

NetScanTools® Pro



Monthly Newsletter

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May 2020

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News

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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 – although our county is moving to 'phase 2' reopening plan on Monday June 1. This just means more business are open.

Thank you and please keep safe.

-Kirk

New SSL Certificate Scanner coming soon

A new version of the Standalone SSL Certificate Scanner and the one included with NetScanTools Pro will be released most likely the week of June 1.

We had several suggestions that were implemented in this version. The most visible is the addition of the IPv4 address column. If you have entered a hostname, the server IPv4 address that was connected to is shown and now recorded in the database. We are also recording the port number in the certificate database.

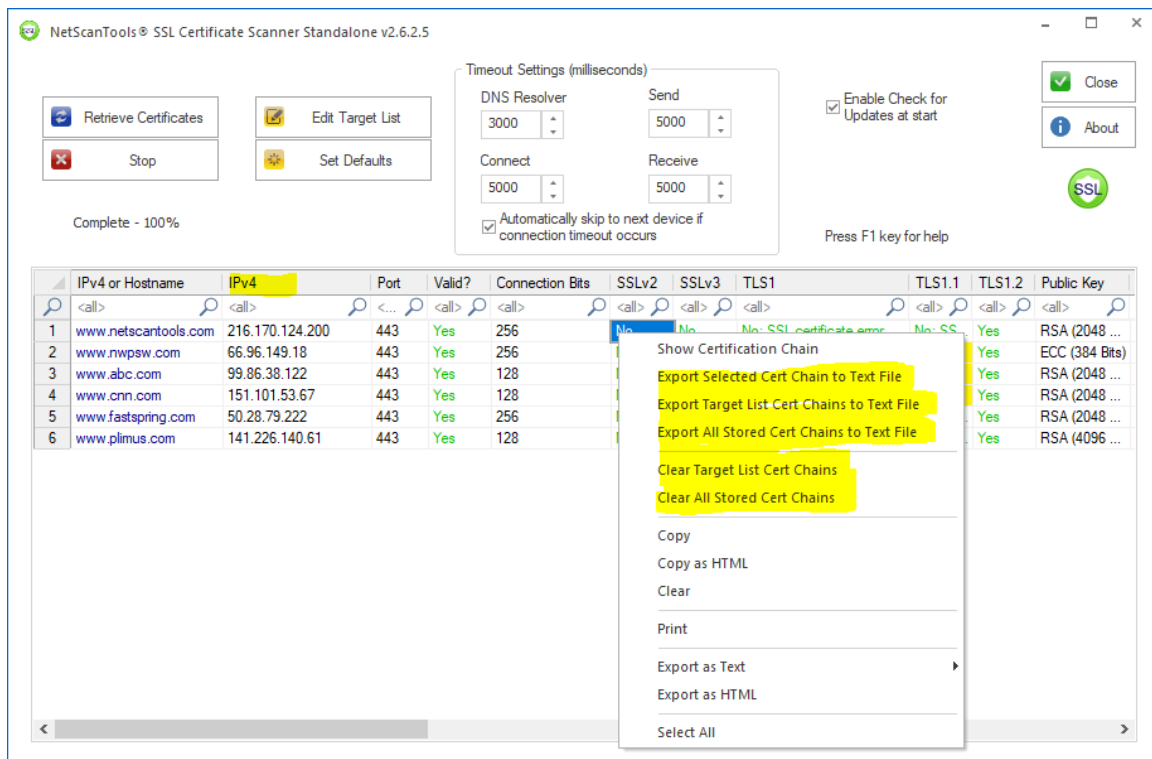
There are also changes that help you see and clear the certificate database. There are two new right click export options. One to export any cert data already in the database for the list of targets currently shown and another to export all cert data contained in the database. The exports are in tabbed delimited text format suitable for quick import into Excel or similar. You may ask why not CSV? – commas often appear in the fields we retrieve from the certificates so that is not an option.

The 'clearing' right click options let you clear the cert data for the current list of targets or clear all the cert data in the database.

The final change was to the dates from and to for the certificate validity. It will now be reported in UTC (GMT) and that will be shown in the database export and in the grid. The date and time we last retrieved information from the web server will continue to be shown in your local time.

That brings us to a final important topic: *Web servers. This software is designed to communicate ONLY with web servers.* It cannot communicate with mail servers or active directory servers. You will not get any response if you try to enter those non-web servers.

The Standalone version will be released first and it will also include a new SQLite version. The one included with NetScanTools Pro functions identically and will be released as part of NetScanTools Pro 11.91.1 soon afterwards.



NetScanTools Pro 11.91 released May 6, 2020

This release is important if you use Packet Flooder, Ping Scanner, Ping Trend or Packet Player.

First the problems that were fixed. *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.

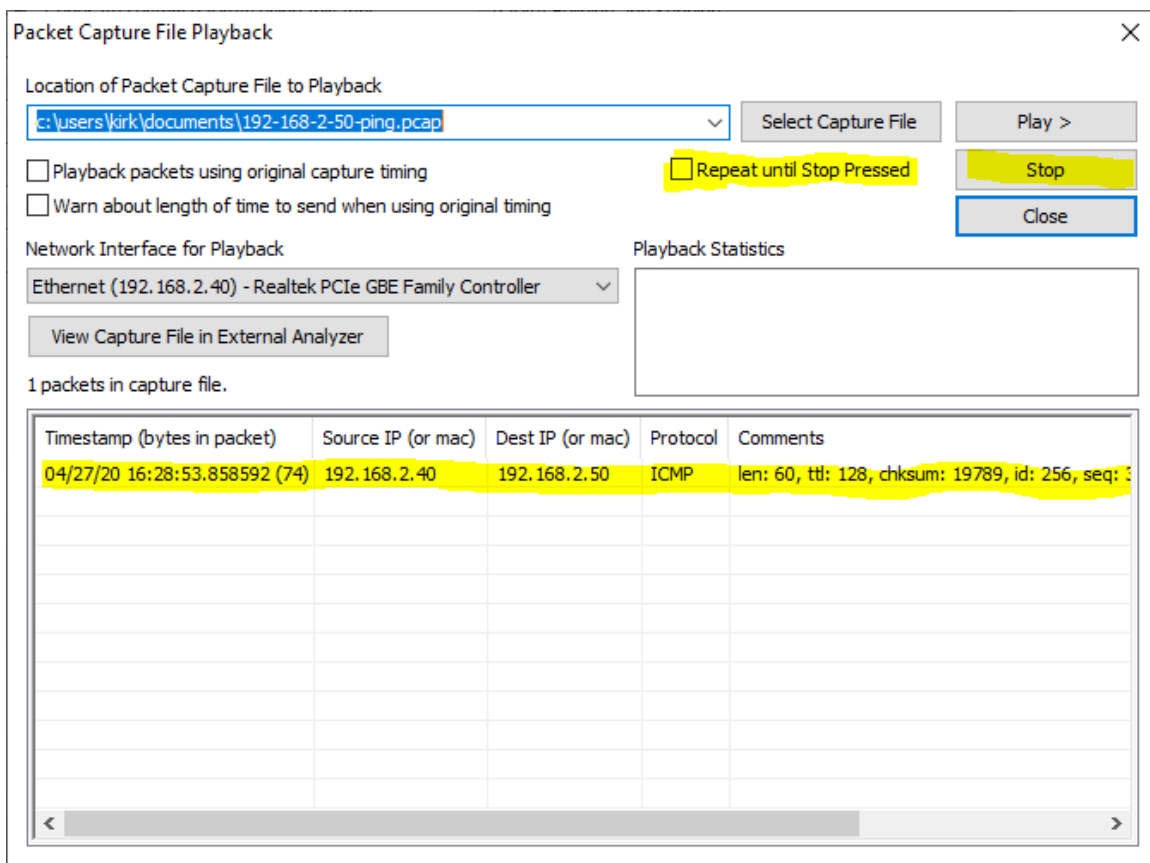
Packet Flooder has had some problems that affected non-English language operating system users - it basically did not work. The problem had to do with the performance counters used to populate the graph and bandwidth percentage gage. The data retrieved from the performance counters was requested as English 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.

The screenshot displays the 'Manual Tools - Packet Flooder (UDP Traffic Generator)' interface. The main window shows various configuration options for a UDP flood attack, including target IP (192.168.2.50), port (7), flood mode (Automatic), and bandwidth target (80%). A 'Run Action' section is set to 'Until Stopped' with a 10-second timer. The data payload is configured with 'Randomize Data' and a 'Random Length' of 65507 bytes. A status bar at the bottom indicates 'Stats: 9.2 seconds. Ave 8205 packets per sec. Ave 12222024 bytes per second.' A 'Bandwidth Utilization % vs time' graph shows a very low utilization rate. A warning dialog box titled 'Packet Flooder Message (9 sec)' is overlaid on the graph, stating: '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)'. The interface also shows a 'Realtek PCIe GBE Family Controller' as the selected network interface.

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.



To obtain this new version you must have an active maintenance plan. Click on Help menu/Check for New Version, then locate a link in the embedded web page. Click on it to open your default browser, enter your access credentials to download the new full installer. Exit NetScanTools Pro and run the installer to update the software to 11.91.

The list of changes.

11.91 May 6, 2020

-Packet Flooder - The cause of the 'Sendto failed message' explaining that the size of the packet exceeded the message buffer size has been corrected.

-Packet Flooder - The Socket Buffer Size window is now grayed indicating that you cannot change it directly. It is showing the current buffer size.

-Packet Flooder - The methods used to obtain interface bandwidth and other statistics has been made language independent. Previously they only worked with English language Windows operating systems - it now works with any language Windows.

-Packet Flooder - A new method of activating the flooder for only a specific time period has been added.

-Packet Flooder - The method of recording the End of the send in the history database now works correctly.

-Packet Flooder - The status line above the speed gauge now shows elapsed time, average packets per second and average bytes per second.

-Packet Capture Playback (see Packet Generator) now has a new Repeat Until Stop Pressed checkbox that will cause the current capture file to be played back until the new Stop button is pressed. If you use repeat, the stop button is polled at the end of each packet stream send, not during. Additionally, when you start the Packet Player, the last selected packet file will be loaded and displayed if it is available.

-Ping Scanner has fixes to prevent significant slowdowns with the 'Do Local ARP Scan' checkbox checked while scanning non-local IP addresses. Similarly, if your computer's IP address is within the scanning range and 'Do SMB/NBNS Scan' is checked, your IP address is skipped.

-Ping Scanner - improved message shown when subnet mask checkbox is active and user does not have sufficient privileges.

-PingTrend now has a new checkbox allowing control of the DF (don't fragment) bit in the IP header.

-PingTrend - improved accuracy of reported time between packets.

-Updated MAC address/Manufacturer database.

-Updated IP to Country database.

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.

Contact Information

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

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