

OVERVIEW & PURPOSE

This guide is for Windows but should work with any platform, the purpose being you have easier control over your nodes and a quick setup without the need to know any linux or use remote access. It will also save you vps costs, the only drawback is that you have to have a computer running 24/7 online but if you stake then you are doing this already. You can run multiple Tor nodes or as many as you need on the one computer.

WHAT YOU WILL NEED

- 1. The latest version of the Galilel coin wallet.
- 2. The Tor Browser for your system from here <https://www.torproject.org>
- 3. A computer suitable for running 24/7 online.

STEP 1 - SETUP YOUR MAIN WALLET (CONTROLLER WALLET)

- 1. If you already have a wallet installed already then go to 2. If not then install the Galilel coin wallet as normal and fully sync.
- 2. Create address for how many masternodes you will need and label them mn1, mn2, mn3, mn4 ect.. Copy the address and paste them into a text document like this >

```
mn1      ..y64y63ud99cyc007ch776c8c70
mn2      ..xkmj4jm4mmd98fjd7fi8fdj kf8
mn3      ..c78c88dhndmyfkkdbhd7hjd25
mn4      ..omxin374674b74b74b7c9008v7
```

- 3. Go to the debug window and generate the private keys for your masternodes. Type `masternode genkey` to generate a private key for every masternode, then copy the private keys and paste them in the text document like this >

```
mn1 genkey      ..979hity6u67h8GHRDSJKXCNN5BDBbKHbj4a3NN4VM8nWU
mn2 genkey      ..5864878HIUTGJ7h8GHRDSJKXCNN5BDBbKHbj4a3NN4VM8
mn3 genkey      ..UHFTDFHL880344JHRDSJKXCNN5BDBbKHbj4a3NN4VM8nW
mn4 genkey      ..544YG7R55K67h76YTIJHHIKHbj4a3NN4VM8nWUHHGUF5H
```

- 4. Transfer the correct amount of coins to your wallet from the exchange that you will need for each masternode, I.e if a coins masternode collateral is 15,000 then you need 15,000 coins for mn1 but make sure you have enough to covered to transfer fee, so send 15,010. If you already have the correct amount of coins in your wallet then go to step 5.
- 5. Now send the exact collateral to each masternode address one at a time, start with mn1, wait for the coins to confirm then type `masternode outputs` each masternode address you send coins to will create a transaction id like this "a97c835aae17ebde01155c48w8b73e5bd763fee5bb4ff1650c4479578f8e9ed6" : "1" you can also right click the transaction in the

transactions tab of the wallet or in send `coin control` copy and save them in the text document like this >

```
mn1 outputs      "7tu07hh8h68j99h9yhldg6gffn5bd763fee5bbc9f1650c4479558f8e9ed6" : "1"
mn2 outputs      "hs8669cah9c7k0s7c6s789jc97s0c9f1650c4479558fs89a07sf6shh8s7f" : "0"
mn3 outputs      "4whhgr77hwg7hllahgflbn8c6c59c7c97c9dbbc9f1650cduy9jkskje9fd6" : "0"
mn4 outputs      "97e9w67kf97690w6dh869h9yhldg6gffn5bd7e5bbsdc9gf16e446dds5gg0" : "1"
```

- 6. Now that we have all the info we need saved in the info text document, we now need to backup the wallet and save this to a safe place. You can do this one of two ways, if the wallet client has a backup in the menu then use this, if not then turn off the wallet, go to the coins blockchain folder (in windows its C:\Users****\AppData\Roaming\Galilel) there you will find wallet.dat copy that to a safe place. Close the wallet.

STEP 2 - INSTALL TOR BROWSER & EDITING THE TORRC FILE

- 1. Download the Tor Browser installation file from <https://www.torproject.org> and install.
- 2. When the Tor browser has finished the install we need to edit a file called torrc, this file can be found in the folder >
- 3. Tor Browser\Browser\TorBrowser\Data\Tor
- 4. Open the torrc file in a text editor.
- 5. Once open in the editor you will need to add the following lines of text, (If there is already text in the file, just start underneath it). Add a line for each masternodes like this (make sure the <LOCATION> is correct and where you installed the Tor Browser, example >

```
HiddenServiceDir C:\Program Files (x86)\Tor Browser\nodeGALI1
HiddenServicePort 36001 127.0.0.1:9901
```

- 6. Add a line for each masternode. The only things you will have to change is the last number after 127.0.0.1:900* You can add as many as you need like this >

```
HiddenServiceDir <LOCATION>\Tor Browser\GALInode1
HiddenServicePort 36001 127.0.0.1:9901
```

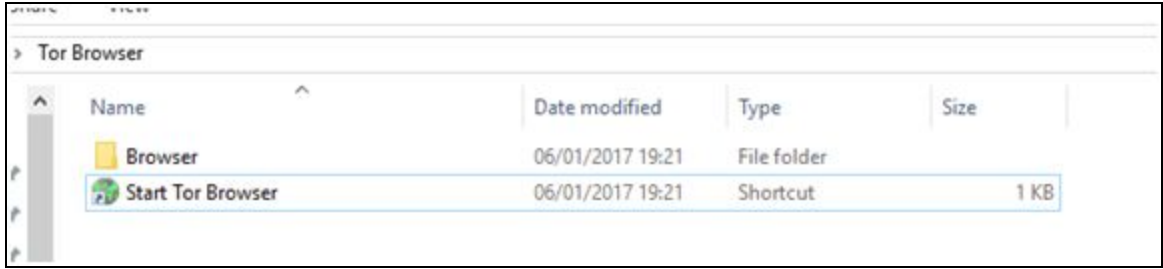
```
HiddenServiceDir <LOCATION>\Tor Browser\GALInode2
HiddenServicePort 36001 127.0.0.1:9902
```

```
HiddenServiceDir <LOCATION>\Tor Browser\GALInode3
HiddenServicePort 36001 127.0.0.1:9903
```

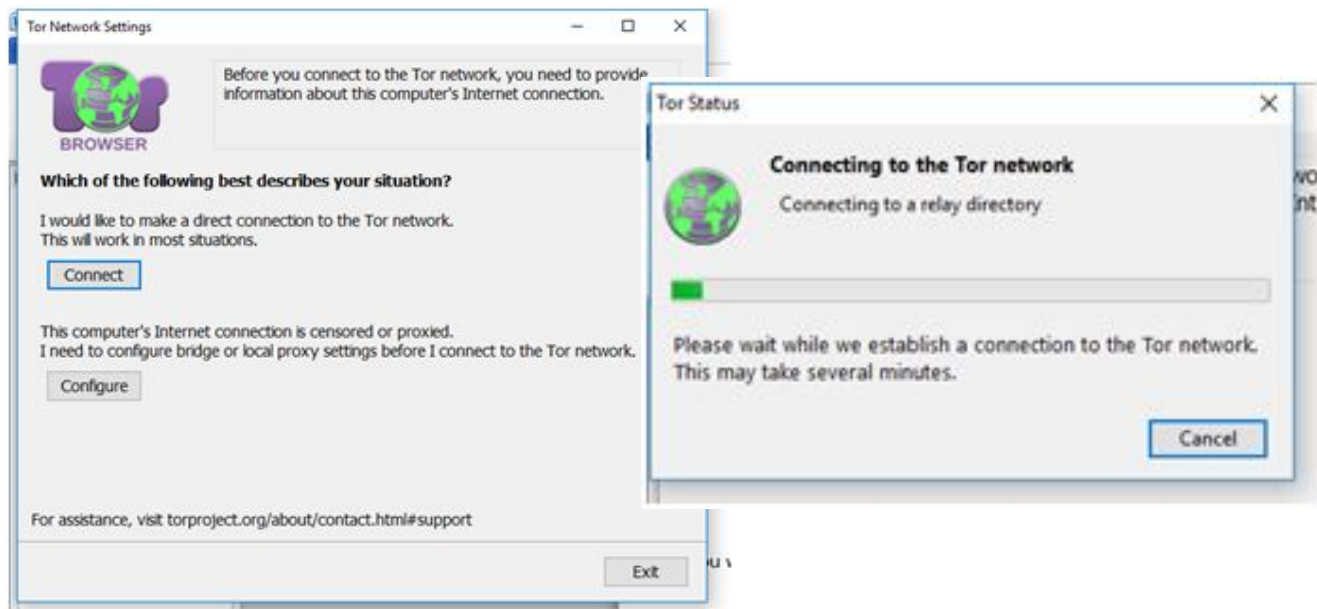
- 7. Make sure your masternode port is **36001** and the p2p forward local ports are correct for each node you add **127.0.0.1:990*** ect.
- 8. Save and close the torrc, you might want to make a shortcut to this file on your desktop for quick access later.

STEP 3 - CREATING .ONION ADDRESSES

- 1. Start tor browser.

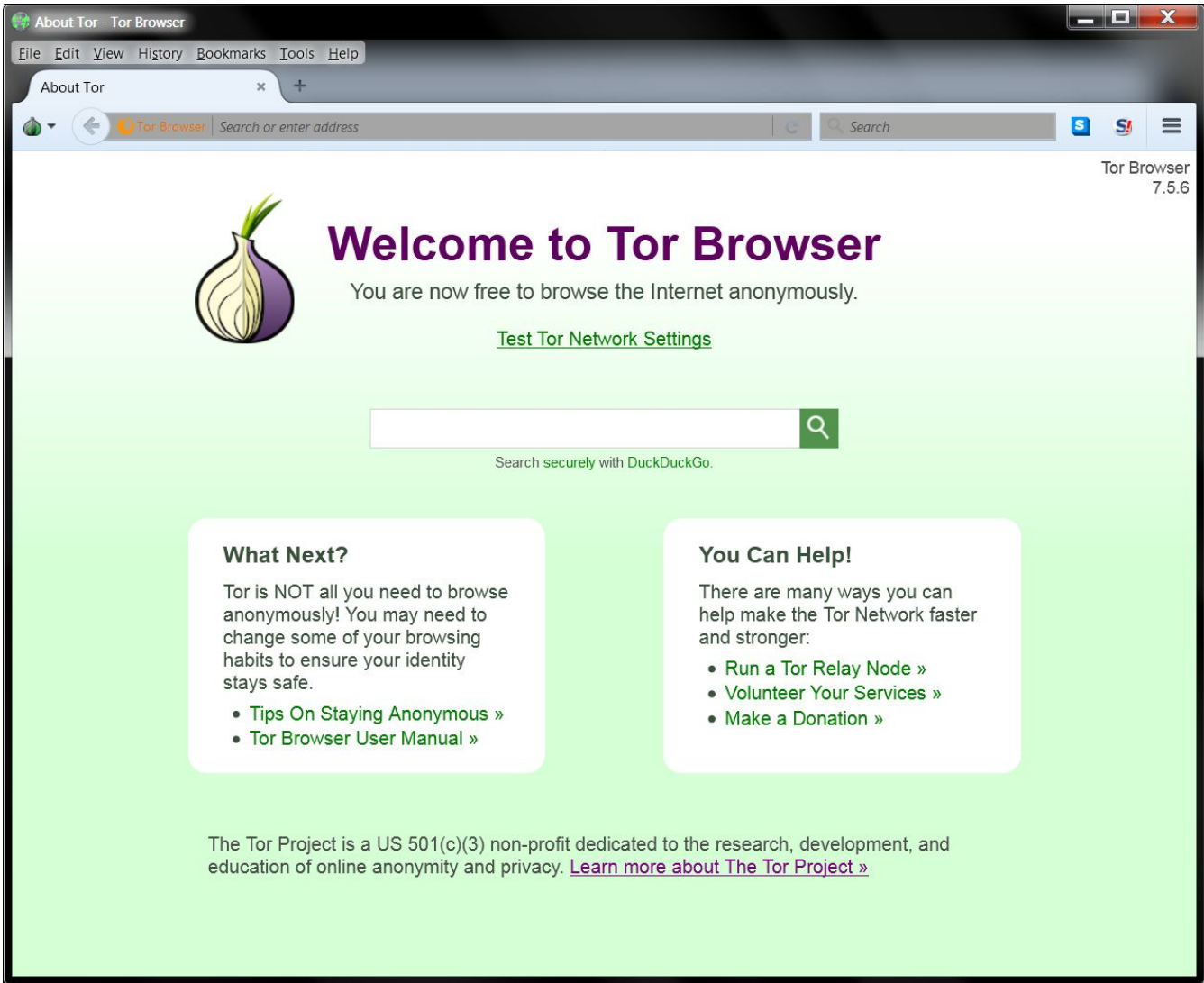


- 2. If you are not connected behind a proxy simply click connect or if you are add in your details.



- 3. Connecting this box will popup.

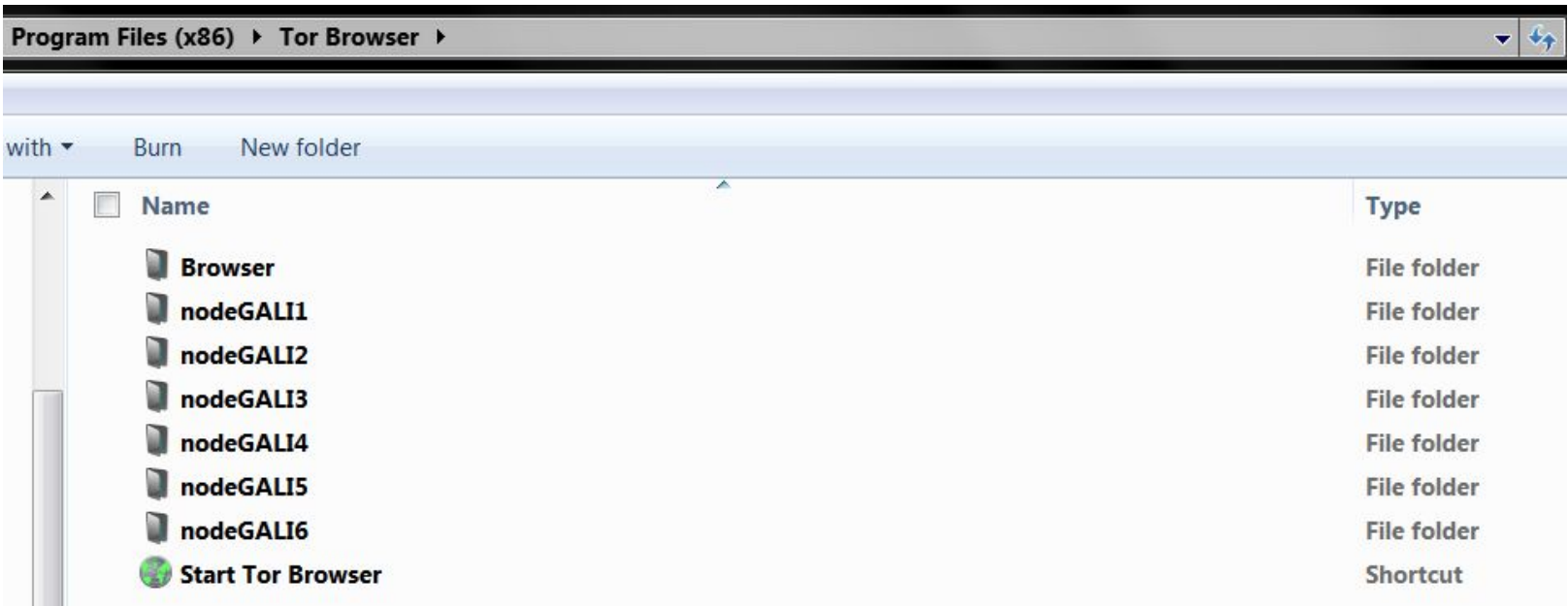
4. Once connected you will be faced with a screen like this below, you can click ‘Test Tor Network Settings’ to make sure it is working.



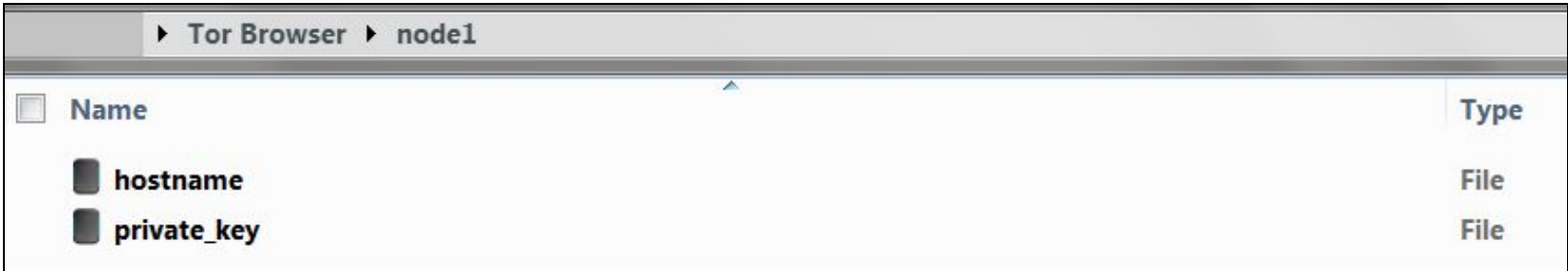
5. Now you have run the Tor Browser it has automatically created your onion IP addresses in the folders you used in the torrc config file.
6. Close Tor Browser, then add # to all the command lines in the torrc file to deactivate and to keep a record, like this, then save :
- ```
HiddenServiceDir C:\Program Files (x86)\Tor Browser\nodeGALI1
HiddenServicePort 36001 127.0.0.1:9901
```

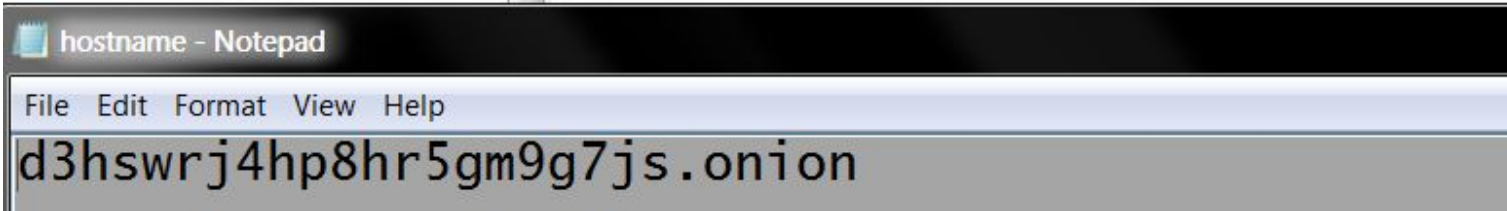
STEP 4 - GATHER THE INFORMATION

1. Go to the Tor Browser folder and you will see the node folders you specified in the torrc file. Example >



2. In each of these node folders you will find a file called hostname Open it with a text editor again and it will show you the .onion address/IP >





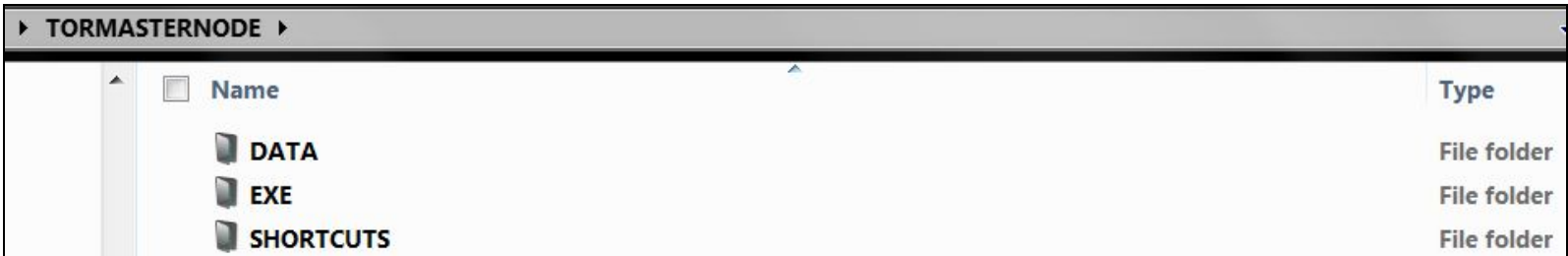
3. Copy each of the .onion addresses from node1, node2, ect.. to the info text document you saved earlier like this >

```
mn1 d3hswrj4hp8hr5gm9g7js.onion
mn2 kheg7eh7d57f5sv7x4z3x.onion
mn3 kjg7tyc5hf6hr54s7g6f5.onion
mn4 g67h73nhgsk3gtb3dvtru.onion
```

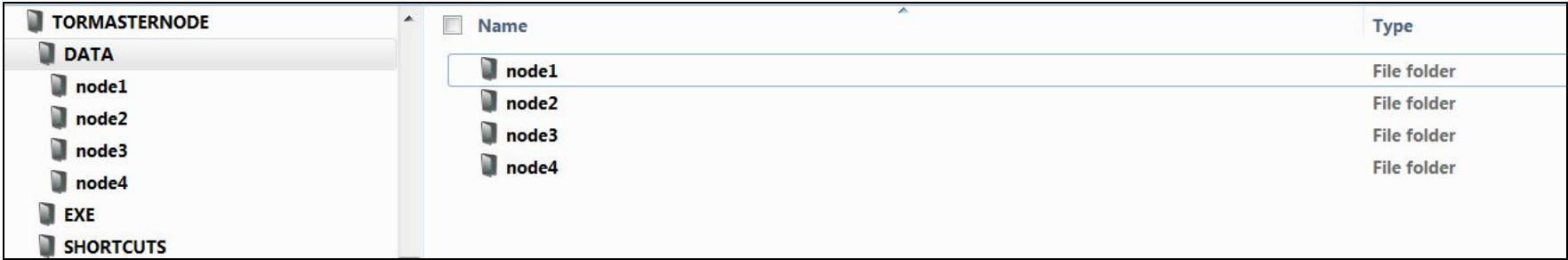
4. Save info text document. You should now have all the details needed to setup the masternodes.

STEP 5 - SETUP THE WALLET FOLDERS

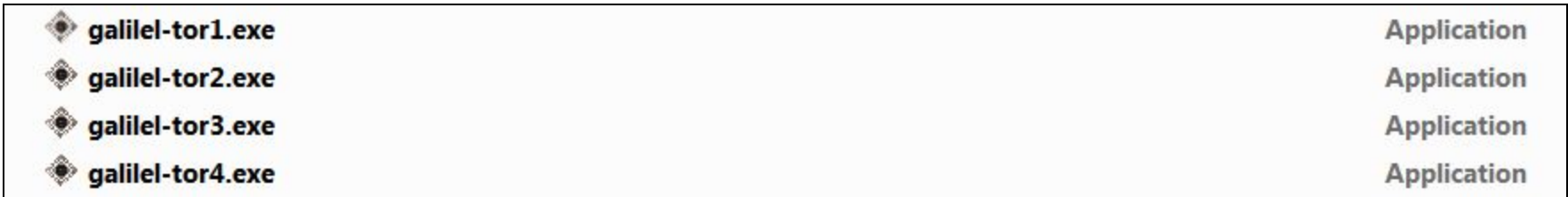
1. Now we need to setup the masternode wallet folders for node1, node2, node3...ect. Create a folder on a drive called TORMASTERNODE, example ` C:\TORMASTERNODE ` then create 3 more folders inside TORMASTERNODE labeled DATA , EXE , SHORTCUT >



2. Next create the folders node1, node2, node3 ect.. In the DATA folder or drag and copy the nodeGALI\* folders from Tor Browser folder.



3. Next copy the galilel-qt.exe file to the ` \TORMASTERNODE\EXE ` folder . You now need to to make copies of the galilel-qt.exe and name them galilel-tor1.exe, galilel-tor2.exe, galilel-tor3.exe, ect... example >



4. Now create a shortcut to each galilel-tor\*.exe in the SHORTCUTS folder like this >



STEP 6 - SHORTCUTS & CONFIGS

1. Next we have to edit the shortcuts so the wallets find the blockchain in the DATA/nodeGALI\* folders. Right click the first shortcut, click properties and add this line to the end of the target after 1 space> -datadir=C:\TORMASTERNODE\DATA\nodeGALI1
2. Example : C:\TORMASTERNODE\EXE\galilel-tor1.exe -datadir=C:\TORMASTERNODE\DATA\nodeGALI1

|                  |                                            |
|------------------|--------------------------------------------|
| Target type:     | Application                                |
| Target location: | EXE                                        |
| Target:          | 1.exe -datadir=C:\TORMASTERNODE\DATA\node1 |
| Start in:        | C:\TORMASTERNODE\EXE                       |

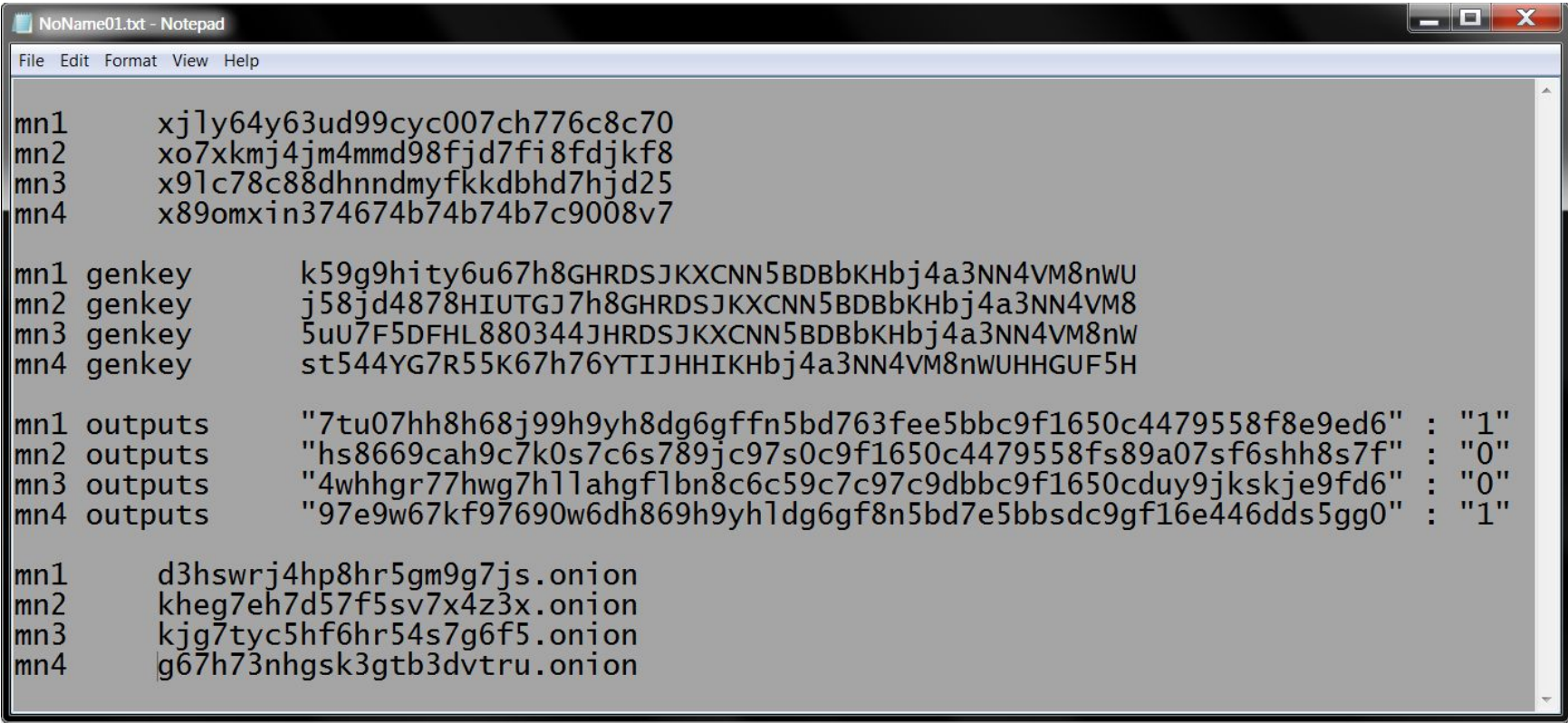
Make sure your location (drive letter) of the TORMASTERNODE is correct, above the example is located on C Drive.

3. Now edit the next shortcuts but change the node number so the other wallets can find their own blockchain folder like this >

-datadir=C:\TORMASTERNODE\DATA\nodeGALI2  
-datadir=C:\TORMASTERNODE\DATA\nodeGALI3  
-datadir=C:\TORMASTERNODE\DATA\nodeGALI4 ...ect

Once all your shortcuts are edited copy them to your desktop or create a shortcut to the shortcut folder.

4. We now need to open the info document saved earlier, it should look something like this >



5. First edit the control wallet galilel.conf & masternode.conf, go to C:\Users\\*\*\*\AppData\Roaming\Galilel folder and open both files in a text editor.
6. In the galilel.conf add the following without < > brackets

```
listen=1
server=1
daemon=1
staking=1
rpcuser=<user>
rpcpassword=<password>
rpcport=36002
port=9901
rpcallowip=127.0.0.1
onion=127.0.0.1:9901
maxconnections=256
masternode=1
externalip=<TOR NODE 1.onion>
masternodeaddr=<TOR NODE 1.onion>:36001
masternodeprivkey=<mn1 PRIVATEKEY>
masternodeaddr=<TOR NODE 2.onion>:36001
masternodeprivkey=<mn2 PKEY>
masternodeaddr=<TOR NODE 3.onion>:36001
masternodeprivkey=<mn3 PKEY>
masternodeaddr=<TOR NODE 4.onion>:36001
masternodeprivkey=<mn4 PKEY>
addnode=<Official seed node>
addnode=<Official seed node>
```









