# DECENTERNET
# PLANETARY TECHNOLOGICAL
# ASCENSION PROTOCOL

### Whitepaper - **English**

# A WORD from the Author

Please note that this publication is versatile and flexible in nature. We know by heart that technologies do not stay stagnant. Technologies like the Decenternet can only be fruitful when it is allowed to adapt to the natural speed of evolution of mental and physical technology. The contents herein may be updated and evolve over time, as the ability to evolve is omnipresent in its foundation. Regardless of the circumstances, I would like to express my deepest appreciation in advance for the insights that will be given to us as feedback in the future by benevolent scientists and engineers who will devote their souls to the Decenternet universe epoch and the idea of liberty it represents. We congratulate you on taking the first step toward contributing to the Decenternet open source quest for planetary greatness. Realize that the acquisition and absorption of the knowledge contained here is already a big contribution to the Decenternet collective quest to raise ourselves to the title of advanced civilization. Perhaps you may find out that the relative time required for planetary change is shorter than the average lifespan of a person. Notice how the statement "too ahead of its time" means nothing anymore in this day and age. VERITAS IN LIBERTAS

Sean Kim

Creator and Founder of Decenternet

# 1.  Problem – Centralized Network of Wealth and Power

Multiple blockchain projects have attempted to provide a solution for the problem of centralized wealth and power on Earth. Much gratitude is expressed towards significant achievements in the areas of decentralization of finance, smart contracts, and IoT (Internet of Things) that many blockchain projects have laid the conceptual foundation in the past. However, implementation attempts of blockchain technology into our society has faced quite a few critical challenges. Notice how there is a general trend forming in the industry where no project can provide a complete planetary grade solution for the problems caused by unbalanced centralization of wealth and power under a single umbrella. Most new crypto-projects that are based on decentralization models of business have a narrow focal point and do not have the wide perspective that integrates global problems and challenges in a holistic manner including old models of competition, fragmentation, encapsulation (silo-model), and reductionism. From our perspective, it is vital to build a solution based on cooperation, convergence, and interoperability in order to address the following challenges:

- Monopolistic intermediaries physically own most of the data on the internet enforcing harmful policies on its users.
- Mass surveillance through the utilization of proprietary OS.
- Extraction, exploitation and profiling of private information without proper consent of the users. Most solutions partially contribute to the security of data and transactions superficially while at the same time fail to provide a clear solution for the breach of essential privacy rights enforced by centralized privative source SaaS[1] and operating systems on all devices monitoring all human activity on the planet. This creates an environment where individuals can be targeted for manipulation anytime, anywhere if they are deemed not submissive enough to the ultimate state of power.
- Monopolization of policies governing financial incentivization on the Internet which leads to an unfair profit distribution structure that does not benefit the users[2].
- Suppression of vital information that could be essential for survival of our species through monopolized content distribution networks[3].
- The majority of projects claim to provide decentralized profit models while their applications are still running on the traditional centralized Internet infrastructure. Notice how semi-decentralization solutions of this kind are still exposed to centralized search engines, storage services, and bandwidth providers.
- Inflationary fiscal policies gradually depreciate the value of labor for all citizens on this planet. No scalable cryptocurrency can be immediately implemented on the current payment network infrastructure as a solution for this issue.
- The issue of scalability is not properly addressed in an unbiased manner in most blockchain projects. Many projects provide partial ideal models for assisting human activity, yet there is no definite answer for how they can maintain performance on a planetary scale.
- There's a lot of interest in partial token metrics for short-term profits without providing a competent fiscal framework for the planet. Many projects discuss pricing of a token and sales commissions passionately for the short-term pump and dump gains. However, no project provides a unified technological solution which can allow a natural transition of the current debt based economic state of the world into an appreciative transparent crypto-economy. The word token economics itself does not address any economic issues of our time being solely focused on marketing and promotional purposes for quick gains and bailouts.
- Collecting money utilizing the ICO niche has become the priority for centralized solutions disguised as decentralization models. A sound investor can observe the overtokenization phenomenon as being no different from the dotcom bubble which lasted only four years. This creates confusion and draws negative attention due to excessive greed. Having a separate currency for every single aspect of business simply does not provide a convenient, realistic, pragmatic, and social operational model. Again, remember that no project will have a decentralized influence if they are tokenized on the centralized corrupt internet outside of the Decenternet.

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[1] See "Who does that server really serve?" by Dr. Stallman: https://www.gnu.org/philosophy/who-does-that-server-really-serve.en.html

[2] "Tech's top five now worth more than $3 trillion" in CNN: http://money.cnn.com/2017/10/31/investing/apple-google-alphabet-microsoft-amazon-facebook-tech/index.html

[3] Facebook, Google and Youtube Censorship at an all time high: https://www.collective-evolution.com/2018/03/01/facebook-google-youtube-censorship-at-an-all-time-high-what-ever-happened-to-free-speech/

- Lack of a viable mass adoption strategy is the biggest obstacle. Numerous architectural models for decentralized ecosystems are constantly proposed every day and fund themselves without a clear or any serious initiative for mass industry adoption negotiations taking place. Decentralization sounds ideal. However, even if there is a soccer field, there will not be a soccer game without the players agreeing to play in it. This problem exposes once again the old and constant problem of the lack of interoperability resulting from technologies that do not cooperate with each other.
- Many projects are pushing technology forward without proper legal and financial backing for liquidity and price transparency among the exchanges. Most crypto exchanges expose projects to market manipulation due to lack of liquidity and unbalanced ownership of tokens. Great projects that could potentially save mankind can be brought to an immediate halt.
- Last but not least decentralized business projects are being perceived as the ultimate solution for all social problems without stressing the importance of exploring distributed solutions which are much more powerful and immutable[4]. The superficial approaches merely driven by marketing visions feed this false idea. It is imperative to design solutions with an in-depth study of network theories and the contributions that science deploys in these fields, especially the contributions of social and humanistic sciences.

## 2. The Solution - Decenternet

The term Decenternet was coined to simply describe a version of the Internet where ownership of data, power, governance, and financial incentivization is naturally decentralized and distributed among its users as opposed to the past centralized information network solutions. It is an alternative software defined Peer-to-Peer (P2P) immutable hyperspeed net-neutral decentralized Internet infrastructure platform solution unbound by politics and oppression. Once Decenternet is out, it can't be stopped from spreading. It is cheaper, much faster, proliferates net neutrality, protects your privacy, and removes the influence of intermediaries without having to ask for permission from any central organization. Notice how most projects outside of the Decenternet do not offer the value Satoshi Nakamoto envisioned because they are still running on the centralized, monopolistic Internet. For more information on the social implications of Decenternet, please refer to Decenternet's original socio-political white paper, "The Decenternet Initiative" at https://www.decenternet.com. Realize that the Decenternet is the technological infrastructure for creating independence of all human activities from any centralized governance systems. It is supported by a strong trusted appreciative cryptocurrency, Spyce. Spyce is the essence of mental, physical, economic activity on the Decenternet including all commerce and trade of goods and services.

## 3. The New Decenternet Economy

Spyce provides a complete pragmatic approach absorbing the damage of the next economic crisis for the majority of the people on this planet. Notice how the world's top economists have been warning against the chronic decline of the purchasing power of the USD[5] - the value of your labor. This aspect of our social paradigm is not addressed often enough or completely ignored in most crypto projects. Realize that social inequality, deterioration of the quality of life, economic insolvency, and social indoctrination are the issues we must overcome. The Decenternet, in essence, is the planetary immunologic reaction to central market manipulation that has been one of the major causes of economic collapse and instability in the past. Spyce can be obtained through purchasing it or harvesting. Harvesting is the act of allowing your computing resources (any domestic PC or laptop) to be used as a supporting agent that sustains the Decenternet core microservices. Spyce is used also for content storage, content delivery, and dWapps (Decentralized web applications). In addition, Decenternet is powered by a smart hybrid network, hybrid consensus scalable system, high number of transaction throughput, and customized side ledgers for various industries.

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[4] To understand this crucial different concept in a glance, see "Centralized vs Decentralized vs Distributed " by Saurabh Goyal: https://medium.com/delta-exchange/centralized-vs-decentralized-vs-distributed-41d92d463868

Spyce is the fuel that runs and maintains all decentralized systems within Decenternet. With the introduction of the concept of Spyce, Decenternet will be fully capable of having a secure exclusive crypto exchange through the Spyce financial infrastructure which aims to integrate immunity against market manipulation. Decenternet core assets such as the Osiris, Metatron OS, Titan, Liberty SE, Liberty Ads Network together with the SpyceDex crypto exchange will gradually initiate the process of transitioning the inflationary global economy into a completely decentralized state through hard work and labor by gradually releasing Decenternet microservices, eliminating the potential for corrupt economic activity on the planet by centralized organizations of power. The citizens of the new independent world will always have full control over their financial and intellectual assets creating an environment where wealth is constantly flowing through the hands of people. Find yourself understanding gradually that a self-sustainable socio-economic structure is the most natural state of being in the new decentralized world. For more information on Spyce, the currency of freedom, and its *Meta Economic Spyce Value equation* please refer to the "The Decenternet Initiative" white paper at https://www.decenternet.com. Based on the concepts mentioned above, notice how how we may find ourselves naturally enjoying the following impactful benefits:

## 3.1.  Business and Economic Impact

- Transparent and dynamic monetary incentivization of user activity on the Decenternet. Users get incentivized financially just by using the Osiris UBI Browser by contributing to the Liberty Ads network with precious marketing data. The Beta Test for the Osiris is ready today for download at https://decenternet.com. For more information on the benefits of the Osiris UBI Web browser please go to about osiris.
- Tokenization of aspects of virtually all human activity under a transparent and fair business structure where the monopolistic party who used to control most data on the internet is left out of the picture. Atlas™ Tokenization platform, all economic activity may be free from the chains of limitation set by the central organizations of power.
- Structural revitalization of the profit model where content creators and audience groups can mechanically have a strong say in the profit distribution protocol calibration and policies. Notice how profits will flow back to the content creators and cost will be reduced significantly for businesses in the Decenternet open source content delivery dWapps (Decentralized Web Applications).
- Reallocation of the economy from an exhaustive inflationary state to an appreciative transparent technological platform creating a natural planetary environment where abundance and prosperity are default states of being. This alleviates the burden and pain caused by a debt based currency while introducing a self-sustainable and ever expanding economy and business environment.
- Revitalization of the economy through the removal of the third party intermediaries in all aspects of human business activity bringing pure economic value to the producers and consumers. We consider this contribution as a preliminary step towards a socio-economic model focused on "prosumers" and production based on the P2P model.

## 3.2.  Social and Cultural Impact

- Ownership and management of private data worth trillions of dollars a year can be transferred to its rightful owners - the People, through a compensation system. Data regarding identity, credit rating, financial records, health records, criminal records, and so much more will no more be owned and manipulated by a centralized authority thanks to the Veritas™ Decenternet blockchain ID Network. It is your data, and only you can give access to it under your consent. Veritas™ is truly revolutionary because it allows you to transfer your citizenship and obtain a passport to the new decentralized world.
- Total decentralization of the current centralized version of the Internet, seeking to bring to the present the values and philosophical principles contained in the design of the original design of the Internet.
- Establishment of a planetary scale constitution infused into all governance systems enforced by technology. For instance, all search engines on Decenternet are forever 100% open source.
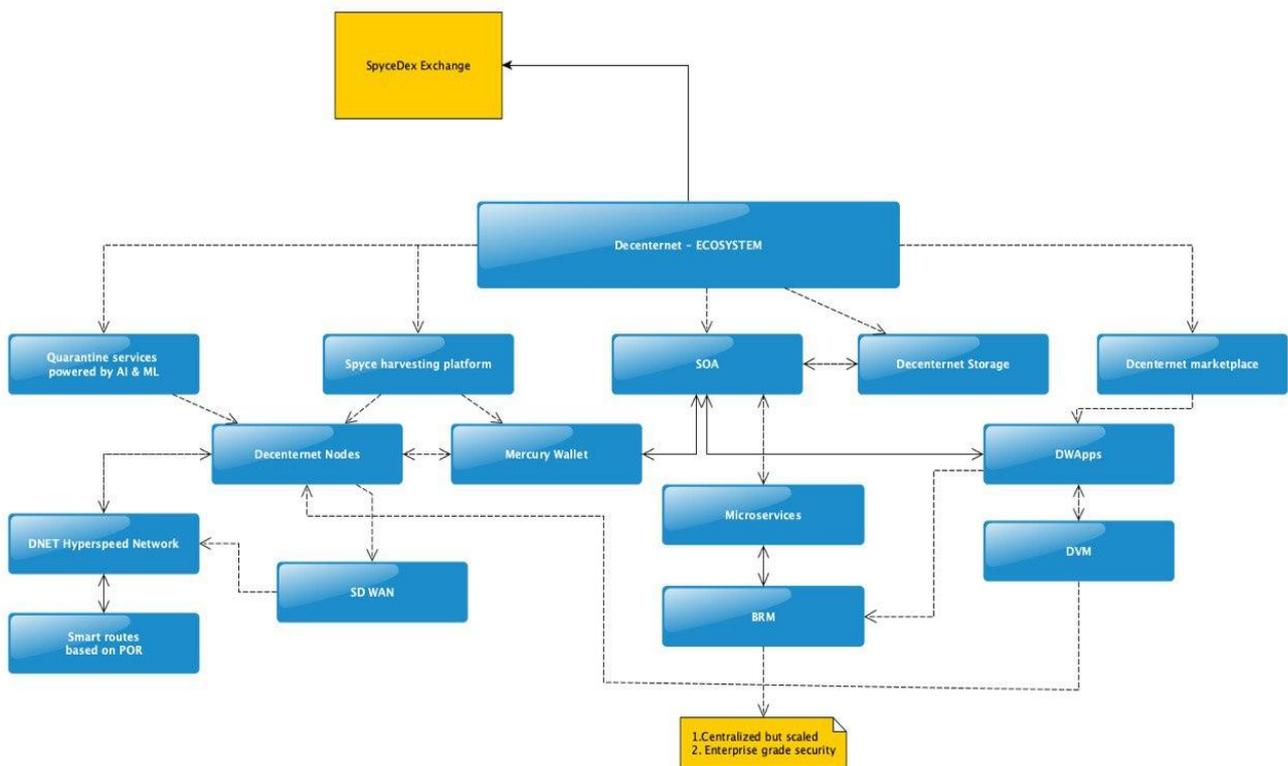
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[5] See: Desjardins, J. "Visualizing the Buying Power of the U.S. Dollar Over the Last Century". 2017
http://www.visualcapitalist.com/buying-power-us-dollar-century/

- Total protection of privacy as a basic human right.
- Net Neutrality principle mechanically enforced by the constitution of the Decenternet infused into the architectural design.
- Freedom and control centered on the users/peers who are not considered mere consumers on whom exchange value is extracted but instead are recognized as producers of value that enrich the network.
- Distribution of all centralized systems of governance. A government scheme based on real democracy and community co-governance of the peers that make up the network.

## 3.3. Technological Impact

- Suppressed technology will eventually raise to the surface of mainstream awareness naturally through the power of the open source Liberty Search Engine.
- Complete planetary grade blockchain solution powered by Decenternet.
- A GNU/Linux based actual OS with all the features and benefits of Open Source systems that allow users to take full advantage of their computing resources in an enterprise-grade level performance social operating system for the masses.
- All Decenternet Dapps and Dwapps run natively on the Decenternet and optionally on the old slow monopolistic traditional Internet.
- Technological ascension of our civilization through the transparent delivery of vital data for everyone.

## 4. Decenternet Architecture Overview



## 4.1. Decenternet ecosystem highlights

- Hybrid Spyce Harvesting platform.
  - ✓ Planetary Grade Scalability
  - ✓ Node fault detection and tolerance

- Hybrid temporal consensus system
  - ✓ Large number of transactions/seconds
  - ✓ BFT tolerant
  - ✓ Double spending prevention
  - ✓ Race attack prevention
  - ✓ Finney attack prevention
  - ✓ Sybil attack prevention
- Distributed storage and streaming engine (Decenternet Storage)
- Anonymous operations are supported
- Smart contracts
- Marketplace with dApps
- SOA based architecture for microservices
- BRM integration
- Quarantine services on nodes available to the network
- Smart Decenternet network
- SpyceDex Exchange integration

## 4.2. Hybrid harvesting platform (Spyce)

Decenternet Hybrid harvesting platform is a breakthrough in cryptocurrency validation and processing systems. The following are the limitations of traditional blockchain solutions:
- Limited scalability
- Limited privacy
- Lack of formal contract verification
- Storage constraints
- Unsustainable consensus mechanisms
- Lack of governance and standards
- Inadequate tooling
- Quantum computing threat

To overcome these issues Decenternet implements the following solution

1. **Hybrid consensus algorithm:** Consists of 3 concepts Temporal algorithm, DAG, and Sharding. Notice how the Decenternet does not rely on traditional blockchain architecture.

Decenternet uses a temporal algorithm to generate a temporal proof of the chronological order of events. Nodes, those are involved in generating the temporal proof of a certain transaction, will require coming to a consensus. Temporal consensus distributed ledger will support higher throughput. Stay tuned for the gradual release of more technical data on this.

2. **Smart routing based on POR:** We are working on designing hyperspeed network selection system based on POR (proof of reliability). Every node will have to maintain a healthy POR status so that they can get a chance to participate in the transaction validation.

$$R = Ut + Sr$$

Where:

**P**
Period(P) is a constant with a value of 3,600; unit is expressed in second(s).

## T
Time (T) is the total amount of time a node is ready to accept data in a given P. Unit expressed in second(s).

## Ut
Uptime (Ut) is the average amount of time a node is online, expressed in a unit of second(s). Uptime is enforced with a minimum of 3,600 seconds (one hour). Expressed in the following formula:

$Ut = T/P * 100$

## S
Storage(S) is the average amount of storage of a node. A miner is required to allocate a minimum of 15 gigabytes worth of storage.

## Sr
Storage reputation (Sr). Storage alone is not enough to get a high score. The node must always provide available storage ready to host data whenever a request is made. It boosts the Decenternet speed as it prevents a high volume of storage request for every node.

## Mms
Minimum maintaining storage(Mms) is the suggested storage which must be allotted by a dedicated node in a span of P. It has the constant value of 1,000 GB. It is expressed in the following formula:

$Sr = S/Mms * 100$

## R
Node Reliability(R) is the result of computation based on node uptime, storage, and bandwidth. Basically, it is the reputation of a given node.

## Pool Node reliability
Implementation of pools to geographically grouped nodes will improve the lookup time in DHT because the message exchanges will be between pool managers and clients rather than individual nodes. The pool manager is the best node within its pool, the most responsive, and one with the best uptime reputation. These pool managers are keeping a summary of their nodes' performance and statuses by querying their nodes in an acceptable time interval. Thus, when a request from a client arrives, the pool manager will always be ready to respond immediately.

$$Pr = \frac{(\sum_{i=1}^{n} R_i)}{n}$$

Where:

## n
The variable n stands for the total number of nodes in a pool.

## i
Index (i) is the position of summation.

## Pr
Pool reliability (Pr) is the average reliability of all nodes inside a pool.

## R (Node Reliability)
In conclusion, the reliability of a pool is the average reliability of all nodes within that pool. The context of having a reliable pool will translate to having nodes which have the required minimum available storage, good bandwidth, and excellent uptime reputation at a given time. This is why the Decenternet can be uniquely defined as a "hyper-speed" internet infrastructure. All other solutions would be simply too slow compared to the traditional monopolistic internet.

## 4.3.  Harvesting rewards

Harvesting reward for a node is determined using the following formula:

Harvesting reward of the top 1 node is computed using the following formula:

$$R_1 = \frac{N_t}{Cr} + 1$$

While the succeeding nodes from the highest PoR  to the lowest PoR (top 2 to top n) are computed using

$$R_n = R_{n-1} - \frac{1}{(N_t - 1)/2}$$

Harvesting reward *(R )* is the rewards computed based on the total number of nodes which passed the minimum PoR requirements.

Spyce harvester *(N )* is the participating node in Decenternet which passed the minimum PoR requirements.

Node Total ($N_t$ ) is the total number of nodes who passed the minimum PoR.
Current Reward *(Cr )* is the present total maximum number of Spyce awarded to harvesters.

The default value is 11,688 Spyce grams.

To put this formula into application, suppose we have 10 nodes who met the minimum PoR requirements, the harvesting reward, in this case, is 11 Spyce grams. The following Spyce will be awarded to N nodes depending on its PoR rank.

## 4.4.  Transaction Fee

Tx1 = P1+RN1+N1 (where, P1:Pool node, RN1: Router node, N1: harvesting Node).

Transaction fee will be nominal as there are not POW or hashing to be solved. Therefore there is no need to put all your resourced to solve anything. Hence not many specific resources are consumed.

## 4.5.  Decenternet Storage dCache

We are working on a decentralized data pull and push services. These services will let the users rent their storage to the network. Data will be encrypted by RSA keys.

The node running on the client machine will ensure that the data pull and push is happening properly. This is another way of earning Spyce.

## 4.6.  Decenternet Marketplace

The Decenternet marketplace will house dApps made by the community for a specific use-case. Decenternet marketplace will provide various microservices via SOA platform. Developers can utilize these data services to fulfil various specific requirements.

Although we understand that it should not have outside access, we are backing the microservice result with a unique cryptographic proof.

## 4.7. Smart contracts and DVMs

Decenternet will support Smart contracts which will be running on DVMs (Decenternet virtual machine). Smart contracts can be deployed and can be called via dApps.
Decenternet will release its high-level JS library to build the smart contracts.
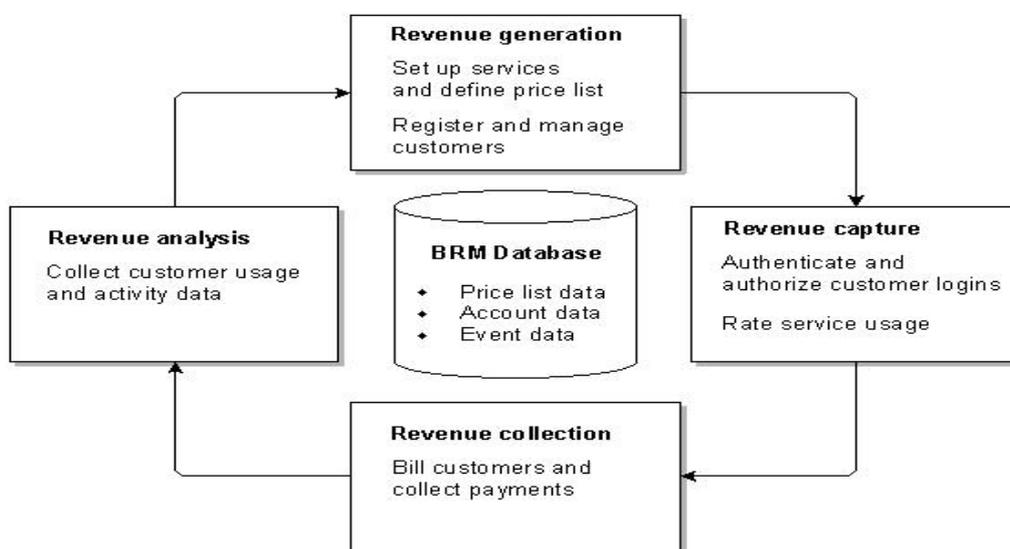
## 4.8. SOA

A service-oriented architecture is essentially a collection of services. These services communicate with each other. The communication can involve either simple data passing or it could involve two or more services coordinating some activity. Some means of connecting services to each other is needed.

SOA will be utilized to prevent any monolithic application architecture and will provide more scaling to the centralized data. Decentralized models such as Kafka with Cassandra, Lambda is evaluated to see the better fitment to the overall architecture. SOA will sit on top of the microservices. Stay tuned for more technical information release on this.

## 4.9. BRM

BRM is an end-to-end revenue management system for communications and media service providers. When you build your business around BRM, you can more effectively manage the revenue life cycle:
- BRM revenue generation enables you to deliver services with optimal pricing to your customers. With BRM, service plans can be complex, yet you can change them quickly to respond to changing market conditions. BRM customer management tools enable you to continue generating revenue from existing customers by maintaining a positive and proactive relationship.
- BRM revenue capture enables you to rate service usage with a high level of control and responsiveness. The BRM system is integrated with network authentication, authorization, and accounting.
- BRM revenue collection enables you to invoice and bill customers, collect payments, manage accounts receivable (A/R), and collect general ledger (G/L) data.
- BRM revenue analysis enables you to audit processes for revenue leakage, generate business intelligence reports, and set up safeguards for data consistency and high availability. Collecting revenue analysis data helps you adjust your service plans for maximum revenue generation.
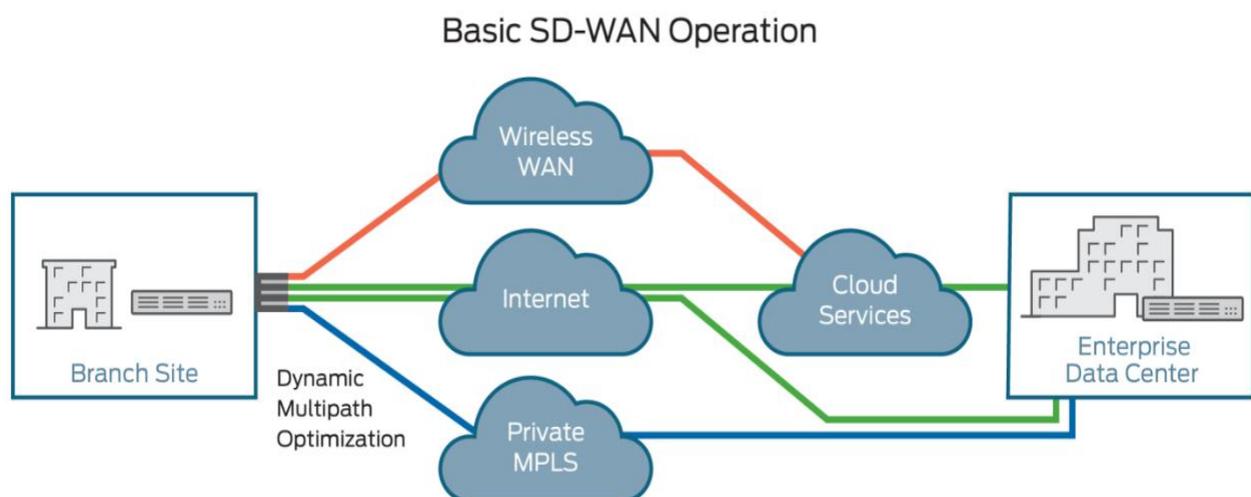- SOA-BRM will be utilized by Decenternet.

# 4.10. Decenternet Hyperspeed network

The Decenternet is a much more transparent evolved form of the current centralized internet. In the overall architecture of the network, nodes can choose between the participants/contributors with lightning fast speed. An SD-WAN setup powered by POR ranking of all the nodes is built to accomplish this.

The Software Defined Wide Area Networks (SD-WAN) is a specific application of software-defined networking (SDN) technology applied to WAN connections, which are used to connect enterprise networks - including branch offices and data centers - over large geographic distances.

A WAN might be used, for example, to connect branch offices to a central corporate network or to connect data centers separated by distance. In the past, these WAN connections often used technology that required special proprietary hardware. The SD-WAN movement seeks to move more of the network control is moved into the "cloud," using a software approach.



Basic SD-WAN Operation

Our approach will use a similar concept to a variant of SD WAN called Internet-based SD-WAN. This type of SD-WAN is using multiple appliances at each customer location, using public Internet connections from customer-chosen providers. The customer pays for a portion of its Internet connections to be SD-WAN.

Using SD-WAN concepts, we designed a decentralized software-defined routing mechanism for all decentralized platforms in Decenternet networks. It will be able to provide services for both Decenternet platforms and third-party platforms. This smart routing mechanism will make sure the high-performance delivery of requested resources, processes, and all other types of request in Decenternet infrastructure.

SD-WAN Consumers are

1. Client Dapp: Client applications are any software applications on any different platforms for mobile, web, and desktop. A dApp may consume different platforms available in Decenternet infrastructure, be it native or third-party platforms. It uses a platform-specific API which is all supported by SD-WAN. A client dApp will be able to connect directly to platform-specific nodes after SD-WAN has completed the relaying nodes to the requesting dApp.

2. Platform API: Platform Application Programming Interfaces are any defined functions, protocols, or tools which is used in building software applications. In this case, all Decenternet platform APIs whether third-party or not has to connect to SD-WAN for effective and efficient node routing.

3. SD-WAN Cluster: An SD-WAN Cluster is a grouping of nodes based on location. An SD-WAN client is needed to join automatically to the nearest cluster. Any harvester can install an SD-WAN Client software, it is where they can define its configurations such as PLATFORM_TYPECODE.

4. Routing Nodes: Routing nodes are computers with high computing and bandwidth capability. These nodes are responsible for detecting the nearest path of resources in Decenternet. Nodes in this cluster will make sure the fast delivery of contents and other resources from Decenternet harvesters to end-users by having an automated performance detector and network path detection systems based on peer performance (PoR Score). Routing nodes will make every network requests and responses efficient. It also uses the caching nodes to improve the performance. Routing nodes will technically base its process in DSCP QoS and ToS. The Quality of Service (QoS) is to achieve via a dual internet connection for every virtual router. This will make sure a consistent uptime of the routing service. Type of Service (ToS) on the other hand will help categorize the request and help the router acts as a mediator on which connections will be used. Real-Time connections and non-Real Time connection will have different routes. Each routing nodes store cluster-wide information for each platform-specific node. This group of information is called Atom.

**SD WAN Atom**

| IP_ADDRESS | PLATFORM_TYPECODE | CLUSTER_CODE | PoR_SCORE |
|---|---|---|---|

IP_Address is the network address of the platform-specific node.
PLATFORM_TYPECODE is a vendor-defined code for its platform.
CLUSTER_CODE is an auto-generated code assigned by the SD-WAN Client App.

PoR_SCORE is a computed score for the reliability of a node

# 4.11. UBI Architecture

UBI(Universal Basic Income) on the Decenternet is possible through the unique Decenternet UBI™ architecture. Notice how self-sustainability, perfect balance, prosperity and stability is a basic feature of all natural ecosystems. Remember that for some parts of the world, even 50 cents a day could actually make a big difference. Realize that the more you use Decenternet(Osiris Browser, Hermes Messenger, Mercury Wallet, Liberty Search Engine, Decenternet Apps, dWebsites, and many more) the more empowerment you are bringing to everyone in a planetary scale. The Decenternet UBI™ Architecture stays true to this basic most fundamental benevolent aspect of humanity. Technical information on the UBI architecture will be revealed after deployment.

# 4.12. Osiris Net-Neutral Web Browser

Osiris is the world's first Net-Neutral browser designed to bring freedom back into your hands. It is at the heart of the UBI architecture for global mass adoption of Spyce. Osiris is designed to gradually bring forth the realization of a planetary grade information network and a decentralized financial infrastructure that is borderless, permissionless and free from corruption and oppression. Notable features of the Osiris beta version 0.010.92 are:
- Saves you money by preventing unnecessary data charges used for intrusive ads(videos, banners, malicious scripts)
- 3 to 5 times faster than traditional browsers.
- Protects sensitive private information from forced extraction preventing profit and data extortion.
- Elimination of monopolistic revenue streams that do not bring value to the user.

- Blocks intrusive ads.
- Prevents suppression of valuable information.
- Always Free.

Due to the sensitivity of the issues surrounding net-neutrality and the disruption Osiris can bring into our society, further information regarding its UBI web browsing architecture will be released strategically to the community for the protection of the Decenternet vision. Notice that a community EARLY BETA TEST for windows is already available for download at https://decenternet.com.

# 4.13. The Liberty Search Engine

The autonomous decentralized system managed by high level incentives effectively eliminates the necessity of monetizing the Liberty search engine. Liberty is the native Decenternet search engine. Liberty is simply designed to fulfil one simple purpose: to speak the truth. When you type "sexy shoes" it will fetch the content with the most popular demand first. It doesn't bring you the content with the most ad clicks. When you type "Hermetic philosophy," there's no third-party organization preventing you from obtaining the secret occult alchemic art of metaphysical mastery. Liberty does not suppress human progress for fear of the unknown. It encourages it, for that is the very essence which makes us collectively more powerful together with the appreciation of the Spyce economy.

Centralized media giants, who used to control the insemination of information in the past, attempt to display the world as being dangerous, fearful, and full of conflict. They are desperately trying to focus on the negative aspects of humanity because the cycle of negativity is ending. Do not buy into their stories, for you are a magnificent being whose potential is yet to be discovered. Build your own ideas and make your own rules. The Liberty search engine boldly encourages all human expression. Humanity is waking up to a new level of wisdom and responsibility. Power should not be privileged to just a very few number of people. We should all become powerful together. This philosophy is omnipresent in all native Decenternet applications. Unlimited freedom awaits your decision. Now it is only up to you to express your vote of confidence by contributing to the Decenternet with your inner decision-making leadership. The Decenternet belongs to you, the people.

Liberty's architecture is built on the open-source ElasticSearch that collects and stores information on websites and contents in and out of Decenternet. It is run by private computers or nodes using a decentralized network provided by the Decenternet. All data, such as the index, will be stored in Decenternet nodes. End users can search contents through inputted text criteria, just like how Google search works.

ElasticSearch is based on Lucene, which supports a highly scalable full-text search and analytics search engine. It is a distributed, multi-tenant-capable full-text engine with an HTTP web interface and schema-free JSON (JavaScript object notation) documents. In ElasticSearch, you can store all kinds of documents, search, and analyze big volumes of data quickly in near real-time. [6] We have decided to develop Liberty on ElasticSearch technology based on the following criteria:

1. Scalability
2. Open source
3. Large community
4. Uses rest API
5. Well documented
6. Distributed environment support
7. Good search performance
8. Full-text search support
9. Reliable
10. Easy management

ElasticSearch is distributed, which means that indices can be divided into shards and each shard can have zero or more replicas. Each node hosts one or more shards and acts as a coordinator to delegate operations to the correct shard(s). Re-balancing and routing are done automatically. Related data is often stored in the same index, which consists of one or more primary shards, and zero or more replica shards. Once an index has been created, the number of primary shards cannot be changed. A small procedure is needed to make Liberty capable of traversing the Decenternet network. We see Liberty as a continuous process of enhancement as the Decenternet community grows. You may discover for yourself that the Liberty SE design is scalable to respond to expected rapid demand for Decentralized technologies. The following tasks are strategically planned for future demand and development:

- Support for decentralized protocols and other incoming decentralized solutions.
- An autonomous jury-duty-like voting system for filtering out content of extreme negativity from the Decenternet.

## 4.14. Open source Liberty Ads Network

Liberty Ads is a part of the UBI architecture on Decenternet. Spyce will be utilized in the Decenternet advertising platform, the Liberty Ads Network.

Osiris users can earn Spyce upon accumulating genuine usage time surfing with the Osiris UBI Browser. Merchants will have to pay with Spyce for the Ads.

The Liberty Ads Network only collects data from people that is necessary for marketing and never report that data to a central organization of power without their permission. Users can verify how the data collected is being used under an open source development environment. User's approvals will be required for collection.

Merchants are able to explore the statistical reports which can show them the performance of their Ads against various filters.

Notice how the user gets paid to browse the Decenternet with the Osiris Browser through the power of the Liberty Ads Network UBI Architecture. Also, notice how immediate cost reduction across all businesses on Decenternet is naturally guaranteed. This is only a fraction of the benefits of the decentralized world Decenternet brings to the world. Realize self-sustaining finesse is expressed in the business environment by the power of Decenternet. Business will never be the same in the Decenternet universe.
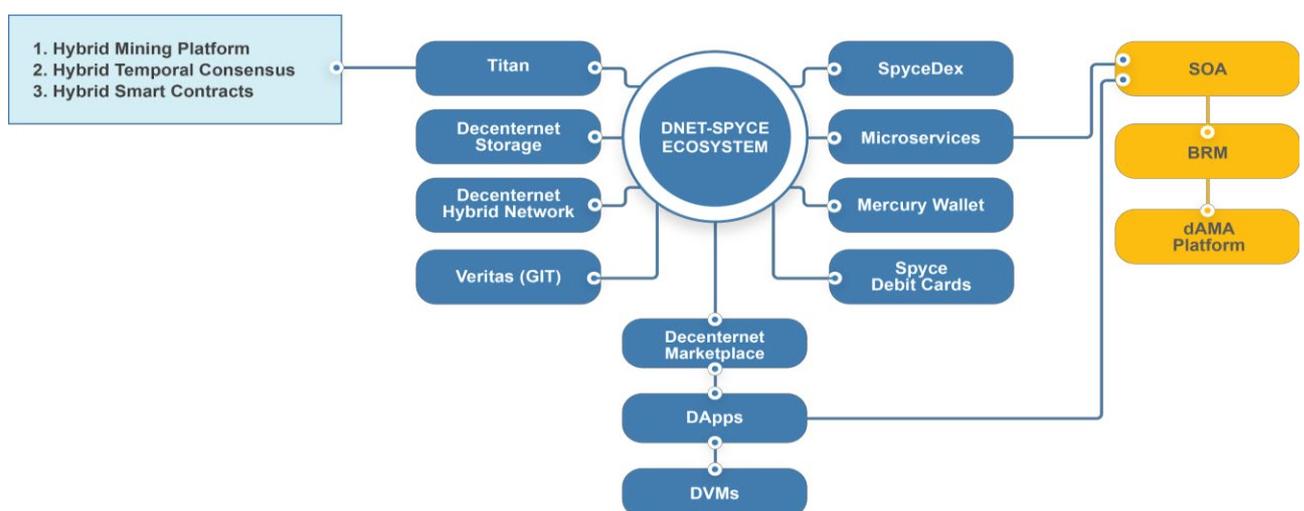
## 4.15. Metatron Blockchain OS

The Metatron Operating System (OS) is the next level of natural integration of decentralized social technology into our civilization. It provides a definitive solution for most social problems and beyond. The Metatron OS is a mid-long term asset of the Decenternet infrastructure. Metatron OS is an open model of creation, interoperability, convergence, and cooperation. It is the most natural progression model of creation in action. As you continue to explore the value proposition Decenternet offers to the human race, you may also perceive gradually the value of the Metatron OS as the all-embracing solution. In simple terms, Metatron OS brings the maximum level of security to the individual, highly incentivized compensation systems, natural integration of a new age of social security, a thriving mental and physical environment, and total transparency to all data flow as default feature to the Decenternet Age. The following is a fraction of the technical monumental features Metatron OS powered by Decenternet has to offer our society.

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[6] James, "Top 5 Open Source Search Engines," My Technology, (2015), accessed 1/16/2018, https://www.mytechlogy.com/IT-blogs/8685/top-5-open-source-search-engines/#.WjjNp9-WbDc.

- HDCS – Decenternet hybrid DLT based on Proof of Reliability (POR) + Temporal Proof + Directed Acyclic Graph (DAG) algorithm engineered specifically to scale up to 10,000,000 transactions per second once globally circulated more than 90% adoption – allowing it to become the most suited distributed planetary solution surpassing even the 24,000 TPS of VISA.

- In-house decentralized web applications (dWApps) ranging from education, healthcare, retail, transportation, social media, content media, airline, IoT to e-commerce, artificial intelligence, marketing ads automation platforms and much more will be developed in parallel with the core development. The Decenternet Team is constantly negotiating with the world's top institutional leaders and influencers in each industry to bring in the best in-house solutions that will be hosted on Decenternet from the adoption phase of the new internet.

- All dwApps and dApps are audited by the community before it is officially accepted in the Osiris and Metatron Apps Store.

- Metatron OS is designed to circumvent data privacy breaches on Decenternet overlay network fabric to guard against data piracy that is driven by traditional OS on the corrupt Internet.

- Metatron OS core assets can run on the traditional centralized OS such as Windows and IOS if the user chooses to utilize traditional OS in conjunction with Metatron core assets.

- Many Metatron OS core assets such as the Osiris Browser, Hermes Messenger, Spyce Multi-currency Wallet, can be fully functional with their own features on mobile and desktop creating an active user base community independently without having to wait for the Decenternet harvesting core assets to be completed and deployed.

- When Decenternet goes live, all current deployed Decenternet dWapp platforms will be migrated into the new incentivized net-neutral Decenternet.

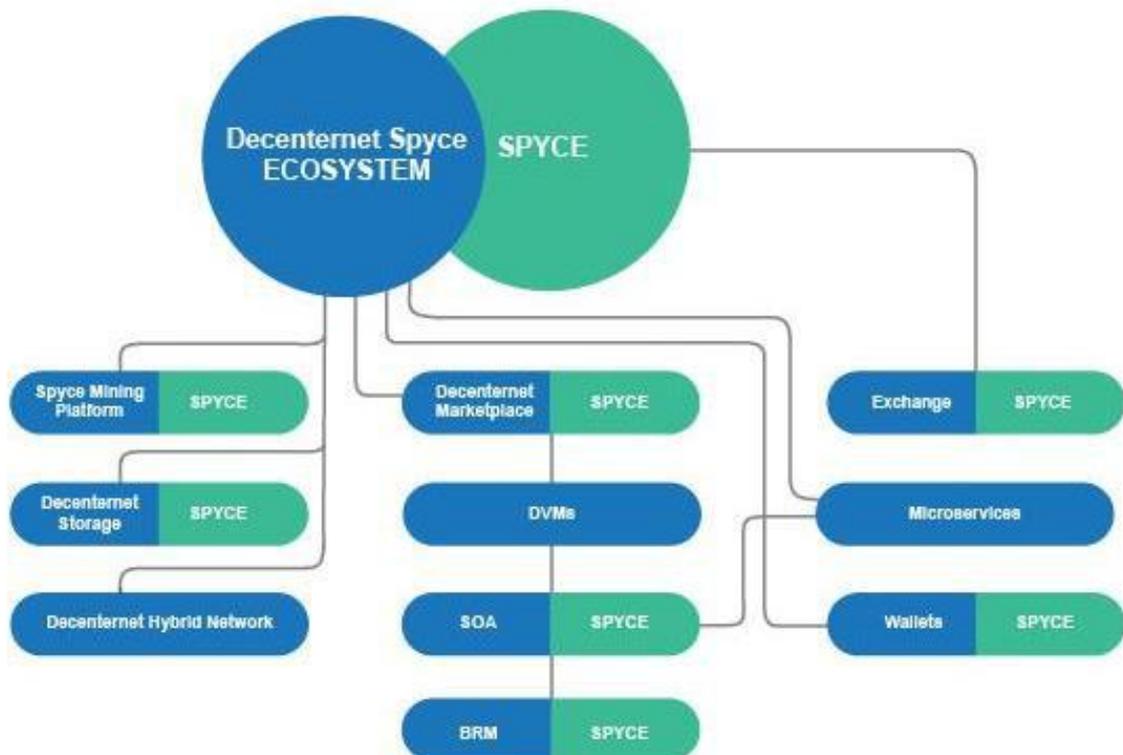# 4.15.1. Metatron Platform Overview and Details



As you continue to delve deeper into the exploration of possibilities the new decentralized world has to offer, you may also notice that the world will never look, or feel the same after the proliferation of Metatron OS powered by Decenternet. It would be helpful to keep in mind that the following examples are just a fraction of the real projects being already developed on the Decenternet ecosystem. You could

naturally allow yourself to imagine how your life would change with the following type of dWapps becoming available when entire planets are powered by Decenternet. Remember that many of the following projects will be doing their own public token offering using Spyce as the standard base currency on the Decenternet.

## 4.15.2. Metatron Components

This diagram shows what the major components and how they would be infused together to work as an ecosystem. Decenternet will be transitioned to its native ecosystem in stage-2. High-level technical details can be found in subsequent technical articles.
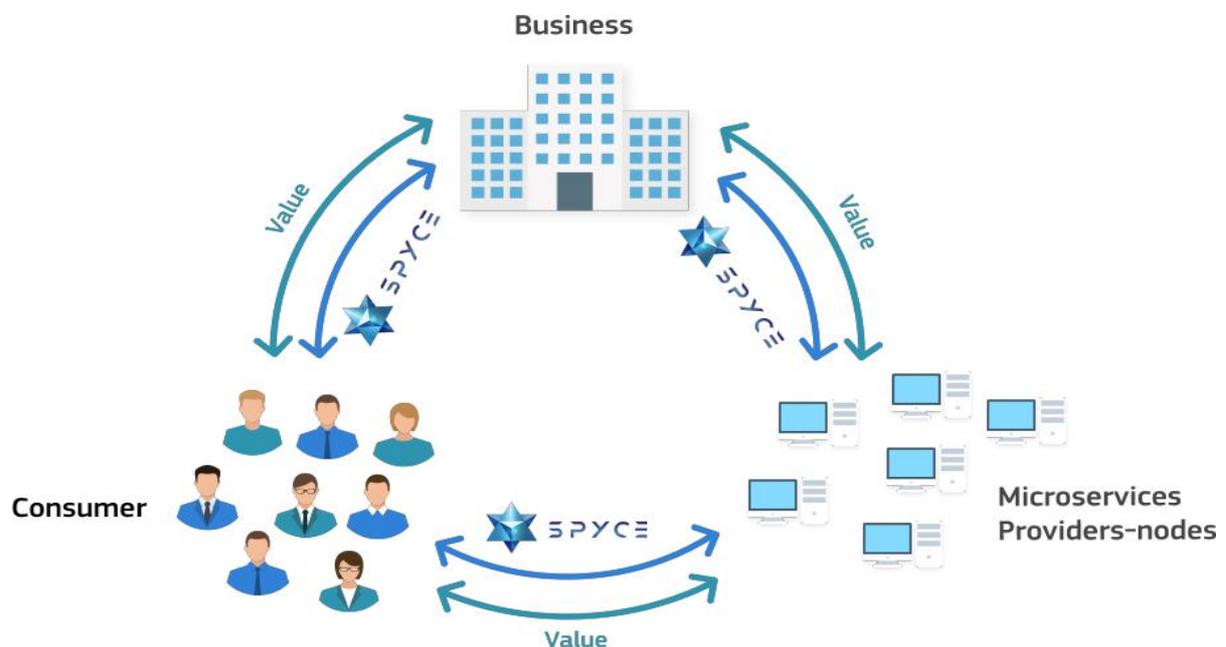


## 4.15.2. Decenternet sApps and dWapps

d-Apps (decentralized apps) and dWapps (Decentralized Web Applications) will be available in the Decenternet marketplace. Metatron dApps addresses real-world problems. Everything that exists in the current centralized internet will have their decentralized models on the Decenternet. With Spyce harvested from homes, individuals will be able to build their businesses of their own on the Decenternet. Notice how this will bring a second booming phase of ICOs now building truly 100% decentralized projects that no longer depend on the centralized Internet. Initially, they are going to be hosted on centralized infrastructure outside of Decenternet. During this phase, users will be able to get a partial taste of the value dApps and dWapps on Decenternet can do. Eventually, they will be gradually transitioned into the Decenternet native infrastructure unleashing the full power humanity has compressed deep inside as the economy and all data migrates to the new decentralized world powered by Decenternet.

# 5.  Token Economics

The Osiris web browser provides a unique decentralized eco-system where users are encouraged and rewarded for adding value. At the core of this, we have our Spyce cryptocurrency. This is holistically integrated into every aspect of our virtual economy, allowing people to use and receive the token. All major microservices of Decenternet such as Storage, Deep Mining, DNS, Liberty Ads Network, Web Server, Search Engine, dWallet and dMessenger give incentives in Spyce creating an appreciative economy that stays true to the UBI(Universal Basic Income) philosophy and business model. All value produced through the UBI microservice providers is incentivized according to the market value of Spyce that is the currency required to gain access to any consumer or enterprise grade goods and services provided through Decenternet microservices aggregation platform. The cost of the services provided by these components are lower cost compared to its centralized counterparts. Notice that cheaper services for consumers does not translate to lower income for microservice providers, because remember that on the Decenternet there're no middleman or need extract funds to build expensive brick and mortar data centers. Furthermore, we are designing the ecosystem in Decenternet with both the harvester's resource profitability and subscribers' consumption cost in mind. We are simply using the resources that are available today that already have been already paid by the people(domestic pcs and smartphones). Incentivization is the blood flow of Decenternet. The expected natural adaptation of the Decenternet will lead to a cycle of self-sustainable cash flow between consumers, content producers and harvesters. In essence some individuals can become a true prosumer where he or she could potentially be a consumer, content creator and a harvester of Spyce at the same time. The Decenternet – as a platform for an internet infrastructure that promotes unlimited freedom – gives the existing harvesters an infinite opportunity to earn profits, expand consumption and grow businesses on Decenternet. As of today, there are more than 1.3 billion websites in the world wide web[7]. Facebook earned $4.7B in the third quarter of this year, imagine having that amount distributed to all the harvesters on Decenternet. However, what if we include other content distribution networks such as Google's earnings into the equation? Sooner or later you may see how the Decenternet infrastructure could eventually bring huge opportunities to earn more, invest and grow for the general population.



According to reports by the UN, there will only be around 8.5 billion human lives available by 2030. This is why, only 8.5 billion grains of Spyce was originally planned to be in circulation until the year of 2030.

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[7] Facebook beats in Q3 with $4.7B profit, record share price despite Russia
https://techcrunch.com/2017/11/01/facebook-q3-2017-earnings/
[8] *World population projected to reach 9.7 billion by 2050*, United Nations Department of Economic and Social Affairs, (2015, New York), accessed 1/16/2018 http://www.un.org/en/development/desa/news/population/2015-report.html.

However, due to the fact that scarcity means more value to the Spyce holder, it has been decided to limit the amount of Spyce to mere 200 Million grains. Beyond 2030, the value of Spyce will be solely determined by the free market. Assuming that we have roughly 1 Spyce grain per person by 2030 notice how we can determine the minimum average economic value of a human life on this planet aside from the value of a non-inflationary cryptocurrency.

Realize that the most valuable resource on this planet is not gold, diamonds, graphite or crude oil. You are it. Realize that the human life is the most valuable resource on the planet. The decenternet is the first, one and only real asset backed cryptocurrency that decentralizes power in information networks and financial systems pegging the value of people into the value of Spyce thought the gradual activation of a healthy transparent planetary neural network. Understanding that the value of Spyce is organically designed to reflect roughly the economical value of human life is essential. This is one of the two crucial prerequisites for natural elimination of war through technology. The second is the release of the open source Liberty Search Engine.

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Notice how the Decenternet provides an actual physical vision of what the future of web infrastructure will look like in our society. The above examples are inhouse solutions that are being developed in order to demonstrate the power of the Decenternet architecture capabilities. It is important to remember that anyone can now express and deploy their ideas on Decenternet if he or she owns Spyce. Spyce is acquired through mining, harvesting or purchasing it from a cryptocurrency exchange. You can realize how the human race possesses the technical and mental leadership to achieve planetary greatness within the Decenternet initiative. If not now then when? If not us then who? Realize that at this moment in history, our species is engineering the technology that will transition ourselves to the next level of mental and physical evolution. We can look beyond scalability issues, cosmetic decentralization partial decentralization, and semi-decentralization solutions.[9] If there was a way to witness our greatness without any limitations, would you choose to explore it together as a species? That is a question only you know the answer.

# VERITAS IN LIBERTAS

9 See "No, Ripple Isn't the Next Bitcoin" by Mike Orcutt: https://www.technologyreview.com/s/609958/no-ripple-isnt-the-next-bitcoin/
Also See "What are full, witness and solidity nodes?" Tron's core nodes are exclusively controlled by 27 companies. https://tronscan.org/#/help/faq