Solution:

Base Score Metrics

Base Score Metrics

Exploitability Metrics

Attack Vector (AV)*

Network (AV:N) | Adjacent Network (AV:A) | Local (AV:L) | Physical (AV:P)

Attack Complexity (AC)*

Low (AC:L) | High (AC:H)

Privileges Required (PR)*

None (PR:N) | Low (PR:L) | High (PR:H)

User Interaction (UI)*

None (UI:N) | Required (UI:R)

Scope (S)*

Unchanged (S:U) | Changed (S:C)

Impact Metrics

Confidentiality Impact (C)*

None (C:N) | Low (C:L) | High (C:H)

Integrity Impact (I)*

None (I:N) | Low (I:L) | High (I:H)

Availability Impact (A)*

None (A:N) | Low (A:L) | High (A:H)

Temporal Score Metrics

Temporal Score Metrics

Exploit Code Maturity (E)

Not Defined (E:X) | Unproven that exploit exists (E:U) | Proof of concept code (E:P) | Functional exploit exists (E:F) | High (E:H)

Remediation Level (RL)

Not Defined (RL:X) | Official fix (RL:O) | Temporary fix (RL:T) | Workaround (RL:W) | Unavailable (RL:U)

Report Confidence (RC)

Not Defined (RC:X) | Unknown (RC:U) | Reasonable (RC:R) | Confirmed (RC:C)

Environmental Score Metrics

Environmental Score Metrics

Exploitability Metrics

Attack Vector (MAV)

Not Defined (MAV:X) | Network (MAV:N)

Adjacent Network (MAV:A) | Local (MAV:L) | Physical (MAV:P)

Attack Complexity (MAC)

Not Defined (MAC:X) | Low (MAC:L) | High (MAC:H)

Privileges Required (MPR)

Not Defined (MPR:X) | None (MPR:N) | Low (MPR:L)

High (MPR:H)

User Interaction (MUI)

Not Defined (MUI:X) | None (MUI:N) | Required (MUI:R)

Scope (MS)

Not Defined (MS:X) | Unchanged (MS:U) | Changed (MS:C)

Impact Metrics

Confidentiality Impact (MC)

Not Defined (MC:X) | None (MC:N)

Low (MC:L) | High (MC:H)

Integrity Impact (MI)

Not Defined (MI:X) | None (MI:N)

Low (MI:L) | High (MI:H)

Availability Impact (MA)

Not Defined (MA:X) | None (MA:N)

Low (MA:L) | High (MA:H)

Impact Subscore Modifiers

Confidentiality Requirement (CR)

Not Defined (CR:X) | Low (CR:L)

Medium (CR:M) | High (CR:H)

Integrity Requirement (IR)

Not Defined (IR:X) | Low (IR:L)

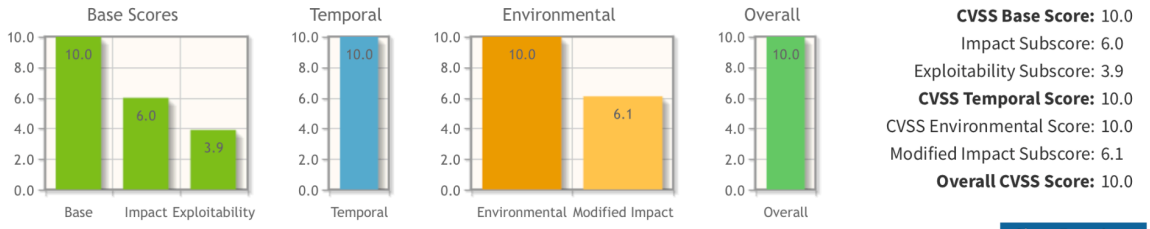
Medium (IR:M) | High (IR:H)

Availability Requirement (AR)

Not Defined (AR:X) | Low (AR:L)

Medium (AR:M) | High (AR:H)

Interpret the score



CVVS score for the vulnerability is 10. This mean this vulnerability is critical and it has the potential to cause a lot of damage to Sam Scoops' business if it get exploited or not mitigated.

Mitigation and remediation

1. Update/Reconfigure the firewall
2. Implement MFA
3. Data encryption to safeguard sensitive data
4. Audit trails to log the changes made to the files
5. Use of IDPS systems
6. SIEM tools to monitor
7. Network segmentation to avoid lateral movement
8. Input validation: Input validation must be adopted to avoid any malicious SQL injection to the SQL database for unauthorized access.
9. RBAC or JIT access controls