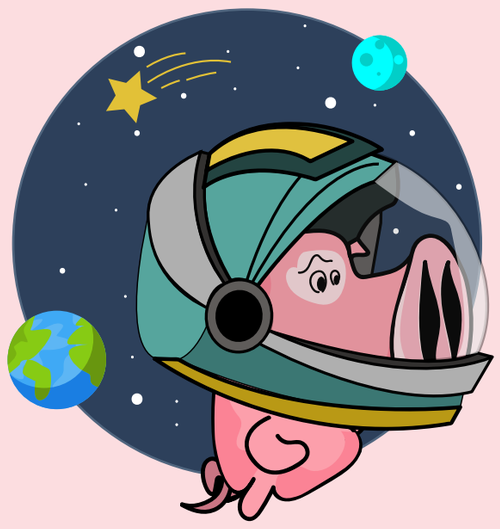
SNORT 101

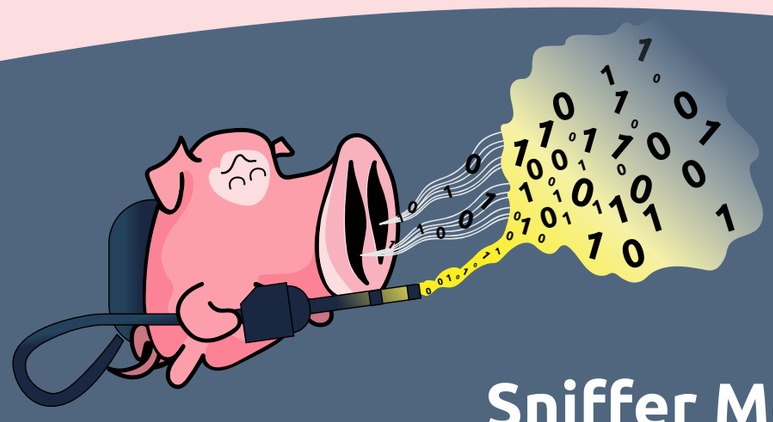


Global Commands

Display version:
Snort -V
Snort -version

Do not display the version banner:
Snort -q

Use specific inetrface:
Snort -i eth0



Sniffer Mode

Verbose mode:
Snort -v

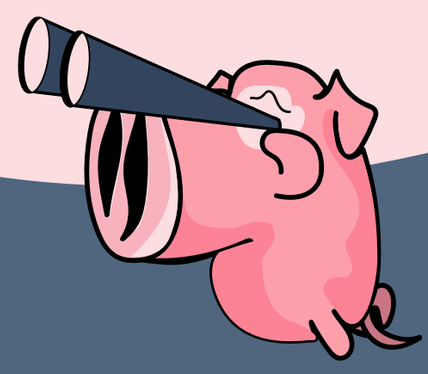
Display link-layer headers:
Snort -e

Display data payload:
Snort -d

Display full packet details in HEX:
Snort -X

Multiple flag usage. Display all packet details:
Snort -eX

Sniff “N” number of packets:
Snort -v -n 10



Logger Mode

Default log path : /var/log/snort

Use alternative log path:
Snort -v -l /home/username/Desktop

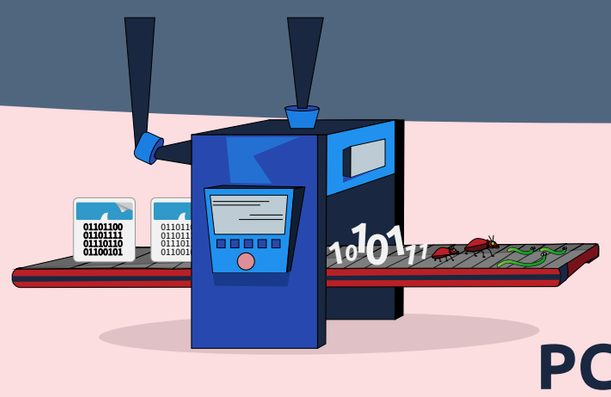
Log in ASCII format:
Snort-v -K ASCII

Read snort files:
Snort -v -r snort.log

Default Log path -> /var/log/snort"

Read “N” number of packets:
Snort -v -r snort.log -n 10

Filter packets with “Berkeley Packet Filters” (BPF):
Snort -v -r snort.log tcp
Snort -v -r snort.log ‘udp and port 53’



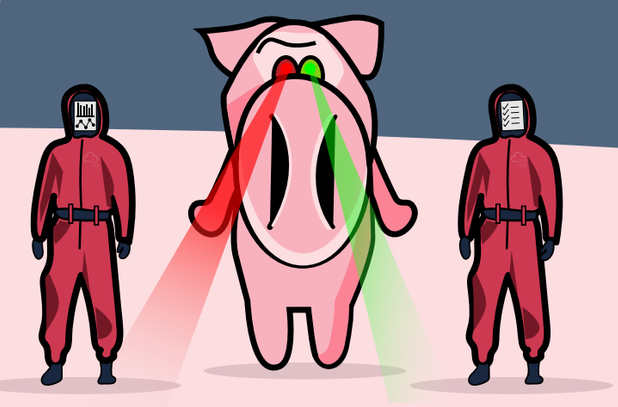
PCAP Processing

Process single pcap file:
Snort -c /etc/snort/snort.conf -q -r file.pcap -A console

Process multiple pcap files:
Snort -c /etc/snort/snort.conf -q --pcap-list= "file1.pcap file2.pcap" -A console

Process pcaps from folder:
Snort -c /etc/snort/snort.conf -q --pcap-dir=/home/pcap-folder -A console

Show processed pcap name:
Snort -c /etc/snort/snort.conf -q --pcap-list="file1.pcap file2.pcap" -A console --pcap-show



IDS/IPS Mode

Use configuration file:
Snort -c /etc/snort/snort.conf

Test instance and configuration file:
Snort -c /etc/snort/snort.conf -T

Disable logging:
Snort -c /etc/snort/snort.conf -N

Run Snort in background:
Snort -c /etc/snort/snort.conf -D

Alert mode 1 | No output:
Snort -c /etc/snort/snort.conf -v -A none

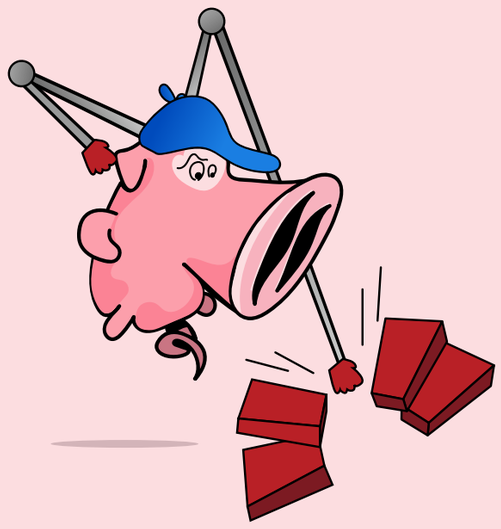
Alert mode 2 | Console output 1:
Snort -c /etc/snort/snort.conf -v -A console

Alert mode 2 | Console output 2:
Snort -c /etc/snort/snort.conf -v -A cmg

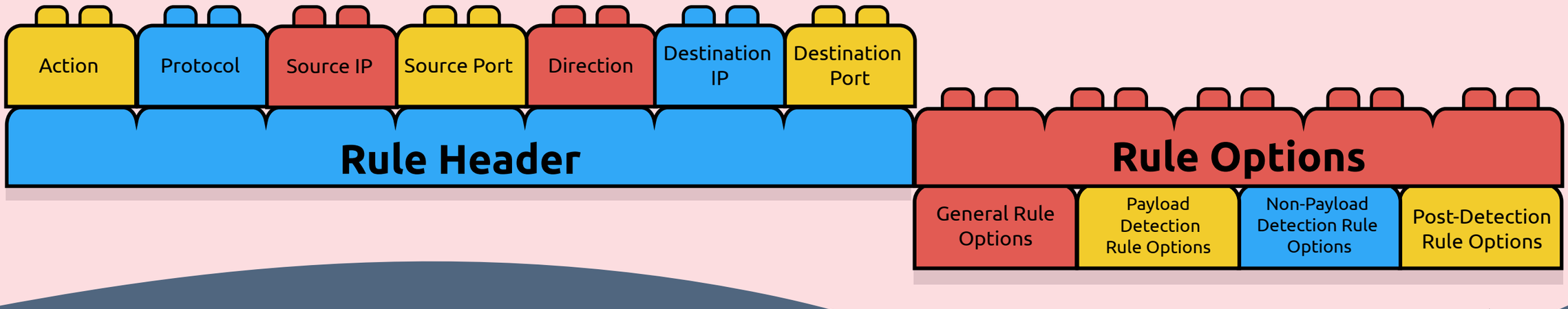
Alert mode 3 | File output 1:
Snort -c /etc/snort/snort.conf -v -A fast

Alert mode 3 | File output 2:
Snort -c /etc/snort/snort.conf -v -A full

Use rules without configuration file:
Snort -c /etc/snort/rules/local.rules -v -A console



Snort Rule Breakdown



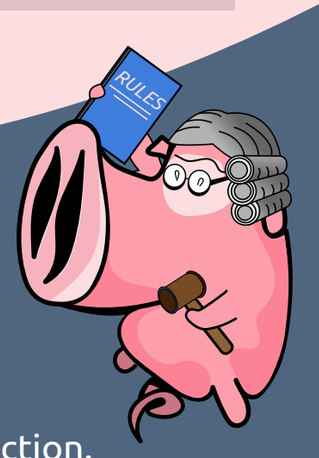
Snort rules are composed of two logical parts;

Rule Header:

This part contains network-based information; action, protocol, source and destination IP addresses, port numbers, and traffic direction.

Rule Options:

This part contains packet-based investigation details; message, reference, flow and content.

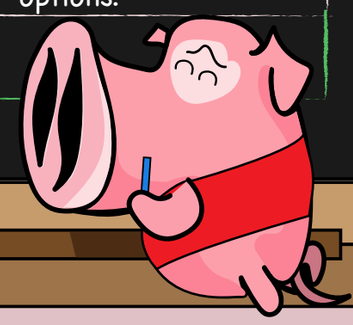


Example Rule

Alert rule for possible “Directory Traversal Attempt” detection.

```
alert tcp $EXTERNAL_NET any -> $HOME_NET $HTTP_PORTS (
msg:"Directory Traversal Attempt!";
flow:established;
nocase; content:"HTTP"; fast_pattern; content:"| 2E 2E 2F|"; content:"/..";
session:all;
reference:CVE,XXX;
sid:100001; rev:1;)
```

RULE HEADER		Action	alert	Action, this option tells Snort what to do in a rule match
		Protocol	tcp	Protocol to be analysed. Supported protocols: TCP, UDP, ICMP, IP.
		Source IP	$EXTERNAL_NET	Source IP addresses.
		Source Port	any	Source ports.
		Direction	->	Direction operator. Identify the orientation of traffic.
		Destination IP	$HOME_NET	Destination IP addresses.
		Destination Port	$HTTP_PORTS	Destination ports.
RULE OPTIONS	GENERAL RULE OPTIONS	Message	msg	Display message for rule match.
		Reference	reference	Provide additional information or reference for the rule.
		Rule id	sid	Unique rule number.
		Revision info	rev	Revision information for the rule.
	NON-PAYLOAD RULE OPTIONS	Flow	flow	TCP stream direction.
	PAYLOAD DETECTION RULE OPTIONS	Nocase	nocase	Disable case sensitivity to enhance the content match.
		Content	content	Filter the payload data and look for an exact match.
		Fast-pattern	fast-pattern	Prioritise the content search to speed up the payload search. This option is required when using multiple “content” options.
	POST-DETECTION RULE OPTIONS	Session	session	Extract user data from TCP sessions.



https://tryhackme.com/room/snort