

Burstcoin documentation for GNU / Linux

By Kartojal, donation address: [BURST-WYC4-HHV3-UHA2-CVF6S](#)

Last updated: 01/04/2015

machine translation from spanish.

1. Intro

Regards! First of all, my user is Kartojal in forums and forum **Bitcointalk.org**, in this guide we will see how to install and configure our wallet or wallet Burst, and learn to mine with your hard drives with Pools.

GNU / Linux distribution that I used to make this guide is **Xubuntu 14.10**, although it will all distributions derived from Debian, such as Ubuntu, Lubuntu, Kali Linux or steamos.

Today will be necessary to use the terminal, do not panic, if you know **copy and paste** text, and you have patience **will be easy!** I recommend trying to mine due to Burst low energy usage, Compared to traditional GPU or ASIC mining.

2. Installing the wallet of BURST

2.1. Minimum requirements and installation

The following is required:

- ★ Having a java version 7 or higher installed.
- ★ Have a decompressing RAR
- ★ A web browser, such as Chromium, Chrome, Firefox, Midori ...
- ★ Burst Purse

To check the current version of Java on Xubuntu 14.10 and started a terminal

We write the following:

```
java -version
```

If exit the "**java version**" is equal to or greater than **1.7.0**, you do not have to upgrade Java, in the opposite case you have a lower version or do not have installed, we will enter the following commands.

```
apt-get update
```

```
sudo apt-get install openjdk-7-jre
```

Need to unzip purse wallet in RAR format, so if no

you have it , you launch the following command in the terminal:

```
apt-get update
```

```
sudo apt-get install rar
```

Then, we unload the purse Burst, currently in version 1.2.3,
the following link:

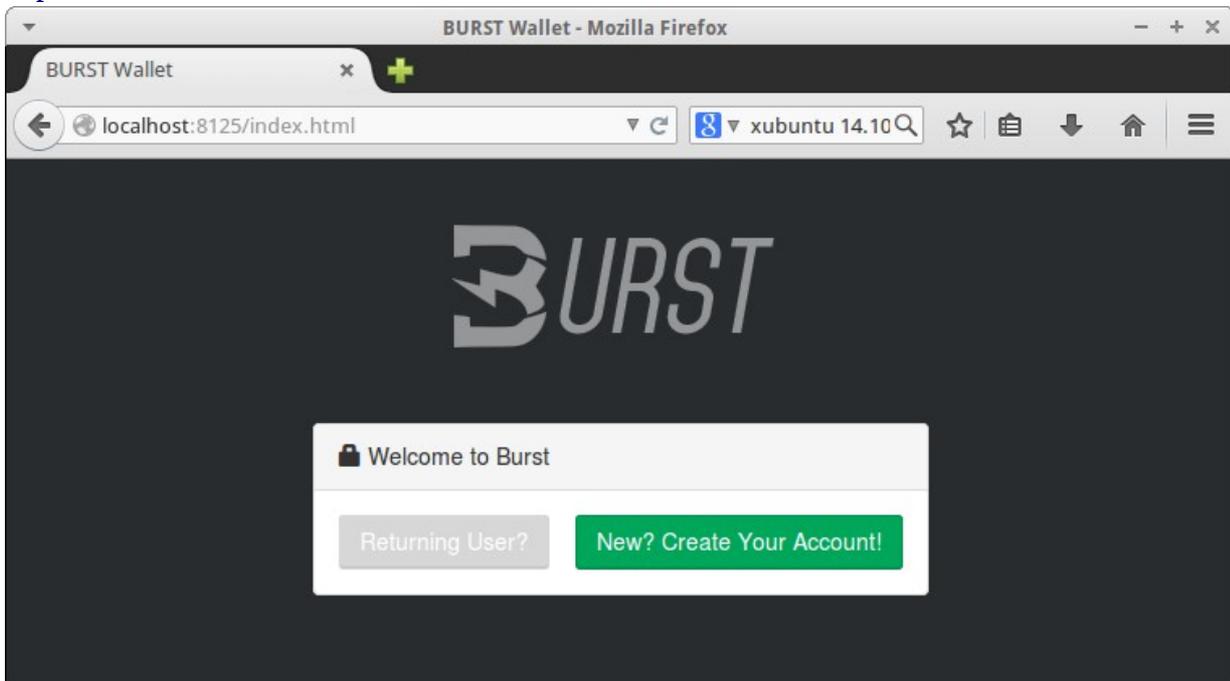
Burst wallet version 1.2.3

<https://web.burst-team.us:449/index.php/wallets/>

We decompressed double click on the downloaded file, and will appear us a graphic assistant decompression. In the "Extract" section we indicate the folder

destination and click on the button "Extract". We click on the script "run.sh" housed in the generated folder called **burst_1.2.3**, we wait a few seconds or minutes, depending on power computer. done above, we open a web browser like Firefox or Chromium with the following address:

<http://localhost:8125/index.html>



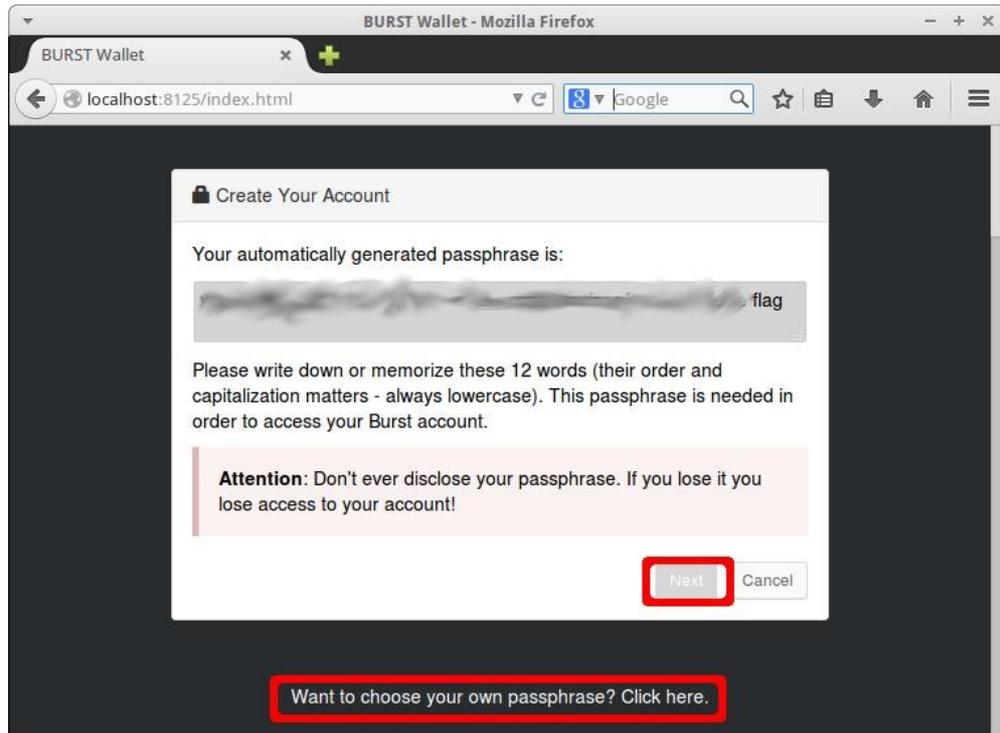
If all went well, you will see the following website, **so it works!**

2.2. Create account Burst, activation and safety

On the Welcome page, we give "New? Create your Account! "Which It generates a long password (**passphrase**) that contains a long sentence random words in English, **which must write down on paper or copied to another side is safe.**

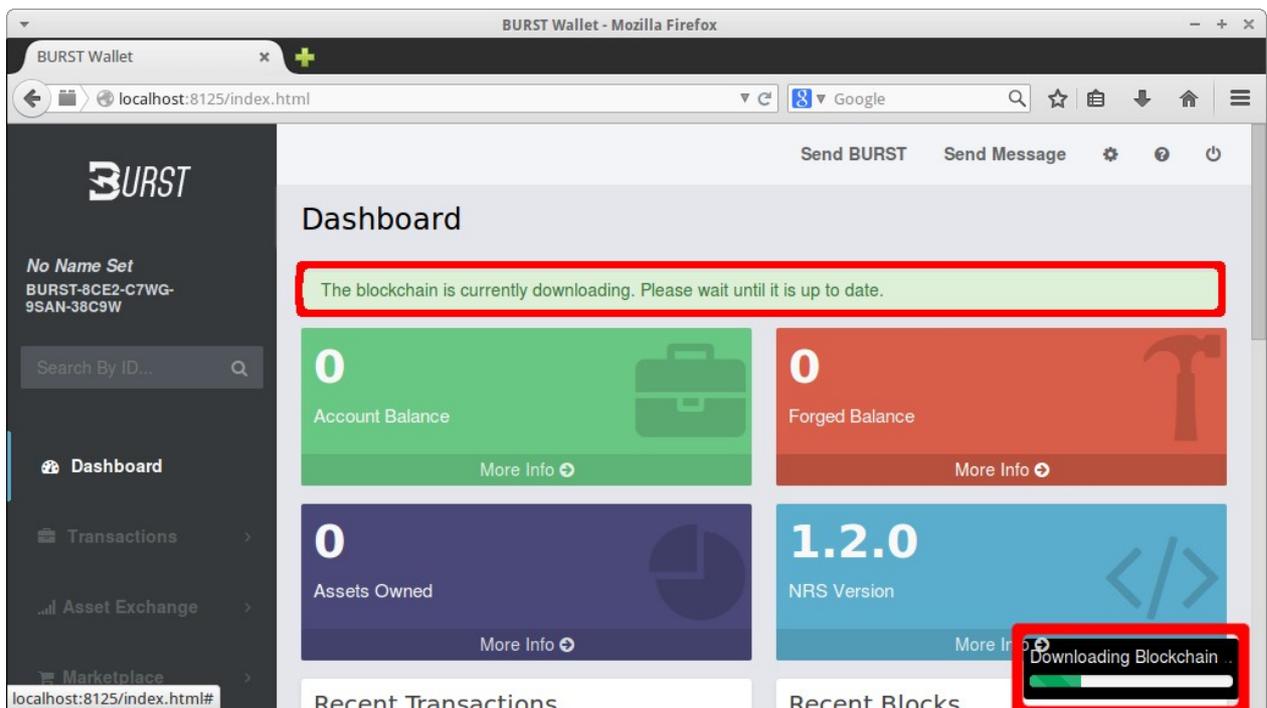
!!! VERY Important note: Passwords are strongly recommended extremely long, with punctuation, capitalization and lowercase letters, and numbers, to prevent brute force password.

If you prefer a default password click on "Next" or if you want a password own, press down on "Want to choose your own passphrase? Click here. "



!!! **VERY Important note:** You will be asked to enter the passphrase generated created by you to log in Burst so, **Save your password in a safe place !**

After registering your passphrase and log in , you will enter into your purse, and now must wait a while (to me takes me hours) until the discharge **blockchain** such and as you indicated, **good time to take advantage and do other things!**

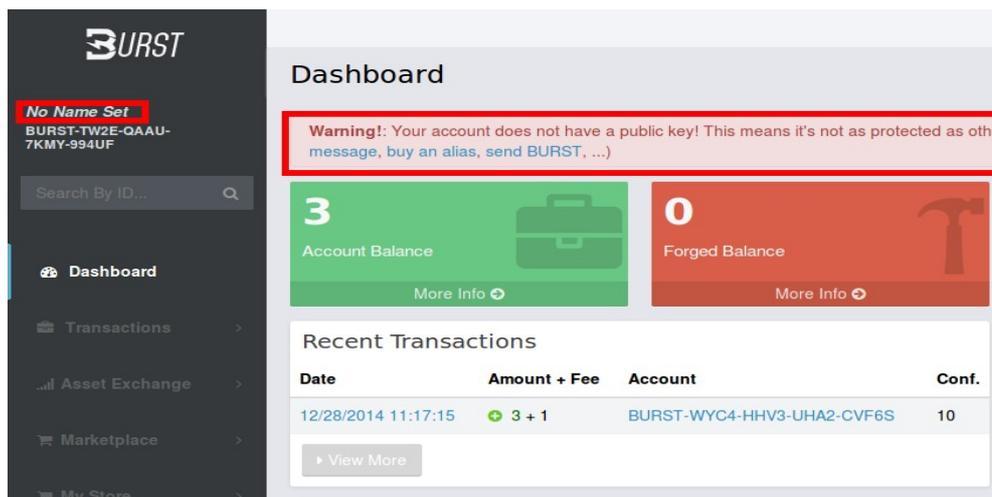


After waiting, a welcome message will appear like this:

IMPORTANT STEP: You will need to send you a small amount of burst your Purse address, which will be as one that is underlined above, to activate your account, you can use it this faucet, which will give generously a few coins to start:

<http://faucet.burst-team.us>

IMPORTANT STEP: Once the transaction is completed and confirmed, you warn you that your account will not be secure until you yourself make a transaction or change any account information, such as your name. Only costs a Burst and is the simplest. Click on "No name set":



Fill the one form which appears with the name you want description, write your passphrase and "Update Account Info". After a while, change information is confirmed and disappear warning message. **Done, You have made your Burstcoin Wallet fully functional!**

The screenshot shows a "Set Account Info" dialog box with the following fields and buttons:

- Name:** A text input field containing "Your Name".
- Description:** A large text area for entering a description.
- Passphrase:** A text input field for entering a passphrase.
- Fee:** A label indicating "Fee: 1 BURST - advanced".
- Buttons:** "Cancel" and "Update Account Info".

3. Minar in Burst

3.1. Summary mined in Burst

It consists of three phases:

1. Creating plots
2. Optimization of plots (Optional but highly recommended.)
3. Mined

To mine in BURST need large storage capacity, we are talking about several **terabytes**. The more ability you have, the greater will be the chance that in your "**plots**" the hash containing the next block is. For the mining plots can read faster, optimizing expanding "**Stagger**". In **GNU / Linux**, with the **ext4 file system**, **it is not necessary defragment your hard drive**, therefore I recommend you format your hard drives you will use for mining in that format. A **plot** consists of a succession of **nonces**, this in turn is formed **256 Kb** data.

After these phases, you just have to open your **mining**, and read consecutively plots that you have generated. For every new block detected in the network, **the mining read again the plots**, looking for the hash that contains the following block.

It is advisable to fill the hard disk or 200Gb 100Gb plots, for example in a 2 TB disk, create 10 plots of 200Gb, one by one, and so you can go sapping when go slowly running out . The process of creating plots and optimization is quite slow, but we only have to do once.

3.2. Creating plots

There are two ways to create the necessary plots by GPU, or by CPU:

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GPU:

-

It is much faster than the CPU, from decent graphics.

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If you have more than one graphics card, you can create plots on hard drives simultaneously, increasing the speed of creation of plots.

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CPU:

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Slower than GPU unless you have a great processor, type Xeon You can use CPU and GPU both to leverage resources and end before the the creation phase plots, designating for example the CPU to a hard disk, and GPU to a different hard drive, getting process two hard drives at once. To mine is not necessary to use SSD, no higher gain is achieved, as we need CAPACITY not SPEED, except that the SSD are very expensive, bucking.

!!! If you have an SSD with some capacity, you can create the plots much faster there, and then move them to larger hard drive you'll use to mining capacity. Come up with programs that need, select the version of your architecture, normally today 's computers are 64 - bit, if you have any

questions, find the name of your processor by Google. Select the download according to our architecture, 64 - bit or 32 - bit: Plots by GPU maker, created by Cryo:

[GPU Plot Generator 64 - bit 4.0.3](#) - RECOMMENDED

[4.0.3 Generator Plot GPU 32bit](#)

Plots by CPU Creator, created by Markus Tervooren, optimized Niksa Franceschi, **also is optimizer and mining:**

[MDCCT Plotter / Optimizer / Miner 64bit](#)

INFO: **64 - bit** compilation **MDCCT** uploaded by me, if the version is necessary 32 bits, can try to compile from source, [here](#) . Plot Generator 4.0.3 GPU, we have to open the console and go to the folder where you unzipped the program and run it with the following arguments:

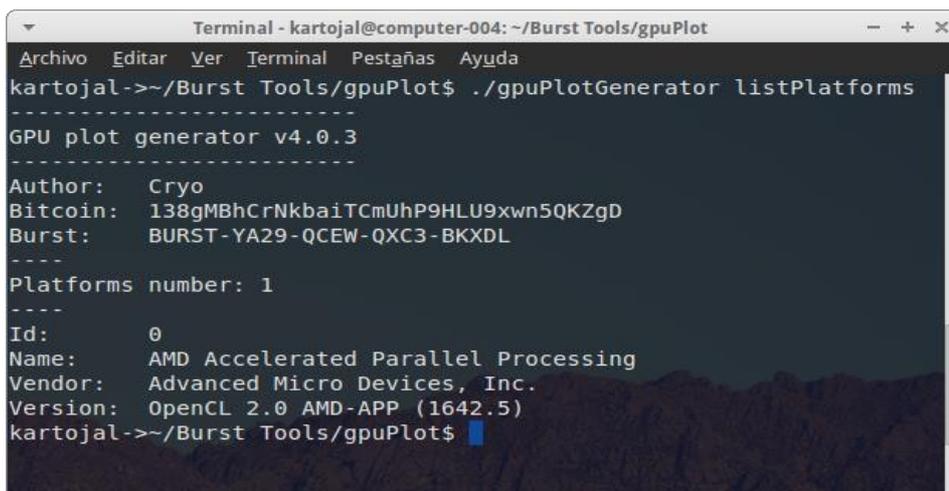
First we introduce the listPlatforms parameter:

```
./gpuPlotgenerator listPlatforms
```

We will output like the following, in my case is AMD with id 0:

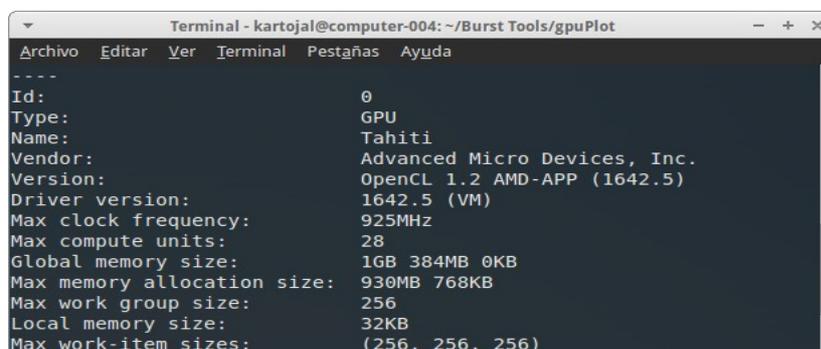
Second, we introduce as an argument the following, where "ID" poneis ID platform of your graphics card (usually 0):

```
./gpuPlotGenerator listDevices 0
```



```
Terminal - kartojal@computer-004: ~/Burst Tools/gpuPlot
Archivo Editar Ver Terminal Pestañas Ayuda
kartojal->~/Burst Tools/gpuPlot$ ./gpuPlotGenerator listPlatforms
-----
GPU plot generator v4.0.3
-----
Author: Cryo
Bitcoin: 138gMBhCrNkbaiTCmUhP9HLU9xwn5QKZgD
Burst: BURST-YA29-QCEW-QXC3-BKXDL
----
Platforms number: 1
----
Id: 0
Name: AMD Accelerated Parallel Processing
Vendor: Advanced Micro Devices, Inc.
Version: OpenCL 2.0 AMD-APP (1642.5)
kartojal->~/Burst Tools/gpuPlot$
```

In my case, I detect a GPU Tahiti (AMD HD 7950) and tells me the My device ID is 0:



```
Terminal - kartojal@computer-004: ~/Burst Tools/gpuPlot
Archivo Editar Ver Terminal Pestañas Ayuda
-----
Id: 0
Type: GPU
Name: Tahiti
Vendor: Advanced Micro Devices, Inc.
Version: OpenCL 1.2 AMD-APP (1642.5)
Driver version: 1642.5 (VM)
Max clock frequency: 925MHz
Max compute units: 28
Global memory size: 1GB 384MB 0KB
Max memory allocation size: 930MB 768KB
Max work group size: 256
Local memory size: 32KB
Max work-item sizes: (256, 256, 256)
-----
```

Therefore, **with the data collected** in the directory gpuPlotGenerator, we will open file "**devices.txt**" with any text editor. If you have a text editor, Gedit download with this command in

the terminal:

sudo apt-get update

sudo apt-get install gedit

The file "devices.txt" contains settings of devices for use in mining, in the following format:

[ID_PLAT] [ID_DIS] [THREADS] [GROUP_SIZE] [HASHES]

For example, for a 7950 or a 270X, write only the following in the file, Example:

0 0 6144 256 8192

If you need to set more graphics cards, we would add more lines with the same format, for more information on **your card**, ask for the post of bitcointalk officer, or post GpuPlotGenerator, here:

<https://burstforum.com/index.php?threads/gpu-plot-generator.45/>

After setting the **devices.txt file**, we can start with the creation of **plots**. The arguments for gpuPlotGenerator are:

`./gpuPlotGenerator generate buffer "/ direccion_de_salida / nombre_del_plot"`

`gpuPlotGenerator generate buffer "/ direccion_de_salida / filename".`

The third argument is the address and name of the file plots, which have to be a specific format, if not, the miner can not read it.

Format:

[Tu_Id_Cuenta_Numérica] _ [ComienzoNonces] _ [NumeroDeNonces] _ [Stagger]

What is everything? I'll explain:

-

Numerical Account ID: This is your address your purse in numerical format, achieved by opening your purse, clicking on the left side in your address from Burst Y in "Copy Numeric Account ID "

The screenshot shows the BURST wallet interface. On the left is a dark sidebar with the BURST logo and navigation options: Dashboard, Transactions, Asset Exchange, and Marketplace. The main area is titled 'Dashboard' and features a green card displaying '31 Account Balance' with a 'More Info' link. Below this is a 'Recent Transactions' table with columns for Date, Amount + Fee, and A.

Date	Amount + Fee	A
12/28/2014 11:17:15	3 + 1	B
12/26/2014 22:50:14	0 + 1	B
12/26/2014 11:59:37	0 + 1	B

-

Beginning of nonces: Le indicas to start writing GpuPlotter where the plot, **the first time will be in**

the nonce 0, but from the second you will have to change that value by the following formula:

Nonces beginning of the previous plot + nonces previous plot + a nonce

If you do not, the plots will be stepped on each other, and will not generate the plot correctly, if you is not clear, wait till you see the examples before you start.

-

Number of nonces: The total amount of nonces that will have your plot, remember a nonce is formed by 256K. For a plot of about 200 Gb are 819200 nonces necessary, formula:

Plot size in Kb (Kilobytes) / 256

Therefore, for plot 100Gb, would 104857600 Kb, 256 Kb divided into

It is what contains every nonce:

$104857600/256 = 409600$ **nonces**

-

Stagger: The number of nonces that the mining read per cycle, according

I have understood, against stagger higher the better. Although the gpuPlotter

one stagger of **8192** is recommended if you have 8GB of RAM or more, if you have less than 8GB uses the value **4096**.

Theoretical example:

I have a single hard disk **1000GB** (1TB), as size of the plots do? The It is recommended not more than 200Gb anyway. Therefore, we could create **5 200GB plots** each in a 1000GB hard drive.

First we pass the Gb Kb, which would **209715200 Kbytes** thus **dividing** it

256 Kbytes having a nonce, we get **the size** of each **nonces plot**.

$209715200/256 = 819200$ **nonces**

As is the first plot, will begin in the **nonce 0** and M have **8Gb of RA** therefore

I will use **8192 to stagger**. My ID number is **12398897390212249922**.

My future plots will be stored in /mnt / disk1 / plots (Create the directory before),

therefore in **the console I write the following** in the folder **gpuPlotGenerator**:

```
./gpuPlotGenerator generate buffer /mnt / disk1 / plots / 12398897390212249922_0_819200_8192  
"
```

When this process is complete, start the second plot. The only detail that you have to change is the starting number of nonces, which happen to be from 0 to 819,201, using the above formula:

Nonce beginning of the previous plot + nonces previous plot + a nonce

Therefore it is:

0 + 819200 + 1 = 819201 nonce the beginning of the second plot

All other values remain intact, therefore, write in the terminal:

```
./gpuPlotGenerator generate buffer  
"/ Direction / 12398897390212249922_ 819,201 _819200_8192"
```

The third plot, will be formed in the same way, changing only "

beginning of nonce ", which in this case is:

819201 + 819200 + 1 = 1638402 nonce the beginning of the third plot

Since other values remain intact, we introduce into the terminal:

```
./gpuPlotGenerator generate buffer "/ address / 12398897390212249922_ 1,638,402  
_819200_8192"
```

And so the following plots to fill 1000GB hard drive, **it is recommended leave some space**. If you had another hard drive, continues with the same formula the start of nonce.

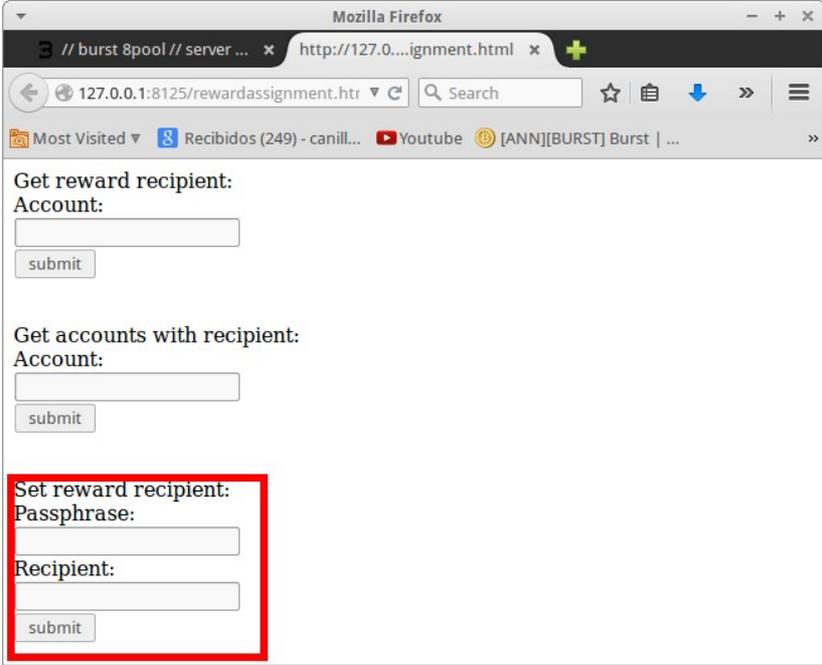
3.3 Mine in Pools

To undermine, use the **burst-miner-r4 Uray**, you can download version 64 bits from [here](#) . First we need to define in **your wallet Pool numerical ID** that let's connect, I'll explain it as an example for a European pool in Germany, its web address is <http://burst.poolto.be> , its port 8124, and its numerical ID. It is **2586531156840260529** , so:

1. We must first **begin our purse Burst 1.2.3** therefore we go to our **wallet** folder and double click on "**run.sh**" or run it from the **terminal**.
2. Once already started purse, open the following page:
<http://127.0.0.1:8125/rewardassignment.html>
3. At the end of the resulting page, see "Set reward recipient"

In **Passphrase**, enter your **Passphrase**, the same with which you log on Burst your wallet.

In **Recipient**, you put the numeric ID in the Pool you would want conectaros, I'll use the example of **burst.poolto.be** is **2586531156840260529**.



The screenshot shows a Mozilla Firefox browser window with the URL `http://127.0.0.1:8125/rewardassignment.html`. The page contains three sections for setting reward recipients. The first section is 'Get reward recipient: Account:' with an input field and a 'submit' button. The second section is 'Get accounts with recipient: Account:' with an input field and a 'submit' button. The third section, 'Set reward recipient:', is highlighted with a red box and contains 'Passphrase:' and 'Recipient:' input fields, each followed by a 'submit' button.

Click **Submit**, and if the data is **correct**, a long text will appear with hashes. If it is **wrong**, will give a resulting very short text.

IMPORTANTE:

We hope quietly within **4 blocks**, 10 minutes, so that our union confirming the pool **before start mining**.

After this step, you are going to the directory you **burst-miner-r4 Uray** and editais the file "mining.conf" with your favorite text editor, for the case of the pool **burst.poolto.be**, it would be as follows:

```
{
"poolUrl" "burst.poolto.be:8124"
"submissionMaxDelay": 30,
"submissionMaxRetry": 3,
"SocketTimeout": 60,
"maxBufferSizeMB": 512,
"plots": [
"/ direction / of / the / folder / plots"
]
}
```

Now we just start the **burst-miner-r4** from the **terminal** to start mining, as follows:

```
./burstminer
```

And presto, you should start **reading your plots** for each new block is detected on the network, you'll see that not only consume resources, since it only reads the plots once every time it detects a new block. **Good luck with the mining!**

3.5. Single-Mining

It is as simple as mine in a pool, but telling your "reward recipient" your own address:

1. We begin our purse Burst.
2. We're going to <http://127.0.0.1:8125/rewardassignment.html>
3. At the very bottom "**Set recipient reward**", we wrote our personal password in "**Passphrase**" and "**Recipient**" our Burst **own address**, and click on **Submit**.
4. We expect four blocks, about 10-15 minutes.
5. In the **configuration file** of your Uray miner in "**poolUrl**" you replace the old address by "**127.0.0.1:8125**".
6. Start your miner, and go! **Remember** that you need to **open the client Purse** to undermine in **Solo mode**.

3.6. Tips

You can use your PC to do other things while your plots are not in the main hard disk is your OS apart, the PoC mining consumes **very little CPU**, and the mining of Uray only consumes **512 MB of RAM**, this you can increase in your configuration file in "**MaxBufferSizeMB**" if your plots are too big.

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Although the **SSD** is faster, it **is not necessary to undermine such speed**, since the important thing is to have larger size of plots.

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You can use an **SSD more than 200Gb** and a good **GPU** to create plots **doubling the speed**, served in environments where you need to deploy a serious amount of plots. Once finished, the plot generated copies to disk hard miner.

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No need to defragment in GNU / Linux thanks to the file **ext4**, therefore, I would recommend that **all hard drives formatearas that you will use for mining** that file system using **Gparted**.

-

To generate higher profits, you can allocate a portion of your miners a pool with many workers to have a steady income and small while undermining your other miners into smaller pools, to have from time then greater rewards.

*If you found this document **useful** and want buy me a beer, this is the*

*Personal address my account **Burst:** [BURST-WYC4-HHV3-UHA2-CVF6S](#)*