

smartswitch - Ping - # 2

Ping

Ping - utility to verify the integrity and quality of connections based on TCP/IP networks, as well as the everyday name of the request.

The utility sends requests (ICMP Echo-Request) to a specified node on the network and captures the incoming responses (ICMP Echo-Reply).

The time between sending a request and receiving a response (RTT, from the English. Round Trip Time) allows to determine the round trip delay (RTT) of a route and packet loss rate, that is, indirectly determine the load on the data transmission channels and intermediate devices.

Do not confuse Ping - determining the integrity and quality of communication with the transport protocols TCP connection and UDP - determining transmission and data rate!

Normal ping is 64 bytes long (plus 20 bytes of the IP-header).


According to RFC 791 standard IPv4 total size of the packet may not exceed 65 535 bytes.

Complete absence of the ICMP-Reply can also mean that the remote node (or any of the intermediate router) is blocking ICMP Echo-Reply or ignores ICMP Echo-Request.

To send ICMP-packets it's needed to create a raw-sockets.

Therefore, if Smartswitch is running in the emulator (such as VirtualBox), this function may not work.

Example of ping:

Ping	
host	<input type="text" value="google.com"/>
packet count	<input type="text" value="10"/>
	

```
PING google.com (172.217.20.206): 56 data bytes
64 bytes from 172.217.20.206: icmp_seq=0 ttl=55 time=34.876 ms
64 bytes from 172.217.20.206: icmp_seq=1 ttl=55 time=35.005 ms
64 bytes from 172.217.20.206: icmp_seq=2 ttl=55 time=34.992 ms
64 bytes from 172.217.20.206: icmp_seq=3 ttl=55 time=34.702 ms
64 bytes from 172.217.20.206: icmp_seq=4 ttl=55 time=34.997 ms
64 bytes from 172.217.20.206: icmp_seq=5 ttl=55 time=34.993 ms
64 bytes from 172.217.20.206: icmp_seq=6 ttl=55 time=34.578 ms
64 bytes from 172.217.20.206: icmp_seq=7 ttl=55 time=34.998 ms
64 bytes from 172.217.20.206: icmp_seq=8 ttl=55 time=34.992 ms
64 bytes from 172.217.20.206: icmp_seq=9 ttl=55 time=34.886 ms

--- google.com ping statistics ---
10 packets transmitted, 10 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 34.578/34.902/35.005/0.141 ms
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[Русский перевод](#)

Files

ping.gif	21.3 KB	01/07/2017	Andrii Arsirii
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