# **Design Deception Solutions**

Team ID: 11

Project ID: CS\_EGCERT2\_2023

**UOttawa** university

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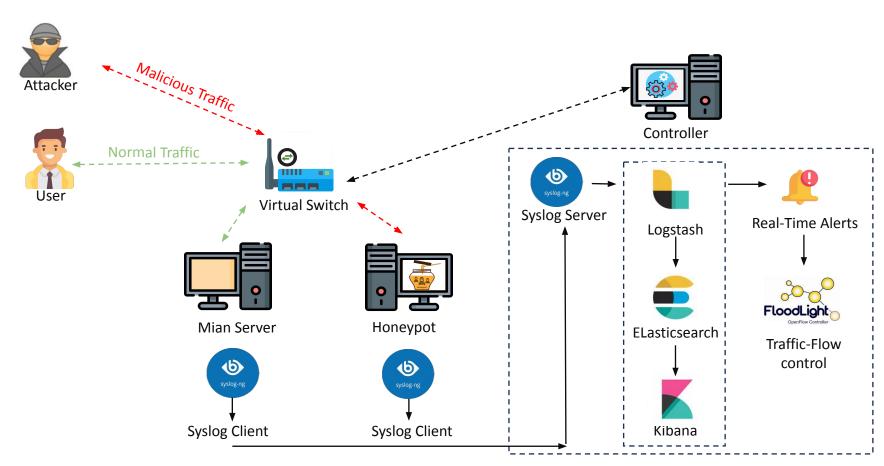
#### **Project Problem Definition:**

- Deploy automated decoys and honeypots.
- Implement Real-Time Alerting system
- Create Centralized Logging System

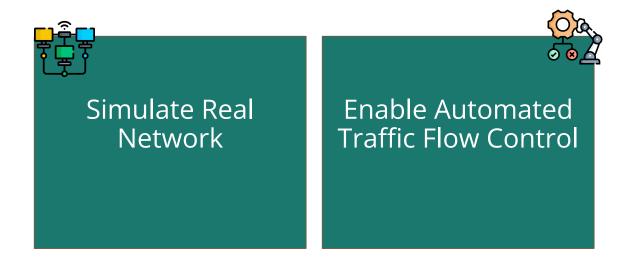
#### **Potential Benefits to Sponsor/Users:**



Project Mentor	Project Sponsor	Project uOttawa Support	
Dr. Ahmed Hamdy	EG-CERT	Prof. Miguel Garzon	



**System Architecture** 

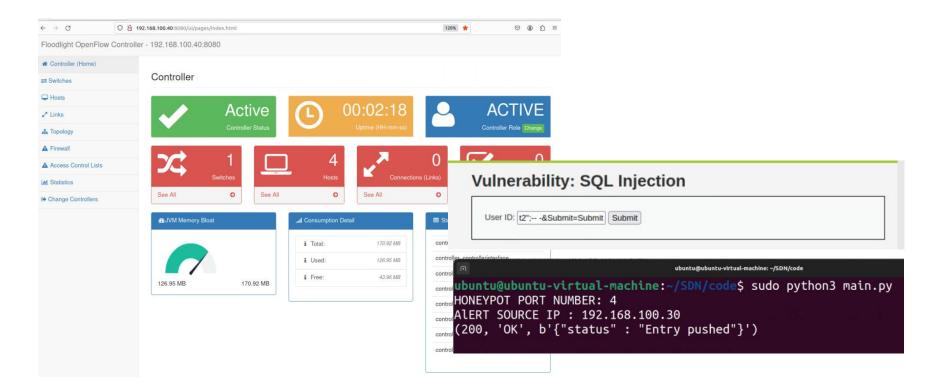


#### Simulate Real Network

Creating VirtualNetwork devicesusing Open VSwitchSDN.

# Control The Traffic Flow Automatically

- Monitor and extract malicious IPs from alerts
- Create flow rule using Floodlight SDN controller



main-server on QEMU/KVM

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

5... 1308.12... RealtekU\_fb... RealtekU\_fb... ARP

5... 1308.13... RealtekU\_fb... RealtekU\_fb... ARP

5... 1308.14... RealtekU fb... RealtekU fb... ARP

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5... 1308.38... 192.168.100... 224.0.0.251

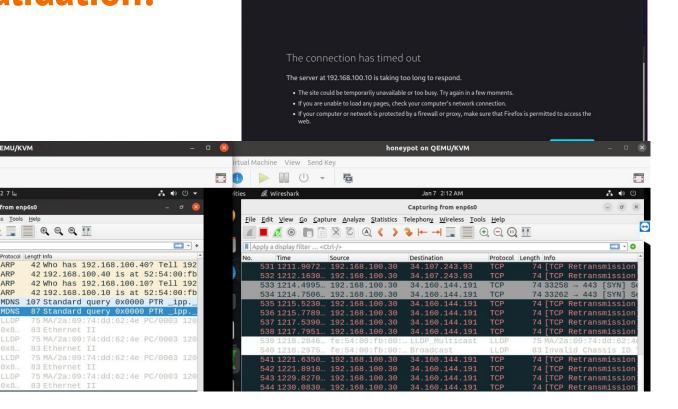
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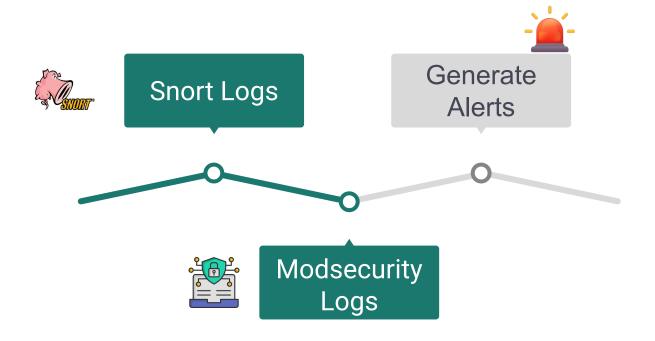
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① 192.168.100.10/DVWA/

Kali Linux 🧝 Kali Tools 💆 Kali Docs 💢 Kali Forums 🦰 Kali NetHunter 🦠 Exploit-DB 👙 Google Hacking DB 📫 OffSec

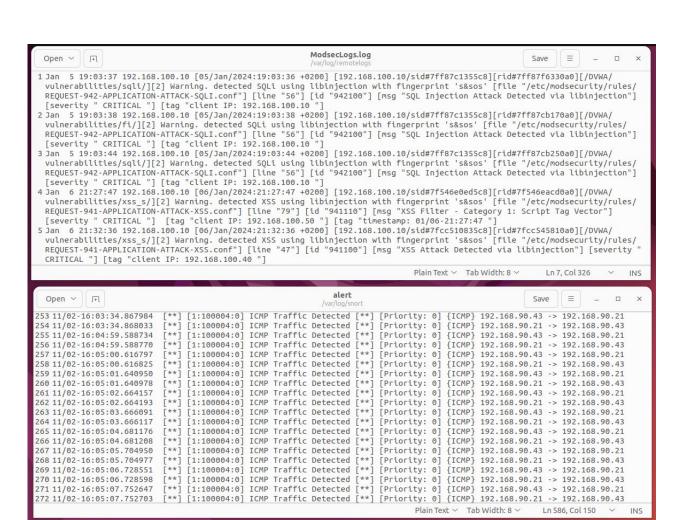




# Test and Validate

ModSecurity Logs

**Snort Logs** 





Apply Penetration Testing

Create Centralized Logging system

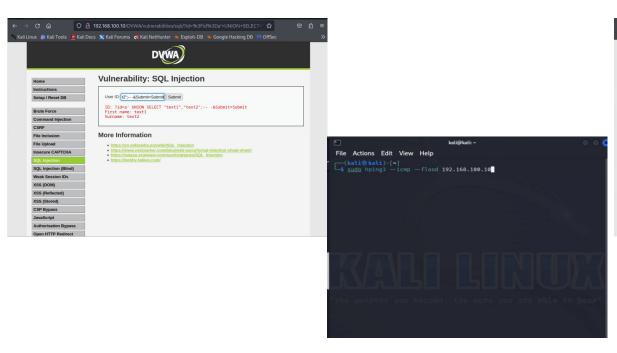


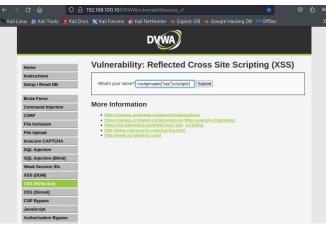
#### Simulating Attacks

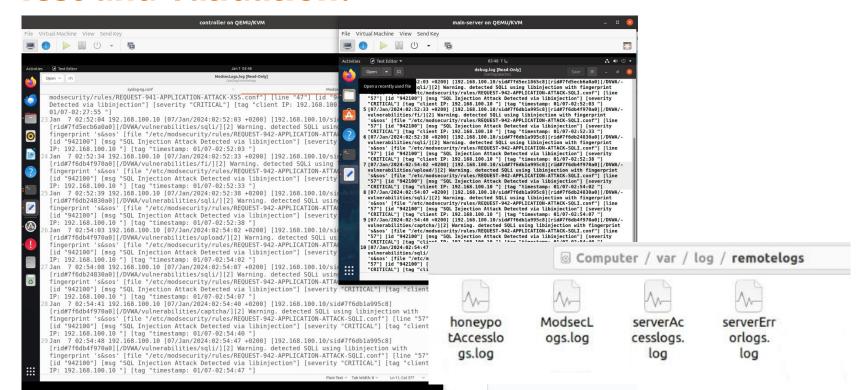
 Creating attacks on the network and the servers

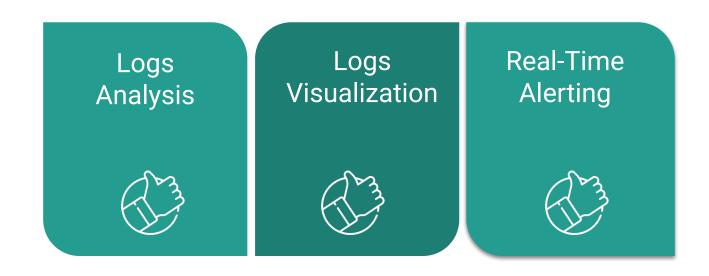
## Create Centralized Logging system

 Creating client-server system using syslog-ng

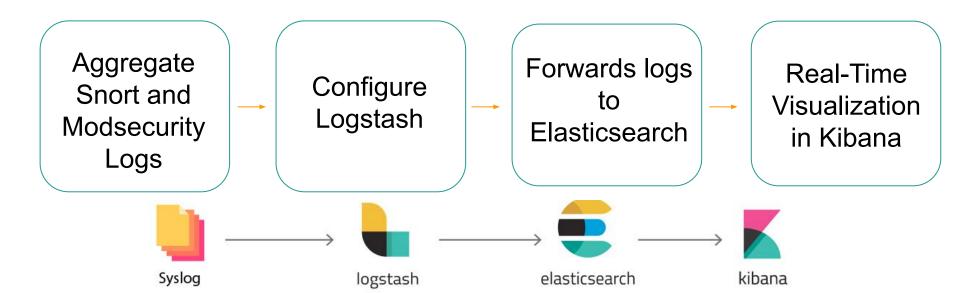


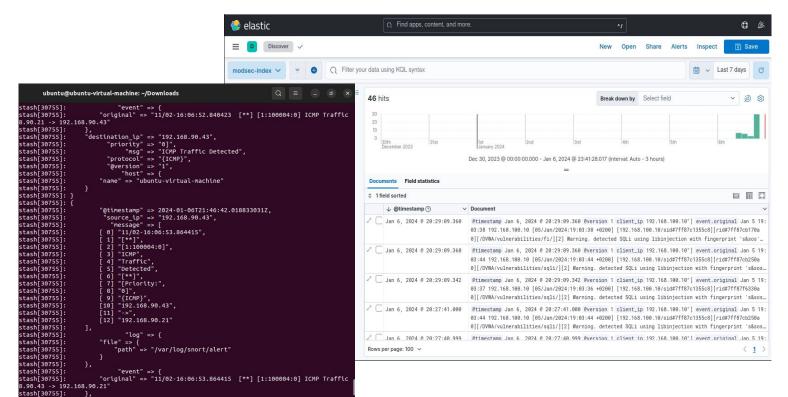




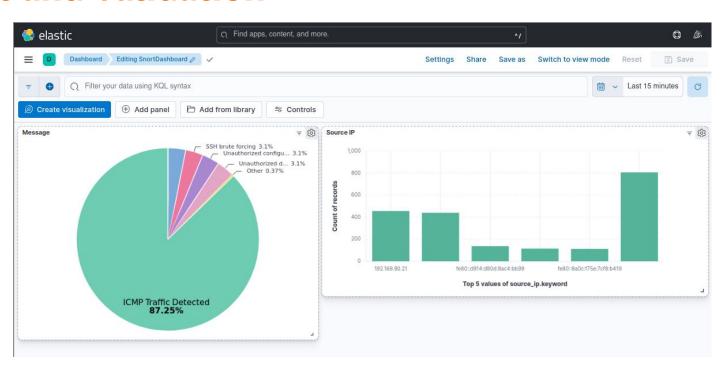


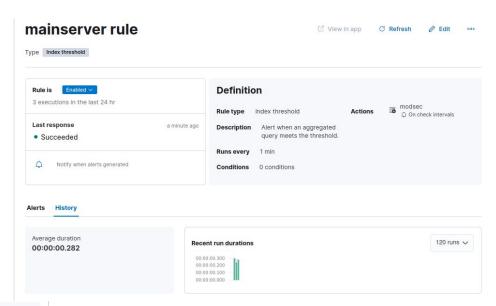
• Integrate ELK with our system.

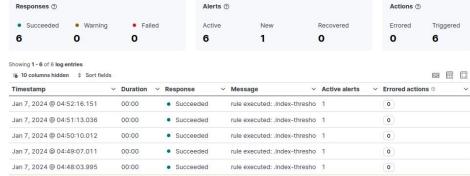












## **Any Questions?**



Thank you