

Software requirements specification

Introduction

Purpose

Firewall for management process in linux.

Project scope

Study new technology, work in command, gaining experience working driver.

Overall Description

Product features

- Exist blacklist for pocesses.
- Exist process list.
- Add process to blacklist.
- Remove process from blacklist.
- Add not running processes to blacklist by path.
- Kill process.
- Display information about the selected process in the process list.

User documentation

- Test plan.
- Code documentation.
- UI documentation.
- Diagram which show the work of application.
- Presentation.

System features

- *File **AFFL_black_list*** : File which contains the list of processes should be added to the blacklist.
- *File **AFFL_command***: File for communication between UI and driver.
- *Add to blacklist*: Adds the selected process to blacklist.
- *Remove from blacklist*: Removes the selected user from the user program, the process of the file that should be stored blacklist.
- *Add not running processes blacklisted by name*: Adds the path of the executable is not running, the file in the file for the blacklist.
- *Kill process*: Kill the selected process.
- *Display information about the selected process in the process list*: Show information about the selected process.

External interface requirements

User interfaces

The program uses the UI. There are two forms.
In the first form:

- Field which displays a list of all processes.

- Field that displays the list of blocked processes (blacklist).
- Field that displays information about the selected process.

5 buttons:

- Button that updates the list of processes.
- Button that adds the selected process in the blacklist.
- Button that removes the selected process from the blacklist.
- Button that kill the selected process.
- Button which open the second form.

The second form:

- Input field to enter the path to the executable file.
- Button to add a name of executable file to the blacklist.

Communication interfaces

Communication between the user program and the driver using the file
(Describe the option / command) (see System features)

Limitations

The program must be run as root.

Enter the path to the executable file, but not the name of the executable file.

OS Linux (kubuntu 13.10, ubuntu 13.10, lubuntu 13.10). Kernel version 3.11.