

| (P) Preparation | (I) Identification | (C) Containment |
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| <div>1. Patch asset vulnerabilities</div> <div>2. Perform routine inspections of controls/weapons</div> <div>3. Ensure antivirus/endpoint protection software is installed on workstations and laptops</div> <div>4. Confirm that servers and workstations are logging to a central location</div> <div>5. Review firewall, IDS, and IPS rules routinely and update based on the needs of the environment</div> <div>6. Conduct employee security awareness training</div> <div>7. Restrict users to the least privileges required</div> <div>8. Set and enforce secure password policies for all accounts ^[1]</div> <div>9. Refer to NIST guidelines when creating password policies ^[2]</div> <div>10. Ensure all accounts with elevated permissions have passwords that are unique, complex, and required to be changed periodically</div> | <div>1. Monitor for:<div>a. Access to detailed information about the organization’s local password policy ^[3]</div><div>b. Access to cloud-based password policies such as AWS ^[3]</div><div>c. Multiple failed authentication attempts across one or various accounts</div><div>d. Attempts by a user account to gain access to unusual or unauthorized systems or networks</div><div>e. Sign-in failures from out-of-the-ordinary locations or repeated MFA failures</div></div> <div>2. Investigate and clear ALL alerts associated with the impacted assets or accounts</div> <div>3. Routinely check firewall, IDS, IPS, and SIEM logs for any unusual activity</div> | <div>1. Inventory (enumerate & assess)</div> <div>2. Detect Deny Disrupt Degrade Deceive Destroy</div> <div>3. Observe -> Orient -> Decide -> Act</div> <div>4. Issue perimeter enforcement for known threat actor locations</div> <div>5. Archive scanning related artifacts such as IP addresses, user agents, and requests</div> <div>6. Determine the source and pathway of the attack</div> |
| (E) Eradication | (R) Recovery | (L) Lessons/Opportunities |
| <div>1. Close the attack vector by applying the Preparation steps listed above</div> <div>2. Perform endpoint/AV scans on targeted systems</div> <div>3. Reset any compromised passwords</div> <div>4. Inspect ALL assets and user activity for IOC consistent with the attack profile</div> <div>5. Inspect backups for IOC consistent with the attack profile PRIOR to system recovery</div> <div>6. Patch asset vulnerabilities</div> <div>7. Reset accounts that have been breached immediately</div> | <div>1. Restore to the RPO (Recovery Point Objective) within the RTO (Recovery Time Objective)</div> <div>2. Address any collateral damage by assessing exposed technologies</div> <div>3. Resolve any related security incidents</div> <div>4. Restore affected systems to their last clean backup</div> | <div>1. Perform routine cyber hygiene due diligence</div> <div>2. Engage external cybersecurity-as-a-service providers and response professionals</div> <div>3. Implement policy changes to reduce future risk</div> <div>4. Utilize newly obtained threat signatures</div> <div>5. Remember that data and events should not be viewed in isolation but as part of a chain of behavior that could lead to other activities</div> <div><div>References:<div>1. MITRE ATT&CK Mitigation M1027: https://attack.mitre.org/mitigations/M1027/</div><div>2. NIST Digital Identity Guidelines: https://pages.nist.gov/800-63-3/sp800-63-3.html</div><div>3. MITRE ATT&CK Technique T1201: https://attack.mitre.org/techniques/T1201/</div></div></div> |

Resources:

- GuardSight GSVSOC Incident Response Plan: https://github.com/guardsight/gsvsoc_cybersecurity-incident-response-plan
- IT Disaster Recovery Planning: <https://www.ready.gov/it-disaster-recovery-plan>
- Report Cybercrime: <https://www.ic3.gov/Home/FAQ>