

Blue Team: Summary of Operations

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Network Topology

TODO: Fill out the information below.

The following machines were identified on the network:

- **Kali**
 - **Operating System:** Linux 5.4.0
 - **Purpose:** Attacker machine
 - **IP Address:** 192.168.1.90
- **ELK**
 - **Operating System:** Ubuntu 18.04.4
 - **Purpose:** Monitoring loggings
 - **IP Address:** 192.168.1.100
- **Capstone**
 - **Operating System:** Ubuntu 18.01.1
 - **Purpose:** Alert testing
 - **IP Address:** 192.168.1.105

Description of Targets

TODO: Answer the questions below.

The target of this attack was: Target 1 (192.168.1.110).

Target 1 is an Apache web server and has SSH enabled, so ports 80 and 22 are possible ports of entry for attackers. As such, the following alerts have been implemented:

Monitoring the Targets

Traffic to these services should be carefully monitored. To this end, we have implemented the alerts below:

Excessive HTTP errors.

Alert 1 is implemented as follows:

- **Metric:** WHEN count() GROUPED OVER top 5 'http.response.status.code
- **Threshold:** Above 400
- **Vulnerability Mitigated:** Enumeration/Brute Force
- **Reliability:** High reliability

HTTP Request Size Monitor

Alert 2 is implemented as follows:

- **Metric:** WHEN sum() of http.request.bytes OVER all documents
- **Threshold:** Above 3500 in the last minutes
- **Vulnerability Mitigated:** Code injection in HTTP requests or DDOS
- **Reliability:** Medium reliability

CPU Usage Monitor

Alert 3 is implemented as follows:

- **Metric:** WHEN max() OF system.process.cpu.total.pct OVER all documents
- **Threshold:** Above 0.5
- **Vulnerability Mitigated:** Malicious software
- **Reliability:** high reliability