



Ubuntu Server 16.04 setup guide

About Us: cryptowithacause is a joint fund-raising effort of a couple charities to support the migrant, refugee and homeless crisis in Greece. Funds are used to support homeless feeding programs and assistance to migrants in need.

How do I setup CWC cryptowithacause masternode? (Quark based)

applies to Quark branch 3.3

Use the following instructions to setup a masternode for a Quark based coin on **Ubuntu Server 16.04**

Make sure that you have the following requirements.

- Required amount of coins to setup the masternode.
- A wallet to store your coins.
- A server or VPS.

Please visit our Github page to find the wallet or files required.

<https://github.com/cryptowithacause/cwacoin/tree/master/releases/download/1.0.0.0>

STEPS:

Prepare your VPS

Install Ubuntu Server 16.04 on a VPS.

Update your Ubuntu machine.

```
sudo apt-get update  
sudo apt-get upgrade
```

Install the required dependencies.

```
sudo apt-get install build-essential libtool autotools-dev automake pkg-config libssl-dev libevent-dev  
bsdmainutils python3 libboost-system-dev libboost-filesystem-dev libboost-chrono-dev libboost-test-  
dev libboost-thread-dev libboost-all-dev libboost-program-options-dev  
sudo apt-get install libminiupnpc-dev libzmq3-dev libprotobuf-dev protobuf-compiler unzip software-  
properties-common
```

```
sudo apt-get update -y && apt-get upgrade -y && apt-get install git -y && apt-get install build-essential  
libssl-dev libboost-all-dev libqrencode-dev pkg-config libminiupnpc-dev qt5-default qttools5-dev-tools  
libgmp3-dev -y && add-apt-repository ppa:bitcoin/bitcoin -y && apt-get update -y && apt-get install  
libdb4.8-dev libdb4.8++-dev -y && apt-get install autoconf -y && apt-get install build-essential libtool  
autotools-dev pkg-config libssl-dev libboost-all-dev autoconf automake -y && apt-get install libzmq3-dev  
libminiupnpc-dev libssl-dev libevent-dev -y && apt-get install libgmp-dev -y && apt-get install openssl -y  
&& apt-get update -y && apt-get install git build-essential -y && apt-get install aptitude -y && aptitude  
install libdb4.8++-dev -y && apt-get install git -y && apt-get install software-properties-common python-  
software-properties -y && add-apt-repository ppa:git-core/ppa -y && apt-get update -y
```

```
sudo apt-get update && sudo apt-get install gcc-4.9 -y && sudo apt-get upgrade libstdc++6 -y && sudo  
apt-get update && sudo apt-get install libstdc++6 -y && sudo apt-get update && sudo apt-get install -y  
software-properties-common && sudo add-apt-repository ppa:ubuntu-toolchain-r/test && sudo apt-get  
update && sudo apt-get install -y curl build-essential supervisor wget libstdc++6 && sudo apt-get  
upgrade -y
```

Install Berkeley DB.

```
sudo add-apt-repository ppa:bitcoin/bitcoin  
sudo apt-get update  
sudo apt-get install libdb4.8-dev libdb4.8++-dev
```

Download the files required.

```
wget https://github.com/cryptowithacause/cwaccoin/blob/master/releases/download/1.0.0.0/cwacU16.tar.gz  
wget https://github.com/cryptowithacause/cwaccoin/blob/master/releases/download/1.0.0.0/cwcU16qt.tar.gz
```

Extract the tar files.

```
sudo tar -xzf cwacU16.tar.gz  
sudo tar -xzf cwcU16qt.tar.gz
```

Install the daemon and tools.

```
sudo mv cryptowithacaused cryptowithacause-cli cryptowithacause-tx /usr/bin/
```

```
sudo chmod +x /usr/bin/crypto*
```

Create the config file.

```
sudo mkdir $HOME/.cryptowithacause  
sudo nano $HOME/.cryptowithacause/cryptowithacause.conf
```

Paste the following lines in cryptowithacause.conf.

```
#----  
rpcuser=rpc_cryptowithacause  
rpcpassword=kuw05sqio7bcm8z96o7redv17xws1lw6xpd1qf33  
rpcallowip=127.0.0.1  
#----  
listen=1  
server=1  
daemon=1  
maxconnections=64  
#----  
#masternode=1  
#masternodeprivkey=  
externalip= REPLACE_WITH_EXTERNAL_IP_OF_VPS  
#----
```

Leave the fields “masternode” and “masternodeprivkey” commented out.

Replace the text “REPLACE_WITH_EXTERNAL_IP_OF_VPS” with the external IP address of your VPS.

E.G. externalip=136.144.171.201

Start your node with the following command.

```
cryptowithacaused
```

Wait until the daemon has finished downloading the blockchain.

Send the collateral

Open your wallet and wait until your wallet has downloaded the blockchain.

Go to “Tools”.

Click “Debug console”.

This is the console where you will execute all commands.

Create a new masternode private key.

```
createmasternodekey
```

Example output

```
7VatfYVvk5fFMTymPDhgSURAESDACJhWpd89WHGoh35d9fbLQPj5
```

Show your collateral address.

```
getaccountaddress "MN1"
```

Example output

```
TDC99hZmSmYEcBu4WcxA2TCT6KBqHB6Hos
```

Transfer the required amount of coins to the “collateral address” that you created using the command “getaccountaddress “MN1””.

Wait until the transaction has the required masternode confirmations.

Go to “Tools”.

Click “Debug console”.

Enter the following command.

```
getmasternodeoutputs
```

Example output

```
[
  {
    "txhash": "506a242ccbfd2555bcd9cff5f4041752c911f39cb2905acc83ccfe0cf8808df9",
    "outputidx": 1
  }
]
```

Go to “Tools”.

Click “Open Masternode Configuration File”.

Modify the following line and paste it into notepad.

MN1 136.144.171.201:9999 7VatfYVk5fFMTymPDhgSURAESDACJhWpd89WHGoh35d9fbLQPj5
506a242ccbfd2555bcd9cff5f4041752c911f39cb2905acc83ccfe0cf8808df9 1

MN1 - Alias for your masternode.

136.144.171.201 - External IP address of your VPS.

9999 - Replace with P2P port of your coin.

7VatfYVk5fFMTymPDhgSURAESDACJhWpd89WHGoh35d9fbLQPj5 - Masternode private key from the command "createmasternodekey".

506a242ccbfd2555bcd9cff5f4041752c911f39cb2905acc83ccfe0cf8808df9 - Value "txhash" from the command "getmasternodeoutputs".

1 - Value "outputidx" from the command "getmasternodeoutputs".

Save the file and close notepad.

Close your wallet.

Register your masternode

Place the masternode private key in the config file of your masternode and uncomment the values "masternode" and "masternodeprivkey".

Example config

```
#---
rpccallowip=127.0.0.1
rpcport=18459
listen=1
txindex=1
staking=0
server=1
daemon=1
logtimestamps=1
maxconnections=256
masternode=1
port=18460
#externalip= REPLACE_WITH_EXTERNAL_IP_OF_VPS
masternodeprivkey=mn-private-key
masternodeaddr= REPLACE_WITH_EXTERNAL_IP_OF_VPS:18460
addnode=217.61.5.105
addnode=99.241.9.54
#---
```

Restart your masternode using the following commands.

```
cryptowithacause-cli stop  
cryptowithacause
```

Open your wallet.

Go to "Settings".
Click "Unlock Wallet".

Enter your wallet passphrase and unlock your wallet.

Go to "Tools". Click "**Debug console**".

Start your masternode using the command.

startmasternode alias false MN1

Your masternode is now registered and will appear in the masternode list.

You can check the status of your masternode using the command "getmasternodestatus" on your VPS.

```
sudo cryptowithacause-cli getmasternodestatus
```

Example output

```
{  
  "txhash": "506a242ccbfd2555bcd9cff5f4041752c911f39cb2905acc83ccfe0cf8808df9",  
  "outputidx": 1,  
  "netaddr": "136.144.171.201:9999",  
  "addr": "TDC99hZmSmYEcBu4WcxA2TCT6KBqHB6Hos",  
  "status": 4,  
  "message": "Masternode successfully started"
```

Well done! Your masternode is now running and rewards will start to arrive in your wallet soon.

