NE ①ONE
PROFESSIONAL

RAPID RECREATION OF REAL-WORLD NETWORKS

Desktop Appliance

Half-Rack Appliance

Virtual & Software

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

✔ Network Scenario Builder & Player with pre-installed examples

✔ Intelligent Pictorial GUI

✔ Built-in Geolocation Network Latency Calculator

✔ Database of more than 53 impairments pre-installed

The NE-ONE Professional Edition 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 Professional'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 Professional 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.
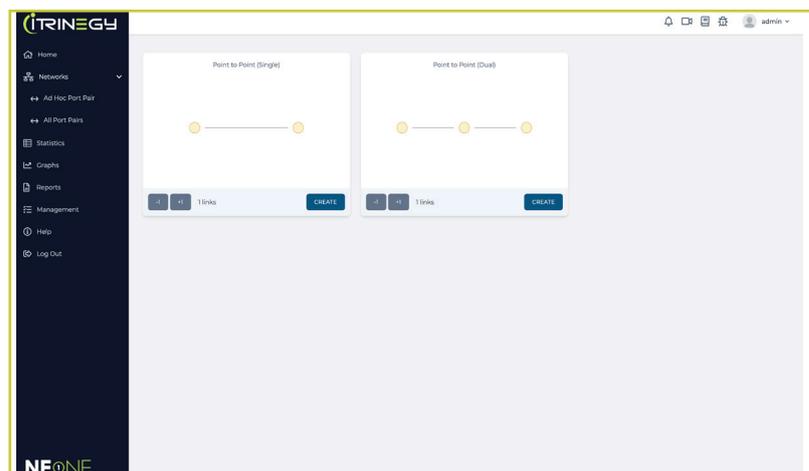

As English isn't everyone's native language each user can choose their preferred language including German and French. Further languages including Spanish, Korean, Japanese and Chinese will be available soon.

AUTO-CONFIGURATION - REMOVING THE GUESS WORK

NE-ONE Professional 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 Professional comes with a catalogue of over 42,000 locations, so simply choose the required start and end point locations and NE-ONE Professional will calculate and insert the base latency for a typical WAN circuit.
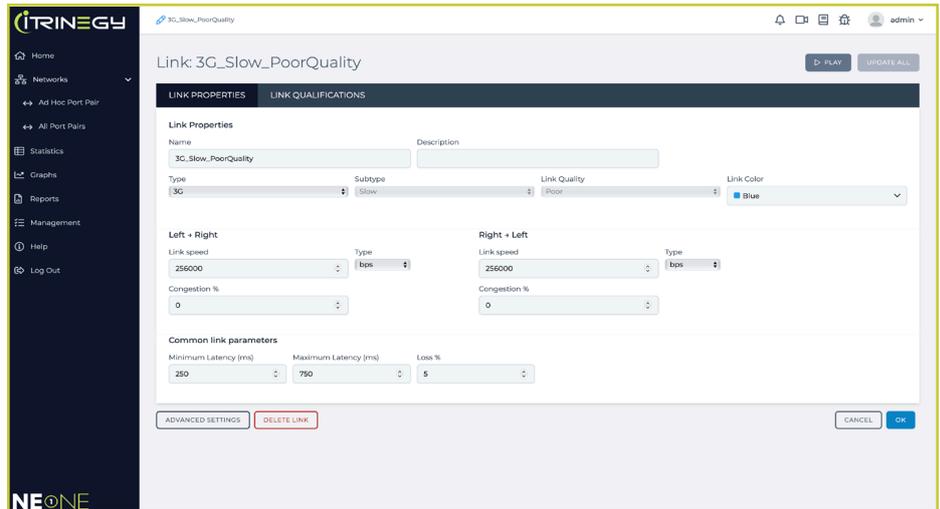

Define two endpoint locations, set the link type and quality. Default Latency and Loss values will be automatically calculated which can be customized if required.

PREDEFINED LINK TYPES & ASSOCIATED PROPERTIES

You know that you need to test using a 5G 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 Professional 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's comprehensive impairment library allows you to have complete control over the quality of the test network.

NETWORK SCENARIO BUILDER & PLAYER

The unique 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 real world situations by combining network experiences together to be run over time.
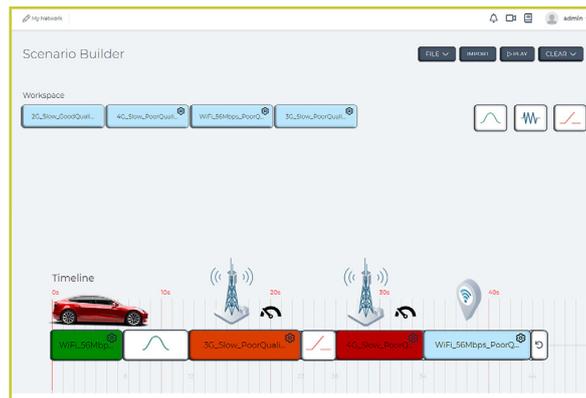
The realism of the network experience can be further enhanced by adding intelligent transitions between each element. Transitions define how NE-ONE Professional will handle the changes, for example a variable transition from a 4G to 5G network or perhaps a momentary outage between the change.

NE-ONE Professional'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 Professional's multi-link feature allows you to simultaneously create 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 3G, 4G, 5G mobile networks and concurrently compare the experience over each network. NE-ONE Professional'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.
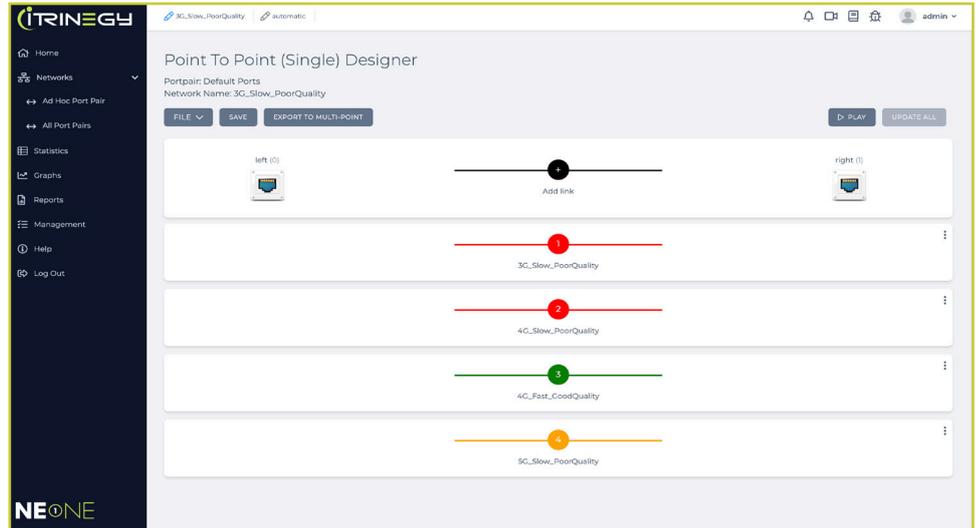
DUAL HOP / LAST MILE EMULATION

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 Professional'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 Professional 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 Family Impairments and Transitions Data Sheet" for more information.

GRAPHS, STATISTICS & PACKET CAPTURE

NE-ONE Professional's built-in graphing feature allows you to view and compare 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.
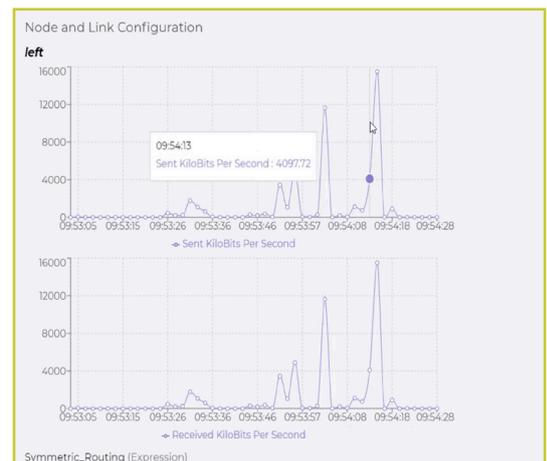
REPORTS

NE-ONE's Professional Reports provide you with instant visibility into how the test network was configured and how it was used. The ability to instantly see key performance metrics allows you to quickly identify application inefficiencies and reduce the amount of time troubleshooting.

Configuration Report: Lists all configuration settings including nodes, links, routing, bandwidth and impairments used in a Test Network.

Test Report: Provides all of the information from the Configuration Report together with graphs that show how much data was transferred across each Link and Node.

EXTERNAL INTEGRATION

NE-ONE provides a couple of ways for users to interact with the NE-ONE to automate changing network conditions from functional and/or performance test tools or scripts.

The **CLI or API*** provides a simple way to control the NE-ONE from the command line or a TCP sockets interface.

NE-ONE's powerful **RESTful API*** can be used to automatically create, control and tear down test networks on demand from external applications and tools. Every GUI operation has a RESTful API equivalent that enables easy integration to minimize time spent setting up and running the required tests.

MULTI-USER

NE-ONE's multi-user design makes it really easy for the administrator to control access to ports and for users to collaborate with each other. Users can work on multiple test network configurations at the same time, within the same browser session, and the built-in file browser allows sharing of test network configurations between users as well as a secure folder to store private configurations.

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

ENTERPRISE MANAGEMENT

Optionally integrate the NE-ONE into organization-wide LDAP or RADIUS single-sign for authenticating users against their existing login credentials. Add the NE-ONE into standard security and monitoring systems using built-in SNMP support.

BACKUP & RESTORE

NE-ONE Professional's built-in Backup feature allows you to easily create a single offline backup file of the NE-ONE Professional settings and configuration. Should a catastrophic failure occur then the NE-ONE Professional Restore feature can be used to recover the appliance from a single backup file.

LCD CONTROL PANEL

(Desktop Appliance Only)
The appliance LCD provides rapid initial configuration. Additionally, test networks 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.

ENABLE ENTERPRISE FEATURES

As the NE-ONE family uses the same code across the entire range it's really easy to enable NE-ONE Enterprise features, therefore protecting your initial investment and future proofing you for more extensive requirements.

APPLIANCE OPTIONS

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

Desktop	Half-Rack Appliance	Virtual	Software
Up to 1 Gbps	Up to 10 Gbps	Up to 10 Gbps	Up to 10 Gbps
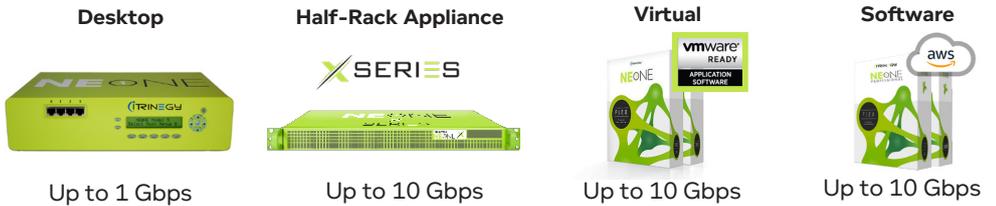
To find out more about the NE-ONE Professional Emulator Model options, please see "iTrinegy NE-ONE Professional Product Comparison Sheet"

DESKTOP APPLIANCE

The NE-ONE Professional Desktop appliance is a three model range designed to meet your testing requirements and budgets. Please review the "NE-ONE Professional 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 Professional Desktop Appliance is ideal for sharing between department and locations. To ensure your NE-ONE Professional investment is protected, we offer a military-grade ruggedized carry case option.

NE-ONE X-SERIES

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

Customers that require the Model 5, 10 or 20 configuration on a rack appliance can choose at time of purchase to upgrade the hardware to the NE-ONE X2 half-depth 1U rack.

LOOKING FOR A VIRTUAL OR SOFTWARE SOLUTION?

Recognizing the growing trend towards testing in virtual environments, iTrinegy also offers the NE-ONE Professional as Virtual Flex Appliances:

- Certified by VMware, the NE-ONE Professional Flex Virtual Appliance range is proven and optimized for ESXi Enterprise deployments
- Distributed in qcow2 format for Kernel-based Virtual Machine (KVM) server including Openstack and Devstack environments

SOFTWARE AND PLATFORM UPDATES

iTrinegy regularly releases software updates that provide new features, enhancements and hot fixes that optimize user experience. Furthermore, Platform Updates ensure your Appliance is kept up-to-date with the latest industry packages and is protected against known security vulnerabilities. Software and Platform Updates are fully automated using NE-ONE Professional's intuitive GUI which means the amount of downtime is minimized.

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 Professional 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 Professional Emulator Model Options and their features, please see "NE-ONE Professional Emulator Comparison Sheet".

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