

, , ■

IP- , () .

LINUX

:

1 - iperf - .

2 - mtr - traceroute ping . , traceroute, mtr , .

3 - IP

WINDOWS

:

1 - tracert - . , TCP/IP. Traceroute . UDP, TCP, ICMP GRE. Windows ICMP-, Linux Cisco — UDP. — , .

, TRACERT

tracert [-d] [-h _] [-j _] [-w _]

-d- tracert IP- . tracert.

-h _ - . 30.

-j _ - IP , _ . — 9. _ IP- (-), .

-w - - ICMP ICMP- , -. , (*). 4000 (4).

_ - , IP- .

-? - tracert

TRACERT

: tracert /?

, : tracert google.com

IP- , : tracert -d google.com

2 - PING - Windows TCP/IP. PING - ICMP IP , TCP/IP. -. , .

! , (ping), , - .

.

(> > cmd >)

, PING

ping [-t] [-a] [-n] [-l] [-f] [-i TTL] [-v] [-r] [-s] [{-j _ | -k _}] [-w] [_],

-t - ping - , . CTRL-BREAK. ping CTRL-C.
-a - IP- . .
-n - -. -4.
-l - () -. — 32 . — 65527.
-f - «Don't Fragment» IP-, 1. - . , (Maximum Transmission Unit).
-i TTL - TTL IP- -. TTL, . Windows XP 128. TTL - 255.
-v - (TOS) IP- -. 0. - 0 255.
-r - (Record Route) IP- , - -. . , . 1 9.
-s - (Internet Timestamp) IP - - . 1 4.
-j - - IP- , _ . — 9. — IP- (-), .
-k - - IP- , _ . (). 9. — IP- (-), .
-w - -, -. - , "Request timed out". 4000 (4).
 __ - , IP- .

PING

: ping /?;
ya.ru : ping google.com -t;

3 - - PATHPING . Pathping - , , , , . TRACERT PING . ,
 . , , .

, PATHPING

pathping [-n] [-h __] [-g _] [-p] [-q _ [-w] [-T] [-R] [__],
-n - pathping IP- . pathping.
-h __ - . 30.
-g _ - IP- , _ . 9. _ IP- (-), .
-p - (). 250 (1/4).
-q _ - , . — 100.
-w - (). 3000 (3).
-T - 2 (802.1p) -, . , 2. , QoS.
-R -, RSVP (Resource Reservation Setup Protocol,), . , QoS.
 __ - , IP- .
 /? - .

pathping

- Pathping /? - .
- Pathping google.com - google.com

4) - iperf - .