

## Bitcoin Green (BITG) Masternode Setup Guide:

A Bitcoin Green masternode requires 2500 BITG of collateral to operate. This guide will show you how to get started with mining Bitcoin Green through masternode proof-of-stake. Start out by downloading the BITG Wallet from \_\_\_ and running bitcoingreen-qt.

*NOTE: You can run your hot wallet on a different computer than your cold wallets. This can increase security by keeping your hot wallet (with coins) on your local computer. To do this, complete steps 1-10 on your local machine's wallet (editing masternode.conf), and then do the rest on your VPS wallet (editing bitcoingreen.conf).*

1. Click the Receive tab in your wallet. Create a new address and call it MN1 in the Label field. Type 2500 in the Amount field. Click request payment to get an address.

Bitcoin Green Core - Wallet

File Settings Tools Help

Overview Send Receive Transactions Masternodes

**Bitcoin Green**

Use this form to request payments. All fields are optional.

Label: MN1

Amount: 2500.00000000 BITG

Message:

Reuse an existing receiving address (not recommended)

Request payment Clear

### Requested payments history

Date	Label	Message	Amount (BITG)
1/20/2018 02:46	(no label)	(no message)	(no amount)

Show Remove

Synchronization pending... BITG

2. This will be the address for your masternode collateral. Copy the Address field.

The screenshot shows the Bitcoin Green Core - Wallet application. The main window has a green header with navigation tabs: Overview, Send, Receive, Transactions, and Masternodes. A dialog box titled "Request payment to MN1" is open, displaying a large QR code. Below the QR code, the "Payment information" section includes:  
URI: bitcoingreen:GKaXxSvX8hdJAqPqx7TJrSr3D6kPohKsKe2  
amount=2500.00000000&label=MN1  
Address: GKaXxSvX8hdJAqPqx7TJrSr3D6kPohKsKe2  
Amount: 2500.00000000 BITG  
Label: MN1  
A context menu is open over the address field with options: Copy (Ctrl+C) and Select All (Ctrl+A). At the bottom of the dialog are buttons for "Copy URI", "Copy Address", "Save Image...", and "Close".

In the background, the "Requested payments history" table is visible:

Date	Label
1/20/2018 03:11	MN1
1/20/2018 02:46	(no label)

At the bottom of the wallet interface, there is a status bar with "Synchronization pending..." on the left and "BITG" with system icons on the right.


- Next, send exactly 2500 BITG to this address from the Send tab. Click send to send the transaction and click Yes to accept the fee.

Bitcoin Green Core - Wallet

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Overview Send Receive Transactions Masternodes

## SEND



Pay To: GKgXxSvX8hdJAqPgx7TJrSr3D6KPohKsKe

Label: MN1

Amount: 2500.00000000 BITG

Transaction Fee: 0.00010000 BITG/kB [Choose...](#)

[Send](#) [Clear All](#) [+ Add Recipient](#)

SwiftTX Balance: 2500.99997740 BITG

Synchronization pending... | BITG

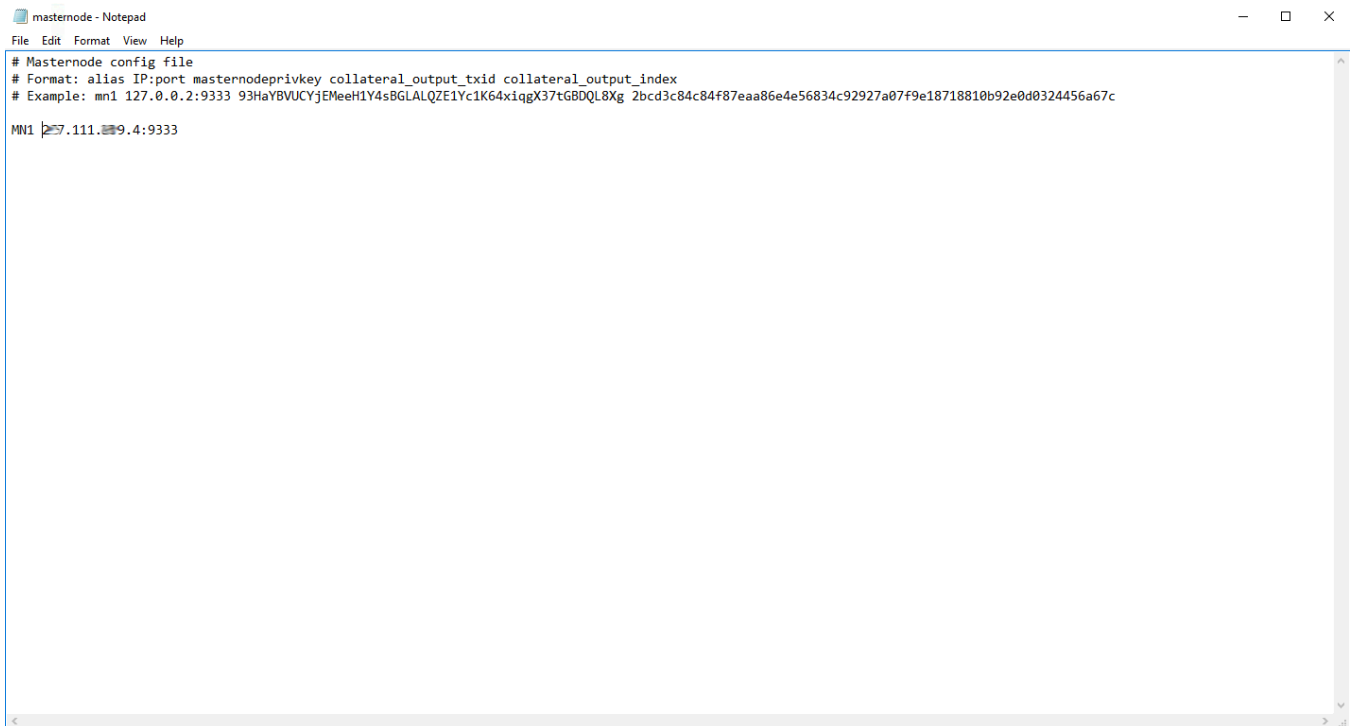
4. Time to edit the Masternode Configuration file. Click on Tools and click “Open Masternode Configuration File”. This should open in your text editor (Notepad).

The screenshot shows the Bitcoin Green Core - Wallet application window. The title bar reads "Bitcoin Green Core - Wallet". The menu bar includes "File", "Settings", "Tools", and "Help". The "Tools" menu is open, displaying the following options: Information, Debug console, Network Monitor, Peers list, Wallet Repair, Open Wallet Configuration File, Open Masternode Configuration File, Show Automatic Backups, and Blockchain explorer. The "Open Masternode Configuration File" option is highlighted. The main interface features a green header with "Transactions" and "Masternodes" tabs. Below the header is the "Bitcoin Green" logo. The "SEND" section is visible, with fields for "Pay To:", "Label:", and "Amount: 5.00000000 BITG". At the bottom, there is a "Transaction Fee: 0.00010000 BITG/kB" with a "Choose..." button. Further down, there are buttons for "Send", "Clear All", and "Add Recipient". The status bar at the bottom shows "Synchronization pending..." and "Balance: 2500.99994000 BITG".

- Now we need to add 1 line of code to the Masternode Configuration file. This is easy. It just takes a few steps. You need to fill out the following code format:

**alias IP:port masternodeprivkey collateral\_output\_txid collateral\_output\_index**

Your alias is your masternode name (MN1). Next, you need your VPS or host computer IP address. If you use ZapHosting, this can be found on your user dashboard. The port for Bitcoin Green is 9333. Your config file should now look like this:



```
masternode - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:9333 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
MN1 111.111.111.4:9333
```

6. Now go to your wallet, click Tools and click the Debug Console.

Bitcoin Green Core - Wallet

File Settings **Tools** Help

- Information
- Debug console**
- Network Monitor
- Peers list
- Wallet Repair

**BITG Backup**

- Open Wallet Configuration File
- Open Masternode Configuration File

Available

- Show Automatic Backups

Pending

- Blockchain explorer

Total **2 500.99 BITG**

**Bitcoin Green**

Transactions Masternodes

### Recent transactions

	1/20/2018 03:16 (n/a)	-0.00003740 BITG
	1/20/2018 02:59 (n/a)	-0.00002260 BITG
	1/20/2018 02:48 (GUfiEQRzXGDSL2pXu5BjssS3EuaCtPpWcf)	+2 501.00000000 BITG

Synchronization pending...

BITG

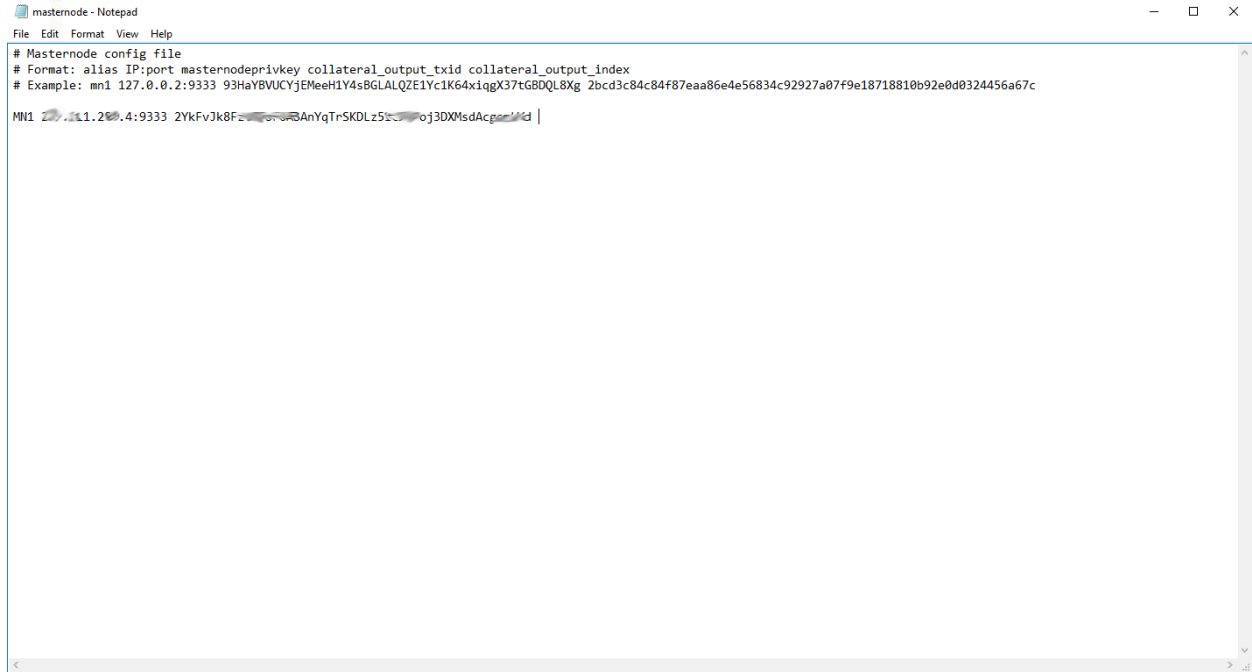
7. Type “masternode genkey” and press Enter. Copy the result.

The screenshot shows the Bitcoin Green Core - Wallet application window. The title bar reads "Bitcoin Green Core - Wallet" and the menu bar includes "File", "Settings", "Tools", and "Help". The main navigation bar is green and contains "Overview", "Send", "Receive", "Transactions", and "Masternodes". The Bitcoin Green logo is prominently displayed in the center. On the left, a sidebar shows "BITG Balances" with categories: Available, Pending, and Total. A "Tools window" is open, displaying the RPC console with the following text:

```
02:53:14 Welcome to the Bitcoin Green RPC console.  
Use up and down arrows to navigate history, and Ctrl-L to clear screen.  
Type help for an overview of available commands.  
03:40:39 masternode genkey  
03:40:39 [2Yk] [Copy] [Ctrl+C] [Select All] [Ctrl+A]
```

The output of the command is highlighted in green, and a context menu is visible over it. At the bottom left, a status bar indicates "Synchronization pending...". At the bottom right, there are system tray icons for BITG, network, and other services.

## 8. Paste into your Masternode config file.



```
masternode - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:9333 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tG8DQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
MN1 1.2.3.4:9333 2YkFvJk8F...AnYqTrSKDLz5...oj3DXMsAcg... |
```



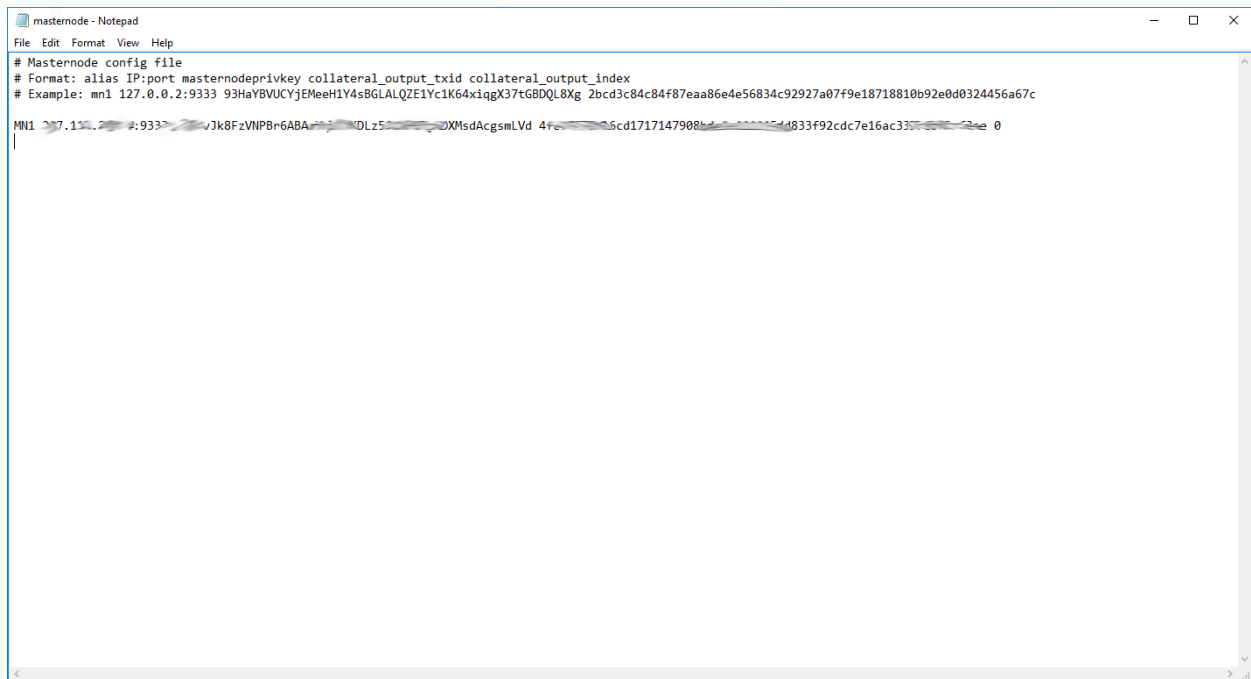
- Go back to the debug console and type “masternode outputs” and press enter. Copy the txhash and note the outputidx.

The screenshot shows the Bitcoin Green Core - Wallet application. The main window has a green header with navigation buttons: Overview, Send, Receive, Transactions, and Masternodes. Below the header is the Bitcoin Green logo. The interface is divided into sections: BITG Balances (with sub-sections Available, Pending, Total), Recent transactions, and a Tools window. The Tools window is open to the Console tab and displays the following output:

```
02:53:14 Welcome to the Bitcoin Green RPC console.  
Use up and down arrows to navigate history, and Ctrl-L to clear screen.  
Type help for an overview of available commands.  
03:40:39 masternode genkey  
03:40:39 2YkFvJk8FzVNPBr6ABAnYqTrSKDLz51tSNPoj3DXMsdAcgsmLVd  
03:45:52 masternode outputs  
03:45:52 [  
  {  
    "txhash": "4fe7f762016c422734200b333441115590950...",  
    "outputidx": 0  
  }  
]
```

A context menu is visible over the txhash, with options: Copy (Ctrl+C) and Select All (Ctrl+A). The status bar at the bottom left shows "Synchronization pending..." and the bottom right shows "BITG" and system icons.

10. Paste the txhash into the masternode config file. Don't forget the outputidx. Save the masternode config file and then close the wallet.



```
masternode - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:9333 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
MN1 127.0.0.2:9333 Jk8FzVNPBr6ABA...DLz5...XMsdAcgsmLVd 4f...5cd1717147908b...4833f92cdc7e16ac33...e 0
```

11. Now you need to edit the wallet config file. Open the Wallet Configuration File from the Tools menu.

The screenshot shows the Bitcoin Green Core - Wallet application window. The title bar reads "Bitcoin Green Core - Wallet". The menu bar includes "File", "Settings", "Tools", and "Help". The "Tools" menu is open, displaying the following options: "Information", "Debug console", "Network Monitor", "Peers list", "Wallet Repair", "Open Wallet Configuration File", "Open Masternode Configuration File", "Show Automatic Backups", and "Blockchain explorer". The "Open Wallet Configuration File" option is highlighted. The main interface features a green header with "Transactions" and "Masternodes" buttons, and the "Bitcoin Green" logo. Below the header, there are input fields for "Custom change address", "Split UTXO", "Pay To:", "Label:", and "Amount:". The "Transaction Fee" is shown as "0.00010000 BITG/kB" with a "Choose..." button. At the bottom, there are "Send", "Clear All", and "Add Recipient" buttons. The status bar at the bottom right shows "Balance: 18340.84992890 BITG" and system icons.

12. When you open your wallet config, it should be blank. Below is what your config file needs to be. Copy paste this into bitcoingreen.conf.

```
rpcuser=longrandomusername  
rpcpassword=longerrandompassword  
rpccallowip=127.0.0.1  
listen=1  
server=1  
daemon=1  
logtimestamps=1  
maxconnections=256  
masternode=1  
port=9333
```

```
addnode=51.15.198.252  
addnode=51.15.206.123  
addnode=51.15.66.234  
addnode=51.15.86.224  
addnode=51.15.89.27  
addnode=51.15.57.193  
addnode=134.255.232.212  
addnode=185.239.238.237  
addnode=185.239.238.240
```

```
masternodeaddr=IP:port  
masternodeprivkey=masternodeprivkey
```

Add your **IP:Port** and **masternodeprivkey**. Also, change the rpcuser and rpcpassword to something random. Keep everything else the same, then Save:



```
bitcoingreen - Notepad  
File Edit Format View Help  
rpcuser=longrandomusername  
rpcpassword=longerrandompassword  
rpccallowip=127.0.0.1  
listen=1  
server=1  
daemon=1  
logtimestamps=1  
maxconnections=256  
masternode=1  
port=9333  
  
addnode=51.15.198.252  
addnode=51.15.206.123  
addnode=51.15.66.234  
addnode=51.15.86.224  
addnode=51.15.89.27  
addnode=51.15.57.193  
addnode=134.255.232.212  
addnode=185.239.238.237  
addnode=185.239.238.240  
  
masternodeaddr=  
masternodeprivkey=
```

13. Restart the wallet. Now your masternode should show up in the Masternodes tab.

Bitcoin Green Core - Wallet

File Settings Tools Help

Overview Send Receive Transactions Masternodes

## Bitcoin Green

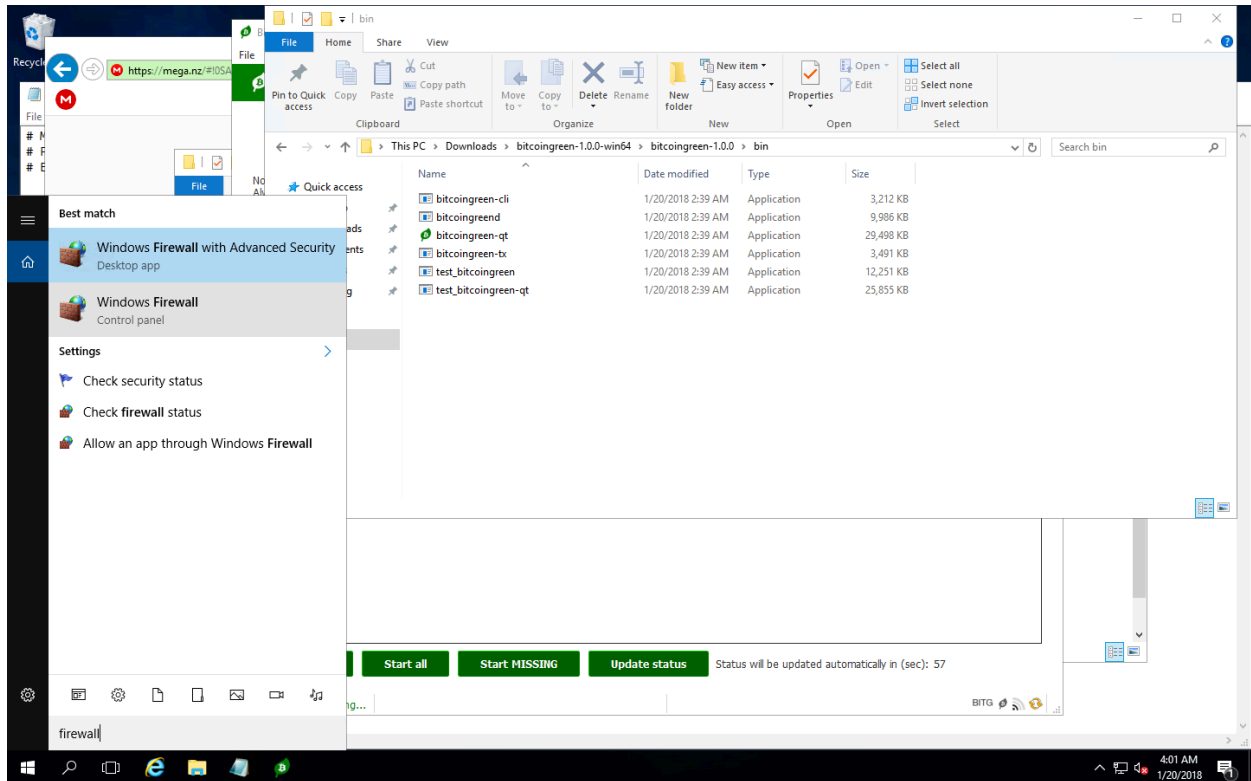
Note: Status of your masternodes in local wallet can potentially be slightly incorrect. Always wait for wallet to sync additional data and then double check from another node if your node should be running but you still see "MISSING" in "Status" field.

Alias	Address	Protocol	Status	Active	Last Seen (UTC)	Pubkey
MN1	[REDACTED]	70912	ENABLED	00m:00s	2018-01-20 11:54	[REDACTED]

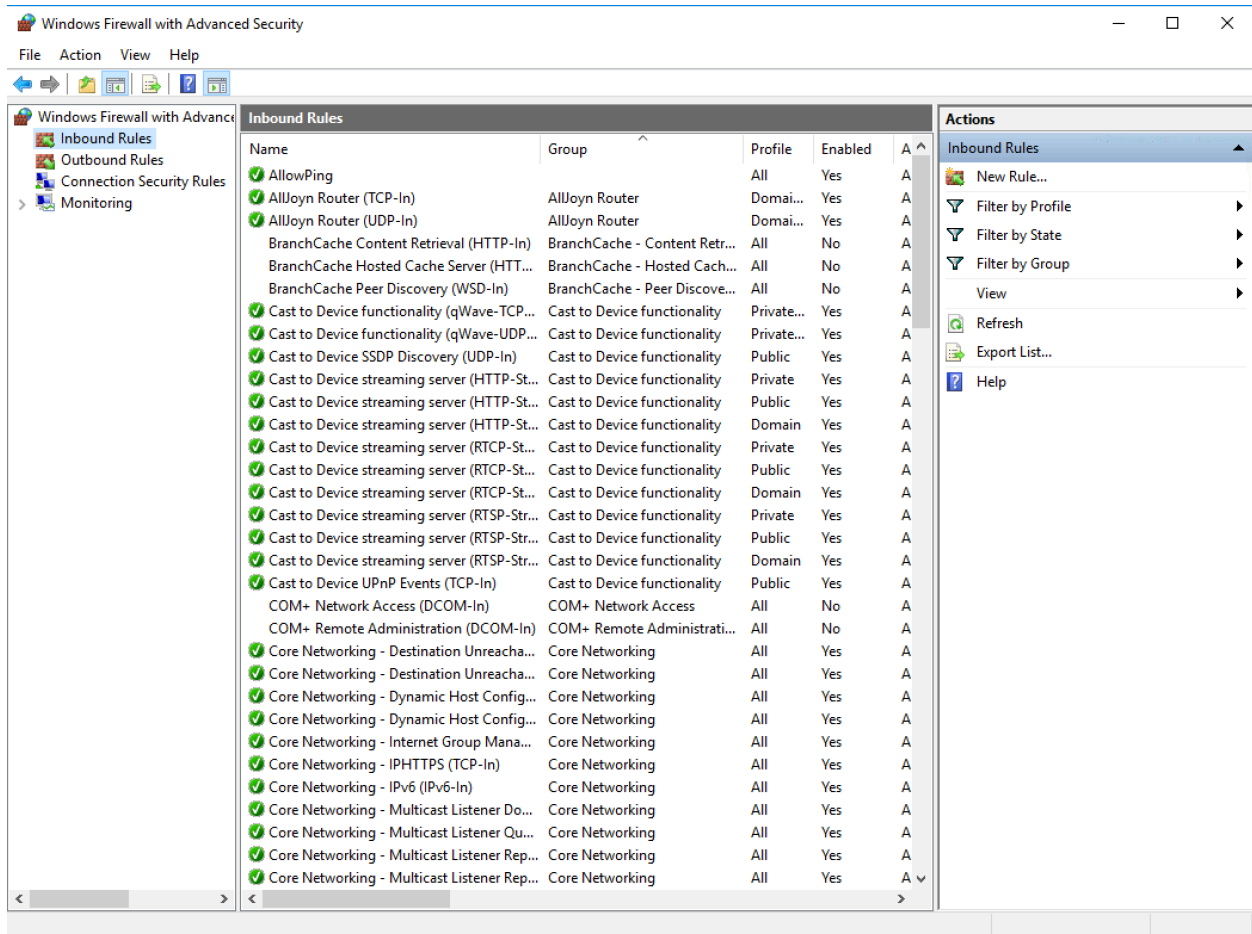
Start alias Start all Start MISSING Update status Status will be updated automatically in (sec): 29

Synchronization pending... BITG [System Icons]

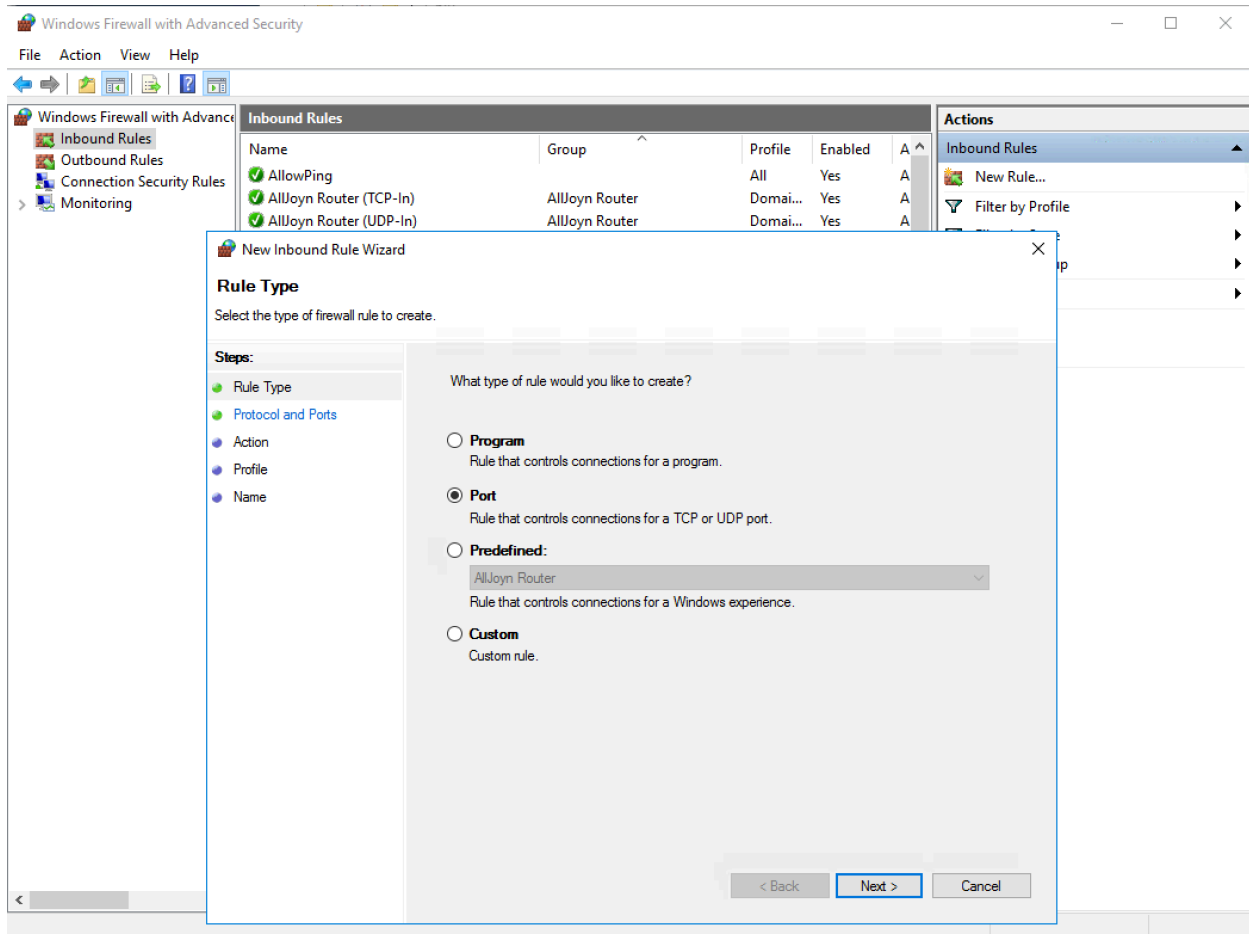
14. Next you have to edit your firewall. We need to open a port for the masternode. Open Windows Firewall from the start menu. Click “Advanced Settings”.



15. Clicking “Advanced Settings” will open the firewall control panel. Click “Inbound Rules”.

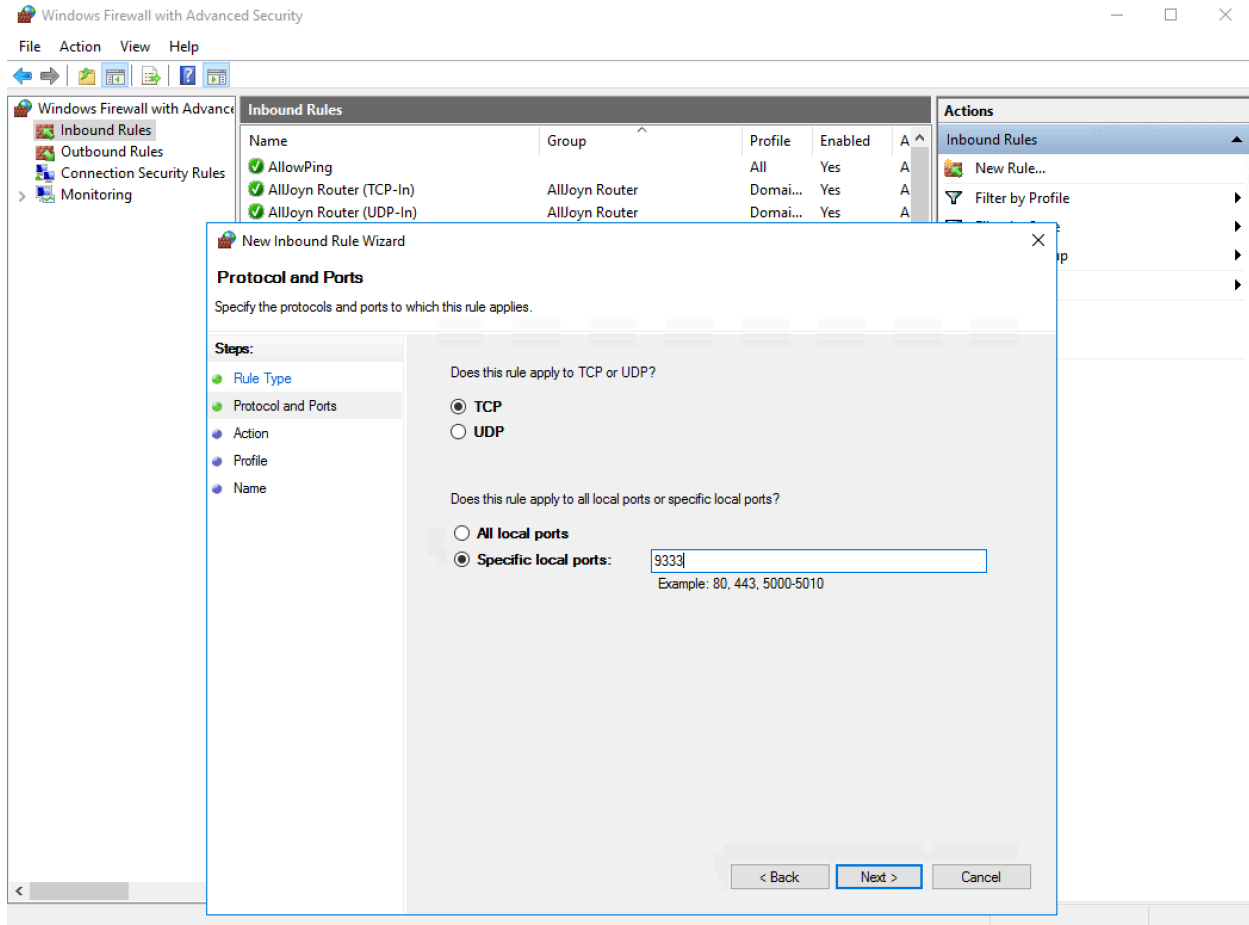


16. Click “New Rule” on the upper right side and you will get this screen. Select Port.

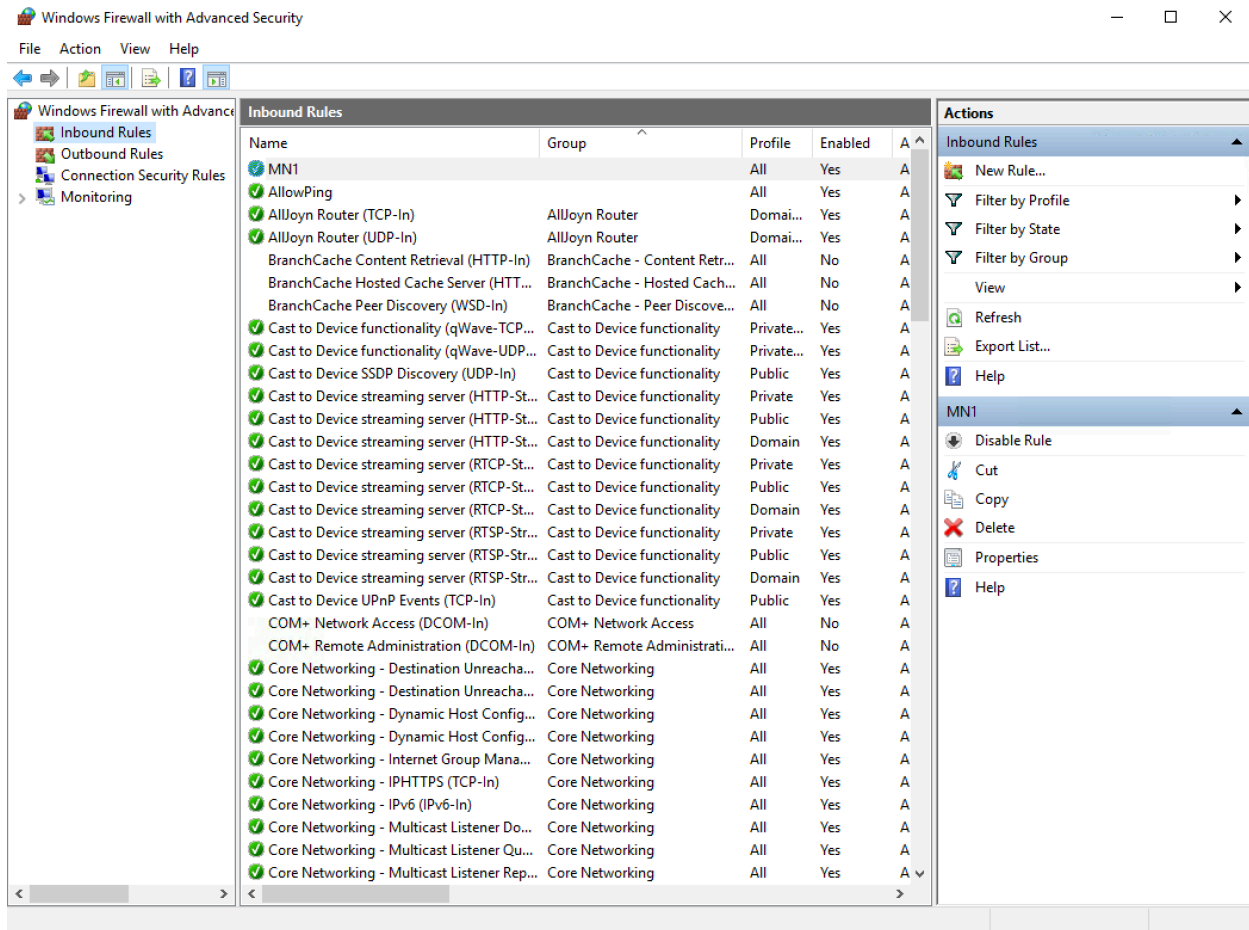




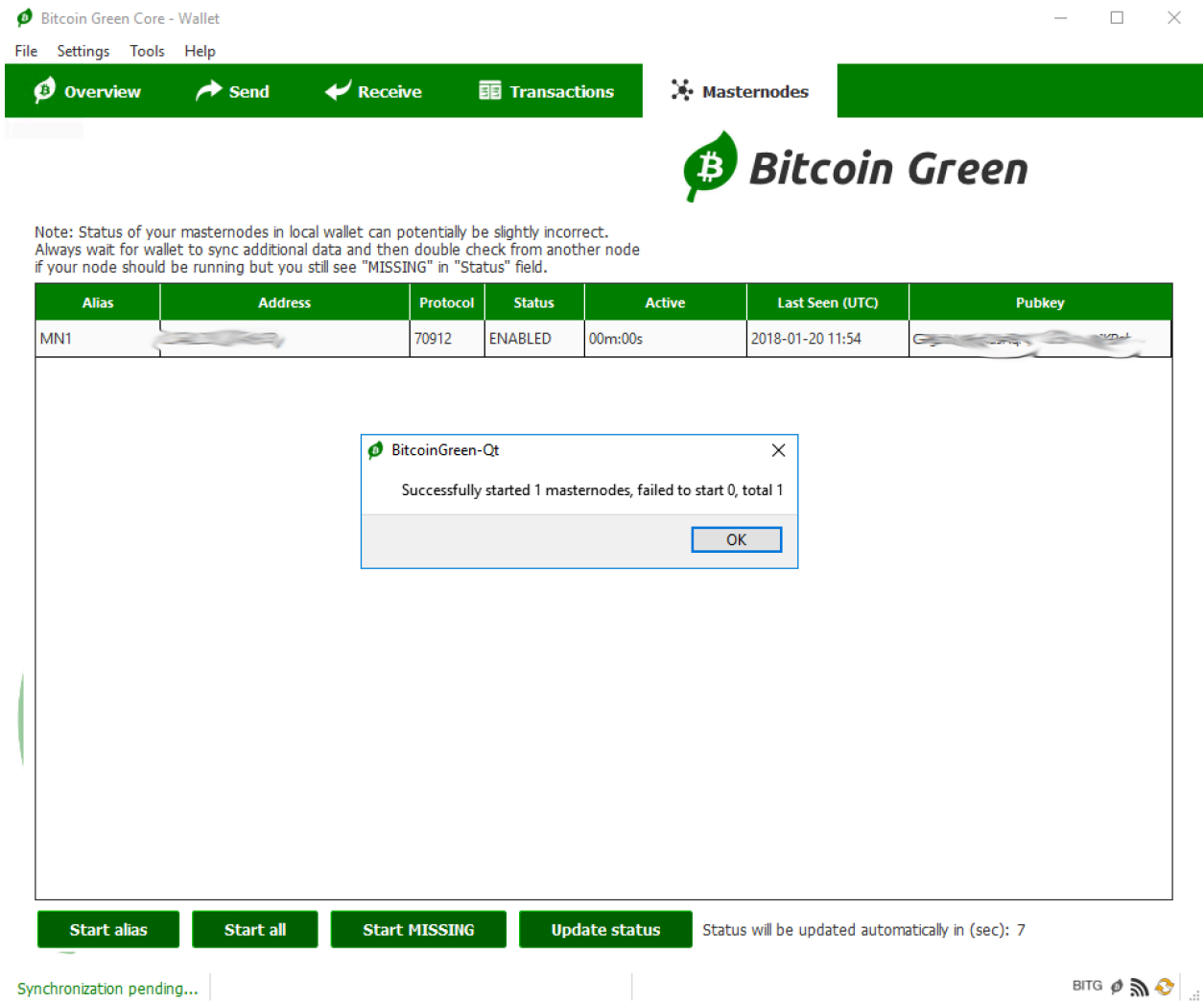
17. Choose the port to allow. In this case it is 9333.



18. Click through, allow the connection, allow it in all places. Give it a name, it can be anything you want. When you are done, you will be back on the Windows Firewall control panel and you will see your new rule. You can now close the firewall control panel.



19. Go back to your Masternodes tab and click Start All. Success! Now relax and wait for the stakes to come in.



Bitcoin Green Core - Wallet

File Settings Tools Help

Overview Send Receive Transactions Masternodes

## Bitcoin Green

Note: Status of your masternodes in local wallet can potentially be slightly incorrect. Always wait for wallet to sync additional data and then double check from another node if your node should be running but you still see "MISSING" in "Status" field.

Alias	Address	Protocol	Status	Active	Last Seen (UTC)	Pubkey
MN1	[REDACTED]	70912	ENABLED	00m:00s	2018-01-20 11:54	[REDACTED]

BitcoinGreen-Qt

Successfully started 1 masternodes, failed to start 0, total 1

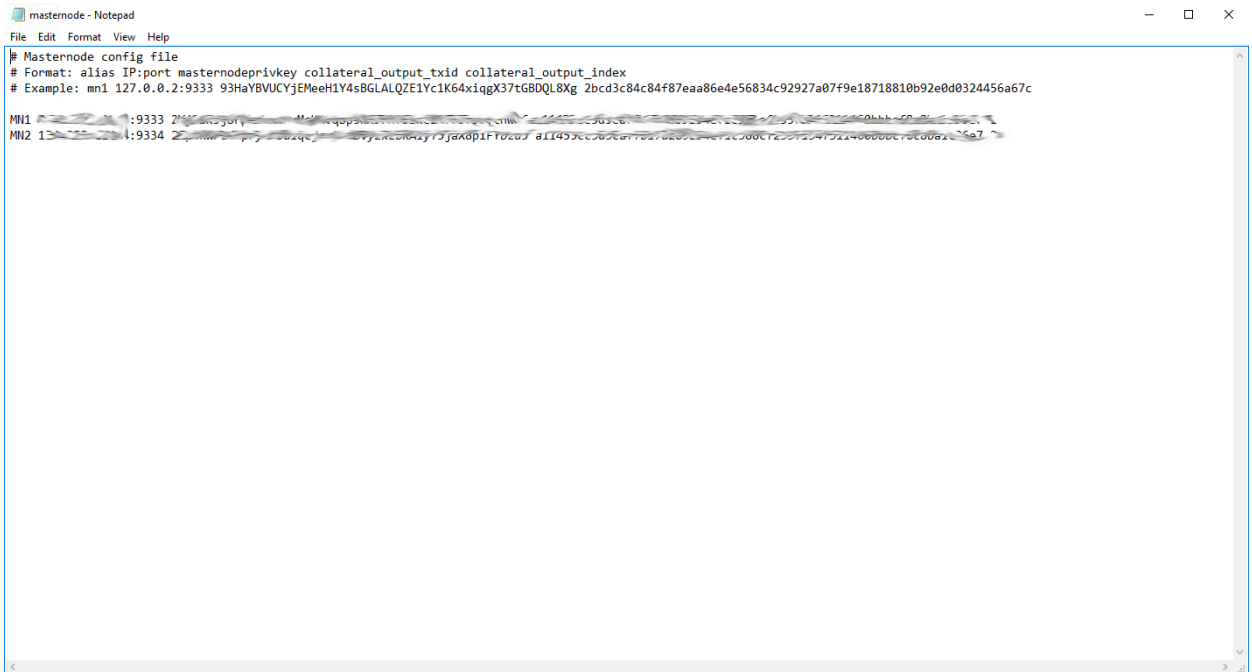
OK

Start alias Start all Start MISSING Update status Status will be updated automatically in (sec): 7

Synchronization pending... BITG [Icons]

## ADDING ADDITIONAL MASTERNODES:

1. To run additional masternodes, start by completing steps 1-10 with the alias MN2 and the port 9334. This means add a new line to the masternode.conf. Do this for each masternode. Here's what it looks like for 2 masternodes:



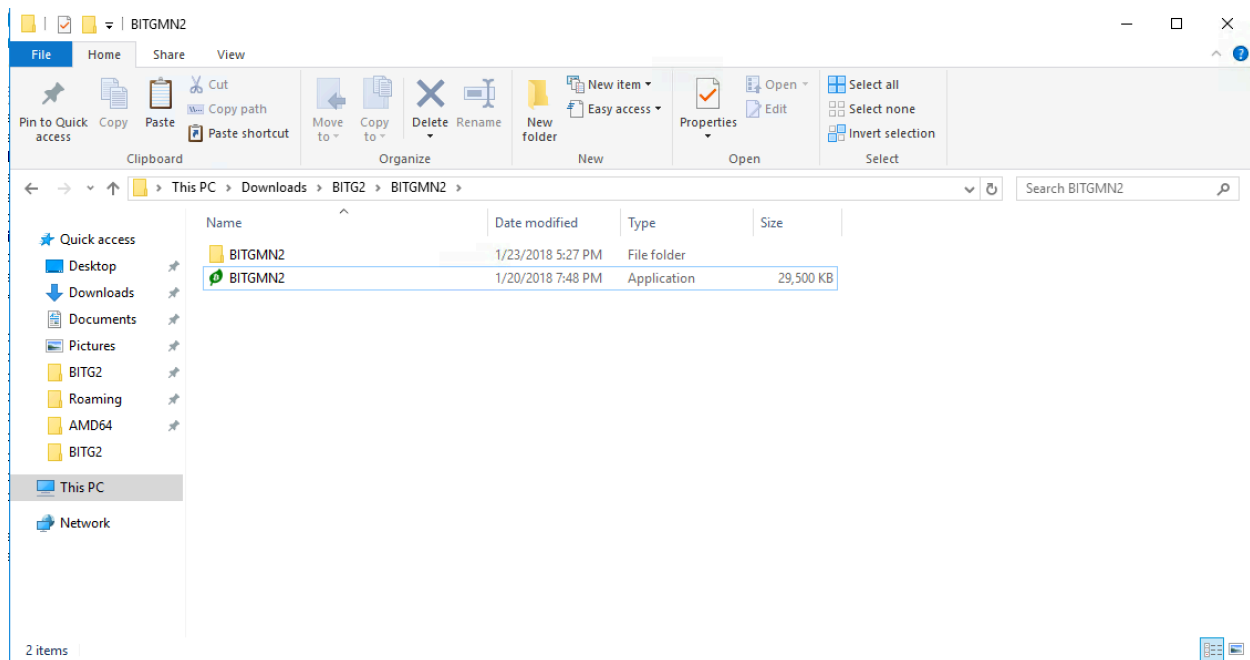
```
masternode - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:9333 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
MN1 127.0.0.2:9333 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
MN2 127.0.0.2:9334 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c
```

*For each additional masternode you can increment the port by 1. You can only run 1 masternode per port. As for the alias, it can be anything you want. FYI - the main wallet that holds your masternode.conf file and all your coins is called the “hot wallet”.*

*Next, you’ll have to open an instance of the Bitcoin Green wallet for each masternode. Each masternode requires it’s own unique instance of Bitcoin Green. Your first masternode is already running in the hot wallet instance. Opening additional instances will allow you to run additional nodes on the same machine. These instances are called “cold wallets”. They don’t need to hold any coins, they are just there to keep the port open for BITG. In fact, the only thing that matters in the cold wallet is the bitcoingreen.conf file. First, we’ll need to give the Bitcoin Green client a new blockchain database to access.*

***tl;dr for each MN we need to run an empty BITG wallet to keep the right port open***

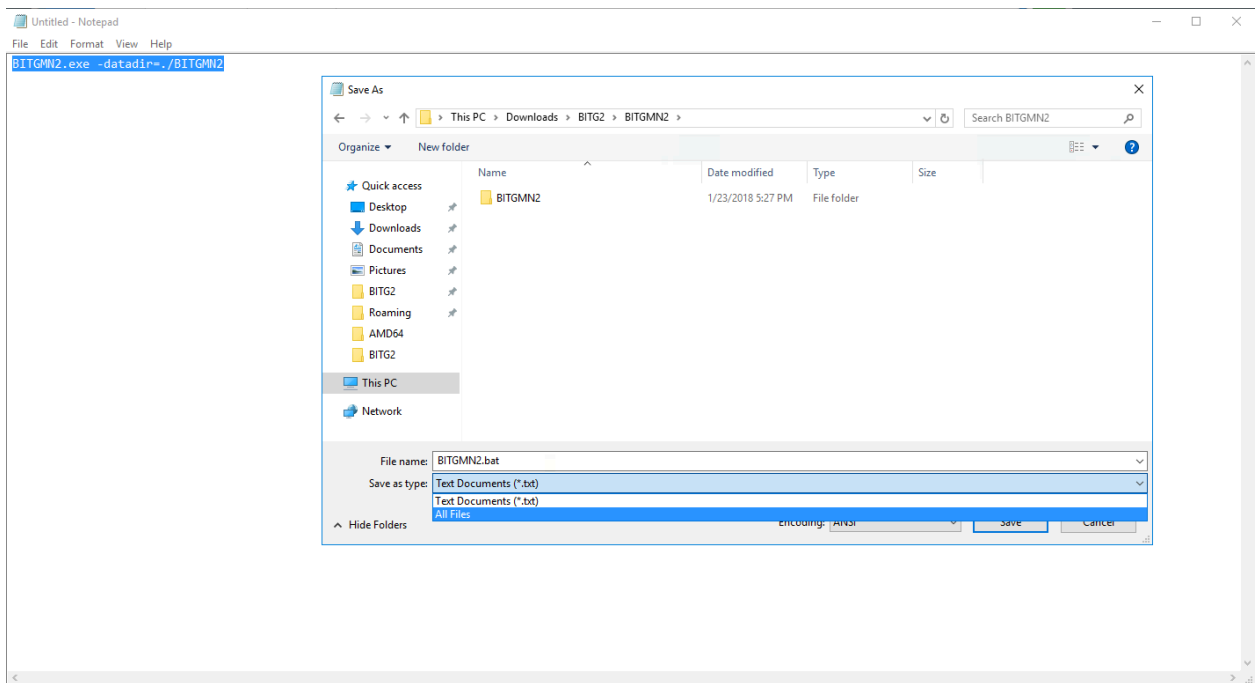
2. Create a new folder. It can be anywhere on your computer. Copy the bitcoingreen-qt file (from your Downloads or maybe C:\Program Files\BitcoinGreen) and paste it into the new folder. Rename the qt file to BITGMN2. Then create another folder called BITGMN2. Your screen should look like this:



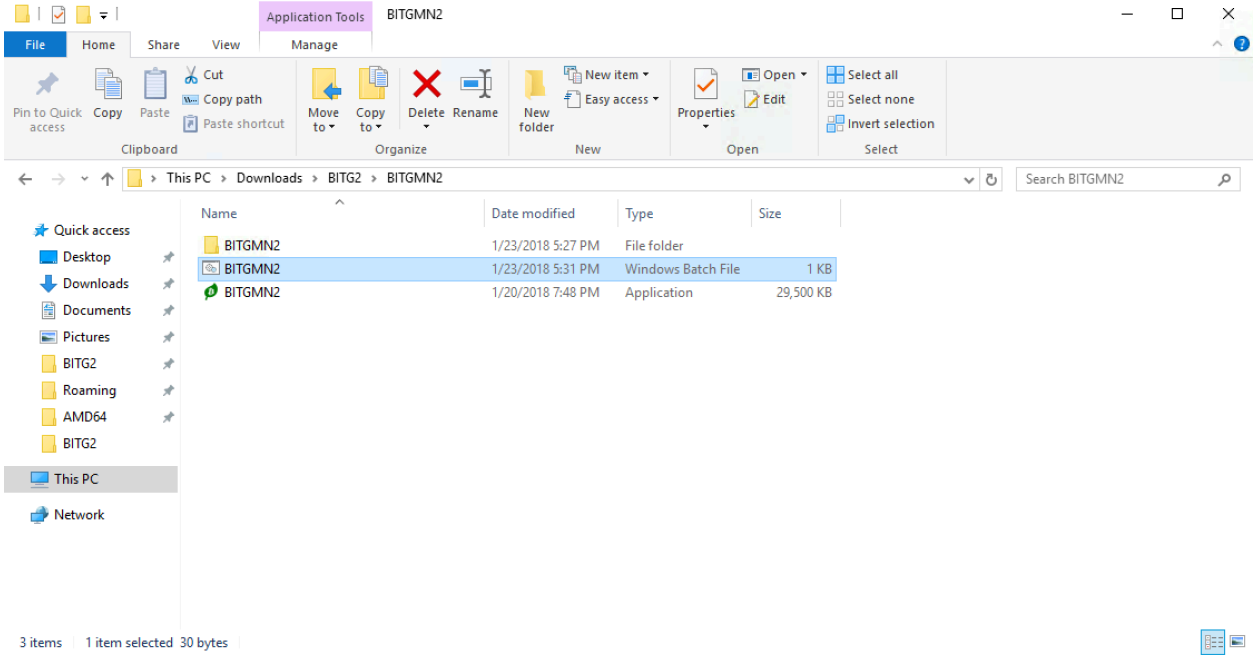
3. Now open a new file on Notepad. Paste the following:

```
BITGMN2.exe -datadir=./BITGMN2
```

Save as “BITGMN2.bat” in your new folder and make sure to select All Files file type. This creates an executable batch file.

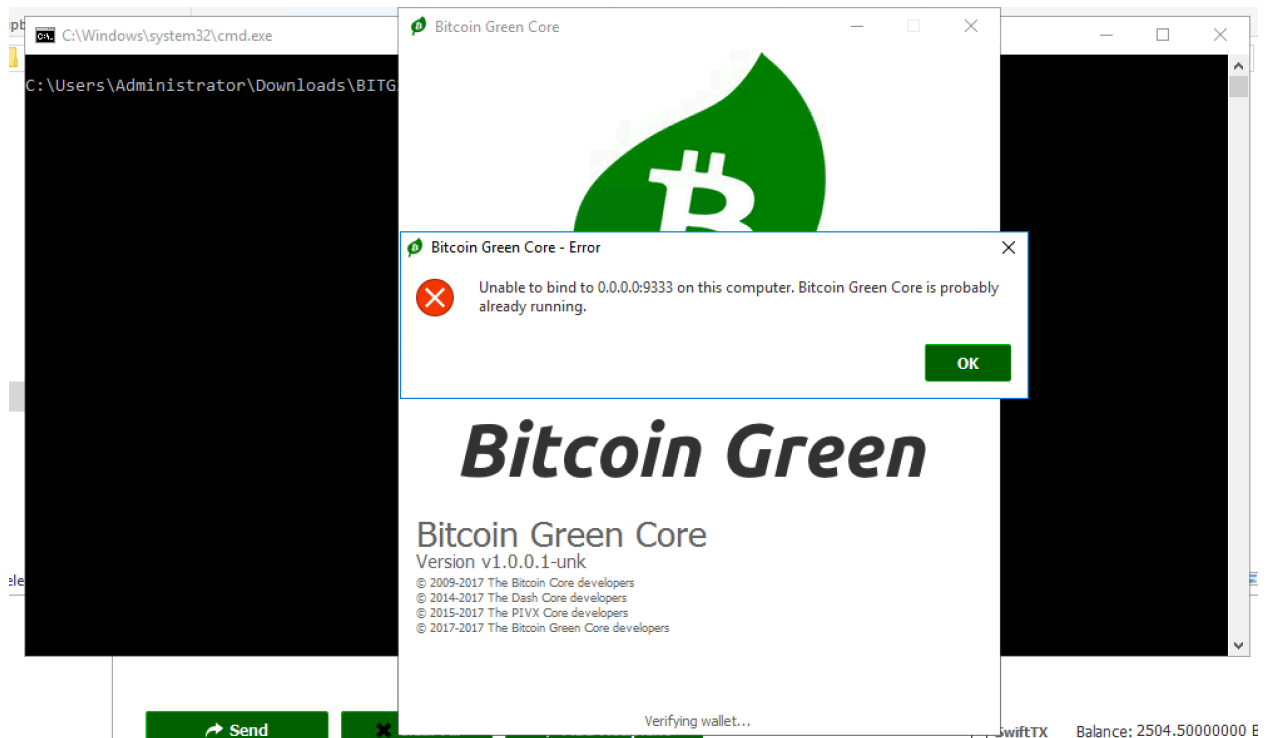


Final Folder:



4. Now try to open the BITGMN2.bat file you have just created (Note: you must open the batch (.bat) file to use BITGMN2 as the new directory).

*If your main wallet is open, you will get errors. That's okay. Even though you got errors, it created the new directory that you will edit. Click through the errors, but the wallet will not open. However, open the BITGMN2 folder you just created. It will now have a bitcoingreen.conf file that you can edit.*



5. Edit the new bitcoingreen.conf file with the config from step 12. It will be the same except you will need to put the new port and masternode key. Don't forget the "port=" line.
6. When you have finished editing the new config, press Save.
7. Make sure to open all the ports you are using in your firewall.
8. Open the wallet by clicking the batch file. Once your cold wallet is open you are good to go.
9. Return to your hot wallet and click start all. Your nodes should succeed.
10. *When your nodes status still says ENABLED after 130 minutes, you will know your setup worked successfully. You will not know until 130 minutes after starting the node. If the node says missing after 130 minutes it will stop mining and your setup failed.*
11. *To save sync time, you can copy the entire blockchain into the new directory (just make sure to delete the wallet.dat file and masternode.conf – and do it AFTER you paste them in. Your wallet will spawn blank ones which is what you want)*