

Forum:[Hack Forums](#)

Thread: [The Ultimate Guide to Mining on Windows | AMD, Nvidia, and CPU](#)

'Snorlax - December 17, 2013, 6:33 am

Introduction

What is mining? Mining is when you use your PC, or rather your PC's hardware, to solve blocks for the currency you chose.

I am not going into details how the math behind solving is made, because I simply don't know.

You don't need a beast machine to mine, but the better hardware you have, the more will you make.

You can use both your graphics card and your processor to mine with. They can mine at the same time as well.

A good read about mining and Bitcoins in general can be found [here](#). Go read that for a better understanding!

Good stuff to know

Algorithm

There are two major algorithms you need to look at. SHA-256 and Scrypt.

A SHA-256 example could be Bitcoin.

A Scrypt example could be Litecoin.

Since both are different algorithms, you will not be able to mine at same speeds when comparing them.

Visit [this site](#) and tick either SHA-256 or Scrypt, then press calculate for a complete list over the most famous coins out there.

Hashing

When you measure how fast you hash (or mine), it's measured in hashes per second.

When you mine, you are doing it really fast. Therefore you normally measure it in kilo hashes or mega hashes.

When you do Scrypt mining, you measure in Kh/s, which is kilo hashes per second.

When you do SHA-256 mining, you measure in Mh/s, which is mega hashes per second.

1 Mega is 1.000.000, so 1 Mh/s is one million hashes per second.

1 Kilo is 1.000, so 1 Kh/s is one thousand hashes per second.

How fast can I mine?

When you want to mine, you need to look up which graphics card you have.

If you have an AMD graphics card, you are lucky. Those mine a lot faster, when you compare prices.

If you have Nvidia, you can still mine, but it will not be as efficient as AMD.

As I wrote before, there is a hashing difference between SHA-256 and Scrypt.

If you want to look up Scrypt, then go [here](#).

If you want to look up SHA-256, then go [here](#).

That is the most exact one I have found, and are very useful to get an approximation.

On these pages, you will see a lot of graphics cards getting tested. Scroll down or search for your card.

To get the best hashing rate out of your card, you sometimes have to use configurations made by other people.

That will be explained later on, when we get to the actual mining part.

If you go to any of these pages and search for 6990 (which is an AMD 6990), you will see 6990 in the first field.

Second field is how fast it can mine. That is the most important part.

If your numbers are really low (below 50), you will not be making a lot of coins!

'Snorlax - December 17, 2013, 6:34 am

Start your mining journey

Getting a pool

First you need to make an account on a pool. Do a simple Google search for "coin pool" where coin is the coin you want to mine.

Could be Litecoin, Bitcoin, Omnicoin, or Dogecoin. Any existing coin. I will use [this](#)

Omnicoin pool as an example. Once your account has been made, you can go to the "[Getting Started](#)" page.

That will contain pretty much all you need to know about the specific pool.

Nvidia

To start off mining with your Nvidia card, you need CUDAMiner.

Grab a copy of CUDAMiner [here](#). Grab the 32 or 64-bit version!

Unpack the files somewhere on your computer, and make a new batch file inside that folder.

Now you need to make the configuration for the batch file. An example could look like this:

Code `cudaminer.exe -o stratum+tcp://omc.pools.doctor-blue.net:3333 -O`

`accountUsername.workerName:workerPassword`

Replace accountUsername with the username of your account. Replace workerName with the name of the worker (from previous step),

and at last you need to replace workerPassword with the password for your worker.

You could open the batch file now, and it would auto-tune settings, but we are not going to do that.

Now go back to the "How fast can I mine?" part, and open a link to one of the comparisons.

Omnicoin is script based, so we want Scrypt.

Now search for your graphics card, like before, and take a look to the second right column (Config)

Some people include their parameters (arguments) they use to tweak the settings to the max.

You want to use those settings. An example could be:

Code `-C 1 -I K112x2 -i 0`

You want to paste that in after the last character of your configuration. In my example, that would be after workerPassword.

The final configuration would look something like this:

Code `cudaminer.exe -o stratum+tcp://omc.pools.doctor-blue.net:3333 -O`

`accountUsername.workerName:workerPassword -C 1 -I K112x2 -i 0`

If there is no configuration for your graphics card, then don't worry. Try without and CUDAMiner will automatically tune it.

If CUDAMiner crashes while tuning, just open it again. It might crash a few times.

Now open the batch file, and you should be mining!

AMD

For AMD mining you need CGMiner. Grab a copy [here](#).

I would recommend getting 3.7.2, because I am not sure if graphics card mining is supported in the newest version!

Now you need to do the same thing as in the Nvidia mining part, but change a few stuff around.

Unpack the files to a folder and make a new batch file in that folder.

Now you need to make the configuration for the batch file. An example could look like this:

```
Code cgminer --script -o stratum+tcp://omc.pools.doctor-blue.net:3333 -u
```

```
accountUsername.workerName -p workerPassword
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Replace accountUsername with the username of your account. Replace workerName with the name of the worker (from previous step),

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You want to use those settings. An example could be:

```
Code -v -w 256
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CPU

CPU mining will not get you a lot, but it's good if you have a PC you don't need. It will lag your PC a lot, so I wouldn't suggest doing it unless you're not using it.

Start off by grabbing a copy of CPUMiner [here](#) and unpack the files into a folder.

Next up you need to create a batch file inside that folder, and make a configuration for it. I simply use no arguments, because that works perfectly for me.

Inside the batch file, you need to paste in your configuration, which could look like this:

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Code minerd.exe --url=stratum+tcp://omc.pools.doctor-blue.net:3333
```

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--userpass=accountUsername.workerName:workerPassword
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Save the file and open the file, and you're now mining with your CPU!

Conclusion of this thread

Okay.. Maybe not the ULTIMATE thread of mining. I won't be able to cover all the needs and every miner out there, so this is what I made instead.

Help

Feel free to contact me at any time for help. Post on this thread with your question, and people might help you before me.

'Snorlax - December 17, 2013, 8:08 am

(Dec 17, 2013 09:07 AM)Mint. Wrote: [\[CITE\]](#) Wow. Great stuff :D ive seen some crazy rigs people have made.

So have I man... Those pictures you find on Google and on BitcoinTalk is eyegasm!

Infinity. - December 17, 2013, 8:14 am

Great tutorial mate! but still as of yet my problem haven't been fixed. ?

'Snorlax - December 17, 2013, 8:14 am

(Dec 17, 2013 09:14 AM)Infinity ? Wrote: [\[CITE\]](#) Great tutorial mate! but still as of yet my problem haven't been fixed. ?

What's the issue? I'll be happy to help ya out ;)

mastergun - December 17, 2013, 8:29 am

Wow verry nice topic...!

This fixed my cpu problem xD

Infinity. - December 17, 2013, 8:35 am

(Dec 17, 2013 09:14 AM)Snorlax Wrote: [\[CITE\]](#) What's the issue? I'll be happy to help ya out ;)

What ??? you forget so soon mate! Check out my pm's.

'Snorlax - December 17, 2013, 8:57 am

(Dec 17, 2013 09:35 AM)Infinity ? Wrote: [\[CITE\]](#) What ??? you forget so soon mate! Check out my pm's.

I've been very busy lately, and I can't remember everything!

If you posted the issue here, I'm sure other people who read this might be able to help.

Boomboxes - December 17, 2013, 10:55 am

Woa thanks a lot for this man, lots of info in it I didn't know a lot about before reading!

Moshiro - December 18, 2013, 10:31 am

(Dec 17, 2013 07:34 AM)Snorlax Wrote: [\[CITE\]](#) Start your mining journey

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How can I get an account? "Replace accountUsername with the username of your account. Replace workerName with the name of the worker (from previous step), and at last you need to replace workerPassword with the password for your worker."

Where am I getting that? I am using BlockChain

'Snorlax - December 18, 2013, 11:21 am

(Dec 18, 2013 11:31 AM)Moshiro Wrote: [\[CITE\]](#) How can I get an account? "Replace accountUsername with the username of your account. Replace workerName with the name of the worker (from previous step), and at last you need to replace workerPassword with the password for your worker."

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That will contain pretty much all you need to know about the specific pool.

It's written right under "Starting your mining journey"

Doctor Blue - December 18, 2013, 12:10 pm

You suck. This is the worst guide I have ever read.

Spoiler [\(Click to View\)](#)/sarcasm

I would put AMD above NVIDIA because AMD is masterrace.

Furthermore you forgot to link to my bitcoin guide in your introduction :(

Mining is simply running a hash function on a random integer (the nonce) until the calculated hash equals the target hash (specified in the blockchain). The nonce is then broadcast to the network and every computer on the network will hash the nonce and verify that it matches the target. After x number of confirmations (Depending on the cryptocurrency) the block has been confirmed along with all the transactions listed within it.

EDIT 500: You're using the wrong stratum address, moron. stratum+tcp://37.59.39.91:3333

'Snorlax - December 18, 2013, 12:13 pm

(Dec 18, 2013 01:10 PM)Doctor Blue Wrote: [\[CITE\]](#) You suck. This is the worst guide I have ever read.

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We need more Nvidia miners!!!

I'll go add your guide, so people can get more knowledge about BITCOINS, lol.

Megalomaniacs - December 31, 2013, 2:54 pm

Hey, mine still closes as soon as I open CGminer?

This is my config

Code cgminer --script -o stratum+tcp://omc.pools.doctor-blue.net:3333 -u Oisinh3.worker -p worker
Any help?

express21 - January 19, 2014, 10:45 am

the only tutorial that got me to start mining ?.

thank you sir.

whosBlu - February 17, 2014, 5:22 am

Wow thanks! Helped alot.. Just wondering (im very new to mining) what can these omni coins be used for? Like are these coins supposed to be converted into paypal? Don't call me dumb (I know i must sound it) but im just new and confused.

'Snorlax - February 17, 2014, 5:28 am

(Feb 17, 2014 06:22 AM)whosBlu Wrote: [\[CITE\]](#) Wow thanks! Helped alot.. Just wondering (im very new to mining) what can these omni coins be used for? Like are these coins supposed to be converted into paypal? Don't call me dumb (I know i must sound it) but im just new and confused.

Nothing yet! The owner of Hack Forums (Omniscient) talked about making them valuable. So far there has been no progress, because Omni is a busy man!

The_Defiant_One - February 19, 2014, 2:19 pm

Great guide. Really informative. Thanks for sharing!