

CMPE 283 Assignment 3 Submission

Name: Hemaprasanthi Mutyala Id: 013704392

1. For each member in your team, provide 1 paragraph detailing what parts of the lab that member implemented / researched.

Answer: I did it myself

2. Include a sample of your print output from your test program from “with ept” and “without ept”.

Answer:

With Ept:

```
ubuntu@ubuntu: ~/Desktop
ubuntu@ubuntu:~/Desktop$ gcc -o testing testing.c
ubuntu@ubuntu:~/Desktop$ ./testing
CPUID(0x4FFFFFFF), exits=2733382, cycles spent in exit =7540828047781034180
ubuntu@ubuntu:~/Desktop$
```

Without Ept:

```
ubuntu@ubuntu: ~/Desktop
ubuntu@ubuntu:~/Desktop$ ./testing
CPUID(0x4FFFFFFF), exits=10660189, cycles spent in exit =98806243478910321012
ubuntu@ubuntu:~/Desktop$
```

3. What did you learn from the count of exits? Was the count what you expected? If not, why not?

Answer:

There was an increase in the number of exits when I run the program with ept =0. The number of exits increased from 2733382 to 10660189. This is according to my expectations, since VM exits on each and every PF(page fault) to maintain the shadow page tables up to date.

4. What changed between the two runs (ept vs no-ept)?

Answer:

I followed the same process for both the scenarios.

Booting the guest VM, creating the test program, compiling and executing the test program.