## TrueChian Development Practice : IDE Breakpoint Debug

##### Experiment Environment:

* macOS 10.13.6
* go version go1.9.3 darwin/amd6
* goland 2018.2.1
* truechain-fpow branch

### Download Project Code From Github:

git clone -b fpow ow https://github.com/truechain/truechain-engineering-code.git

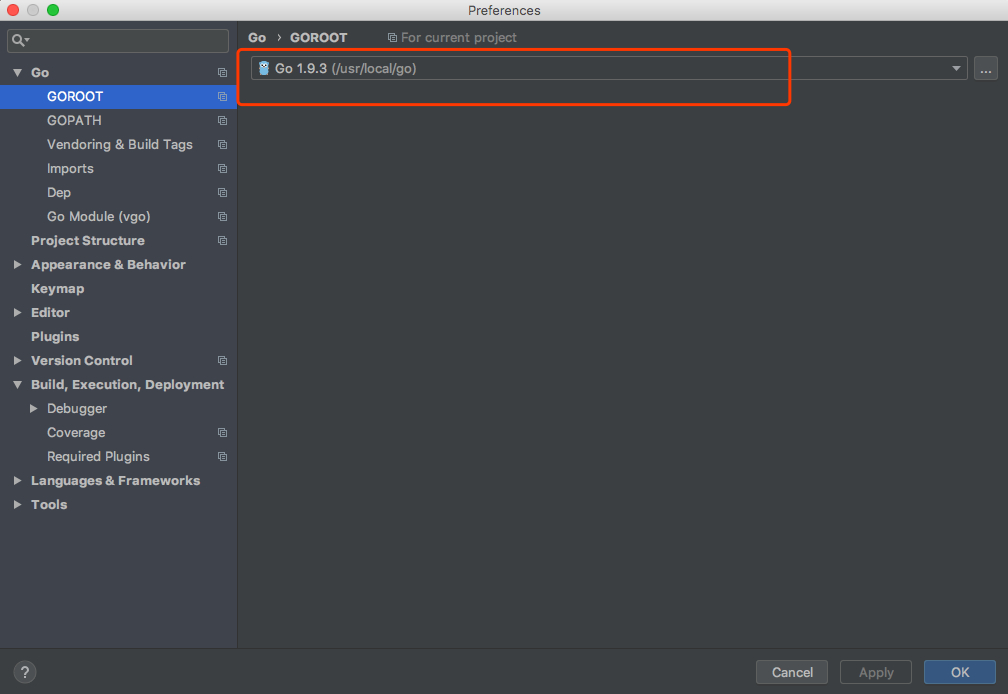
### Download GoLand Development IDE:

https://www.jetbrains.com/go/download

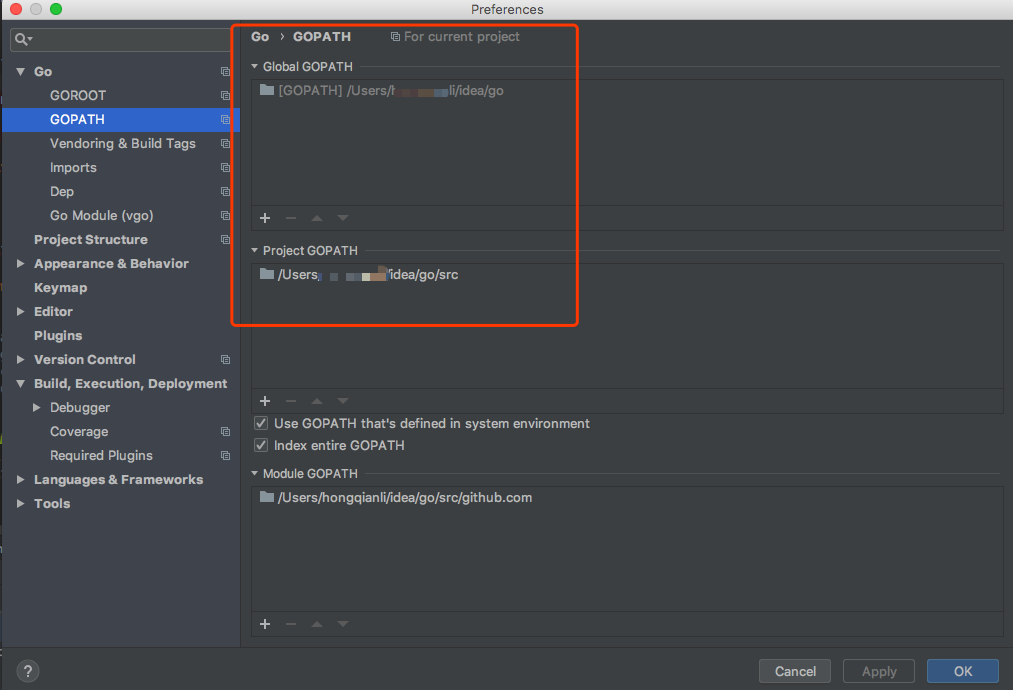
PS: Please downloading the version witch matches to your current Operation System. For the usage privilege, you can choose the 30-days probation or buying the full authorization.

### GoLand Development Environment Configuration:

Environment Variable Configuration: GOROOT



Environment Variable Configuration: GOPATH



### Import Code:

File >> Open ${ProjectPath}

### Compile Code:

$ make getrue

PS: After “make” the project, the exeacutable file of “geture” will generate at the path of “build/bin”

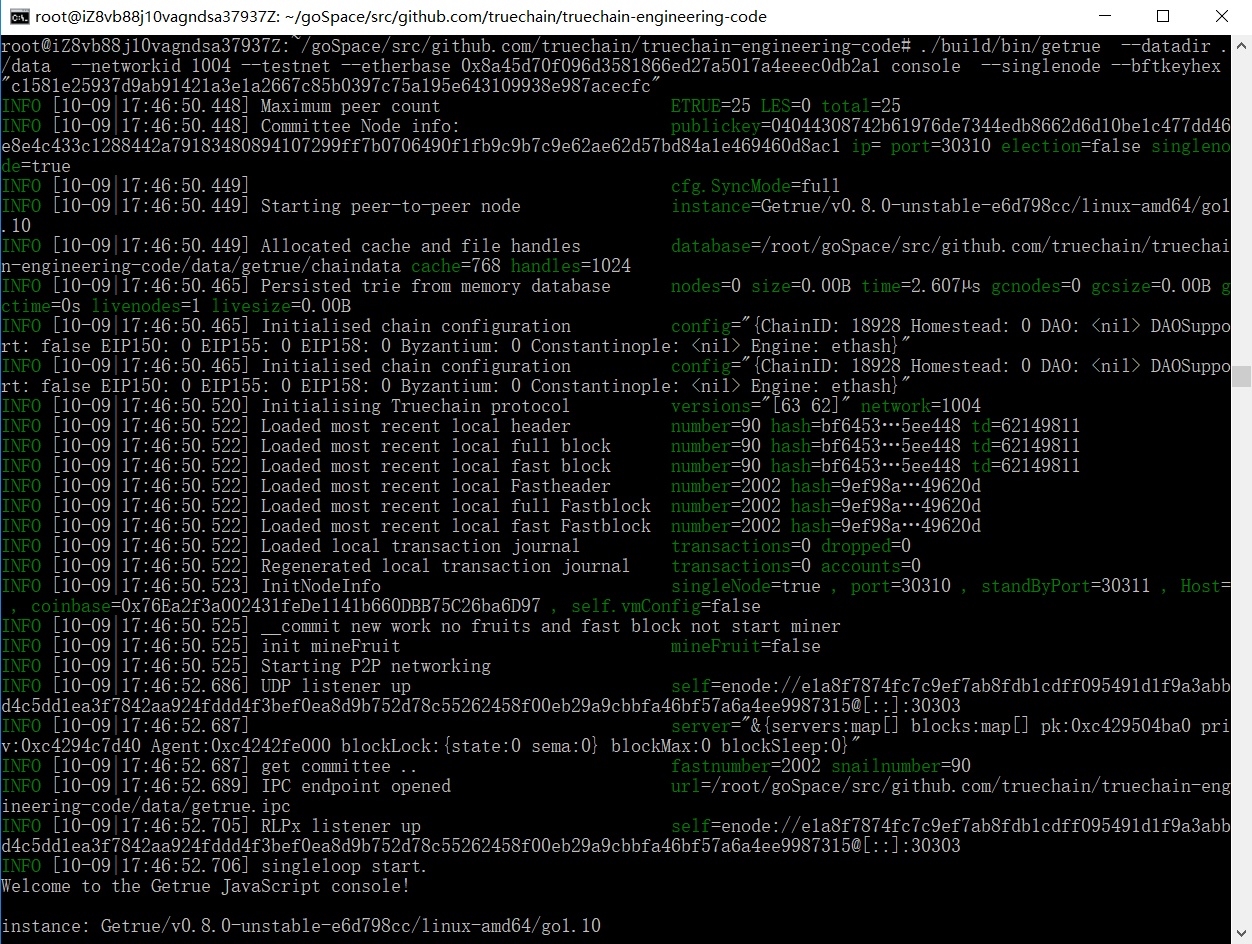
$ ./build/bin/getrue --datadir ./data --networkid 1004 --testnet --etherbase 0x8a45d70f096d3581866ed27a5017a4eeec0db2a1 console --singlenode --bftkeyhex "c1581e25937d9ab91421a3e1a2667c85b0397c75a195e643109938e987acecfc"

PS: Running the generated file “getrue” with the arguments like above will start up a Committee Node to mine. The meanings of these arguments are listed below:

--datadir ./data => this argument indicates the path of our data to save

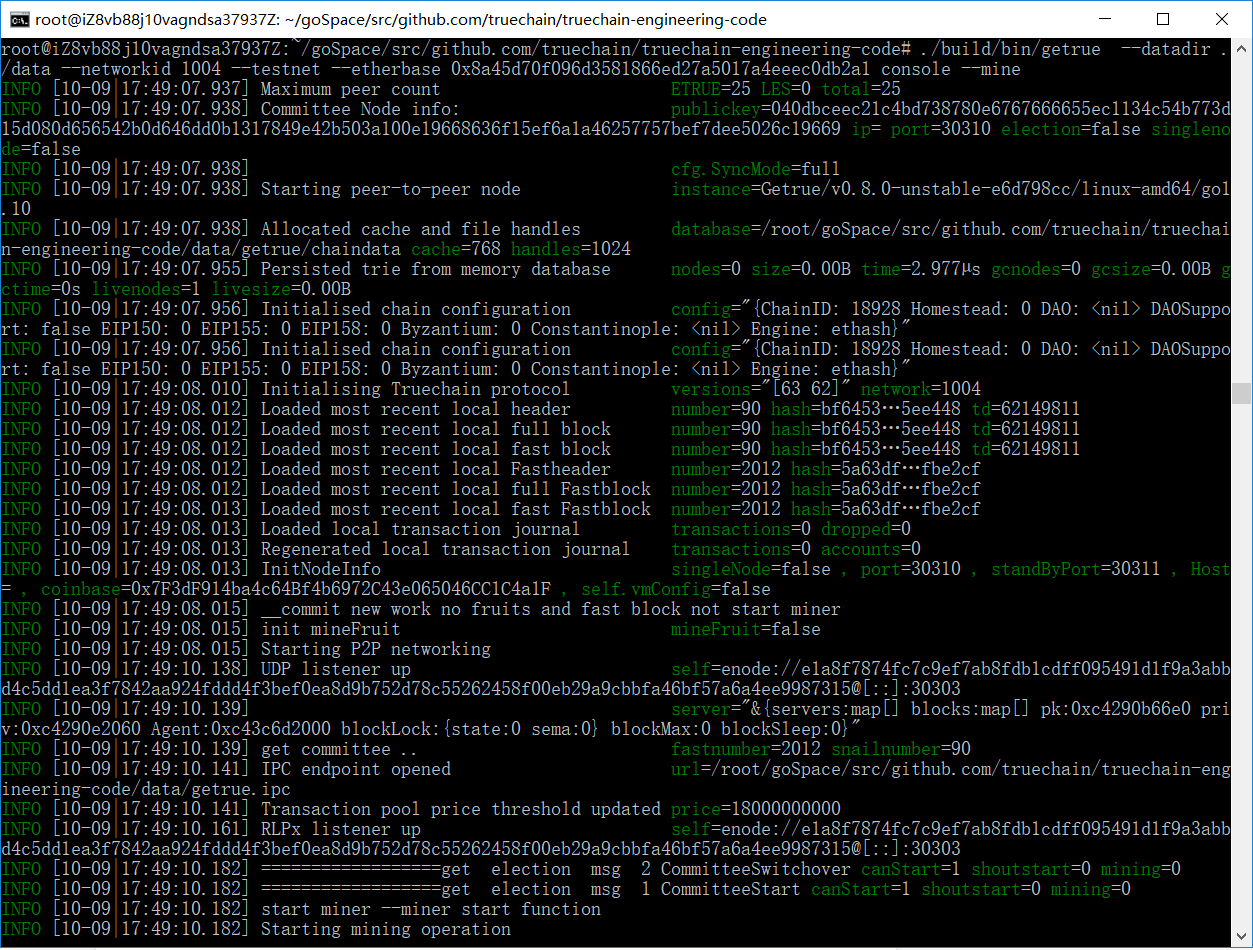
--networkid 1004 => this argument indicates network id. The machines with the same network id will be recognized to link each other

--singlenode => this argument indicates this node is a single node



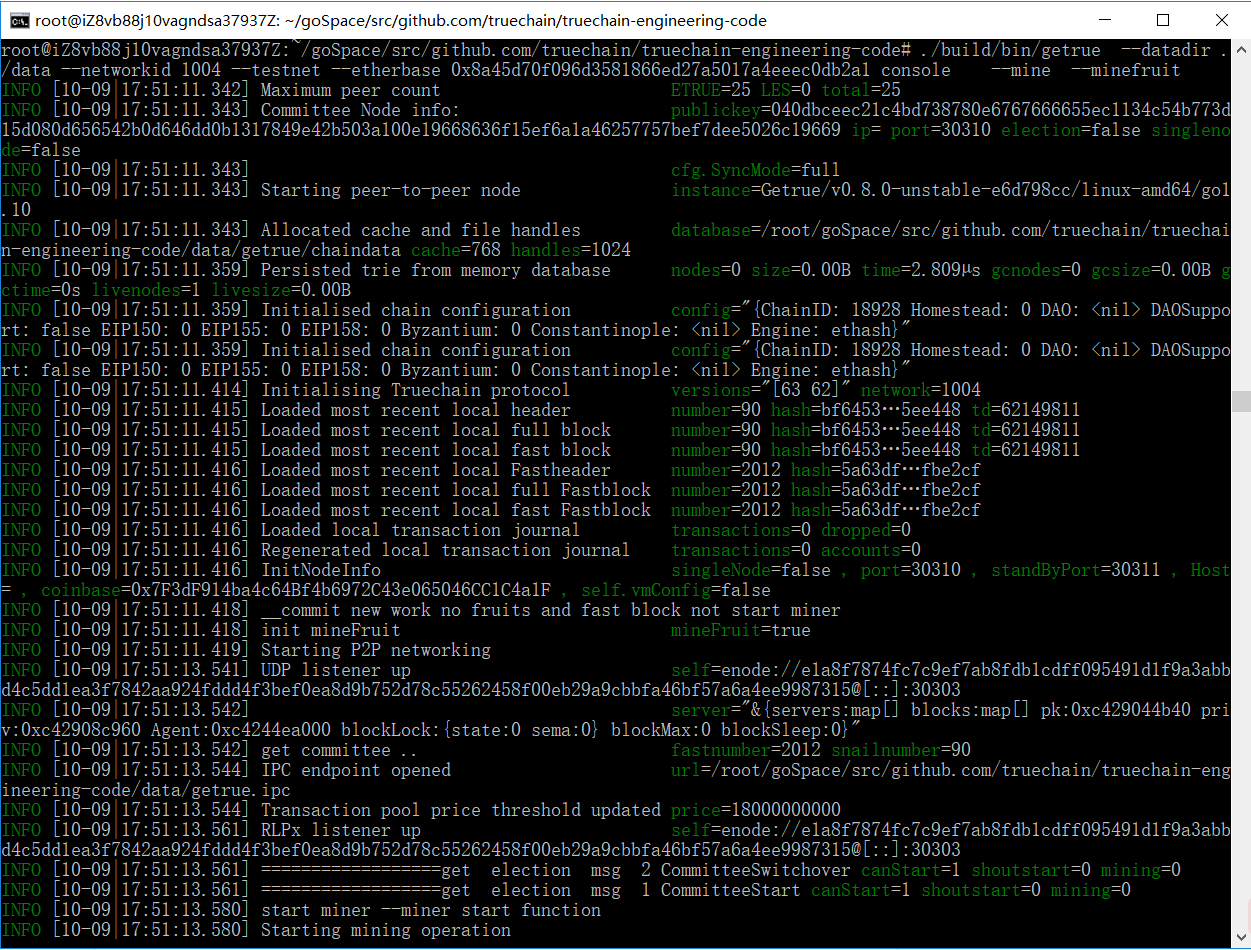
$./build/bin/getrue --datadir ./data --networkid 1004 --testnet --etherbase 0x8a45d70f096d3581866ed27a5017a4eeec0db2a1 console --mine

PS: Running the generated file “getrue” with the arguments like above will start up a SnailBlock Node to mine. The “block” and “fruit” are mined at the same.

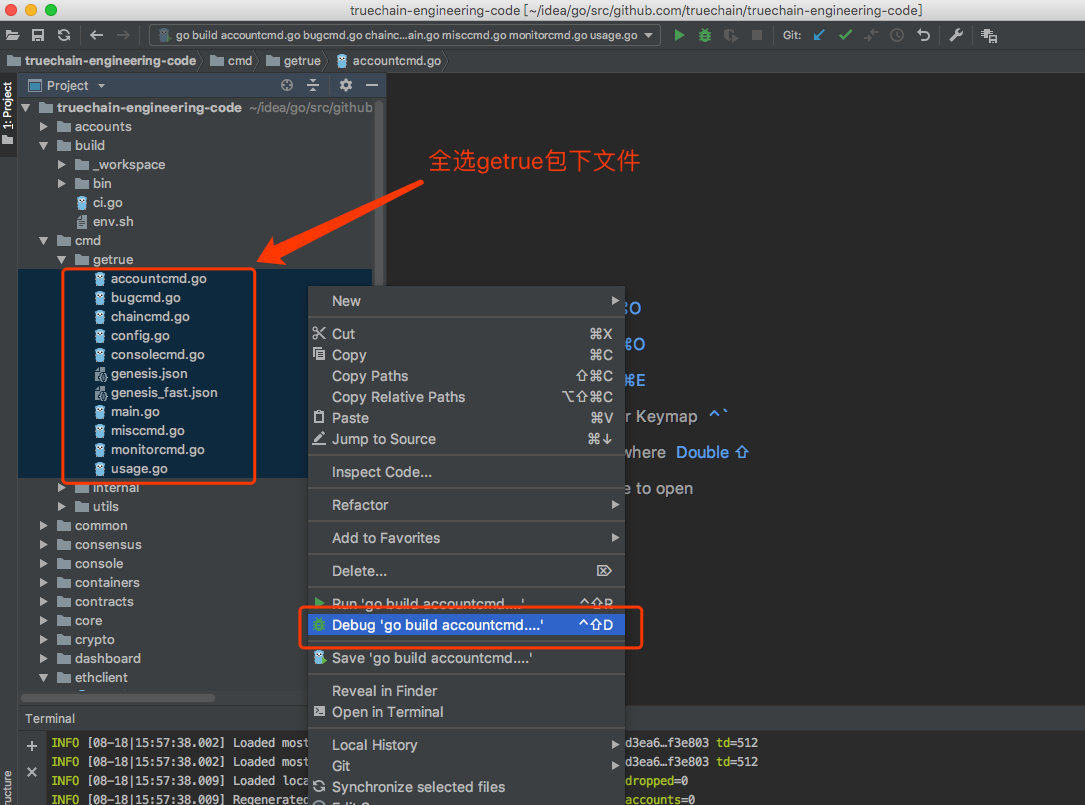


$ ./build/bin/getrue --datadir ./data --networkid 1004 --testnet --etherbase 0x8a45d70f096d3581866ed27a5017a4eeec0db2a1 console --mine --minefruit

PS: Running the generated file “getrue” with the arguments like above will start up a SnailBlock Node to mine. The argument of “--minefruit” makes us only mine “fruit”.



### Debug Mining Code



### Put breakpoint on the code which interests us to begin our Breakpoint Debug

