

## OVERVIEW

The NE-ONE family provides the most complete and realistic network impairment library allowing you to easily mimic what happens in real-world networks. With more than 100 parameters to choose from NE-ONE combines realism and accuracy in a Software Defined Test Network that allows you to test applications over a range of controllable and repeatable scenarios. Furthermore, each impairment function has multiple parameters allowing you to customize its behavior for your specific testing needs. NE-ONE’s impairments are frequently updated based on evolving networks and customer needs.

## IMPAIRMENTS

Edition	Professional	Enterprise
<b>Impairment Type</b>		
<b>Linkspeed, Bandwidth &amp; Queuing</b>		
Linkspeed and FIFO Queue Bytes	✓	✓
Linkspeed with Variable Congestion		✓
QoS Class Bandwidth		✓
QoS Class Bandwidth using Expressions		✓
<b>Latency &amp; Jitter</b>		
Gaussian (Normal Distribution) Delay	✓	✓
Step Delay Periodic	✓	✓
Step Delay Packet	✓	✓
Fixed Delay	✓	✓
Fixed Delay with Jitter	✓	✓
Random Delay	✓	✓
Delay Sequences		✓
Delay Scenarios		✓
Inter Packet Gap		✓
<b>Loss</b>		
Random Drop with Burst	✓	✓
Poisson Drop	✓	✓
Packet Error - 1 in X Bits	✓	✓
Burst Loss	✓	✓
Drop - 1 in X	✓	✓
Random Drop	✓	✓
<b>Cloud Network (Represent a Core Network in a Single Object)</b>		
Bandwidth		✓
Latency		✓
Jitter		✓
Queue		✓
Loss		✓
Cost (TTL)		✓

## IMPAIRMENTS

Edition	Professional	Enterprise
<b>Impairment Type</b>		
<b>Bit Error</b>		
Error with Burst	✓	✓
Poisson Error	✓	✓
Random Packet Error	✓	✓
Random Packet Corrupt		✓
<b>Duplicate</b>		
Packet Duplicate & Move	✓	✓
<b>Out of Order</b>		
Random Packet Time Reorder	✓	✓
Random Packet Move Offset	✓	✓
Packet Reorder 1 in X	✓	✓
<b>Fragment</b>		
Fragment MTU	✓	✓
<b>Pause</b>		
Pause Transmission		✓

## TRANSITIONS

<b>Scenario Builder Network Transitions</b>		
<b>Gradual</b> - Changes parameters gradually (linearly)	✓	✓
<b>Variable</b> - Changes parameters randomly	✓	✓
<b>Outage</b> - Creates an increasingly lossy network, followed by total loss, then comes back quickly but not instantly	✓	✓
<b>None</b> - Changes parameters immediately between scenarios	✓	✓