NE-ONE ENTERPRISE
DATA SHEET

NE1 ONE ENTERPRISE

OVERVIEW

The NE-ONE Enterprise hardware and virtual Network Emulators offer the feature depth, integration and scalability required to enable accurate, controllable and repeatable test networks for organizations of all sizes. NE-ONE Enterprise combines simple creation and control of test networks with fast setup via its web UI, compelling TCO and outstanding customer support.

1 GBPS MODELS:

Feature Description	Model 2	Model 4	Model 6	Model 8
Emulation Ports - RJ45 Copper	2	4	6	8
Network Objects	20	30	40	50
Soft Ports	16	32	48	64
Management Port	1 RJ45 Copper	1 RJ45 Copper	1 RJ45 Copper	1 RJ45 Copper
Product Code	NE1-ENTP-2-1G	NE1-ENTP-4-1G	NE1-ENTP-6-1G	NE1-ENTP-8-1G

10 GBPS MODELS:

Feature Description	Model 2	Model 4	Model 6
Emulation Ports - 10G Fiber Optic	2	4	6
Emulation Ports - RJ45 Copper	2	2	0
Network Objects	30	50	70
Soft Ports	64	128	192
Management Port	1 RJ45 Copper	1 RJ45 Copper	1 RJ45 Copper
Product Code	NE1-ENTP-2-10G	NE1-ENTP-4-10G	NE1-ENTP-6-10G

25 OR 40 GBPS MODELS:

Please contact your NE-ONE representative for further details.

A **Network Object** is a Node or Link used in the Designer which can have impairment or routing properties defined. Please refer to the Network Objects Explained document for further information on how to calculate the number of network objects that you require.

Soft Ports can be created as subdivisions of physical or other soft ports. Traffic for Soft Ports can be classified by VLAN, IP Address (V4 and V6), IP Port or packet data.

COMMON

Licence Type	Perpetual
Support and Maintenance	1, 2 or 3 Years
Rack Size	1U
Storage Capacity	500GB SSD

FEATURES

General:

- Intuitive Web GUI
- Management Ethernet Port
- Multi-user (Unlimited)
- Control access to physical and Soft Ports by user
- Centrally Save & Share Test Networks
- Virtual Appliance (VMware Certified) for all models
- User Authentication: Built-In/LDAP/Radius

Soft Ports:

- Port Manager
- Create Soft Port from Physical Port
- Create Soft Port from Soft Port
- Route Traffic by:
    * VLAN (Layer 2) with tagging/detagging/retagging
    * IPv4 (Layer 3) with ICMP/ARP/DHCP Relay support
    * IP (Layer 3) with IPv4 and IPv6 support
    * Filter (layer-less) by ranges of IP src/dest, Port (application), VLANs or "Wireshark-like" expression

Automation:

Network Scenario Builder:

- Example Profiles
- Transition - None
- Transition - Variable
- Transition - Outage
- Transition - Gradual

Timed Network Variables:

- Table-Driven
- Formula-Driven

API:

- Full RESTful API (with JavaScript)

Network Toplogy Wizard:

- Point to Point (Single)
- Point to Point (Dual)
- Fully Mesh
- Hub and Spoke
- Cloud
- Free Form

Multi-Point Designer:

- Icon Library
- Customizable Background
- Save & share Test Networks
- Apply Impairments on Links (circuits)
- Apply Impairments on Nodes (routers)

Test Networks:

General:

- Port Pairs - Ad Hoc
- Port Pairs - Favourite
- Set Default Test Network on Boot
- Nodes[1] - (Virtual Routers)
- Links[1] - (Circuits)
- Geolocation Network Latency Calculator
- Packet Capture; Nodes and Links
- Jumbo Frame Support (Up to 9,700 bytes)

Port Set-up:

- IP V4 & V6 Addressing
- Inline - Bridge
- Inline - Route
- Router
- Router on one port (router-on-a-stick)
- DHCP Relay
- NAT - Both Static & Dynamic

Routing & Filtering:

- Sophisticated routing/filtering including route by Layer 2 and Layer 3 properties e.g. IP/Subnet, IP Range, IP src/dest, Port (application)
- Both symmetric and asymmetric, and using "Wireshark-like" classification "route" at Layers 4-7
- Advanced "Wireshark-like" expressions to specify Filters and Routes matching with Just-in-time (JIT) compiler for speed
- NAT & PAT

Network Topologies:

- Point-to-Point
- Point-to-Point Dual Hop
- Hub and Spoke
- Partial Mesh & Fully Meshed
- Cloud
- Any Combination of the above

FEATURES

Test Networks (Continued):

Network Profiles:
- LAN
- WAN
- Mobile - 2G
- Mobile - 3G
- Mobile - 4G
- Mobile - 5G
- SDSL
- ADSL
- Satcom
- Custom

Unlimited Impairments:
- Bandwidth (1bps increments)
- Loss
- Latency
- Bit Error
- Duplicate
- Fragment
- Out Of Order
- Congestion - Static
- Congestion - Variable

Note: See the NE-ONE Family Impairment & Transitions Guide for more information.

Traffic Generation:
- UDP
- TCP

PCAP Playback:
- Packet Replay
- Intelligent Packet Replay

QoS:
- QoS Bandwidth & Priority
- Class of Service Handling and Traffic Shaping

Analysis:

Graphs:
- Bits Received Per Sec
- Bits Sent Per Sec
- Packets Received Per Second
- Packets Sent Per Second
- Bytes Received Per Second
- Bytes Sent Per Second
- Packets Received
- Packets Sent
- Bytes Received
- Bytes Sent
- Internal Dropped
- Hardware Dropped

Statistics:
- Bits Received Per Sec
- Bits Sent Per Sec
- Packets Received Per Second
- Packets Sent Per Second
- Bytes Received Per Second
- Bytes Sent Per Second
- Packets Received
- Packets Sent
- Bytes Received
- Bytes Sent
- Internal Dropped
- Hardware Dropped

Reports:
- Configuration Report
- Test Report
- Applications Report
- Application Performance Report

FEATURES

Administration:

- Backup
- Restore
- File Browser
- Port Pair Manager
- System Notifications (Audit Log)
- SSL Certificate
- Software Update
- Network Time (NTP) Server
- SNMP Support
- Session Time-out

Integration Feature Pack:

- API/CLI[2]
- Restful API[2]
- Embedded Javascript Engine
- Packet Engine Programming Language (PEPL)

Integration features are not included in the base license

Help and Training:

- Operator Manual (via GUI)
- CLI/API Manual (via GUI)
- Restful API (via GUI)
- Online videos - (via GUI)
- Training Course

Options and Feature Packs:

Network Object Packs:

NE-ONE Enterprise - 5 Network Object Pack	NE1-ENTP-OB-5PACK
NE-ONE Enterprise - 10 Network Object Pack	NE1-ENTP-OB-10PACK
NE-ONE Enterprise - 50 Network Object Pack	NE1-ENTP-OB-50PACK

Soft Port Packs:

NE-ONE Enterprise - 5 Soft Port Pack	NE1-ENTP-SP-5PACK
NE-ONE Enterprise - 10 Soft Port Pack	NE1-ENTP-SP-10PACK
NE-ONE Enterprise - 50 Soft Port Pack	NE1-ENTP-SP-50PACK

Integration Packs:

NE-ONE Enterprise Integration Feature Pack	NE1-ENTP-IP

References:
[1] Limited by Network Objects
[2] All GUI functions are available