Compiling PARI from the GIT repository

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Introduction

This talk focuses on the current development version of the PARI library (2.10.*), available from our GIT repository, see

  http://pari.math.u-bordeaux.fr/anongit.html

The text of this talk is available in the files sources.* in

    http://pari.math.u-bordeaux.fr/Events/
              PARI2017b/talks/

Windows users

Download a precompiled 64bit installer `Pari64*.exe` or 32bit binary `Pari32*.exe` from

http://pari.math.u-bordeaux.fr/pub/pari/
windows/snapshots/

Also available are precompiled 64bit binary `gp64-gmp-git*.exe` or 32bit binary `gp32-gmp-git*.exe`.

Mac OS users

Download a precompiled DMG `PariGP-*.dmg` from

`http://pari.math.u-bordeaux.fr/pub/pari/mac/`
`snapshots/`

Also are precompiled binary `gp-git*-osx`.

Debian/Ubuntu

On Debian/Ubuntu, to install all the packages required to build pari from source:

```
sudo apt-get build-dep pari
```

From source with GIT

Clone the PARI repository with GIT ($\sim$ 150MB).

```
git clone http://pari.math.u-bordeaux.fr/git/pari.git
cd pari
```

From source without GIT

Download `pari-2.10-*.tar.gz` from

`http://pari.math.u-bordeaux.fr/pub/pari/snapshots/`

and unpack it

```
tar xf pari-2.10-*.tar.gz
cd pari-2.10-*
```

PARI compilation

```
./Configure --prefix=GPDIR --mt=pthread
make -j4 gp
make doc
make statest-all
make install
make install-bin-sta
GPDIR/bin/gp
```

GP configuration

Create and customize `~/.gprc`. Add

```
histfile = "~/.gp\_history"
colors = "lightbg" \\ or "darkbg"
lines = 40
parisizemax = 4G \\ or the maximum amount of memory
                 \\ GP can use (important)
read "~/.gprc.gp"
```

Create an empty file `~/.gprc.gp`

Updating GIT

To update GIT to the most recent revision:

```
git fetch
git rebase origin/master
```