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IDS detection system:

- set up the following four Suricata scenarios and submit the results to Canvas.
- (part 1) 25%
 - create a Suricata rule that alerts when a browser attempts to access a URL with the string "oracle" in the URL.
 - o submit the rule you create.

IDS-Router:

```
| Columnate Note: | X | Windows PowerState | X | Windows PowerStates | X | Windows PowerStat
```

 submit the alert log (fast.log) lines that Suricata creates when the rule is triggered.

IDS-router:

part 4) 25%

- create a Suricata rule that detects a content text string from the lassie.txt file on Host 1
- submit the rule you create.

IDS-Router:

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submit the alert log (fast.log) lines that Suricata creates when the rule is triggered.

IDS-Router

```
root@ee8af94c5362:/var/lib/suricata/rules# suricata -i eth1
i: suricata: This is Suricata version 7.0.2 RELEASE running in SYSTEM mode
i: threads: Threads created -> W: 12 FM: 1 FR: 1 Engine started.
^Ci: suricata: Signal Received. Stopping engine.
i: device: eth1: packets: 14, drops: 0 (0.00%), invalid chksum: 0
root@ee8af94c5362:/var/lib/suricata/rules# cd /var/log/suricata/
root@ee8af94c5362:/var/log/suricat# ls
certs eve.json files suricata-start.log
core fast.log stats.log suricata.log
root@ee8af94c5362:/var/log/suricat# more fast.log
12/01/2023-19:39:09.518251 [**] [1:10000012:1] woof [**] [Classification: (null)] [Priority: 3] {TCP} 192.168.60.5:50874 -> 10.9.0.5:9090
12/01/2023-19:39:45.919956 [**] [1:10000012:1] woof [**] [Classification: (null)] [Priority: 3] {TCP} 192.168.60.5:53860 -> 10.9.0.5:9090
```

Host A

```
root@ddfffbabe8e:/# nc -l 9090
Lassie is a fictional female Rough Collie dog and is featured in a 1938 short story by Eric Knight that was later expanded to a 1940 full-length novel, Lass ie Come-Home. Knight's portrayal of Lassie bears some features in common with another fictional female collie of the same name, featured in the British writ er Elizabeth Gaskell's 1859 short story "The Half Brothers". In "The Half Brothers", Lassie is loved only by her young master and guides the adults back to where two boys are lost in a snowstorm.

Knight's novel was filmed by Metro-Goldwyn-Mayer in 1943 as Lassie Come Home, with a dog named Pal playing Lassie. Pal then appeared with the stage name "La ssie" in six other MGM feature films through 1951. Pal's owner and trainer, Rudd Weatherwax, then acquired the Lassie name and trademark from MGM and appear ed with Pal (as "Lassie") at rodeos, fairs, and similar events across America in the early 1950s. In 1954, the television series Lassie debuted and, over the next 19 years, a succession of Pal's descendants appeared on the series. The "Lassie" character has appeared in radio, television, film, toys, comic books, animated series, juvenile novels, and other media. Pal's descendants continue to play Lassie today.root@dfffblae98e:/# nc -l 9090
Lassie is a fictional female Rough Collie dog and is featured in a 1938 short story by Eric Knight that was later expanded to a 1940 full-length novel, Lassie ic Come-Home. Knight's portrayal of Lassie bears some features in common with another fictional female collie of the same name, featured in the British writ er Elizabeth Gaskell's 1859 short story "The Half Brothers". In "The Half Brothers", Lassie is loved only by her young master and guides the adults back to where two boys are lost in a snowstorm.

Knight's novel was filmed by Metro-Goldwyn-Mayer in 1943 as Lassie Come Home, with a dog named Pal playing Lassie. Pal then appeared with the stage name "La ssie" in six other MGM feature films through 1951. Pal's owner and trainer,
```

Host1

```
^C
root@e742bd5b2d56:/home/seed# cat lassie.txt | nc 10.9.0.5 9090
root@e742bd5b2d56:/home/seed# cat lassie.txt | nc 10.9.0.5 9090
```

part 2 25%

- o create a Suricata rule that alerts when any host is pinged.
- o submit the rule you create.

 \circ $\;$ submit the alert log (fast.log) lines that Suricata creates when the rule is triggered.

Host A:

```
^C
root@d6f5f1bae98e:/# nc -l -p 9090
```

Host 1:

```
root@e742bd5b2d56:/# ping 10.9.0.5

PING 10.9.0.5 (10.9.0.5) 56(84) bytes of data.

4 bytes from 10.9.0.5: icnp_seq=1 ttl=63 time=0.992 ms

44 bytes from 10.9.0.5: icnp_seq=2 ttl=63 time=0.187 ms

44 bytes from 10.9.0.5: icnp_seq=2 ttl=63 time=0.187 ms

44 bytes from 10.9.0.5: icnp_seq=2 ttl=63 time=0.187 ms

44 bytes from 10.9.0.5: icnp_seq=2 ttl=63 time=0.188 ms

45 bytes from 10.9.0.5: icnp_seq=6 ttl=63 time=0.188 ms

46 bytes from 10.9.0.5: icnp_seq=6 ttl=63 time=0.189 ms

46 bytes from 10.9.0.5: icnp_seq=6 ttl=63 time=0.189 ms

46 bytes from 10.9.0.5: icnp_seq=2 ttl=63 time=0.199 ms

46 bytes from 10.9.0.5: icnp_seq=1 ttl=63 time=0.199 ms

46 bytes from 10.9.0.5: icnp_seq=1 ttl=63 time=0.199 ms

46 bytes from 10.9.0.5: icnp_seq=11 ttl=63 time=0.299 ms

46 bytes from 10.9.0.5: icnp_seq=12 ttl=63 time=0.299 ms

46 bytes from 10.9.0.5: icnp_seq=12 ttl=63 time=0.188 ms

40 bytes from 10.9.0.5: icnp_seq=12 ttl=63 time=0.189 ms

40 bytes from 10.9.0.5: icnp_seq=15 ttl=63 time=0.189 ms

40 bytes from 10.9.0.5: icnp_seq=12 ttl=63 time=0.118 ms

40 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

40 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

40 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

41 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

42 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

43 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

44 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

45 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

46 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms

47 bytes from 10.9.0.5: icnp_seq=22 ttl=63 time=0.118 ms
```

IDS-router:

suricata.rules

Alert log:

```
root@e8af94c5362:/var/log/suricata# suricata -i eth1
i: suricata: This is Suricata version 7.0.2 RELEASE running in SYSTEM mode
i: threads: Threads created -> W: 12 FM: 1 FM: 1 Engine started.
^ci: suricata: Signal Received. Stopping engine.
i: device: eth1: packets: 445, drops: 0 (0.00%), invalid chksum: 0
root@ee8af94c5362:/var/log/suricata# more fast.log
12/01/2023-22:21:30.647367 [**] [1:10000002:1] ICMP Ping Detected [**] [Classification: (null)] [Priority: 3] {ICMP} 192.168.60.5:8 -> 10.9.0.5:0
12/01/2023-22:21:30.647676 [**] [1:10000002:1] ICMP Ping Detected [**] [Classification: (null)] [Priority: 3] {ICMP} 10.9.0.5:0 -> 192.168.60.5:0
12/01/2023-22:21:51.439499 [**] [1:10000002:1] ICMP Ping Detected [**] [Classification: (null)] [Priority: 3] {ICMP} 192.168.60.5:8 -> 10.9.0.5:0
12/01/2023-22:21:51.439499 [**] [1:10000002:1] ICMP Ping Detected [**] [Classification: (null)] [Priority: 3] {ICMP} 10.9.0.5:0 -> 192.168.60.5:0
root@ee8af94c5362:/var/log/suricata#
```

(part 3) 25%

- create a Suricata rule that alerts when telnet traffic is seen on the network.
- o submit the rule you create.
- submit the alert log (fast.log) lines that Suricata creates when the rule is triggered.

Host1:

```
root@e742bd5b2d56:/# telnet 10.9.0.5

Trying 10.9.0.5...
Connected to 10.9.0.5.

Escape character is '^]'.
Ubuntu 20.04.1 LTS
d6f5f1bae98e login: seed
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.15.133.1-microsoft-standard-WSL2 x86_64)

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

This system has been minimized by removing packages and content that are not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
Last login: Fri Dec 1 22:31:49 UTC 2023 from 192.168.60.5 on pts/2 seed@d6f5f1bae98e:~$
```

Host A:

```
root@d6f5f1bae98e:/# nc -l -p 9090
```

IDS-Router

Alert:

```
root@e8af94c5362:/var/log/suricata# suricata -i eth1
i: suricata: This is Suricata version 7.0.2 RELEASE running in SYSTEM mode
i: threads: Threads created -> W: 12 FM: 1 FR: 1 Engine started.
^C1: suricata: Signal Received. Stopping engine.
i: device: eth1: packets: 386, drops: 0 (0.00%), invalid chksum: 0
root@ee8af94c5362:/var/log/suricata# more fast.log
12/01/2023-22:32:44.7/tog/suricata# more fast.log
12/01/2023-22:32:44.7/tog/suricata# more fast.log
12/01/2023-22:32:47.976537 [**] [1:10000003:1] Telnet Traffic Detected [**] [Classification: (null)] [Priority: 3] {TCP} 192.168.60.5:34558 -> 10.9.0.5:23
root@ee8af94c5362:/var/log/suricata#
```