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## 1. Overview

This report investigates credential leaks detected on the dark web using OSINT techniques. The goal is to identify **exposed credentials**, **assess threat actor tactics**, **and recommend mitigation measures** to reduce the risk of account compromises.

# 2. Key Findings

### **Credential Exposure Analysis**

- 5 sets of credentials linked to corporate email addresses were found on dark web forums.
- 3 compromised accounts show active login attempts from unauthorized locations.
- Leaked credentials contain plaintext passwords, increasing the risk of credential stuffing.

## **Threat Actor Insights**

- The identified leaks originate from underground marketplaces and hacker forums.
- Threat actors sell login credentials bundled with browser session cookies to bypass MFA.
- Credential stuffing tools such as OpenBullet and Sentry MBA were referenced in forum discussions.

# 3. Attack Methodology Analysis

Threat actors leverage stolen credentials in the following phases:

## **Phase 1: Credential Acquisition**

- Techniques Used:
  - Data breaches from unsecured databases

- Phishing campaigns targeting employees
- Malware (keyloggers, infostealers)

### **Phase 2: Credential Exploitation**

- Tactics Observed:
  - Automated login attempts using credential stuffing bots
  - Selling stolen credentials on dark web markets
  - Bypassing multi-factor authentication (MFA) using stolen session cookies

### 4. Risk Assessment

**Severity Level: HIGH** 

- Potential Impact:
  - Account Takeover: Unauthorized access to internal systems.
  - Privilege Escalation: Attackers could escalate privileges within SaaS platforms.
  - Data Exfiltration: Sensitive customer or company data may be extracted.

## 5. Recommended Mitigation Strategies

## **Immediate Actions (Within 24 Hours)**

- Force password resets for all exposed accounts.
- Implement mandatory Multi-Factor Authentication (MFA).
- Block known compromised IP addresses linked to unauthorized access attempts.

## **Long-Term Strategies**

- 1. Dark Web Monitoring: Establish an automated threat intelligence feed.
- Password Policy Enforcement: Require strong, unique passwords per account.
- 3. **Security Awareness Training:** Educate employees on **phishing risks** and **password hygiene**.
- 4. Account Lockout Measures: Limit failed login attempts to prevent brute-force attacks.

### 6. Conclusion

Dark web activity suggests that **corporate credentials have been actively traded** among cybercriminals. Without immediate **mitigation efforts**, affected accounts **remain at risk** for **fraud, data theft, and ransomware attacks**.

By enforcing MFA, monitoring the dark web, and strengthening authentication policies, organizations can reduce exposure and prevent credential-based attacks.

# 7. Appendix: Supporting Data

## **Threat Intelligence Sources:**

- Shodan Breach Database
- Have I Been Pwned (HIBP)
- Recorded Future Dark Web Intelligence

### MITRE ATT&CK Techniques Used:

- T1078 Valid Accounts
- T1110 Brute Force
- T1555 Credentials from Password Stores
- T1586 Compromise Accounts