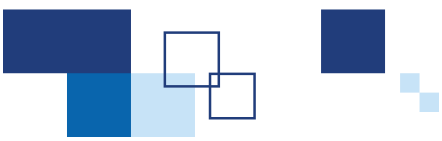
SHUNRA

VE NETWORK CATCHER LITE

USER MANUAL

Version 4.5



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VE Network Catcher Lite

Emulating a network's conditions is a difficult task. There are always discrepancies between emulation and real life. When emulating the Internet, this problem seems even more acute because an accurate statistical model defining the Internet was never developed, and may never be, due to the fact that the Internet's backbone is constantly being upgraded.

Therefore, Shunra has developed the VE Network Catcher Lite. It is a "record and playback" tool that allows you to record Internet parameters prevailing between two hosts on the network over a defined period. The recorded parameters are then used to recreate the Internet or any other WAN connection accurately. This recording can then be imported into other Shunra Virtual Enterprise applications to assist in creating an accurate emulation of the network.

VE Network Catcher Lite captures actual data from the specific WAN connection you want to emulate, and stores it to a file.

About This Document

This document contains the following sections

- **How it Works**: (page 2-2) provides an overview of VE Network Catcher Lite operation
- **Using VE Network Catcher Lite**: (page 2-2) guides you through the main functions of VE Network Catcher Lite
- **About .ntx File Format**: (page 2-6) reviews the resulting data created by VE Network Catcher Lite
- **About Shunra Software**: (page 2-7) provides a short overview of Shunra Software

How it Works

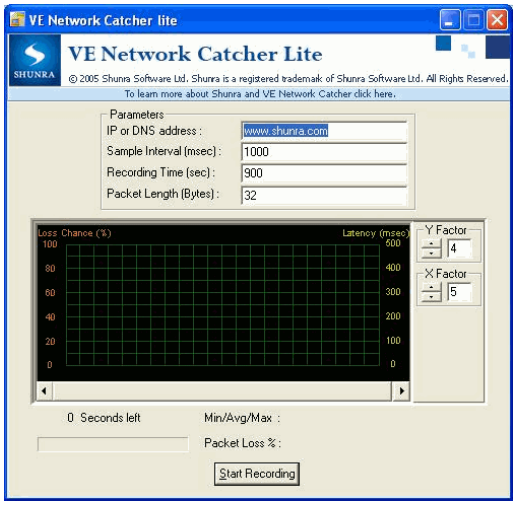
The VE Network Catcher Lite utility measures latency and packet loss by actually sending an IP packet to a real destination (such as an Internet site) in the WAN Cloud.

Data generated by VE Network Catcher Lite can then be imported into ShunraVE Modeler, which allows you to create a wide variety of network emulation scenarios that mimic the behavior of complex WANs; and Shunra VE Desktop, which simulates a single WAN link at a time.

Using VE Network Catcher Lite

☞ **To record real life latency and packet loss values with VE Network Catcher Lite:**

1 Activate VE Network Catcher Lite. The following window is displayed.

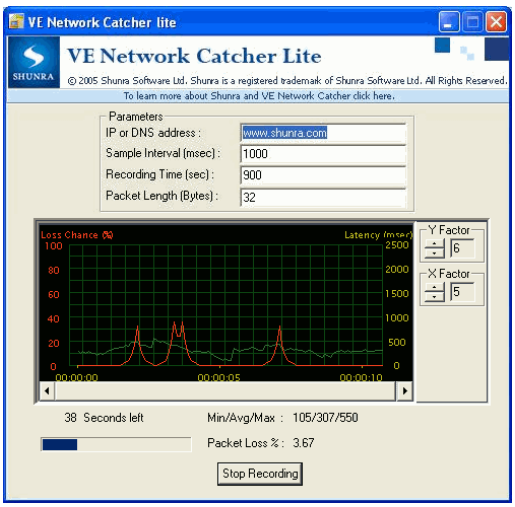


2 Enter the following Parameters:

Parameter	Description
IP or DNS Address	Type the address of the destination to which VE Network Catcher Lite will send IP packets in order to measure latency and packet loss. For example, the address can be the URL of an Internet site (you must be connected to the Internet).
Sample Interval	VE Network Catcher Lite samples the WAN Cloud at a pre-defined frequency. Enter the frequency in milliseconds. The higher the frequency the more accurate the collected data.
Recording Time	Limit the recording time to a number of seconds. The maximum allowed is 900 seconds.
Packet Length	Set the size of the sample IP packet, in bytes. Use a packet size that is similar to the size of the actual packets that are expected to travel across the emulated network.

3 Click [**Start Recording**]. Note that the button name changes to **Stop Recording** when VE Network Catcher Lite starts to sample the WAN Cloud. You can click it to stop the operation without saving the collected data.

While recording data, the VE Network Catcher Lite window reports results on-line, as illustrated below:

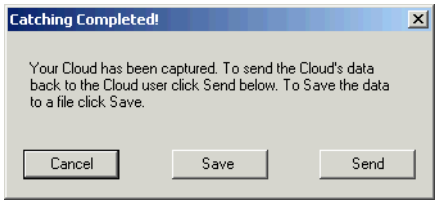


A description of the reported data follows:

Reported Data	Description
Graph	As the time passes, the measured latency and packet loss values are plotted (a curve appears). The y-axis indicates the measured latency/packet loss and the x-axis indicates the time that has elapsed since the beginning of the sampling process. The graph displays latency in green, and packet loss in red.

Reported Data	Description
x Seconds left	The number of seconds left until the end of Recording Time. A visual gauge reports progress.
Min/Avg/Max	The minimum, average, and maximum latency measured so far.
Packet Loss %	The percentage of packets lost so far.
Y Factor, X Factor	Use the spin buttons to change the scale of the X- and Y-axes.

4 Wait until the end of Recording Time; the Catching Completed dialog box is displayed.



5 Click [**Send**] to send it to an e-mail address, or click [**Save**] to save the file. The file is called an "emulation template." It carries the extension .ntx.

About .ntx File Format

VE Network Catcher Lite saves data in a .ntx file. NetworX files are based on XML. The .ntx file is proprietary to Shunra and can be imported into the Shunra VE Modeler, and VE Desktop. For more information about Shunra Software or the VE Modeler, visit http://www.shunra.com.

The contents of the .ntx file includes the following:

- **Recording Date:** the day, date, and time of the recording
- **Source:** the host name of the workstation from which VE Network Catcher Lite was activated
- **Target:** the IP or DNS address to which packets were sent to measure latency and packet loss
- **Min/Avg/Max:** the minimum, average, and maximum latency that were measured during the VE Network Catcher Lite session
- **Recording Time:** the duration of the VE Network Catcher Lite session (minutes and seconds)
- **Packet Length:** the size of the test packet that was used
- **Packet Interval:** the frequency at which packets were sent during the session (milliseconds)

About Shunra Software

Founded in 1997, Shunra fast became a leader in network emulation, or the predicting of application performance across complex networks. Our flagship product the VE Modeler enables the design and running of network scenarios to assist in predicting the performance of applications across the global WAN.

Together with a Network Appliance and fine tuned suite of powerful applications, the Shunra VE Suite assists customers in completing tasks such as predicting feasibility of networked applications, guides Data Center Relocation, VoIP planning, fine tuning of Quality of Experience before rollout, and much more.

For further information about Shunra and our well rounded suite of solutions, please visit http://www.shunra.com.