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Official Go implementation of the Bytom protocol <https://bytom.io/>

🔖 1,994 commits

🌿 19 branches

📦 25 releases

👤 Fetching contributors

📄 AGPL-3.0

Branch: master ▾

New pull request

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This branch is even with Bytom:master.

🔗 Pull request 📄 Compare

🚦 Paladz Merge pull request [Bytom#1802](#) from Bytom/prod ... Latest commit 19d90c0 Oct 24, 2019

📁 accesstoken	replace goleveldb with tendermint db (Bytom#1660)	Mar 29, 2019
📁 account	feat(api): add estimate-chain-tx-gas (Bytom#1791)	Oct 18, 2019
📁 api	feat(api): add estimate-chain-tx-gas (Bytom#1791)	Oct 18, 2019
📁 asset	Fix list-assets vm_version field lost (Bytom#1705)	Apr 17, 2019
📁 blockchain	modify chain tx fee (Bytom#1793)	Oct 21, 2019
📁 cmd	fix desc	Jul 31, 2019
📁 common	delete the unused code (Bytom#1567)	Feb 18, 2019
📁 config	add bytom logs into files	Jul 31, 2019
📁 consensus	Change version 1.0.10 (Bytom#1796)	Oct 23, 2019
📁 crypto	Support mDNS LAN peer discover (Bytom#1687)	Apr 15, 2019
📁 dashboard	dashboard: update dashboard with chain transactions option.	Oct 23, 2019
📁 database	Process block integra test (Bytom#1740)	Apr 25, 2019
📁 docs/release-notes	update release note	Oct 24, 2019
📁 encoding	Clean vendor (Bytom#1309)	Sep 2, 2018
📁 env	Added env dir.	Aug 23, 2017
📁 equity	modify dashboard directory (Bytom#1453)	Nov 13, 2018
📁 errors	modify error response (Bytom#1039)	Jun 9, 2018
📁 event	Fix mined block broadcast err (Bytom#1726)	Apr 22, 2019
📁 log	log writer close	Aug 15, 2019
📁 math/checked	chain's log and math library.	Jul 18, 2017
📁 mining	fix the bug	Apr 26, 2019
📁 net	replace goleveldb with tendermint db (Bytom#1660)	Mar 29, 2019
📁 netsync	fix ban node failed	Aug 16, 2019
📁 node	add bytom logs into files	Jul 31, 2019
📁 p2p	Merge pull request Bytom#1799 from Bytom/fix_p2p_log_level	Oct 24, 2019
📁 protocol		
📁 test	add block integration test (Bytom#1745)	May 2, 2019


```
$ git clone https://github.com/Bytom/bytom.git $GOPATH/src/github.com/bytom
```

- Build source code

```
$ cd $GOPATH/src/github.com/bytom
$ make bytomd      # build bytomd
$ make bytomcli    # build bytomcli
```

When successfully building the project, the `bytom` and `bytomcli` binary should be present in `cmd/bytomd` and `cmd/bytomcli` directory, respectively.

🔗 Executables

The Bytom project comes with several executables found in the `cmd` directory.

Command	Description
bytomd	bytomd command can help to initialize and launch bytom domain by custom parameters. <code>bytomd --help</code> for command line options.
bytomcli	Our main Bytom CLI client. It is the entry point into the Bytom network (main-, test- or private net), capable of running as a full node archive node (retaining all historical state). It can be used by other processes as a gateway into the Bytom network via JSON RPC endpoints exposed on top of HTTP, WebSocket and/or IPC transports. <code>bytomcli --help</code> and the bytomcli Wiki page for command line options.

🔗 Running bytom

Currently, bytom is still in active development and a ton of work needs to be done, but we also provide the following content for these eager to do something with `bytom`. This section won't cover all the commands of `bytomd` and `bytomcli` at length, for more information, please the help of every command, e.g., `bytomcli help`.

🔗 Initialize

First of all, initialize the node:

```
$ cd ./cmd/bytomd
$ ./bytomd init --chain_id mainnet
```

There are three options for the flag `--chain_id`:

- `mainnet` : connect to the mainnet.
- `testnet` : connect to the testnet wisdom.
- `solonet` : standalone mode.

After that, you'll see `config.toml` generated, then launch the node.

🔗 launch

```
$ ./bytomd node
```

available flags for `bytomd node`:

Flags:	
--auth.disable	Disable rpc access authenticate
--chain_id string	Select network type
-h, --help	help for node
--log_file string	Log output file (default "log")
--log_level string	Select log level(debug, info, warn, error or fatal)

```

--mining                      Enable mining
--p2p.dial_timeout int        Set dial timeout (default 3)
--p2p.handshake_timeout int   Set handshake timeout (default 30)
--p2p.keep_dial string         Peers addresses try keeping connecting to, separated by ','
(for example "1.1.1.1:46657;2.2.2.2:46658")
--p2p.laddr string            Node listen address. (0.0.0.0:0 means any interface, any
port) (default "tcp://0.0.0.0:46656")
--p2p.lan_discoverable        Whether the node can be discovered by nodes in the LAN
(default true)
--p2p.max_num_peers int       Set max num peers (default 50)
--p2p.node_key string          Node key for p2p communication
--p2p.proxy_address string     Connect via SOCKS5 proxy (eg. 127.0.0.1:1086)
--p2p.proxy_password string    Password for proxy server
--p2p.proxy_username string    Username for proxy server
--p2p.seeds string             Comma delimited host:port seed nodes
--p2p.skip_upnp               Skip UPNP configuration
--prof_laddr string           Use http to profile bytomd programs
--simd.enable                 Enable SIMD mechan for tensority
--vault_mode                  Run in the offline enviroment
--wallet.disable              Disable wallet
--wallet.rescan               Rescan wallet
--wallet.txindex              Save global tx index
--web.closed                  Lanch web browser or not
--ws.max_num_concurrent_reqs int Max number of concurrent websocket requests that may be
processed concurrently (default 20)
--ws.max_num_websockets int    Max number of websocket connections (default 25)

Global Flags:
--home string    root directory for config and data
-r, --root string DEPRECATED. Use --home (default "/Users/zcc/Library/Application Support/Bytom")
--trace          print out full stack trace on errors

```

Given the `bytomd` node is running, the general workflow is as follows:

- create key, then you can create account and asset.
- send transaction, i.e., build, sign and submit transaction.
- query all kinds of information, let's say, available key, account, key, balances, transactions, etc.

simd feature:

You could enable the *simd* feature to speed up the *PoW* verification (e.g., during mining and block verification) by simply:

```
bytomd node --simd.enable
```

To enable this feature you will need to compile from the source code by yourself, and `make bytomd-simd`.

What is more,

- if you are using *Mac*, please make sure *llvm* is installed by `brew install llvm`.
- if you are using *Windows*, please make sure *mingw-w64* is installed and set up the *PATH* environment variable accordingly.

For more details about using `bytomcli` command please refer to [API Reference](#)

🔗 Dashboard

Access the dashboard:

```
$ open http://localhost:9888/
```

🔗 In Docker

Ensure your [Docker](#) version is 17.05 or higher.

```
$ docker build -t bytom .
```

For the usage please refer to [running-in-docker-wiki](#).

Contributing

Thank you for considering helping out with the source code! Any contributions are highly appreciated, and we are grateful for even the smallest of fixes!

If you run into an issue, feel free to [bytom issues](#) in this repository. We are glad to help!

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