

NetScanTools® Pro



Monthly Newsletter

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May 2013

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News...

From the Editor...

Look for a new release of the Switch Port Mapper soon. Also, SwitchPortMapper.com just had a minor facelift. NetScanTools.com will have one as well this summer.

-Kirk

Managed Switch Port Mapping Tool v2.09 released May 17, 2013

The Managed Switch Port Mapping Tool v2.09 has a significant change in the algorithm for processing qBridge mib. With this change the application can now map even more switches like the D-Link DGS-1210 series. Another user-suggested change was to add right click options for changing results cells that have a background color (like red) to white. You can change a single cell, a single column or the whole grid.

2.08 May 17, 2013

- Improved logic of qBridge MIB processing to include switches that only use a small part of qBridge MIB, yet enough to map the switch.
- Added results grid right click menu items to reset color of a single cell, column or whole grid to white.
- Added warning to web page report mentioning the effects of ARP table size when Ping Sweep is active. Affects Windows Vista and later operating systems. Please see Microsoft KB949589 for ways to increase the ARP table size. Default is only 256 entries or less depending on your operating system settings.
- Several minor wording changes to web page report.
- Updated MAC address/Manufacturer database.

Get the trial version of the installed software by going to <http://www.SwitchPortMapper.com> or visiting NetScanTools.com and clicking on Managed Switch Port Mapping Tool.

NetScanTools® Pro version 11.50 released May 14, 2013

This release adds two new tools – the frequently requested Duplicate IP Scanner and the Firewall Rules Tool. The Duplicate IP Scanner works by scanning your subnet (or part of your subnet) for different MAC addresses sharing the same IPv4 address. The Firewall Rules tool is something that Windows 8 users can appreciate – it gives you a quick view into the current firewall rule settings and it can directly launch the built-in operating system tool without having to navigate through Control Panel. That tool requires Windows Vista and newer. Windows XP users are beginning to see more tools that require later operating systems – we will continue to support XP for a while longer, but most of our registered users are now on later OS's.

Another visible change is the addition of charts to several tools. These charts show a packet send versus response time. Ping, Ping Scan, Arp Ping and Traceroute now have a button to display the timing chart. You can print or save the charts as images.

How to get v11.50: Click on Help/Check for New Version, then on Login Here – this requires an active maintenance plan and your access credentials are shown on the check for new version window in the program.

WHAT'S NEW IN THIS RELEASE

Version 11.50 May 14, 2013

New Tools:

- Duplicate IP Scanner: this tool scans your subnet looking for duplicate IPs responding with different MAC addresses. If a duplicate is found, both devices are displayed.
- Firewall Rules: this tool gives you the ability to rapidly see the Windows Firewall Settings showing applications, ports, protocols and blocking state. It also has a button for launching the Windows Firewall with Advanced Security management application without having to go through Control Panel. This tool requires Windows Vista or newer.

Changes:

- Arp Cache Tool: Button to flush (clear) ARP Cache added. Requires Windows Vista or later and requires Administrator privileges.
- Arp Ping Tool: Button added to display a chart showing the Arp Ping results as ping versus time. Chart can be saved, printed or copied to the clipboard.
- Arp Scan Tool: Significant internal changes to the way Arp Reply packets are handled and displayed. It no longer depends on displaying the operating system Arp Cache (as the Arp Cache Tool does) because the cache can be out-of-date or incorrect due to limits placed on the size of the cache (affects Windows Vista and later). See Microsoft KB949589 for methods of increasing the Arp cache size.
- Framework: menu items shortcuts under Accessibility updated to reflect new tools.
- Managed Switch Port Mapper Launcher: if using NetScanTools Pro USB Version, it now searches for the USB version of the Managed Switch Port Mapping Tool on the same flash drive.
- Network Neighbors: now correctly works with the Favorites panel.
- Packet Generator: crash problem when displaying the 'sleep' message window inside a loop fixed.
- Packet Generator: parsing of commands containing numbers (DS_BIT3, DS_BIT4, DS_BIT5, ECN_ECT_BIT6, ECN_CE_BIT7) fixed.
- Packet Generator: parsing of CDP_IP_ONE, ARP_NET_DEST_MAC, ARP_SENDER_MAC_FIELD and ARP_TARGET_MAC_FIELD fixed.
- Packet Generator: added two more example scripts. Press Select Script to see them.
- Ping Enhanced Tool: Button added to display a chart showing the Ping results as ping versus time. Chart can be saved, printed or copied to the clipboard.
- Ping Scanner Tool: Button added to display a chart showing the Ping results as ping versus time. Chart can be saved, printed or copied to the clipboard.
- SMTP Server Test: Reformatted tool layout and made a small change to the way the previous server list is memorized.
- Traceroute Tool: Button added to display a chart showing the Traceroute timing results as hop versus time. Chart can be saved, printed or copied to the clipboard.
- Updated SQLite to 3.7.16.2
- Updated database files.

How to Improve the Results from Ping Sweep in the Managed Switch Port Mapping Tool

We recently had a user move his Managed Switch Port Mapping Tool from Windows XP to Windows 7. He emailed to ask why he saw MAC Addresses but very few IP addresses – he wanted to know what *we* changed. After much research we found that as of the release of Windows Vista, the ARP cache is no longer managed the way it was in XP and now defaults to a tiny 256 entry cache. And, what's more, the user found that his company had set the ARP cache to only 10 IP/MAC addresses.

How to find out what your ARP cache size is now:

1. open a command prompt
2. enter this command and press Enter:

netsh interface ipv4 show global



```
Developer Command Prompt for VS2012
C:\Program Files (x86)\Microsoft Visual Studio 11.0>netsh interface ipv4 show global
Global
Querying active state...

General Global Parameters
-----
Default Hop Limit           : 128 hops
Neighbor Cache Limit       : 256 entries per interface
Route Cache Limit         : 128 entries per compartment
Assembly Limit            : 131433672 bytes
ICMP Redirects             : enabled
Source Routing Behavior    : doNotForward
Task Offload               : enabled
Debug Media Sense         : enabled
Media Sense Logging        : disabled
HLB Level                  : all
HLB Version                : version3
Multicast Forwarding       : disabled
Group Forwarded Fragments : disabled
Randomize Identifiers      : enabled
Address Flush Reply        : disabled

Current Global Statistics
-----
```

3. Note the Neighbor Cache Limit (second from the top). On this system it is 256 entries per interface which is the default.

While 256 entries may be enough for normal users, if you are ping scanning an IP range larger than 256 devices (like in a 10.x.x.x network) and expecting to see more results, you won't see them. In fact, our user was only seeing 10 because his company had set it at 10.

The good news is you can set your ARP cache size limit to a much larger number - here's how:

1. open an *administrator* command prompt
2. enter this command and press Enter:

netsh interface ipv4 set global neighborcachelimit = 4096

Want to learn more about the changes to ARP caching methods introduced in Windows Vista and still in use in Windows 8? Please visit <http://support.microsoft.com/kb/949589>

Announcing the USB Version of the Managed Switch Port Mapping Tool

After much work, the fully portable USB Version of the Managed Switch Port Mapping Tool was released with 2.07 on April 22. By 'fully portable' we mean that the software resides entirely on a USB Flash Drive. Everything is saved to the flash drive and the software runs from the drive. You do not need to install it on the host system.

How it works: Simply plug the flash drive into a USB port on the host, then navigate with Windows Explorer to the drive and launch spmap.exe. We have 'batch' files on the drive to make that easier. Unlike NetScanTools Pro, there is no need to 'run as administrator', so you can run it with user privileges. When you are done, 'eject' or stop the USB flash drive and remove it. Your files stay on the flash drive.

It runs on Windows 8, 7, Vista and XP as well as the Windows Server Operating Systems. All you need is access to an open USB port and permission to use the port.

Purchase Options

- We can provide a new license preinstalled on a high speed 16 GB USB 3.0/2.0 compatible drive for \$229 (compare with the Installed Version unlock code price of \$199). Shipping is extra.
- Or you can install a new license on your own USB Flash Drive for \$209. We provide the files to place on the drive and interaction with Tech Support is required to activate it.
- If you already have NetScanTools Pro USB Version, you can get the file set for a discounted \$109. Interaction with Tech Support is required to activate it. We allow one discount per license of NetScanTools Pro.
- We are also offering 'Sidegrade' which means you already have the installed version of the Managed Switch Port Mapper 2.x now and you also want it on on USB – you will end up with both licenses active. We can send it preinstalled on a USB Flash Drive or you can use your own flash drive.
- Of course upgrades from Managed Switch Port Mapper 1.x to 2.x now can go to either the Installed Version or the USB Version. Pricing varies.

The USB Version is available now.

NetScanTools® Pro Maintenance Plan and the Managed Switch Port Mapping Tool

I would like to address some confusion about the NetScanTools Pro Maintenance Plan. Some customers who have a license for both products are asking if the NetScanTools Pro Maintenance Plan covers the Managed Switch Port Mapping Tool upgrade from 1.x to 2.x. The customer may have even bought them together with Bundled pricing. We have many customers who only have a license for the Managed Switch Port Mapping Tool and many who only have a NetScanTools Pro license.

The answer is no, the plan does not cover the upgrade because they are separate products.

We have priced the upgrade at a very low price (1/4 the new license price) and we do not anticipate releasing 3.0 for some time. In fact, it took 7 years to go from Managed Switch Port Mapping Tool v1 to v2. If you have v2 now, all the new versions of 2.x are no charge until we reach v3.

You have the NetScanTools® Pro Maintenance Plan, but you are still many versions behind – why?

We see this all the time when people register. We see it when they renew their maintenance plan - we check the logs and see that they have never logged in and downloaded updates. For whatever the reason, the question remains, why are they installing 11.01 (for example) when we are at 11.42?

There are many good reasons to install the latest version: First of all is bug fixes, secondly there are new tools introduced with each .1, .2, .3, .4 etc. edition and thirdly, there are database updates.

OK – A Quick Review on upgrading to a new version. First thing you need is an active NetScanTools Pro maintenance plan. Start NetScanTools Pro and click on Help/Check for New Version. An embedded browser window opens up on the right side of the program. Click on the download link, a popup window appears. Enter your login credentials (shown to you in the program right above the embedded window) and download the zip file. Exit NetScanTools Pro and run the contents of the zip file which is actually a full install. Restart it and verify the latest version.

Contact Information

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

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