Forensic Approach - Credential Compromise (Not Ransomware)

1. Isolate the server

- o Connect an Ethernet cable directly from the laptop to the ESXi server.
- On the laptop, go to Network Settings > Ethernet Adapter, Set a manual IP address> IP: 10.0.0.10
- Open a web browser and go to: https://10.0.0.3
- o Make sure it's not connected to any corporate network,
- Plug in the Wireless USB Adapter, Install drivers if required and then connect to Hotspot for Internet
- o Install Autopsy from USB on the DC and run it and analyze the results .
- Install Cisco CSE & Scan for Malware with Cisco EDR

2. Look for suspicious activity based on the outcome of Autopsy

- o Run the <u>Domain Controller Compromise Assessment PS script</u>
 Open Power Shell /CMD
- o netstat -ano
- o netstat -ano | findstr ESTABLISHED
- o net group "Domain Admins" /domain
- o taskschd.msc
- o Get-Process
- Get-Service | Where-Object { \$_.StartType -eq 'Auto' -and \$_.Status -eq 'Running' }
- o Resource Monitor>Network
- Go to Programs and Features> Look for remote access tools like AnyDesk, TeamViewer,Ultra viewer etc.
- Start>Run> shell:startup
- Start>Run>%TEMP% folder for unknown scripts
 Check For Unusual Persistence (Run without "")
- o Open Powershell > "reg query HKLM\Software\Microsoft\Windows\CurrentVersion\Run"
- Open Powershell > "reg query HKCU\Software\Microsoft\Windows\CurrentVersion\Run"

3. Review logs collected from the site, and run it in Autopsy

Security Log:

4624 - Successful logons

4625 – Failed logons

4648 – Logons with explicit credentials

4672 - Special privilege logons

4720 - New user account created

4722 – User account enabled

4728 – User added to privileged group

1102 – Audit logs cleared

Export Logs If Needed

- Create directory C:\Forensics
- o Open PowerShell
- wevtutil epl Security "C:\Forensics\Security.evtx"
- o wevtutil epl System "C:\Forensics\System.evtx"
- o wevtutil epl Application "C:\Forensics\Application.evtx"

4. Decide on risk & Make the Call: If the following are true, close the case:

- o No Malware or C2 traffic
- No unauthorized software's installed
- No unauthorized accounts
- o No persistence mechanisms
- No suspicious logins post-reset
- No lateral movement

Next Steps for Strengthening Security Posture:

- o Integrate DNS with Cloudflare
- o Integrate into Mimecast
- Harden Azure Entra Conditional Access Policies
- o Apply geo-blocking rules to only allow logins from approved countries
- o Block or restrict legacy authentication protocols and untrusted devices.
- o Enforce MFA Using Authenticator App for All Employees