GUNCOIN (GUN) USERS GUIDE

30 December 2017

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Preface

We wish to thank you up front for taking the time to learn more about Guncoin (GUN) and how it can benefit you and your business. As you well-know, this is an ever-changing world that we live in and virtual currencies are now a reality and generally accepted worldwide. Guncoin (GUN) is just that - a well-established type of crypto currency that people and businesses can exchange for goods and services.

Please keep in mind, that this Users Guide is primarily directed to the end user of our crypto currency who may have had very little exposure to crypto currencies and know very little about what they are or how to use them. While the text of this book may be beneath the typical crypto currency enthusiast, it should be very useful to the crypto currency novice or small business owner looking for a new payment system for their business.

For any cryptocurrency owner or developer, general acceptance by the cryptocurrency community is necessary and much time and money has been spent on that. But acceptance by potential users outside the cryptocurrency community is very often overlooked or just ignored. That is the much larger community that this Users Guide is directed to and we hope they find it interesting, educational and ultimately profitable for them. We thank you again for considering Gun coin!

Sincerely,

The GUN Team

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1 INTRODUCTION TO CRYPTO CURRENCIES

1.1 What are Crypto Currencies?

Basically, a crypto currency is a digital currency relying on the principals of cryptography. Wikipedia describes it very well;

> "A crypto currency (such as Bitcoin, Litecoin, Ethereum, Monero, Feathercoin, etc.) is a **peer-to-peer**, **decentralized**, **digital currency** whose implementation relies on the **principles of cryptography** to validate the transactions and generation of the currency itself."

To many who are reading this, that definition still may not answer the question to their satisfaction. So let's break that definition down to clarify it even more.

Peer-to-Peer - "Peer-to-peer" means that each node on the network is able to connect to any other node and act as both a server and a client that shares updates to the blockchain (the public ledger) without the need for a central server anywhere else on the network.

Decentralized - "Decentralized" refers to the peer-to-peer architecture of the network. Since each node can act as both a server and a client, there is no need for a central server or centralized authority, thus effectively solving and eliminating the double spending problem.

Digital Currency - "Digital currency", among its various names, is electronic money that acts as an alternative currency in the digital world (though offline adoption is also increasing too). Currently, alternative digital currencies are not produced by government-backed central banks, nor necessarily backed by a national currency.

Principles of Cryptography - "Cryptography" relies on public and private keys for security. With crypto currencies, every transaction has to be signed by a private key for security. Due to the strong security and well understood principles of cryptography, counterfeiting digital currencies is virtually impossible.

1.2 Types of Crypto Currencies

We are going to avoid getting very technical in this section. There is more than enough written on the types of available coins and their ever-changing and evolving technical specifications to fill more pages than we have to share here. We will

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focus on the basic features and differences of the two most popular types and let the coin developers and techies fill in the details if you need more info on these and the others. When in doubt, "Google"!

Simply put, when it comes to crypto currencies, there is Bitcoin and then there is everything else. That is they it has been since crypto currencies came in to being and has not changed years later. That may sound like why would one bother to use anything else but Bitcoin - which could not be farther from the truth.

In reality, each crypto currency developer made a decision as to which type of algorithm they wished to use to create their coins before they were created. There are primarily two different algorithms types that are used for the majority of coins that are in existence today - SHA-256 and Scrypt. Most other algorithms are derived from one of these two. Neither are easy to mine any more, becoming increasingly difficult the more coins that have been mined. So what follows in this section is a very brief explanation of how the two algorithms work, so you can understand the mining process a little better.

1.2.1   SHA-256

The SHA-256 algorithm was the first algorithm used with a crypto currency, when Bitcoin was created using it. SHA-2, which the SHA-256 falls under, was created by the National Security Agency (NSA) and was published in 2001. SHA stands for Secure Hash Algorithm. This makes a lot of sense for crypto currencies, since you need to solve the hash algorithms to release the coins. The more coins that are mined, the harder the hash algorithms will become, since it was originally used as a security system tool for companies and governments.

1.2.2   Scrypt

The Scrypt algorithm that crypto currencies use is a "proof-of-work" (POW) algorithm, which is basically using the same philosophy as the Scrypt algorithm, but is targeted against releasing blocks rather than block an attack. Scrypt is a key derivation function created to require large amounts of memory on a computer to perform large scale custom hardware attacks. It was released in 2012 and was quickly used by crypto currencies for mining coins as an alternate method to the SHA-256 algorithm that Bitcoin used. In general, Scrypt is seen as a better algorithm for miners, as you can buy equipment that will significantly improve your

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performance compared to the SHA-256 where you cannot buy equipment to make mining better - just more equipment (less economical).

1.2.3   Bitcoin versus Altcoins

For the most part, there are not a lot of significant differences between Bitcoin and the many alternate coins (Altcoins). One of the primary benefits of a thriving Altcoin economy is that they often represent the testing of a theory that may eventually benefit Bitcoin itself. Many Altcoins use Scrypt or a Scrypt derivative as their mining algorithm instead of SHA256. If SHA256 is ever discovered to have been compromised at some time in the future (possible with rapid technological advancements), having a drop-in replacement for that tainted system already available would be a major boon and prevent major market crashes everywhere.

While faster confirmation times are typically the most talked about Altcoin benefit, the most often overlooked part of that statement is that transaction finality is a result of computational cost, not of time. This means that if an Altcoin has one-tenth (1/10) the confirmation time and an equal amount of hash power relative to Bitcoin, that it will take ten (10) times as many confirmations to reach the same level of transaction security. In reality, faster confirmations are a psychological benefit, not a technical one.

The best way to think about it is to compare the needs for the US Dollar, the Yuan, the Euro, or the Pound - all have different and dedicated users and there is always the ability to exchange one for the other. Likewise on and even lower level, why do you get tokens and game tickets at fairs and event centers that are converted to cash or prizes? The Altcoins will always exist because they need to as their individual niche markets will demand it. This is where Guncoin (GUN) fits into the big picture in our niche business and marketing area.

1.3 How is a Crypto Currency Created?

For most users of Guncoin or any crypto currency, it is not really necessary to understand how the creation or mining process itself works in detail. But it is fundamentally important to understand that there is a mining process to create Guncoin, or most other crypto currencies. Unlike typical currencies where governments and banks can simply choose to print unlimited amounts whenever more money is needed, a crypto currency has to be mined by users (known as

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miners) using a mining program that solves some very sophisticated algorithms to release blocks of coins that can go into circulation when they end up in users hands.

This is the interesting part that makes crypto currencies unique. Absolutely no one person can simply press a button and get unlimited coins - just not possible. Everybody can compete equitably when mining the coins of their choice by buying the same equipment as everyone else. All the different crypto currencies use different types of algorithms for the blocks to be released. Typically, it is not something that you could easily do on a standard PC or laptop as it usually requires specific equipment to mine most of the coins available today. Additionally, you can expect a higher electricity bill compared to the profits you will be able to make from it. It is also worth noting that the more coins that have been mined from a crypto currency, the more difficult it gets to release new blocks and acquire new coins. The algorithms are designed this way to ensure that all the coins would not be mined instantly and leave room for the crypto currency to stabilize and not be created and dumped at the beginning - thus not having any significant value for anyone besides the miners. This cannot happen with a technically well-designed crypto currency as most are today.

Guncoin, like every crypto currency, has a limited amount of coins that can be mined and once they have all been mined, there will be no more of them created as it is virtually impossible - the mine is closed! This means that when all 500 million Guncoins have been mined, they will be the only coins in circulation forever and no further Guncoins will be added to the system. The same applies to all other crypto currencies. This is one reason that many people today see crypto currencies as a good alternative to the standard currencies we have today that are based on nothing more than goodwill between countries to ensure the value of the currency doesn't fluctuate.

1.4 What is a Blockchain?

For starters, a blockchain is NOT a bank. A blockchain is a continuously growing list of electronic records, called blocks, which are linked and secured using cryptography. The blockchain is like a huge, global, decentralized spreadsheet. It keeps track of who sent how many coins to whom, and what the balance of every account is.

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It is stored and maintained by thousands of people (miners) across the globe, who have computers - often with extra hardware. The blocks in the blockchain are made up of all the individual transactions sent from your GUN wallet, to and from exchanges, pools, vendors, and everywhere else.

When you see your balance on in your GUN wallet or view your transactions on the blockchain, you are seeing data on the blockchain, NOT in our personal systems. Just to clarify again – the GUN blockchain is NOT a bank – it is basically an encrypted list of addresses and transactions that grows each day. If you want to know more about what blockchains are – start here:

https://en.wikipedia.org/wiki/Blockchain

1.5 Crypto Currencies Pros and Cons

There are pros and cons for using any new currency system. Fortunately for crypto currencies, the list of advantages is growing, while the disadvantages are being slowly overcome.

1.5.1   Advantages of Crypto Currencies

Easy and Fast Payment: Without using your credit card or any requirement to sign any documents, you just need to know the wallet address of the person or organization to whom you want to transfer money. Payment transfer processing is typically very fast and can occur within a matter of seconds.

Secure: The use of military grade cryptography ensures that transactions remain secure and are virtually hack-proof. No person except the owner of a wallet can make transfers or payments from a wallet.

Low or No Fees: Banks and payment processing companies charge fees to conduct payment and fund transfers. But with crypto currencies, these fees can be eliminated except in rare circumstances.

1.5.2   Disadvantages of Crypto Currencies

Irreversible Payment: There is no central point in payment processing, so if you transfer to someone by mistake and want to get a refund for services, there is no option to dispute your claim. The only way to get your money back is to ask the person to refund the payment. If he refuses, the funds are gone. (Depending on your point of view, this could be an advantage)

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Not Widely Accepted Yet: At this time, there are a growing number of companies, websites and businesses that accept Bitcoin and many are now adding other crypto currencies as well. As the crypto currency environment continues to expand and more people become aware of it, the list will continue to grow. This issue gets less and less important each day!

Corrupted or Lost Wallet: If you stored your digital currencies on your system or mobile, did not back it up properly and lose it, then there is no way to get your coins back - there is no one to file a claim with. Even the currency developer or owner cannot get their own back if that were to happen to him or her! Again, regular wallet backups (described later in this text) easily solve this problem.

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2 GUNCOIN (GUN)

2.1 Description

Guncoin (GUN) is an open source peer-to-peer Scrypt based crypto currency that began from the love of firearms, computing and investing.   That, along with extensive experience buying and selling firearms via online auctions, such as GunBroker.com, prompted the GUN Team to come up with a better, faster cheaper payment solution that could be easily adopted for all to use for the firearm industry and all the accessories and services associated with that.

There are so many crypto currencies out there that come and go so quickly – many without focus or the technical or customer support structure in place for the long term for users and online retailers needing a stable coin. Guncoin is not just any crypto currency like those – it is an activity-specific crypto currency that is focused on providing a safe and secure financial transaction alternative primarily for the firearms industry.   It is a stable and well established crypto currency, having been created in mid-2014.

Speaking from experience, when buying and selling firearms related goods, it is extremely hard to find a payment processor. Unfortunately, the choices are very limited. PayPal does not accept transactions for firearms in $USD. BitPay does not accept transactions for firearms in Bitcoin (BTC). Most traditional credit card processors will not either. While some 3rd party processors might, they come with an incredibly high fee (usually 25% or more). Legitimate businesses are being forced to close the doors because nobody will process their payments. We think that Guncoin (GUN) will change all that because:

- It is decentralized, so no single company controls Guncoin.
- Transactions post instantly and fully confirmed in minutes.
- There are no fees.

Guncoin was originally developed utilizing the Litecoin crypto currency model and therefore is mined with "Scrypt" style GPU mining. This allows almost anybody to be able to mine Guncoin. Those that are already set up for mining. will have no problem mining Guncoin with their current equipment.

Guncoin is just what is needed – Download your wallet and you are ready to go, with no fees or expenses and many places to easily liquidate your Guncoin back to your

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pocket book. It really is that easy! The crypto currency market is expanding each day and businesses like yours can really benefit from a simple payment system like Guncoin. We hope after reading this section, you will see how easy it is to start using Guncoin for your personal or business use.

2.2 Why the Neoscrypt Algorithm?

In late 2014, Team Guncoin decided to upgrade Guncoin from the "Scrypt" algorithm to the "Neoscrypt" algorithm. While this was not an easy choice as there were so many options out there then, it became clear to us and many others in the crypto community that Neoscrypt would most likely be the next generation Proof-of-Work (PoW) algorithm designed to replace Scrypt.

Neoscrypt consumes a lot less memory than Scrypt, but yet is more memory intensive and stronger cryptographically. The Neoscrypt algorithm combines the power of Salsa20/20, ChaCha20/20, BLAKE2s and FastKDF into a very secure ASIC-resistant solution. It is definitely not some kind of Scrypt-Jane or Scrypt-N or whatever – It is a VERY solid, well-designed and well thought-out algorithm which we felt represented the next generation of coins that could include Guncoin (GUN). While Scrypt continued to be used sucessfully by many other coins, we felt for better security of Guncoin and to protect our miners that Neoscrypt offered the best of everything moving forward. Additionally, we still think it provides the exact opportunities for the small-time business owner or newbie that we were looking for back when we switched over to it.

If you remember, Scrypt was made very popular by Litecoin. The hashing technologies used by the Scrypt algorithm started with a PBKDF2-HMAC-SHA256 key derivation, and ended with 8 rounds of the Salsa20 cipher as its mixing engine. However, it was shown that only having 8 rounds of Salsa20 could be broken through differential crypto analysis – not as secure as we all had thought.

So the Neoscrypt creator designed NeoScrypt to be compatible with Scrypt, but to have several functional differences which provided significant advantages over Scrypt. So he wrote a custom key derivation algorithm which is much stronger and faster than Scrypt. NeoScrypt's mixing engine employs 20 rounds of Salsa20, followed by 20 rounds of ChaCha20. Not only is this combination faster and more secure than standard Scrypt, but it only takes 32KB to 64KB of memory, compared to the 128KB of memory used by Scrypt.

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We are still thoroughly convinced that NeoScrypt-based currencies are set to become the best option for those who have a low to medium budget for mining equipment and therefore cannot afford ASIC rigs. With the adoption of NeoScrypt by Guncoin several years ago, we ensured that our loyal miners and newbies would always be able to viably mine Guncoin by never having to compete against miners who have bought the next generation of expensive Scrypt ASICs. With these Scrypt ASICs, the smaller hobbyist miner, or curious firearm enthusiast, would have no place left to mine anything on Scrypt-based coins, just like GPUs have no place left on Bitcoin any more. Only those with deep pockets can mine Bitcoin and this will end up being just a few large companies or well-funded individuals.

In our view, this does not make a good case for decentralization and not where GUN needed to go. Like we have stated many times before, we have no interest in huge ASIC farms mining GUN – that would eliminate the newbies trying to mine for the first time and put our coins and market price in the hands of a select few – not what we want. We feel strongly that with this change, we have protected our current and future miners, while setting the stage for Guncoins' next phase of introducing GUN to non-crypto users who can benefit from our coins usage in their businesses and not just trade or dump it on exchanges for fun and profit.

2.3 Specifications

While the specifications for Guncoin are well documented and functionally stable today, the Guncoin Team is always looking for ways to improve the coin and keep it viable and competitive moving into the future. Coin upgrades and enhancements can be implemented with a simple FREE software upgrade when they are needed!

- **Name: Guncoin**
- **Symbol: GUN**
- **Address Prefix: "G" (or "H")**
- **Cryptography: Neoscrypt PoW (Proof of Work)**
- **Difficulty Re-Target: DigiShield**
- **P2P Port: 42954**
- **RPC Port: 42953**
- **Maximum Coins: 500,000,000**

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- **Block Time: 2 Min (30 blks/hr x 150 GUN/blk = 4,500 GUN/hr)**
- **Block Rewards: 150 coins (current)**

    100 coins (after block 1,500,000)

    75 coins (after block 2,000,000Difficulty
- **No. of Confirmations -** 6 (for transactions)

2.4 Available Operating Platforms

The Guncoin Team is pleased to provide our users with multiple platforms for transacting business with Guncoin (GUN). There are many operating systems out there for potential users. The Guncoin team has tried to maximize the potential user base for Guncoin and your business by providing ready-made wallets/clients for the following operating platforms:

- **Windows (32bit / 64bit)** - one download from main website
- **Linux (32bit / 64bit) -** one download from main website
- **Apple (MacOS) -** one download from the main website
- **Android -** one download from the main website

So many other coins will only supply a Windows wallet and source code to their users and nothing more. To save our users and retailers time, we will always supply much more.

2.5 Physical Coin Design

Much thought and effort went into the actual physical design of the Guncoin itself. The desire was something that would be easy to recognize and distinguish from the many "cartoon-type" designs that we see today. The bottom line was that the Guncoin Team wanted a coin that looked real enough to actually spend somewhere and made it clear to all who see and read it what Guncoin is all about. We are pleased with the following designs.

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2.6 Logos and Tokens

Like the physical coin design, much though went into the design of a logo for Guncoin and tokens, if and when those would be created.

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2.7 What Makes Guncoin Unique?

There are hundreds of crypto currency coins out there today. How does The Guncoin team differentiate its coin from the others? This is how:

- **Specific Target Market -** Unlike many coins who just create a nice coin and hope it will catch on (which is a great thing if it happens), Guncoin is not waiting for a market to show up. With so many coins out there, that is very unlikely to happen. While anyone or any business is free to use Guncoin for their business, from a marketing perspective, the GUN Team is focusing their marketing and promotion time and money in a narrower area which should be very obvious from our coin name and logo.

- **Technologically Current -** Many coins are launched and for whatever reasons, just sit on their website or forum thread and do very little to keep up with or ahead of new coins that show up every day. By staying technologically stagnant, these other coins lose value for their users and investors. The GUN Team will be continually assessing the available coin technology and will look to upgrade GUN again when they feel it is appropriate and beneficial to GUN users. See our Roadmap in Section 5.0.

- **Equitable Opportunities for All -** Many coins are created and are heavily mined by a select few for many months. Over that time, the reward for their efforts is systematically decreased. This results in less reward for anyone starting to mine that coin at that point - even though they may exert the same or more effort and expense to mine the same coin. Many of these "front loaded" coins are very reputable and highly sought after - even more are not. There is little incentive for miners to mine the coin anymore. The promoters of these coins will sell this as increasing the demand by limiting the supply - a true statement. But in the end, the only ones who have a chance to make any money are those who mined it for many months when the reward was maximized. Guncoin (GUN) is NOT one of those coins. A miner today will get the same reward today for their efforts as they did months ago (150 GUN) and as a miner will get months from now - Equitable for All.

- **Team Dedication -** The Guncoin Team consists of a growing number of paid developers; each an investor of time, effort, and "stock" in Guncoin, coupled with strongly backed community funded bounties for projects and marketing.

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- **Friendly Atmosphere -** The Guncoin community aims to be family friendly and safe. Something that can cater to the general population of Facebook, Twitter and Instagram users of all ages, gender, and race. We believe in Freedom of Speech and in debates with logic over arguments. Everyone is entitled to their opinion and we listen and communicate in a respectful way.

2.8 Important Guncoin (GUN) Internet Links of Interest

Below is a list of important websites for useful Guncoin (GUN) information.

- **Main Website -** http://www.Guncoin.info
- **GUN Wallets -** http://www.Guncoin.info/wallets
- **GUN Roadmap-** http://www.Guncoin.info/roadmap
- **GUN Source Code -** https://github.com/guncoin/guncoin
- **GUN Block Explorer -** https://chainz.cryptoid.info/Guncoin
- **BitcoinTalk -** https://bitcointalk.org/index.php?topic=498671.0
- **CryptoCoinTalk -** https://cryptocointalk.com/topic/10674-guncoin-gun-information/
- **Facebook -** http://www.facebook.com/guncoin
- **Twitter -** http://www.twitter.com/TeamGuncoin
- **Coin Market Cap -** http://www.coinmarketcap.com/currencies/guncoin
- **World Coin Index -** http://www.worldcoinindex/coin/guncoin

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3 GETTING STARTED WITH GUNCOIN (GUN)

Getting started using Guncoin is not really any different than with any other virtual currency. Now that you have seen the basics of crypto currencies, all you need to do is set up your wallet to store your Guncoin.

3.1 Setting Up Your Wallet

The Guncoin team has gone to great efforts to create wallets for many different potential user platforms as previously described in Section 2. You should download the appropriate wallet from our "Wallet" page on Guncoin.info depending on your platform. Since all wallets operate basically the same, to simplify our discussion, we are only going to describe the Windows wallet setup and operation in this section. However, the instructions apply to all of the wallets.

This is a critical step in that, just like a real wallet, all of your money will be here. This is where you will transact your business with Guncoin by sending and receiving GUN. It is important to follow the instructions correctly and backup your wallet on a regular basis.

It is perfectly acceptable to have more than one wallet. However, if you have more than one wallet, <u>each wallet must be a on different computer</u>. Two wallets on the same computer could potentially overwrite or corrupt each other, and cause you a lot of grief in the process, unless you are very careful. For the most part, one wallet, properly backed-up on a regular basis is fine.

3.1.1   Downloading and Launching Wallet/Client Software

a) From the "Wallet" page at Guncoin.info, click on the button for the type of platform that you are using and want to store your GUN in.   This will download a Zip File to your hard drive.

b) Use your favorite utility to unzip it to a folder entitled GUN V1.x (where x = newest wallet version) or whatever.

c) Open the new folder and right click on the **guncoin-qt.exe** file in the folder you just created and create a shortcut for this file. Drag the shortcut to your desktop. You should see a small Guncoin appear as an icon for the file.

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d) Go ahead and click on this new Guncoin icon on your desktop to open the wallet and after about 30-45 seconds, you should see the wallet shown in Figure 3-1 pop up on your screen. Most likely it will not synchronize at this time until you have created and modified your **Guncoin.conf** file.

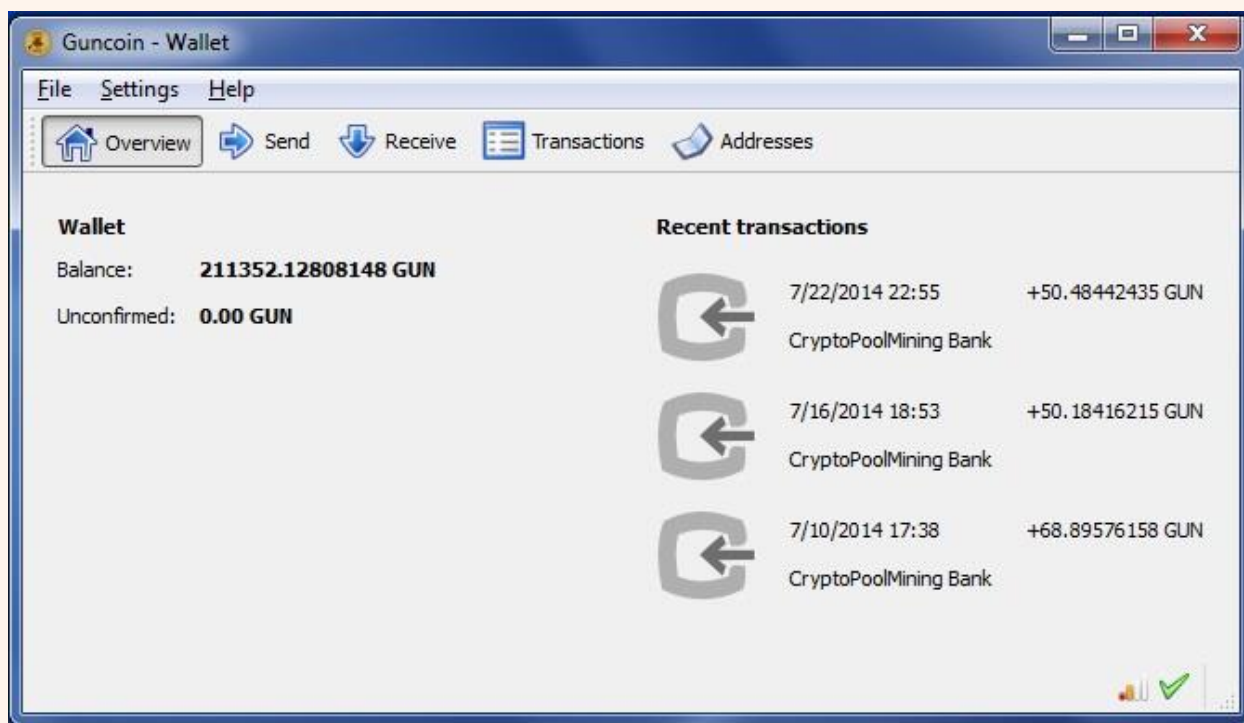e) Go ahead and close your wallet at this time by clicking "File/Exit" on your new wallet.

Figure 3-1: Guncoin Wallet

3.1.2   Creating Your Configuration Files

Of key importance in getting up and going, is having your primary configuration file (Guncoin.conf) created and placed in the proper location. When you opened your wallet for the first time, a new folder called **Guncoin** was created in your **Users/YourUserName/AppData/Roaming** folder. In some cases, the **AppData** folder is a hidden folder and you will most likely have to "unhide" it before proceeding. Once you have located the folder, click on the **Guncoin** folder to open it.

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Here, there will be two important files. The first and most obvious is your **wallet.dat** file. This is your actual wallet data that will contain your number of coins and much more information about your wallet and transactions.

The second is a file which does not exist the first time you open the directory and you have to create it from scratch - this is your **Guncoin.conf** file.

a) Open Notepad (or your favorite text editor) to create a simple configuration file that tells your wallet where and how to connect to the Guncoin network.

b) Create the following text file, substituting your preferred user name and password where applicable.

```
server=1
rpcuser=anyusernamehere
rpcpassword=anypasswordhere
rpcallowip=127.0.0.1
```

c) When complete, save the text file as **Guncoin.conf** into the same folder as your **wallet.dat** file. Your wallet should now be properly configured and ready to be opened again.

3.1.3   Launching and Synchronizing Your Wallet

Now that you have the wallet software configured and the configuration file in place, click on the Guncoin icon on your desktop to open the wallet again. It should open up as before. However, this time you should notice a green bar at the bottom of the wallet window as shown in Figure 3-2 that indicates the time left before the wallet synchronizes or catches up with the current Guncoin blockchain. This could take anywhere from a few minutes to a few hours, depending on how many blocks need to be downloaded and the speed of your Internet connection.

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Figure 3-2: Wallet Synchronization

During this synchronization period, you will notice two icons in the lower right corner of the wallet - Hovering over each icon with your mouse, will give you the status of each one of them.

a) Left icon indicates that you are connected to the Guncoin blockchain and how many connections you have.

b) Right icon should eventually become a green check mark indicating that you are connected and synchronized with the Guncoin blockchain.

If you got through all of these steps successfully, the green bar on the bottom should be gone, you should see the green check mark in the lower right corner and the current number of blocks should now be shown. Your Guncoin wallet is now ready to use!

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3.2 Using Your Guncoin Wallet

3.2.1   Receiving Guncoin

Having new Guncoins appear in your wallet is always a very good thing - the more the better! Whether they are from profits from an exchange or the sale of a product or service, they are always very welcome in your wallet.

a) First, click the "Receive Coin" tab at the top of your wallet and the screen in Figure 3-3 will appear.

b) You should have an address there that is your first GUN wallet address. This is what you would give someone wishing to send you GUN. Feel free to put a label on it and name it what you want.

c) You can create more addresses with different labels by clicking the "New Address" button in the lower left corner. It sometimes is convenient to have multiple addresses to keep your funds separate for different products or services. It is much like having separate accounts in the same wallet.
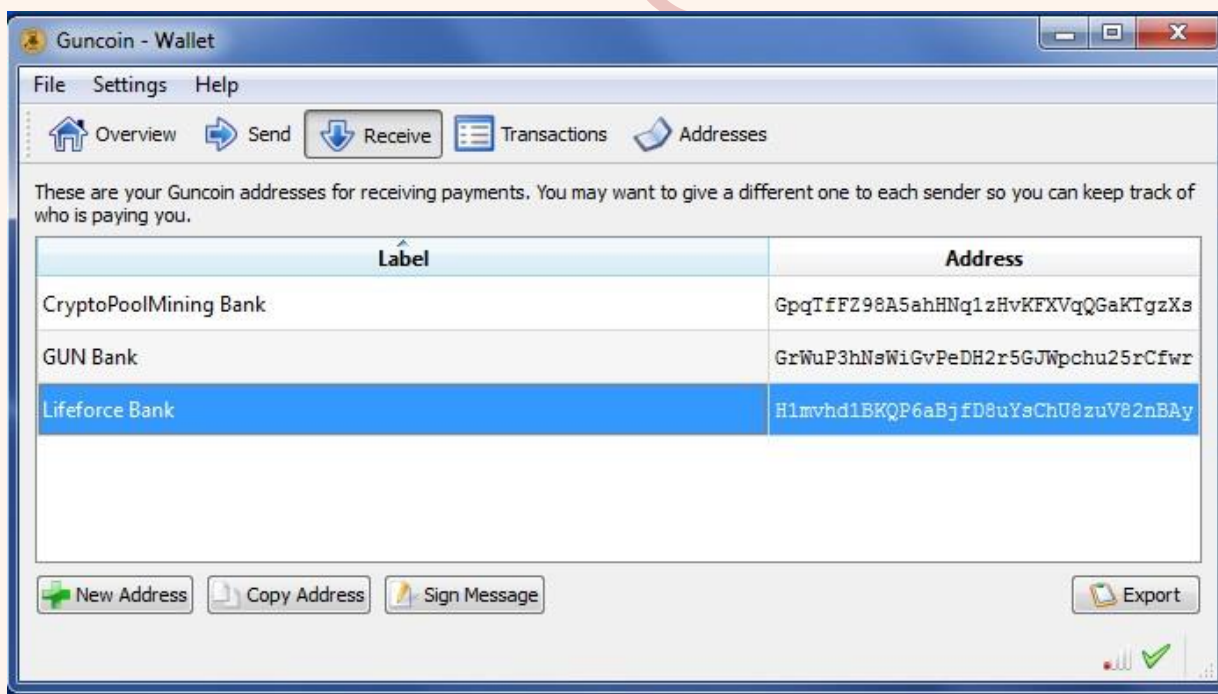

Figure 3-3: Receiving Coins

That is all there is with this screen - just a place to keep your wallet addresses organized.

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3.2.2   Sending Guncoin

Once you have GUN in your wallet, you can easily send it on to someone else.

a) Click on the "Send Coins" tab on your wallet and the "Send Coins" screen will come up with 3 fields for you to complete (2 mandatory fields and one optional field) like that in Figure 3-4.

b) Whoever you are sending the coins to should have previously sent you their Guncoin wallet address which you should cut and paste into the **"Pay To"** field first. Please cut and paste it and do not try and type it in by yourself one character at a time!

c) The **"Label"** field is optional and is used to map an address to a person or business that you may frequently use and will end up in your Address Book. You can click the "Add Recipient" button in the lower left to do this.

d) Enter the amount you wish to send in the **"Amount"** field and verify everything is correct in all fields before clicking "Send" to finish.
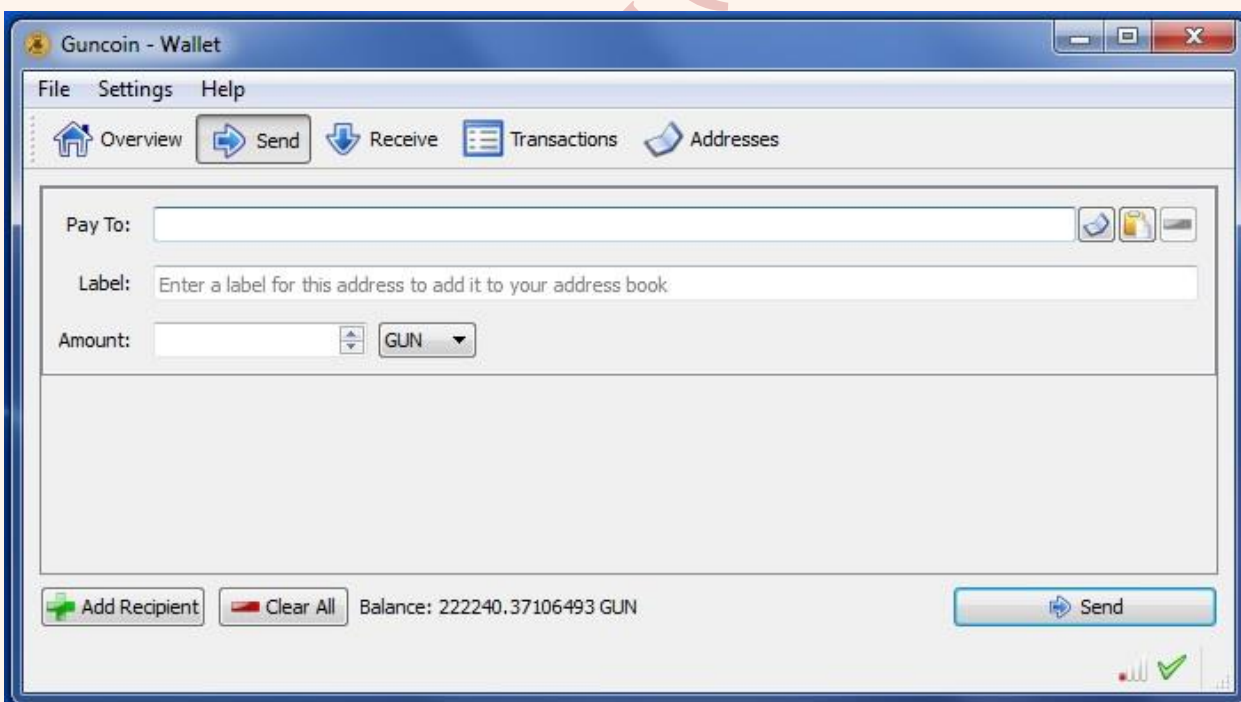

Figure 3-4: Sending Coins

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e) After clicking send you will see a final confirmation window popup that will give you one last chance to make sure you have everything correct.

3.2.3   Reviewing Transactions

Every transaction, whether you are sending or receiving Guncoins, can be reviewed and monitored within your wallet by clicking on the "Transactions" tab on your wallet as shown in Figure 3-5. Clicking on this tab will bring up the "Transactions" window containing a list of every transaction your wallet has ever been part of.
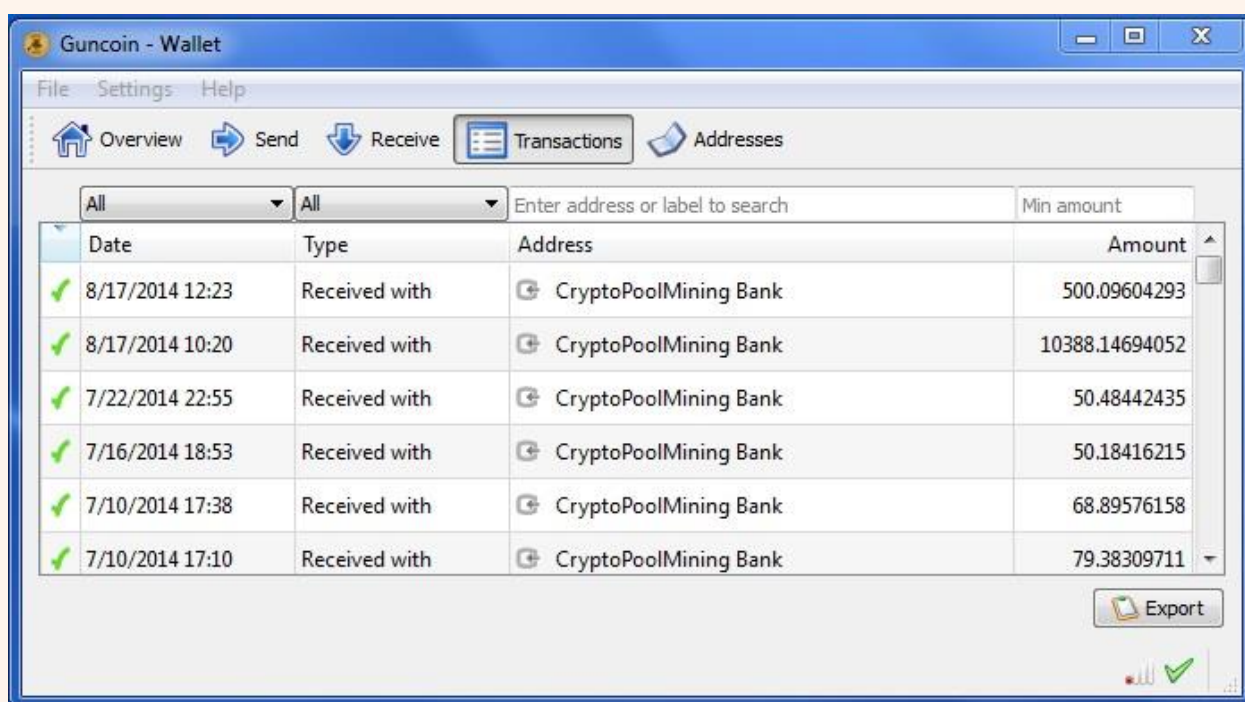

Figure 3-5: Wallet Transactions

Here are a couple of important things you can learn from this window.

- **Column 1 -** Indicates current confirmation status of the transaction.
  a) "Question Mark" indicates zero confirmations.
  b) "Clock Face" indicates between 1 and 5 confirmations have occurred.
  c) "Green Check Mark" indicates 5 transactions have occurred.
- **Column 2 -** indicates the date and time of the original transaction.
- **Column 3 -** indicates whether it was sent or received.
- **Column 4 -** indicates which wallet address it was sent to or received with.

- **Column 5 -** indicates total amount of GUN transferred for that transaction.
- **Export Button -** used to export all transactions to a spreadsheet.

Note that moving your mouse over any one transaction and "right-clicking" will give you several more options including reviewing the details of that transaction.

3.2.4   Your Address Book

Your Address book is just that - a place to keep all the addresses that you have either sent coins to or received them from - its use should be self-explanatory as shown below in Figure 3-6.
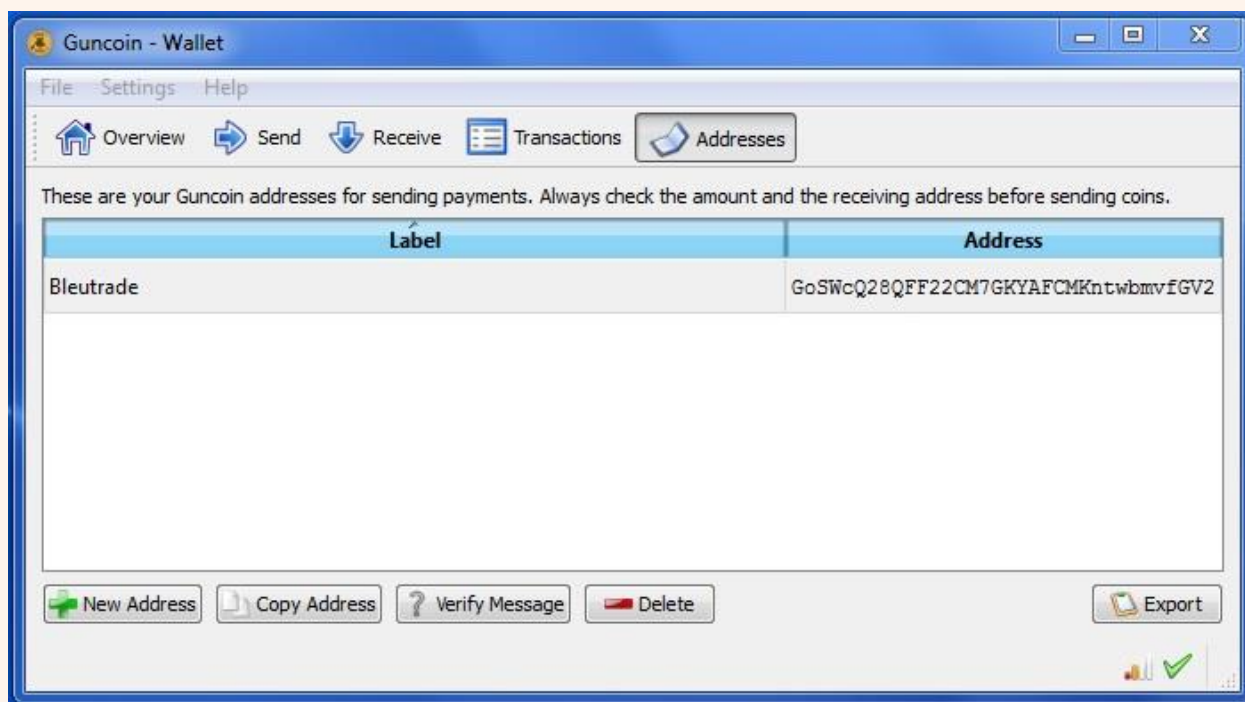

Figure 3-6: Addresses Window

3.2.5   The Debug Window (Help)

Clicking the "Help" tab on the top menu and the "Debug Window" will take you to the Debug Window. The Debug Window is a very valuable resource for information on the current state of the Guncoin blockchain and network. There are two different menu options to choose.

Information Tab: The Information Tab is lust like it says - Useful Information about GUN and is shown in Figure 3-7. The upper half of the pane shows the build

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date, version and client information for Guncoin. Next you will see the number of network connections that you have to the Guncoin network. Typically, if you have added 4 nodes like the following example, you will see 4 connections.
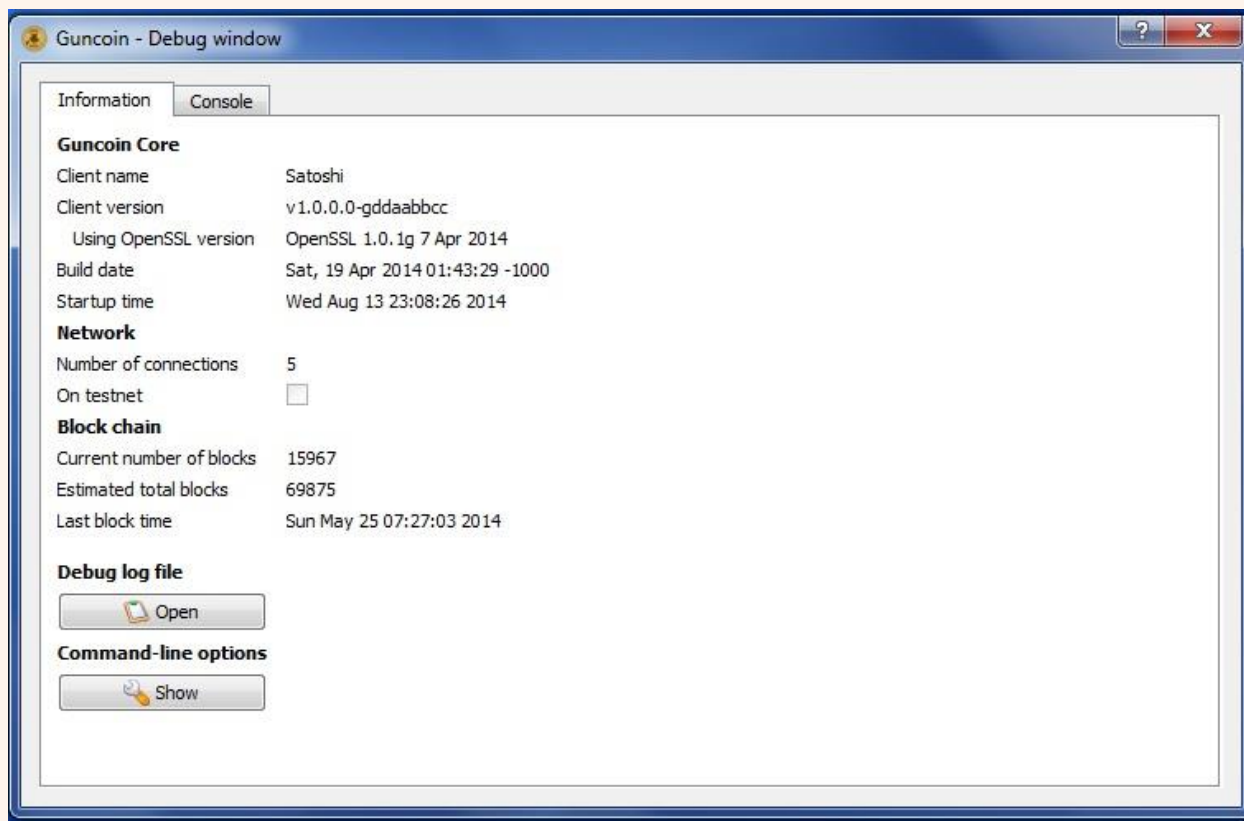

Figure 3-7: Debug Window - Information Tab

The blockchain information is useful as it always tells you where you are in the blockchain, as well as the current number of blocks mined to date.

Console Tab: Clicking the Console Tab will bring up a console. While there are many useful commands for you to type here, one the most beneficial ones is **"getmininginfo"**. Doing that will bring up the window show in Figure 3-8 that shows the current state of mining operations on the entire network.

The most useful information to be obtained here is:

- The **"blocks"** shows which block is on the network being mined now.

- The **"difficulty"** goes up and down depending on the network hash rate tells how difficult it is to mine at this time.

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- The **"networkhashps"** shows the current hash rate for the Guncoin network, which includes all solo miners and pools mining Guncoin.
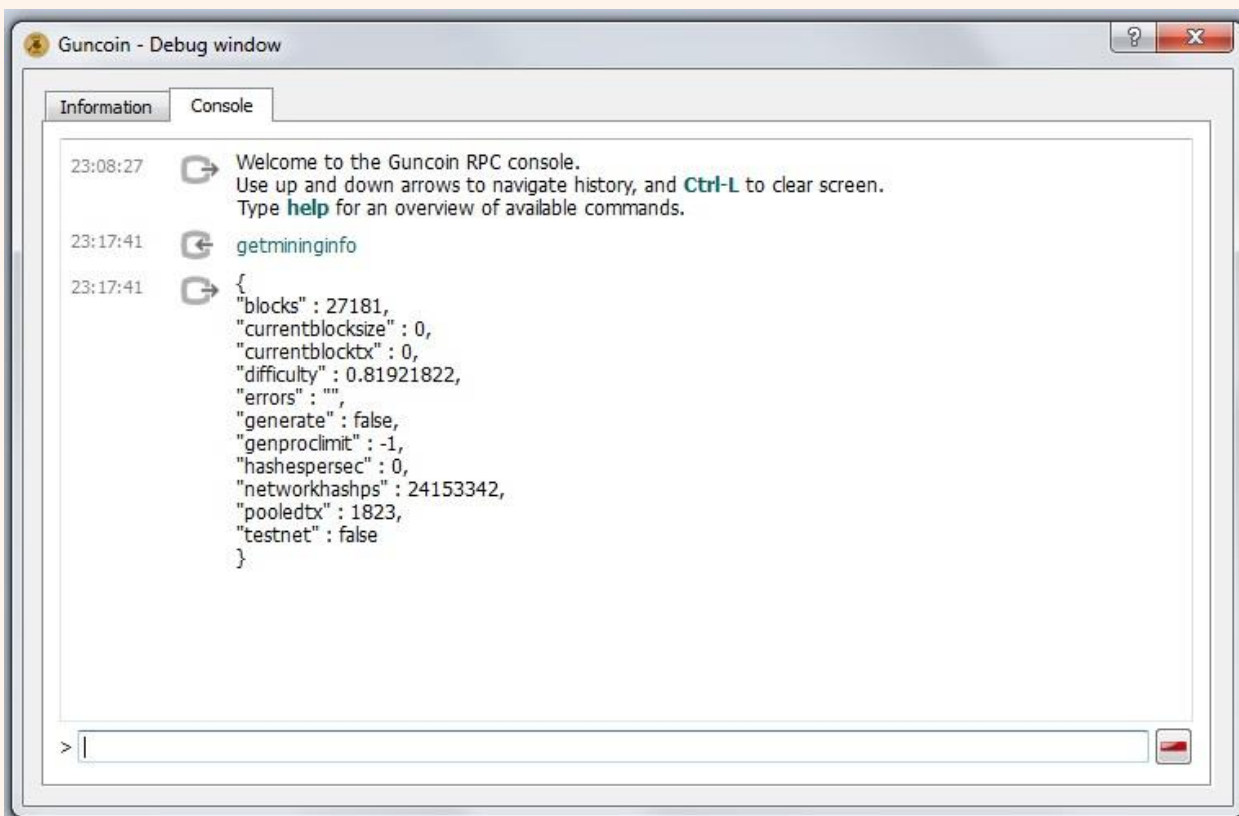

Figure 3-8: Debug Window - Console Tab

The **"getpeerinfo"** command will provide useful information about the network in general and the **"help"** command will provide a list of all commands that can be used in the console.

3.2.6   Backing Up Your Wallet

Backing up your Guncoin wallet is one of the most critically important things that you can do with your wallet and of vital importance to your business survival. Doing this once a day at a minimum is highly recommended - more if you have many transactions each day.

Corrupted files, hard disk crashes etc. can be disastrous if your wallet is not backed up properly. While backing it up to the same hard drive in your computer

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where your wallet is located is easy, it does not prevent problems after a hard disk crash. The backup process is as simple as we can make it and typically takes less than one minute.
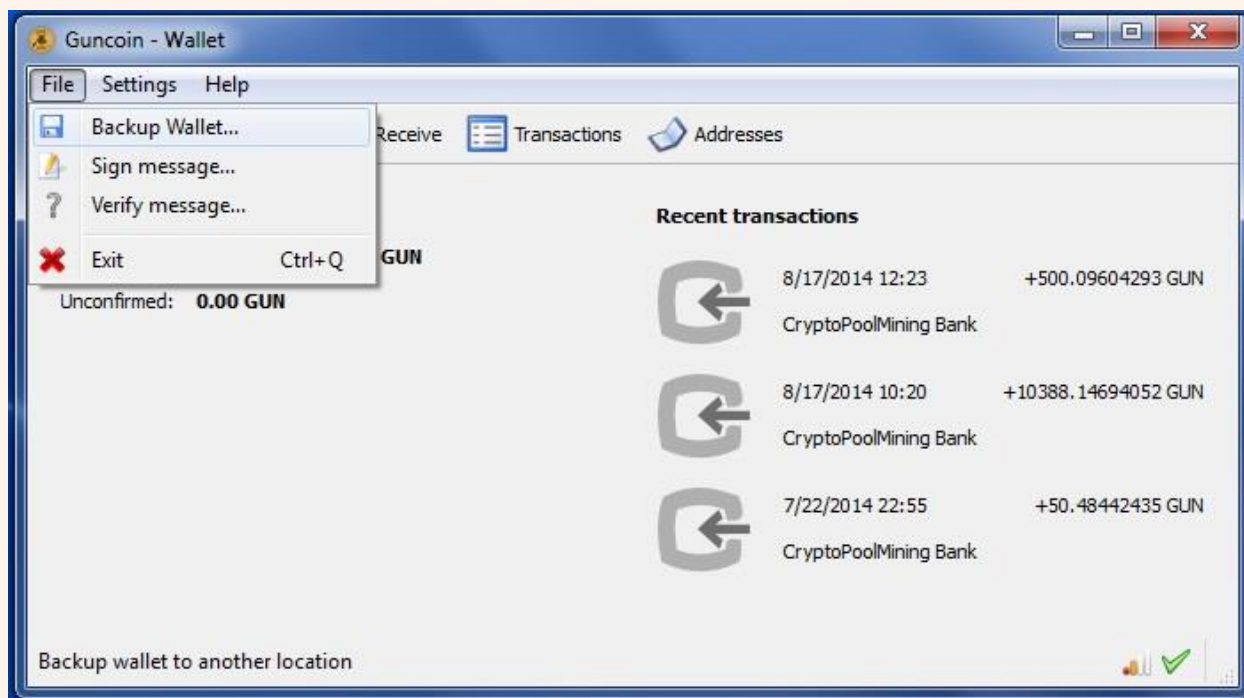

Figure 3-9: Backup Wallet

Follow these simple steps to back up your wallet as shown in Figure 3-9- preferably to a USB memory stick instead of the same computer.

a) In the upper left corner, click on **"File"**, then **"Backup Wallet"**.

b) Pick a place to put the wallet backup and a name - we recommend the name of your computer and a time stamp of some type. You are done!

3.3 Filling Your Wallet with Guncoin (GUN)

There are several ways to get Guncoin into your Wallet. Depending on what you are doing, the chances are that you will find all three of the following options of interest.

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3.3.1   Transfer from Another GUN User

The simplest way is if someone just sends it to you. The Sending and Receiving processes were discussed in 3.2.2 and 3.2.3 and can be used for reference if necessary.

3.3.2   Buying Guncoin (GUN) on Exchanges

You can easily trade Bitcoin (BTC) or in some cases, actual US Dollars for Guncoin (GUN). Guncoin is listed and traded on a growing number of exchanges. The most current list is always on the Guncoin main website at Guncoin.info. Most of these exchanges have dozens of other coins listed for trading as well. You can typically trade GUN against either Bitcoin (BTC), Litecoin (LTC) or Dogecoin (DOGE) depending on your needs and preferences.

In some cases, you will need to buy Bitcoin first to get your Guncoin. This is not really a problem, as there are many sites that allow you to buy Bitcoin directly using bank debits or credit cards. **Coinbase.com** is one such site and is very easy to use, has good security and has a good track record with many crypto currency users. As Guncoin (GUN) is still a relatively a new coin, the prices on these exchanges sometime will cover a wide and varying range. While this offers a huge opportunity for a trader profiting using arbitrage situations, for the business owner, it can be overwhelming to decide which one is best. We suggest that you setup accounts with 2-3 exchanges (for FREE - no minimums) and liquidate your GUN when the prices are to your liking on one of those.

3.3.3   Mining Guncoin (GUN)

We could write an entire book on mining crypto currencies and many have before us. So a detailed description of the process will not be described here, just the general process and a few recommendations. We will try and provide you some excellent tutorials on the mining process and how to set it up yourself and mine your own Guncoins. Here are a few excellent mining tutorials for you to check out:

- **http://arstechnica.com/business/2014/03/digging-for-cryptocurrency-the-newbies-guide-to-mining-altcoins/**

- **http://www.pcworld.com/article/2151261/beginners-guide-to-mining-litecoin-dogecoin-and-other-bitcoin-variants.html**

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So for the more adventurous user who wants to fill his or her own wallet with coins that he or she mines, there are two different ways that you can mine Guncoin (GUN) - those would be **Solo** and **Pool** mining that you probably learned from the above tutorials.

Solo Mining: Solo mining is just that, you and your equipment against every other solo miner and every pool on the network to solve a block before they do. Rather that write a tutorial here about Solo Mining, we will just give you a link to a couple of outstanding tutorials that tell you exactly what you need to do to mine Scrypt coins on your own. Nothing we can add to what they have written. For the most part with Guncoin, you just open up your wallet and click on the Mining tab and start mining and you are going. Keep in mind, that finding a block on your own with just a CPU is very difficult and it could be days before you find one – but then you get to keep it all. Try these links for more info on Solo Mining.

- **https://bitcointalk.org/index.php?topic=260049.0**

- **https://cryptocointalk.com/topic/3963-solo-mining-ebt-a-guide-for-complete-noobies/**

Pool Mining: Pool mining is by far the simplest and safest approach to mining - there is some safety in numbers. If anyone in the pool solves the block, for the most part, everyone in the pool shares the block reward based on their contribution to the effort. There are several credible mining pools listed on the Guncoin.info website and typically they have directions on which mining programs to use and what your command line and settings should be to connect to their pool. Usually, one of the settings is your GUN Wallet Address, so when you accumulate enough GUN, the pool sends them to your wallet automatically.

Mining Software: Much has changed in mining technology since Guncoin was first created.   The GPUs have gotten more powerful and energy efficient and the software needed to mine with them, has become more customized to take advantage of what hardware you may be using. With that in mind, depending on how you choose to pool mine, use the following recommend mining software options.

- **NSGminer for AMD GPUs:**
  https://github.com/ghostlander/nsgminer/releases

- **CCminer for NVidia GPUs:**
  http://ccminer.org

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- **NeoScrypt CPU miner for use with the Guncoin miner interface:**
  https://github.com/ghostlander/cpuminer-neoscrypt/releases

Once you have your Guncoin wallet and mining software, refer to the previous tutorials for setting up your type of platform and you should be mining Guncoin quickly.

We realize that this is not enough information to get you set up mining GUN. That is because with so many combinations of computers, operating systems, mining software, graphic cards and ASICs, there is no way that we can effectively cover all these. That being said, thanks to the coin design of Guncoin, mining GUN can be a very rewarding and profitable venture. Please do your due diligence on all of the above before jumping in to it.

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4 USING GUNCOIN (GUN) FOR YOUR BUSINESS

Up to now in this book, everything has been about understanding how Guncoin works and getting it connected and set up properly to running on your computer. Now we will discuss how to integrate it in to your business.

4.1 Your Website

Your website is probably your primary store front and a very important part of your business, whether you sell products or provide services for your clients or customers. Whether you have a paid programmer who maintains your website or do it yourself, that all depends on your personal budget, your time constraints, your tools and your technical knowledge. Some very basic steps are:

- Product or service is listed with a corresponding price in Guncoin (GUN) on your website product or service page.

- User clicks the product/service icon and orders it which provides you a confirmation of the product/service order.

- User is then provided with your Guncoin (GUN) wallet address to send the GUN to - which they should do at that point.

- You have the order and can watch for the GUN to show up in your wallet - once it does, the process is irreversible - unless you choose to manually send the coins back.

While this is not an automated process, it has proven to be very secure and reliable. If you have a paid programmer or are very technically-oriented to program your website yourself, it is possible to automate and customize this process for your website.

4.2 Setting Prices

Guncoin (GUN) trades 24 hours a day, 7 days a week year, 365 days a year on several coin trade exchanges. Which one you use depends on your personal preferences, etc. On each one, the daily price for GUN could cover quite a range. Over time, this range will narrow and more consistent prices across the exchanges will be found. There are several websites that collect this trade data (prices,

volume, etc.) from multiple exchanges and through a complex formula, come up with a converted price (typically in US Dollars) for one Guncoin.

While there are several sites that do this, we have included several below for reference purposes. Guncoin (GUN) is listed on all of them.

- CoinMarketCap.com
- Cryptoid.info
- WorldCoinIndex.com

In setting your target prices, any of these websites can give you the best way to accomplish that as they are looking across multiple exchanges and would have a more stable price for Guncoin (GUN). That being said, if you only plan to trade on one coin trade exchange, you should use the prices from that one exchange.

4.3 Transactions and the Confirmation Process

Once your Guncoins (GUN) are on the way to you, it is very useful and important to monitor their progress to your wallet as was described in detail in Section 3.2.3. Once you see a Green Check Mark in the Confirmation Status Column, that means at least 6 confirmations have occurred (possibly hundreds) and the coins are yours. At that point, you have technically been paid and can proceed with your business arrangement.

Depending on the hash rate of the Guncoin network, the time to get 6 confirmations could take from one minute to several hours. As a result, many users typically will proceed with their business transaction after two (2) to four (4) confirmations have occurred. This is typically a very low risk thing to do as once you have more than one confirmation, it is very, very rare that the transaction will not go through. Ultimately, we cannot advise you on this and it is a business decision on your part as to how many confirmations you require to move forward with your business with your client/customer.

5 GUNCOIN (GUN) ROADMAP AND RELEASE NOTES

TBD

TIMEFRAME	VERSION	CONTENT / FEATURES
APR 2014	GUN Core V1.0	Original Guncoin release: • Litecoin scrypt implementation
OCT 2014	GUN Core V1.1	Initial Neoscrypt conversion upgrade: • Neoscrypt switchover set at block 120,000 • DigiShield - Difficulty re-target incorporated
DEC 2017	GUN Core V1.2	Release mirrors the bitcoin core 0.09.x releases along with some additional wallet enhancements including: • Embedded seed nodes • Faster wallet syncroniztion • Automatic Checkpointing (ACP) • WIN auto-setup and configuration • Autotools build system • Transaction malleability-related fixes • Transaction fee changes • Bitcoin-cli changes • walletpassphrase RPC changes
JAN 2018	GUN Core V1.3	Release mirrors the bitcoin core 0.10.x releases and changes the block version to 4 on block height 840,000. Version 4 blocks brings two soft forks after 75% of the last 1,000 blocks are version 4 - BIP65 and BIP66. • BIP65 – OP_CHECKLOCKTIMEVERIFY replacement for nLockTime • BIP66 – Strict DER signatures Additional enhancements: • Faster synchronization • Dynamic fees • Improved signing security

TIMEFRAME	VERSION	CONTENT / FEATURES
		• Watch-only wallet support • Consensus library • Standard script rules relaxed for P2SH addresses • bitcoin-tx separate tool • Mining and relay policy enhancements
FEB 2018	GUN Core V1.4	Release mirrors the bitcoin core 0.11 - 0.13 releases. • TBD • TBD
MAR 2018	GUN Core V1.5	Android Mobile Wallet
TBD	TBD	Lightning Network Compatible

6 CONCLUSION

We hope that by now you recognize that the Guncoin (GUN) team has put a priority on the success of our end-users with this GUN Users Guide, multiple wallets and so many useful resources found online. Not only do we want you to have all the necessary tools and resources, but we want to assure you that our coin, our team and our ongoing support will be here for you for a very long time.

We will always try and keep our material fresh and current, while staying up with coin technology. So you can expect frequent updates of this document - please check back often to keep up with us. Thank you so much for your support of Guncoin (GUN). We look forward to a long and prosperous adventure for all of us with you!