

## June 2014

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# News...

From the Editor...

New releases are out! Come and get them!

-Kirk

## New Releases Planned for Early July

We are working on a new minor version release of the Managed Switch Port Mapping Tool and a new minor release of NetScanTools **Pro.** Look for those releases in early July. Monitor our Twitter feed @netscantools or sign up to be notified when new releases come out here:

http://www.netscantools.com/spmapnewreleasesignup.html

## Discussion about SNMP in NetScanTools Pro<sup>®</sup>

The SNMP Tools are one of the most powerful and versatile tools in NetScanTools Pro. We use it all the time to research and pull data from new switches and routers. In fact, you may not even know that Windows supports SNMP reporting and has since Windows NT.

If you are not familiar with SNMP, the initials stand for Simple Network Management Protocol. It comes in three versions: 1, 2c and 3. Versions 1 and 2c are insecure using plaintext community names (passwords that can be packet captured and seen plainly) and v3 supports three security levels ranging from no encryption to full encryption. It is a UDP protocol so the packets are sent to the target and if the target chooses to reply, a reply comes back. There is no way to completely know that an SNMP daemon (service) is listening on UDP port 161. Most devices support v1 and v2c and v3 is becoming much more common. You can usually choose with versions of SNMP you want to use either from CLI (command line interface) or from a web interface on the device.

The information monitored by SNMP is often dynamic in nature, like the port assignments and packet counts reported by a switch to the Managed Switch Port Mapping Tool. It can also be static like a device model number, serial number or firmware revision.

The data is reported in a hierarchical manner using numeric OIDs (Object Identifier) to which can be thought of as directories and files with data. The OIDs are defined by MIBs (Management Information Base) which are human readable text files written in Abstract Syntax Notation One and define what type of information is collected and how it is reported.

My person favorite and most useful tool in 'SNMP Tools – Core' is Walk and WalkBulk (v2/v3 only). What Walk does for you is show you all the OIDs and their values starting at the level you OID input and going until that level is complete. WalkBulk is faster because it can use bulk requests where instead of one request followed by one OID reply, it does one request and gets up to the 'Bulk Reps' value number of OIDs in reply.

**Example:** enter the value .1.3.6.1.2.1 into the OID field, select SNMP v1 or v2c, enter a target switch or router IP address, enter the community name (public is a read-only default often used), then select the Walk option and press Perform Action. If the device is SNMP enabled and you have the right community name, a huge amount of data will start showing up in the results display. You are walking the 'MIB2' section of which major portions are required to be supported by the device if it is SNMP enabled. Even small managed switches support SNMP, so give it a try.

#### A note about the results output

Press the Settings button and and you will see some Display Output Options. Show full OID means that if any data is received from the target, the SNMP engine will attempt to look through the loaded MIB text files and translate the numeric OID into human readable format. The OID is shown to the left of the = sign. .1.3.6.1.2.1 would be translated into .iso.org.dod.internet.mgmt.mib2. It can only translate if MIBs are loaded. We include some MIBs and you can add others in SNMP - Advanced. See the Help file for more information.

The next setting is Show abbreviated OID with source module. If this is selected, the translation is partial. You will see things like SNMPv2-MIB::sysDescr.0 = GS724TS on a line. Where the thing to the left of the double colons is the MIB source module and the next thing is the item of interest followed by = value.

Finally, Show OID as numeric ignores all translation and shows the full numeric OID followed by = value.

**Example of walking a whole device:** Enter .1 in the OID field, then walk or walkbulk the device. This is what we use to look at a switch. It can take some time on a complicated device.

Right click in the results for saving and printing (if you are brave and have lots of paper) options.

That is just a quick overview of SNMP. It is a very useful tool in discovering information about devices, local or remote.

## NetScanTools<sup>®</sup> Pro Version 11.61 released May 9, 2014

This release fixed an urgent algorithm problem in the Whois tool that was introduced in v11.60. And we added 50 new top level domain Whois servers in addition to the 180+ added in v11.60 – the IANA has been busy. This includes servers for new TLDs like '.wtf' and '.fail'. Another minor change is that the DNS entry boxes labeled 'DNS Server' now all accept up to 48 entries. Some were only accepting 16 before old entries would age out of the list. As usual, the other databases were all updated.

## Looking for NetScanTools<sup>®</sup> Pro Version 11.70 Suggestions

We already have some new tools in work for v11.70, a DNS tool and an IPv6 tool, but we are always looking for suggestions. Tell us what you need and maybe it can become a tool in NetScanTools Pro. There are no guarantees that your suggestion will be implemented, but send an email to support at netscantools dot com if you have a suggestion for a change, improvement or new tool.

# Managed Switch Port Mapping Tool 2.33 Released April 29, 2014

This release addressed problems with interpreting VLAN information when mapping HP ProCurve 1810G switches. Our tests were all done with the latest 1810G firmware v2.12. This release also improved reporting of the 'capabilities' field in LLDP and CDP plus improved the parsing of the MAC address field.

#### Details of the changes in versions 2.33

#### 2.32 March 14, 2014

-Added algorithm changes to support specific issues with obtaining the VLANs for HP ProCurve 1810G switches. Switch firmware must be v2.12 or newer. -Added warning message when a user tries to alter certain tables using Database Maintenance.

-Change: when you click in the IP Address or alias boxes in the left control panel, the Settings window opens for that device.

-Updated SNMP Manager to v2.02.

-Updated SQLite to version 3.8.4.3

-Updated MAC address/Manufacturer database.

#### Get the new release at SwitchPortMapper.com.

# You have the NetScanTools<sup>®</sup> 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 11.43 (for example) when we are at 11.61?

**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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