

NetScanTools® Pro



Monthly Newsletter

www.netscantools.com

April 2020

 <https://twitter.com/netscantools>

 <https://www.facebook.com/NetScanTools>

 <https://www.youtube.com/user/netscantools>

 <https://netscantools.blogspot.com/>

In this newsletter:

News

- **NetScanTools Pro minor release coming soon**
- **New Switches and Routers added to Switch Compatibility List**
- **NetScanTools Basic 2.54 Released March 25, 2020**
- **NetScanTools LE**
- **SSL Certificate Scanner 2.6.2.5 Release March 6, 2020 (standalone version)**

News...

From the Editor...

As I write this from my home office, we continue to be under the Washington State 'stay home, stay healthy' order. The end date has not been announced. We are open for business because I can work from home. We will not ship any USB drives with our software pre-installed for a while. At this point our county stretching from Puget Sound to the Pacific Ocean has had only 18 positive cases.

Thank you and please keep safe and separate.

-Kirk

NetScanTools Pro minor release coming soon

A new minor version release should be ready during the first full week of May. It addresses some problems reported by users and adds some new features to existing tools.

First the problems. *Ping Scanner* was having trouble scanning IPs outside the subnet if the Do Local ARP Scan and Do SMB/NBNS Scan checkboxes were checked – long delays were interfering with the usability. Those issues were identified and fixed.

Packet Flooder has had some problems that affected non-English language operating system users - it basically did not work. The problem had to do with the performance counters used to populate the graph and bandwidth percentage gage. The data retrieved from the performance counters was requested as English language descriptions which did not exist on German or Russian Windows – now they are locale independent and can retrieve from any language operating system so the gage, graph and 'Auto' mode should work for everyone. Another problem we noticed was when random data lengths were used. By changing the upper limit on the UDP packet length to 65507 (the theoretical upper data payload limit) the problem we found goes away.

There is also a new message that appears at the end of an 'Auto' session offering an explanation as to why it never reached the bandwidth you requested if that happened during the session. See screenshot below.

Manual Tools - Packet Flooder (UDP Traffic Generator)

Target IPv4/IPv6 Address or Hostname: 192.168.2.50 X Target UDP Port Number: 7 Random Port Numbers

Resolve Hostname to IPv4 Resolve Hostname to IPv6

Number of Threads: 2 Set Socket Buffer Size: 4 x 16384 Bytes

Interpacket Delay (µSec): 100 Socket Buffer Size: 65536 Bytes

Flood Mode: Automatic Manual

Bandwidth %: 80

Run Action: Until Stopped Time period: 10 Seconds

Data Payload Contents and Length: Randomize Data 'abcdef' Data Text Data Data from File

Random Length: 65507 Max Bytes Fixed Length: 65507 Bytes

Stats: 9.2 seconds, Ave 8205 packets per sec, Ave 12222024 bytes per second.

Packet Flooder Message (9 sec)

! Current Outgoing Bandwidth 9.8% is not close to Target Bandwidth 80.0% meaning this interface or an upstream interface is already at it's limit (ex. Wifi I/F)

Bandwidth Utilization % vs time

Now the New Features. A new feature added to *Packet Flooder* are controls to run the flood operation for a specified number of seconds or indefinitely. The summary that appeared above the gage after Stop was pressed has been completely redone to show average packets per second and average bytes per second. See screenshot above.

A new feature was added to the *Packet Capture Playback* tool found on the *Packet Generator* tool – repeat sending of the packet file until Stop is pressed. Since the packet playback is handled by the driver, once it is started we can only poll the Stop button when each playback is complete. Another new thing was automatic loading of the previously sent packet(s) into the Packet List display.

Packet Capture File Playback

Location of Packet Capture File to Playback
c:\users\kirk\documents\192-168-2-50-ping.pcap

Select Capture File Play >

Playback packets using original capture timing Repeat until Stop Pressed Stop

Warn about length of time to send when using original timing Close

Network Interface for Playback: Ethernet (192.168.2.40) - Realtek PCIe GBE Family Controller

View Capture File in External Analyzer Playback Statistics

1 packets in capture file.

Timestamp (bytes in packet)	Source IP (or mac)	Dest IP (or mac)	Protocol	Comments
04/27/20 16:28:53.858592 (74)	192.168.2.40	192.168.2.50	ICMP	len: 60, ttl: 128, chksum: 19789, id: 256, seq: :

If no other issues are found, we will go ahead and release it the week of May 4. We will also update the Demo version soon afterwards.

New Switches and Routers added to Switch Compatibility List

A Managed Switch Port Mapping Tool user reported his test findings. He reported several Aruba Switch models as reporting data. He also reported three Fortigate models from Fortinet that were used successfully as sources of ARP data (Router/Server 1 or 2).

Part Number	Model	Manufacturer	Software Version	Function
J9851A	5412Rzl2	Aruba (HP-E)	KB.16.05.0007	Switch and Router
J9851A	5412Rzl2	Aruba (HP-E)	KB.16.07.0003	Switch
	5406Rzl2	Aruba (HP-E)	KB.16.07.0003	Switch
	2930F	Aruba (HP-E)	KB.16.07.0003	Switch
	2930F	Aruba (HP-E)	KB.16.05.0007	Switch
JL258A	2930F-8G	Aruba (HP-e)	KB.16.07.0003	Switch
	Fortigate 501E	Fortinet	6.2.3 (build 1066)	Router (Firewall)
	Fortigate 1500D	Fortinet	6.2.3 (build 1066)	Router (Firewall)
	Fortigate 201E	Fortinet	6.2.3 (Build 1066)	Router (Firewall)

NetScanTools Basic 2.54 Released March 25, 2020

This release was planned to update the software to the latest SQLite and clean it up a bit. Remember, this is freeware.

SQLite is updated several times a year and it was necessary to update the software to reflect the many SQLite updates and change the date to 2020. We also removed all references to NetScanTools LE – more on that below.

<https://www.netscantools.com/nstbasicmain.html>

NetScanTools LE

We released NetScanTools LE 10 years ago with the intent to serve the law enforcement market. Several individuals had expressed a need for a version of NetScanTools with the tools they felt law enforcement would use. However, it was not very popular.

After several years of low sales volume, we recently decided to retire it. If you are a current licensee, we will continue to make minor updates to it, but no new features will be added. Use Help menu/Check for New Version to see if there is an update.

If you have questions, please contact support.

SSL Certificate Scanner 2.6.2.5 Released March 6, 2020

This release updates the standalone version to match the version included with NetScanTools Pro 11.90.2.

These are the changes in this release:

-Changes to the grid control used to display results. The software is designed to sort the contents by clicking on the column header - the intent is that the user would click after the tool has completed an action. We found that for certain tools clicking on a header before it was complete could miss-sort the results output. This has been corrected - clicks on a header while the tool is in progress are ignored. Please click on the header to sort once the tool has completed an action.

-SSL Certificate Scanner has expanded error notes for TLS1, TLS1.1 and TLS1.2. TLS1.3 will not be supported until Microsoft SCHANNEL supports it.

-Updated dates to 2020.

-Updated SQLite to version 3.31.1.

<https://www.netscantools.com/ssl-certificate-scanner-standalone.html>

Contact Information

If you have any questions or suggestions, please feel free to email.

Northwest Performance Software, Inc.
PO Box 1375
Sequim WA 98382
(360) 683-9888
www.netscantools.com
sales [at] netscantools [dot] com

'NetScanTools Pro', 'NetScanTools Standard', 'NetScanTools Basic', 'NetScanTools LE', 'ipPulse', 'Northwest Performance Software' and 'NetScanTools.com', are trademarks of Northwest Performance Software, Inc. 'NetScanTools' is a registered trademark of Northwest Performance Software, Inc.

Other names and trademarks are the property of their respective owners.