

## Top Critical Vulnerabilities Identified

### Target Details

**IP dress:** 192.168.152.129 (Metasploitable2)

**SystAdem Type:** Linux Ubuntu 8.04 LTS (vulnerable VM)

**Purpose:** Ethical hacking training & vulnerability scanning

### 1. vsftpd 2.3.4 Backdoor Command Execution

- **CVSS Score:** 10.0 (Critical)
- **Description:** A backdoored version of vsftpd allows unauthenticated remote code execution when a smiley :) is used in the username.
- **Affected Service:** FTP (Port 21)
- **Remediation:** Uninstall vsftpd 2.3.4 immediately and replace with a trusted, updated FTP server (or disable FTP altogether if not needed).

### 2. Samba smbd 3.x - Remote Code Execution

- **CVSS Score:** 10.0 (Critical)
- **Description:** Vulnerable Samba versions allow attackers to execute arbitrary code via crafted SMB packets.
- **Affected Service:** SMB (Port 445)
- **Remediation:** Upgrade Samba to a secure version ( $\geq 4.x$ ). Disable SMBv1 if not required.

### 3. MySQL Privilege Bypass

- **CVSS Score:** 10.0 (Critical)
- **Description:** MySQL is configured with weak access controls, allowing attackers to escalate privileges.

- **Affected Service:** MySQL (Port 3306)
- **Remediation:** Harden MySQL configurations, disable remote root login, update MySQL to a secure version, and enforce strong authentication.

#### 4. Unencrypted HTTP Services

- **CVSS Score:** 7.5 (High)
- **Description:** Apache is running over HTTP, exposing credentials and session info in plaintext.
- **Affected Service:** HTTP (Port 80)
- **Remediation:** Enable HTTPS using SSL/TLS certificates. Redirect all HTTP traffic to HTTPS.

#### 5. OpenSSH with Weak Ciphers

- **CVSS Score:** 7.5 (High)
- **Description:** SSH is configured to support outdated and weak encryption algorithms.
- **Affected Service:** SSH (Port 22)
- **Remediation:** Edit `/etc/ssh/sshd_config` to disable weak ciphers (e.g., arcfour, cbc modes) and enable only secure algorithms.