

## NAME:

geth - the go-ethereum command line interface

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## USAGE:

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

## VERSION:

1.6.6-stable-10a45cb5

## COMMANDS:

init      Bootstrap and initialize a new genesis block  
import    Import a blockchain file  
export    Export blockchain into file  
removedb   Remove blockchain and state databases  
dump      Dump a specific block from storage  
monitor   Monitor and visualize node metrics  
account   Manage accounts  
wallet    Manage Ethereum presale wallets  
console   Start an interactive JavaScript environment  
attach    Start an interactive JavaScript environment (connect to node)  
js        Execute the specified JavaScript files  
makedag   Generate ethash DAG (for testing)  
version   Print version numbers  
bug       opens a window to report a bug on the geth repo  
license   Display license information  
dumpconfig Show configuration values  
help, h   Shows a list of commands or help for one command

## ETHEREUM OPTIONS:

--config value                      TOML configuration file  
--datadir "/Users/benwang/Library/Ethereum" Data directory for the databases and keystore  
--keystore                          Directory for the keystore (default = inside the datadir)  
--nousb                              Disables monitoring for and manage 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  
--dev                                Developer mode: pre-configured private network with several  
debugging flags  
--syncmode "fast"                   Blockchain sync mode ("fast", "full", or "light")  
--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: 20)  
--lightkdf                          Reduce key-derivation RAM & CPU usage at some expense of  
KDF strength

## 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 "/Users/benwang/.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.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.accounts slots value      Minimum number of executable transaction slots guaranteed per account (default: 16)  
 --txpool.global slots 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 (min 16MB / database forced) (default: 128)  
 --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)  
 --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: 4)  
 --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: 10)  
 --gpopercentile value Suggested gas price is the given percentile of a set of recent transaction gas prices (default: 50)

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

#### DEPRECATED OPTIONS:

--fast Enable fast syncing through state downloads  
 --light Enable light client mode

EXPERIMENTAL OPTIONS:

--shh      Enable Whisper  
--help, -h show help

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