

(P) Preparation	(I) Identification	(C) Containment
<div><div><div>1. Patch asset vulnerabilities</div><div>2. Perform routine inspections of controls/weapons</div><div>3. Maintain Antivirus/EDR application updates</div><div>4. Create network segmentation</div><div>5. Log traffic between network segments</div><div>6. Incorporate threat intelligence</div><div>7. Perform routine inspections of asset backups</div><div>8. Conduct user security awareness training</div><div>9. Conduct response training (this PBC)</div><div>10. Implement a patch management process to check for unnecessary features, files, and dependencies[2]</div><div>11. Conduct regular vulnerability scans involving automatic and manual review[3]</div><div>12. Test software prior to production deployment[4]</div><div>13. Perform integrity checks on pre-OS boot mechanisms and compare to known-good baseline behavior[5]</div></div></div>	<div><div><div>1. Monitor for:<div><div>a. File hashes that do not match known-good binaries[4]</div><div>b. Known-malicious signatures[4]</div><div>c. Physical tampering[5]</div></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></div>	<div><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><div>7. Fortify non-impacted critical assets</div></div></div>
(E) Eradication	(R) Recovery	(L) Lessons/Opportunities
<div><div><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></div>	<div><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></div>	<div><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> <div><div>References:<div><div>1. https://attack.mitre.org/techniques/T1195/</div><div>2. https://attack.mitre.org/mitigations/M1051/</div><div>3. https://attack.mitre.org/mitigations/M1016/</div><div>4. https://attack.mitre.org/datasources/DS0022/</div><div>5. https://attack.mitre.org/datasources/DS0013/</div></div></div></div>