

## Hping

Usage:  
# hping [Options] [TargetIPAddr]  
Send packets to [TargetIPAddr] as specified by [Options]

Options:  
--count [N]: Number of packets to send  
--beep: Beep when a packet is *received*  
--file [FileName]: Send contents of file as a payload, must be used with --data  
--data [N]: Length of payload to send in bytes, if no --file is specified, payload is all X's  
--interface [Interface]: Use specified interface name

Speed Options:  
--fast: Ten packets per second  
--faster: One million packets per second  
--flood: Send packets as fast as possible  
--interval [Seconds] /u [Microseconds]: Interval in seconds/microseconds between sent packets

Modes:  
Default Mode: TCP  
--rawip: Send raw IP packets, no TCP/UDP  
--icmp: Send ICMP packets  
--udp: Send UDP packets

Source Selection:  
--spoof [Hostname]: Send all packets from specified source address

## Hping (continued)

Target Address Selection:  
Single Target:  
# hping [TargetIPAddr]  
Send packets to [TargetIPAddr]  
  
Random Multiple Targets:  
# hping --rand-dest 10.10.10.x  
--interface eth0  
Send packets to 10.10.10.x with x being randomly chosen for each packet between 1 and 255  
--interface must be used with --rand-dest

Dest Port Selection:  
Single Port:  
--destport [Port]  
[Port]: Send packets to this port  
+[Port]: Increment port number by one for each *response received*  
++[Port]: Increment port number by one for each packet *sent*  
  
Multiple/Range of Ports:  
--scan [PortRange/List]: Scan this target range or list of ports (X-Y,z,known). The known keyword tells Hping to send packets to the list of ports in /etc/services

Source Port Selection:  
Default: Use source port > 1024 assigned by OS, incrementing for each packet sent  
--baseport [Port]: Start with this source port, incrementing for each packet sent  
--keep: Use only a single source port for all packets



## Purpose

The purpose of this cheat sheet is to describe some common options for a variety of security assessment and pen test tools covered in SANS 504 and 560.

## Tools Described on This Sheet

### Metasploit 3.X

The Metasploit Framework is a development platform for developing and using security tools and exploits.

### Metasploit Meterpreter

The Meterpreter is a payload within the Metasploit Framework which provides control over an exploited target system, running as a DLL loaded inside of any process on a target machine.

### FGDump

FGDump is a tool for locally or remotely dumping runtime Windows password hashes.

### Hping

Hping is a command-line TCP/IP packet assembler/analyzer