Speed Test

Introduction

The Speed Test is an easy test tool for measuring ping, jitter, TCP and UDP throughput from one MikroTik device, to another. The "speed-test" command is based on the Ping Tool and Bandwidth Test. In order to use this command - Bandwidth test server needs to be accessible.

General interface properties

The speed-test is based on five configurable properties:

- address - IP address of host;
- connection-count - If a device has more than 20 cores - core count will be used (default is 20);
- password - Password for the remote device;
- test-duration - Duration for each test (*By default: 5 tests * 10 sec duration + 1sec pause between each test = 55sec*);
- user - Remote device username;

Configuration Example

Bandwidth and speed tests should be conducted through the devices, not on them to ensure real-life simulation and not to overload the CPU on the devices under testing,(DUT) due to the traffic generating process.

To run a simple test from device A (192.168.88.1) to device B (192.168.88.2):

```
[admin@MikroTik] > /tool/speed-test address=192.168.88.1
            status: done
    time-remaining: 0s
   ping-min-avg-max: 541us / 609us / 3.35ms
 jitter-min-avg-max: 0s / 76us / 2.76ms
              loss: 0% (0/100)
       tcp-download: 921Mbps local-cpu-load:30%
         tcp-upload: 920Mbps local-cpu-load:30% remote-cpu-load:25%
       udp-download: 917Mbps local-cpu-load:6% remote-cpu-load:21%
         udp-upload: 916Mbps local-cpu-load:20% remote-cpu-load:6%
```

If any of device CPU utilization during test reaches 100% warning message will appear:

```
[admin@MikroTik]] > /tool/speed-test address=192.168.88.1
                ;;; results can be limited by cpu, note that traffic generation/termination
                    performance might not be representative of forwarding performance
            status: done
    time-remaining: 0s
   ping-min-avg-max: 541us / 609us / 3.35ms
 jitter-min-avg-max: 0s / 76us / 2.76ms
              loss: 0% (0/100)
       tcp-download: 721Mbps local-cpu-load:78%
         tcp-upload: 820Mbps local-cpu-load:100% remote-cpu-load:84%
       udp-download: 906Mbps local-cpu-load:10% remote-cpu-load:54%
         udp-upload: 895Mbps local-cpu-load:55% remote-cpu-load:12%
```

"test-duration" parameter allows changing the duration of all of the 5 tests:

-) Ping test with 50ms delay
-) TCP receive
-) TCP send

-) UDP receive
-) UDP send