Run Pchain (Windows)

Go：https://golang.org/doc/install

1、Install Windows

 1.1、Download

Download link： https://studygolang.com/dl

 1.2、Install

Install MSI files or zip compressed package versions to decompress, you need to install or decompress them into the C:\ go directory, otherwise you need to configure environment variables.

1.3、configure

　　A. Increase the environmental variable GOROOT = C:\ Go\

　　B.zip version configuration: add the following directory to the system environment variable PATH, c:\Go\bin
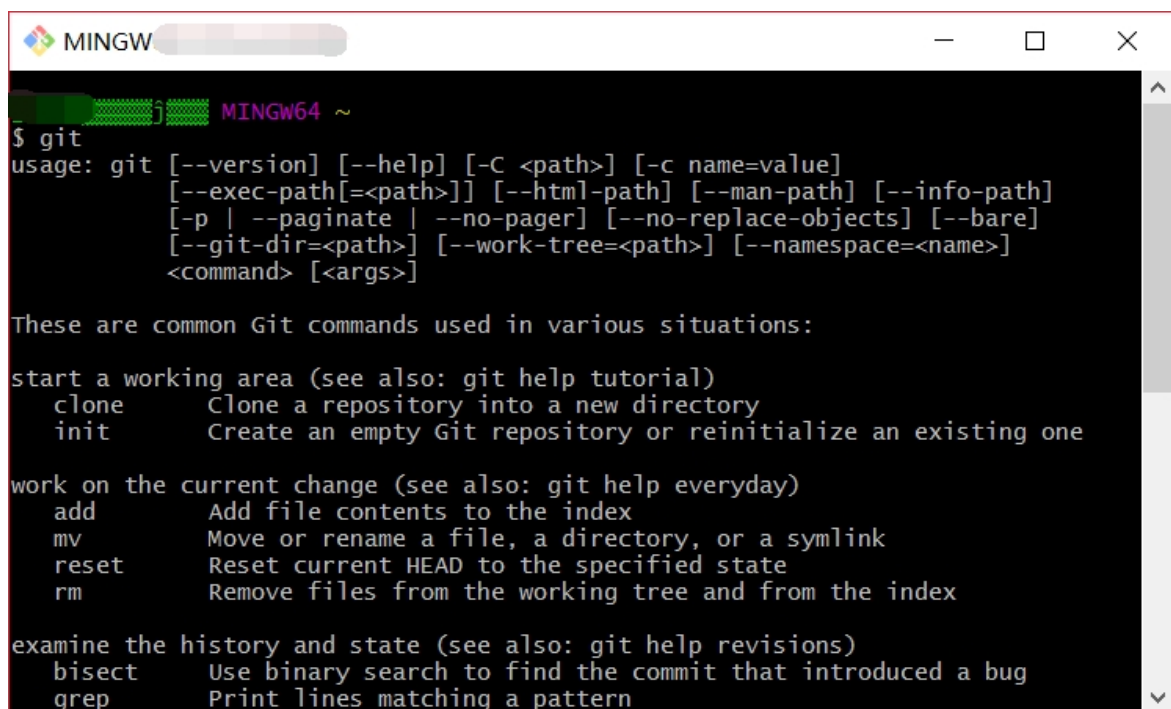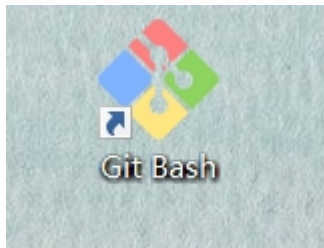
1.4、go version

```
C:\Users\    l>go version
go version go1.11 windows/amd64
```

Git download(windows)

Download path：https://git-scm.com/downloads

With Git, the desktop shortcut interface is as follows. Open it and use it.

3、Pchain download and edit

Create folders:

C:\pchain\bin\

C:\pchain\src\github.com\

Source Code

Notice: source has to be under current directory.

cd C:\pchain\src\github.com\

```
C:\>cd C:\pchain\src\github.com\

C:\pchain\src\github.com>
```

git clone https://github.com/pchain-org/pchain.git

```
C:\pchain\src\github.com>git clone https://github.com/pchain-org/pchain.git
Cloning into 'pchain'...
remote: Enumerating objects: 722, done.
remote: Counting objects: 100% (722/722), done.
remote: Compressing objects: 100% (502/502), done.
remote: Total 22934 (delta 414), reused 403 (delta 207), pack-reused 22212
Receiving objects: 100% (22934/22934), 56.34 MiB | 1.72 MiB/s, done.
Resolving deltas: 100% (13676/13676), done.
Checking out files: 100% (5263/5263), done.

C:\pchain\src\github.com>
```

Copy build.bat to directory C:\pchain：

C:\pchain\src\github.com\pchain\restore

build.bat	2019/1/16 15:22
build.sh	2019/1/16 15:22
pchain.iml	2019/1/16 15:22
pchain-plan.txt	2019/1/16 15:22
readme.txt	2019/1/16 15:22
run.bat	2019/1/16 15:22
run.sh	2019/1/16 15:22
run_debug.sh	2019/1/16 15:22

C:\pchain

bin	2019/1/16 15:16
src	2019/1/16 15:17
build.bat	2019/1/16 15:22

build.bat


```
C:\pchain>build.bat
github.com/pchain/vendor/github.com/tendermint/ed25519/edwards25519
github.com/pchain/vendor/golang.org/x/crypto/openpgp/errors
github.com/pchain/vendor/golang.org/x/sys/cpu
github.com/pchain/vendor/github.com/ethereum/go-ethereum/common/fdlimit
github.com/pchain/vendor/github.com/hashicorp/golang-lru/simplelru
github.com/pchain/vendor/golang.org/x/crypto/poly1305
github.com/pchain/vendor/golang.org/x/crypto/salsa20/salsa
github.com/pchain/vendor/github.com/ethereum/go-ethereum/common/hexutil
github.com/pchain/vendor/github.com/ethereum/go-ethereum/crypto/sha3
github.com/pchain/vendor/github.com/ethereum/go-ethereum/common/math
github.com/pchain/vendor/github.com/ethereum/go-ethereum/rlp
github.com/pchain/vendor/github.com/go-stack/stack
github.com/pchain/vendor/github.com/mattn/go-isatty
github.com/pchain/vendor/github.com/ethereum/go-ethereum/crypto/secp256k1
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/util
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/comparer
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/storage
github.com/pchain/vendor/github.com/golang/snappy
github.com/pchain/vendor/gopkg.in/karalabe/cookiejar.v2/collections/prque
github.com/pchain/vendor/github.com/mattn/go-colorable
github.com/pchain/vendor/github.com/ethereum/go-ethereum/common
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/cache
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/filter
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/errors
github.com/pchain/vendor/bls/bn256
github.com/pchain/vendor/github.com/ethereum/go-ethereum/log
github.com/pchain/vendor/golang.org/x/crypto/sha3
github.com/pchain/vendor/github.com/btcsuite/btcd/btcec
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/opt
github.com/pchain/vendor/github.com/syndtr/goleveldb/leveldb/iterator
```

After compile, you will find the binary executable file
pchain.exe under pchain/bin/

Run Pchain

Enter the current directory

C:\pchain\bin

1) Init the local account:

pchain.exe --datadir .pchain init_eth_genesis "{100000000000000000000000,100}"

```
C:\pchain\bin>pchain.exe --datadir .pchain init_eth_genesis "{100000000000000000000000,100}"
INFO [01-16|15:31:13.210] this is init_eth_genesis
INFO [01-16|15:31:21.569] createPriValidators                    account:=0xfFa08aA5D78c8DE02EC8B66b4B920104
3e943fCA pwd:=pchain
```

Check

2) Init the local pchain

pchain.exe --datadir .pchain init .pchain/pchain/eth_genesis.json

3) Run pchain

Copy run.bat to directory C:\pchain\bin：

1) Edit run.bat


```
@echo off

set PWD=%~dp0
%PWD%\pchain.exe --datadir .pchain  --networkid=10000 --port=30201 --syncmode "full" --mine  --rpc   --rpcport 6969   --rpcaddr=0.0.0.0
--rpccorsdomain=* --mine   --rpcapi "eth,web3,personal,net,admin,tdm,miner,personal,chain,txpool"  --verbosity=4 > pchain.log 2>&1
```

2) run pchain.exe

login to another console and run this command to check the log

more pchain.log

Run mining mode:

pchain.exe --datadir .pchain   --networkid=10000 --port=30201 --syncmode "full" --mine   --rpc   --rpcport   6969   --rpcaddr=0.0.0.0   --rpccorsdomain=*   --rpcapi "eth,web3,personal,net,admin,tdm,miner,personal,chain,txpool"   --verbosity=4   >

pchain.log 2>&1

Non-mining mode:

```
pchain.exe --datadir .pchain    --networkid=10000 --port=30201 --syncmode "full" --rpc    --
rpcport    6969          --rpcaddr=0.0.0.0          --rpccorsdomain=*          --rpcapi
"eth,web3,personal,net,admin,tdm,miner,personal,chain,txpool"          --verbosity=4    >
pchain.log 2>&1
```