

ECHIDNA

Installation

1. Pull docker image

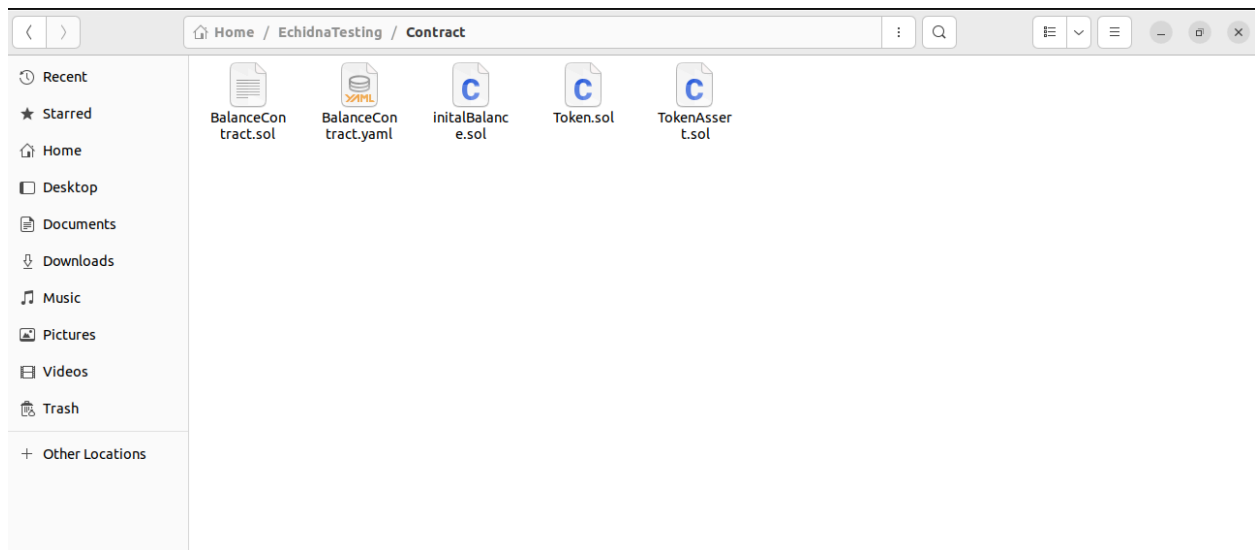
```
docker pull trailofbits/eth-security-toolbox
```

2. Run the image

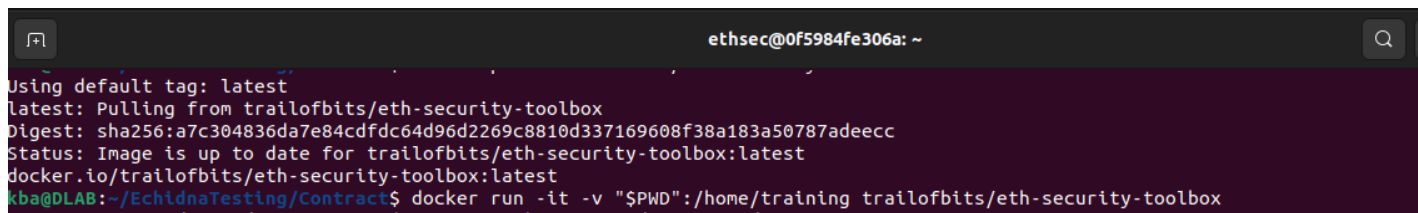
```
docker run -it -v "$PWD":/home/training trailofbits/eth-security-toolbox
```

Here the contract should be present on the current working directory and the exact copy of things present in the working directory is present in /home/training folder in docker container.

I have created a folder "EchidnaTesting" and inside the folder i created another folder called contracts.



I open the folder in a terminal. Then i pulled echidna docker image. Then i run the docker



Then the container started

Now you can see whatever files present inside the contracts folder is present in /home/training in Docker container.

Now i am going to test the Token.sol file with echidna using the command

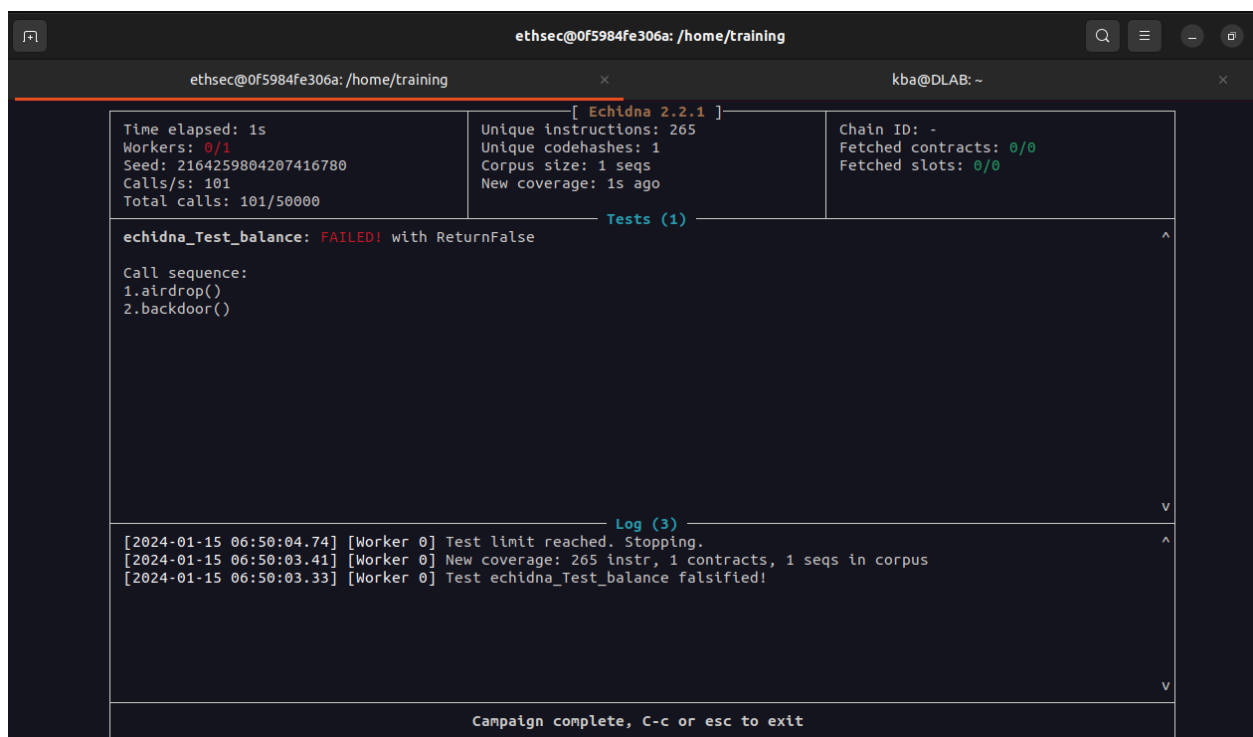
```
echidna contract.sol  
echidna Token.sol
```

Or

```
echidna contract.sol --contract Test-contract-name
```

```
echidna Token.sol --contract TestToken
```

The output will be



```
ethsec@0f5984fe306a: /home/training  
[ Echidna 2.2.1 ]  
Time elapsed: 1s  
Workers: 0/1  
Seed: 2164259804207416780  
Calls/s: 101  
Total calls: 101/50000  
Unique instructions: 265  
Unique codehashes: 1  
Corpus size: 1 seqs  
New coverage: 1s ago  
Chain ID: -  
Fetched contracts: 0/0  
Fetched slots: 0/0  
Tests (1)  
echidna_Test_balance: FAILED! with ReturnFalse  
Call sequence:  
1.airdrop()  
2.backdoor()  
Log (3)  
[2024-01-15 06:50:04.74] [Worker 0] Test limit reached. Stopping.  
[2024-01-15 06:50:03.41] [Worker 0] New coverage: 265 instr, 1 contracts, 1 seqs in corpus  
[2024-01-15 06:50:03.33] [Worker 0] Test echidna_Test_balance falsified!  
Campaign complete, C-c or esc to exit
```