

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/
PARI2018/talks/](http://pari.math.u-bordeaux.fr/Events/PARI2018/talks/)

Windows users

Download a precompiled 64bit installer

`Pari64-2-10-0.A2018b.exe` or 32bit binary

`Pari32-2-10-0.A2018b.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-full-2.10.0.A2018b.dmg` from

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

on some system, you need to right-click on the icon and select open, so that you can bypass the security check.

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

Linux

To install all the packages required to build pari from source:

Debian/Ubuntu

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

Fedora

```
sudo dnf install readline-devel gmp-devel
```

If you want to use git, also do

Debian/Ubuntu

```
sudo apt-get install git bison
```

Fedora

```
sudo dnf install git bison
```

From source with GIT

Clone the PARI repository with GIT (~ 150MB).

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

From source without GIT

Download `pari-2.10.0.A2018b.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  
./Configure --prefix=GPDIR.dbg -g  
make -j4 gp  
make install -C Olinux-x86_64.dbg  
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
./Configure -l
make install
```

Changelog

You can see the latest commits with

```
git log
```