

GUI Shortcuts

Ctrl+E	Start capture.
Ctrl+E	Stop capture.
Ctrl+S or Ctrl+Shift+S	Save the current capture file.
Ctrl+O	Open a capture file (.pcap, .pcapng, etc.).
Ctrl+F	Search for a packet by string or display filter.
↓ / ↑	Move to the next or previous packet in the packet list.
Ctrl+↓ / Ctrl+↑	Jump to the next or previous packet in the same conversation.
Enter	Expand or collapse a tree item in the details pane.
Backspace	Jump to the parent node in the packet details pane.
Tab or Shift+Tab	Navigate between UI elements (e.g., filter bar, packet list).

Capture Filter Expressions

Capture all traffic from a host.	src host 192.168.1.10
Capture all traffic to a host.	dst host 8.8.8.8
Capture all traffic to and from a host.	host 192.168.1.1
Capture specific port traffic.	port 443
Only capture TCP traffic.	tcp
Only capture UDP traffic.	udp
Only capture DNS traffic (UDP port 53).	udp port 53
Capture ICMP (ping) traffic.	icmp
Capture HTTP traffic.	tcp port 80
Capture HTTPS traffic.	tcp port 443
Capture traffic from a network.	net 192.168.1.0/24
Exclude SSH traffic.	not port 22

Display Filter Expressions

Filter by IP	ip.addr == 10.10.42.1
Filter by Source IP	ip.src == 10.10.42.1
Filter by Destination IP	ip.dst == 10.10.42.1
Exclude IP	!(ip.addr == 10.10.42.1)
IP Range	ip.addr >= 10.10.42.1 and ip.addr <= 10.10.42.100
Subnet	ip.addr == 10.10.42.1/24
Protocol Filter	http or ftp or ssh or icmp
TCP port	tcp.port == 25
HTTP Host	http.host == "example.com"
IP and port	ip.addr == 10.10.50.1 and tcp.port == 25
Timestamp	frame.time >= "2025-08-07 12:48:22"
SYN flag	tcp.flags.syn == 1 && tcp.flags.ack == 0
Destination TCP port	tcp.dst == 27
Broadcast traffic	eth.dst == ff:ff:ff:ff:ff:ff
Multicast traffic	(eth.dst[0] & 1)
MAC address	eth.addr == 00:10:f7:23:12:c5

Display Filter Operators

Equal to	== or eq
Not equal to	!= or ne
Greater than	> or gt
Less than	< or lt
Greater than or equal to	>= or ge
Less than or equal to	<= or le
Logical AND	and or &&
Logical OR	or or
Logical NOT	not or !

tshark Commands

tshark -D	List all available interfaces.
tshark -i enp0s3	Capture packets on a specific interface.
tshark -i enp0s3 -w file.pcapng	Save captured packets to a file.
tshark -a duration:30 -i enp0s3	Capture traffic for 30 seconds.
tshark -f "port 443" -i enp0s3	Apply a capture filter to only record HTTPS traffic.
tshark -Y "http" -r file.pcapng	Apply a display filter to show HTTP traffic from a saved file.
tshark -T fields -e ip.src -e ip.dst	Output only specific fields (the source and destination IP in this example).
tshark -z io,stat,1	Show I/O statistics in 1-second intervals.
tshark -z conv,tcp	Display TCP conversations.
tshark -i enp0s3 -c 100 -w file.pcapng	Capture 100 packets and stop automatically.
tshark -i enp0s3 -w file.pcapng -P	Show packets live in the terminal and write them to a file.
tshark -r file.pcapng -Y "http.request"	Filter and display only HTTP requests from a capture file.
tshark -r file.pcapng -T fields -e ip.src -e ip.dst -e frame.len	Display the selected fields (source IP, destination IP, frame size).
tshark -r file.pcapng -T fields -e ip.src -e ip.dst -E header=y -E separator=, > packets.csv	Export selected fields as a CSV file.
tshark -r file.pcapng -T json	Output data in a structured JSON format.
tshark -r file.pcapng -Y "dns" -T fields -e dns.qry.name	Extract domain names from DNS query packets.
tshark -i enp0s3 -f "tcp[tcpflags] & tcp-syn != 0" -c 10	Capture 10 TCP SYN packets to identify connection attempts.
tshark -i enp0s3 -f "host 192.168.1.10"	Capture traffic to and from the specified IP address.
tshark -qz io,stat,1 -i enp0s3 -a duration:60	Print packet counts per second over 60 seconds.
tshark -i enp0s3 -w file.pcapng &	Start a capture in the background.