COUCHAIN

The Blockchain Redefining Your World

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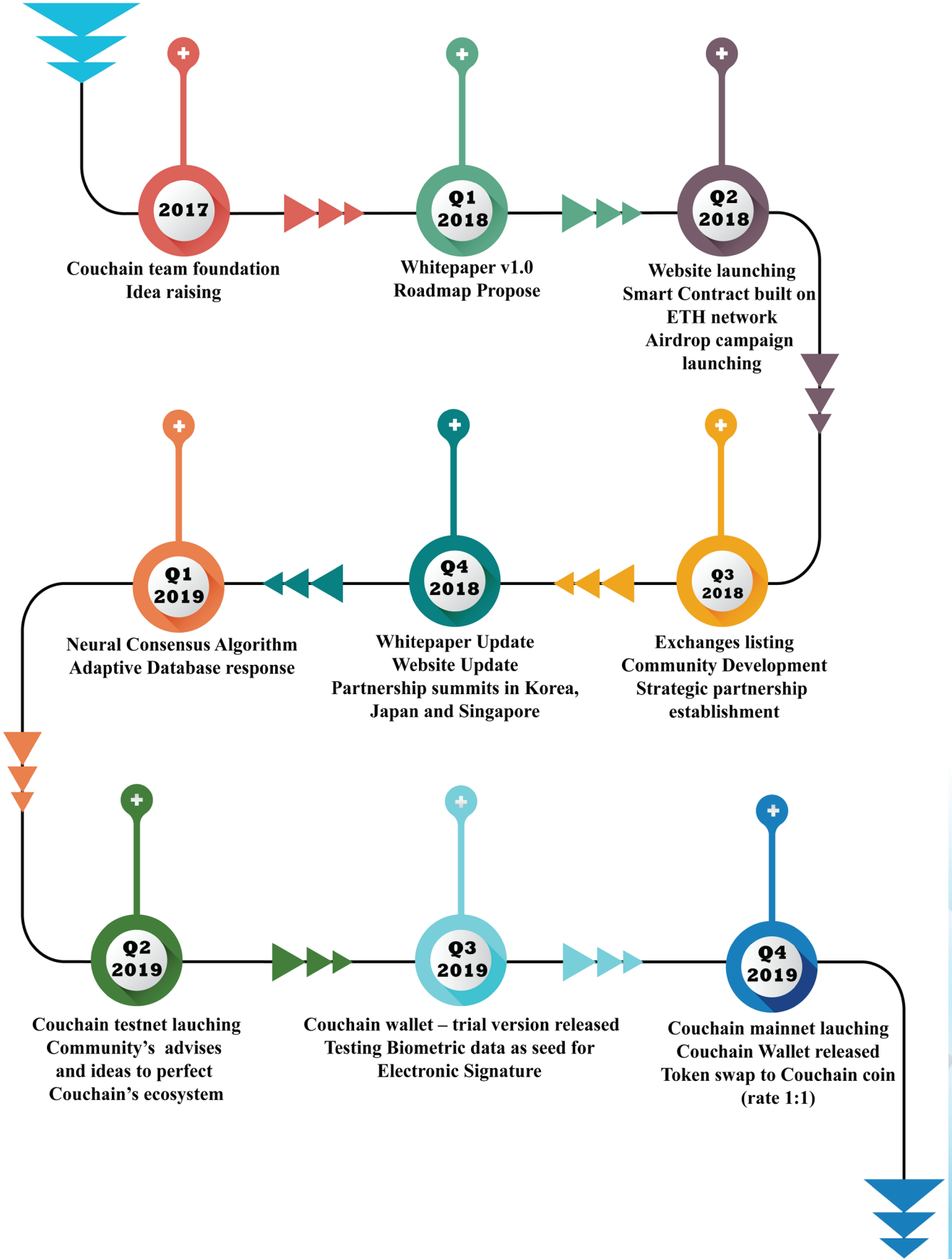
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Unveiling
A Cutting-Edge Blockchain

Reliability and demonstrable safety should be the hallmarks of the frontline protagonists of the Blockchain phenomenon. The associated aftereffects of block mining in today's world is a huge demand for computing power, environmental degradation, and slow pace of transactions. While transaction costs remain high for the most part, there is an imbalance in the height of technological progress in relation to optimal service delivery.

Poor transaction processing times arise from the use of processors of limited output and capacity. By sticking to the status quo, the world is sold a dummy; as an option exists in faster Blockchain versions in quantum processing. In the same vein, the built-in safety mechanism of consensus approval before major decisions are made on the Blockchain also slows the transaction processing rate. This applies to both the Proof of Stake and Proof of Work modes.

The Blockchain is a network of interconnected things that makes it possible for data update from connected terminals. As data gets updated, the entire network goes into a rescan, leading to a slowdown and consumption of more computing power and storage. This observation is what makes the Blockchain presently inadequate for complex uses.

In the same vein, security layers built-in to the Blockchain can only safeguard data, and is ill-structured to ensure recovery of lost coins. Coins sent to wrong wallet addresses and inactive nodes are also not recovered. Malicious accounts are also out of the net as the present structure cannot block them.

Not to be forgotten is the fact that crypto currencies come with distinct configuration that makes it impossible for homogenous universal interaction.

A Blockchain with Real-World Use Cases

The Couchain Blockchain is a robust outcome of digital technology that can be used for real world applications. When Bitcoin hit the limelight, tech experts began to explore the potential of the Blockchain, and they realized that its functionalities extend beyond facilitating digital currencies.

The cue of fast thinking techies led to the surge in the number of decentralized applications that have made it to global limelight. Anyone who asks if DAPPs are already available, should see the likes of BitShares, BitMessage, and Peerplays. These have become known for decentralized exchange functions, encrypted messaging, and trustless betting. Golem is also known for cloud computing and Steemit stands out as a social media platform.

While many developers have shown interest in the Blockchain, the challenge faced up to the third era was building a Blockchain app from ground up. The work involved in this regard posed a challenge to innovators who have to go through the laborious process each time.

In the wake of the Fourth generation of Blockchains, developers have realized that options exist for their native apps to be hosted. Couchain Blockchain effectively takes off this burden that innovators and developers have grappled with over the years by complementing existing solutions.

Developers will be able to use the Couchain Blockchain to host their apps and develop their product/service niche using a robust platform.

The Era Before Couchain

The immediate era that preceded the unveiling of Couchain had as its defining attraction such landmarks as:

- Expedited transaction speed
- A gravitation from PoS to DpoS
- The attraction of commercial adoption
- Use of a consensus algorithm
- Deepened Scalability
- Transaction fees reduction
- Wider Integration possibilities.

As the possibilities of an expedited transaction speed emerged in the third generation of Blockchains, the promise of the viability of the commercial adoption of Blockchains became a reality.

In the second generation, although the essence of Blockchain transactions conquering national and continental boundaries became a reality, efficiency was a problem, the speed of credit card processing excelled what the Blockchain could offer in the Ethereum and Bitcoin universes.

In the third generation, Bitshare showed some promise, and when RippleNet became a reality, the capacity of the Blockchain to churn out millions of transactions per second brightened up.

Just when the world was getting used to the excitement that existing Blockchains have a commercial adoption possibility, the Couchain has come into the mix with the outstanding fourth generation relational Blockchain.

The concept of Blockchain operating systems can be placed as an ongoing sphere with commercial usage gathering momentum. There has also been facets of excitement with the so many use cases unveiled.

Couchain is primed as a Blockchain that developers can explore in hosting apps that answer to their core selling points. Such open source slant is the hallmark that defines the robust architecture, security and associated innovative features.

Any application that is developed on the Couchain Blockchain will be able to make use of the provided database, a model of operation, account permissions, account recovery and multiple indices.
Couchain capabilities provides you work with sorted data , enables scheduling functions, manage CPU cores, handle needed authentication and allied key management across the platform. You will be able to focus on your core business functions so that routine demands of app administration do not clutter your performance and efficiency.

There is no doubt that developers will be able to focus on app development and optimize their roles with Couchain at the background. App users that come on to the network will be free to explore the functionalities without the hurdle of access fees. This can unlock several business potentials and give any app an opening for growth and expansion of market share.

Couchain:The Mission

Couchain has a mission that is not targeted at defining Blockchain technologies by trademark, but, rather based on capabilities. The evolution of the Blockchain can be traced from the first to the fourth generation.

The concept of first generation Blockchains is identified for their use of the ***Proof of Work***[1] algorithm in validating transactions. The resultant ***hard forks***[2] associated with the pioneer era of the Blockchain innovations that were not groundbreaking.

The dawn of a second generation Blockchain started with Ethereum leading the era denominated by smart contracts-based Blockchains. The underlying attraction of the era was the capacity for issuance of varying tokens on the platform.

What the first and second generation had in common was energy –intensive and poor speed of transactions. Validation of newly spawned blocks progressed at snail speed that made a commercial adoption of the Blockchain unattractive.

The major drawbacks of the first two generations of the Blockchain necessitated improving scalability, reducing energy usage levels, and expediting transaction speed. These apparent drawbacks became the persuasion for the evolution of the third generation of Blockchains.

The third generation of Blockchains was anchored on the updated Proof of Stake algorithm in place of the Proof of Work option. Beyond these, off-chain scaling partial or full centralization and graph chains also featured in this era.

What the fourth generation sought to do is to provide an exponential leap in transaction processing times. ***Scalability***[3] is also a target so that no impediment can lie on the path of commercial adoption of the Blockchain. Making the Blockchain competitive for use in more diverse and complex scenarios is the end-game of this era.

The demands of diversified work environments require security of data, expedited traceability, and data persistence for the Blockchain to be relevant. Applying the concept of relational databases to complex data structures are inevitable for optimized Blockchains.

As an epitome of the fourth generation Blockchain, Couchain expands the boundaries of present possibilities in data storage, auditing, reliability, security and application decentralization. The Neural Consensus Algorithm, which uses **ε**-differential agreement as a substitution for Proof of Work and ***Proof of Stake***[4] approach.

Couchain offers a higher level of adaptation within the Blockchain by providing features for integration of ERC20/ERC23 solutions. It also allows hosting of third party tokens and coins integration.

Couchain has made appropriate use of existing solutions that optimize the Block-chain as an adjunct to its distinct selling points.

Couchain and Global Adoption of the Blockchain

Couchain offers a structure that stretches the boundaries of the Blockchain as we presently know it. Data layers are enhanced by Couchain in an expedited verification manner that flows through entire organized data structures that have symbolic links. Couchain Blockchain makes verification of transactions possible within a distributed decentralized system in a coherent manner. The Couchain model differs from what obtains presently in the Blockchain by its introduction of a storage solution with advanced and organized capacities.

Couchain offers what can otherwise be described as an adaptive Cryptographic Database, which best suited for complex data structures. The layers of data would interact seamlessly to ensure the realization of envisioned goals.

On the Couchain platform, computing power is optimized as this can be shared between linked nodes in both on-chain and off-chai modes. In this manner, the requirement of speedy processing will be met with all the available resources at work.

Couchain is set to win the market as the most AGILE solution for every area of need and deployment. The ***AGILE approach***[5] makes it possible for a responsive framework that draws on experiences encountered in the course of project development. In this wise, all possible SWOT (strengths, weaknesses, opportunities and threats) are catered for. So, whatever is sub-optimal in the process is discarded or improved upon.

AGILE is the best approach to software development as it makes room for updates and fine tuning from conception to deployment phases. This makes it possible to respond to changing market trends and competitors' unique selling points. Using AGILE makes it a sure bet to remain at the cutting-edge while the product launch is underway.

Fast-Paced Transaction Processing

Couchain is differentiated by its quality, and that is a major selling point that the market is open to at the moment. The Blockchain is attractive for use in many facets of life, but, only to the extent that it meets the requirements of varying business interests. Speed is what makes the difference between competing Blockchains in today's world, and Couchain leverages on this.

Couchain will process transactions at a faster pace with increased participation leading to a higher processing times. This is a huge plus for diversified businesses as it increases the capacity for transaction processing. Couchain optimizes computational strength, and the performance of each node on an on-chain and off-chain basis.

Greenhouse Friendly

Couchain is Greenhouse-Friendly, which ties to the prevailing global sentiment of steering the Blockchain away from fossil energy dependency. Couchain is optimized to minimize computational power input for transactional validation as opposed to the huge energy needs built-in for POW (Proof of Work) algorithms.

Couchain substitutes ***Neural Consensus Algorithm***[6] for POW, and this entails a deepening of linear scalability. The performance increase will arise as the node size increases. A Better performance is assured in a 100k node network ecosystem with TPS peaking at 100k.

When it comes to reaching consensus, there is no selection of a head node, since there are only simple calculations that will arise, a lower energy consumption is assured. This gives Couchain a greenhouse friendly identity.

Couchain: The Touchstones

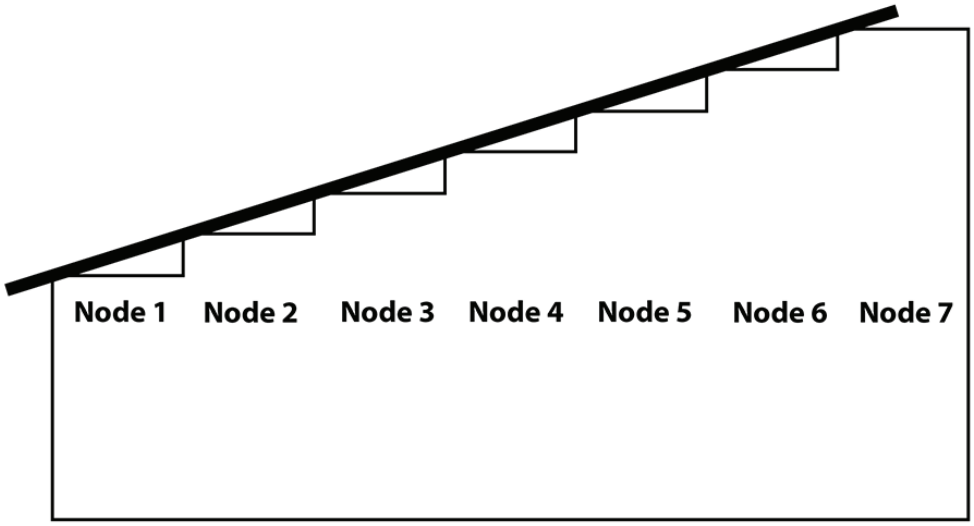
Couchain projects a complete generational shift for the Blockchain with unique selling points that aim at the understated touchstones:

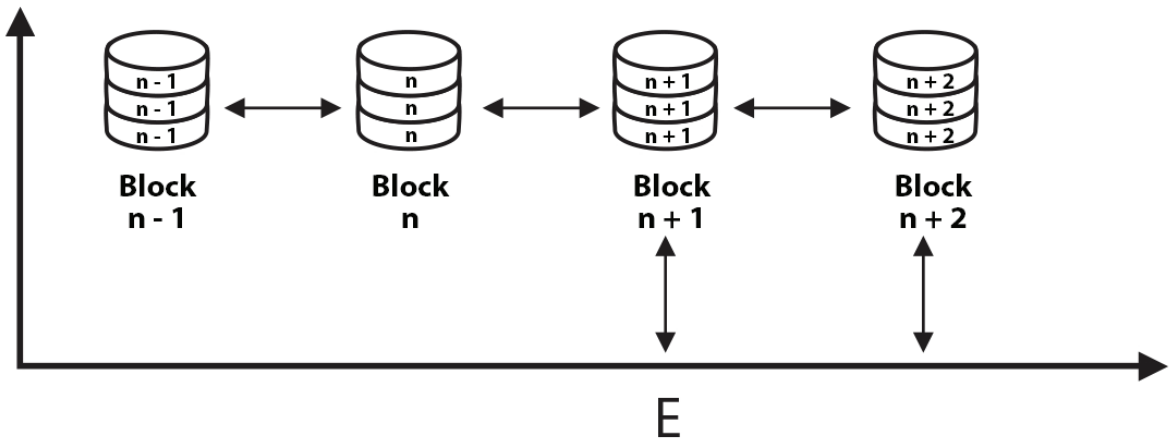
1. Neural Consensus Algorithm
2. On-chain and Off-chain Computing Sharing
3. Adaptive Database
4. Micro service Structure and Functional API
5. Rollback (Adjustable feature only on request)
6. Biometric data as seed for Electronic Signature
7. Transactional Model
8. Seamless Data Flow
9. Proven Multi-Chain Networks
10. Developer Integrations for Java and Programming Languages of Common Use

1. Neural Consensus Algorithm

Couchain adopted the Neural Consensus Algorithm as a result of several of its hallmarks. The **ε**-differential agreement (EDA) as the Neural Consensus is also known, leverages on the strength of linear scalability. Linear scalability in the consensus algorithm, exponetizes performance as node size increases.

A Diagrammatic Linear Flow





Steele's Dimensional Node Representation

Increase in node size or more participation won't slow down the network, but, have the opposite effect. As node size increases, there is faster convergence and logically, an optimized performance results.

What stands out with Couchain's preferred algorithm is that EDA has a configuration based on micro-real numbers, which is between 0 and 1. This takes on the strong points of the prevalent consensus algorithms as they are known and overrides their associated weaknesses.

When EDA is put to use in a 100K node network ecosystem, Transactions per Second (TPS) peaked at 100K. The delay in confirmation of transactions plummeted by several seconds. Remarkably, a lower computational power is needed for the outlined procedure compared to DpoS, PoS and PoW approach.

These are hallmarks of the Neural Consensus Algorithm:

- Continuous voting replaces discrete voting as used in known consensus processes
- Different environments are configured with different efficiency parameters
- Energy saving and greenhouse friendly
- Operational suitability for a wide-range of network systems
- Adjustable parameters
- Reduced transmission overhead

Structural Security Essence

The use of secured Virtual Containers for distribution of nodes is the structural security approach for Couchain. Any Host machine operator cannot have the needed credentials for access to nodes without due access, which is in consonance with the Linux Security referral.

The use of double access lock is preferred so that anyone with guest credentials cannot compromise the lock feature.

Structural Security anchored on Reverse Access Denial

The double access lock evaluated above is put in place to ensure that nodes not directly under Couchain management is secure and not compromised. This approach isolates the prescribed configuration from unwanted interventions and runs autonomously.

Couchain is authentic with a design that makes it inaccessible to just anyone. The security layout has three major components within the container as shown above, it also encompasses the Operative and Security layers. There is the substantive Couchain Server compiled code, Couchain Cluster asymmetric key authenticator, the challenge seed, the server code hash certificate as well as the transaction data.

The cluster access certificate can be put to additional use by automating container access credentials' update during the compilation phase by using a random password. This will preclude any interloper from gaining access without having the preset input keys.

Adoptive Language

To make Couchain open to a wider spectrum of developers globally, Couchain is designed to make use of the widely known SQL-anchored syntax.

The purpose of this approach is to make it easier for more people to learn Couchain basics without much ado. This will also make room for the standard persistent-storage functions which is understandable by a majority of developers.

2. On-Chain and Off-chain Computing Sharing

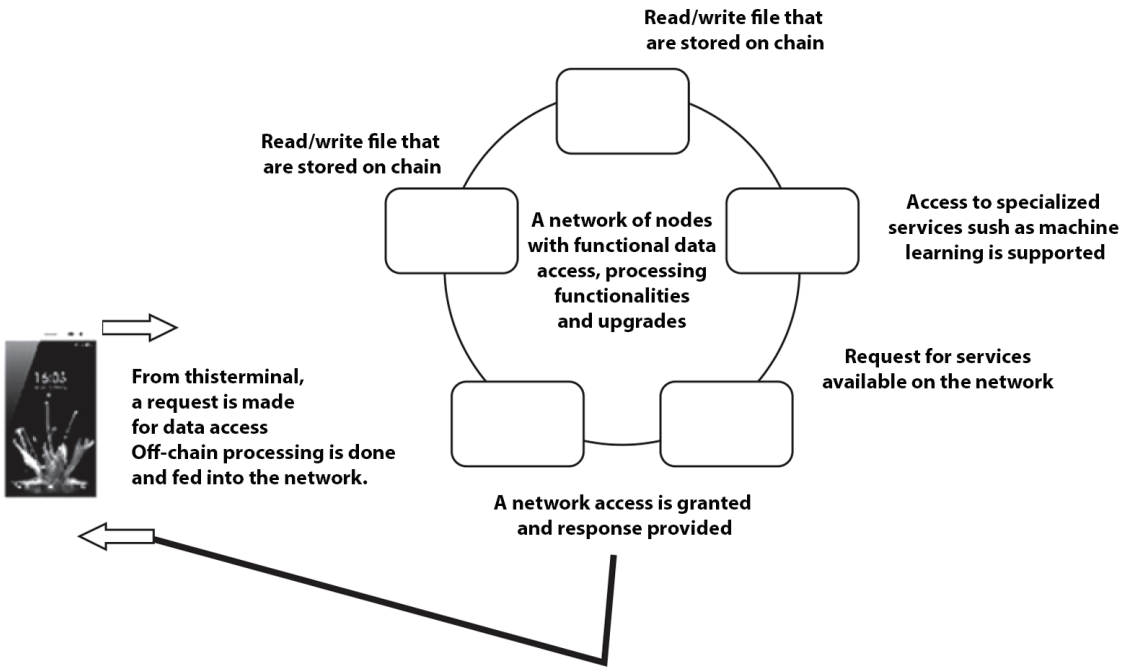
The demands of computing power on the Blockchain is not in doubt. This comes to the fore in global concerns over the huge energy-intensive nature of existing Blockchains.

If Couchain enables computations off-chain, it has to go on in a decentralized approach. Realizing this, the processes are optimized in such a way as to ensure that data integrity is assured

Running computations on-chain has proven to be prohibitive for the Ethereum Blockchain, and this explains the high gas implication for transactions. When computation is therefore enabled off-chain, heavy tasks can be sufficiently executed on those nodes.

Tasks that are data –intensive like 3D functionalities and transcoding of videos are practically impossible in on-chain modes. These are some of the tasks that can go on off-chain to ensure cost savings.

Couchain will make it possible for developers to work around the inhibitions identified. A range of verifiable computations can be tracked ***using tools***[7] that make such possible. A proof of correctness and proof result can be retrieved by clients using less computational power that is far less than what an actual on-chain computation of transactions will necessitate.



Couchain is optimized to ensure that computing is shared between on-chain and off-chain systems. When computing is done off-chain, pressure and energy demands reduces on the chain. The processing that goes on off-chain also ensures that a distributed storage is optimized at all times.

Since the stored data on-chain is accessible to everyone, the off-chain version also gets updated whenever it regains network connectivity. This feature of Couchain can be seen as multi-pronged with a distinct innovative edge.

3. Adaptive Database

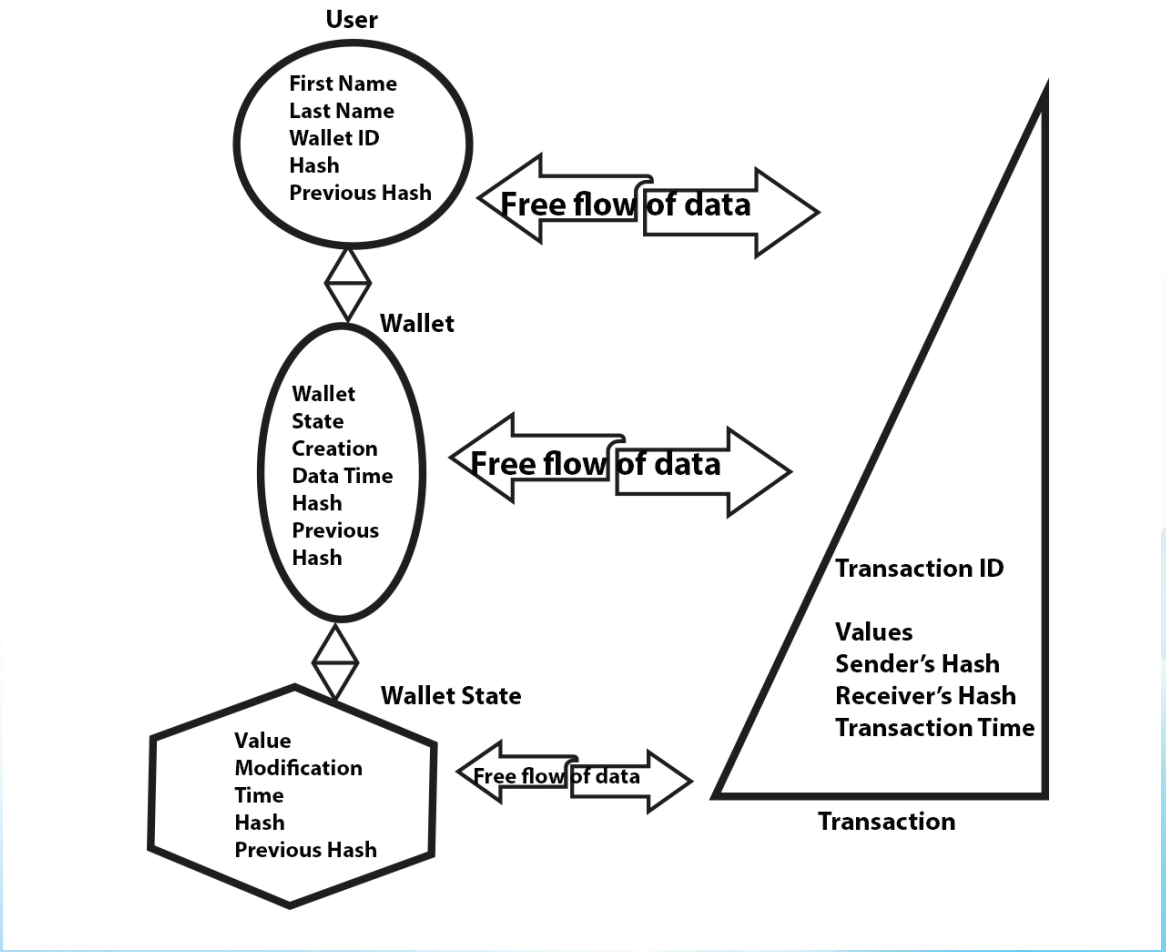
Couchain is capacitated for industrial, institutional or administrative use that calls for synchrony of complex processes.

Couchain is positioned as a trailblazer in the marketplace of cryptographically adaptive database solutions with distributed or decentralized features.

The conceptualization of Couchain makes it possible for chainable entities to become split-chains with that entail disparate entities and records. These entities rejoin the parent chain after each transaction-related modification is completed.

In Couchain terms, the transactional coins along with all subsisting entity on the platform will conform to four identified tables:

- Individual user
- The wallet
- The wallet state, and
- The Transaction



Couchain's Adaptive Database Model

Each of these outlined fields are activated reciprocally and they will be validated interrelated.

An adaptive Database is called upon by Couchain so that data linking is unlimited. All activated wallets on the chain can undergo series of states, but, must be linked to a defined user. The change of states will involve:

An existing state - to make validation possible
An auditable link to the most recent transaction or major chain trail

These two work paths makes it easy to trace the underlying basis for a state change, making it possible to avoid or invalidate dummy or fraudulent transactions. As structured on Couchain, after a transaction validation is made on a sub-chain, the modified state rejoins the parent chain.

The immediate effect of the Couchain innovation is that for each new transaction, there must be two hashes: the state link and the most recent transaction. The algorithm makes it inherent that a transaction only gets validated upon a verification of the most recent trail.

The utility of the Couchain solution to transactional validation opens the door for an efficient management of complex data demands. Our technology will be adaptable to all applications that requires global, institutional, industrial, regulatory or sovereign demands. This is a step forward to an efficient Blockchain universe.

Re-joInable Split-chains that thrive on Parallel Work

Operationally, the algorithm that allows split-chains for transactional processing and rejoining to the parent chain makes room for workload analyzers. In this sense, each cluster that requires chain splitting will be identified to give room to two secondary chains. If required, these chains will re-split when a higher than normal level of transaction requests are received.

On chain normalization, all multiple split-chains will link back to the parent chain and be validated. The beauty of this approach lies in maintenance of safety of transaction records as parallel processing continues.

4. Microservice Structure and Functional API

Couchain has a functionality based on Serverless and Microservices modelling. It is primed to provide secured and advanced API functionalities that adapts to both approaches in tandem with best practices.

While microservices has been used as a distinct approach in times past, cutting-edge improvements have shown that it can be merged with a functional API to optimize system resource and outcomes.

A functional API is vital for Couchain processes as traditional APIs though effective, are quite resource-demanding. A ***Microservices***[8] API is in a different world as it has built-in capacities that expedites autonomous roles in a fast, quick and nimble manner.

The Microservices Approach

The Microservices approach that underlies Couchain makes it possible for the component operating segments to be self-existent. This is detailed insomuch as there are clear lines of transactional responsibility.

A typical outline will involve:

- A database (distributed in this sense)
- Clarity of Transactional focus
- Running process
- A systems repository
- The Functional API
- User Interface

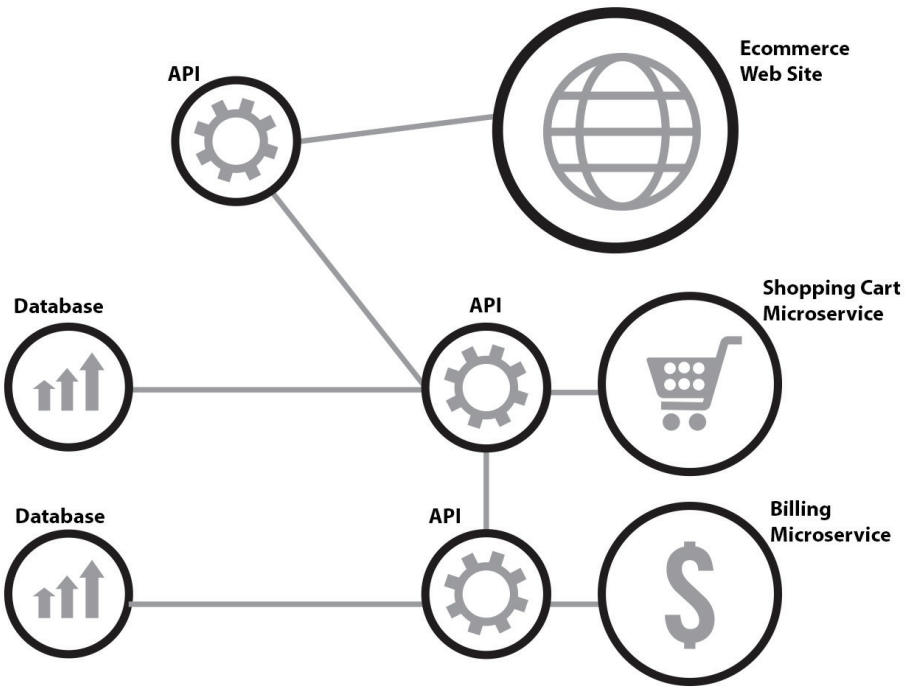
The broad layout of Couchain coverage area makes it dynamic to accommodate expansion of services as the scale of operations demand.

There is no doubt that the design of Couchain microservices makes enough rom for fault tolerance and systemic isolation. The implication of this provision is captured in the data sharding mode.

Couchain is therefore optimized so that the component parts are:

- Easy to understand
- Adhere to the defined smart contracts
- Are guarded to prevent database exposure without requisite credentials
- Able to isolate failed nodes until integrity is confirmed
- Capable of deployment even if a minority of nodes are non-functional
- Shielded from system timeouts associated with microservices architecture with the sub-chain processing innovation.

A Frontend View of a Functional Microservices API



Incorporating Data Sharding

When data sharding occurs, it does not disrupt the database as the constituent nodes have records of the entire chain or a part thereof. The mechanism at work here stimulates the coordinator node to prescribe the data partition readiness. This is done to make data distribution optimal to the existing workload.

Based on the tenets of High Availability, persistence and reliability cannot be compromised even when cluster capacity shrinks. As long as ≥ 51% of available nodes remain active. In the event of a cluster crash, the active nodes will redistribute the validated data structures. This will serve to confront subsequent partial cluster crashes that might occur.

Couchain Blockchain evidently displays the capacity for data sharding and optimized parallel work. This is an indication of a robust horizontal scalability, system resilience, inherent disaster recovery, increased security unappalled high availability, non-existent single point of ***failure***[9]

5. Rollback (Adjustable feature only on request)

Our cutting-edge technology is optimized for rollback of transactions that are presently impossible with the frontline Blockchains. This will allow for a revision to an earlier state that does not call to question the chain validation credibility.

It is worthy to highlight that failure of rollback provisions is one of the loopholes in the Ethereum and other Proof of Stake or Proof of Work protocols. The rollback feature only needs to be enabled for systems that require it for applications and tokens that require it.

A number of users of existing Blockchains have had cause to lament over lack of rollback features. Millions of USD worth of tokens and coins ***are in limbo***[10] to date as a result of this.

Couchain is poised to have the rollback activated on request for clients who see a need for such. While some Blockchain processes do not have a need for a rollback, those that dwell on token transfers and transactions will find it needful.

User Security anchored Freezable wallets

Freezing a wallet becomes necessary whenever there is suspected activities that require intervening action. This is a provision made possible with the AGILE configuration put in place.

When activated, individual user environments will decide on activation if it suits subsisting native prescriptions.

6. Biometric data as seed for Electronic Signature

Existing research points at the use of biometric features for the preservation of the identity of sign-in integrity. The inevitable absence of duplication possibilities using this electronic signature option makes it attractive for Couchain uses.

There are no two persons that have identical fingerprints neither do the retina have similar metrics. A whole world of infallible credential still waits to be explored on the biological ID front.

The possible use of ***retina scan, fingerprints and related data***[11] will be evaluated by the Couchain team for possible biometric data integration.

The use of biometric data on IOS, Android and related platforms for user safety will be evaluated while considering the impact on legal grounds.

7. Coherence of Transactional Model

Couchain preferred mechanism will ensure that all transaction data get transmitted in a ***transactional model***[12] for coherence and data completeness.

Couchain design complies with all the requirements of the ***ACID***[13] paradigm, which is an acronyms allusion to the logical properties undergirding all transactions.
For any secure transactional model, the underlying technology has to be attuned to:

- **Atomicity,** which states that transactions are indivisible in execution and that completion is required in execution. No allowance is made for partial or null executions.
- **Consistency,** which highlights the need for a database to transit from a valid state to another. Persistent data has to align with pre-existing rules.
- **Isolation,** which requires that execution of respective transactions must be treated in isolation. This will also mean that if a transaction fails, it must not interfere with the fate of concurring transactions.
- **Durability,** which aligns with persistence, and requires that after a transaction is initiated, the outcome cannot be indeterminate for any reason whatsoever. In other words, not even power interruption, system crash or any other excuse is permitted.

Blockchain Interoperability

Couchain coins will run on the ***ERC20***[14] interface, which will be compatible with ERC23 for the purpose of external interface interoperability.

ERC20/ERC23-driven Native off-chain adaptors

Couchain is committed to the inward and outward flow of tokens and coins on its chain that originate from non-proprietary chains.

ERC20/ERC23 guest-enabled Native off-chain adaptors

Couchain will support interfacing with tokes and coins in an unhindered flow for native off-chain adaptors to support guests in the course of transactions.

Interoperability with other blockchains based on Reciprocal Chain Confirmation

Couchain's optimization will take into consideration the states of competing Blockchains to make it possible to for exchange of respective tokens. This will aim at and ensure trust and validation.

The reciprocity of this mechanism ensures that the state validation of Couchain can be shared with other blockchains as the verification need arises. This will become operational via a specific interface based on a serverless feature that takes into consideration a container compilation, which points adapters to accommodate other chains.

8. Seamless Data Flow

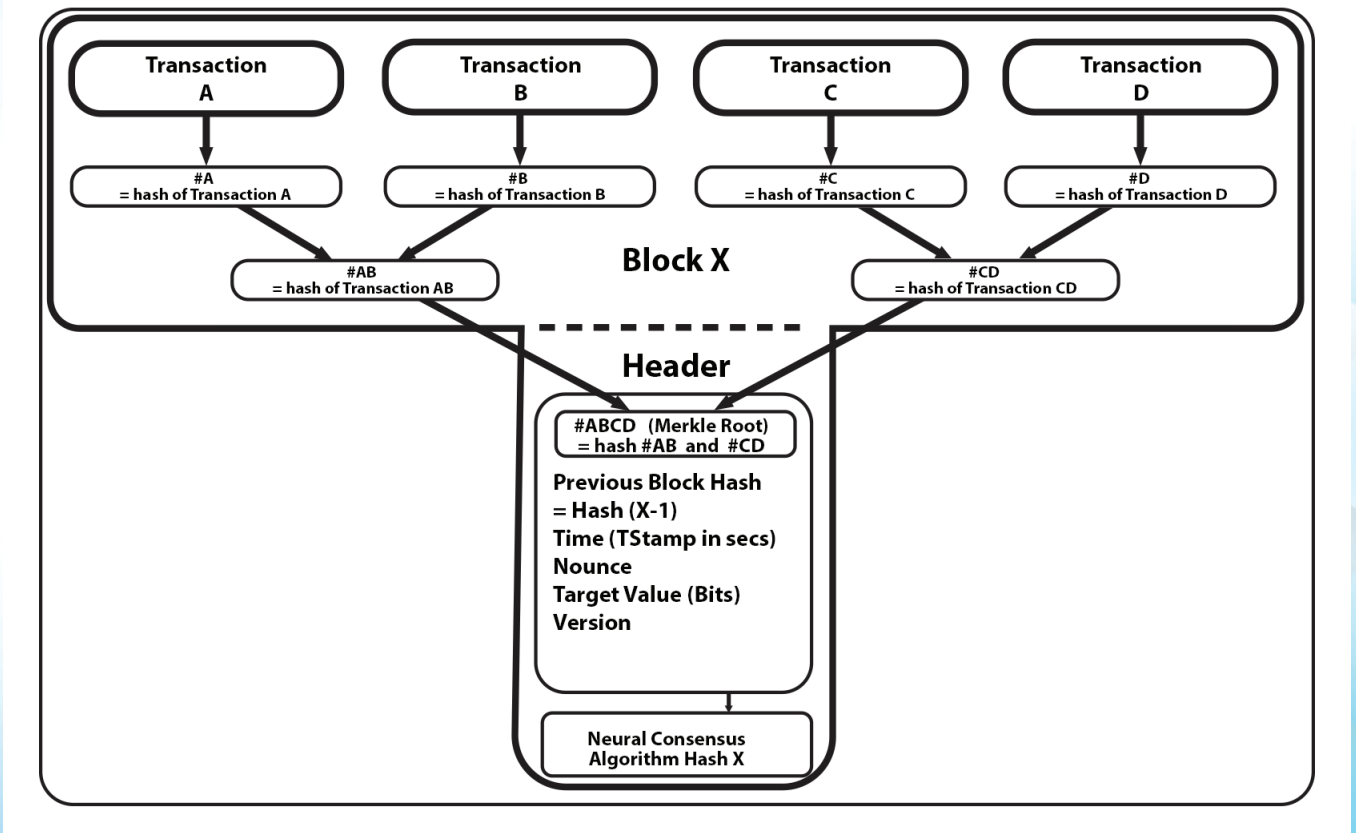
When a transaction is initiated, it has to go through a procedure of acceptance, requisite control, validation as well as the expected persistence.
The procedure of a transaction can be simplified as follows:
A transaction is relayed for processing with all the needed data provided and authenticated by a private key>

The Couchain client sends the details of the transaction to the coordination clusters led by an assigned node>

The assigned node splits the verification so that all nodes with a proprietary lead can evaluate within the ambit of a designated protocol>

The nodes will evaluate the transaction for data authenticity by checking for signature, repeated hash, availability of funds, blocked or active wallets, user existence, requisite wallet states>

What is generated from user ID gets processed into volatile memory as other data fields of existential nature gets probed>



A Transaction Hash Outcome Process

At the end of the processing stage is transaction transmission to the ***Topic Message Queue***[15] assigned with a defined protocol to the due recipient as defined. The worker nodes will receive the distributed messages parallel.

The worker nodes will act on the processing by verifying data, evaluating associated conditions before proceeding to create a new wallet state. The process will include retrieving the processes hash of previous related transactions in order to use them for transactional update. All these will be made possible with the Neural Consensus Algorithm in place to produce a ***Transaction Hash***[16].

9. Proven Multi-Chain Networks

Bitcoin and Ethereum are notorious for single chain structures with their remarkable limitation of confining transactions to just one chain.

Couchain recognizes the inhibition on the pathway of efficiency, and this is the motivation for a multi-chain structure enabled by the Neural Consensus Algorithm. Side chains, parallel chains and multiple chains will be enabled to meet the respective needs of entrepreneurs and businesses.

Couchain's preferred architecture is the heterogeneous forest network that enables interoperability between the digital sphere and real-world situations. This paves the way for resources and assets to be defined on Couchain, stored, transferred and transformed to meet emerging and present needs.

Couchain is resourced for system efficiency in two distinct ways:

The first efficiency standpoint is the autonomous sub-chains effect that makes it possible to provide resources as requests arise to parallel substantiate data streams across nodes and numerous threads.

When the chain-split occurs, it speeds up ongoing transactions to a logical completion and terminates when the output is added to the parent chain. The technique at work here allows for all blocks within the parent chain to synchronize in validating two distinct sub-chains using two separate incoming links.

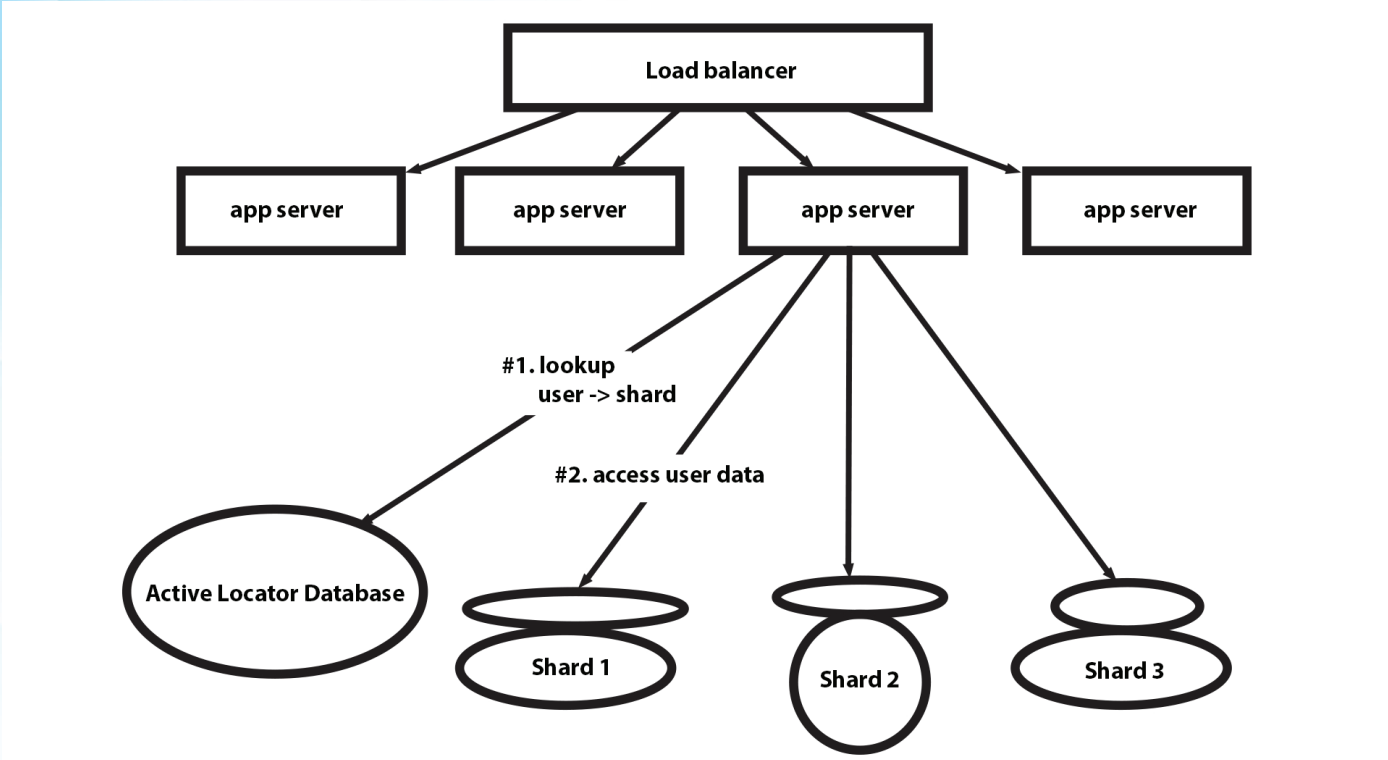
The second efficiency standpoint is ***Data Sharding***[17], which is a notable technique used for data distribution between multiple nodes. In a data series XYZ with three Cluster Nodes, the data distribution will fan out as:

- XY
- YZ
- ZX

The order of this subdivision makes transactional higher processing speed to soar, given that the originating data queries will optimize each step having impacted just the subchain nodes.

Couchain also thrives on ***High Availability***[18], which makes it possible to rely on an efficient cluster type as a contingency when a system shutdown renders some nodes inoperable.

Flowing from the earlier illustration, in an X, Y, Z scenario, if Z is knocked out, X and Y can be leveraged on to support the Blockchain and prevent a denial of service. The configuration is operative as long as the number of active nodes are ≥ 51%.



In the event of a shutdown that takes off multiple nodes, the undisturbed cluster will reorganize data autonomously till there is a complete reactivation of all nodes.

10. Developer Integrations for Java and Programming Languages of Common Use

The functional libraries with high-end propensities for interfacing Java Spring, JavaScript and other programming languages of common use in Couchain is a priority. While developing the capacity for integrations is going to be effective, it will be based on market needs coupled with client requirements.

As the testnets for Couchain are unveiled, we will make provisions for the programming languages that are highly used in the developer marketplace. This will make it possible for institutional, and enterprise-level adoption of the Couchain offering on a universal scale.

Already, apart from other considerations, widely sought-after tools like ***Spring***[19] is provided for as a feature of our platform. Spring has a utility in its use as a container for Java. The prized features of Spring is notably in use by Java apps.

Couchain architecture takes into consideration the utility of Java and has also provisioned modules for its integration. Java is used for writing programs and creates applications in various spheres of life.

Even the less literate of PC users would have made use of Java whenever one program or the other is downloaded on the PC. This clarification explains why Couchain' Java provisioning is all-important.

For developers, Javascript also plays a huge role since it is a basis for building many apps. Using Javascript alongside Couchain is made easy for integration purposes.

Developers will find Couchain to be a delight to put to use for integration purposes.

Our approach to these aforementioned processes will be to allow for proprietary solutions to integrate Couchain into the official ***MainNet***[20] as well as private chains.

Immediate Steps

The Blockchain 4.0 is the emergent platform that Couchain will utilize for the launch of its tokens. Couchain as an ERC20 token will be released to the community through an airdrop campaign. Our goal is to bring Blockchain 4.0 within the reach of everyone across the globe.

As an immediate step, Couchain will launch via airdrop as an ERC20 coin. We believe the community has a great role to play in the evolution of Couchain. Please feel free to send your ideas across the project. As we explore the views of all stakeholders, we can build the Couchain Blockchain

A Walk-Through Couchain

Couchain is effectively summarized in the following highlights:

Neural Consensus Algorithm (ε-differential agreement)

PoS (Proof of Stake), Dpos, and PoW is substituted by EDA
(**ε**-differential agreement: Essentially an ordering of blocks based on continuous voting).

Next Generation Wallet

Fool-proof secure wallets accessible by biometric inputs.

Transaction Rollback

An optional feature activated based on client request

Divisible Chains

Chain severability optimizes available resources.

Off-Chain and On-Chain Computing Sharing

Optimizes off-chain nodes to reduce on-chain clogging

Greenhouse Friendly

Supports energy conservation by avoiding repetitive processes that are fossil-energy intensive

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