GDB guide

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- Print variable names, change variable values, stop at certain conditions, etc.

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- Print a variable content `print <var>` `set <expression>`

Configurations for GDB

- Install GDB
- Define GDBMacros variable in the local enviroment
- Run docker container (if you are using one) with

```
docker run --cap-add=SYS_PTRACE --security-opt
seccomp=unconfined
```

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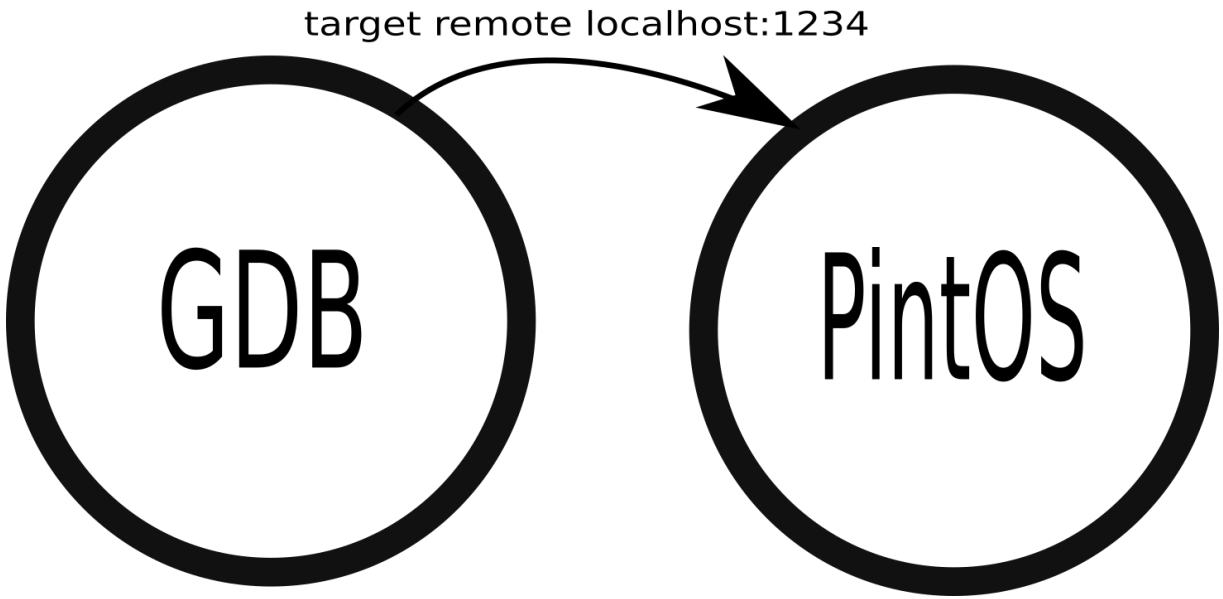
- **Shell2**: Load binary `pintos-gdb kernel.o`
- **Shell2**: Attach to proccess `target remote localhost:1234`
- Start debbuging by pressing `c`

Configuration for GDB: Graphical



Usefull PintOS-GDB macros

- **btthread thread**: Run a backtrace on a specific thread
- **dumplist list-name list-type element**: Print the element of a given list
- **hook-stop**: This is called everytime a pagefault occurs
- **btthreadlist list-name element**: Shows the backtrace of all the threads contained in the list
- **btpagefault**:Backtrace of a thread after a page fault.

Usage example: Alarm Clock

Live example

Bibliography

https://web.stanford.edu/class/cs140/projects/pintos/pintos.pdf