CYBER SECURITY SOC ANALYST TRAINING – SIEM (SPLUNK)

- 1. Course Introduction
- 2. Networking Concepts
- 3. Cyber Security Concepts
- 4. Understanding Splunk, SIEM and SOC Process
- 5. Understanding Various Logs, Dashboard and Alert creations
- 6. Walkthrough SIEM use cases and Incident Handling Stages
- 7. Introduction to threat Hunting
- 8. Networking and Security Interview Questions
- 9. SIEM Interview Questions
- 10. SOC Process Interview Questions and Day to Day Activities
- 11. SIEM Alert Analysis Interview Questions
- 12. Discussion on Real Time Activities
- 13. Course wrap up

Section 1: Course Introduction – 1Hrs

1. Cyber Security Analyst – Intro to Course Content

Section 2: Networking Concepts – 15Hrs

- 1. Introduction to Organization Network-1
- 2. Introduction to Organization Network-2
- 3. ISO Model Application and Presentation Layer Basics
- 4. ISO Model Session, Transport, Network and Data Link Layer Basics
- 5. ISO Model Recap AND Public/Private Address Range
- 6. Introduction to web technology
- 7. Understanding HTTP protocol Part 1
- 8. Understanding HTTP Part 2 and Understanding Service Ports Part1
- 9. Understanding SMB, Telnet, FTP, NFS, SMTP, MySQL Services.
- 10. Introduction to Windows Types of Windows OS and Permissions
- 11. Windows OS Computer Management, Utilities
- 12. Port Numbers Part 1
- 13. Port Numbers Part 2

Section 3: Cyber Security Concepts – 11Hrs

- 1. Introduction to Security CIA Encryption and Hashing
- 2. Defense in Depth Approach
- 3. Cyber Kill chain OR Phases of Attack
- 4. Brute Force Attack and Types
- 5. Phishing and Spoofing Attacks
- 6. DNS Tunneling Attack
- 7. Malware and its Types
- 8. OWASP Top 10

Section 4: Understanding Splunk, SIEM and SOC Process-10Hrs

- 1. SOC Introduction and Process
- 2. SOC Roles and Responsibilities
- 3. SIEM Architecture
- 4. Splunk Introduction
- 5. Splunk Installation
- 6. Splunk Universal Forward Installation

Section 5: Understanding Various Logs, Dashboard and Alert creations – 24Hrs

- 1. Uploading Demo Logs to Splunk and firewall Log analysis
- 2. Understanding Firewall Logs
- 3. Splunk Dashboard creation Firewall Part 1
- 4. Splunk Dashboard creation Firewall Part 2
- 5. IDS Log Analysis
- 6. DNS Profiling Scenarios Part 1
- 7. DNS Profiling Scenarios Part 2
- 8. Understanding DNS Logs
- 9. Understanding HTTP Logs Part 1
- 10. Understanding HTTP Logs Part 2
- 11. Understanding Windows Log
- 12. Understanding Windows Event IDs
- 13. Windows Sysmon Log Analysis
- 14. Understanding Antivirus Logs

Section 6: Walkthrough SIEM use cases and Incident Handling Stages – 8Hrs

- 1. SIEM Use cases Part 1
- 2. SIEM Use cases Part 2
- 3. SIEM Use cases Part 3
- 4. Malware outbreak Analysis
- 5. Incident Handling stages

Section 7: Introduction to Threat Hunting – 5Hrs

- 1. Threat Hunting Scanning attack on Web Server
- 2. Threat Hunting Brute Force Attack
- 3. Email Header Analysis

Section 8: Networking and Security Interview Questions – 4Hrs

- 1. What are networking devices?
- 2. What is IP address and IP address classification?
- 3. What is NAT and PAT?
- 4. Tell me few port numbers which you know?
- 5. How a Firewall works?
- 6. How VPN works?
- 7. What is Symmetric and Asymmetric Encryption?
- 8. Explain CIA triad?
- 9. What is difference between SSL and HTTPS?
- 10. How do you stay up to date on Cyber Security news and latest attacks?
- 11. What is the difference between Virus and Warm?
- 12. Explain SQL Injection Attack?
- 13. What is botnet?
- 14. What is Brute Force Attack?
- 15. SIEM related interview topics?

Section 9: SIEM Interview Questions – 2Hrs

- 1. SIEM Dashboard and Use cases
- 2. What are different event logs you analyze?

Section 10: SOC Process Interview Questions and Day to Day Activities – 4Hrs

- 1. What is Security Operation Center?
- 2. What are various Security Devices used in your organization?
- 3. How does a SOC Team manage or work in an organization?
- 4. What are the Roles and Responsibilities of SOC Engineer?
- 5. What are the fields in Sample Incident ticket ServiceNow?
- 6. What are Service Level Agreements (SLA) for the SOC Incidents?
- 7. What is False Positive Analysis? Or what are various outcomes of Analysis?
- 8. How many Logs sources are there in your organization?
- 9. What are the steps in Incident Response Life Cycle?
- 10. Can you please explain what you will do after getting an alert? (Alert IR Flow)
- 11. How will you manage work in shifts?
- 12. How do you handle P1, P2, P3 and P4 incidents?

Section 11: SIEM Alert Analysis Interview Questions – 3Hrs

- 1. How do you analyze if receive a Brute Force Attack Alert?
- 2. What will you do if receive a Malware Attack Alert?
- 3. How do you analyze Phishing email attack?
- 4. How do you Analyze SQL Injection attack?
- 5. How do you analyze DDOS attack?
- 6. How do you analyze if a suspicious IP detected in outbound traffic?

Section 12: Discussion on Real Time Activities – 2Hrs

1. Discussion on Real Time Activities

Section 13: Course wrap up - 1Hrs

1. Course wrap up