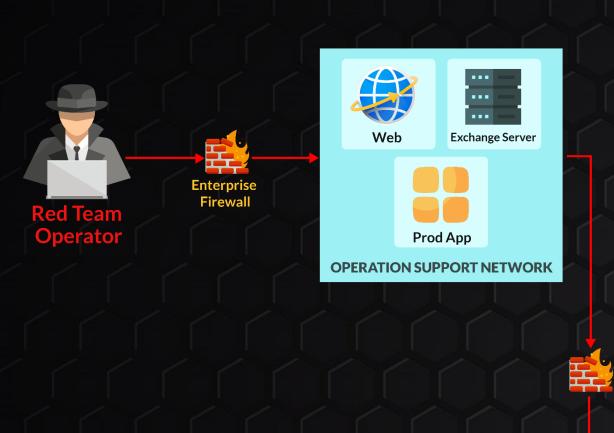


# Certified Red Team Specialist V2 [CRTS V2]

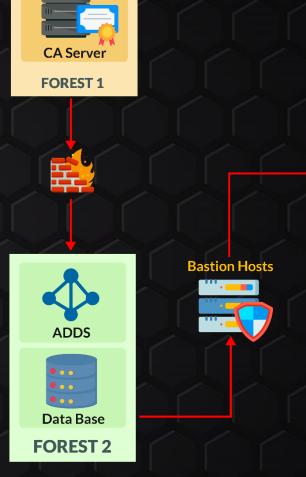


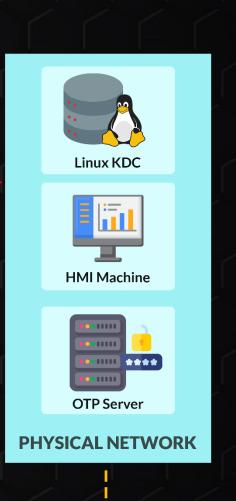
### Certified Red Team Specialist V2 Architeture

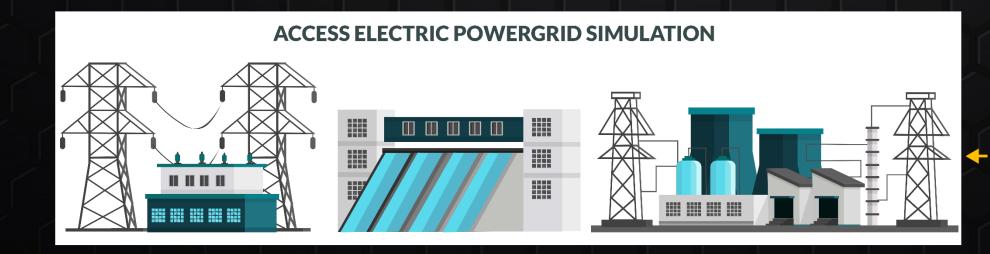




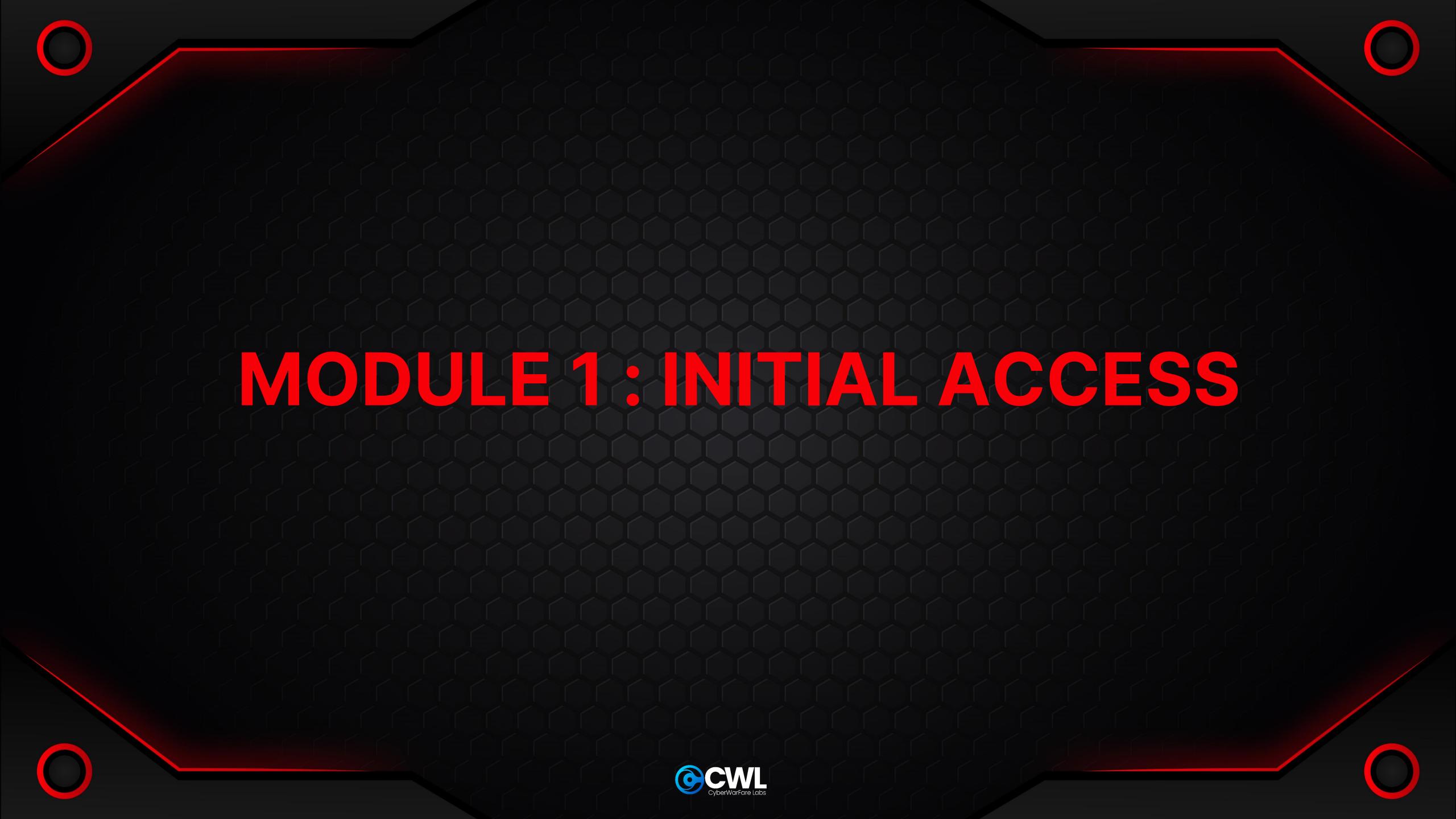










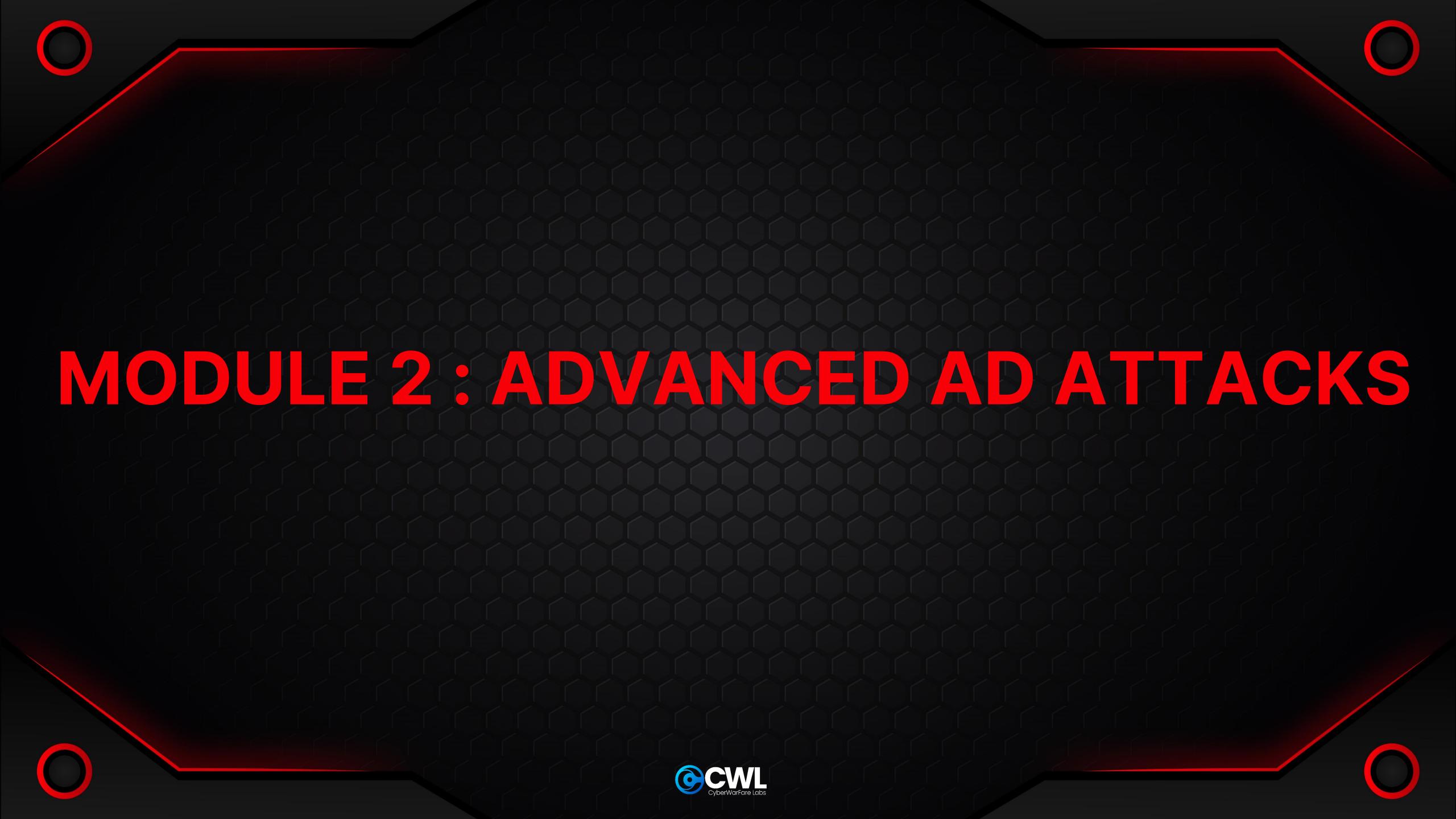


## Module 1 Perform Cyber Kill Chain

#### 1. Case Studies

- Real Life Case Studies
  - Abusing Web App based Vulnerabilities
  - Leaked PAT to Self-Hosted GitLab Runner
  - Adversary In the Middle Attack (AiTM)
  - Manipulating Exchange Rules
  - Abusing & Impersonating Enterprise Applications
    - Zoom
    - Visual Studio





### Module 2 Advanced AD Attacks

- 1. Kerberos Delegation
  - Kerberos Extension
    - S4U2Self
    - U2U
    - S4U2Self + U2U
  - Attacks
    - Diamond Tickets
    - Sapphire Tickets

- 2. Linux Active
- Credential Discovery
- Kerberos in Linux
- Credential Extraction



### 3. Group Managed Service Account (gMSA)

- Machine Access
- User Access

#### 4. Certificate Services

- Introduction
- Authentication
- ESC Abuse
  - ESC1
  - ESC4
  - ESC6
  - ESC8
- Golden Certificate
- Un-PAC the Hash
- Shadow Credentials

### 5. Cross-Forest Attacks

- Kerberoasting
- ACL Abuse
- Foreign Security Principal
- Trust Key
- Privileged Access Management (PAM)
- Over-Permissible Certificate Template



