



ethereum

INTERACTING WITH  
FINCONTRACTS ON  
ETHEREUM

Maciej Żurad

# FINCONTRACTS-LIB

- a `node.js` package
- implements logic for dealing with Fincontracts
- single-step install

```
npm install --save fincontracts-lib
```

- documentation @ <https://doc.esdoc.org/github.com/asiron/fincontracts-lib/>

# CORE API

- **Fincontract** - blockchain's Fincontract in memory
- **FincNode** - blockchain's Fincontract description node in memory
- **Deployer** - deploy and/or issue Fincontracts
- **Evaluator** - current or estimated value of a Fincontract
- **Executor** - join and choose Fincontracts
- **Fetcher** - fetch Fincontracts from the blockchain
- **Parser** - parse Fincontract's string description
- **Serializer** - serialize Fincontracts into JSON
- **DotGenerator** - generate DOT graphs from Fincontracts

# FINCONTRACTS-CLI

```
git clone git@github.com:asiron/fincontracts-cli.git
```

- **blockchain** - bash script for managing private-net
- **fincli** - CLI for interacting with blockchain deployed Fincontracts

# \$ ./blockchain

## blockchain management tool

\$ ./blockchain <b>setup</b>	creates new accounts, preallocates ether, compiles & deploys smart contracts
\$ ./blockchain <b>deploy</b>	compiles, deploys smart contracts & creates JS instantiation scripts
\$ ./blockchain <b>start</b>   <b>stop</b>   <b>restart</b>	starts, stops or restarts geth node
\$ ./blockchain <b>attach</b>	attaches to currently running geth node

# \$ ./fincli

## Commands:

help [command...]	Provides help for a given command.
exit	Exits application.
connect <host>	Connects to a local Ethereum node
register	Registers the currently selected account
show-balance	Shows balance of the currently selected account
select-account <index-or-address>	Selects an Ethereum account for sending transactions
list-accounts	Lists unlocked Ethereum accounts
create-fincontract [options] <expr>	Creates a Fincontract and deploys it to the blockchain
join-fincontract [options] <id>	Joins a Fincontract given its <id> from the currently selected account
pull-fincontract [options] <id>	Pulls a Fincontract from the blockchain.
show-fincontract [options] <name>	Shows detailed information about a saved Fincontract as text or graph
list-fincontracts [options]	Lists all saved Fincontracts
delete-settings	Wipes out all user settings (autocomplete, saved fincontracts)
example <index>	Deploys one of the examples from marketplace smart contract

LIVE DEMO