## **Monitoring and Logging Network Traffic (3e)**

Network Security, Firewalls, and VPNs, Third Edition - Lab 06

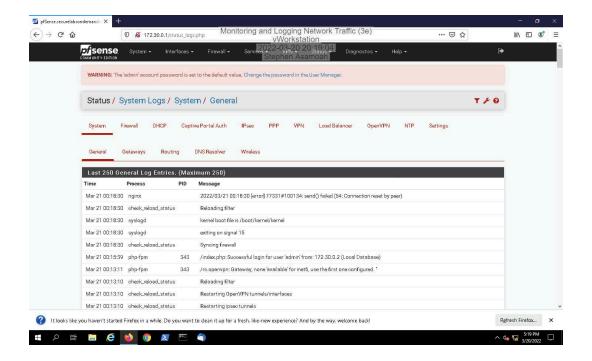
Student:	Email:
Stephen Asamoah	stephen.asamoah@howardcc.edu
Time on Task:	Progress:
2 hours, 4 minutes	100%

Report Generated: Sunday, March 20, 2022 at 9:03 PM

# Section 1: Hands-On Demonstration

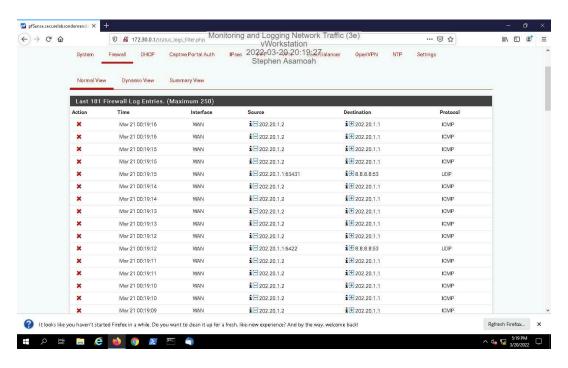
### Part 1: Configure the pfSense Firewall Log

13. Make a screen capture showing the system logs.



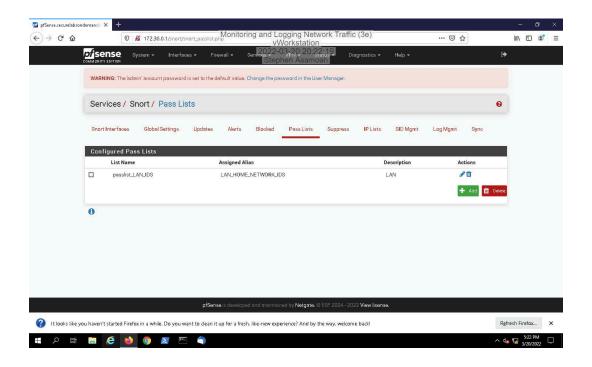
#### Network Security, Firewalls, and VPNs, Third Edition - Lab 06

15. Make a screen capture showing the firewall logs.

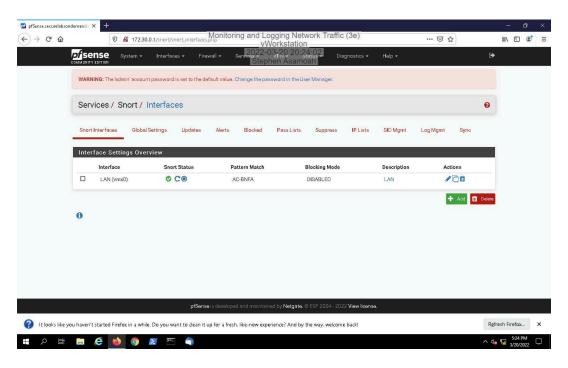


# Part 2: Configure a Snort Intrusion Detection System

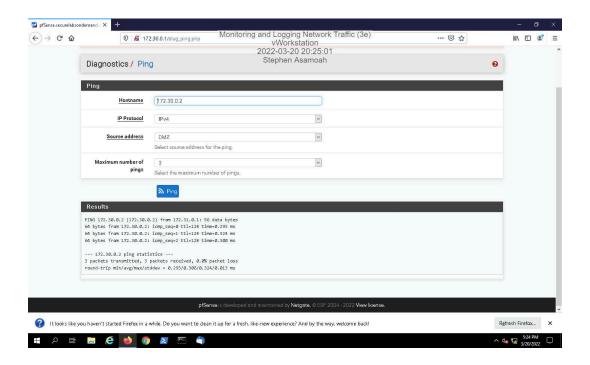
14. Make a screen capture showing the updated Pass Lists page.



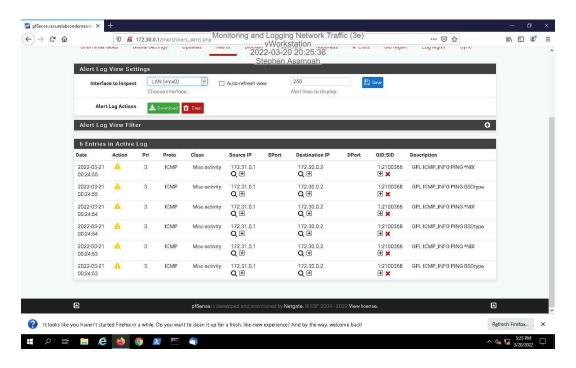
28. Make a screen capture showing the active Snort status on the LAN interface.



33. Make a screen capture showing the successful ping results.

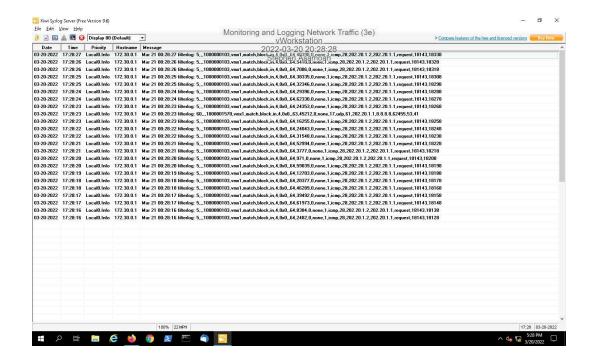


38. Make a screen capture showing the ICMP alerts in the Snort Active Log.



Part 3: Implement Firewall Log Forwarding with Kiwi Syslog Server

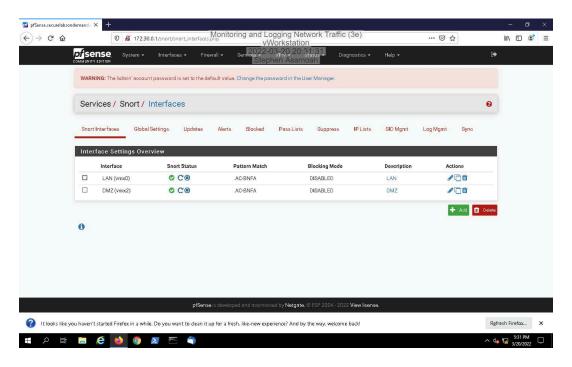
17. Make a screen capture showing the pfSense firewall log events in Kiwi Syslog Server.



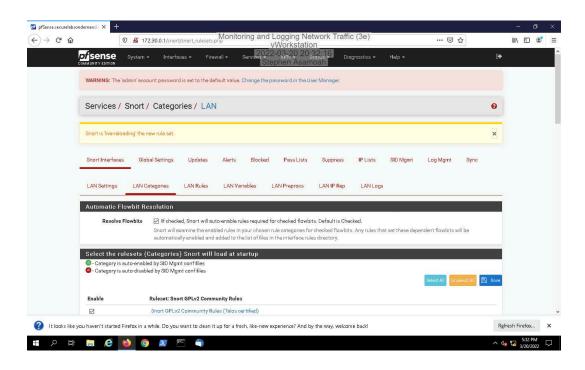
# **Section 2: Applied Learning**

#### Part 1: Configure Snort Monitoring on the DMZ

17. Make a screen capture showing the active Snort status on the DMZ interface.

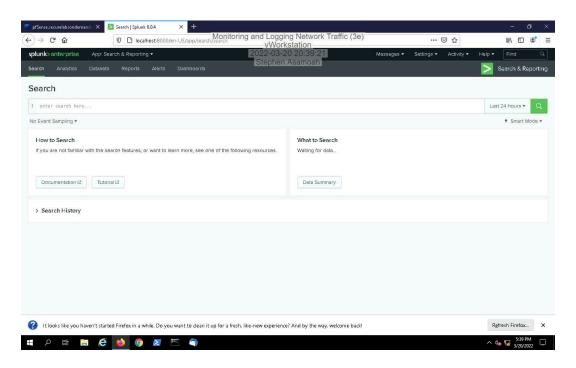


20. Make a screen capture showing the Snort GPLv2 Community Rules enabled and "livereloading" message.



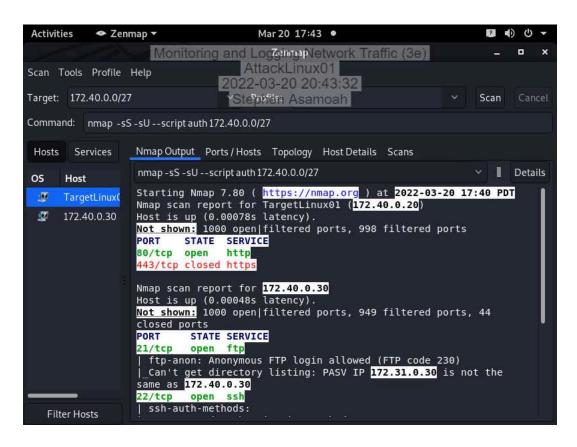
# Part 2: Implement Security Information and Event Management with Splunk

13. Make a screen capture showing the indexed events in Splunk.

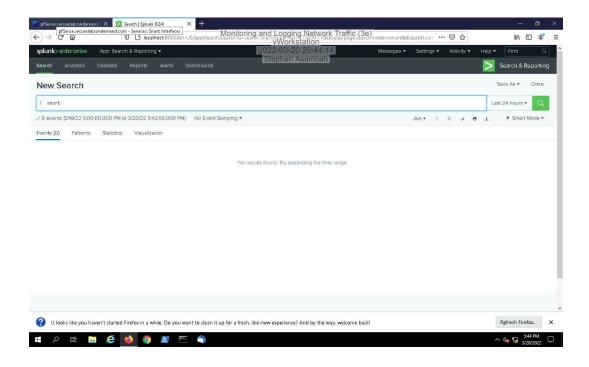


Part 3: Simulate and Detect a Perimeter Network Attack

6. Make a screen capture showing the Nmap scan report.



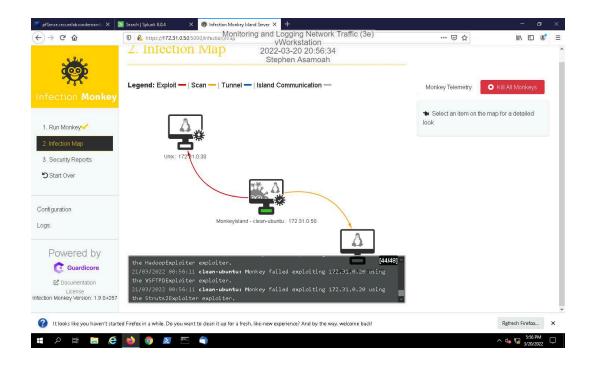
9. Make a screen capture showing the search results in Splunk.



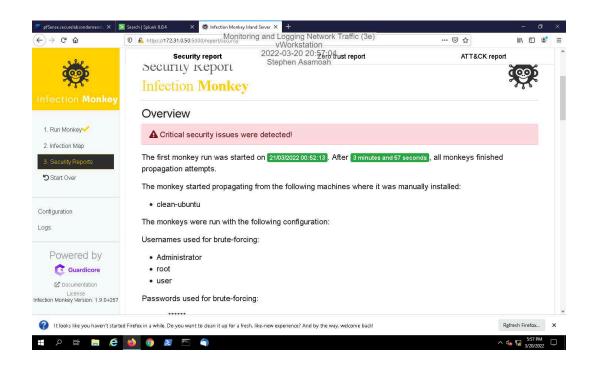
# **Section 3: Challenge and Analysis**

#### Part 1: Simulate a DMZ Breach with Infection Monkey

Make a screen capture showing the resulting Infection Map.



Make a screen capture showing the resulting Security Report.

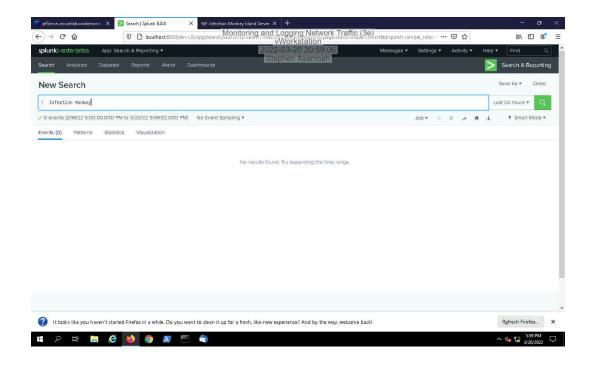


**Summarize** your DMZ breach simulation results, highlighting what you found to be the greatest concerns from a network monitoring perspective.

The network has weak segmentation. machines from different segments are able to communicate

#### Part 2: Detect a Simulated DMZ Breach with Snort and Splunk

Make a screen capture showing the results of your search query for Infection Monkey traffic in Splunk.



**Describe** any concerns about the structure of the query result or the data elements it contains. What data fields would you add, remove, or edit to make log analysis more effective?

I did not receive any results from splunk

**Write a brief memo** to your manager describing Splunk's usefulness in detecting traces of your simulated breach. What configuration changes would you recommend? How would you enhance its functionality?

I did not receive any search results in splunk