

How to install and use oitimetool in modern times?

NOTE

After our small success, [SIO2Jail](#) was introduced, making the whole oitimetool obsolete.

Limitations: why can't we just run oitimetool on our favorite system?

- Oitimetool requires pintool
 - Different version of pintool on Linux (2.14-71313) and different one on Windows (2.13-61206).
 - The 2.13 version for Windows is not available for download anymore.
- pintool 2.14 for Linux requires Linux kernel < 4.0 and support for IA32.

The outdated Ubuntu method

Install Ubuntu 13.10

- Install [Ubuntu 13.10 32-bit i386](#) ([index](#)) in a virtual machine.
 - Don't check "Download updates while installing" in installer.

Repair package manager

- Open `/etc/apt/sources.list`.
- Make file look like the one in [source below](#).
- `sudo apt-get update`
- To test if all went well, use `sudo apt-get upgrade`. This should update `openssl` and Firefox should be able to open GitHub website by now.
 - If this doesn't work, try `sudo apt-get dist-upgrade`.

Download oitimetool and pintool.

- Download oitimetool from [official repository](#) ([readme](#)) and unpack all contents to `~/oitime/`.
- Save `pintool` from [official page](#) ([index](#)) as `~/oitime/pin-2.14-71313-gcc-4.4.7-linux.tar.gz`.
- `cd ~/oitime/`
- `./oitimetool test-programs/primes-gcc34` should now work. Yay! if it does.
 - If this doesn't work, try `chmod +x ./oitimetool`, `chmod +x test-programs/*` and then try the above again.

Install g++

- `sudo apt-get build-essential`

sources.list

```
# See http://help.ubuntu.com/community/UpgradeNotes for how to upgrade to
# newer versions of the distribution.
deb http://old-releases.ubuntu.com/ubuntu/ saucy main restricted
deb-src http://old-releases.ubuntu.com/ubuntu/ saucy main restricted

## Major bug fix updates produced after the final release of the
## distribution.
deb http://old-releases.ubuntu.com/ubuntu/ saucy-updates main restricted
deb-src http://old-releases.ubuntu.com/ubuntu/ saucy-updates main restricted

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team. Also, please note that software in universe WILL NOT receive any
## review or updates from the Ubuntu security team.
#deb http://old-releases.ubuntu.com/ubuntu/ saucy universe
#deb-src http://old-releases.ubuntu.com/ubuntu/ saucy universe
#deb http://old-releases.ubuntu.com/ubuntu/ saucy-updates universe
#deb-src http://old-releases.ubuntu.com/ubuntu/ saucy-updates universe

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team, and may not be under a free licence. Please satisfy yourself as to
## your rights to use the software. Also, please note that software in
## multiverse WILL NOT receive any review or updates from the Ubuntu
## security team.
#deb http://old-releases.ubuntu.com/ubuntu/ saucy multiverse
#deb-src http://old-releases.ubuntu.com/ubuntu/ saucy multiverse
#deb http://old-releases.ubuntu.com/ubuntu/ saucy-updates multiverse
#deb-src http://old-releases.ubuntu.com/ubuntu/ saucy-updates multiverse

## N.B. software from this repository may not have been tested as
## extensively as that contained in the main release, although it includes
## newer versions of some applications which may provide useful features.
## Also, please note that software in backports WILL NOT receive any review
## or updates from the Ubuntu security team.
deb http://old-releases.ubuntu.com/ubuntu/ saucy-backports main restricted universe multiverse
deb-src http://old-releases.ubuntu.com/ubuntu/ saucy-backports main restricted universe
multiverse

#deb http://security.ubuntu.com/ubuntu saucy-security main restricted
#deb-src http://security.ubuntu.com/ubuntu saucy-security main restricted
#deb http://security.ubuntu.com/ubuntu saucy-security universe
#deb-src http://security.ubuntu.com/ubuntu saucy-security universe
#deb http://security.ubuntu.com/ubuntu saucy-security multiverse
#deb-src http://security.ubuntu.com/ubuntu saucy-security multiverse

## Uncomment the following two lines to add software from Canonical's
## 'partner' repository.
## This software is not part of Ubuntu, but is offered by Canonical and the
## respective vendors as a service to Ubuntu users.
# deb http://archive.canonical.com/ubuntu saucy partner
# deb-src http://archive.canonical.com/ubuntu saucy partner

## This software is not part of Ubuntu, but is offered by third-party
## developers who want to ship their latest software.
#deb http://extras.ubuntu.com/ubuntu saucy main
#deb-src http://extras.ubuntu.com/ubuntu saucy main
```

The modern old kernel approach

Surely, there must be *some* Linux distribution which uses 3.x kernel, but is still supported, so package system doesn't need to be fixed, right?

It looked like after half-hour of searching, I found an [ideal search query](#). The most popular distribution was CentOS, and I had heard its name before, so it looked perfect.

Long story short, pintool doesn't work with some obscure exception.

Some obscure exception

```
A: Source/pin/injector_nonmac/auxvector.cpp: CopyAux: 291: unexpected AUX VEC type 26

#####
## STACK TRACE
#####
addr2line -C -f -e "/home/j/Downloads/olimpiada-oitimetool-bin-c671d44/pin-2.14-71313-gcc.4.4.7-
linux/ia32/bin/pinbin" 0x566a728b 0x566a80f6 0x566a83e1 0x5690c3a7 0x56911972 0x56913809
0x56902e59 0x5690801f 0x568f6202 0x56901cc1 0xf74211b3
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Detach Service Count: 1
Pin 2.14
Copyright (c) 2003-2015, Intel Corporation. All rights reserved.
@CHARM-VERSION: $Rev: 71293 $
@CHARM-BUILDER: BUILDER
@CHARM-COMPILER: gcc 4.4.7
@CHARM-TARGET: ia32
@CHARM-CFLAGS: __OPTIMIZE__=1 __NO_INLINE__=__NO_INLINE__
./oitimetool: line 57: 5000 Aborted (core dumped) "$PIN_DIR/pin" $OPTIONS
"$PIN_DIRO/oitimetool$LIB_SUFFIX" $OITIMETOOL_ARGS -- $*
```