

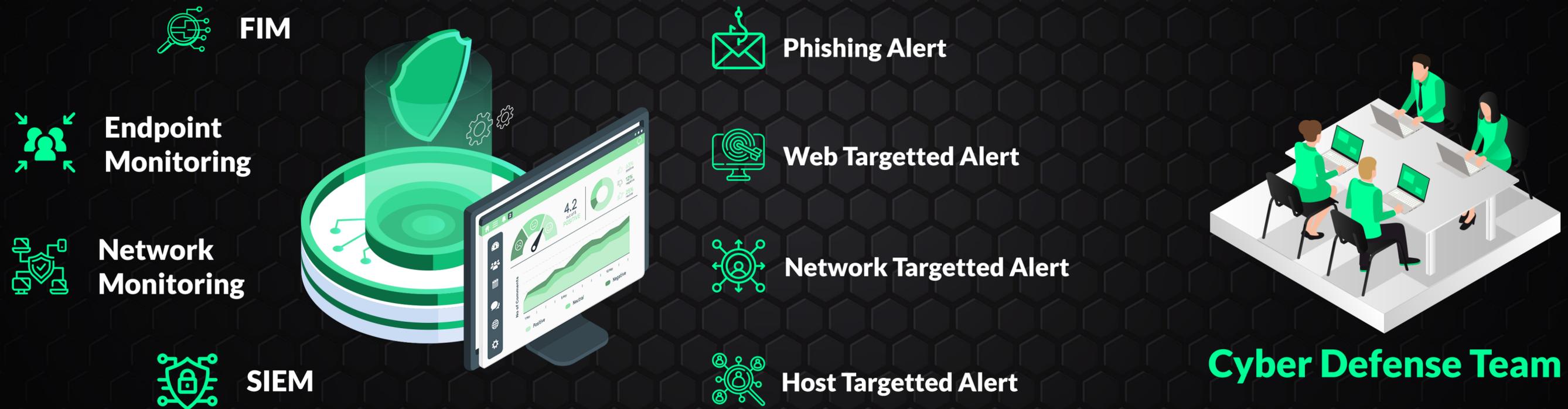


# Cyber Defense Analyst [CCDA]



@CyberWarFare Labs

# Certified Cyber Defense Analyst [CCDA] Architecture



# I. INTRODUCTION TO CYBER DEFENCE

- 1.1 Introduction to Cyber Defense
- 1.2 Working of Cyber Defense
- 1.3 Key Skills required for Cyber Defense Analyst
- 1.4 Roles & Responsibilities of Cyber Defense

# II. PHISHING THREATS INVESTIGATION AND ANALYSIS

- 2.1 General overview of Phishing attack
- 2.2 Common types of the phishing attack
- 2.3 Phishing Investigation techniques
- 2.4 Header Analysis
- 2.5 URL Analysis
- 2.6 Suspicious file download
- 2.7 Malicious macros investigation
- 2.8 Incident Response Mind map

# CYBER RANGE CHALLENGES



**Email Header Analysis**



**Credential Phishing Investigation**



**Suspicious Attachment Phishing Investigation**



**Suspicious Macros Phishing Investigation**

# III. WEB-BASED INTRUSIONS: INVESTIGATIVE STRATEGIES AND ANALYSIS

- 3.1 General overview of Web based attack
- 3.2 Common types of the web based attacks
- 3.3 Web attack Investigation
- 3.4 Web attack detection
- 3.5 Incident response Mind-Map
- 3.6 Injection based attack investigation
- 3.7 Automated tools attack investigation
- 3.8 Inclusion based attacks Investigation

# CYBER RANGE CHALLENGES



**Subdomain Enumeration**



**Admin Page access  
detected**



**SQL-Map activity  
detected**



**Vulnerability Enumeration  
activity  
detected**



**File Inclusion activity  
detected**



**Command Injection activity  
detected**

# IV. UNVEILING NETWORK INTRUSIONS: METHODS AND ANALYTICAL APPROACHES

- 4.1 General overview of Network based attack
- 4.2 Common types of the Network based attacks
- 4.3 Working of Network Defence
- 4.4 Incident response Mind-Map
- 4.5 Network Scan activity investigation
- 4.6 Log4J investigation
- 4.7 Bind Shell investigation

# CYBER RANGE CHALLENGES



**NMAP Detection**



**DOS investigation**



**Suspected Data exfiltration detected**



**Netcat activity detected**



**Service brute forcing**

# V. DECODING HOST-BASED INTRUSIONS: TECHNIQUES AND ANALYTICAL METHODS

- 5.1 General overview of Host based attack
- 5.2 Common types of the Host based attacks
- 5.3 Host attack Investigation
- 5.4 Working of EDR & XDR
- 5.5 Incident response Mind-Map

# CYBER RANGE CHALLENGES



**Suspicious File activity detected**



**Suspected .SH  
file detected**



**Suspicious Scheduled task  
detected**



**Suspicious Linpeas activity  
detected**



**Multiple Remote  
Failed Login Detected**



**Suspicious PowerShell activity  
detected**

# CYBER RANGE CHALLENGES



**Password File Modification  
Detected**



**File modification activity  
Detected**



# Thank You

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