

Week 14 Lab Tutorial

This is a snippet of the commands and tools that were covered in Tuesday's exercise session.

After it is uploaded, please refer to the corresponding recording for a demonstration of these tools.

Intro

- A quick introduction to the main files in the VM
- Tutorial for useful tools for the assignment

t1 & t2

- c file
- run.sh file
- samples, password.txt, traces

SGXTRACE

- Generating your own traces

```
cd ~/pin-2.14-71313-gcc.4.4.7-linux/source/tools/SGXTrace
```

- Example from the handout

```
../../../../pin.sh -t ./obj-intel64/SGXTrace.so -o ~/isl/ls.txt -trace 1 -- ls /home
```

- Generating multiple traces

```
../../../../pin.sh -t ./obj-intel64/SGXTrace.so -o ~/isl/ls_1.txt -trace 1 -- ls /home
```

```
../../../../pin.sh -t ./obj-intel64/SGXTrace.so -o ~/isl/ls_2.txt -trace 1 -- ls /home/sgx
```

- Comparing traces

```
vimdiff ~/isl/ls_1.txt ~/isl/ls_2.txt
```

- Traces and understand their syntax

```
gedit ~/isl/t1/samples/1/traces/magicbeans.txt
```

READEF

- [tool tutorial](#)

- man page

```
man readelf
```

- checking function addresses

```
readelf -s password_checker_1 | grep main
```

```
readelf -s password_checker_1 | grep password
```

OBJDUMP

- [tool tutorial](#)

- man page

```
man objdump
```

- using `objdump` for disassembly along with annotated C code

```
objdump -S password_checker_1 | more
```

- you can try to search for the string `password` in the output of the above command by typing `/password`