

## Document your code

[Dismiss](#)

Every project on GitHub comes with a version-controlled wiki to give your documentation the high level of care it deserves. It's easy to create well-maintained, Markdown or rich text documentation alongside your code.

[Sign up for free](#)[See pricing for teams and enterprises](#)

# Command Line Options

[Jump to bottom](#)

ligi edited this page on Jun 19, 2018 · 40 revisions

```
$ geth help
```

```
NAME:
```

```
geth - the go-ethereum command line interface
```

```
Copyright 2013-2018 The go-ethereum Authors
```

```
USAGE:
```

```
geth [options] command [command options] [arguments...]
```

```
VERSION:
```

```
1.8.11-stable
```

```
COMMANDS:
```

account	Manage accounts
attach	Start an interactive JavaScript environment (connect to node)
bug	opens a window to report a bug on the geth repo
console	Start an interactive JavaScript environment
copydb	Create a local chain from a target chaindata folder
dump	Dump a specific block from storage
dumpconfig	Show configuration values
export	Export blockchain into file
export-preimages	Export the preimage database into an RLP stream
import	Import a blockchain file
import-preimages	Import the preimage database from an RLP stream
init	Bootstrap and initialize a new genesis block
js	Execute the specified JavaScript files
license	Display license information
makecache	Generate ethash verification cache (for testing)
makedag	Generate ethash mining DAG (for testing)
monitor	Monitor and visualize node metrics
removedb	Remove blockchain and state databases

version	Print version numbers
wallet	Manage Ethereum presale wallets
help, h	Shows a list of commands or help for one command

**ETHEREUM OPTIONS:**

--config value	TOML configuration file
--datadir "/home/ligi/.ethereum"	Data directory for the databases and
keystore	
--keystore	Directory for the keystore (default = inside
the datadir)	
--nousb	Disables monitoring for and managing USB
hardware wallets	
--networkid value	Network identifier (integer, 1=Frontier,
2=Morden (disused), 3=Ropsten, 4=Rinkeby) (default: 1)	
--testnet	Ropsten network: pre-configured proof-of-
work test network	
--rinkeby	Rinkeby network: pre-configured proof-of-
authority test network	
--syncmode "fast"	Blockchain sync mode ("fast", "full", or
"light")	
--gcmode value	Blockchain garbage collection mode ("full",
"archive") (default: "full")	
--ethstats value	Reporting URL of a ethstats service
(nodename:secret@host:port)	
--identity value	Custom node name
--lightserv value	Maximum percentage of time allowed for
serving LES requests (0-90) (default: 0)	
--lightpeers value	Maximum number of LES client peers (default:
100)	
--lightkdf	Reduce key-derivation RAM & CPU usage at
some expense of KDF strength	

**DEVELOPER CHAIN OPTIONS:**

--dev	Ephemeral proof-of-authority network with a pre-funded
developer account, mining enabled	
--dev.period value	Block period to use in developer mode (0 = mine only if
transaction pending) (default: 0)	

**ETHASH OPTIONS:**

--ethash.cachedir	Directory to store the ethash
verification caches (default = inside the datadir)	
--ethash.cachesinmem value	Number of recent ethash caches to keep
in memory (16MB each) (default: 2)	
--ethash.cachesondisk value	Number of recent ethash caches to keep
on disk (16MB each) (default: 3)	
--ethash.dagdir "/home/ligi/.ethash"	Directory to store the ethash mining
DAGs (default = inside home folder)	
--ethash.dagsinmem value	Number of recent ethash mining DAGs to
keep in memory (1+GB each) (default: 1)	
--ethash.dagsondisk value	Number of recent ethash mining DAGs to
keep on disk (1+GB each) (default: 2)	

**TRANSACTION POOL OPTIONS:**

--txpool.nolocals	Disables price exemptions for locally submitted
transactions	

--txpool.journal value      Disk journal for local transaction to survive node restarts (default: "transactions.rlp")  
 --txpool.rejournal value    Time interval to regenerate the local transaction journal (default: 1h0m0s)  
 --txpool.pricelimit value    Minimum gas price limit to enforce for acceptance into the pool (default: 1)  
 --txpool.pricebump value    Price bump percentage to replace an already existing transaction (default: 10)  
 --txpool.accountslots value Minimum number of executable transaction slots guaranteed per account (default: 16)  
 --txpool.globalslots value   Maximum number of executable transaction slots for all accounts (default: 4096)  
 --txpool.accountqueue value Maximum number of non-executable transaction slots permitted per account (default: 64)  
 --txpool.globalqueue value   Maximum number of non-executable transaction slots for all accounts (default: 1024)  
 --txpool.lifetime value      Maximum amount of time non-executable transaction are queued (default: 3h0m0s)

#### PERFORMANCE TUNING OPTIONS:

--cache value                Megabytes of memory allocated to internal caching (default: 1024)  
 --cache.database value      Percentage of cache memory allowance to use for database io (default: 75)  
 --cache.gc value            Percentage of cache memory allowance to use for trie pruning (default: 25)  
 --trie-cache-gens value      Number of trie node generations to keep in memory (default: 120)

#### ACCOUNT OPTIONS:

--unlock value      Comma separated list of accounts to unlock  
 --password value    Password file to use for non-interactive password input

#### API AND CONSOLE OPTIONS:

--rpc                    Enable the HTTP-RPC server  
 --rpcaddr value        HTTP-RPC server listening interface (default: "localhost")  
 --rpcport value        HTTP-RPC server listening port (default: 8545)  
 --rpcapi value        API's offered over the HTTP-RPC interface  
 --ws                    Enable the WS-RPC server  
 --wsaddr value        WS-RPC server listening interface (default: "localhost")  
 --wsport value        WS-RPC server listening port (default: 8546)  
 --wsapi value        API's offered over the WS-RPC interface  
 --wsorigins value      Origins from which to accept websockets requests  
 --ipcdisable            Disable the IPC-RPC server  
 --ipcpath              Filename for IPC socket/pipe within the datadir (explicit paths escape it)  
 --rpccorsdomain value Comma separated list of domains from which to accept cross origin requests (browser enforced)  
 --rpcvhosts value      Comma separated list of virtual hostnames from which to accept requests (server enforced). Accepts '\*' wildcard. (default: "localhost")  
 --jspath loadScript    JavaScript root path for loadScript (default: ".")  
 --exec value            Execute JavaScript statement  
 --preload value        Comma separated list of JavaScript files to preload

into the console

#### NETWORKING OPTIONS:

--bootnodes value      Comma separated enode URLs for P2P discovery bootstrap (set v4+v5 instead for light servers)

--bootnodesv4 value    Comma separated enode URLs for P2P v4 discovery bootstrap (light server, full nodes)

--bootnodesv5 value    Comma separated enode URLs for P2P v5 discovery bootstrap (light server, light nodes)

--port value            Network listening port (default: 30303)

--maxpeers value        Maximum number of network peers (network disabled if set to 0) (default: 25)

--maxpendpeers value   Maximum number of pending connection attempts (defaults used if set to 0) (default: 0)

--nat value            NAT port mapping mechanism (any|none|upnp|pmp|extip:<IP>) (default: "any")

--nodiscover            Disables the peer discovery mechanism (manual peer addition)

--v5disc                Enables the experimental RLPx V5 (Topic Discovery) mechanism

--netrestrict value    Restricts network communication to the given IP networks (CIDR masks)

--nodekey value        P2P node key file

--nodekeyhex value    P2P node key as hex (for testing)

#### MINER OPTIONS:

--mine                Enable mining

--minerthreads value   Number of CPU threads to use for mining (default: 8)

--etherbase value      Public address for block mining rewards (default = first account created) (default: "0")

--targetgaslimit value   Target gas limit sets the artificial target gas floor for the blocks to mine (default: 4712388)

--gasprice "18000000000" Minimal gas price to accept for mining a transactions

--extradata value      Block extra data set by the miner (default = client version)

#### GAS PRICE ORACLE OPTIONS:

--gpoblocks value      Number of recent blocks to check for gas prices (default: 20)

--gpopercentile value   Suggested gas price is the given percentile of a set of recent transaction gas prices (default: 60)

#### VIRTUAL MACHINE OPTIONS:

--vmdebug      Record information useful for VM and contract debugging

#### LOGGING AND DEBUGGING OPTIONS:

--metrics            Enable metrics collection and reporting

--fakepow            Disables proof-of-work verification

--nocompaction       Disables db compaction after import

--verbosity value    Logging verbosity: 0=silent, 1=error, 2=warn, 3=info, 4=debug, 5=detail (default: 3)

--vmodule value      Per-module verbosity: comma-separated list of <pattern>=<level> (e.g. eth/=5,p2p=4)

--backtrace value    Request a stack trace at a specific logging

statement (e.g. "block.go:271")

<code>--debug</code>	Prepends log messages with call-site location (file and line number)
<code>--pprof</code>	Enable the pprof HTTP server
<code>--pprofaddr value</code>	pprof HTTP server listening interface (default: "127.0.0.1")
<code>--pprofport value</code>	pprof HTTP server listening port (default: 6060)
<code>--memprofile rate value</code>	Turn on memory profiling with the given rate (default: 524288)
<code>--blockprofile rate value</code>	Turn on block profiling with the given rate (default: 0)
<code>--cpuprofile value</code>	Write CPU profile to the given file
<code>--trace value</code>	Write execution trace to the given file

#### WHISPER (EXPERIMENTAL) OPTIONS:

<code>--shh</code>	Enable Whisper
<code>--shh.maxmessagesize value</code>	Max message size accepted (default: 1048576)
<code>--shh.pow value</code>	Minimum POW accepted (default: 0.2)

#### DEPRECATED OPTIONS:

<code>--fast</code>	Enable fast syncing through state downloads (replaced by <code>--syncmode</code> )
<code>--light</code>	Enable light client mode (replaced by <code>--syncmode</code> )

#### MISC OPTIONS:

`--help, -h` show help

#### COPYRIGHT:

Copyright 2013-2018 The go-ethereum Authors

```
golang <3
```

► Pages 68

[Main Ethereum Wiki](#)

## Install and build

[Installing Ethereum](#)

[Developers' Guide](#)

## Usage

[Managing Accounts](#)

[Mining](#)

[Contract Tutorial](#)

## Interface Documentation

[Command Line Options](#)

[JavaScript Console](#)

[Management API](#)

[JSON-RPC server](#)

## Issues

[FAQ](#)

[Reporting issues](#)

[Community and support](#)

[Issue handling workflow](#) (draft proposal)

## Developers

[Mobile Clients](#)

[Native DApps](#)

[Active go-ethereum projects](#)

## Clone this wiki locally

<https://github.com/ethereum/go-ethereum/wiki.git>

