README

// This file is the HW3 manual
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--**** What is the file structure for this program? ****--
The file structure is:

```
-hw3
        -build          contains the MAKEFILE
        -common         contains the common used library
        -config         contains the config file. The default value is on purpose for
test. Please change when need
        -doc            contains the documentation
        -peer           contains the peer client source code
```

--**** How to compiler the program? ****--
Assume you are in the hw3 directory and have install the ghthash

```
cd build
make clean;make
```

After this command, you would automatically has executable peer in the build directory and distribute to the eight test directory which names peer0 to peer7

--**** Before run the code, What does the config file contains and how to change? ****--
You may only need to concern those two config items:

```
servernum = 1           // this specify the number of peer nodes in the whole
system
testmode = 1            // this specify whether it is in the test mode
```

Please note: the config file is in the ./config directory. You need to change all the 8 config files. Each config file you may need to change two items as above shows.

--**** How to run the program ****--
After make, and change the config file in the ./config directory if need, you can enter to the build directory:
And open 8 terminals, each one please cd to the corresponding peer directory, named peer0 to peer7. And execute:

```
sudo ./peer ../../config/peer0.conf
sudo ./peer ../../config/peer1.conf
...
```

Important note 1: must start the command with sudo. (since if the file number is large, it's necessary to adjust system resource, like number of file can be opened)
Important note 2: It is must to start all the 8 nodes in 15 secondes. This is a very primitive strategy for now to coordinate those nodes.
Thank you for your patience!

--*** How to start the test mode, that's to say, the Performance evaluation? ****--
Change the config file for each peer node. Modify the 'testmode's value to 1.

--**** Other resource to consider? ****--
The output file can be viewed about the program process.