

Running a Bitcoin Node

Notebook: Articles

Created: 13-11-2018 10:59 AM

Updated: 19-11-2018 11:29 AM

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To install bitcoin core, use the following options

1. To install the Bitcoin Core Graphical User Interface (GUI), type the following line and proceed to the Bitcoin Core GUI section below:

```
sudo apt-get install bitcoin-qt
```

2. To install the Bitcoin Core daemon (bitcoind), which is useful for programmers and advanced users, type the following line and proceed to the Bitcoin Core Daemon section below:

```
sudo apt-get install bitcoind
```

3. To install both the GUI and the daemon, type the following line and read both the GUI instructions and the daemon instructions Note that you can't run both the GUI and the daemon at the same time using the same configuration directory.

```
sudo apt-get install bitcoin-qt bitcoind
```

Bitcoin Core Daemon

If you are logged in as an administrative user with sudo access, you may log out. The steps in this section should be performed as the user you want to run Bitcoin Core.(If you are an expert administrator, you can make this a locked account used only by Bitcoin Core.)

From the terminal, type:

```
bitcoind -daemon
```

It will print a message that Bitcoin Core is starting. To interact with Bitcoin Core daemon, you will use the command

```
bitcoin-cli
```

(Bitcoin command line interface).

Note: It may take up to several minutes for Bitcoin Core to start, during which it will display the following message whenever you use "*bitcoin-cli*":

```
error:{ "code":-28,"message":"Verifying blocks..."}
```

After it starts, you may find the following commands useful for basic interaction with your node:

1. bitcoin-cli getblockchaininfo : Returns an object containing various state info.
2. bitcoin-cli getnetworkinfo :
3. bitcoin-cli getnettotals :
4. bitcoin-cli getwalletinfo :
5. bitcoin-cli stop :
6. bitcoin-cli help :

Configure bitcoin config file (bitcoin.conf) for JSON RPC

```
rpcuser=exchange  
rpcpassword=chakravuyha  
rpcallowip=0.0.0.0/0
```

NodeJs

Install the package via npm:

```
npm install bitcoin-core --save
```

main.js

```
const Client = require('bitcoin-core');  
const client = new Client({  
  network: 'mainnet',  
  host: '192.168.1.3',  
  port: 8332,  
  username: 'exchange',  
  password: 'chakravuyha'  
});
```

Using callbacks to process the response

```
client.getBlockCount((error, res) => {  
  if(error){console.log(error)}  
  else console.log(res)  
})
```

For more details click [this](#)

For more bitcoin-core methods click [here](#)