

## The NE-ONE network emulator and profiler from iTrinegy



# PRODUCT REVIEW

It was once the case that to be certain that a user's experience of an application was acceptable required nothing more than a reliable network: this is no longer true.

Applications vie with each other for resources and user expectations are based on faultless access from any location using multiple diverse endpoints. Additionally, for most organisations some applications are literally critical to business success, so action is needed.

To fully understand performance of an application on a given network requires work. Doing this in a production environment is appealing but professionally flawed. However, a multi-port, point-to-point network emulation and profiling appliance, such as the NE-ONE from iTrinegy, literally transforms this business critical task into achievable, repeatable, reality.

The device under review is the four port version which includes the NE-ONE Profiler: the four ports mean that two separate emulations can take place contiguously.

With the appliance unpacked, some power, and a network connection we used the device's LCD display to determine its readiness. We established three network connected entities for our testing; a client, a server and a management laptop. The NE-ONE management port was connected to our main network and using the laptop GUI we defined our network emulation parameters. It arrives with ten predefined connection types plus the ability to define

custom connections. We created a custom multi-hop emulation to emulate a path based on a WAN with no impairment and a 3G wireless connection and then specified circuit characteristics. Our end point was configured in Chicago USA with our first hop being in Welwyn UK and the second hop (last mile) being a UK 3G connection.

Next we selected from a range of link quality options for each link, starting with high quality error free circuits to establish a best case base line and then systematically degraded the links to see what would happen. Upon starting the emulation we were able to display graphically the link properties over time. We arrived at this point impressively fast and with awesome simplicity. We saved our custom emulation to the appliance which we could re-launch and, if required, from its LCD display.

An emulation can be moved into more advanced territory achieved using Advanced Configuration where, for example, there are multiple choices to emulate different forms of loss, bit error, latency and queuing. While more involved, it remains quick and easy.

Reasons for emulating network operation of an application are manifold, but examples include clarifying tolerable parameters for a circuit SLA, network utilisation limits, uncontrolled (no SLA) networks and broad scenario emulation such as data centre migration to the cloud.

Validating application performance on

non-production networks provides an accurate and highly specific understanding of what to expect on target networks. It creates a datum to safely understand planned changes and manage network risk.

As mentioned earlier, this version of NE-ONE appliance also offers NE-ONE Profiler. Accessed from the GUI or LCD it records network data and describes the attached production network. Once set up it is left to run, capture and profile network traffic, profiling top bandwidth users by IP address, top application usage and network utilisation. Recorded network data is saved to the appliance and it can be used to create custom emulations. This is useful for exploring what/if changes in a safe emulated environment, providing quick and accountable before, during and after deployment visibility, minimising operational risk.

Because those in charge of application delivery are not always network specialists, the simplicity of use of the NE-ONE appliance is ideal while remaining highly effective. Network professionals will not turn this off because it is any network they want it to be. The question will be how many to purchase! **NC**

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