Wireshark Cheat Sheet

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Default columns in a packet capture output

No.	Frame number from the beginning of the packet capture
Time	Seconds from the first frame
Source (src)	Source address, commonly an IPv4, IPv6 or Ethernet address
Destination (dst)	Destination address
Protocol	Protocol used in the Ethernet frame, IP packet, or TCP segment
Length	Length of the frame in bytes

Logical Operators

Operator	Description	Example
and or &&	Logical AND	All the conditions should match
or or ||	Logical OR	Either all or one of the condition should match
xor or ^^	Logical XOR	exclusive alternation – Only one of the two conditions should match not both
not or !	NOT(Negation)	Not equal to
[n] [...]	Substring operator	Filter a specific word or text

Filtering packets (Display Filters)

Operator	Description	Example
eq or ==	Equal	ip.dest == 192.168.1.1
ne or !=	Not Equal	ip.dest != 192.168.1.1
gt or >	Greater than	frame.len > 10
lt or <	Less than	frame.len <10
ge or >=	Greater than or Equal	frame.len >= 10
le or <=	Less than or Equal	frame.len<=10

Filter Types

Capture filter	Filter packets during capture
Display Filter	Hide Packets from a capture display

Wireshark Capturing Modes

Promiscuous mode	Sets interface to capture all packets on a network segment to which it is associated to
Monitor mode	setup the Wireless interface to capture all traffic it can receive (Unix/Linux only)

Capture Filter Syntax

Syntax	protocol	direction	hosts	value	Logical operator	Expressions
Example	tcp	src	192.168.1.1	80	and	tcp dst 202.164.30.1

Display Filter Syntax

Syntax	protocol	String 1	String 2	Comparison Operator	value	logical operator	Expressions
Example	http	dest	ip	==	192.168.1.1	and	tcp port

Keyboard Shortcuts – main display window

Accelerator	Description	Accelerator	Description
Tab or Shift+Tab	Move between screen elements, e.g. from the toolbars to the packet list to the packet detail.	Alt+⟶ or Option+⟶	Move to the next packet in the selection history.
↓	Move to the next packet or detail item.	⟶	In the packet detail, opens the selected tree item.
↑	Move to the previous packet or detail item.	Shift+⟶	In the packet detail, opens the selected tree item and all of its subtrees.
Ctrl+ ↓ or F8	Move to the next packet, even if the packet list isn't focused.	Ctrl+⟶	In the packet detail, opens all tree items.
Ctrl+ ↑ or F7	Move to the previous packet, even if the packet list isn't focused.	Ctrl+⟵	In the packet detail, closes all tree items.
Ctrl+.	Move to the next packet of the conversation (TCP, UDP or IP).	Backspace	In the packet detail, jumps to the parent node.
Ctrl+,	Move to the previous packet of the conversation (TCP, UDP or IP).	Return or Enter	In the packet detail, toggles the selected tree item.

Miscellaneous

Slice Operator	[...] - Range of values
Membership Operator	{} - In
CTRL+E	- Start/Stop Capturing

Protocols - Values

ether, fddi, ip, arp, rarp, decnet, lat, sca, moprc, mopdl, tcp and udp

Common Filtering commands

Usage	Filter syntax	Usage	Filter syntax
Wireshark Filter by IP	ip.addr == 10.10.50.1	Filter by URL	http.host == "host name"
Filter by Destination IP	ip.dest == 10.10.50.1	Filter by time stamp	frame.time >= "June 02, 2019 18:04:00"
Filter by Source IP	ip.src == 10.10.50.1	Filter SYN flag	tcp.flags.syn == 1
Filter by IP range	ip.addr >= 10.10.50.1 and ip.addr <= 10.10.50.100		tcp.flags.syn == 1 and tcp.flags.ack == 0
Filter by Multiple Ips	ip.addr == 10.10.50.1 and ip.addr == 10.10.50.100	Wireshark Beacon Filter	wlan.fc.type_subtype = 0x08
Filter out IP address	!(ip.addr == 10.10.50.1)	Wireshark broadcast filter	eth.dst == ff:ff:ff:ff:ff:ff
Filter subnet	ip.addr == 10.10.50.1/24	Wireshark multicast filter	(eth.dst[0] & 1)
Filter by port	tcp.port == 25	Host name filter	ip.host = hostname
Filter by destination port	tcp.dstport == 23	MAC address filter	eth.addr == 00:70:f4:23:18:c4
Filter by ip address and port	ip.addr == 10.10.50.1 and Tcp.port == 25	RST flag filter	tcp.flags.reset == 1

Main toolbar items

Toolbar Icon	Toolbar Item	Menu Item	Description	Toolbar Icon	Toolbar Item	Menu Item	Description
	Start	Capture → Start	Uses the same packet capturing options as the previous session, or uses defaults if no options were set		Go Forward	Go → Go Forward	Jump forward in the packet history
	Stop	Capture → Stop	Stops currently active capture		Go to Packet...	Go → Go to Packet...	Go to specific packet
	Restart	Capture → Restart	Restarts active capture session		Go To First Packet	Go → First Packet	Jump to first packet of the capture file
	Options...	Capture → Options...	Opens "Capture Options" dialog box		Go To Last Packet	Go → Last Packet	Jump to last packet of the capture file
	Open...	File → Open...	Opens "File open" dialog box to load a capture for viewing		Auto Scroll in Live Capture	View → Auto Scroll in Live Capture	Auto scroll packet list during live capture
	Save As...	File → Save As...	Save current capture file		Colorize	View → Colorize	Colorize the packet list (or not)
	Close	File → Close	Close current capture file		Zoom In	View → Zoom In	Zoom into the packet data (increase the font size)
	Reload	View → Reload	Reloads current capture file		Zoom Out	View → Zoom Out	Zoom out of the packet data (decrease the font size)
	Find Packet...	Edit → Find Packet...	Find packet based on different criteria		Normal Size	View → Normal Size	Set zoom level back to 100%
	Go Back	Go → Go Back	Jump back in the packet history		Resize Columns	View → Resize Columns	Resize columns, so the content fits to the width