International Journal of Recent Advances in Multidisciplinary Topics
Volume 3, Issue 5, May 2022
https://www.ijramt.com | ISSN (Online): 2582-7839

White Paper for Gander Coin – A P2P Blockchain Network Utility Crypto Coin Built Using Scrypt

Hiranmayee Panchangam[1*], Shaik Ayesha[2], Subi Ansari[3], Mohammad Faiz[4], Pran Pegu[5]
[1]*Computer Science Engineer, Business Development, Gander, Hyderabad, India*
[2,3]*Entrepreneur, Project Owner, Gander, Hyderabad, India*
[4]*Technical Lead, IT, Gander, Lucknow, India*
[5]*Blockchain Developer, IT, Gander, Goa, India*

***Abstract*: Decentralized networks are replacing centralized hierarchies. In other words, online payments strictly [P2P] could be transmitted directly from one party to another without passing through a banking institution. While digital signatures help, a trusted third party is still essential to prevent double-spending. This paper offers a peer-to-peer network solution with Gander. The network timestamps and transactions are processed by hashing them into a continuing chain of hash-based proof-of-work, establishing an irreversible record. The sequence of events the computational power of the CPU can be considered as evidence. Here, the chain or the network controls the computational power, ensuring protection from hackers as it is structured. While there are many other coins available in the market, we propose "Gander" based on Scrypt algorithm and list out the technical and realistic utility of Gander Coin in this Whitepaper.**

***Keywords*: Gander, Whitepaper, P2P network, Blockchain technology, Ethereum, ERC 20, De-Fi, Crypto asset, Digital coin.**

1. Introduction

When processing electronic payments, commerce on the Internet has evolved to rely almost entirely on financial institutions acting as trusted third parties to facilitate the transaction. While the system functions satisfactorily for the vast majority of transactions, it is plagued by the trust-based paradigm's fundamental flaws. While we popularized Bitcoin on Satoshi Nakamoto et al. 2008, the real credit was about De-Fi.

A. P2P Network

The fig. 1, mimics a Peer-to-Peer network where data can be sent from one node to the other in one way without any intermediary. Once the data transmission is executed, we cannot reverse it.

1) Problem Statement and De-Fi

With Decentralized Finance, transacting between two peers has become easy without the interference or extra fees for the act. The notion of De-Fi is widely supported as -The cost of mediation increases transaction expenses, restricting the smallest practicable transaction size and eliminating the possibility of small casual transactions. With the reversal, the requirement for trust grows. Customers must be aware of merchants that ask for more information than necessary. A certain amount of fraud is expected. Using actual currency avoids these costs and payment risks in person, but no such mechanism exists for payments over a communications channel.

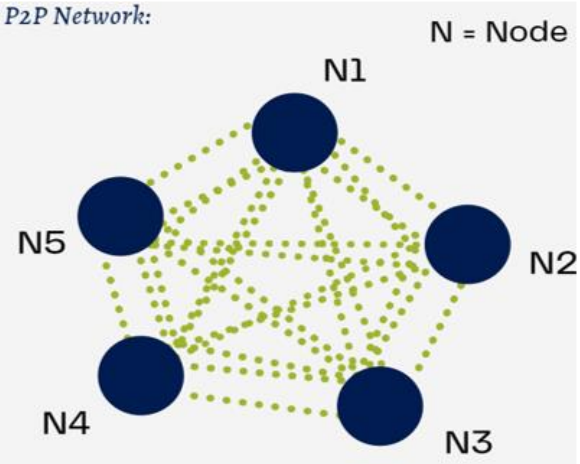


Fig. 1. P2P network mode of data transfer

A highly predictive, secured, and volatile coin is yet to air the crypto market, which is the prime reason to initiate GANDER. Thus, there is an immediate need for more execution of these projects.

Gander vouches for De-Fi because:

- Accessible by anyone with a stable internet connection.
- Retention of complete control by users.
- No need for any additional permissions by any institution or authorization.
- Instant settlement of transactions.
- Usage is not restricted by time.
- Much Returns Potential

*Corresponding author: hiranmayee030798@gmail.com

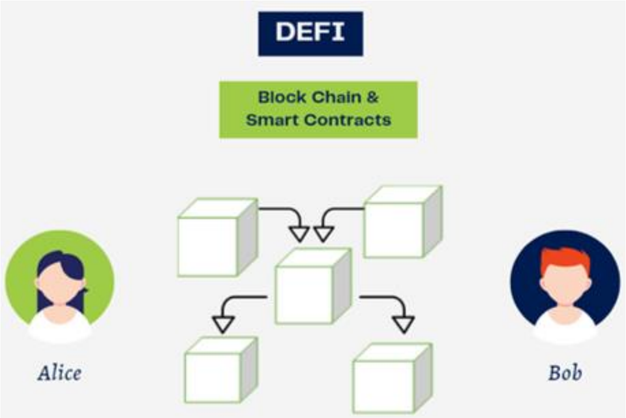


Fig. 2. Architecture of De-Fi networking

B. *Aim*

With the means of this whitepaper, we aim to launch the "Gander Coin" to the crypto-coins market based on Scrypt and the perks of high-end Blockchain technology.

C. *Objectives*

Our objectives for the proposal of Gander Coin are as follows,

- Open-Source Access and Self-Custody.
- Transparency and Immutability.
- Value Transfer and Security.
- Full Control and Highly Secured.
- Highly Efficient and Predictive.

D. *Significance of the Project*

In the last year, institutions have officially committed to digital assets, formerly viewed as speculative. No central entity may intervene or manipulate users' assets in Defi because it is enabled by public blockchains and smart contracts that execute rules specified by developers and governance token holders.

It is the concept of redefining money and how we may gain it that inspired cryptocurrency, which by its very nature runs against established methods. Despite this, the vast majority, if not all, of cryptocurrencies operate per legally enforced laws.

With Gander, we think that by harnessing the potential of collective decentralization, we can create something far more powerful than anything a centralized team could ever dream of. A community-run token is worthless unless it is supported by individuals who work together to give it meaning.

E. *Project Description*

Blockchain technology is revolutionary, and it is predicted to have a significant economic impact, similar to the Internet. Since blockchain technology powers Bitcoin and other virtual currencies, it is reasonable to expect it to future power exchanges.

1) *Blockchain Insights*

The blockchain is a decentralized ledger. It uses an append-only data structure, which means new transactions and data can be added but not deleted. This operation creates a permanent record of data and transactions between parties. A blockchain is created by connecting many nodes with software. There are numerous blockchains, not one global entity.

A blockchain can have many connected nodes but stay distinct from other blockchains. A blockchain's integrity and usefulness require a consensus mechanism and a reward system. The reward system is a scheme that awards a miner some Bitcoin for successfully mining a block. Mining is done by powerful computers solving complicated mathematical puzzles. After a transaction is validated and accepted by the network, miners move to the next block.

Timestamp: In the network, each block is formed based on every transaction recorded at a unique timestamp of the syntax 00:00:00:00 corresponding to Date, Time i.e., Hours, Minutes, Seconds and Milli-Seconds of the data transacted.

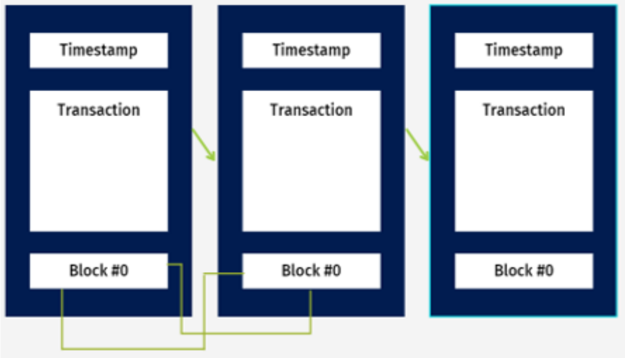
Transaction: In the transaction details or the metadata of the Price, Asset, Ownership, etc. is recorded and is not reversible once recorded providing strong evidence of the transaction.

Block: Each transaction corresponding to its unique timestamp is stored and represented as a block, which is broadcasted to the network. In the next step, the transaction is approved and the block is added to the network and the ledger is distributed to the members in the chain.

We further have the idea to develop our coin Gander Coin which can later be swapped with Gander tokens and mined too. We were highly inspired by Scrypt Hash Function and Litecoin specifications. The technical data about Gander Coin shall be dealt with in next sections.

Insights for Gander Tokens & Formation:

Gander Project has been initialized as ERC 20 standard token. We have to observe that the Ethereum blockchain is capable of storing transactions, and EVMs can run smart contracts. The Gander token lives on the Ethereum blockchain, and they benefit from the Ethereum blockchain technology. Gander relies on the Ethereum platform. We acknowledge that the Native currency on Ethereum is ether. Still, as the token can work like other currency, such as a share of a company, loyalty points, and gold certificates, the Decentralized world regards Ethereum very highly.



Fig, 3. Blockchain working

Our Gander token will be created by a competent contract adhering to all of its guidelines. As the smart contract is responsible for creating tokens, managing transactions, keeping track of balances, the authentication is a hundred percent guaranteed.

As smart contacts are pretty risky, we have taken additional care in deploying them with high interoperability and zero bugs.

Gander Smart contract is unique and listed on all possible exchanges for people to trade. Our six mandatory functions and three optional functions that any ERC 20 contract should abide by have been maintained by Gander with utmost superiority.

Later on, our own block chain network has been in making mimicking the Litecoin structure, which shall be further discussed in the below sections.

2. Literature Review

Gander is a forward-thinking brand. Our project began with a player concept and has since evolved through numerous stages. All levels have been built with our community, developers, and Gander management input.

Consequently, this whitepaper focuses on a variety of novel and distinctive concepts and seeks to describe the architectural environment we foresee for the future of travel in the blockchain.

A. Insights from other Researchers

The Leader organizes and schedules user messages so that they may be processed efficiently by other nodes in the system, maximizing throughput. It executes transactions on the current state, stored in RAM, and publishes the transactions, as well as a signature of the final state, to the replication nodes, referred to as Verifiers. Verifiers do the duplicate transactions on their copies of the state and publish the state's computed signatures as confirmations. Confirmations published in the public domain act as votes for the consensus algorithm. [Anatoly Yakovenko, SOLANA, et al., 2013]

The proof-of-work also solves the problem of majority decision representation. Anyone with many IPs could corrupt a majority based on one IP address per vote. Proof-of-work is one CPU per vote. The longest chain represents the majority decision and has the most proof-of-work invested. If honest nodes control most CPU power, the honest chain will develop faster than other chains. [Satoshi Nakamoto et al., 2008]

COTI has implemented techniques for monitoring, detecting, and defending against potential attacks, maintaining network security. COTI's Double Spend Prevention Nodes are an example of such a mechanism. COTI also includes unique mechanisms for resolving transactional disputes, a much-needed feature that is not achievable with current cryptocurrencies. The employment of an Arbitration Service resolves disputes. [COTI, The Trust Chain Consensus, et al., 2018]

Litecoin is peer-to-peer Internet money that enables rapid, near-zero-cost payments to anyone. It is now the most widely used cryptocurrency in the world. Litecoin is an open-source, decentralized global payment network that operates entirely without the intervention of any central authorities. Mathematics ensures the network's security and gives users the ability to manage their finances. Litecoin has significantly faster transaction confirmation speeds and more storage efficiency than the leading math-based currency in the world. Litecoin is a proven medium of commerce that may be used with Bitcoin because of its widespread industry backing, trade volume, and liquidity. [Charlie Lee et al., 2011]

B. Related Works

It has long been predicted that cryptocurrencies would fundamentally change the internet payment ecosystem. To do this, cryptocurrencies must be user-friendly, efficient, and massively scalable. Numerous blockchain-based systems have been developed to address the difficulties inherent in achieving high transaction throughput while remaining economical. However, these have met with limited success. [COTI, The Trust Chain Consensus, et al., 2018]

Elrond uses random numbers in its operation, for example, in the random sampling of block proposers and validators into consensus groups and the shuffling of nodes between shards after an epoch, both of which are described below. Because both characteristics contribute to Elrond's security assurances, it is critical to employ random numbers that are both provably unbiased and unpredictable when generating them. [Elrond et al., 2019]

Omni ledger assures security and correctness by selecting large, statistically representative shards that handle transactions. Omni ledger introduces Atomix, a fast cross-shard commit protocol. Nodes can either fully commit a transaction across shards or get "rejection proofs" to abort and unlock the state affected by partially completed transactions. Ledger pruning using collectively-signed state blocks and low-latency "trust but verify" validation for low-value transactions all help Omni ledger improve performance. [E. Kokoris-Kogias et al., 2017]

Chain space is a distributed ledger platform for high-security transactions. For extensibility, it leverages privacy-friendly intelligent contracts. Throughput may be increased linearly utilizing S-BAC, a unique distributed atomic commit technique that ensures consistency and excellent audibility. Modern zero-knowledge approaches implement privacy features, while BFT ensures consensus. [M. Al-Bassam et al., 2017]

True decentralization of a coin occurs only when people accept it as payment for goods and services purchased rather than simply as a trade asset on cryptocurrency exchanges. The latter adds another marketable asset to the mix and makes it no different from traditional securities; if anything, it makes it even riskier. [Ryoshi et al., 2020]

3. Methodology

A. Algorithm Insights

Several notable projects, including Litecoin (LTC), Dogecoin (DOGE), and Einsteinium (EMC2), make use of Scrypt. As soon as we move to create our blocks as we intend to make Gander Cryptography Coin, the Gander blocks ecosystem is in the making. We have utilized the programming language of C++ using C++ Editor and the Algorithm of Scrypt for the generation of Hash Function.

The Scrypt hashing algorithm is employed to secure the data on various Proof of Work blockchains. Tenebrix (TBX) was the first product to use this method, which was presented in 2011. Currently, the Scrypt mining algorithm is one of the top three Scrypt-blockchains in terms of market value, securing more than $3 billion in digital currencies. [Delton Rhodes et al., 2020]

Scrypt has several advantages:

- When compared to other mining algorithms, it is less complex.
- When compared to other algorithms such as SHA-256, the energy consumption is lower.
- Transaction costs on Scrypt currencies' blockchains are typically cheaper than those on other coins' blockchains.
- It is four times faster to mine Scrypt than it is to mine Bitcoin.
- The encryption of wallets, files, and passwords is quite effective.

B. *Key Derivation Function*

Scrypt is an essential derivation function that is password-based (KDF). In cryptography, an essential derivation function (KDF) is a hash function that uses a pseudorandom function to derive one or more secret keys from a personal value such as a master key, a password, or a passphrase. KDFs are generally effective at preventing brute force password guessing attacks from being carried out on a computer system.

Before the invention of Scrypt, however, essential derivation functions (KDFs) such as Password-Based Key Derivation Function 2 (PBKDF2) were limited in their ability to withstand the attack of FPGA ASICs. Scrypt addresses this limitation. PBKDF2 and other password-based key-derivation algorithms were computationally costly, but they did not consume much memory. Scrypt was created to be both computationally and memory expensive to maximize security. Scrypt is an essential distribution function (KDF) devised for password storage by Colin Percival that is resistant to hardware-assisted attacks due to its variable memory cost. RFC 7914 contains the details of how to do so.

To combat the emergence and dominance of ASIC mining rigs and the following centralization of cryptocurrency mining, Scrypt was created. In terms of blockchain technology, Scrypt is intended to be a significant improvement over SHA-256, which is currently used on the Bitcoin network and other Proof of Work networks that support digital currency.

Because Scrypt is designed, miners must generate random numbers in a short period. The computer must keep these numbers in the processor's Random Access Memory (RAM), and Blocks must access them continually before miners can submit a result. Scrypt networks, in comparison to SHA-256 networks, often have a substantially lower hash rate.

C. *Working of Scrypt*

The Scrypt algorithm includes numerous parameters, one of which is N, which defines the cost of the method in terms of resources required to execute it. Then there's p, which specifies the parallelization, and r, which specifies the block size and hence the amount of RAM needed. Additionally, there are settings for the hash algorithm and the length of the resulting hash. [Emanuele Pagliari et al., 2019]

Scrypt's operation requires two initial parameters: the message to be encrypted and the Salt, a random string used to increase entropy and protect the system from Rainbow table attacks. They are nothing more than association tables that enable the recovery of clear encryption keys from hashed keys via a time-memory attack. [Emanuele Pagliari et al., 2019]

After that, the data is passed into a custom key derivation function called PBKDF2, which stands for Password-Based Key Derivation Function 2. Using the settings previously specified by the method, this function further minimizes the encrypted key's vulnerability to brute force attacks. The PBKDF2 algorithm generates a sequence of 128*r Bytes blocks [B0...Bp1] in the integer p. [Emanuele Pagliari et al., 2019]

At this stage, the blocks are mixed, even in parallel, using the ROMix function, in this case of sequential memory-hard type. The produced mixed blocks are then supplied as a Salt parameter (expensive Salt) to another PBKDF2, which generates the necessary length key. [Emanuele Pagliari et al., 2019]

D. *Network*

As previously mentioned, our Gander Coin [GAND] network build deployment settings are as follows-

Our blockchain network has the constructors of timestamp, transactional data, previous hash parameters. The store of value and the validation function that our blocks generate is subtle which ensures the integrity of the genesis block. The Scrypt algorithm hash function identifies any blocks by taking the properties of the block.

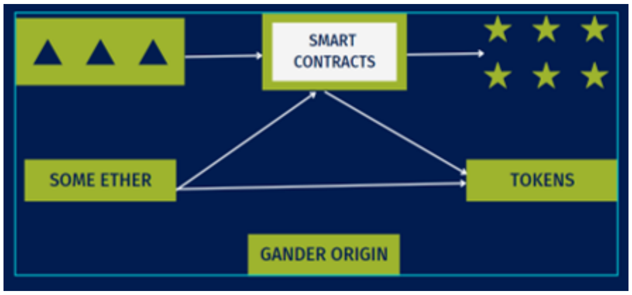
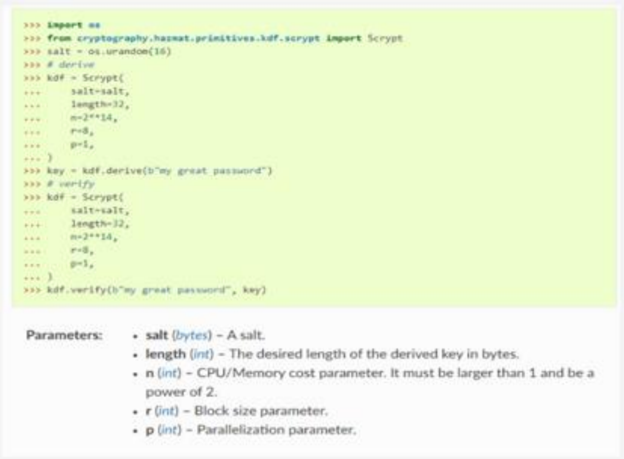


Fig. 4. Block diagram of Gander formation



```
>>> import os
>>> from cryptography.hazmat.primitives.kdf.scrypt import Scrypt
>>> salt = os.urandom(16)
>>> # derive
>>> kdf = Scrypt(
...     salt=salt,
...     length=32,
...     n=2**14,
...     r=8,
...     p=1,
... )
>>> key = kdf.derive(b"my great password")
>>> # verify
>>> kdf = Scrypt(
...     salt=salt,
...     length=32,
...     n=2**14,
...     r=8,
...     p=1,
... )
>>> kdf.verify(b"my great password", key)
```

Parameters:
- **salt** (*bytes*) – A salt.
- **length** (*int*) – The desired length of the derived key in bytes.
- **n** (*int*) – CPU/Memory cost parameter. It must be larger than 1 and be a power of 2.
- **r** (*int*) – Block size parameter.
- **p** (*int*) – Parallelization parameter.

Fig. 5. Scrypt Key Derivation Function

E. *Incentives and Reclaiming Disk Space*

This section will discuss the incentives, reward plans, and disk space reclaim. These days, blockchain can be easily created and regenerate the new hash by changing the contents of the block. To prevent this, our proof of work consensus mechanism is strongly built.

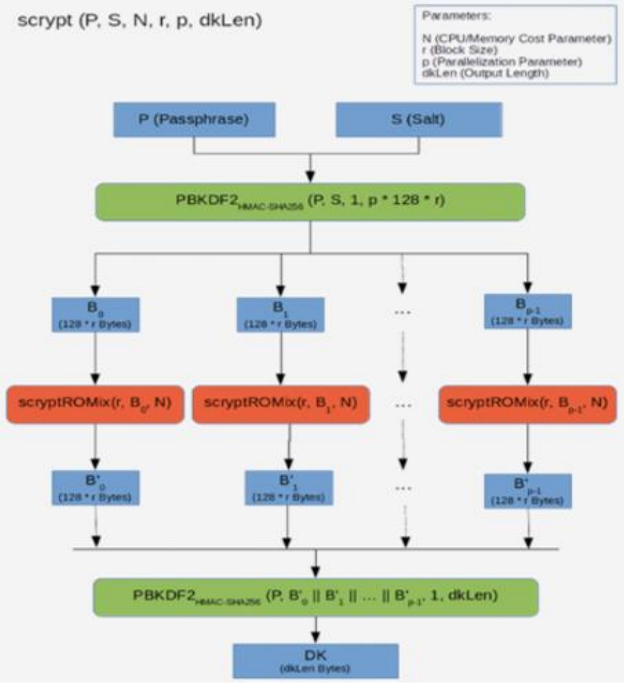
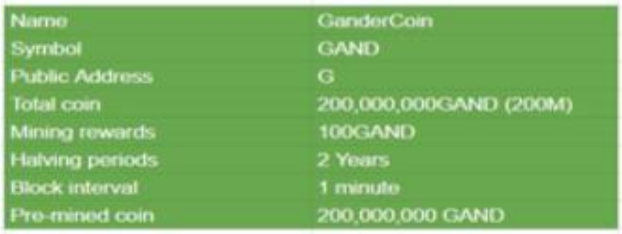
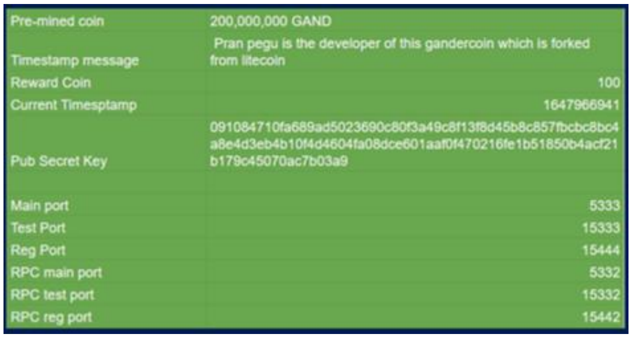

scrypt (P, S, N, r, p, dkLen)
Parameters:
N (CPU/Memory Cost Parameter)
r (Block Size)
p (Parallelization Parameter)
dkLen (Output Length)
P (Passphrase)
S (Salt)
PBKDF2$_{HMAC-SHA256}$ (P, S, 1, p * 128 * r)
B_0 (128 * r Bytes)
B_1 (128 * r Bytes)
...
B_{p-1} (128 * r Bytes)
scryptROMix(r, B_0, N)
scryptROMix(r, B_1, N)
scryptROMix(r, B_{p-1}, N)
B'_0 (128 * r Bytes)
B'_1 (128 * r Bytes)
B'_{p-1} (128 * r Bytes)
PBKDF2$_{HMAC-SHA256}$ (P, B'_0 || B'_1 || ... || B'_{p-1}, 1, dkLen)
DK (dkLen Bytes)

Fig. 6. Working architecture of Scrypt



Name	GanderCoin
Symbol	GAND
Public Address	G
Total coin	200,000,000GAND (200M)
Mining rewards	100GAND
Halving periods	2 Years
Block interval	1 minute
Pre-mined coin	200,000,000 GAND

Fig. 7. Gander coin details



Pre-mined coin	200,000,000 GAND
Timestamp message	Pran pegu is the developer of this gandercoin which is forked from litecoin
Reward Coin	100
Current Timesptamp	1647966941
Pub Secret Key	091084710fa689ad5023690c80f3a49c8f13f8d45b8c857fbcbc8bc4a8e4d3eb4b10f4d4604fa08dce601aaf0f470216fe1b51850b4acf21b179c45070ac7b03a9
Main port	5333
Test Port	15333
Reg Port	15444
RPC main port	5332
RPC test port	15332
RPC reg port	15442

Fig. 8. Deployment settings of Gander Coin

We do not want people to spam our blockchain. To ensure this, the difficulty level is previously set so that we shall be able to create one block every minute. It is inevitable that, as computers get faster with time, they will require less time to mine a new block. To compensate for that, Gander shall enhance the difficulty level.

We maintained multiple transactions for a block to facilitate mining transactions and rewards for miners. The mining rewards are steadily introduced in our system. The pending transactions shall be sequence executed after their validation by new blocks creation after the specified time interval. All transactions made during this time interval are temporarily stored in the pending array to be included in the next block.

4. Desired and Established Functioning

A. *Proof of Work*

Tenebrix's Scrypt proof of work was a particular favourite of ours. Using Scrypt, one may mine Gander Coin at the same time that one is mining Bitcoin.

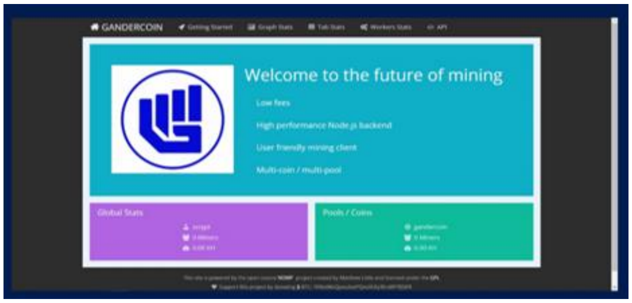


Fig. 9. Mining pool server site

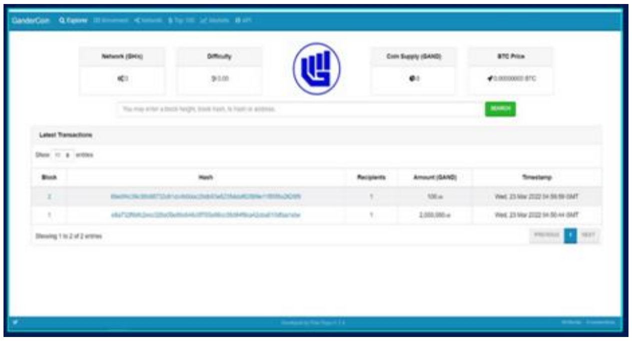


Fig. 10. Gander coin landing website

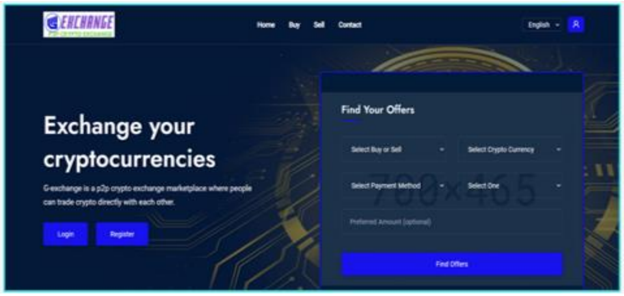

EXCHANGE
Home
Buy
Sell
Contact
English
Exchange your cryptocurrencies
G-exchange is a p2p crypto exchange marketplace where people can trade crypto directly with each other.
Login
Register
Find Your Offers
Select Buy or Sell
Select Crypto Currency
Select Payment Method
Select One
Preferred Amount (optional)
Find Offers

Fig. 11. Exchange sub domain

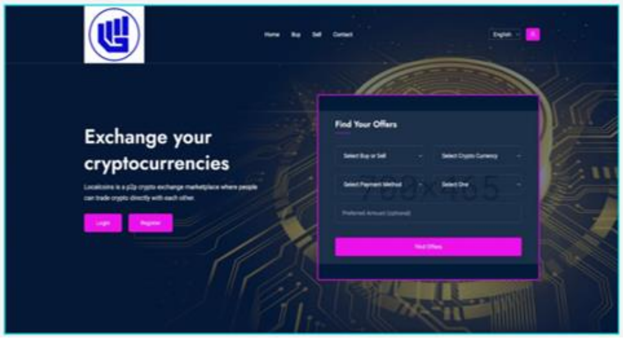


Fig. 12. Gander exchange website main

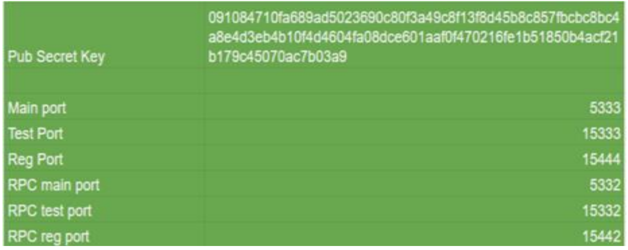
B. *Code and Calculation*

It is possible to execute, change, copy, and distribute modified versions of Gander coin software under the terms of the MIT/X11 license. Gander coin is an open-source project. Transparently, the source code and binaries of the software may be independently verified.

The port number is 5333. If you have the know-how, you can configure it on your router. This will allow you to have more than eight connections at the same time. In addition, the default RPC port is 5332. When miners connect with your client/daemon, they will utilize the port number specified here. The deployment settings are listed in Figure 8 above. This is our Gander Coin Explorer Site: http://34.227.105.60:3001/.

This is our Gander Coin Mining Pool Website:
http://34.227.105.60:8080/.
Our Exchange is found here http://3.86.247.210.
The source code is here:
https://github.com/ppegu/gandercoin-core.

Port Settings:



Pub Secret Key	091084710fa689ad5023690c80f3a49c8f13f8d45b8c857fbcbc8bc4a8e4d3eb4b10f4d4604fa08dce601aaf0f470216fe1b51850b4acf21b179c45070ac7b03a9
Main port	5333
Test Port	15333
Reg Port	15444
RPC main port	5332
RPC test port	15332
RPC reg port	15442

C. *Value Proposition and Utility*

Since the beginning, our project has undergone various changes. In addition to the Gander management and developers, Gander involved the entire community in the design process.

Value Proposition Prospects:

1) *Pre-Mined Coins*

Pre-mined coins for the Gander coin will be 80,000,000.00: the genesis block and the first two blocks, certifying the genesis block's validity. Coins should be released relatively, according to our standards. Having a high number of coins controlled by a single person or group goes against the decentralized nature of our coin. There will be no pre-mined coins and thus no way for us to pay for bounties, but we believe in this coin's value and that people will be ready to invest in it early on and create services to improve it.

2) *Wallet Encryption*

Encrypting your wallet helps you secure it, allowing you to observe transactions and your account balance but requiring you to input your password before spending Gander money. This safeguards against wallet-stealing viruses and trojans and performs a sanity check before sending money.

3) *Mining Rewards*

Miners are now rewarded with 50 new gander coins for each block, a figure that is typically half every two years (every 2 * 525600 block). As a result, the Gander coin network generates 200,000,000.00 Gander coins.

4) *Block Time*

We were amazed by Solid Coin's ease of use and lightning-fast transactions. While fast confirmations are not always as secure as Bitcoin's delayed confirmations, they are handy for small merchants who do not require ultra-secure transactions. The average Gander coin block time is one minute, ten times faster than the average Bitcoin block time. Thus, if merchants desire the same level of security as Bitcoin, they may wait ten times as many Gander currency confirmations as Bitcoin. However, most retailers accept one-confirmed transactions for modest quantities of Gander currencies.

5) *Difficulty Level*

We will maintain the same retarget block as Bitcoin did in 2016, but because blocks are discovered ten times faster, the difficulty will retarget approximately every counter year. Due to the combination of rapid retarget periods and Scrypt proof of work, we anticipate avoiding the issue that Namecoin had; hashing power leaving more abruptly than it arrived, resulting in a high difficulty slog for those who remained. Right now the difficulty level is set to 0.02.

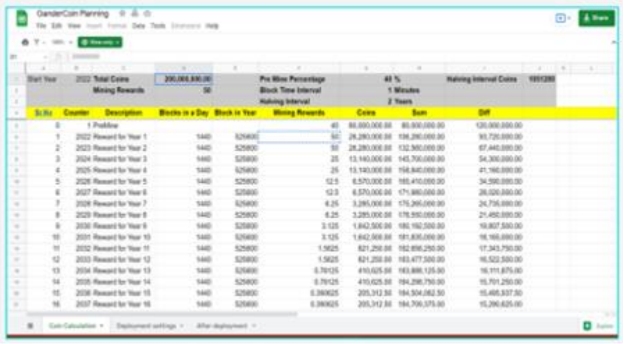
6) *Coin Generation*

Miners are now producing 52,560,000.00 coins per 1440 blocks. Because of our quicker blocks, we must adjust the blocks at which coin generation is halved to mirror Bitcoin's generation trajectory correctly. Every 210,000 blocks, the number of bitcoins is generated in half. For every 1051200 coins, the number of Gander coins produced will help behalf. For those doing the math, Gander coin is expected to produce nearly ten times as many coins as Bitcoin, totalling approximately 200,000,000.00 Gander coins.

7) *Security against attacks*

In the beginning, the network hash rate is likely low, making it an easy target for a 51 per cent attacker. Since our revolutionary release, there has been a high hash rate from minute one. In our opinion, this deterred attackers. Because so many people were mining on the chain at once, there was a lot of natural orphaning. With block locking at every difficulty change, we avoided any attacks.

D. *Coin Calculation Graph*



Start Year	2022	Total Coins	200,000,000.00		Pre Mine Percentage	40 %		Halving Interval Coins	1051200
		Mining Rewards	50		Block Time Interval	1 Minutes			
					Halving Interval	2 Years			

Sr.No	Counter	Description	Blocks in a Day	Block in Year	Mining Rewards	Coins	Sum	Diff
0	1	PreMine			40	80,000,000.00	80,000,000.00	120,000,000.00
1	2022	Reward for Year 1	1440	525600	50	26,280,000.00	106,280,000.00	93,720,000.00
2	2023	Reward for Year 2	1440	525600	50	26,280,000.00	132,560,000.00	67,440,000.00
3	2024	Reward for Year 3	1440	525600	25	13,140,000.00	145,700,000.00	54,300,000.00
4	2025	Reward for Year 4	1440	525600	25	13,140,000.00	158,840,000.00	41,160,000.00
5	2026	Reward for Year 5	1440	525600	12.5	6,570,000.00	165,410,000.00	34,590,000.00
6	2027	Reward for Year 6	1440	525600	12.5	6,570,000.00	171,980,000.00	28,020,000.00
7	2028	Reward for Year 7	1440	525600	6.25	3,285,000.00	175,265,000.00	24,735,000.00
8	2029	Reward for Year 8	1440	525600	6.25	3,285,000.00	178,550,000.00	21,450,000.00
9	2030	Reward for Year 9	1440	525600	3.125	1,642,500.00	180,192,500.00	19,807,500.00
10	2031	Reward for Year 10	1440	525600	3.125	1,642,500.00	181,835,000.00	18,165,000.00
11	2032	Reward for Year 11	1440	525600	1.5625	821,250.00	182,656,250.00	17,343,750.00
12	2033	Reward for Year 12	1440	525600	1.5625	821,250.00	183,477,500.00	16,522,500.00
13	2034	Reward for Year 13	1440	525600	0.78125	410,625.00	183,888,125.00	16,111,875.00
14	2035	Reward for Year 14	1440	525600	0.78125	410,625.00	184,298,750.00	15,701,250.00
15	2036	Reward for Year 15	1440	525600	0.390625	205,312.50	184,504,062.50	15,495,937.50
16	2037	Reward for Year 16	1440	525600	0.390625	205,312.50	184,709,375.00	15,290,625.00

Fig. 13. Gander coin plan

Listing Availability:

Gander Coin shall be surfaced and facilitated under many exchanges and bug platforms like WazirX, CoinCRED, Cryptore, CoinDCX, Binance etc.

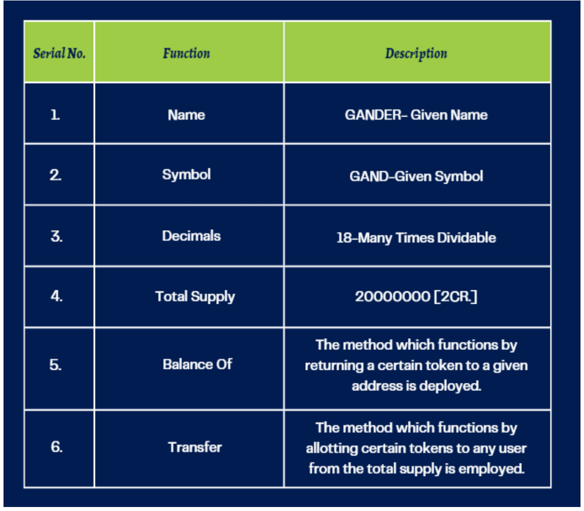
Utility:

Gander Coins can be used for all the purchase activities in India's largest e- commerce website HathMe.

Gander Token Insights:

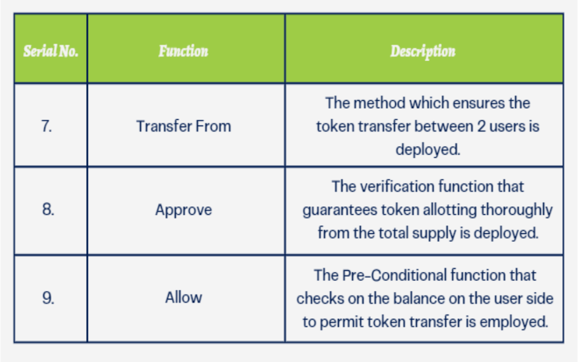
Here in this section, we shall deal with the metadata of Gander Token.

Table 1
Gander token insights



Serial No.	Function	Description
1.	Name	GANDER- Given Name
2.	Symbol	GAND-Given Symbol
3.	Decimals	18-Many Times Dividable
4.	Total Supply	20000000 [2CR.]
5.	Balance Of	The method which functions by returning a certain token to a given address is deployed.
6.	Transfer	The method which functions by allotting certain tokens to any user from the total supply is employed.

Table 2
Gander token insights



Serial No.	Function	Description
7.	Transfer From	The method which ensures the token transfer between 2 users is deployed.
8.	Approve	The verification function that guarantees token allotting thoroughly from the total supply is deployed.
9.	Allow	The Pre-Conditional function that checks on the balance on the user side to permit token transfer is employed.

5. Conclusion and Future Scope

We believe that cryptocurrency is financial freedom for every citizen. In the current marketplace, we have real wealth in the form of paper and coins, as well as digital wealth in the form of digital wallets. Cryptography is a decentralized version of digital currency, with no servers involved in transaction processing and no centralized system to govern it. Gander Coins are safe and confidential: Cryptocurrencies are powered by blockchain technology, which ensures user anonymity. It also ensures high levels of security via cryptography, as we previously discussed. Gander is decentralized, unchangeable, and open: The entire system is based on shared ownership, which means that data is accessible to all members with permission and is tamper-proof. Gander has an inflation hedge: Cryptocurrency is an excellent investment in times of inflation. Investors constantly compare cryptocurrency to gold. One of the reasons for this is that, like gold, they are in small quantities, as there is a limit on the amount of cryptocurrency that can be mined.

Acknowledgement

"Gander" for change - Initiated & Run by 2 strong female entrepreneurs of Nine 99 Technologies LLP. We are extremely thankful for Mrs. Shaik Ayesha and Mrs. Subi Ansari for believing in the project Gander Coin. The world requires an efficient and reliable source of finance technology and we are grateful for our mentors for guiding us and making important decisions at every stage of the project.

Ayesha and Subi, are the torchbearers for the successful deployment of the Project Gander. In the chaotic times like this, we are immensely proud to be led by leaders like them. Empowered people, Empower People. We firmly believe that usage of technology is not limited to any sex, caste or creed instead it must be limited to the benefit of mankind only.

References

[1] E. Kokoris-Kogias, P. Jovanovic, L. Gasser, N. Gailly, E. Syta and B. Ford, "OmniLedger: A Secure, Scale-Out, Decentralized Ledger via Sharding," *2018 IEEE Symposium on Security and Privacy (SP)*, 2018, pp. 583-598, doi: 10.1109/SP.2018.000-5.

[2] Y. Sun, R. Xue, R. Zhang, Q. Su, and Sheng Gao, "RTChain: A Reputation System with Transaction and Consensus Incentives for E-commerce Blockchain," in *ACM Trans. Internet Technol.*, vol. 21, no. 1, pp. 1-24, Feb. 2021.

[3] Y. Wang, X. Yin, H. Zhu, and X. Hei, "A Blockchain Based Distributed Storage System for Knowledge Graph Security," in *Artificial Intelligence and Security: 6th International Conference, ICAIS 2020*, Hohhot, China, July 17–20, 2020, Proceedings, Part II. Springer-Verlag, Berlin, Heidelberg, 318–327.

[4] "Intelligent Sustainable Systems", Springer Science and Business Media LLC, 2022

[5] M. A. Al Ahmad, A. Al-Saleh, F. A. Al Masoud, "Comparison between PoW and PoS Systems of Cryptocurrency," in *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 10, no. 3, pp. 1251-1256, June 2018.

[6] Litecoin Whitepaper

[7] Bitcoin Whitepaper

[8] Solana Whitepaper