

# **Security Incident Investigation Report**

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## **1. Executive Summary:**

- This report analyzes SSH authentication logs and identifies a brute-force attack that resulted in a successful root login.
- The attack originated from an external IP address, compromising system security.

## **2. Findings:**

- Attacker IP: 45.67.89.12
- Attack Type: Brute-force login attempt
- Target Accounts: admin, test, root
- Success: Root access was successfully obtained

## **3. Evidence:**

Jan 12 10:02:15 Failed password for invalid user admin from 45.67.89.12

Jan 12 10:02:22 Failed password for root from 45.67.89.12

Jan 12 10:02:25 Accepted password for root from 45.67.89.12

## **4. Impact:**

- Attackers may have gained full control of the system, including access to sensitive files and services.

## **5. Recommendations:**

1. Block attacker IP
2. Disable direct root login
3. Change all system passwords
4. Enable MFA
5. Limit SSH login attempts
6. Install fail2ban
7. Audit system for persistence

## **6. Conclusion:**

A brute-force attack resulted in successful unauthorized system access. Immediate incident response actions are necessary to prevent further exploitation.