PsPing v2.1

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In this article

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Introduction

PsPing implements Ping functionality, TCP ping, latency and bandwidth measurement. Use the following command-line options to show the usage for each test type:

Installation

Copy *PsPing* onto your executable path. Typing "psping" displays its usage syntax.

Using PsPing

PsPing implements Ping functionality, TCP ping, latency and bandwidth measurement. Use the following command-line options to show the usage for each test type:

Usage: psping -? [i|t|l|b]

Parameter	Description
-? I	Usage for ICMP ping.
-? T	Usage for TCP ping.
-? L	Usage for latency test.
-? B	Usage for bandwidth test.

ICMP ping usage:
psping [[-6]|[-4]] [-h [buckets | <val1>,<val2>,...]] [-i <interval>] [-l <requestsize>[k|m] [-q] [-t|-n

<count>] [-w <count>] <destination>

Parameter	Description
-h	Print histogram (default bucket count is 20).
	If you specify a single argument, it's interpreted as a bucket count and the histogram will contain that number of buckets covering the entire time range of values. Specify a comma-separated list of times to create a custom histogram (e.g. "0.01,0.05,1,5,10").
-i	Interval in seconds. Specify 0 for fast ping.
-l	Request size. Append 'k' for kilobytes and 'm' for megabytes.
-n	Number of pings or append 's' to specify seconds e.g. '10s'.
-q	Don't output during pings.
-t	Ping until stopped with Ctrl+C and type Ctrl+Break for statistics.
-w	Warmup with the specified number of iterations (default is 1).
-4	Force using IPv4.
-6	Force using IPv6.

For high-speed ping tests use -q and -i 0.

TCP ping usage:
** psping [[-6]|[-4]] [-h [buckets | <val1>,<val2>,...]] [-i <interval>] [-l <requestsize>[k|m] [-q] [-t|-n
<count>] [-w <count>] <destination:destport>**

Parameter	Description
-h	Print histogram (default bucket count is 20).
	If you specify a single argument, it's interpreted as a bucket count and the histogram will contain that number of buckets covering the entire time range of values. Specify a comma-separated list of times to create a custom histogram (e.g. "0.01,0.05,1,5,10").
-i	Interval in seconds. Specify 0 for fast ping.
-l	Request size. Append 'k' for kilobytes and 'm' for megabytes.
-n	Number of pings or append 's' to specify seconds e.g. '10s'.
-q	Don't output during pings.

Parameter	Description
-t	Ping until stopped with Ctrl+C and type Ctrl+Break for statistics.
-w	Warmup with the specified number of iterations (default is 1).
-4	Force using IPv4.
-6	Force using IPv6.

For high-speed ping tests use -q and -i 0.

TCP and UDP latency usage:

server: psping [[-6]|[-4]] [-f] <-s source:sourceport>

client: psping [[-6]|[-4]] [-f] [-u] [-h [buckets | <val1>,<val2>,...]] [-r] <-l requestsize>[k|m]] <-n count> [-w <count>] <destination:destport>

Parameter	Description
-f	Open source firewall port during the run.
-u	UDP (default is TCP).
-h	Print histogram (default bucket count is 20).
	If you specify a single argument, it's interpreted as a bucket count and the histogram will contain that number of buckets covering the entire time range of values. Specify a comma-separated list of times to create a custom histogram (e.g. "0.01,0.05,1,5,10").
-l	Request size. Append 'k' for kilobytes and 'm' for megabytes.
-n	Number of sends/receives. Append 's' to specify seconds e.g. '10s'
-r	Receive from the server instead of sending.
-w	Warmup with the specified number of iterations (default is 5).
-4	Force using IPv4.
-6	Force using IPv6.
-s	Server listening address and port.

The server can serve both latency and bandwidth tests and remains active until you terminate it with Control-C.

TCP and UDP bandwidth usage:

server: psping [[-6]|[-4]] [-f] <-s source:sourceport>

client: psping [[-6]|[-4]] [-f] [-u] [-h [buckets | <val1>,<val2>,...]] [-r] <-l requestsize>[k|m]] <-n count> [-i <outstanding>] [-w <count>] <destination:destport>

Parameter	Description
-f	Open source firewall port during the run.
-u	UDP (default is TCP).
-b	Bandwidth test.
-h	Print histogram (default bucket count is 20).
	If you specify a single argument, it's interpreted as a bucket count and the histogram will contain that number of buckets covering the entire time range of values. Specify a comma-separated list of times to create a custom histogram (e.g. "0.01,0.05,1,5,10").
-i	Number of outstanding I/Os (default is min of 16 and 2x CPU cores).
-l	Request size. Append 'k' for kilobytes and 'm' for megabytes.
-n	Number of sends/receives. Append 's' to specify seconds e.g. '10s'
-r	Receive from the server instead of sending.
-w	Warmup for the specified iterations (default is 2x CPU cores).
-4	Force using IPv4.
-6	Force using IPv6.
-s	Server listening address and port.

The server can serve both latency and bandwidth tests and remains active until you terminate it with Control-C.

Examples

This command executes an ICMP ping test for 10 iterations with 3 warmup iterations:
psping -n 10 -w 3 marklap

To execute a TCP connect test, specify the port number. The following command executes connect attempts against the target as quickly as possible, only printing a summary when finished with the 100 iterations and 1 warmup iteration:

psping -n 100 -i 0 -q marklap:80

To configure a server for latency and bandwidth tests, simply specify the -s option and the source address and port the server will bind to:

psping -s 192.168.2.2:5000

A buffer size is required to perform a TCP latency test. This example measures the round trip latency of sending an 8KB packet to the target server, printing a histogram with 100 buckets when completed:

psping -l 8k -n 10000 -h 100 192.168.2.2:5000

This command tests bandwidth to a PsPing server listening at the target IP address for 10 seconds and produces a histogram with 100 buckets. Note that the test must run for at least one second after warmup for a histogram to generate. Simply add -u to have PsPing perform a UDP bandwidth test.

psping -b -l 8k -n 10000 -h 100 192.168.2.2:5000

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