



Whitepaper

Unlimited

Secure

Private Blockchain  
File Storage!

# The Team.

## James Vi

Founder & CEO

James Vi is an experienced communications manager in the financial trading industry and a long time Cryptocurrency enthusiast. James is the founder of Gas Files and is solely focused on solving digital storage issues by using innovative block chain technology.

Linked  [James on LinkedIn](#)



## Deepak Chauhan

CTO

As a CEO of Vosco, Deepak is an experienced developer & marketing consultant. For over 11 years, Deepak has helped start-ups around the globe, across different industries, build and expand their business online.

Linked  [Deepak on LinkedIn](#)



## Allan Dacunos

Community Manager

Allan is an Internet Entrepreneur. Allan holds a Bachelor's degree in Commerce and Computer Science from University of San Jose-Recoletos in Cebu City, Philippines. Allan worked in the Philippines' largest Insurance Company CAP Phils. Inc. as an Asset Management Officer. Allan is a dedicated professional with a passion for customer service and marketing.

**Linked in** [Allan on LinkedIn](#)



## Shajid Mahmood

Member Relations

Shajid is a community manager. He is also a marketing expert, advisor and experienced project manager. He has a passion for Blockchain technology. He worked as an assistant of Kepler's CEO Giorgi Topuria and brings a lot of passion and experience to the team.

**Linked in** [Shajid on LinkedIn](#)



## Amit Verma

Head of Marketing

Amit Verma has a passion for providing support services to startups and existing businesses. He has 17 years of experience in technology sectors which includes 13 years Entrepreneurial experience in several business verticals (including IT, ITES, Electronics, Manufacturing, and Telecom VAS & Health).

Linked  [Amit on LinkedIn](#)



## Deepak Raturi

Blockchain Developer

Deepak is an experienced Blockchain developer and has developed many successful Blockchain projects as a freelancer developer over the past 7 years.

Linked  [Deepak on LinkedIn](#)



## Shahrukh Khan

Developer

Experienced Laravel Application Developer with a demonstrated history of working in the information technology and services industry. Skilled in Search Engine Optimization (SEO), SQL, PHP, WordPress, and Customer Relationship Management (CRM).

Linked  [Shahrukh on LinkedIn](#)



# Advisors.

## Filip Poutintsev

Business Innovator, Human Resource Specialist,  
Blockchain Expert and ICO Advisor

Linked  [Filip on LinkedIn](#)



## Adrian Sernero

(ICO BOSS) President at Hiddenlight Company.  
Crypto Advisor

Linked  [Adrian on LinkedIn](#)



## Md Danish Zafar

CEO RightFit Consultants. BLOCKCHAIN Hiring Specialist.

Linked  [Danish on LinkedIn](#)



## Nicholas Huber

COO @ Lamden - Blockchain Development Toolkit and  
Atomic Swap Token. Entrepreneur, Investor, Advisor

Linked  [Nicholas on LinkedIn](#)



# TABLE OF CONTENTS

## Front Page

• The Team.....	3-4
• Advisors.....	5
• Table of Contents.....	6
• Abstract .....	7
• Introduction.....	8
• Gas Files is a Decentralized storage network.....	9-10-11
• The Problem.....	12
• The Solution.....	13
• The opportunity.....	14-15
• How it works.....	16
• Security.....	17
• File Sharing.....	18
• Limitations.....	19
• Road Map.....	20
• Token Sale.....	21
• Gas Files Token Allocation:.....	22
• Allocation Of Funds:.....	23
• Conclusion.....	24



# Abstract

**“Gas Files is here to address these concerns and change the world of digital/cloud storage forever!”**

This white paper explores **digital storage challenges**, and Intends to show to **Gas Files will overcome these challenges** In a unique way.

Despite the tremendous growth, the digital/cloud storage industry has some large interrelated problems - privacy, security, expense and size limitations.



# Introduction

Introducing Gas Files as the future of file storage. Gas Files has set to tackle the problems associated with digital file storage head on. Utilizing IPFS and our own private Ethereum Blockchain, Gas Files enables anyone around the world to store any number of files of any size without limits or security concerns.





# Gas Files is a Decentralized storage network

This new architecture will deliver enhanced scalability, security and resilience.

**Scalability** – we will be able to scale into the Exabyte range and satisfy the storage needs of our users regardless of their storage requirements.

**Security** – the new architecture will be decentralized, therefore eliminating security threats.

**Resilience** – nodes will better communicate with each other if they go offline, ensuring users maintain access to their data.

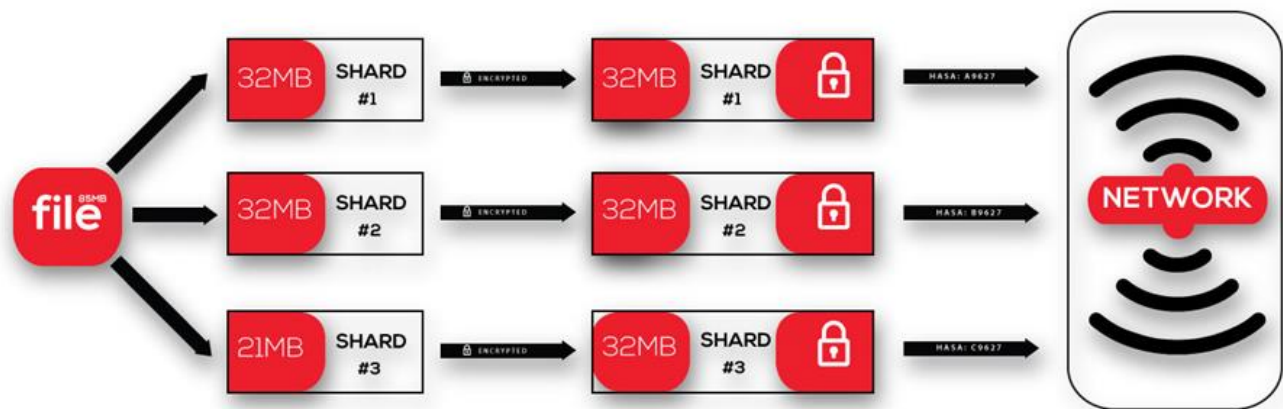
The Gas Files decentralized storage network will combine our own private Ethereum Blockchain with IPFS (**InterPlanetary File System**) to safely secure shards of encrypted files on our secure network.

## A breakdown of the functions:

1. Login to Gas Files Platform using unique identifier
2. Upload files
3. Files are encrypted
4. Encrypted files are split into shards
5. Audit pre-processing is performed for each shards
6. Shards may be transmitted to the network.

Once submitted to the network they are stored securely on the Gas Files Blockchain.

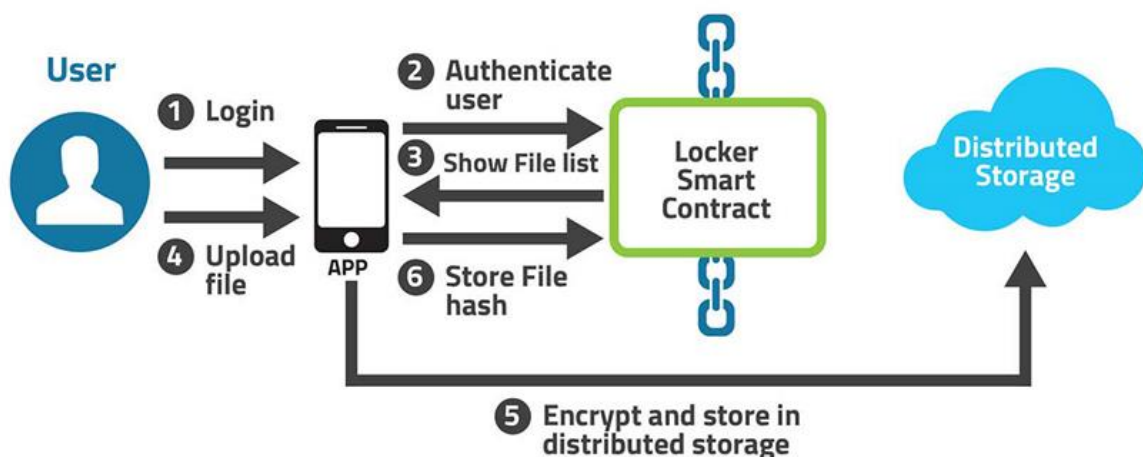




The first step in the process is to compress and store the file in hexadecimal format, which is encrypted and the hash is sent to the Blockchain and stored securely.

There is a 32mb size limit per block so once the file is converted if it is over this limit it will be automatically split into shards before converted to hash and sent to the network.

Once the file is stored on the secure Blockchain it can easily be converted back to its original form and saved to the destination of the users choice: ie computer.



## **InterPlanetary File System (IPFS):**

A new protocol, released as an open source project in 2014, that took advantage of the Blockchain protocol and network infrastructure to create a permanent and decentralized method of storing and sharing files securely.

IPFS uses a content-addressable distribution protocol with a content-address for each document that is “hyperlinked” to the data. Addresses in IPFS are directly linked to an exact and unalterable block of content. A new content-address is created if the content has been changed, which guarantees that no tampering of data occurs.

The mechanism is to take a file, hash it cryptographically so you end up with a very small and secure representation of the file which ensures that someone cannot just come up with another file that has the same hash and use that as the address. The address of a file in IPFS usually starts with a hash that identifies some root object and then a path walking down. Instead of a server, you are talking to a specific object and then you are looking at a path within that object.

### **IPFS + Ethereum Storage:**

We will create a simple datastore solution using IPFS and Ethereum. IPFS provides a convenient interface for distributed data storage, with a hash-based content address for reference to our file. This address will be stored in our smart contract on a private Ethereum Blockchain. To retrieve the latest data, we will fetch the address from our Blockchain and query IPFS for the associated file with GAS Files token transaction.

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# The Problem

**T**he problems with digital storage/cloud storage are, but not limited to:

1. Size limitations
2. Privacy
3. Security
4. Cost



# The Solution

**G**as Files solves all of the outlined problems. There are simply no limitations of size or quantity with Gas Files and our platform focuses on privacy and security utilizing the strengths of modern Blockchain technology. Not having to rely on external servers or rent out space from other peoples machines we have very few overheads which mean huge price reductions for our customers.



# The Opportunity

# Digital File Storage Security

**D**igital File Storage has become one of the fastest growing and most lucrative industries in the world today. However, digital file storage in its current form has many limitations and therefore very expensive. There are also various security concerns. A photographer or videographer who turnover 200gb+ files per day cannot store all their files securely on current cloud storage platforms. The time is now for Gas Files to change the industry forever!



# How it works

**T**he Gas Files platform is very simple. A user will sign up to the platform with a secure identifier with 2FA (2-factor authorization) much like you would at [blockchain.com](https://blockchain.com). The user now has access to the private Blockchain. The user can now select a file or multiple files simultaneously and upload. The actual file does not get uploaded to a server. At this point, the file is converted into a line of code and that data is safely stored on the Blockchain. This Blockchain is private! No-one else can convert your files or download it. If you have your settings set to private they will not even be able to see the file. You can share selected files at any time just by selecting the files and adding the people you wish to send them to. This will be instant and work like a crypto transaction. In this case, the users you send the files to will be able to access the file in the same way you can. To download a file from the private Blockchain it's as simple as uploading it on the Blockchain. You simply choose the files (one or multiple) and select where you wish to save/download the file. The file/s is then converted and saved to your selected location.





# Security

**B**lockchain technology changed the world of financial transactions with its unique mathematical algorithm. This algorithm made financial transactions secure, yet they are public for the world to see. Gas Files while secure, will store a lot of private and sensitive information. Understanding this, we encrypt files, split them into shards and store them securely on our private Ethereum Blockchain that has all the features of the public Blockchain without the fear of people around the world viewing your important files.

No-one else will be able to see your files. You will have a very secure process to access your portal and only you can see your files (unless you plan on sharing them see next).



# File Sharing

**T**he Gas Files Blockchain enables users to easily share files on their private Blockchain as easily as clicking a button. The transfer will be instant and you will have the option of making the file public or private.



# Limitations

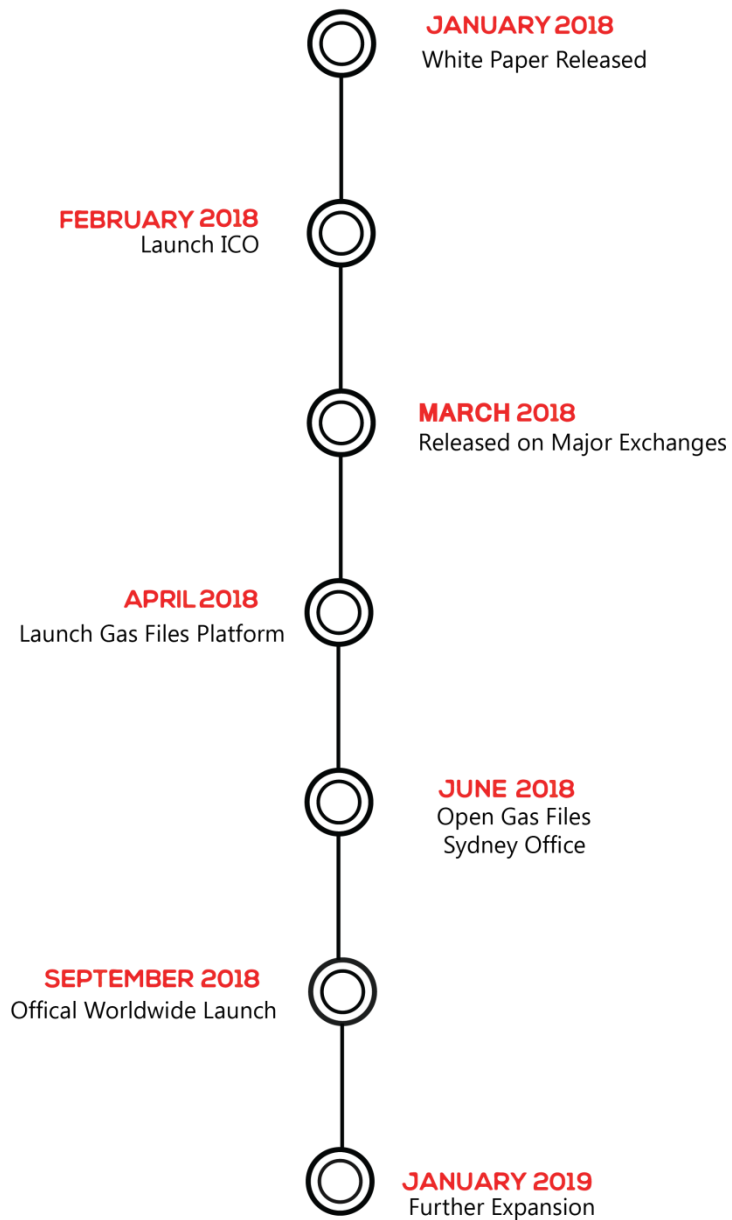
**T**o put it simply there are no limitations to Gas Files. Our technology will enable members to upload any file type of any size and store it safely and securely on the Gas Files Blockchain.

There are no limitations of size or quantity. You can store as many files as you want on the Blockchain and they will be stored much in the same way that a Cryptocurrency stores transaction information on the Blockchain.

**There simply are no limits!**



# Road Map



# Token Sale

**G**as Files Tokens are ERC20 tokens on the Ethereum Blockchain.

The Gas Files token sale will fund the full development and adoption of the Gas Files platform. The sale begins on Feb 9, 2018, and will end on March 9, 2018, or when the hard cap of 10000 ETH is reached.

The total supply of tokens will be 100,000,000. Each GAS token will be priced at 0.0003 ETH at the start of the token sale with bonuses on a sliding scale depending on the period of purchase.

Total supply: 100,000,000 GAS

Token sale supply: 60,000,000 GAS

Soft Cap: 1,000 ETH

Hard cap: 10,000 ETH

Exchange Rate: 1 GAS = 0.0003 ETH = \$0.18 USD \*

Each GAS token will be priced at 0.0003 ETH, with bonuses on a sliding scale depending on the period of purchase.

The sliding scale bonus is specified as follows:

- 30% Bonus for the first 24 hours
- 20% Bonus for the first week
- 10% Bonus until March 02

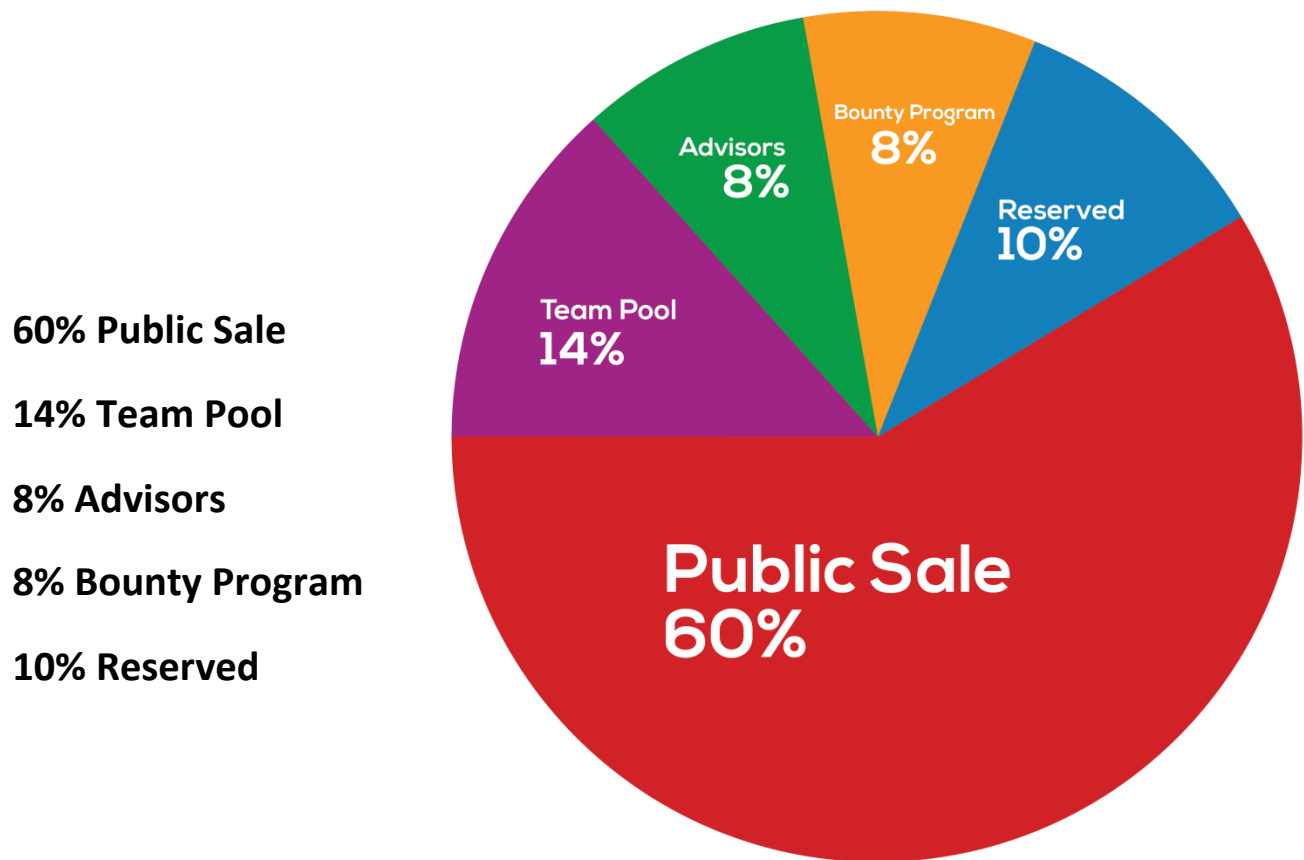
There will be no bonus for the final week of the ICO. Tokens will be transferred once the token sale has ended.

\* The exchange rate at time of publishing



# Gas Files Token Allocation:

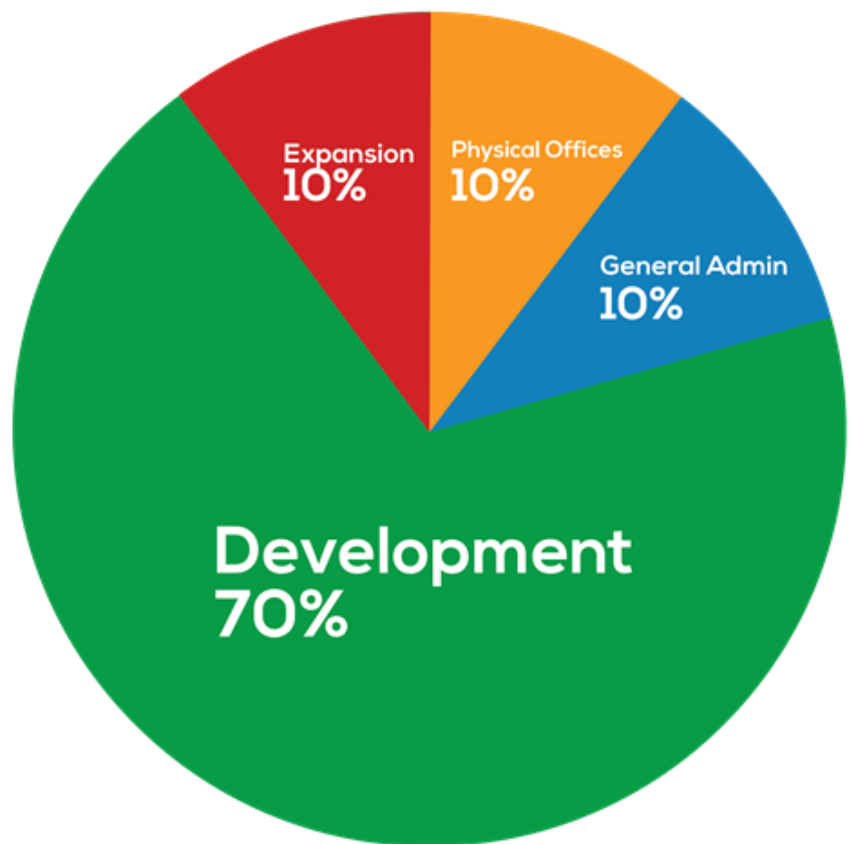
## Token Allocation



# Gas Files Allocation of Funds:

## Allocation of funds

- 70% Development
- 10% General Admin
- 10% Expansion
- 10% Physical Offices



# Conclusion

It is pretty much safe to say that the Blockchain has been one of the most innovative and intriguing technological advancements in the last 50 years. The possibilities are endless. Storing unlimited files on the Blockchain was something that had to happen and thanks to Gas Files it has become a reality.

Gas Files uses the Blockchain technology to store any number of files of any size and shrink it to a single line of code and store it safely and securely on the Gas Files private Blockchain.

**The problem of digital file storage has been solved and we look forward to sharing it with the world.**

