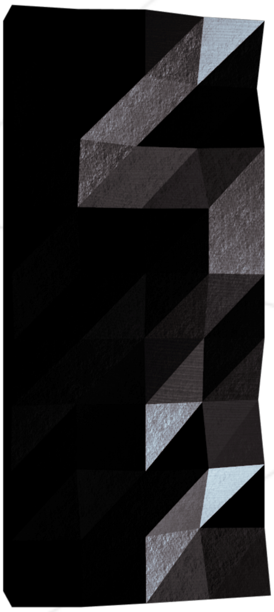

UNIX Project

ft_strace

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Summary: This project aims to recode the strace command.

Version: 4

Contents

Chapter I

Foreword

Strace is a debugging tool under Linux to monitor system calls use by a program, and all the signals it receives, similar to the tool truss on other Unix systems. It was made possible through a feature of the Linux kernel called ptrace.

Chapter II

Mandatory part

You must recode the strace command (without option)

```
\$> man strace
\$> man ptrace
```

- The executable file must be named `ft_strace`
- You must code in C and make a Makefile (respecting the usual rules)
- For this subject no norm and you have the right of the `libc`, on the other hand avoid the abuses on the norm ! This is an advice for the correction.
- You have to handle errors carefully. In no way can your program quit in an unexpected manner (Segmentation fault, bus error, double free, etc).
- You must be on a `VM` with a linux kernel > 3.4, for your information the scale was made with a `Ubuntu 14.10`

- You are only allowed to use the following options :
  - PTRACE_SYSCALL
  - PTRACE_GETREGSET
  - PTRACE_SETOPTIONS
  - PTRACE_GETSIGINFO
  - PTRACE_SEIZE
  - PTRACE_INTERRUPT
  - PTRACE_LISTEN
- You must handle 64 AND 32 bit binaries

Be very careful with signal management ... Really ...

For the smart ones (or not)... Of course you can't call the real strace.

The display should be close to the original display of strace. It is not required to have an exact match.

Chapter III

Bonus part

The following is a list of available bonuses

- The option -c.
- Handle the PATH management.

⚠ The bonus part will only be assessed if the mandatory part is PERFECT. Perfect means the mandatory part has been integrally done and works without malfunctioning. If you have not passed ALL the mandatory requirements, your bonus part will not be evaluated at all.

Chapter IV

Submission and peer-evaluation

Turn in your assignment in your `Git` repository as usual. Only the work inside your repository will be evaluated during the defense. Don't hesitate to double check the names of your folders and files to ensure they are correct.

This project will be corrected by humans only. You're allowed to organise and name your files as you see fit, but you must follow the rules.