

## Command Line Options

<b>-A</b>	Print frame payload in ASCII	<b>-q</b>	Quick output
<b>-c &lt;count&gt;</b>	Exit after capturing <b>count</b> packets	<b>-r &lt;file&gt;</b>	Read packets from <b>file</b>
<b>-D</b>	List available interfaces	<b>-s &lt;len&gt;</b>	Capture up to <b>len</b> bytes per packet
<b>-e</b>	Print link-level headers	<b>-S</b>	Print absolute TCP sequence numbers
<b>-F &lt;file&gt;</b>	Use <b>file</b> as the filter expression	<b>-t</b>	Don't print timestamps
<b>-G &lt;n&gt;</b>	Rotate the dump file every n seconds	<b>-v[v[v]]</b>	Print more verbose output
<b>-i &lt;iface&gt;</b>	Specifies the capture interface	<b>-w &lt;file&gt;</b>	Write captured packets to <b>file</b>
<b>-K</b>	Don't verify TCP checksums	<b>-x</b>	Print frame payload in hex
<b>-L</b>	List data link types for the interface	<b>-X</b>	Print frame payload in hex and ASCII
<b>-n</b>	Don't convert addresses to names	<b>-y &lt;type&gt;</b>	Specify the data link type
<b>-p</b>	Don't capture in promiscuous mode	<b>-Z &lt;user&gt;</b>	Drop privileges from root to <b>user</b>

## Capture Filter Primitives

<b>[src dst] host &lt;host&gt;</b>	Matches a host as the IP source, destination, or either
<b>ether [src dst] host &lt;ehost&gt;</b>	Matches a host as the Ethernet source, destination, or either
<b>gateway host &lt;host&gt;</b>	Matches packets which used <b>host</b> as a gateway
<b>[src dst] net &lt;network&gt;/&lt;len&gt;</b>	Matches packets to or from an endpoint residing in <b>network</b>
<b>[tcp udp] [src dst] port &lt;port&gt;</b>	Matches TCP or UDP packets sent to/from <b>port</b>
<b>[tcp udp] [src dst] portrange &lt;p1&gt;-&lt;p2&gt;</b>	Matches TCP or UDP packets to/from a port in the given range
<b>less &lt;length&gt;</b>	Matches packets less than or equal to <b>length</b>
<b>greater &lt;length&gt;</b>	Matches packets greater than or equal to <b>length</b>
<b>(ether ip ip6) proto &lt;protocol&gt;</b>	Matches an Ethernet, IPv4, or IPv6 protocol
<b>(ether ip) broadcast</b>	Matches Ethernet or IPv4 broadcasts
<b>(ether ip ip6) multicast</b>	Matches Ethernet, IPv4, or IPv6 multicasts
<b>type (mgt ctl data) [subtype &lt;subtype&gt;]</b>	Matches 802.11 frames based on type and optional subtype
<b>vlan [&lt;vlan&gt;]</b>	Matches 802.1Q frames, optionally with a VLAN ID of <b>vlan</b>
<b>mpls [&lt;label&gt;]</b>	Matches MPLS packets, optionally with a label of <b>label</b>
<b>&lt;expr&gt; &lt;relop&gt; &lt;expr&gt;</b>	Matches packets by an arbitrary expression

Protocols			Modifiers	Examples	
arp	ip6	slip	! or not	udp dst port not 53	UDP not bound for port 53
ether	link	tcp	&& or and	host 10.0.0.1 && host 10.0.0.2	Traffic between these hosts
fddi	ppp	tr	or or	tcp dst port 80 or 8080	Packets to either TCP port
icmp	radio	udp			
ip	rarp	wlan			
TCP Flags			ICMP Types		
tcp-urg	tcp-rst		icmp-unreach	icmp-routeradvert	icmp-tstampreply
tcp-ack	tcp-syn		icmp-sourcsequench	icmp-routersolicit	icmp-ireq
tcp-psh	tcp-fin		icmp-redirect	icmp-timxceed	icmp-ireqreply
			icmp-echo	icmp-paramprob	icmp-maskreq
				icmp-tstamp	icmp-maskreply