

SNMP

rychlost SNMP a zatížení sítě

SNMP v pythonu

- pySNMP
 - verze 2.x stable
 - verze 4.1.x development
- SNMPy
- YAPSNMP

Python getnext

The image shows a Wireshark capture window titled "get-next - Wireshark". The filter is set to "snmp". The packet list pane shows a series of alternating get-request and get-next-request packets from 147.32.97.64 to 85.71.177.134, and corresponding get-response packets from 85.71.177.134 to 147.32.97.64. The packet details pane for packet 15775 shows the following layers:

- Frame 15775 (95 bytes on wire, 95 bytes captured)
- Ethernet II, Src: Inventec_c6:41:17 (00:a0:d1:c6:41:17), Dst: Supermic_27:75:8a (00:30:48:27:75:8a)
- Internet Protocol, Src: 147.32.97.64 (147.32.97.64), Dst: 85.71.177.134 (85.71.177.134)
- User Datagram Protocol, Src Port: 32918 (32918), Dst Port: snmp (161)
- Simple Network Management Protocol

The packet bytes pane shows the raw data for the selected packet:

```
0000 00 30 48 27 75 8a 00 a0 d1 c6 41 17 08 00 45 00  .OH'u... ..A...E.
0010 00 51 00 00 40 00 40 11 3f 6e 93 20 61 40 55 47  .Q..@.@. ?n. a@UG
0020 b1 86 80 96 00 a1 00 3d fb 7c 30 33 02 01 01 04  .....= .|03....
0030 13 67 65 74 5f 63 6f 6d 75 6e 69 74 79 5f 73 74  .get_com unity_st
0040 72 69 6e 67 a0 19 02 01 01 02 01 00 02 01 00 30  ring.... .....0
0050 0e 30 0c 06 08 2b 06 01 02 01 02 01 00 05 00    .0...+.. .....
```

At the bottom of the window, the status bar shows: File: "/home/herbol1/school/4.semestr/y36sps/pywatch-tool/getnext/get-next" 61 MB 00:01:29 | P: 47851 D: 116 M: 0

Python getbulk

The image shows a Wireshark capture window titled "get-bulk - Wireshark". The filter is set to "snmp". The packet list shows a sequence of SNMP packets between source IP 147.32.97.64 and destination IP 85.71.177.134. The packets alternate between "getBulkRequest" and "get-response". Packet 32254 is selected, and its details pane shows the following structure:

- Frame 32254 (97 bytes on wire, 97 bytes captured)
- Ethernet II, Src: Inventec_c6:41:17 (00:a0:d1:c6:41:17), Dst: Supermic_27:75:8a (00:30:48:27:75:8a)
- Internet Protocol, Src: 147.32.97.64 (147.32.97.64), Dst: 85.71.177.134 (85.71.177.134)
- User Datagram Protocol, Src Port: 32975 (32975), Dst Port: snmp (161)
- Simple Network Management Protocol

The packet bytes pane shows the raw data for the selected packet:

```
0000  00 30 48 27 75 8a 00 a0 d1 c6 41 17 08 00 45 00  .0H'u... ..A...E.
0010  00 53 00 00 40 00 40 11 3f 6c 93 20 61 40 55 47  .S..@.@. ?l. a@UG
0020  b1 86 80 cf 00 a1 00 3f fb 7e 30 35 02 01 01 04  .....? ~05....
0030  13 67 65 74 5f 63 6f 6d 75 6e 69 74 79 5f 73 74  .get_com unity_st
0040  72 69 6e 67 a5 1b 02 01 07 02 01 01 02 01 00 30  ring.... ....0
0050  10 30 0e 06 0a 2b 06 01 02 01 02 02 01 01 04 05  .0...+.. ....
0060  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  .....
```

At the bottom, the status bar shows: File: "/home/herbol1/school/4.semestr/y36sps/pywatch-tool/getbulk/get-bulk" 86 MB 00:02:08 | P: 67848 D: 182 M: 0

SNMP vlastní implementace

- snmpget
- 12.27s
- snmpbulk
- 1.24s

SNMP python

Konec?

Bonus

- nagios2: debian, ubuntu
 - `check_external_commands=1`

Bonus

Error:

**Could not stat() command file
'/var/lib/nagios2/rw/nagios.cmd'**

Bonus

- Two lines solution:
 - `# dpkg-statoverride --update --add nagios www-data 2710 /var/lib/nagios2/rw`
 - `# dpkg-statoverride --update --add nagios nagios 751 /var/lib/nagios2`

Bonus

konec!

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