

Wireshark Cheat Sheet

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] [...]	Substringing operator	Filter a specific word or text

Filtering packets (Display Filters)

Operator	Description	Example
eq or ==	Equal	ip.dst == 192.168.1.1
ne or !=	Not Equal	ip.dst != 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

Usage	Filter syntax
Wireshark Filter by IP Filter by Destination IP	ip.addr == 10.10.50.1 ip.dest == 10.10.50.1
Filter by Source IP	ip.src == 10.10.50.1
Filter by IP range	ip.addr >= 10.10.50.1 and ip.addr <= 10.10.50.100
Filter by Multiple Ips	ip.addr == 10.10.50.1 and ip.addr == 10.10.50.100
Filter out IP address	!(ip.addr == 10.10.50.1)
Filter subnet	ip.addr == 10.10.50.1/24
Filter by port	tcp.port == 25
Filter by destination port	tcp.dstport == 23
Filter by ip address and port	ip.addr == 10.10.50.1 and Tcp.port == 25

Wireshark Capturing Modes

Promiscuous mode	Sets interfaces 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 Example	protocol tcp	direction src	hosts 192.168.1.1	value 80	Logical operator and	Expressions tcp dst 202.164.30.1
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Display Filter Syntax

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

Protocols – Values

ether, fddi, ip, arp, rarp, mpprc, mppd, tcp and udp
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Common Filtering commands

Usage	Usage	Filter syntax
Filter by URL	Filter by time stamp	http.host == "host name"
Filter SWN flag	Wireshark Beacon Filter	frame.time > "June 02, 2019 18:04:00"
Wireshark broadcast filter	Wireshark multicast filter	tcp.flags.syn == 1 tcp.flags.ack == 0
Host name filter	MAC address filter	wlan.fc.type_subtype = 0x08 eth.dst == ff:ff:ff:ff:ff:ff (eth.dst[0] & 1) ip.host = hostname
RST flag filter		eth.addr == 00:70:f4:23:18:c4 tcp.flags.reset == 1

Main toolbar items

Toolbar Icon	Toolbar Item	Menu Item	Toolbar Icon	Toolbar Item	Menu Item	Description
	Start	Capture → Start		Go Forward	Go → Go Forward	Uses the same packet capturing options as the previous session, or uses defaults if no options were set
	Stop	Capture → Stop		Go to Packet...	Go → Go to Packet...	Stops currently active capture
	Restart	Capture → Restart		Go To First Packet	Go → First Packet	Restarts active capture session
	Options...	Capture → Options...		Go To Last Packet	Go → Last Packet	Opens "Capture Options" dialog box
	Open...	File → Open...		Auto Scroll in Live Capture	View → Auto Scroll in Live Capture	Opens "File open" dialog box to load a capture for viewing
	Save As...	File → Save As...		Colorize	View → Colorize	Save current capture file
	Close	File → Close		Zoom In	View → Zoom In	Close current capture file
	Reload	View → Reload		Zoom Out	View → Zoom Out	Reloads current capture file
	Find Packet...	Edit → Find Packet...		Normal Size	View → Normal Size	Find packet based on different criteria
	Go Back	Go → Go Back		Resize Columns	View → Resize Columns	Jump back in the packet history