



# The Silent Pivot: Member Server to Domain Controller



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CW Labs is a renowned UK based Ed-tech company specializing in cybersecurity cyber range labs. They provide on-demand educational services and recognize the need for continuous adaptation to evolving threats and client requirements. The company has these primary divisions:

1. Cyber Range Labs
2. Up-Skilling Platform
3. Infinity Learning Platform

CWL provides customized on-site training for organizations and accepts bulk orders for corporate upskilling. For inquiries or more details, feel free to reach out at **[support@cyberwarfare.live](mailto:support@cyberwarfare.live)**.





# About Speaker

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Ranjitha V is a Blue Team Security Engineer at CyberWarfare Labs. Interested in Cloud and On-Premise Defense Operations.





## AGENDA

1. Challenge Overview
2. Attack Flow
3. Key Concepts Behind The Attack
4. Investigation MindMap
5. Solving the Challenge





## Challenge Overview :

### The Silent Pivot: Member Server to Domain Controller

- Detect remote authentication → SYSTEM execution → credential access → lateral movement → Domain Takeover
- Analyze key Windows events: 4624, 7045, 4688, 4673/4674, 4672
- Trace attacker movement from member server to Domain Controller

Goal: Reconstruct a full Active Directory compromise path using SIEM logs.





## Attack Flow :

1. Gains access to a member server
2. Executes commands using SYSTEM privileges
3. Attempts to access LSASS (credential dumping)
4. Reuses stolen credentials
5. Moves laterally to Domain Controller
6. Gains Domain Administrator privileges





## Key Concepts Behind the Attack :

### Active Directory (AD)

- Centralized system managing users, systems, and access

### Member Server vs Domain Controller

- Member Server → Regular domain-joined system
- Domain Controller → Handles authentication & controls domain

### SYSTEM Privileges

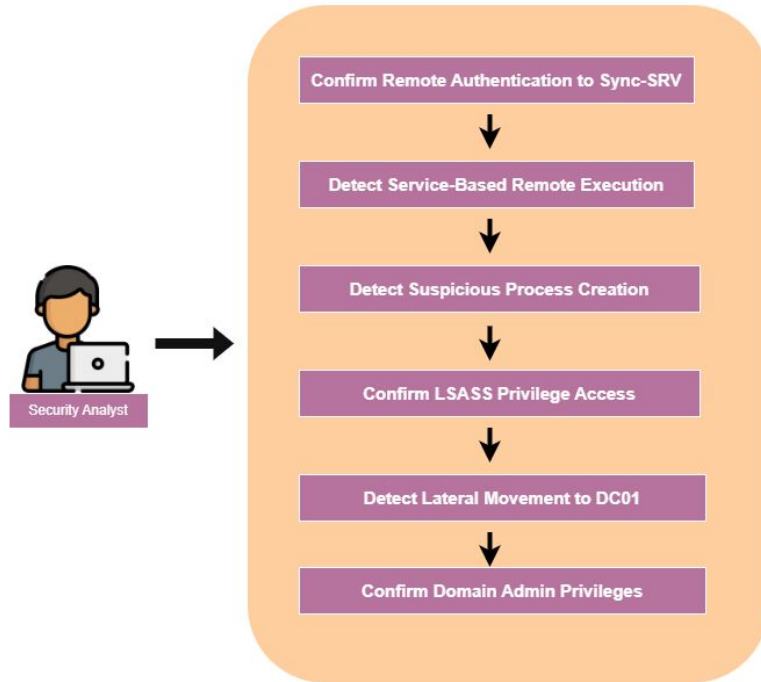
- Highest privilege in Windows
- Full control over the system.

### LSASS (Credential Storage)

- Local Security Authority Subsystem Service
- Stores passwords, hashes, and tickets in memory



## Investigation MindMap :



# Thank You

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