



Relictum Pro

Blockchain 5.0

Decentralized Ledger Technology

Whitepaper

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Relictum Pro

Blockchain 5.0

Global platform covering all the aspects
of human life in a distributed registry

With the use of HYPERNET technology based on peer-to-peer
peering network

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The essence of the project

The essence of the project

We have developed the fully-fledged distributed platform, a 100% reliable electronic data circulation environment for all parameters of human life.

Relictum Pro is a scalable, hyper-modern blockchain, with a view to the far future. This is a platform that can be used both with thin clients and with more powerful processors, basic stations, as well as with the latest electronic and computer technologies, including quantum computer.

A blockchain is a chain of blocks, and Relictum Pro is a system of event formalization having dynamic blocks in addition to the chains of blocks themselves. This greatly expands the possibilities and brings to another level of the mathematical apparatus, and allows you to create not only one-dimensional models of chains, but two-dimensional, three-dimensional, and even four-dimensional models of event formalization.

Relictum Pro is a full-fledged blockchain platform capable of operating in both private and public access for government, commercial and private activities.



Relictum Pro is an endless distributed registry with a developed system of smart contracts, describing (formalizing) any event in human life, ranging from buying and selling goods and services, recording logistic events, to tracking copyright and interacting with legal entities, including a number of self-executing transactions (smart contracts) in any field of activity.



We offer a fundamentally different blockchain organization scheme — Another principle of networking and building blocks:

The first mechanism

is the delivery method – networking as transport.

The second mechanism

is the development and management of block chains.

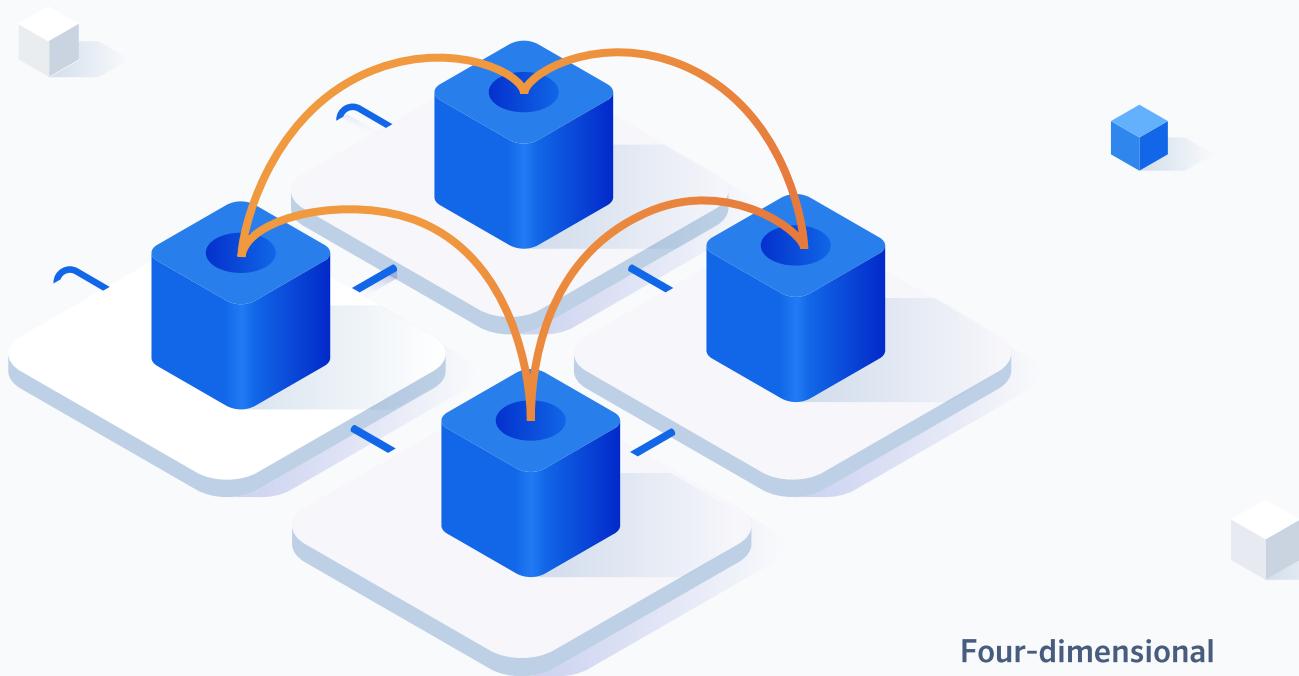
Relictum Pro is an endless distributed registry with a developed system of smart contracts describing more than 80% of significant events in a person's daily life

Thanks to the possibility of smart contracts, an n-dimensional (4-dimensional) chain arise; when new type-properties of smart contracts appear, for example, in case of automatic conclusion of a transaction between several participants, when the chain is automatically closed, and a transaction is concluded between all participants (up to 10 transactions).



Also, the following properties arise:

- The possibility of the intersection of smart contracts and, thus, descriptions of the full type-properties of the product (the possibility of combining smart contracts into one, forming a "LINE of description").
- A blockchain remembers everything – this is an opportunity to get a virtual portrait of a person and, if desired, a participant can make a full sample of various aspects of their life (how much money they spend, what they listen to, what they watch and so on).



Mainnet Relictum Pro has been launched and is fully operational now." We have achieved the following results:

Have been reached in real time at the moment

100 000*

transactions per second

Estimated performance

1 000 000

transactions per second

* The transaction rate of the Relictum Pro blockchain

When transactions not only get to the network but also blocks are written to each node when they return

- Own added modification of SHA1-based hashing algorithm;
- No problems of consensus (there are no problems and issues related to the solution of various ambiguities such as collisions, double waste, etc.);
- A block hash collision may occur in 100 years, due to the continuous numbering of each block in Master_Chain;
- Size (weight) of the node ranging from 120 to 300 bytes; according to calculations, in 20 years the registry weight can reach ~ 1 GB if you work with the bitcoin mode intensit
- Full-featured real nodes in smartphones. That is in favor of full decentralization
 - a full distributed registry independent of third-party servers and services;
- Ehe ability to store global data in a decentralized distributed repository – the choice of each participant to provide hard disk space and receive a commission;

- Full-cranked smart contract of accounting and logistics (for example: from planting a coffee bush – transporting – selling coffee – to accounting for a cup of coffee consumed by the end user)
- The following smart contracts are currently implemented:
 - Signature of the document
 - Token generation
 - Storage of tokens
 - Conducting transactions
- A fully functional portfolio for the user was formed (own decentralized exchange; cryptocurrencies exchange; own platform for holding ICO, Bitcoin, Ethereum and Litecoin wallet).
- The problems expressed by Nick Sabo are solved: when the in-house system of biometric face recognition generates a permanent unique hash of a person which is a private key during a transaction confirmation.

The results achieved for 1,000,000 people with identification accuracy of 99.99999%. After the release of the Alpha version, the calculated optimal amount of the definition of a person's face without intersection is 1 billion.

- A new _HyperNet system is being tested; it differs from the current organization of the blockchain network (peer-to-peer P2P networks)

Relictum Pro uses a virtual circuit switching network as a transport.

This network organization provides a permanent, guaranteed stable connection between all nodes for a limited period of time (from 0.5 to 10 s), depending on the network load. With a small network load, this gap can be up to 10 s, while with a loaded network it decreases to less than 0.5 s

< 0.5
seconds



Network nodes are the nodes, the bodies of which are entirely identical and are binary files with the possibility to upload and manage the registry.

When first started, a node determines which type it belongs to:



Master node

All blocks are stored



Light node

Blocks are stored only for a certain period of time



Private node

Only blocks of own transactions of this node are stored and updated



Sleep node

The attempt to connect to the network. Occurs either when the network is broken, or during the first launch.



Cloud node

Created automatically when a user registers via a web page. Further work is also carried out through the web page



Introduction

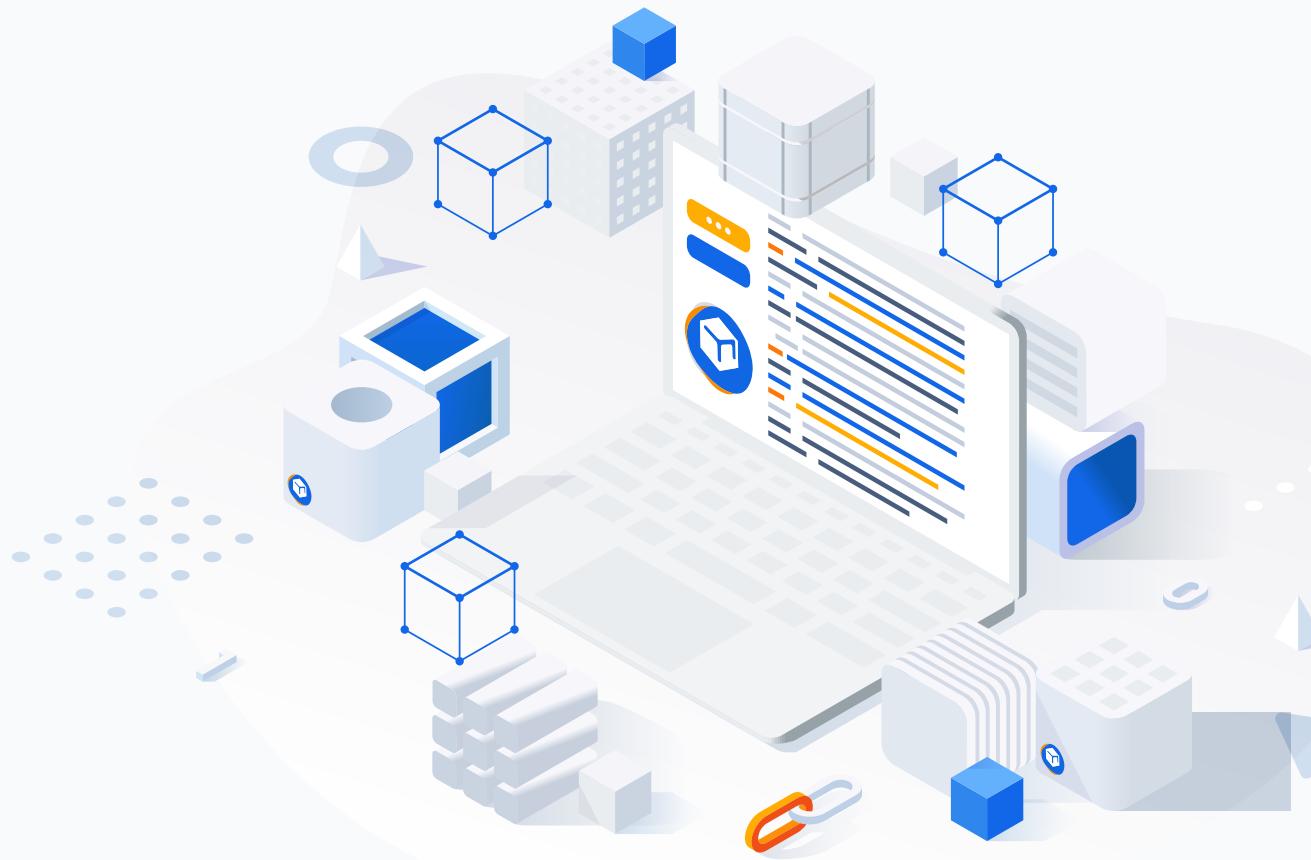
3. Introduction

What is Blockchain

It is a continuous sequential chain of blocks (a linked list) built according to certain rules; each next block has a hash of the previous block.

This is a global, large-scale distributed registry that works with a million computers and is accessible to everyone. Any values, from money to music, could be stored, moved, exchanged, and managed without powerful intermediaries (such as banks, corporations, up to the state itself). Information is distributed across the global registry. When people can trust each other everywhere and cooperate on equal terms.

And trust is based not on the authority of an organization, but cooperation, cryptography, and smart code





Historical review of the . . . industry

4. Historical review of the industry

2008

Create Bitcoin

2019

Start Relictum Pro

The history of Blockchain goes back to 2008 when the Bitcoin cryptocurrency came out

In Bitcoin, a blockchain serves this cryptocurrency only with two smart contracts.

All the attempts to formalize the majority of events with smart contracts in a single blockchain platform have not led to success so far.

- The first generation blockchain consisted of the first currency such as Bitcoin, based on Proof Of Work (PoW), its various clones and forks. This bitcoin initiative is now called blockchain 1;
- The second generation of blockchain is more heterogeneous, based on the use of tokens such as Ethereum and solutions of its ecosystem. These two categories are characterized by very low energy efficiency and low transaction rates. we call it blockchain 2 now ;
- The third generation of blockchain 3 includes those with which they tried to answer questions regarding transaction speed and the impossibility of scaling using various mechanisms;
- Blockchain 4.0 - all the best features of 3rd generation blockchain (faster consensus, ultra-fast transaction confirmation) are included.
- Relictum Pro is Blockchain 5.0

The new network will include all previous blockchain features along with revolutionary innovation



Networking

At the end of the 70s – the beginning of the 80s, new types of networks appeared, as new types of processors appeared, network cards that had to exchange data with each other and a network protocol called x32 appeared. This protocol allowed connecting to computers of various network configurations: star, ring, mixed network communications — i.e., Ethernet

It is still used in all network connections – inside data centers, WiFi. The protocol works over wired connections, radio channels, satellite channels, Ethernet networks. With the increasing number of computers and the distance between them, the use of Ethernet has become problematic.

Ethernet is a network protocol; it operates under the control of a circuit switching network, i.e., The channels themselves are commuting. The Internet is a packet switching network with four-zone addresses, the so-called IP addresses

Addresses are interconnected at the time for transferring a single packet, and when the packet is transmitted, this connection is broken. Since the Internet does not allow to transmit a message without fail, this is accomplished by using a confirmation for which time must be spent, this protocol works at the upper network layer, including the application layer.





Problem

5. Problem

With the development of blockchain technology and blockchain-based applications, new problems are emerging. For example, the inability to scale when applying this technology in large-scale projects, the lack of support for different business scenarios and the inability to exchange information and assets between different blockchains. This hinders both the technology itself and the development of the ecosystem as a whole.

At the moment, the really working blockchain is Bitcoin, the rest are based on Bitcoin – the so-called forks.

A blockchain is only a part of the cryptocurrency in these systems; it serves only its own cryptocurrency.

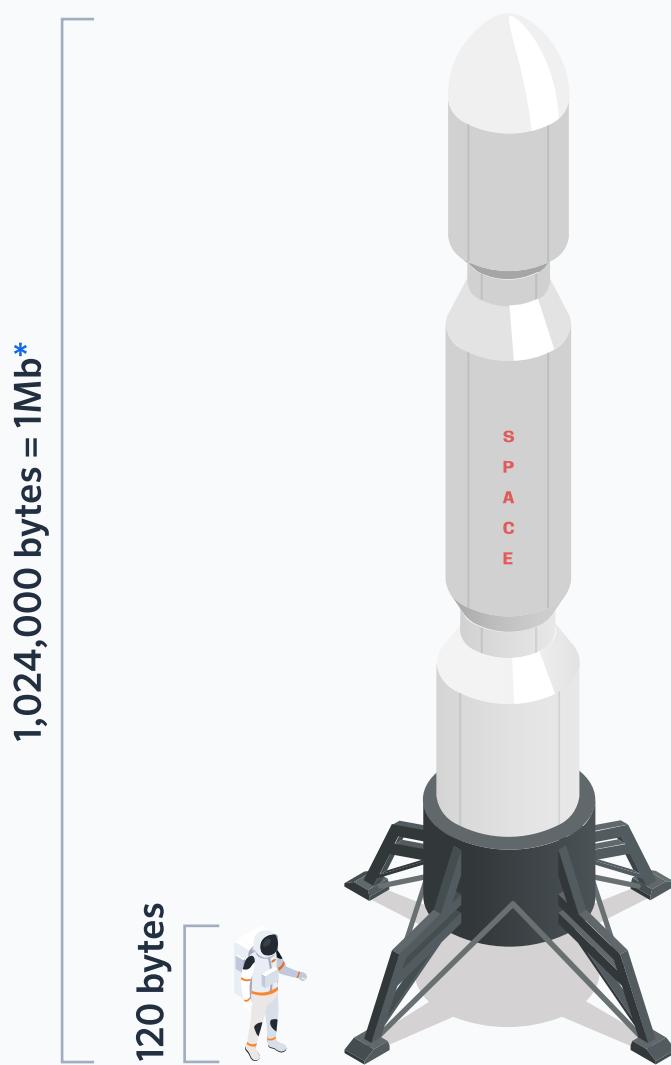
The main problem in the global community of blockchain system developers is the creation of a universal platform that can serve not only a single cryptocurrency, but also record logistic events, copyright tracking, arbitrating, storing data in a decentralized repository, as well as self-executing transactions (smart contracts) in any area of human activity. At the moment, the community is not yet able to provide such a universal platform. This is due to the fact that inertia of thinking does not allow one to go beyond the established stereotypes and opinions.

The main problems of modern blockchains:

Large block size

The bitcoin block size is 8000 times bigger than our block size

It is not advisable to accommodate all transactions that cannot be placed in a single block in a single block. This leads to a decrease in the speed of data processing, a decrease in the speed of data transfer, as well as a decrease in the speed of searching for the necessary information.



* — Example of bitcoin and blockchain 5.0 block sizes

There are some problems in the field of blockchain technology nowadays, and Relictum Pro blockchain can solve them in one way or another

- Using cryptocurrency as a reliable payment instrument
- Scalability
- Energy consumption
- Mobility
- Convenience and comfort
- Transaction rate
- Expensive transactions (the transaction price is 0 in the Relictum Pro blockchain)
- 51% attack problem (This problem is impossible here since each transaction has its own identifier, 1 block = 1 transaction)
- Low throughput (Relictum Pro has reached 100,000 transactions per second)
- Defi Tokens (Wrapped Coins of Ethereum, Bitcoin, Litecoin, and Tether)

At the moment, they use the type of P2P network on which not only message transfer is built, but also storage of file fragments — distributed storages (based on packet switching (Internet), which implies delivery confirmation, unnecessary headers in the packet body, and also uses the central processor for the assembly of fragments. P2P was used for transferring files – for file sharing services. File sharing services were needed so that you could download movies, programs, and documents.

Principle of operation:

One node connects to several and in parts downloads data from other nodes. Thus, the download speed was close to the maximum value of the network card and the speed of a provider.

The disadvantage of P2P:

Today, it does not allow to work with a large number of nodes. Having a large number of nodes, the P2P network starts working with segments. Until one segment closes, the second does not unfold. Segmentation constantly occurs and from different sides, the segments start overlapping, the transaction confirmation time by all nodes increases, this affects the speed of distribution and the time of data transfer.

P2P n-section



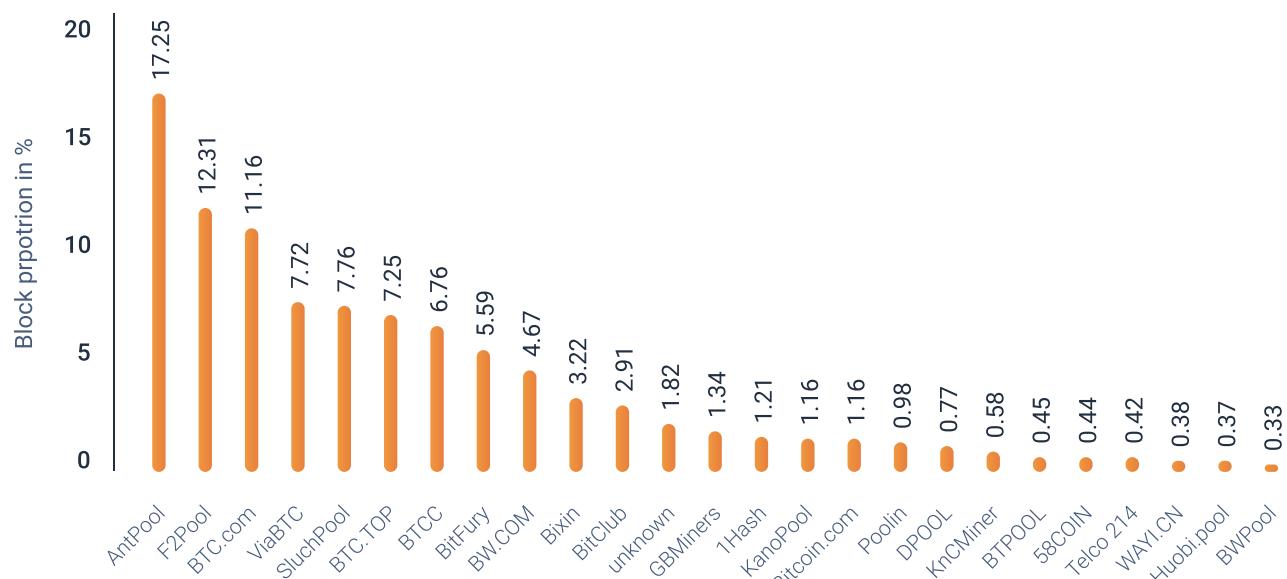
51% attack problem:

The 51% attack (actually from 46%, since not all network participants are able to vote at some point of time) is a term that means that an attacker must have more power than the rest of a network, a kind of "controlling stake" of generating capacity. This is achieved due to the fact that the Network with a consensus makes the decision to conduct a transaction. For example, Ethereum network. (The larger is the network size, the lower is its performance) Many attempts were made to solve this problem using additional consensus. (For example, Casper in the air).

The problem of key loss:

A private key and a public key. After signing a transaction with a private key, a public key is needed to verify and authenticate the signed transaction.

The distribution of Bitcoin-blocks (3 january 2019)





Solution. Proof of tsar

6. Solution. Proof of tsar

In order to solve existing problems, we propose several changes in the architecture of the blockchain, affecting communication protocols, network infrastructure, inter-network agreements, consensus algorithms, and so on.

Relictum Pro platform does not depend on the communication method, it is just a node, and how the message is delivered does not matter;

At the moment, _HyperNet 's own communications technology is being used; it works over or on top of the Internet

The following networking method in the future can be used based on Bluetooth, WiFi, satellite communications, i.e., channel switching based on Bluetooth and/or WiFi and other promising protocols



Networking is the first distinctive mechanism

The existing network organization of modern blockchains is peer-to-peer (P2P) network. Relictum blockchain platform uses a unique protocol based on the TCP/IP protocol, in which a virtual communication channel with each node is formed over the Internet. The advantages of this network are its reliable stability and isolation from the general segment of the Internet. In this virtual channel, only Relictum Pro information is transmitted, which increases the data transfer speed several times

As a transport, we use a new type of network based on the fourth-level data network of the OSI model. _HyperNet is a virtual channel switching network.

The network provides a constant stable connection between all nodes for a small limited period of time (from 0.5 to 10 s), depending on the network load.

With a small network load, this gap can be up to 10 s, while with a loaded network it decreases to less than 0.5 s.



How does it work?

Network nodes are completely identical and represent a binary file with the possibility to upload and manage a registry.

When you first start the node, it automatically determines which type it belongs to



Master node

All blocks are stored



Light node

Blocks are stored only for a certain period of time



Private node

Only blocks of own transactions of this node are stored and updated



Sleep node

The attempt to connect to the network. Occurs either when the network is broken, or during the first launch.



Cloud node

Created automatically when a user registers via a web page. Further work is also carried out through the web page

Proof of Tsar organization mechanism

There is a network regeneration every 0.5 sec (reconnection of all nodes), like the regeneration of computer RAM, led by one main node – “Tsar” and “Generals” standing under it, they collect transactions and transfer them to “Tsar” for processing. After that, “Tsar” gives blocks to “Generals,” and they distribute them further to everyone in the chain. “Tsar” and “Generals” are automatically selected and constantly changing.



Other nodes



General nodes



Tsar_node

Any node can be "General" and "Tsar." But “Tsar” in the next generation, after the regeneration of the network, can no longer be either “Tsar” or the “General.” Like a “General,” in turn, cannot be a “General” two times in succession.



We solved the problem of ambiguity

Thus, collisions of double expenses and other parasitic events disappear. At the same time, “Tsar” does not know that it is “Tsar” at the moment when it is “Tsar”

Estimates show that the probability of a block hash collision may occur in 100 years, But this collision can only be with the hash that was 100 years ago, which makes it irrelevant. This is achieved thanks to the continuous numbering of each Master-block unit.

If the connection with the node is disconnected, the node goes into the sleep-mode (mode 4). When a connection is established with a node, the node passes the integrity check, checks the relevance of the blocks, and begins loading of the missing blocks. After that, the node goes into a network connection mode.

The ranking of nodes depends on the number of transactions that consist of:

- The number of calls to the node – to the distributed repository for documents;
- Time of presence in the network;
- The number of generated transactions;
- The number of transactions going through the node.

Block organization is the second distinctive mechanism

It is not advisable to accommodate all transactions that cannot be placed in one block in one block. This leads to a decrease in the speed of data transmission, as well as a decrease in the speed of searching for the necessary information

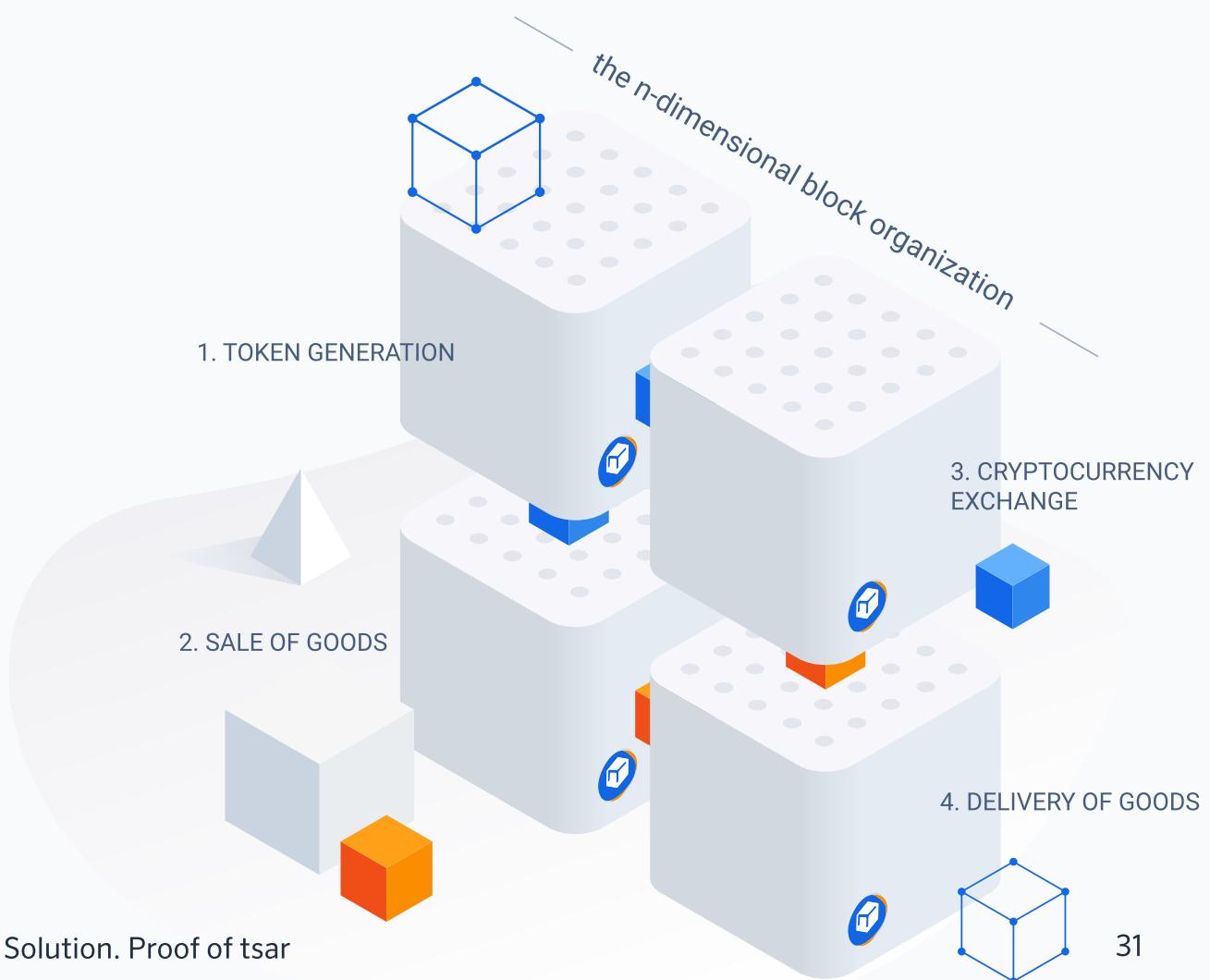
The distinctive mechanism is as follows: only the hash of one event (transaction) is recorded in the block, it cannot be changed.

Thus, all kinds of collisions are swept aside. In addition to recording the event hash into the block, when forming a new block, the entire hash of the previous block and + integer value is taken (we put the sequential block number in front of the block). There is a main chain of blocks – **Master_Chain**, which contains only the hash of a block of lower and side smart contracts

In parallel with the main **Master_Chain**, various independent chains are formed – these are smart contracts that organize the three-dimensional distribution, for example:

- **first smart contract** — generation of tokens;
- **second smart contract** — sale of goods through the store;
- **third** — a crypto exchange;
- **fourth** — delivery of goods, etc.

Thus, the organization of chains of smart contracts and the main **Master_Chain** leads to a four-dimensional model of the organization of distribution of block



The following features of the Relictum platform appear:

- Smart contract independently monitors whether all conditions of a contract were fully fulfilled;
- Possibility to conduct operations with different types of smart contracts, the possibility to generate new smart contracts with new type-properties or property-types;
- Already today, in the Relictum Pro platform, a smart contract can be signed simultaneously between 10 counterparties.



A block diagram is a smart contract:

MASTER_BLOCK #1

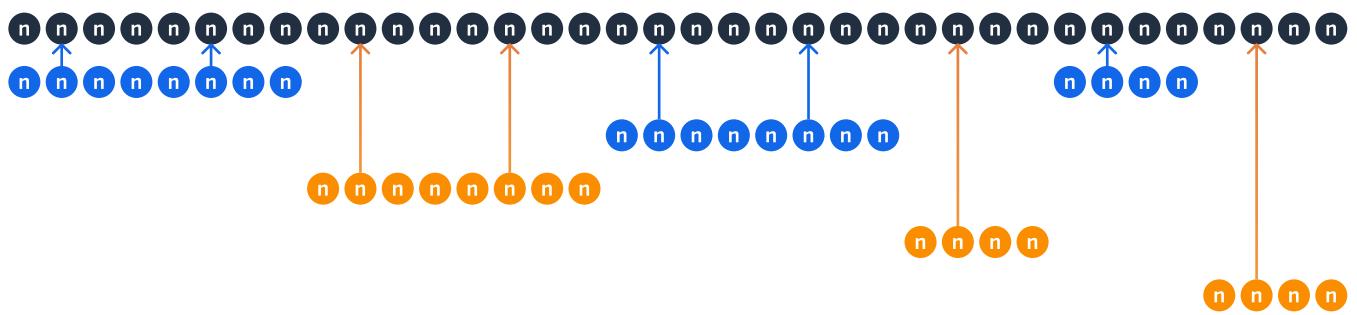
Hash of the previous block

Hash of smartcontracts

Date

Service information

Schematic diagram of multi-smart contracts



Each chain (smart contract) has an index, and each block of this chain has its own index in Master_Chain. In Master_Chain, it is indicated from which index of this chain the appeal took place, but in fact they come one after another. The number of possible new, embedded smart contracts is unlimited.

 — index of each chain (of smart-contract) in Master_Chain;

 — index indicators of chain embedded smart contracts.

Node (network node) – dynamics and functionalit

The nodes are all identical. When initiating, each node determines itself and the group it belongs to (as an option, it is chosen by the owner of the node manually)

Full nodes are binary executable files that can be automatically initialized t



Master node

All blocks are stored



Light node

Blocks are stored only for a certain period of time



Private node

Only blocks of own transactions of this node are stored and updated



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The attempt to connect to the network. Occurs either when the network is broken, or during the first launch.



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A node is, among other things, a portfolio, it includes:

- Possibility to create your own ICO;
- Possibility to create your own exchange;
- You can create your own currency (smart contract of coins, smart contract miner).

Internal opportunities

Relictum Pro allows you to confirm transactions within the network of current cryptocurrencies: Bitcoin, Ethereum, Litecoin, Dogecoin, etc. Transaction confirmations happen instantly. Even if Bitcoin has not reach the owner, a user can already immediately dispose of it.

The possibility to integrate third-party accounting systems, and documentation into the Relictum Pro platform.

Thus, the speed of Bitcoin transactions increases to the speed of transactions of the Relictum Pro platform network.

External features of Relictum Pro (network):

The platform network has its own SDK for all platforms on dynamic libraries and APIs with examples for all types of programming languages (Modula, Delphi, Python, C/C ++, etc.)

Relictum Pro ensures operation with not only SDK and API protocols, but also with own protocol of blockchain-platform at a low level – the socket protocol: high degree of protection, speed.

It uses its own data transfer methods that can transfer not only information, but also blocks, bytes, and entire files for external consumers. Can be used to organize external storage.

Hashing mechanism

Relictum Pro is a supplemented modification of SHA1-based hashing mathematics. The main advantage of it is in converting from 20 bytes to 32 bytes (in your own hash). This gives a high crypto-stability, including from a promising quantum computer

SHA1 hashing



Solving the problem of 51% attack and other ambiguities

A single node, makes a decision within 0.5 to 10 seconds, the network is updated (regenerates) and another main node is selected, it collects instructions, forms blocks and distributes them to all nodes, i.e., the network changes dynamically every second. This gives an advantage, which excludes various kinds of ambiguities – collisions, double spending, and other things. There are no standard consensus principles. The more nodes are in the network, the better is the performance. This is achieved by the unique architecture of Proof of Tsar and the organization of the virtual circuit switching network

Distributed storage

A distributed storage does not require confirmation of data receipt. Thanks to the organization of various chains of smart contracts, the system accelerates the search for fragmented files and their viewing. According to the empirical data, the download speed is significantly faster than the P2P network.

Advantages:

Storage of any digitized documents and a set of data, files in any volume with instant access to any stored information. Distributed data remains forever in the system, unlike any hosting.

The copyright is automatically organized with the recognition of intellectual digitized work and a pirated copy. The author's reward for the use of the work is automated, bypassing intermediaries (using the smart Copyright contract).

Secured storage and key management

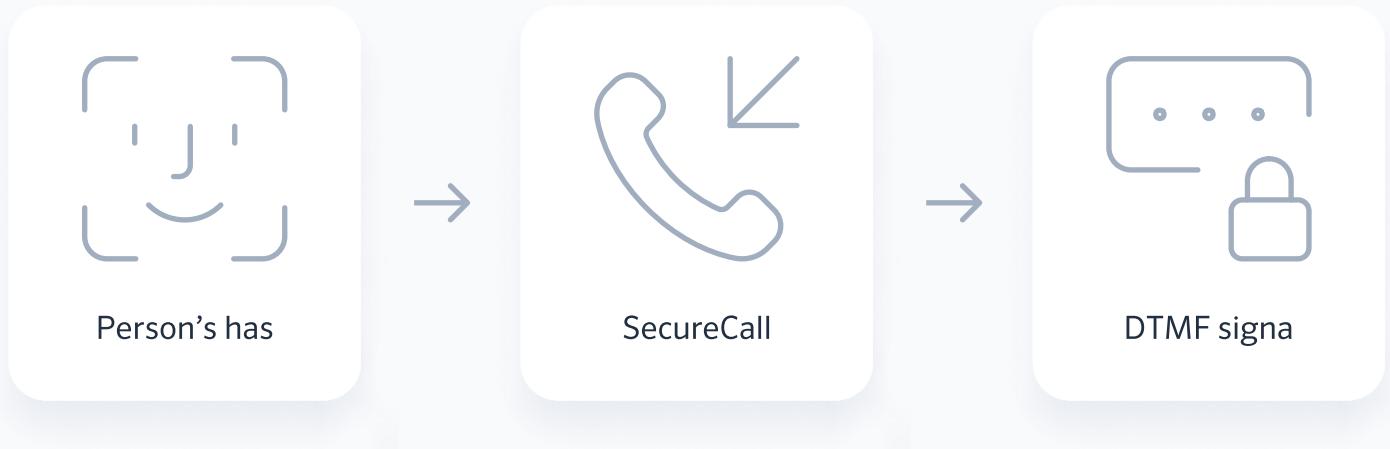
The founder of the smart contract concept, Nick Sabo, put forward three unsolved problems:

- Secure storage and key management;
- Decentralized exchanges;
- Making second-level solutions more user-friendly, especially through automatic routing, at the same time, without neglecting the minimization of trust.

Entering the blockchain platform with two-step authorization solves the problem presented by Nick Sabo.

How does our biometric facial recognition system work:

A person's hash is taken, in conjunction with SecureCall – the confirmation of a transaction with a phone call. During a call, the user enters a password using a DTMF signal along with the following solutions:



- After a successful transaction, the private key loses its relevance, and the client is inevitably obliged to generate a new key (or this is done automatically);
- The public hash from the concatenation hash [Token + pass phrase] or [Token + random text] in binary form is recorded in the smart contract chain;
- It is possible to use 2 short keys with a sequential check, after checking the 1st key (regardless of the result of the check), it is proposed to enter the second key. The mechanism assumes, after the 1st check, to output a string that is the hash of the 2nd key, which means a hacker will need to pick up the 2nd key without knowing, in general, whether the hash of the 1st key is correct. To prevent hacking, it is possible to limit the number of attempts.





Review of competitors and comparison

7. Review of competitors and comparison

Relictum Pro, cannot be compared with existing projects at the moment. Relictum Pro does not have the concept of “comparison with competitors,” since, bearing in mind the problems of modern network organization, HyperNet does not use it anywhere in the way it is currently presented.

Current blockchain	Blockchain  Relictum Pro
The competitors' blockchain systems are organized on P2P networks, which, with a large number of nodes, leads to inhibition of filling the entire network.	Relictum Pro network instantly selforganizes establishes virtual channels between node-node-node and guaranteed fills the network in 0.5-1s
The average speed of filling the network (all nodes) with blocks (Bitcoin or Ether) existing for competitors, taking into account the confirmations, takes, on average, from 10 minutes to several weeks.	Relictum Pro transaction speed (the rate of filling the entire network with blocks in each node) takes from 0.5 to 1 sec
Low bandwidth.	Currently, we have reached the level of 100,000 trns/s in the MaineNet network. The estimated system performance value under ideal conditions is 1,000,000 trns/s.



Distinctive features and advantages

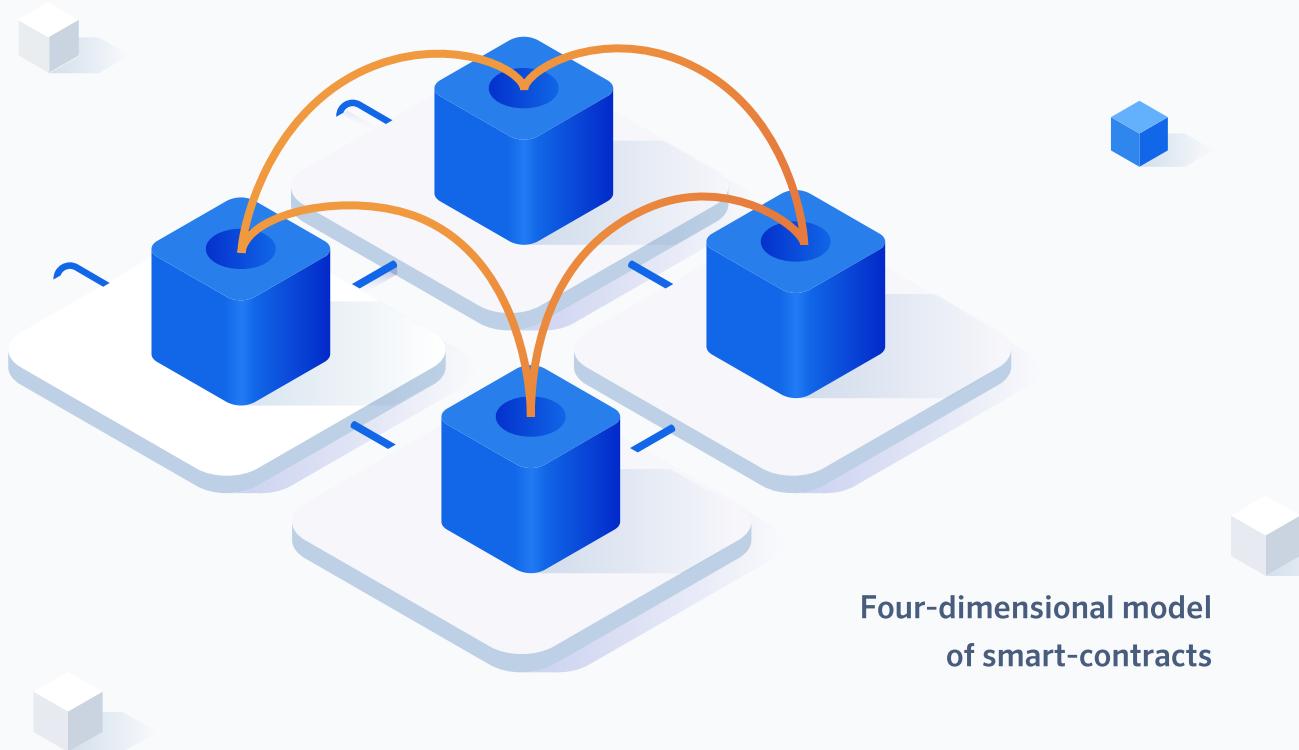
8. Distinctive features and advantages

The number of possible embedded smart contracts is not limited in number and in time.

Cryptocurrency is one chain of smart contracts; tokens are the second chain of smart contracts; the third chain of smart contracts is operations in cryptoexchanges

New properties emerge in the operation of all smart contracts in Relictum Pro developed by smart contracts:

1. The possibility of the intersection of smart contracts, thus describing a more complete type-properties of the goods
2. A blockchain remembers everything is an opportunity to get a virtual portrait of a person and, if desired, a participant can make a full sample on various aspects of their life activity.



System Description

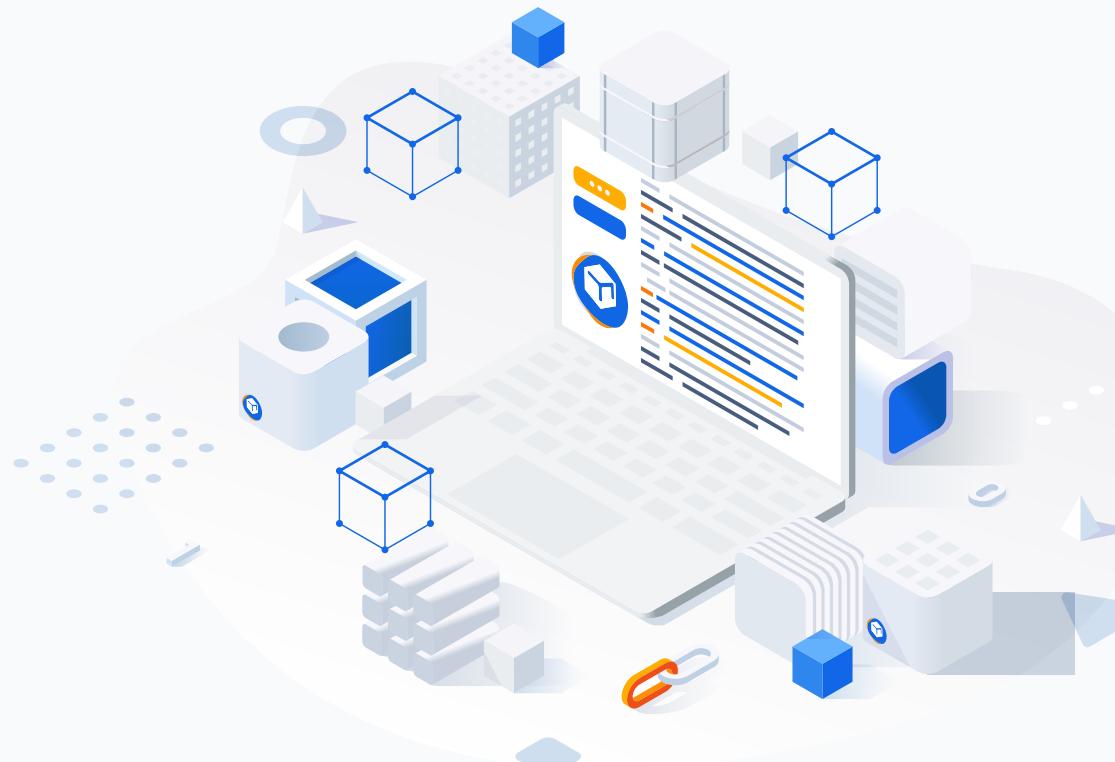
The system consists of:

- Nodes (can be installed on servers, computers, smartphones – these are nodes);
- HyperNet delivery method;
- Distributed storage.

Relictum Pro is a self-organizing, self-developing network, which is expressed in the constant self-ranking of nodes according to several criteria with the assignmen.

Criteria:

- Number of full calls to the node's storage;
- Presence in the network and falling out of the node both by the number of times and by time;
- Number of transactions initiated;
- Number of transactions passing through the node.



Relictum Pro has several major features:

- Smart contracts are used to formalize any type of activity where an event occurs;
- Smart contract independently monitors whether some particular terms of the contract were fully implemented. At the same time, thanks to the Relictum Pro system itself, the code is absolutely protected from any third-party intervention;
- That is, no attacker can change the source code of a smart contract between two (or more) nodes;
- It is an opportunity to conduct operations with different types of smart contracts;
- Possibility to generate new smart contracts with new type-properties or property-types;
- In our system, a smart contract can be concluded at the same time between 10 contractors;
- The weight (size) of a single block in Relictum Pro is about 120 bytes, which is 8000 times less, compared to, for example, Bitcoin.

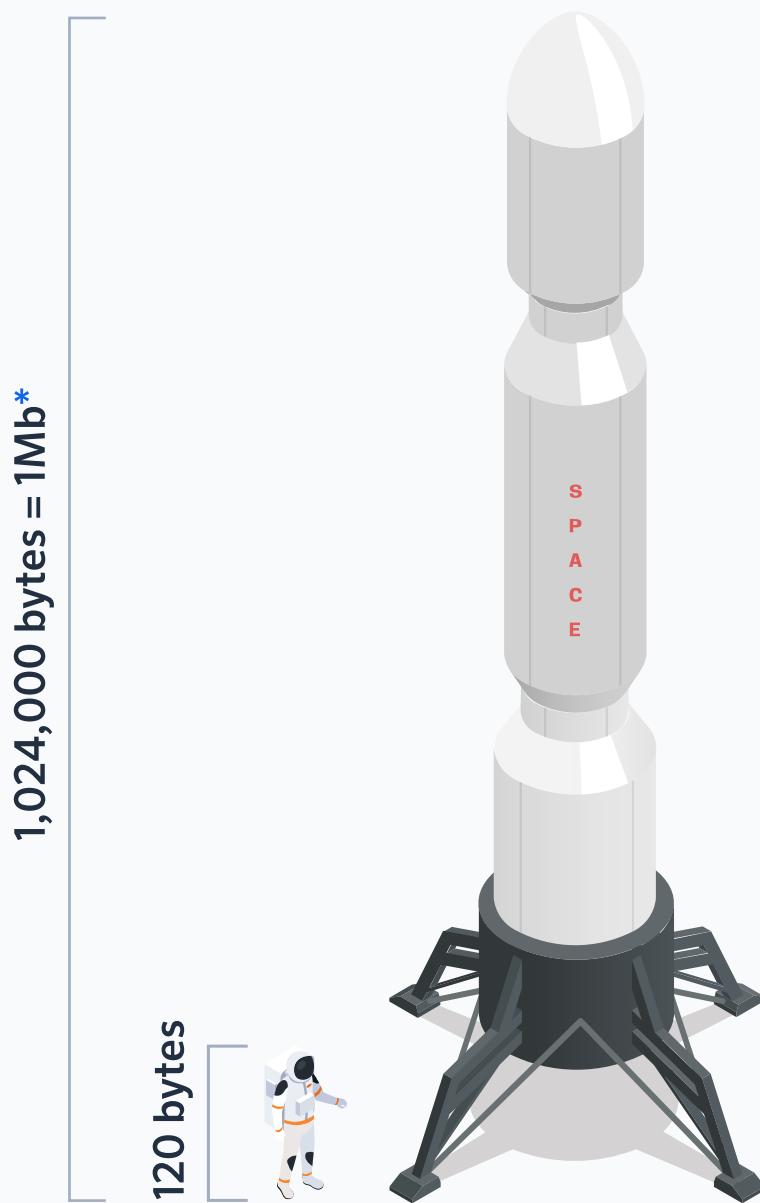


**8000 times less,
compared to
Bitcoin**

* — the weight of the block in our Blockchain 5.0 compared to the weight of the block in the bitcoin network.

The bitcoin block size is 8000 times bigger than our block size

It is not advisable to accommodate all transactions that cannot be placed in a single block in a single block. This leads to a decrease in the speed of data processing, a decrease in the speed of data transfer, as well as a decrease in the speed of searching for the necessary information.



* — Example of bitcoin and blockchain 5.0 block sizes



Applications. Social significance.

9. Applications. Social significance

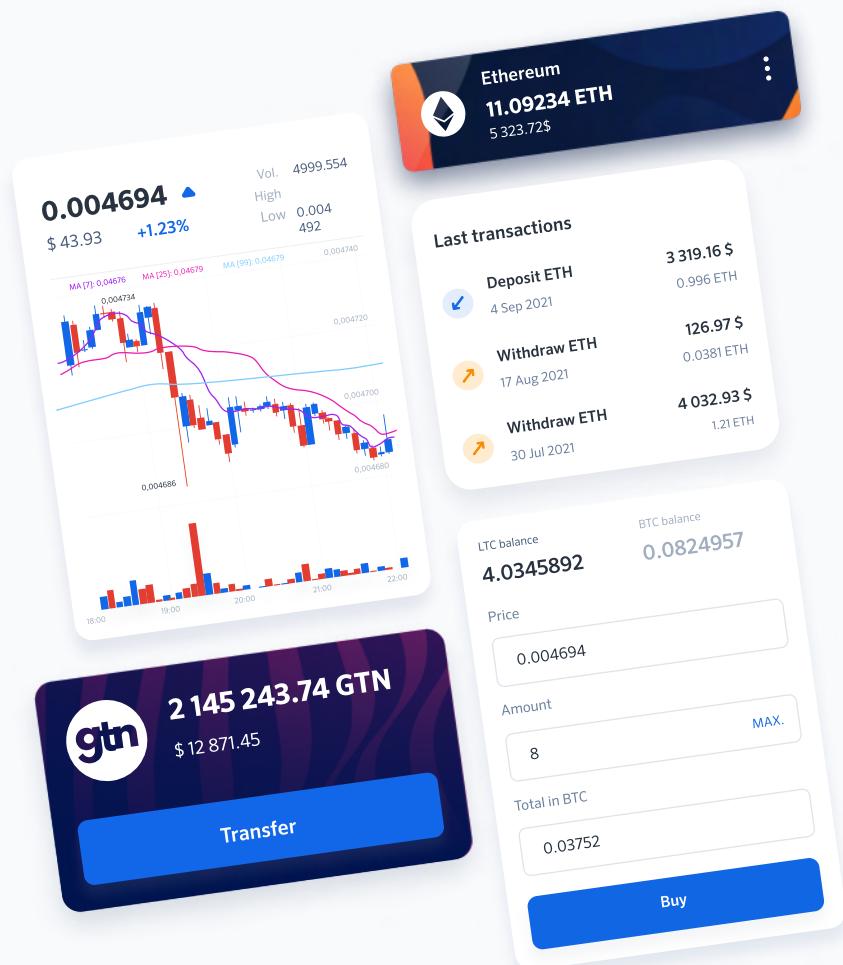
Relictum Pro is a fully-fledged distributed platform, a 100% reliable electronic data circulation environment for all parameters of human life.

Relictum Pro is an ideal Blockchain system with a developed and unrestricted system of smart contracts with new type-properties, where several participants can initiate one event at a time.

Relictum Pro is a scalable, hyper-modern blockchain, with a view to the distant future, a product that can be used with more powerful processors, with the latest electronic and computer technologies, including optical and quantum computers.

Relictum Pro

is a complete blockchain platform designed for public, commercial, and private activities.



Relictum Pro is a smart platform of a distributed registry of the newest generation, designed to formalize (describe) the economic life of a person to exclude intermediaries between participants and record any events (personal livelihoods, logistics, document flow, delivery, transportation, interaction with legal entities, etc)

Solving the problems of existing platforms and having the most advanced parameters, Relictum Pro Blockchain can solve problems on a global economic scale, making our life simpler, more comfortable and safe, making processes transparent and honest





Tokenomics

10. Tokenomics

Relictum token is a digital asset created based on the Relictum PRO blockchain network. We offer you several types of tokens corresponding to national currencies and which are pegged to them: USDR token is the equivalent of the US dollar.

A token is a digital asset, and that means it can easily move across the blockchain, and you get complete freedom of action, which will not happen with fiat money.

Both individuals, traders, and companies can be our clients. Everyone can find some benefit in using Relictum Finance.

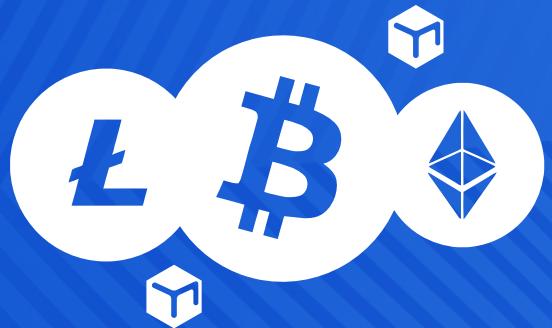
The only limit is your imagination. You can use your tokens wherever digital currency can be used, and its scope is only growing day by day. We believe that one day crypto assets will be as affordable as money and securities familiar to everyone.



Wrapped tokens

Wrapped tokens are digital assets, the emission of which depend on electronic or digital currencies received on Relictum Pro wallets.

The sum of the corresponding wrapped tokens will be equal to the amount of funds sent to the Relictum Pro wallets, this will be the emission mechanism of the wrapped tokens in Relictum Pro.

**2%**

The commission, based on a smart contract, is sent to a special fund Relictum Pro. The sum of all commissions will be the basis for the issue of wrapped tokens.

Wrapped tokens Tokenomic Model

The commision for depositing asests into the blockchain network is

0%

The commission for transactions within the network is

0%

The commision for the withdrawal of assets from the blockchain network is

2%

Genesis tokens GTN

Genesis Tokens are tokens that express the intellectual property (IP) right of Relictum Pro network code issued in the amount of 10,000,000,000 GTN and distributed during the corresponding token sale rounds among early investors who believed in a mathematically based concept and Relictum Pro network.



2%

The genesis tokens provide you with the possibility to receive royalties for using the intellectual property (IP) of the Relictum Pro network program code in the amount of 2% of the size of the forging (emision) of USDR.

Tokenomics model of GTN tokens

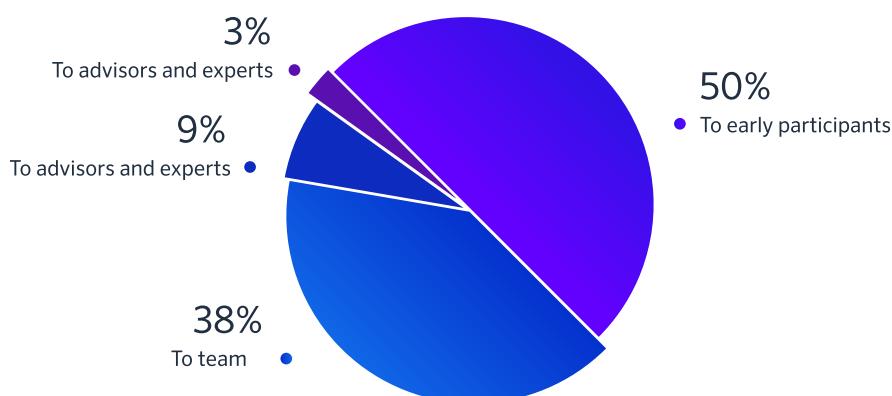
The total volume of emission of the genesis of GTN tokens, pcs:

10 000 000 000 GTN

Distributionrate, 1 GTN for \$:

0.0073\$ ~~0.006\$~~

+1.20%



Stable token USDR

Relictum tokens are a digital asset created on the basis of the Relictum PRO blockchain network. The USDR token is the equivalent of the US dollar.

You can use your tokens wherever digital currency can be used, and its scope is only growing day by day.

**2%**

The minimum commission for replenishing your USDR balance using the Ethereum USDT ERC-20 network + the sender's blockchain network commission.

1 USDT

The minimum commission for replenishing your USDR balance using the Tron USDT TRC-20 network + the sender's blockchain network commission.

USDR Stable Token Tokenomic Model

The commission for transactions within the network is:

0%

USDR withdrawal fee is:

5%

The token can easily navigate the blockchain:

You get complete freedom of action

Full control over assets in a decentralized network:

No banks and other financial institutions



Roadmap

11. Roadmap

1 Quarter 2022



DEV

Node	OS	Settings
	Works on creating a business account with the subsequent publication of the application and transfer to the AppStore on behalf of a business account.	Create a Configuration subsection in the Settings section, which allows to make adjustments to the system operation
	Exclude the NFT item from the list available in the dApps section due to requirements of Apple	Digital NFT Avatar
Light Node & Full Node		
	Blockchain optimization on mobile devices	Phase 0: Implementing the staking mechanism with the ability to add to a specific period
	LightNode & Full Node Architecture Design	NFT
	Create an option in the settings section allowing users to switch the operating mode from light to full	Co-authorship in token creating
UI		Creating a predefined minting function for a given number of copies
	Optimize form rendering, improve animation smoothness	
JRPC		DEX
	Create an endpoint for processing automatic posting requests transactions in the Relictum Pay system	Basic functionality
	Create an endpoint to receive data by crypto wallet	Trading pairs RBTC/USDR RLTC/USDR RETH/USDR
		Interaction with internal balance account
		Orders
		Purchase Market Limit
		Sale Market Limit

1 Quarter 2022



DEV

DEX

Order execution

Matching when placing orders

Cancellation of orders

History

Orders

Trades

Relictum Blockchain listing

Implementation

Phase 0. Basic functionality, closed testing, a special group of testers, a separate build, running on the dev network

Phase 1. Basic functionality, open testing, public access, together with a special group of testers, shared build running on testnet

Phase 2. Basic functionality, publication in mainnet

Relictum Pay

Create the unified standard for connecting off-chain services based on the Relictum Pay smart contract worth 50 USDR

Publish detailed instructions with step-by-step information on integrating Relictum Pay with an external service on GitHub

Decentralized Storage

Implement economic model update for storage holder nodes

Explorer

Increase work performance by implementing a mechanism for caching blockchain data in external storage, as well as optimize the time to receive data

Refactor UI system, create a new updated design of the application scheme

Web Node

Deploy the Relictum blockchain node to implement the Web Node system

Implement a web node inside the relictum.pro account as a web application

[Create an account](#)

[Login](#)

Wallet implementation

Import implementation

Pay implementation

Relictum ID

Create a web resource, relictum.id

Create a unified registry of credentials of the Relictum ecosystem

Create an open authorization and registration protocol

Connect Web Resources Ecosystem to the Protocol

Wiki

[Developer Documentation Updating](#)

Relictum Finance

Increase USDR Collateral Portfolio: Adding USDC Stable Coin

Modernize fiat gateways: Connecting new partners on more favorable terms both for buying USDR by card and for selling

Extend API capabilities, create a widget for implementing the USDR purchase/sale form on third-party sites

1 Quarter 2022



DEV

Relictum NFT

- Fine-tune implemented functions
- Implement the declared functionality, including: creation of a token on a marketplace
- Co-authorship when creating a token
- Improve the economic model
- Fine-tune navigation and filters, as well as systems for promoting authors and works
- Update UI/UX

Application testing on IOS.

Test the DEX Application

Prepare and test Staking.

Relictum NFT

Launch of a large-scale PR campaign for the archetplace and the brightest projects implemented on Relictum NFT

Launch of the Ambassador Program

Introduction of the loyalty program and airdrops practices

Marketing

Building Relationships with developer communities

Popularization and development of the Relictum Pay system

Development of social networks

Discord

Slack

Community education webinars

Audit of the blockchain concept and roadmap for 2022

Negotiating with the TOP 30 CEX regarding the listing of GTN

Marketing research in the field of decentralized data storage.

Popularization of Digital Safe (Decentralized Storage)

2 Quarter 2022



DEV

Node	Node dApps
Implement the Light Node & Full Node mechanism	DEX
Blockchain	Phase 3. Implement the commission from the auction
Create and implement the dynamic commission mechanism	Phase 3. Implement the commission from the auction
Create the mechanism for multiple private keys	Staking
Create the mechanism for the prevented account generation	Phase 1. Implement the additional remuneration program
JRPC	Phase 2 Implementat the additional remuneration program
Create endpoint(s) to receive data from Storage	Decentralized Storage
2.0	Implementation of a new reward program for nodes of storage holders
Create a new concept of Blockchain architecture	Remove the gray storage system, prohibit the ability to create new gray storages, leave the ability to create only white storages
Improve the concept of the consensus mechanism	Implement the Ownership Transfer Mechanism
Create a roadmap for changes implementation - Relictum Hard Fork 2.0	Calculate the cost of files in megabytes
Smart-Contracts	Implement the File Multiple Ownership Mechanism
Create the concept of Relictum Blockchain smart-contracts based on Delphi Programming Language (RVM)	Set a price per download - paid content
Functionality Execution cost Deployment order	

2 Quarter 2022



DEV

Wallet

Device system upgrade,
create a new updated version
of Wallet 2.0

Addition of Cosmos(ATOM)
cryptocurrency

Addition of TON
cryptocurrency

Web Node

Implement Storage

Implement Token

Relictum Finance

Create an auto-conversion mechanism
for buying USDR with a cryptocurrency
other than stablecoins

Add Ethereum cryptocurrency as a
means of payment for buying USDR

Add Bitcoin Cryptocurrency as a
Payment Method for Buying USDR
Cryptocurrency

Explorer

Create a cross-chain version of Explorer
2.0 with new UI/UX, advanced features
statistics, analysis, and viewing
blockchain

Wiki

Bridges

Develop the concept of creating a
bridge to the Cosmos ecosystem

Marketing

Participation in events, exhibitions

Popularization and development of the
Relictum Pay system

NFTMarketplace

Introduction of the loyalty program and
airdrops practices

Participate in the conference
<https://www.nonfungibleconferen>

Partnerships

Prepare and test the light version of the
application

Prepare and test DEX in stages

Prepare and test the web version of the
Relictum Node application

Prepare and implement the analysis, as
well as marketing activities aimed at
highlighting and popularizing the
development of the bridge in the Relictum
ecosystem

Create a Relictum Virtual Office in the
Metaverse

Strengthen the project position in crypto
community to attract new specialists,
advisers, partners

2 Quarter 2022



Strategy

Conduct trend research of blockchain development directions to define the possibility to implement DAO concepts into a Relictum tokenomic model

Develop Relictum Yellowpaper 2.0

Develop Relictum Whitepaper 2.0

3 Quarter 2022



DEV

Node

Blockchain

Implement the multiple private keys mechanism

Implement the prevented account generation mechanism

2.0

Create a console version of MVP

Network Deployment for Developers

Smart-Contracts

Create an MVP based on a concept

Deploy online for a meeting

Bridges

Develop the concept of creating a bridge to the Cosmos ecosystem

Build the ERC-20 bridge to the Etheruem ecosystem

Build the ERC-721 bridge to the Etheruem ecosystem

Node dApps

DEX

Phase 5. API implementation, robots connection

Wallet

Add BNB Cryptocurrency

Add Cardano Cryptocurrency

Add Cardano Cryptocurrency

Decentralized Storage

Share File

Rewards Program for storage holder nodes

Integration with IPFS

Swap

Github

Publish code on Github

Marketing

Conducting Relictum Hackathon 2022

Participation in events, exhibitions

Community education webinars

Partnerships

GameFi

Payments

Listing

CEX announcement for listing

Promotional activities in preparation for the listing

GTN listing

4 Quarter 2022



DEV

Node

Smart-Contracts

2.0

Governance

Full Server Node

HardFork 2.0

OS

Linux

Blockchain

Optimization

Bridges

[Build a bridge to the Solana ecosystem](#)

[Build a bridge to the BNB ecosystem](#)

[Build a bridge to the Cardano ecosystem](#)

Web Node

DEX

Crosschain integration with
other blockchains

Swap

DEX

Add Algorand cryptocurrency

Add NEO cryptocurrency

Decentralized Storage

Marketing

Community education webinars

NFTMarketplace

[Collaboration with NFT-marketplaces
from top 10 list](#)

Partnerships

GameFi

Defi

Create a marketing plan aimed at
promoting, and, first of all, at attracting
merchants to increase turnover of the
stablecoin

Conduct advertising campaigns, aimed at
promoting the system in the Delphi
developer environment



Brief Description

12. Brief Description

Relictum Pro is a fully distributed and decentralized platform, which includes all areas of human activity, ranging from the sale of goods and services (both legal entities and individuals except intermediaries) to complete logistics of the movement of goods and production

Relictum Pro is a blockchain platform describing (formalizing) in any event. It can work both in private mode in closed structures, describing the entire document flow, and at the level of the international single global economy. At the same time, a one-way private <- share. correlation is possible.

Relictum Pro is a global platform covering all aspects of a person's economic life in a distributed registry.

