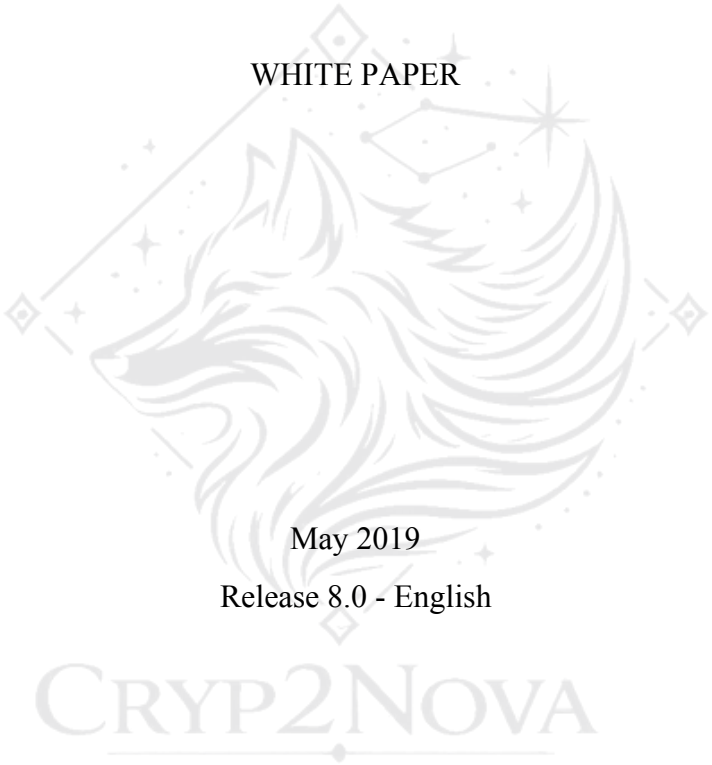
Internet Broadband Marketplace
powered by VPN Network on Blockchain

WHITE PAPER



May 2019

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Abstract

This white paper presents the Privatix concept of a decentralized autonomous VPN network on blockchain with its own crypto-economy which will serve as the first bandwidth exchange marketplace. Based on the blockchain technology, the network will contain thousands or even millions of exit nodes around the world and will provide an innovative new way for developers to build products that will potentially disrupt several markets, like the consumer VPN industry, cyber protection, CDN, business intelligence and even software and mobile apps monetization.

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1. Introduction

Privatix is an established and profitable company that was founded by a group of experienced IT entrepreneurs and talented developers who are passionate about the freedom of the internet, online security, and the rights of individuals and businesses to privacy protection.

Our team - which has more than 10 years' cyber security experience - are the developers of an incredibly easy-to-use, free VPN service - at Privatix.com - that can be used by anyone anywhere, regardless of their level of technical experience. Since 2015, more than 1,250,000 users have used this service.

Privatix is also the team behind Temp-Mail.org. It has more than 200,000 daily visitors and filters out more than 10 million spam emails a day.

Privatix has developed the advanced internet identity checking website Ipleak.com, and many other privacy-related services.

Now we have created a concept of a decentralized, fully autonomous network on blockchain. The Privatix Network is designed to have its own advanced crypto-economy and allow the users to rent out their broadband. We believe it has the potential to end the current era of internet censorship and totally change the current VPN market, among others (e.g. cyber security).

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1.1 Major problems facing the internet

The incredible worldwide growth of internet users is astounding. In 2016 we had 3.4 billion users, representing 46% of the world's population. By 2020, it is predicted that we will see 5 billion users online.

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But, as the number of users online grows, so does the level of internet censorship. In the future, most new users will likely come from countries with increasingly strict internet censorship laws; because these users often have poor internet mobile connections, they are the most vulnerable to these sometimes draconian and arbitrary laws. It is these users who are seeking effective solutions to internet restrictions.

Today, one of the major problems with the internet is the denial of the network neutrality paradigm, that suggests an equal opportunity for everyone to access the world wide web.

This denial will lead to the collapse of the internet as we have known it over the last 25 years. Users are not just being watched by overzealous governments and cybercriminals, their data is collected by ISPs and their basic privacy rights are routinely violated. This is happening not just in countries like China or Iran, but in Australia, Germany, and even the U.S.

The second problem is the cybersecurity issue. According to Cybersecurity Ventures report, we have more than $3B in losses from cybersecurity incidents online in 2015 and it is expected to grow to $6B in 2021. The complexity of technical solutions today means that robust encryption algorithms aren't always accessible to ordinary people to effectively protect their data and ensure cybersecurity easily and affordably.

The third problem is speed. While the internet is global, network quality is not equal in all countries. Content is getting heavier all the time, e.g. full HD videos, streaming movies, etc.

1.2 The current centralized solution

Solutions for the internet censorship problem are currently available on the market. However, they come with a high price tag and are still vulnerable to ISPs control. It's not a secret that the VPN industry is growing fast, not least of all because of the lure of the industry's huge profit margins. As an insider, Privatix is aware of some of the major problems in the centralized VPN

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arena, including false statements about log-keeping policies, data selling, overcharging, unclear billing policies, and the incredible margins that are siphoned off into marketing, advertising, etc.

In fact, the VPN industry doesn't protect users' privacy and data while the users pay a high price for VPN services only because there are no better options on the market.

1.3 New opportunities

With its huge potential to be one of the most powerful forces in the internet technologies sphere, blockchain will enable us to turn current internet privacy and security practices on its head, simultaneously speeding up the internet (without any physical scaling.)

Privatix Network is a conceptual new solution that will benefit ordinary internet users, developers, and online businesses. We intend to reduce costs and margins on the VPN consumer market, eliminate the middleman and enable people to share (and profit from sharing) their spare broadband connection. We will provide a new horizon for developers to build awesome apps and services on the basis of this network, e.g. CDN, business intelligence proxy tools, anti-censorship SDKs for apps, etc. The wealth of potential applications is only limited by imagination.

1.4 Our mission and goals

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Our mission is to create a decentralized and fully autonomous VPN Network on blockchain with advanced Internet bandwidth marketplace powered by its own crypto-economy.

Our goal is to show a possibility to create new kinds of products and services based on the Network capabilities which have the potential to transform a number of markets like VPN, CDN, cyber security and encryption or may even change the landscape of application monetization market.

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2. Token PRIX

The Privatix Network ecosystem will be based on crypto-economic principles. PRIX will be the only crypto-currency allowed for mutual settlements during the buying / selling interactions between network participants.

2.1 Specifications

PRIX**, an** ERC20 token on the Ethereum Blockchain, is the central part of the Privatix Network. It's main purpose is to allow network participants to exchange value.

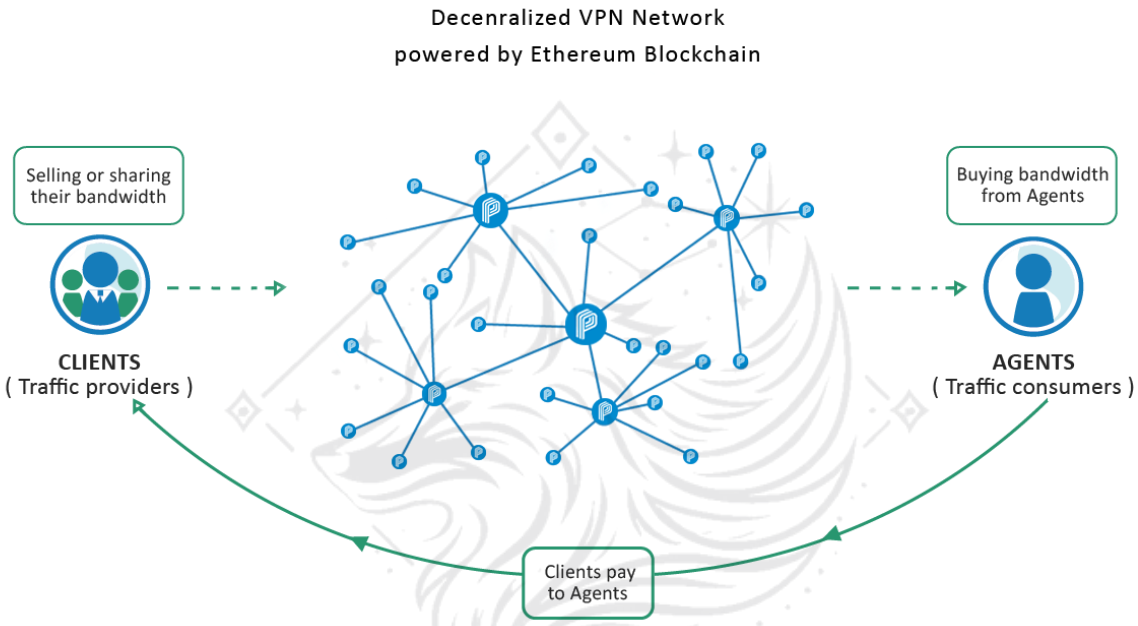
Token name	Privatix Token
Ticker	PRIX
Type	ERC20 (Ethereum)
Address	0x3adfc4999f77d04c8341bac5f3a76f58dff5b37a
Decimals	8
Total supply (after burning)	1,275,455 PRIX (fixed, no dilution)
Mining	No mining or any other means of increasing token amounts will apply to Privatix Token
Token utility	Internal crypto-currency to exchange value (utility) between Privatix Network participants
Token issuer	Privatix Token Ltd (a Gibraltar limited company)
Token special conditions	Token exchanges for purpose of buying / selling internet broadband (between Privatix Network participants only) will be subject to commission fee - up to 1% of transaction price in PRIX. No fees for any other transactions and exchanges except payments for bandwidth.

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2.2 The crypto-economy

The main economic agents inside the crypto-economy of the Privatix Network are:

- Users who want to sell their internet bandwidth (Agents)
- Users who want to buy internet bandwidth from Agents (Clients)



PRIX will be the only crypto-currency allowed for mutual settlements. At the same time, the PRIX token itself is expected to be traded on external exchanges. Assuming there is sufficient market volume, PRIX shall be freely exchangeable for other cryptocurrencies in both directions and anytime, subject to applicable regulations and/or restrictions in the various jurisdictions.

PRIX is not intended to be a digital currency, security, commodity, bond, debt instrument or any kind of financial instrument or investment carrying equivalent rights, nor are the PRIX tokens intended to represent any form of money or legal tender in any jurisdiction, nor any representation of money (including electronic money). Accordingly, any protections offered by

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applicable law in relation to the purchase, holding and/or sale of the instruments and/or investments referred to above and generally known as “securities”, should not apply to your holding or sale of PRIX tokens. PRIX tokens are intended to be digital goods, similar to downloadable software, digital music, and etc.

In basic economic terms, on the demand side there are Clients and on the supply side there are Agents. Clients want to buy broadband from Agents, and Agents, accordingly, want to sell it. So, at the market equilibrium point, the price of internet broadband will be represented in PRIX tokens (for example, 1 MB = 0.001 PRIX).

In the event of an excessive demand for Agents' broadband, the PRIX token is going to increase in price, thereby likely to attract more Agents to the network (as they will see they can sell their broadband for a higher price) and vice versa.

Demand and supply will be self-regulated effectively by market forces; attracted in the case of high traffic costs by Agents craving profit, and in the case of low traffic cost by Clients wishing to buy broadband as cheaply as possible.

2.3 Examples of use

Here are two very simple examples which demonstrate PRIX tokens payments inside the Privatix Network ecosystem.

Example 1

- Hans, a regular internet user from Germany, has a 100 Mbps channel and he does not use it completely, especially at night.
- He has already paid his ISP so no additional costs are required.
- Hans installs the Privatix Network software and thereby becomes an Agent.
- On the other side of the world is a Chinese internet user, Lee.

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- Lee does not have access to many internet sites because internet censorship in China is very strict.
- Lee installs a VPN program based on the Privatix Network and through it buys broadband from Hans. Now he can surf the internet via the encrypted German VPN and get access to all internet sites.
- Hans receives payment in PRIX as Lee uses his free bandwidth.

Example 2

- Alex has an internet hosting business. He rents 10 dedicated servers and sells hosting services for his customers, e.g. site owners.
- All servers are already paid for but their bandwidth is significantly underused.
- Alex installs the Privatix Network Agent software on all his servers and starts selling his bandwidth.
- Another user, Ivan, the owner of a video site, has to rent expensive servers so that people can watch HD video content from around the world.
- Ivan, in order to save on data transfer, uses a product based on the Privatix Network - a CDN - which allows him to buy cheap broadband from hundreds of Agents like Alex.
- As a result, Alex fully loads his servers and receives profit while Ivan cuts content delivery costs.

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3. Token sale

The Privatix Token Sale opened on 19 October 2017 and ended at 16 November 2017. During those 30 days we collected: 5,775 ETH (7,183 ETH in total with 1,408 ETH of Pre-sale).

3.1 Privatix Token (PRIX) final distribution details

100% Total supply: 1,275,455
83% Token Sale and Pre-sale: 1,058,627
7% Founders (locked for 12m): 89,281
7% Future and current team: 89,281
3% Advisors, bounty, and cost covering: 38,263
Total circulation supply: 1,058,627 (7% of locked 12m tokens excluded)
Total contributors: 1,435

All unsold tokens were burned, and no future tokens can be issued.
The exact total supply is 1,275,455.31177803 PRIX
Token address: 0x3adfc4999f77d04c8341bac5f3a76f58dff5b37a

4. Business model

The main assets in the Privatix Network are “exit nodes owners” (Agents). These Agents host on their internet-connected devices special lightweight software which enables them to sell their internet bandwidth.

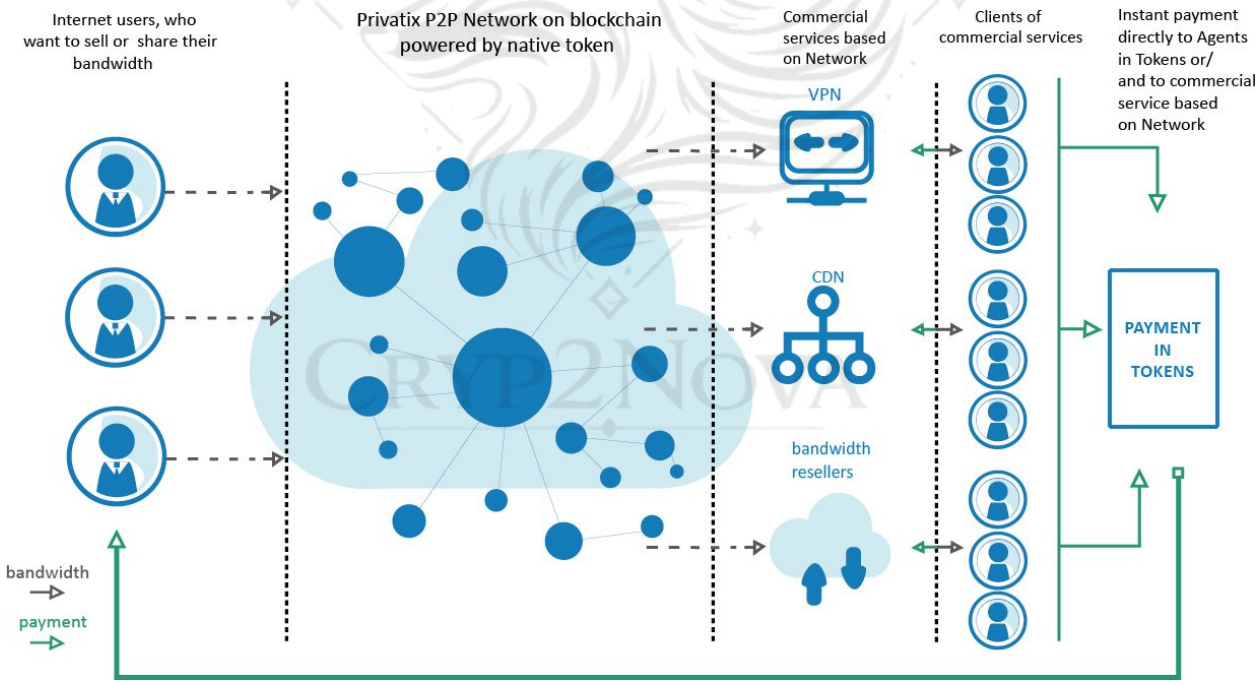
Most internet-connected users have a lot of spare bandwidth that already has been paid for to an ISP but mostly remain unused.

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Privatix will enable the sale of this unused asset (bandwidth) to other network participants and strives to create meaningful value for Agents with no additional costs or any initial investment from their side (installing the free software is quick and easy).

All financial relationships between Agents and Clients will be in PRIX crypto-currency only. Every token exchange linked to payment for internet broadband will be subject to a fee that will be accumulated by Privatix for maintenance and future development. The fee will be in the range up to 1% of the transaction amount. All operations except payments for internet bandwidth, like token trades on exchanges, will be free from any fees.

4.1 Privatix Network



4.2 Proof of Concept (PoC) products

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Our mission is to create a decentralized and fully autonomous network on blockchain - the Privatix Network – but, hand in hand with this, one of our primary goals is to show how people can make the best use of this network and benefit from it in many different ways, including financially.

For this reason, we ourselves will create a number of revolutionary PoC products, based on the Privatix Network, in order to demonstrate to entrepreneurs and developers how they can use this new platform in a number of innovative ways. Privatix, as platform pioneer, also has the potential to derive significant profits from these products by transforming several popular VPN and other markets (e.g. cyber security).

The first product we will focus on will be a decentralized unblockable VPN on blockchain that we believe will address the challenges facing cybersecurity and internet censorship in the digital sphere forever. We expect to totally change the consumer VPN market, enabling people to use VPN for free by sharing their own network, or pay less than $5-10 per year (10-20 times less than current centralized VPN prices).

4.3 Long-term strategy

We define the long-term strategy as a plan for the next three years. In the current real-world situation of internet disruption and blockchain technologies development, it is a challenge to create a fully detailed plan, but by sticking to our mission and goals, and relying on our extensive experience, we are completely confident that we will find the right way in any situation.

Facilitation of a Privatix Network platform, provision of network supply in the form of Agents, as well as the creation of demand in the form of Clients are our main objectives for the immediate future.

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The challenge we face will be to facilitate a balanced marketplace: we will address this by providing adequate compensation to Agents and at the same time create demand by customers. Initially, we will take on the roles of customers and PoC products' owners. We will use our funds to promote the network and ensure its growth and maintain the optimum balance between supply and demand.

At this time we predict the network will include tens of thousands or even millions of Agents. By developing a variety of products based on its foundations, the network will start taking on a life of its own. Privatix will benefit only from the network token exchanges fee and will develop the infrastructure of the network and products.

5. Technical specifications

This document describes high level architectural and process overview of Privatix Network. More details can be found in our technical documentation

5. 1 General

Privatix.io attempts to deliver multiple services that can be used through Privatix network. **Privatix Network** consists of nodes running Privatix distributed applications. Each node can provide or consume services. For each service **Client** - those who consume and pay for services, **Agent** - those who provide services and receive payment.

Concept

The idea that stands behind this project is to create a process that will achieve consensus among Privatix network users and develop software products that will allow users to provide and consume services on this network. Those processes should be decentralized as much as possible to remove single point of failure both technically and politically. We also aim to protect the privacy of Privatix Network users.

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Decentralized applications

Decentralized applications provides different services on top of Privatix Network. New application deployment is greatly simplified with the help of Privatix Core Engine, which enables offering publishing and discovery, agreement signing and termination, usage based payments for each unit of service, billing driven access management and powerful API that give comprehensive control of service lifecycle. All that completely open source and decentralized.

Each application will usually comprise of two independently installed components:

- Privatix Core Engine
- Service plug-in

Privatix Core Engine

Privatix core engine is software that implements consensus algorithms and operations that are common for any service delivered through Privatix network. First goal of Privatix Core Engine is to process untrusted data in trustless environment, verify that it can be univocally understood and processed. Secondary is to automate common tasks for service providers and customers of distributed application.

Service plug-in

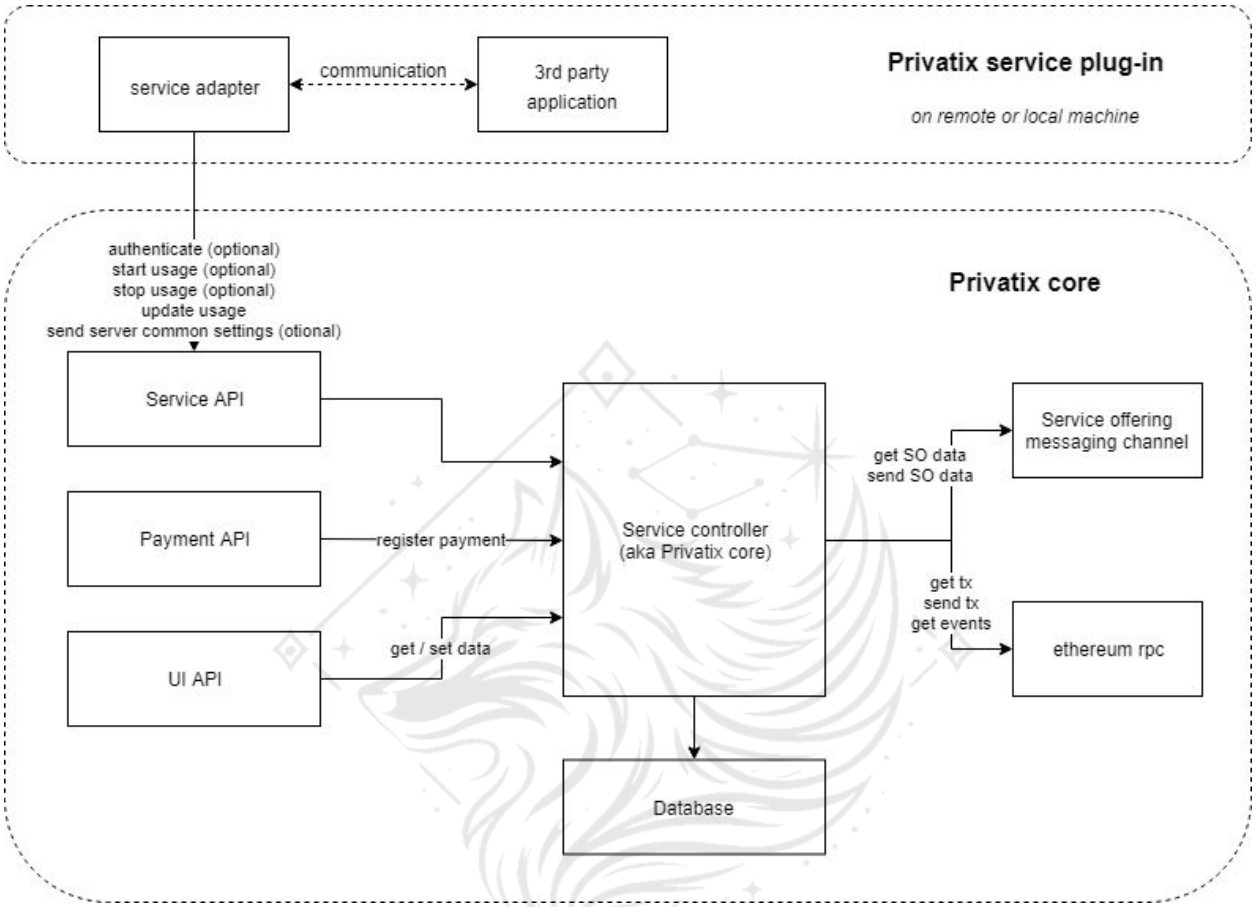
Service plug-in is a software that provides a particular service running along with Privatix Core Engine and using its API. It makes possible to provide or consume particular service, while offloading all consensus and routine tasks to Privatix Core Engine.

5.2 Basic usage scenario

- Agent creates service offering and places deposit.
- Client discovers offerings, compares and accepts them.
- Client signs agreement and places deposit to prove his ability to pay for the service.
- Agent provides access to service.
- Client starts to consume the service in units and pays for each unit
- Service terminated and payment finalized due to lag in payment

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- Client's and Agent's rating updated based on history of their payments processing.



5.3 Consensus

Any decentralized application should define protocols that user should agree. This allows any application to get the same result, while running on any device, by any user. Privatix Network should agree on several procedures:

- Offerings processing
- Payments processing
- Service access procedure

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Offerings - are formalized proposal of service by Agent to any Client on the network. Same procedure of offering placement, discovery, acceptance and disposal makes possible to all Privatix nodes to “speak the same language” and in particular:

- how offerings should be published (by Agents)
- how to discover offerings (by Clients)
- how to validate offerings to ensure that they can be unambiguously interpreted (by Clients)
- how Client signals to Agent that he accepts his offering
- how Agent verifies that Client possesses required amount of funds for particular offering and that these funds cannot be presented to another Agent (double spent)

Offering can be seen as a contract that Agent publishes and sign. This contract should include all necessary information in regards of:

- which service is provided
- in which units it is measured
- when and where Client should pay
- in which cases Agent will stop providing the service

Offering consensus is reached by ensuring that all offerings are conform to Offering template. **Offering template** - a template (schema) for the offering of particular service. When we say particular service we mean not just for e.g. “VPN service”, but concrete implementation of VPN service that both Clients and Agents trusts. Each offering for each single implementation will have its own offering template.

Payments - are payment for service usage paid by Client to Agent for each agreed portion of service and for agreed price. These agreements are part of offering and thus known to Client before he accepts it.

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5.4 Blockchain

Blockchain technology helps us to achieve full decentralization. We currently use Ethereum, but another blockchain (e.g. Cosmos) can be used to implement the same logic. In particular, blockchain is used for:

- micro-payments
- offering discovery
- data for rating system

Smart contracts

Ethereum smart contracts playing important role in Privatix DApp architecture. There are two smart contracts that we use. First one is simple ERC20 smart contract that holds mapping between users Ethereum addresses (aka wallets) and PRIX tokens. We call it Privatix Token Contact (hereinafter PTC). It was deployed during ICO.

Privatix Token Contact (PTC) is used for:

- Token exchange between users
- Delegation of tokens to PSC (described later)
- Get balance of user
- Point of migration between Privatix Service Contracts (if new version is released)

Any user that want to start using services based on Privatix Network will first get PRIX tokens on Privatix Token Contact (PTC). Users also need to have ETH to pay for transactions on Ethereum network. PTC balances will be used to buy and sell PRIX only, rather than pay for services.

To provide additional logic and features, as well as support future upgrades, Privatix deployed additional smart contract named Privatix Service Contract (hereinafter PSC). PSC implements state channels features, service offering discovery, incentivize fair usage and controls supply visibility. To use Privatix services user will delegate control of chosen amount of his PRIX

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tokens to PSC. PSC will then hold internal mapping between user's Ethereum address and PRIX balance and will make transfer operations according to payments for services. User may transfer his tokens from PSC back to PTC. Each smart contract method invocation is subject to user's signature verification same as regular Ethereum transaction thus ensuring each request is authenticated.

Privatix Service Contract (PSC) is used for:

- User balance storage
- Agent offering registration and deposit placement
- Agent offering deactivation and deposit return
- Retrieve available supply for each offering
- Pop up offering to signal it is still actual
- Creating state channel
- Cooperative close of channel (normal close)
- Uncooperative close of channel (dispute close)
- Top up deposit of state channel
- Get internal balance of user
- Transfer user tokens to his PTC wallet

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Offering registration

PSC has method that allows Agent to register offering. Placing of full offering, including all the details can be a costly operation on blockchain as it will require significant amount of blockchain storage. Instead of full offering only offering hash is published. It is used as a unique identifier of the offering. During method invocation Agent will specify the following parameters:

- hash of the offering
- minimum required deposit for Client

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- maximum supply (explained later)
- address where full offering can be retrieved

Together with offering registration Agent is required to place Agent's deposit, which is equal to maximum supply multiplied by minimum deposit. This step is intended to make sybil attack ineffective, by forcing Agent to lock exactly the same amount of tokens as would Clients do, if they will accept his offering up to maximum supply.

Each offering registration will create Ethereum event (aka Ethereum log). Clients will listen to such events and thus will be notified, when new offering is registered.

Address field will contain URL, where Clients would send request to get full offering details. Currently we use Tor hidden service URL as address. This allows Clients to get full offerings from Agents without revealing their IP addresses and makes Agent's IP addresses harvesting complicated.

Offering removal

Offering can be removed by Agent only after some predefined time passes after offering registration or offering pop-up. This period called offering removal period. Such measure is intended to limit effectiveness of sybil attack or irresponsible behavior.

Offering pop-up

In real world offerings likely to become irrelevant as time passes. Privatix Clients will accept "fresh" offering and ignore old once. In case Agent want to signal that his offering is still actual,

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he can pop-up offering. This operation is cheaper than removal of old offering and registering same offering once more.

Service supply

Maximum service supply is the maximum number of concurrent Clients that Agent can serve within single offering. When Agent registers his offering in PSC, he must specify maximum service supply. Each accepted offering will be deducted from the available supply. And vice versa, each closed state channel will increase the supply. Observing current service supply will allow Clients to find out, if Agent still has available supply to serve the Client. PSC will ensure demand for the offering cannot exceed the supply.

State channels

PSC has method that creates state channel, when Client accepts Agent's offering. State channel can be seen as temporary bank account where Client places deposit and Agent can withdraw any portion of this deposit. Agent can withdraw only amount specified by Client and cannot exceed state channel deposit. During withdrawal Agent will send to PSC transaction, which includes state channel unique identifier and amount for withdrawal signed by both Client and Agent. This allowance will be sent by Client to Agent off-chain to minimize costly on-chain transactions. Allowance will be proportional to service consumed by Client. Agent will use the greatest allowance received from Client when closing state channel. During this operation amount allowed by Client minus network fee (explained later) will be transferred to Agent's wallet and reminder will be returned back to Client's wallet.

State channel can be closed by Agent or by Client. During normal operation, it is expected that Client will send signed allowance to Agent and the latest will close state channel. Such operation called cooperative close or normal close.

In case Agent doesn't close state channel Client can initiate uncooperative close (or dispute close). Client will usually perform uncooperative close to return deposit back to his wallet, when

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Agent fails to provide service at all. Client required to make two transactions. First to initiate uncooperative close and second to close channel and receive full deposit back. Second transaction can be made only after some time has passed after the first transaction. This time period called challenge period. If Client has sent allowance to Agent, but initiated uncooperative close, Agent can make cooperative close before challenge period passes.

Network fee

Network fee is a fee that goes in favor of Privatix company. This fee is intended for further development and maintenance of Privatix core. It can be changed by Privatix company anytime, but only between 0% and 1% of Agent's revenue. This range is defined during PSC deploy and cannot be changed afterwards.

5.5 User rating

Both Agents and Clients can be assigned a rating based on their prior behavior. Rating is calculated by analyzing blockchain transactions. Rating calculation involves analysis of cooperative closes vs uncooperative, amount of tokens spent/earned, rating of partners, time of transaction. Detailed explanation of the rating system can be found here.

5.6 Service offering

Each service offering must be created strictly according to its offering template.

Offering template

Offering template maybe seen as standard contract for particular service, where some parameters are variable per Agent. Offering template shipped with service plug-in. Each service plug-in has unique offering template. Both Agent and Client have identical offering template, when choose to use same service plug-in.

Offering template may be imagined as service agreement template:

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This SERVICE CONTRACT is made and entered into by and between ANY CLIENT that accepts this offering (hereinafter the “Client”), and provider with [AGENT_PUBLIC_KEY] (hereinafter the “Agent”). Whereas, Agent and Client desire to enter into a relationship in which Agent will provide “VPN service” to Client. Client must pay to Agent for each [BILLING_FREQUENCY] [UNIT_NAME] consumed. Price for each [UNIT_NAME] is [UNIT_PRICE] PRIX. If Client doesn’t consume service for [MAX_INACTIVE_TIME] Agent can terminate this service contract... etc.

Offering template doesn’t contain full text, but only fields that should be filled by Agent. But, if desired, it can be easily included in

Offering template - is JSON schema that includes offering fields to be filled by Agent. Fields can be divided in two major groups:

- Core fields - fields that common for any service. They are required for proper Privatix core operation. They are generic and doesn't contain any service specifics.
- Service custom fields - (aka additional parameters) any fields that needed for particular service operation. They do not processed by Privatix core, but passed to Privatix service plug-in for any custom logic.

Each Offering template has unique hash. Any offering always includes in its body hash of corresponding offering template. That's how offering is linked to template and related service plug-in.

When Client receives offering, he checks that:

- offering template with noted hash exists in Client's database
- offering passes validation according to offering template

Such validation ensures that both Agent and Client has:

- exactly same offering template
- offering is properly filled according to offering template schema

Core fields

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Here is an example of offering template core fields:

Field title	Field description
name of service	Friendly name of service
offering template hash	Hash of offering template
nonce	uuid v4. Allows same offering to be published twice, resulting in unique offering hash.
agent public key	Agent's public key
service supply	Maximum Number of concurrent orders that can coexist
unit name	name of single unit of service
unit price	Price in PRIX for single unit of service.
min. units	Minimum number of units Agent expect to sell. Deposit must suffice to buy this amount.
max. units	Maximum number of units Agent will sell.
billing type	Model of billing: postpaid or prepaid
billing frequency	Specified in units of service. Represent, how often Client MUST send payment cheque to Agent.
max. billing unit lag	Maximum tolerance of Agent to payment lag. If reached, service access is suspended.
max. suspend time	Maximum time (seconds) Agent will wait for Client to continue using the service, before Agent will terminate service.
max. inactive time	Maximum time (seconds) Agent will wait for Client to start using the service for the first time, before Agent will terminate service.
setup fee	Setup fee is the price that must be paid before starting using a service.
free units	Number of first free units. May be used for trial period.
country of service	Origin of service

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Service custom fields

Using service custom fields in offering template we can add any logic, that should be interpreted by either service plug-in or custom GUI. For example, we can add “Min. download speed” and mark it as required field. Agent will be required to fill this field to pass offering validation. Client’s service plug-in then may check, if Agent do provide download speed as promised in his offering and may terminate service, if not. Service custom fields makes possible to create custom logic, while Privatix Core Engine will verify that offering is published strictly according to template.

Service offering discovery

Before service can be used, Client should:

- discover service offerings
- accept offering and place deposit
- get service access (incl. address of service endpoint, credential, settings, etc.)

Discovery of service offering is implemented based on Ethereum events (aka logs) as described earlier. Client receives offering event together with hash of offering and address (URL), where he can send request to get full offering. In future we may extend URL schemes to support different mediums, but currently URL includes Tor hidden service address. Tor hidden service allows to publish web-service that is accessible through Tor network as regular web-service without revealing IP address of that web-service. This is done to prevent simple harvesting of Agent’s IP addresses.

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Service Offering Messaging Channel

Service Offering Messaging Channel (SOMC) is a service that used to get offering and endpoint messages.

SOMC is implemented as web-service and has three endpoints:

- ping
- offering
- endpoint

Client will send HTTP GET request to this web-service and specify offering hash. Agent will respond with full offering message.
Client will send HTTP GET request to this web-service and specify state channel key. Agent will respond with full endpoint message.

Ping

Ping is simply used to check that SOMC is accessible.

Offering message

Offering message is offering that is signed with Agent's private key. Client will verify that Agent possess the same private key used to publish offering hash on blockchain and to sign offering retrieved via SOMC. Client will also validate that he has template for the offering and that offering is filled according to template schema. If all validation passed successfully, Client will store offering in his database.

Endpoint message

After Client has accepted offering state channel is created and deposit is placed on it. Both Agent and Client will be notified via Ethereum event on successful state channel creation. Then Agent will prepare special message that includes all necessary information for Client to start using the service.

Client will send HTTP GET request to SOMC and specify state channel unique identifier. Agent will then respond with endpoint message. To ensure that sensitive data, such as credentials and IP address are accessible only by Client that accepted Agent's offering, endpoint message is encrypted using Client's public key. Client's public key is restored from Ethereum transaction that used to create state channel for the particular offering.

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Endpoint template

Same as offering, endpoint message should be clearly understand by Client's service plug-in. Client also must be sure that no untrusted data is injected via this message. Here we use the same method as with offerings. Client and Agent both have endpoint template (aka access template), where they both know what data is required for Client to start using the service.
After Client has received endpoint message, he will validate signature and compliance to endpoint template. Same as with offering, endpoint template is a JSON schema and has mandatory core fields and optional custom service fields.

Core fields

Field title	Field description
access template hash	Hash of this access template
nonce	uuid v4. Allows same access template to be shipped twice, resulting in unique access template offering hash.
username	Hash of this access template
password	Can be used to transfer password
payment server address	Address and port of agent's payment receiver endpoint
service server address	E.g. address of VPN server.

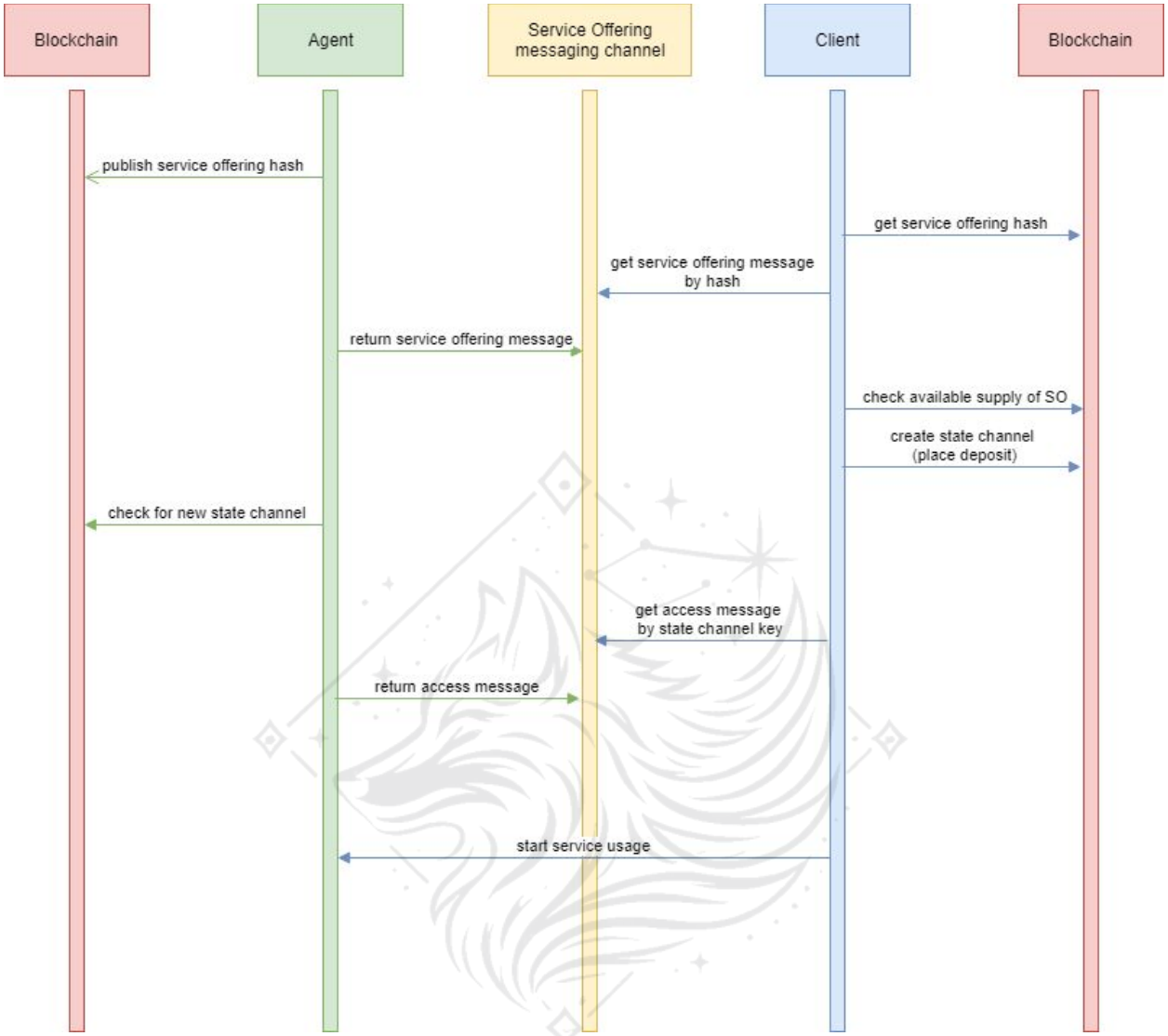
Service custom fields

Same as with offering template, endpoint template can hold any fields that is necessary for custom service logic. For example it may hold various settings that Client's service plug-in need to preconfigure before start connection to Agent's server. It maybe config file, server certificate, etc.

Service offering messaging channel

Service offering messaging channel diagram shows sequence of communication between Client and Agent through Service Offering Messaging Channel and Blockchain. This process allows to discover new offerings, get offering details, securely pass credentials for the service access and securely provide service endpoint address (e.g. VPN server).

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Privatix Core Engine

Components

- Blockchain monitor - get Ethereum events, filter, create jobs
- Ethereum - package that wrap all communication with Ethereum blockchain
- Job queue - create, update and invoke job processing
- Job processor - job handler, that process logic for each job
- Client billing monitor - send payments to Agent according to usage
- Agent billing monitor - verify that payments align with service usage and control service access.
- Pay server - accept payments from Client
- UI server - server that exposes API which is used to view and control accounts, services, etc.
- Session server - server that exposes API which is used by service plug-in to provide or consume service, start, stop, get usage data.
- SOMC - send/get offering and endpoint messages, verify compliance with corresponding templates

Responsibilities

Client role

- register service session usage
- automatically generate payments based on service consumption
- hold service status (pending, active, suspended, terminated)
- hold state channel status (pending, active, terminated)
- synchronize service status between service plug-in and core database
- send and receive Ethereum transactions: transfer tokens between PSC and PTC, create state channel, make uncooperative close of state channel, check PRIX and ETH balances
- validate offering and endpoint messages to be compliant with templates
- communicate with Agent via Tor network
- increase state channel deposit
- save application state in database
- allow to view and control application data via UI API
- logging

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Agent role

- publish/remove/pop-up service offering
- register service session usage
- verify payments received in-time and automatically control access to service based on billing, including resume of access on payment clearance
- automatically terminate service access, when no Client activity made too long
- hold service status (pending, active, suspended, terminated)
- hold state channel status (pending, active, terminated)
- synchronize service status between service plug-in and core database
- send and receive Ethereum transactions: transfer tokens between PSC and PTC, make cooperative close of state channel, automatically make cooperative close (when Client creates uncooperative close request), check PRIX and ETH balances
- create offering and endpoint messages that are compliant with templates
- communicate with Client via Tor network
- save application state in database
- allow to view and control application data via UI API
- logging

Service plug-in

Service plug-in uses Privatix Core Engine API to provide and consume services and benefit from core functionality such as automated micro-payments, data validation and service life-cycle automation.

Each service plug-in has:

- dedicated offering template
- dedicated access template
- custom distributed application code

Service plug-in can provide or consume service. It will respectively communicate with Agent or Client API.

Agent

Agent will subscribe for newly created state channels. Only state channels that passed all validations will be retrieved by service plug-in. This event can be handled to set up new account on arbitrary server for example.

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After that Agent's service plug-in will subscribe to changes to that state channel and will be notified, if service access should be suspended or terminated completely. It will also confirm that service was successfully suspended or terminated to ensure that Privatix Core service status is in sync with service plug-in.

Agent's plug-in may push some common server settings, that will be included as part of endpoint message. This method make possible to handle server configuration changes, such dynamic IP address, etc.

Agent's plug-ins will periodically report on service consumption to Privatix Core.

Client

Client service plug-in will subscribe for new state channels. Together with new state channel created event plug-in will receive whole decrypted endpoint message. It then may prepare to start service usage by configuring 3rd party client software with appropriate settings, credentials, etc.

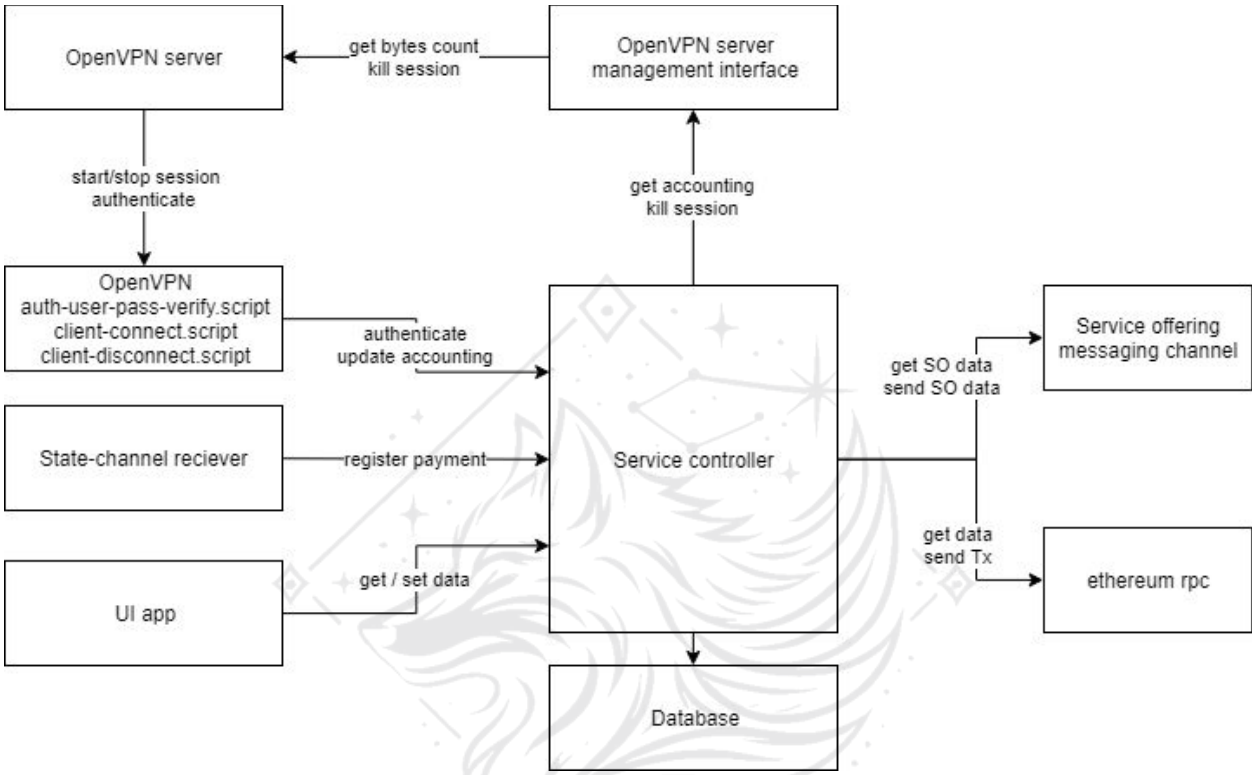
Client will also subscribe to state channel (service) status changes. If Privatix core will notify, that service status changed, it may implement start or stop of session. If service become terminated, than service plug-in will stop usage and delete any data related to the service.

Client's plug-ins will periodically report on service consumption to Privatix Core.

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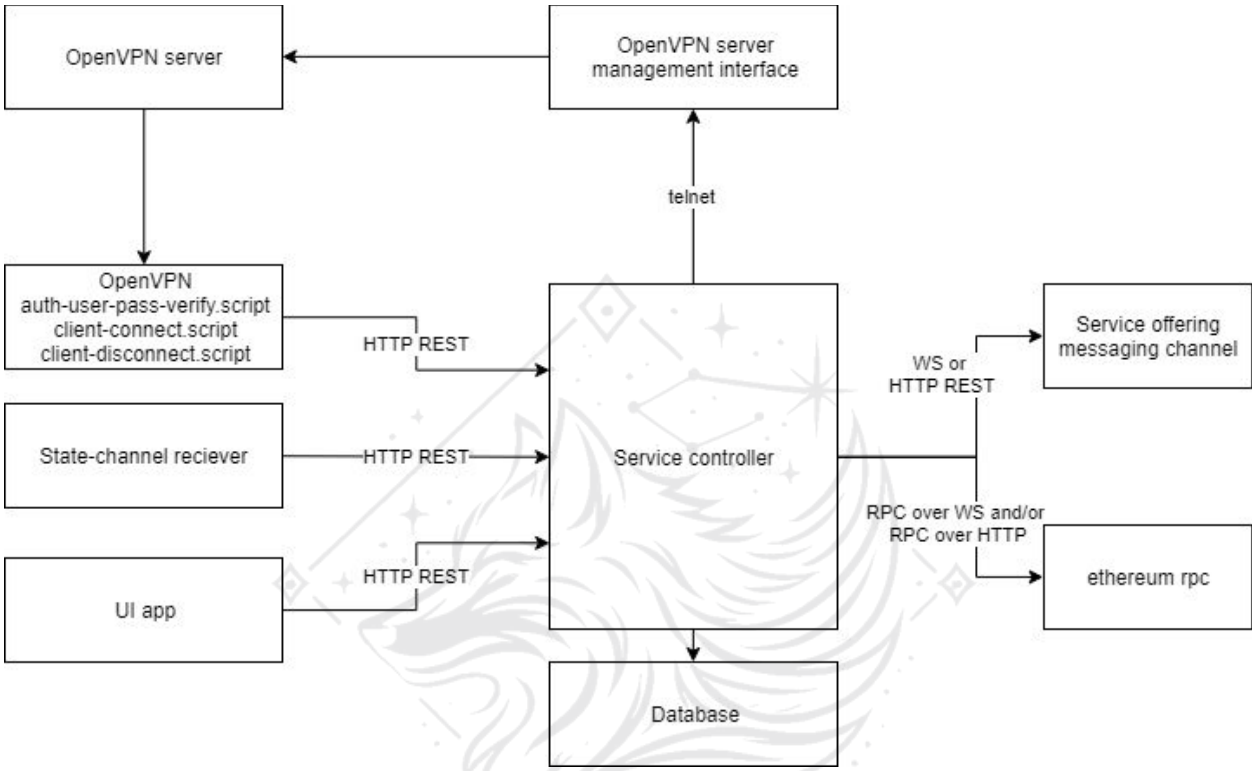
5.6 Service controller functional scheme



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5.7 Service controller protocol scheme



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5.8 Glossary

General

Privatix Company	Privatix (Privatix.io) company develop software and process, which will allow Privatix network users to provide and consume services.
Privatix Network	Network that consists of nodes (users) on this network, which can sell and buy Privatix Services using PRIX tokens
PRIX Token	Token on ethereum blockchain that was created during Privatix.io Token Sale
Privatix Service (service)	Digital good that is offered by Agent and can be consumed by Client on Privatix network
Marketplace	Website maintained by Privatix Company that will simplify usage of Privatix Network as well as perform some messaging function on early stages of development process. All messaging functionality is expected to be moved on decentralized channel on latter stage of development.

Technical

Agent	Participant of Privatix network that wants to sell services.
Client	Participant of Privatix network that wants to buy services.
Service offering (SO) (aka Offering)	Properly filled and signed Service Offering Template. Service offering purpose is Agent's proposal of Privatix Service, which describes its parameters and conditions of sales for specific service. Service offering format is published by Privatix company in form of Service Offering Template

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Service Offering Template (SOT)	Documented format, that Agents uses to publish their Service Offering. Format MUST be known by both Client and Agent to successfully agree on Service Offering
Service Authentication Template (SAT)	Documented format, that Client uses to pass authentication data to Agent. Agent will authenticate Client, when Client start using service according to data specified in this template. Format MUST be known by both Client and Agent to successfully perform authentication.
Service Endpoint Template (SAT)	Documented format, that Agent uses to pass Service Endpoint Address to Client. Client will connect to Service Endpoint using data in this template. Format MUST be known by both Client and Agent to successfully connect to service.
Agent Key	Cryptographic key pair generated according to appendix F. of Ethereum Yellow paper, which is used by Agent to encrypt/decrypt and sign messages.
Client Key	Cryptographic key pair generated according to appendix F. of Ethereum Yellow paper, which is used by Client to encrypt/decrypt and sign messages.
Agent Ethereum Address	Ethereum address of corresponding Agent's Public Key.
Client Ethereum Address	Ethereum address of corresponding Client's Public Key
Service Offering message (aka offering message)	Filled Service Offering Template.
Service Authentication message (aka authentication message)	Filled Service Authentication Template.
Service Endpoint message (aka endpoint message)	Filled Service Endpoint Template.
Offering message hash	Hash of filled Service Offering Template using SHA3 (according to Ethereum Yellow paper).
Authentication message hash	Hash of filled Service Authentication Template using SHA3 (according to Ethereum Yellow paper).

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Endpoint message hash	Hash of filled Service Endpoint Template using SHA3 (according to Ethereum Yellow paper).
Privatix Token Contract (PTC)	Ethereum contract that holds PRIX token that were minted during Privatix.io Token Sale.
Privatix Service Contract (PSC)	Ethereum contract that controls service usage logic and payment processing by Agents and Clients.
Service Deposit	Deposit that is placed to Privatix Service Contract by Client to prevent double spending and guaranteed payment to Agent for Privatix Service.
Service Offering Messaging Channel	Channel that used to publish full Service Offering message, Authentication message and Service Endpoint message. Used by Agent and Client to exchange necessary information that allow Client to start using Privatix Service proposed by Agent.
Service Endpoint	Node that provide Privatix Service and operated by Agent.
Service Endpoint Address	DNS or IP address of Agent service node, that Client will use to receive service.
Marketplace	Web site maintained by Privatix Company that will simplify usage of Privatix Network as well as perform some messaging function on early stages of development process. All messaging functionality is expected to be moved on decentralized channel on latter stage of development.

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Products names

VPN	Centralized VPN service , like Privatix.com
dVPN	Decentralized VPN service based on Privatix Network (As described in privatix whitepaper , section 7)
dCDN	Decentralized CDN based on Privatix Network (As described in privatix whitepaper , section 7)

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dProxyMarket	Decentralized Proxy Maket based on Privatix Network (As described in privatix whitepaper , section 7)
Privatix.BOX	Hardware device, portable VPN router based on Privatix Network (As described in privatix whitepaper , section 7)
Privatix.FAAS	Anti-censorship solution for developers (SDK) based on Privatix Network (As described in privatix whitepaper , section 7)

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6. Markets overview

Below is a brief overview of the target markets for the Privatix Network and possible products that can be made by using the network capabilities of buying / selling internet bandwidth.

6.1 Global VPN market

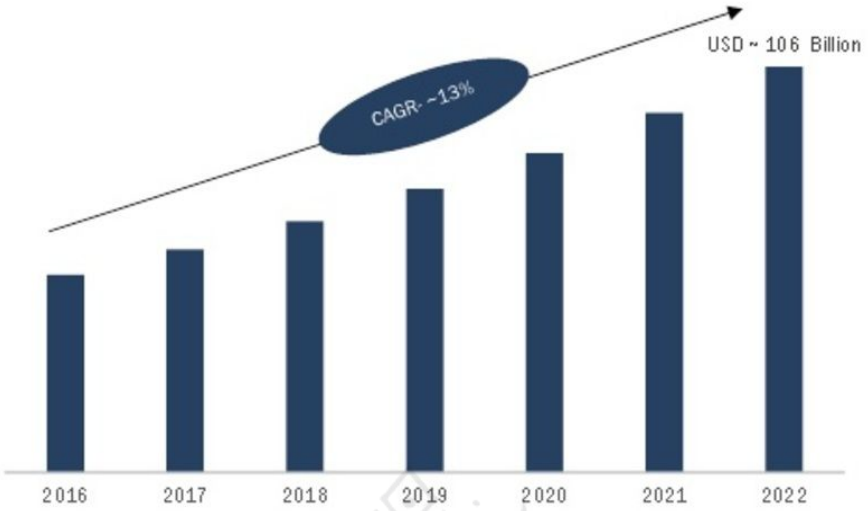
There was an estimate of 3.5 billion internet users worldwide in 2016. This means that about 45 percent of the global population accessed the internet that year. The majority of global internet users are located in East and South Asia, while China is the largest online market in the world.

In 2016, China had over 721 million internet users, more than double the amount of third-ranked U.S., with nearly 290 million internet users. The global average internet speed stood at 6.1Mbps that year.

With the proliferation of inexpensive smartphones, many of today's 5 billion feature phone users will convert to internet users in the next 5 years. New users will mainly reside in countries with strict or strengthening internet censorship.

According to latest reports, the Virtual Private Network (VPN) market is expected to reach USD 106 billion by 2022 at a CAGR (compound annual growth rate) of 13%.

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The major driving factors of this market are increasing internet censorship, an increase in the number of loud security incidents, growing industries, and the increasing number of connected devices mostly in countries with strict internet censorship; countries like China, countries in Asia and Africa, and now Russia as well.

There is no leader who controls more than 10% of the VPN market. Most of the 400 primary VPN providers compete for a small fraction of market share.

The most well-known players are: Hotspot Shield (Anchorfree[1]) backed with more than $62 million invested by VC's, Zenmate[2] with more than $3 million in investments, and Hidemyass (Privax) that was acquired by AVG in 2015 for $40 million[3].

[1] https://www.crunchbase.com/organization/anchorfree
[2] https://www.crunchbase.com/organization/zenguard
[3] https://now.avg.com/avg-acquires-privax/

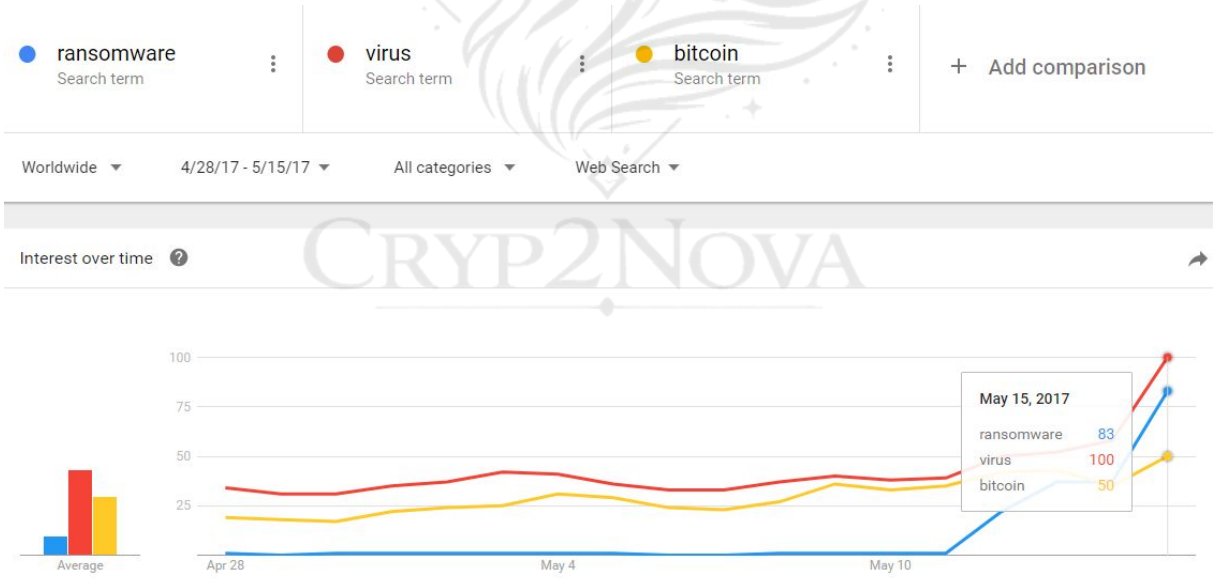
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6.2 Cyber security and privacy protection

According to Zion Market Research[4], the global cyber security market was valued at USD 105.45 billion in 2015; is expected to reach USD 181.77 billion in 2021 and is anticipated to grow at a CAGR (compound annual growth rate) of 9.5% between 2016 and 2021.

Cyber security is associated with information technology security, which focuses on protecting computers and confidential data stored in it from cyber criminals. The cyber security market provides several benefits, including enhanced security of cyberspaces, expanded digital safeguards, and quicker reaction time to national crises. These benefits automatically enhance the value of services to market end-users.

An example of a major cyber security issue is linked ransomware attacks when people's computers are locked and bitcoin payment demanded by cyber criminals to unlock. These events have increased awareness of encryption and protection issues.



Google Trends show spike of interest to ransomware, viruses, and bitcoins after attacks

[4] https://www.zionmarketresearch.com/sample/cyber-security-market

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The cyber security market is segmented based on security types, solution and vertical, and by regions. On the basis of security types, the market is divided into network security, cloud security, wireless security, and others. The cyber solution segment includes identity and access management (IAM), encryption, risk and compliance management, data loss prevention, antivirus and anti-malware, firewall, and others. By vertical, the market is segmented into aerospace, government, financial services, telecommunication, healthcare, and others.

6.3 CDN

Companies leverage Content Delivery Networks (CDN) to increase their online presence in the global market and deliver a high-quality user experience worldwide. CDNs improve site speed, page load times, availability, and performance dramatically. This not only results in higher end-user satisfaction but also increases customer adoption and conversion rates[5].

Market size and growth trends

- The market size of CDN is expected to grow from $4.95 billion in 2015 to $15.73 billion in 2020, and to $70.3 billion by 2025.
- The mobile CDN market is estimated to grow from USD 2.11 billion in 2015 to USD 13.40 billion in 2020, at a compound annual growth rate CAGR (compound annual growth rate) of 44.7% from 2015 to 2020. In regional segmentation, North America is expected to be the largest market in terms of market size, while APAC, Latin America, and MEA are expected to emerge rapidly in this market at high CAGRs.
- The North American region dominated the CDN market in 2015 and is expected to reach $4.6 billion by 2017.
- There are approximately 8.8 million websites using CDNs worldwide.
- Out of the top 10,000 websites, 48.3% are currently using a CDN.
- CDNs, globally, currently serve 50% of content consumed over the internet[6].

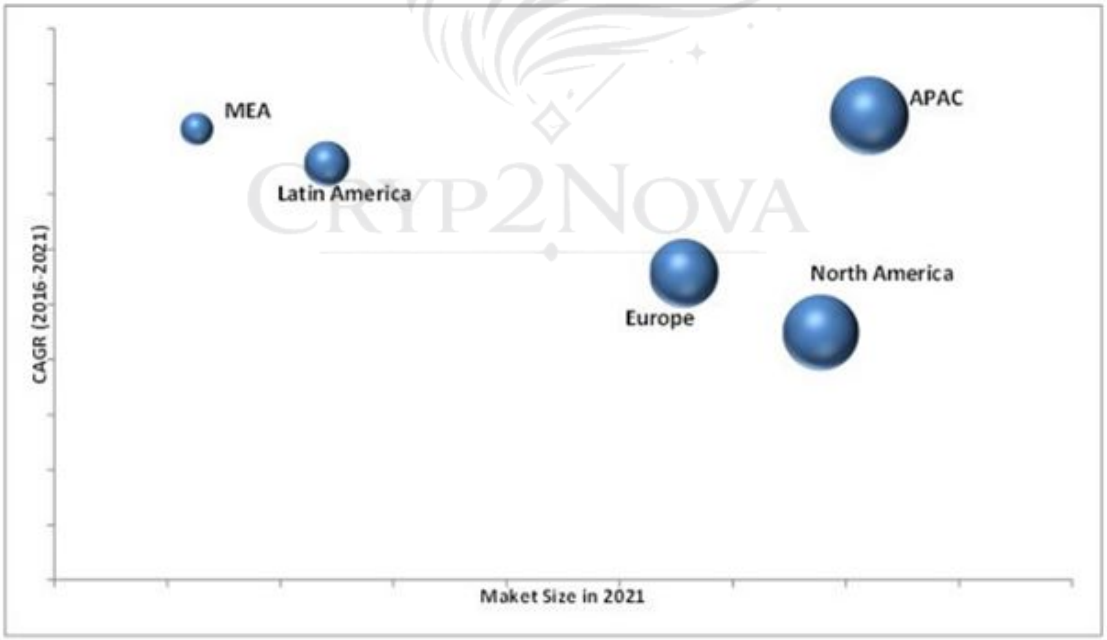
[5] https://www.cdnetworks.com/en/news/content-delivery-network-and-website-performance-stats-2016/513
[6] https://www.cdnetworks.com/en/news/content-delivery-network-and-website-performance-stats-2016/513

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- In 2018, worldwide online CDN traffic is expected to reach 72,893 petabytes per month. The data volume of global CDN internet traffic from 2016 to 2021 (in petabytes per month)[7] is illustrated in the graph below.



Content Delivery Network Market, by Region, 2021(USD Billion)



[7] https://www.statista.com/statistics/267184/content-delivery-network-internet-traffic-worldwide/

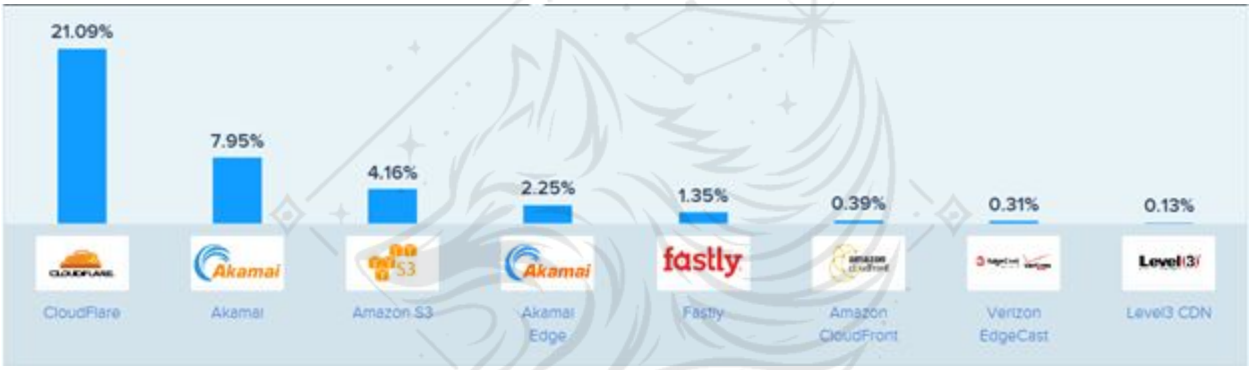
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Growth drivers

- Proliferation of rich media and video content - expected to grow at 4G speed
- Increasing use of connected and smart devices
- Optimized network solutions
- Digitization among organizations
- Highest growth in the online gaming industry

Competitive landscape

The top 10000 websites in the world use the following platforms[8]:



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[8] https://www.similartech.com/categories/content-delivery-network

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6.4 Business intelligence and data collecting (Proxy / Socks gateways)

The global business intelligence (BI) market was worth $14.15 billion in 2015 and projected to reach $26.89 billion by 2020. BI technologies have slowly but steadily revolutionized the field of business strategy and management and penetrated all over the world[9].

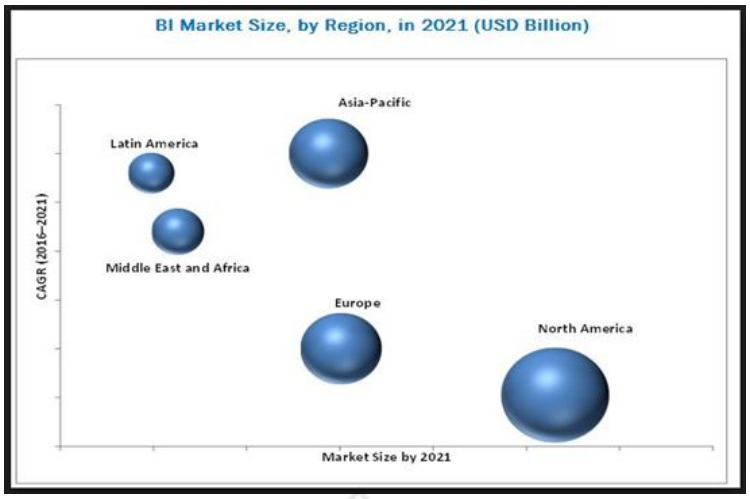
Market size and growth trends

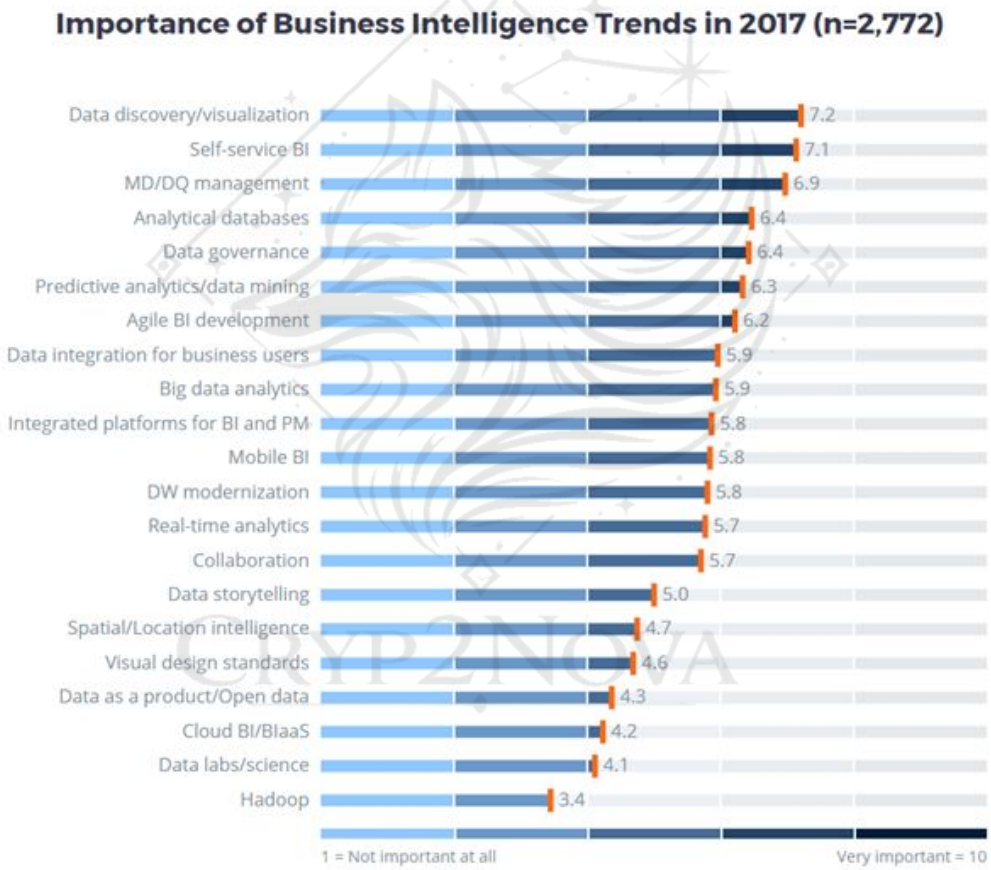
- The global BI market is estimated to grow at a compound annual growth rate (CAGR) of 9.5% between 2016 and 2021[10].
- Global revenue in the BI and analytics software market is forecast to reach $18.3 billion in 2017, an increase of 7.3% from 2016, according to Gartner, Inc[11].
- Data discovery / visualization, self-service BI, and data quality / master data management are the three most important trends[12].
- While the use of traditional dashboard BI is receding into the background, self-service machine data analytics, self-service data discovery and explorations, and BI and analytics in the Cloud are rapidly gaining momentum across the global spectrum[13].
- There is increasing investment in robust BI platforms that can handle multiple data management capabilities such as integration, storage, visualization, statistical and quantitative analysis, instead of multiple specialty tools.

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[9] https://www.mordorintelligence.com/industry-reports/global-business-intelligence-bi-vendors-market-industry
[10] https://bi-survey.com/top-business-intelligence-trends-2017
[11] http://www.gartner.com/newsroom/id/3612617
[12] https://bi-survey.com/top-business-intelligence-trends-2017
[13] http://www.dataversity.net/comparative-study-business-intelligence-analytics-market-trends/

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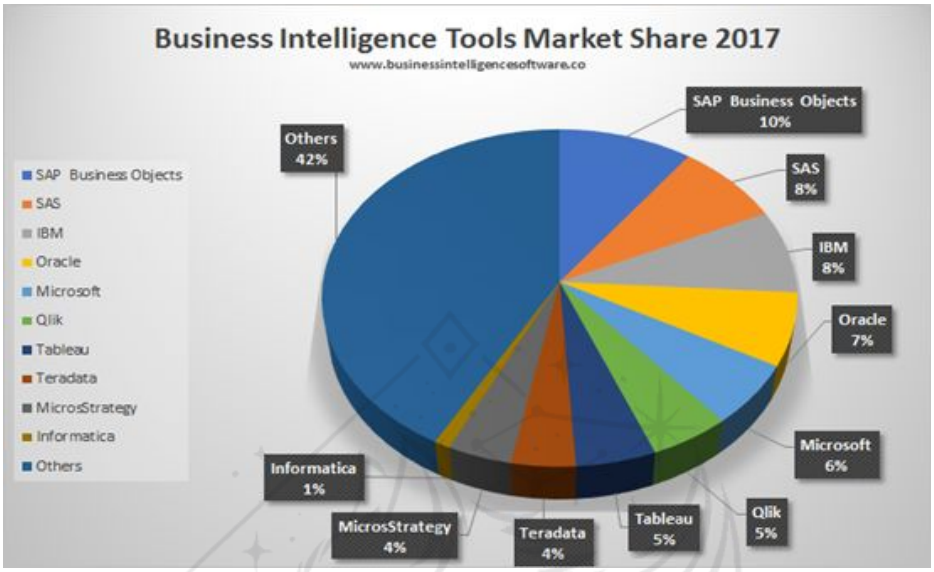


Growth drivers

- Increasing usage of data analytics
- Rising penetration of cloud technologies
- Need for complex datasets drives investments in data preparation

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- Increasing adoption of BI in small- and medium-sized enterprises
- Support for real-time events and streaming data



Competitive landscape (including list of most prominent players)

- Some of the key players in the global BI market include Information Builders, International Business Machines Corporation, Datawatch, Microsoft Corporation, Microstrategy, Inc., Oracle Corporation, Panorama, Pentaho (a Hitachi Company), Qlik Technologies, SAP SE, SAS Institute, Sisense Inc., Tableau Software, Tibco Software, and Yellowfin International Pty Ltd.
- Gartner's Magic Quadrant for Business Intelligence and Analytics Platforms.

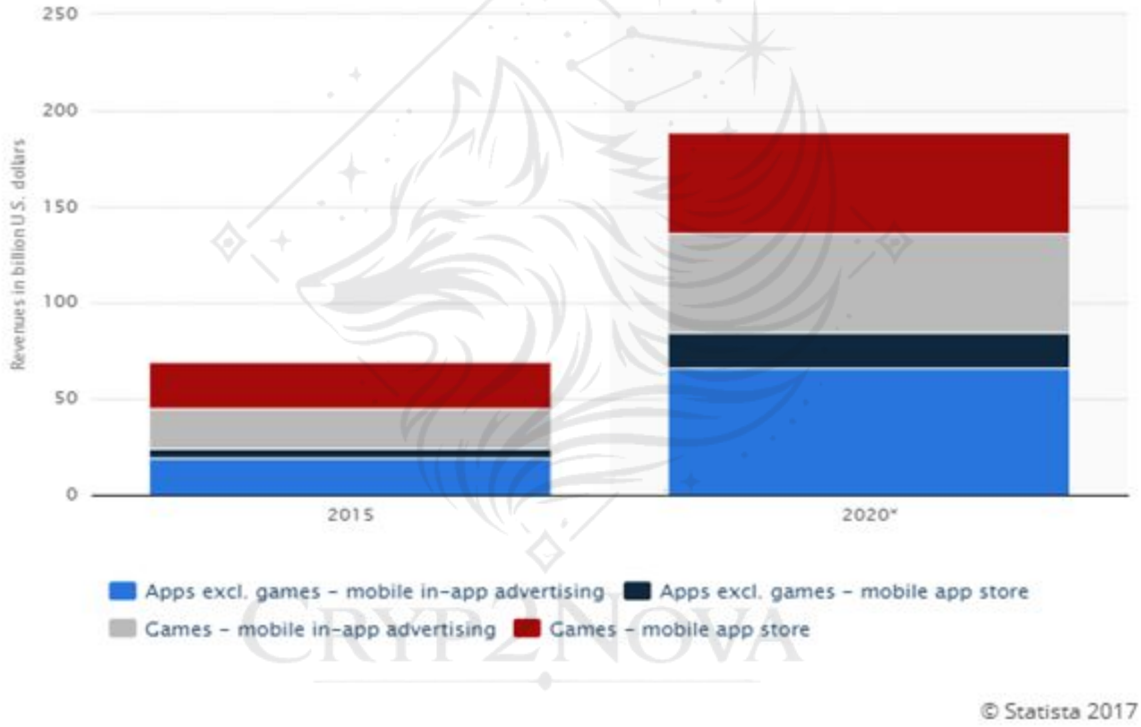
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6.5 Mobile apps and software monetization

Trends point to hybrid monetization models, such as in-app ads and in-app purchases. In-app advertising is set to be a key driver of mobile growth over the coming years.

Market size and growth trends

- In 2015, the mobile app industry generated $69.7 billion in gross annual revenue; it is projected to exceed $189 billion by 2020[14].



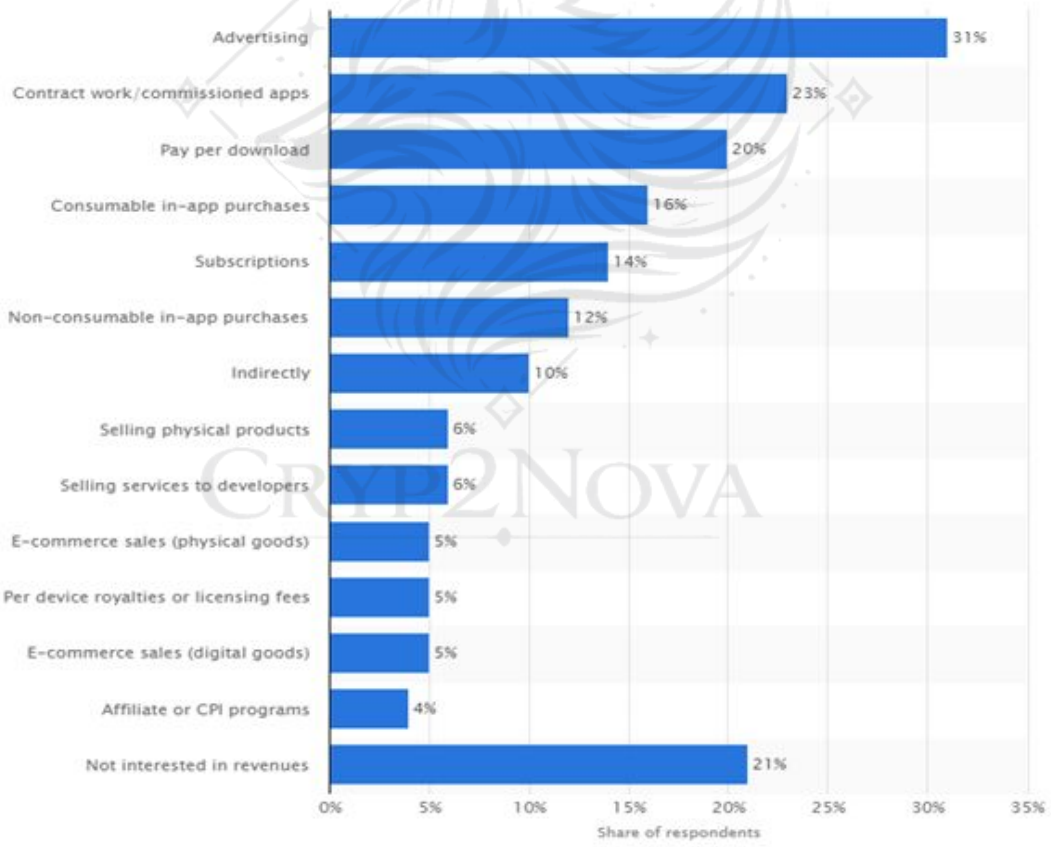
- The worldwide in-app advertising and app store revenues of mobile apps and games in 2015 and predicted in 2020 is illustrated below (in billion US$):

[14] https://www.statista.com/statistics/293636/app-store-composition-business-models/

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2015		2020*	
Apps excl. games – mobile in-app advertising	19.3	Apps excl. games – mobile in-app advertising	65.8
Apps excl. games – mobile app store	4.5	Apps excl. games – mobile app store	18.8
Games – mobile in-app advertising	21.1	Games – mobile in-app advertising	51.4
Games – mobile app store	24.8	Games – mobile app store	53

- May 2016 - Android device owners spent an average of $15.53 making in-app gaming purchases; in contrast, iOS device owners spent $10.96.[15]
- December 2016: 92% of games on Google Play were free to download, and 23% of those used in-app purchases as a monetization model[16].
- Top app monetization models according to mobile developers worldwide (June 2015):



[15] https://www.statista.com/statistics/673479/mobile-games-Android-share-monetization-model/
[16] https://www.statista.com/statistics/673479/mobile-games-Android-share-monetization-model/

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- North America is the leading region in third party in-app advertising both in absolute and relative terms; Asia Pacific will record the largest increase in the next five years at a 177% compound annual growth rate between 2015 and 2020.

Growth drivers

- Customization apps
- Aggregator apps
- Enterprise apps – micro and hybrid
- Software subscription model
- Messaging apps
- Internet of Things[17]
- Android First[18]
- UX, accessibility, and security are more important than ever

Competitive landscape

- 9 million mobile app developers in the world; 60% make $500 or less profit per month
- Less than 0.1% of all apps are commercially successful
- Companies that focus on mobile in-app advertising command the majority of the mobile advertising market and companies that focus on native advertising as a primary revenue stream are the most successful at monetizing through mobile[19].
- Top app monetization solution providers include: [20]
    - Google AdMob
    - Facebook Audience Network
    - Inneractive
    - OpenX Mobile
    - Unity Ads

[17] https://www.cnbc.com/2015/11/09/forrester-mobile-predictions-for-2016.html
[18] http://r-stylelab.com/company/blog/mobile-technologies/mobile-app-development-trends-for-2017-beyond
[19] https://www.smashingmagazine.com/2017/02/current-trends-future-prospects-mobile-app-market/
[20] http://www.businessofapps.com/top-app-monetization-platforms/

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7. Products and services – Proof of Concept

This section will describe Proof of Concept (PoC) products based on the Privatix Network, as well as the concept of the exit nodes software for Agents (owners of exit nodes).

7.1 Privatix.Agent - cross-platform software for exit nodes owners

This software is the primary component of the Privatix Network as it is the one that technically and practically allows the Agents to join the network and start selling their internet bandwidth.

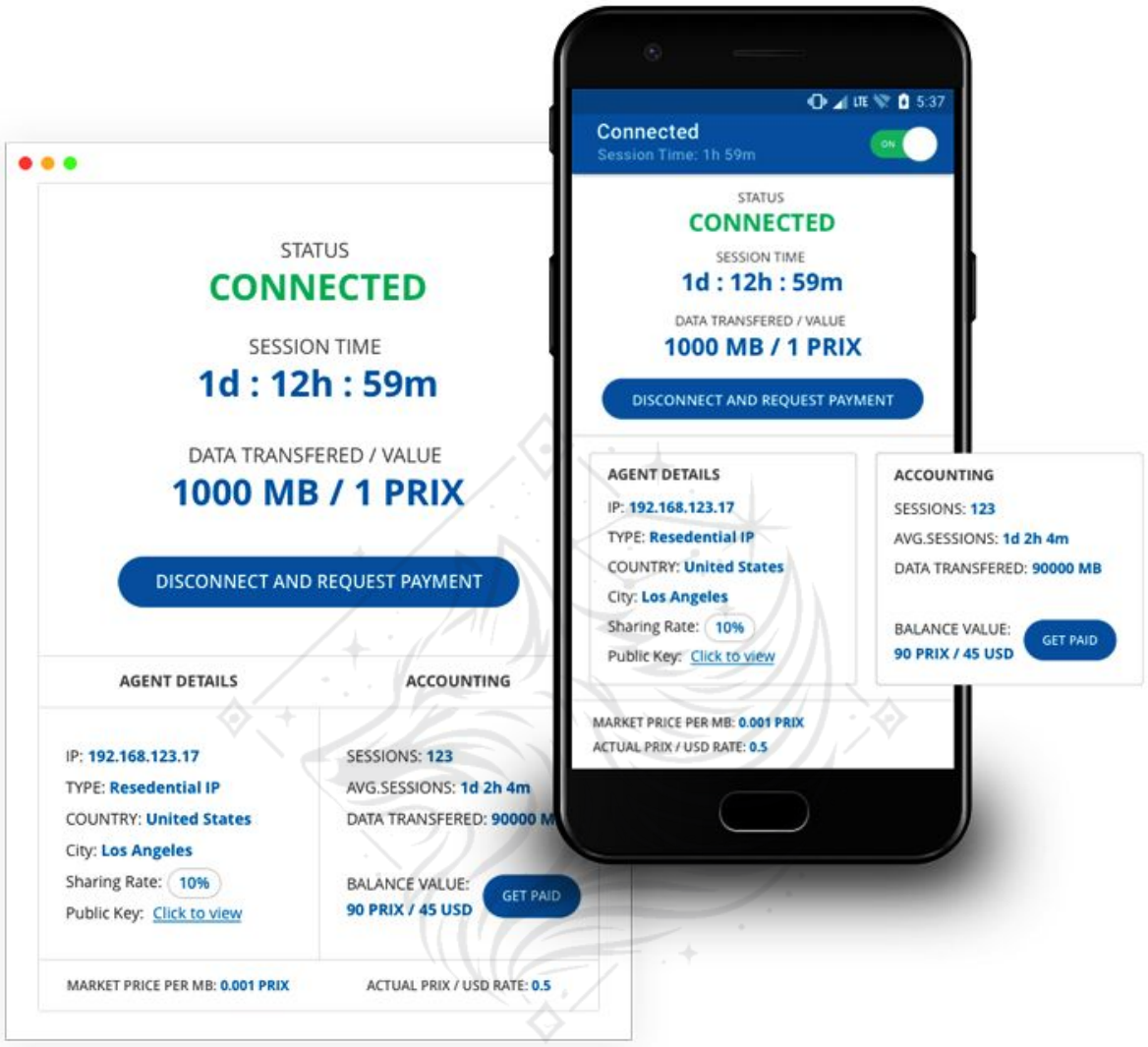
USE CASE

- The user learns about the opportunity to earn by selling his unused broadband
- The user downloads software for his operating system and launches it
- The user sets the percentage of the traffic that he wishes to share and registers on the network
- After connecting to the network, the user turns into an Agent, his IP is recorded on the network, and Clients can now connect to him
- The user can see all accounting and stats in real time
- After accumulating a balance in PRIX tokens, the user can sell them on the exchange straight way or order withdrawal in a fiat currency. After that, we will sell their token at the exchange and send the payment to the user in a fiat currency.

Alternative solution on the market: https://mysterium.network (concept only)

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USER INTERFACE PROTOTYPE



Privatix.Agent will be developed on major platforms in order to create total operational system coverage.

The user will also be able to choose if he wants to share his connection for torrenting or not; there are many countries where torrenting is forbidden and fines may be imposed. We will pre-set by default countries where this policy is applied, and disable the torrenting option in advance.

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7.2 Consumer VPN based on DPI-free VPN protocol

VPN means Virtual Private Network, a secure tunnel between two or more devices. VPN creates a secure tunnel between your computer and the internet, allowing you to surf the web anonymously from wherever you want. VPN also hide your IP address and changes it to another one.

Classic VPN providers use dedicated servers around the world and standard VPN protocols like Openvpn, pptp,l2tp,sstp, etc.

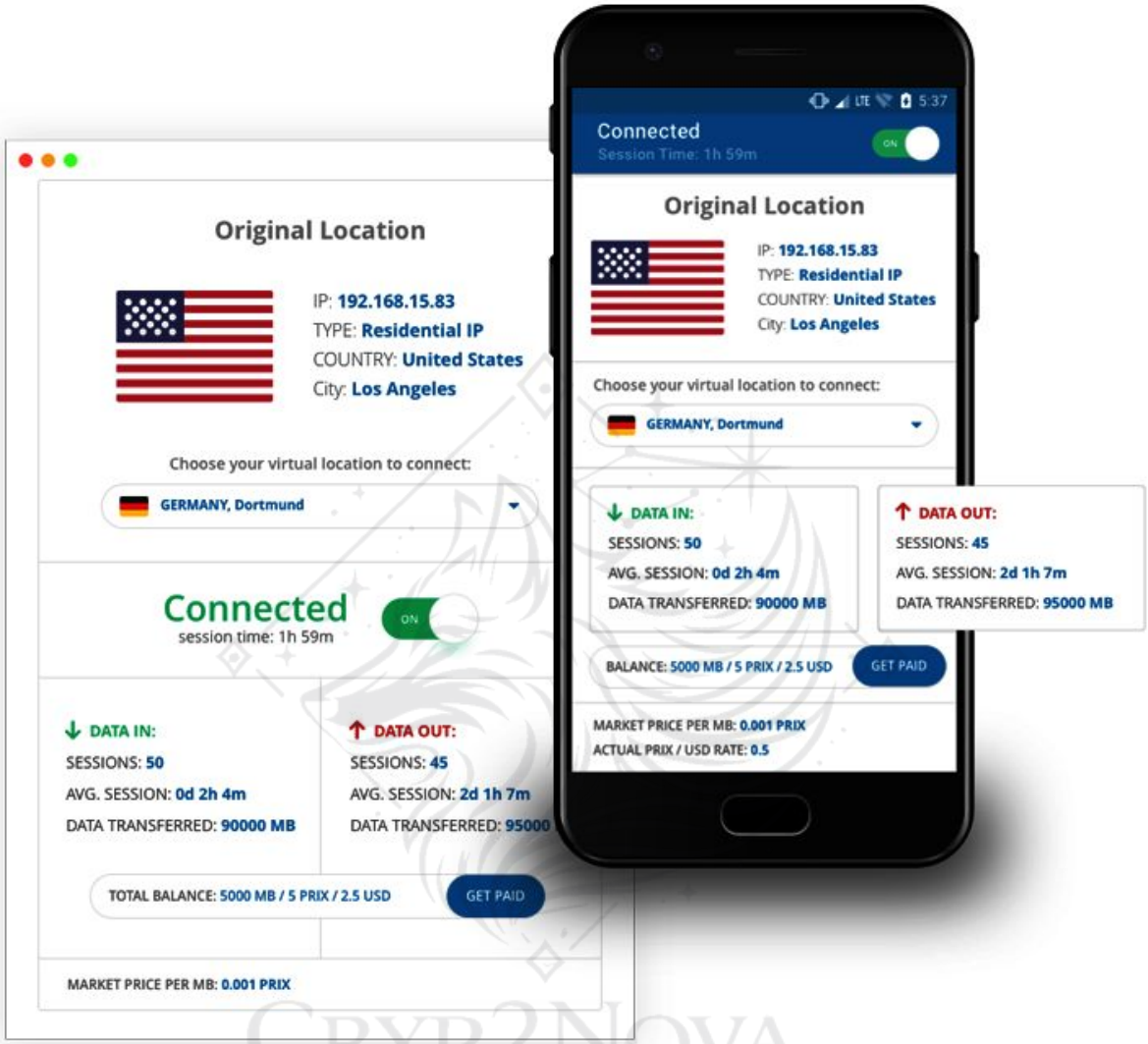
VPN shields your privacy, helps to avoid internet censorship and encrypts your transferred data. The problem of centralized VPN is DPI-based blockers (utilized in China) and data server's IP's that detect when you use a VPN.

VPNs based on the Privatix Network will allow you to surf between millions of exit nodes at the best available speed and use advanced modified VPN connections that are undetectable by DPIs. If you choose to be a peer in the network, you will be able to pay for it by sharing your traffic with other users. If you get more traffic than you give you will have to pay the difference. Vice versa the difference will be paid to you.

Classic VPN service	Decentralized VPN on blockchain
● Focused on owner's profit ONLY ● High profit margins ● Huge marketing and data costs ● No complete anonymity ● Risk of data access by a third-party Can be blocked by sophisticated DPI ● The fact of using VPN is visible ● Slow speed and unstable connection	● Focus on network participants' benefits ● Fair prices without middleman margins ● Low traffic expenses ● Full anonymity ● No private data and logging, no access for a third-party ● Can't be blocked ● The fact of using VPN is invisible ● High speed and stable connection

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Prototype of VPN client based on Privatix Network

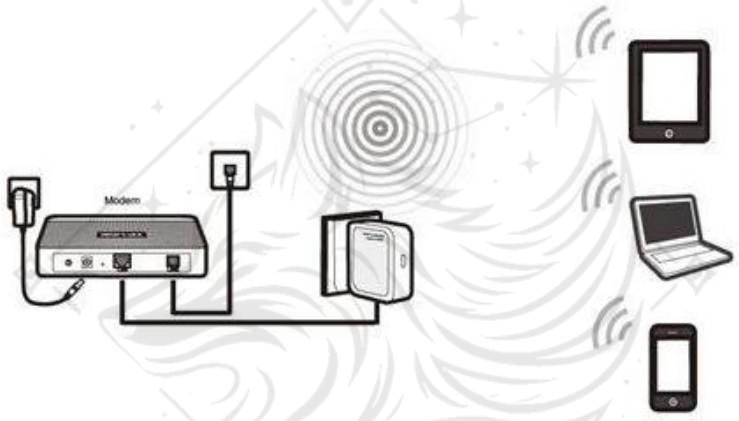


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7.3 Privatix.BOX - portable VPN router

A hardware device (basically an advanced DD-WRT router with pre-set configuration) which allows:

- Connection to the Privatix Network as an Agent without the need to install special software
- Shared VPN-protected connection via Wi-Fi



Members of the Privatix team have been using our prototypes of these devices, which we created on the basis of popular DD-WRT routers, for a long time. This device is particularly useful for travelers and acts as Agent and Client in the Privatix Network without the need to install any software. We also plan to produce these devices in partnership with a suitable manufacturer.

USE CASE

- A user goes on vacation with his family and stays in a hotel
- The user connects Privatix.BOX to an unprotected Wi-Fi hotspot in the hotel
- The user encrypts his connection and shares this safe connection with other family members via Wi-Fi

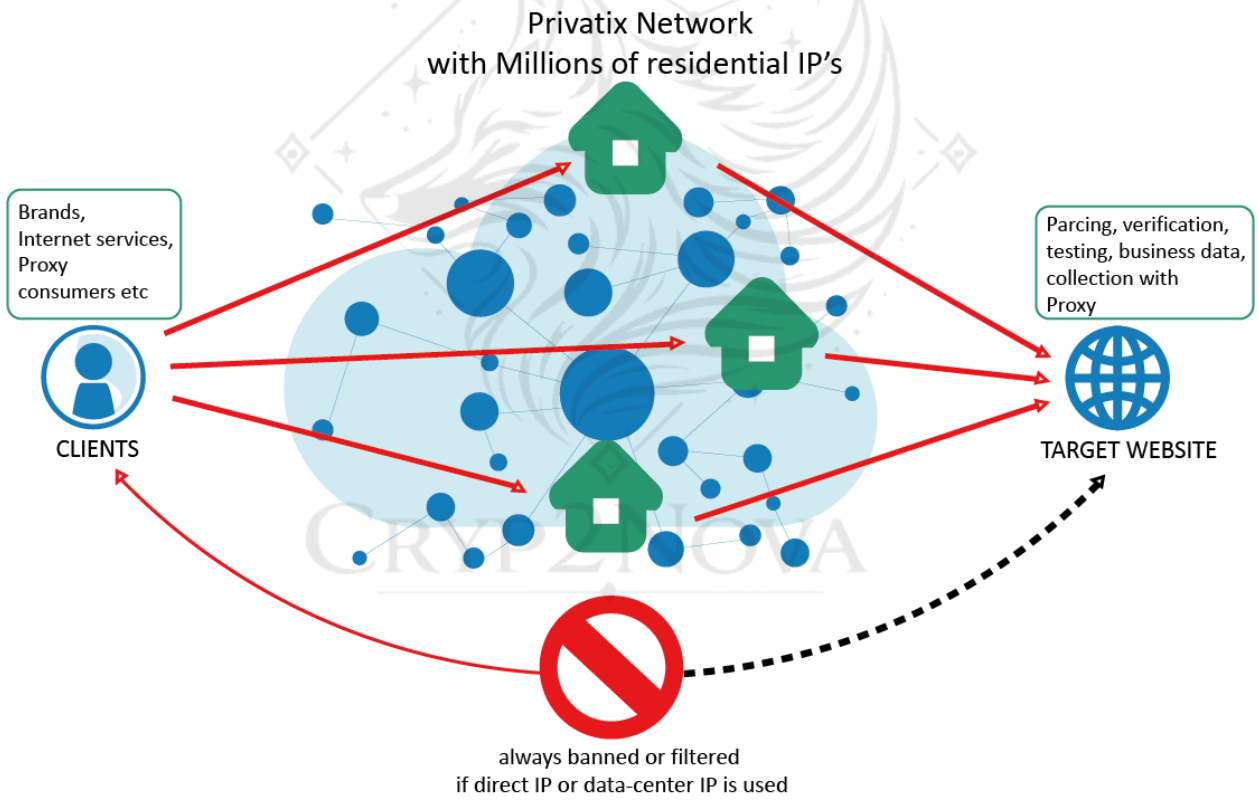
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- If the user opted to be an Agent (share broadband), then most likely the user will get an excellent and fast VPN at no cost at all.

Alternative centralized solution / product on the market: https://keezel.co, https://betterspot.com

7.4 Advanced Proxy / Socks selling API platform

When the Privatix Network is established, it will contain hundreds of thousands, even millions, of connected devices (Agents) and most of them will have residential IP-addresses.



For thousands of companies and businesses, residential proxies are a vital and also scarce resource. Online retailers collecting comparative pricing information, developers testing their web sites from any city in the world, large ad networks using proxies for ensuring the ads they

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deliver are safe and compliant, cybersecurity firms checking sites are not malicious, and business intelligence tools use thousands of proxies every day to parse search engines or competitors' websites.

Our product will include an advanced API through which anyone will be able to buy the use of proxies (traffic) from Privatix Network Agents in a convenient and easy way.

USE CASE

- A large online retailer deals with the daily challenge of collecting data on positions and prices on their competitors' websites
- Data parsing directly from their servers using datacenter IP addresses even in the rotation does not work. The IPs are quickly detected by the competitor and blocked.
- By connecting their software to the platform API, the retailer's developers can buy an unlimited number of proxies with residential IP addresses and completely mask their activity
- Rotating them and paying only for traffic means the retailer can solve their business objectives in very simple and convenient way

7.5 Infrastructure for VPN providers

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All classic VPN providers on the market today use the infrastructure of dedicated servers in different data centers and purchase IPV4 IP address pools. This has a number of serious shortcomings:

- Limited ability to buy new IPV4 IP addresses
- Expensive maintenance of server infrastructure, balancing, etc.
- High broadband costs

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- Most IP addresses from the data center are easily detected and blocked, unlike the IP addresses of home or small offices computers (residential IPs)

Replacing the infrastructure of dedicated servers with a convenient and affordable platform that can be implemented in the product will transform this market, dramatically reduce the cost of broadband for VPN providers, and improve their ability to stay unblockable with residential IP addresses.

7.6 Decentralized CDN on blockchain

At Privatix Network, we do not want “merely” to develop awesome products, eliminate the middleman and reduce prices, but to speed up the entire internet as well.

Classic CDN today is a very profitable business. However, content is becoming heavier, and more expensive, because of the increasing use of HD videos, games and streaming content.

The average price for content delivery today is $0.05 - $0.30 per GB. We believe that by using Agents’ broadband from Privatix Network will allow slashing prices 5 or even 10 fold The main condition for this is a large number of Agents in the network.

This proposal is concept-based and can only be developed if the network grows big enough and we have funds to invest in R&D.

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7.7 Privatix.FAAS - anti-censorship solution for developers

Freedom as a Service (FaaS) - this is the driving force behind Privatix.FAAS. Our goal is to create powerful SDKs that will eliminate the need for developers to worry whether their app will be blocked in some country or not.

Privatix will provide a mobile SDK that will be easy to integrate into any mobile application or software and give developers the ability to send all traffic via the Privatix Network's secure Agents' proxies, ensuring users always have secure and private access to their applications and are never blocked.

Alternative centralized solution / product on the market: https://www.anchorfree.com/sdk/

7.8 Privatix.Monetize - mobile apps and software monetization platform

Developers build applications used by millions of people and, in many cases they can't monetize it as they would like to do.

The most popular monetization methods are paid subscription and ad injection. Both methods always lead to a huge outflow of users, and a decrease in virality as users do not like to pay to watch ads.

Privatix.Monetize will offer developers an SDK that will help to monetize their apps without ads or paid content using the following scheme. Users install the app, which registers in the Privatix Network as an Agent and starts selling the users' idle bandwidth while the developer gets the payment for the traffic.

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8. The Privatix team

Our team has an established record of creating world-class internet services in the VPN and cyber security arena for more than 10 years. We have the proven ability to develop amazing products and run successful internet businesses. Check out our products and maybe you discover that you are already our customer.

8.1 Our last projects track record

The Privatix team currently serves more than 50,000 active users per day and transfers over 10 Petabyte traffic per month through more than 150 of its servers. The customers of our internet services and projects are, literally, millions of users. We know exactly how to build, manage and develop products in the areas of privacy and internet security. You can read below about some of our current projects.

Name	**Privatix VPN**
URL	https://privatix.com
Exists since	2015
Market	VPN service and privacy protection
Business model	Freemium + ad-based
Platforms	Native mobile apps on iOS and Android; browser extensions for Chrome, Opera, and Firefox; and desktop software on Windows
Total users	More than 1,700,000
Daily active users (DAU)	~50,000 - 70,000
Average growth rate (monthly)	9-10% per month in last 2 years

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Name	Temp-mail - temporary email service
URL	https://temp-mail.org
Android app link	Google Play
Ios app link	App Store
Exists since	2012
Market	Internet services - email
Business model	Advertising
Audience	More than 200,000 daily and ~5 billion per month
Mobile apps installs	More than 500,000 in last 6 months (organic)
Average growth rate (monthly)	5-10% per month in last two years

8.3 Our "Unfair Advantage"

Almost always, behind great ideas stand dreamers, advocates of the "idea first" paradigm. Ideas are important but without resources, knowledge, skills, and experience they remain elusive.

At Privatix there are all the necessary components of a successful team that has proved itself in various projects over the past years, and our record is demonstrable. This team will become the backbone of the future Privatix Network company which will attract even more talented employees with vision and entrepreneurial spirit, and the hi-tech skills needed in this demanding industry.

This is the first time we have tried to attract investments. But now it has became clear to us that it is simply impossible to implement such a large-scale project as Privatix Network without significant funding. Our goals and intentions are clear, and we know how to achieve them. Believe in us now and you will participate in the birth of a new global company that will change the world for a better one.

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9. Roadmap

This roadmap is representing projected intentions and may be a subject to changes according to the technical development and testing progress.

9.1 First steps

We will have several months until the end of the year in which we want to prepare the company for the next steps as quickly and efficiently as possible.

9.1.1 First month priorities

We have some top priority tasks that must be finalized in the first month after Token Sale. We will report on these steps and our progress to the community:

- Distributing all bounty tokens to participants and suppliers
- New office spaces renting or expanding current ones in Ukraine, Israel, and Russia
- Transferring to third-party management, “canning / preserve”, or sale of existing projects of the company
- Hiring administrative personnel

9.1.2 Legal, HR and administrative issues

Some legal formalities, as well as financial business processes, will need to be adjusted and facilitated during this period.

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Also, the procedure for selecting and hiring new team members will be started. The procedure for hiring talented people is not always easy and it can be time-consuming to source the best, but with our experience and funding, we will be able to afford to hire the most skilled and motivated people. We know exactly who we are looking for.

9.2 Q4 / 2017 - Q2 / 2018 : Privatix Network Core Development

The final quarter of 2017 and the first two quarters of 2018 will be used to develop a prototype and Alpha version of the Privatix Network, as well as cross-platform software for Agents.

Deadline: The end of the second quarter of 2018

9.2.1 Privatix Network - Alpha

The first release of the Privatix Network will include centralized elements and will be available in open source to receive feedback from the community by the end of the second quarter of 2018.

9.2.2 Privatix.Agent - cross-platform software for exit nodes owners

This product is one of the two most important foundations of the entire Privatix Network, since it allows you to route traffic and sell internet bandwidth to the network.

The first versions for such popular platforms as Windows, Ubuntu, Android, MacOS, iOS will be developed.

9.3 Q3 - Q4 / 2018 : Proof of Concept (PoC) products and Network

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For two quarters, further development of the Privatix Network will be conducted taking into account feedback from the community. At the end of that period, the Beta release of the network will be made, which in essence will be a fully working version.

At the same time, on the basis of the Alpha version of the network, the development of products based on the network will begin; these products will ensure there is adequate demand for broadband. We hope to reduce development time through partnerships or the creation of specialized individual teams and business units in the company.

Deadline: The fourth quarter of 2018

9.3.1 Consumer VPN, based on DPI-free VPN protocol

In the development of standard VPN services we have no competitors. However, we are dealing with VPN on blockchain with a completely different level of development. VPN applications will be developed for all popular operating systems and platforms for maximum market coverage.

9.3.2 Advanced Proxy / Socks selling API platform

A unique platform on which it is possible to use the API to buy multiple outgoing residential IP addresses and their associated spare internet broadband. We expect that this product will allow us to create a huge demand for traffic on the network and therefore we have made it one of our priorities.

9.3.3 Privatix Network - Beta release

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The second (Beta) release of the network will be a fully working Network but with some centralized elements. These elements will be fully transferred to the blockchain with the final release of the network in the next stage.

9.4 Q1 - Q2 / 2019 : Additional Proof of Concept (PoC) products and Network

At the beginning of 2019 our company will already have a fully working Network, so the work that will be conducted in the first two quarters of 2019 will relate to its final release and the transfer of all elements to the blockchain. Also in the first two quarters of 2019, two more products will be created based on the Network.

Deadline for release: The second quarter of 2019
Note: This stage will be implemented if the maximum goal (hard cap) is reached.

9.4.1 Privatix Network - Final release

The final release of the network means that from then on it becomes completely autonomous and any developer can use it to create their own products.

9.4.2 Privatix.FAAS (SDK)

A product that removes the need for developers to worry that their application will be blocked from any source, whether by a local firewall at the ISP level or a global block at governmental level.

9.4.3 Privatix.Monetize (SDK)

This product will allow developers to earn more on their applications and programs. By installing our SDK, the developer will be able to monetize a portion of users' spare bandwidth.

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9.5 Q3 - Q4 / 2019 : Proof of Concept (PoC) products and Network

In the second half of 2019, having already a working and autonomous Privatix Network, we will be able to develop additional products based on it, which will increase the number of participants and, accordingly, the demand for the token itself.

Deadline for releases: end of 2019.
Note: This stage will be implemented if the maximum goal (hard cap) is reached.

9.5.1 Privatix.BOX (Hardware)

A physical device that allows you to simultaneously become an Agent of a Privatix Network and also use VPN functions as a Network Client. This device can also be used as a secure Wi-Fi router.

9.5.2 Infrastructure for VPN providers

We plan to create a product in the form of a network-based service and essentially resell the broadband to existing VPN providers. They will be able to use the traffic from the Privatix Network instead of buying it from internet hosts, and thereby save costs without losing quality.

10. Additional information

10.1 Legal protection framework for exit nodes owners

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We will develop a legal framework to help exit node owners (Agents) to handle situations when they are accused of improper activity by someone who used their node (IP address) .

The basic concept behind this proposal is that certain responsibilities will be transferred from Agents to our company. We will provide to all Agents a document stating that we as a company lease their network for our use and resell it. This document will contain the Agent's node IP and hash in blockchain and the Agent will be able to download it from his dashboard.

For example, in the event an exit node was compromised by criminal activity and police make an investigation, the Agent can print the document and give it to the investigators. Based on node hash and timestamps, the investigators can find on open blockchain related and relevant information, and also contact us and make request for additional data.

We will also try to provide legal help and assistance to investigators and compromised Agents in serious cases at our cost. We will take out some insurance as well; insurance that we can extend to all our Agents in future to cover these types of expenses, should the need arise.

Anonymity is the basis of our network. Of course it has certain risks, but in response to these risks we are going to free Agents from legal responsibility rather than stake out every user.

10.2 Solution for mass adoption problem

As advocates of blockchain principles and a decentralized economy, we certainly support the idea that all payments need to be executed internally with our tokens inside our crypto-economy. Even though this is our paramount goal, we understand that it would make it quite difficult to achieve mass adoption and tempt Agents. At this time, only a fraction of people understand the crypto-economy concept and we don't have time to wait for the entire internet to climb on board; that could take years.

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In order to grow as fast as possible within these limitations, we will develop a centralized exchange gateway to the Privatix crypto-economy in order to create a bigger supply of spare broadband and multiply the number of Agents quickly. Thus, not just users that are familiar with the crypto-world will be able to be an Agent and profit from spare broadband, but all regular internet users as well.

These Agents will see the PRIX token as internal currency and the instant value of these tokens in fiat currency at the same time. For example, if an Agent accumulated the equivalent of "100" in some fiat currency and demanded to be paid, we would provide a simple mechanism to withdraw this token though exchange to fiat and pay him using a common payment system.

10.3 Commitment to open source community

Our team strongly believe in open source and make a promise after three years to contribute 5% from Privatix profits to the development of important open source projects.

10.4 Legal disclaimers

THIS DOCUMENT DOES NOT CONSTITUTE AN OFFER TO SELL, AN INVITATION TO INDUCE AN OFFER, OR A SOLICITATION OF AN OFFER TO ACQUIRE SECURITIES.

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AND OFTEN CONTAIN WORDS SUCH AS 'EXPECT', 'ANTICIPATE', 'INTEND', 'PLAN', 'WILL', 'WOULD', 'ESTIMATE', 'FORECAST' OR 'TARGET'. SUCH FORWARD-LOOKING STATEMENTS BY THEIR NATURE ADDRESS MATTERS THAT ARE, TO DIFFERENT DEGREES, UNCERTAIN. WE CANNOT GUARANTEE THAT ANY FORWARD LOOKING STATEMENTS, BACKTESTS OR EXPERIMENTS MADE BY US OR EXPECTED RESULTS OF OPERATION OF THE PRIVATIX PLATFORM WILL CORRELATE WITH THE ACTUAL FUTURE FACTS OR RESULTS.

ALL POTENTIAL RISKS CAN BE ASSESSED HERE https://dxw4crzwfgmzw.cloudfront.net/site/risk-factors.pdf

THE SALE OF PRIX TOKENS CONSTITUTES THE SALE OF A LEGAL SOFTWARE PRODUCT UNDER GIBRALTAR LAW. THIS PRODUCT SALE IS CONDUCTED BY PRIVATIX TOKEN LIMITED, A GIBRALTAR LIMITED COMPANY, OPERATING UNDER GIBRALTAR LAW. IT IS THE RESPONSIBILITY OF EACH POTENTIAL PURCHASER OF PRIX TOKENS TO DETERMINE IF THE PURCHASER CAN LEGALLY PURCHASE PRIX TOKENS IN THE PURCHASER'S JURISDICTION AND WHETHER THE PURCHASER CAN THEN RESELL THE PRIX TOKENS TO ANOTHER PURCHASER IN ANY GIVEN JURISDICTION.

To be used if the White Paper and other documents will be available in multiple languages:

FOR THE CONVENIENCE OF OUR USERS, THE PRIVATIX WHITE PAPER, WEBSITE AND OTHER RELATED DOCUMENTS ARE AVAILABLE IN A NUMBER OF LANGUAGES. IN THE EVENT THERE IS ANY CONFLICT BETWEEN THE ENGLISH LANGUAGE VERSION AND A FOREIGN LANGUAGE VERSION, THE ENGLISH LANGUAGE VERSION SHALL GOVERN.

10.5 RISK FACTORS

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You should carefully consider and evaluate each of the following risk factors and all other information contained in the Terms of Token Sale (the "Terms") before deciding to participate in the Privatix Token Sale ("Token Sale"). To the best of Privatix Token Ltd.'s (the "Company") knowledge and belief, all risk factors which are material to you in making an informed decision to participate in the Token Sale have been set out below. If any of the following considerations, uncertainties or material risks develops into actual events, the business, financial position and/or results of operations of the Company and the maintenance and level of usage of the Privatix platform and the Privatix Tokens ("PRIX") could be materially and adversely affected. In such cases, the trading price of PRIX Tokens (in the case where they are listed on a cryptocurrency exchange) could decline due to any of these considerations, uncertainties or material risks, and you may lose all or part of your PRIX Tokens.

RISKS RELATING TO PARTICIPATION IN THE TOKEN SALE

There is no prior market for PRIX Tokens and the Token Sale may not result in an active or liquid market for the PRIX Tokens

Prior to the Token Sale, there has been no public market for the PRIX Tokens. Although the Company will use reasonable endeavors to seek the approval for availability of the PRIX Tokens for trading on a cryptocurrency exchange, there is no assurance that such approval will be obtained. Furthermore, even if such approval is granted by a cryptocurrency exchange, there is no assurance that an active or liquid trading market for the PRIX Tokens will develop or if developed, be sustained after the PRIX Tokens have been made available for trading on such cryptocurrency exchange. There is also no assurance that the market price of the PRIX Tokens will not decline below the original purchase price (the "Purchase Price"). The Purchase Price may not be indicative of the market price of the PRIX Tokens after they have been made available for trading on a cryptocurrency exchange.

A PRIX Token is not a currency issued by any central bank or national, supra-national or quasi-national organization, nor is it backed by any hard assets or other credit. The Company is

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not responsible for nor does it pursue the circulation and trading of PRIX Tokens on the market. Trading of PRIX Tokens will merely depend on the consensus on its value between the relevant market participants, and no one is obliged to purchase any PRIX Token from any holder of the PRIX Token, including the purchasers, nor does anyone guarantee the liquidity or market price of PRIX Tokens to any extent at any time.

Furthermore, PRIX Tokens may not be resold to purchasers who are citizens or permanent residents of, People's Republic of China, Republic of Korea (including its territories and possessions) or any other jurisdiction where the purchase of PRIX Tokens may be in violation of applicable laws. Accordingly, the Company cannot ensure that there will be any demand or market for PRIX Tokens, or that the Purchase Price is indicative of the market price of PRIX Tokens after they have been made available for trading on a cryptocurrency exchange.

Future sales or issuance of the PRIX Tokens could materially and adversely affect the market price of PRIX Tokens

Any future sale or issuance of the PRIX Tokens would increase the supply of PRIX Tokens in the market and this may result in a downward price pressure on the PRIX Token. The sale or distribution of a significant number of PRIX Tokens outside of the Token Sale (including but not limited to the sales of PRIX Tokens undertaken after the completion of the initial token sale, issuance of PRIX Tokens to persons other than purchasers for purposes of community and employee initiatives, affiliate (or bounty) program development, academic research, education and market expansion and issuance of PRIX Tokens as a reward to employees and/or users of the Privatix platform), or the mere perception that such further sales or issuance may occur, could adversely affect the trading price of the PRIX Tokens.

Negative publicity may materially and adversely affect the price of the PRIX Tokens

Negative publicity involving the Company, the Privatix platform, the PRIX Tokens or any of the key personnel of the Company, may materially and adversely affect the market perception or market price of the PRIX Tokens, whether or not it is justified.

We may not be able to pay any anticipated rewards in the future

There is no assurance that there will be any transaction volume such that you will receive any rewards anticipated to be distributed to active users of the Privatix platform. Further, even in the

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event there is substantial transaction volume and interactions among the users and the Privatix platform, there is no assurance you personally will receive any part of the rewards. This is because the ability of the Company to pay any reward to you will depend on the future results of operations and the future business and financial condition of the Company and there is no assurance of the future results of operations and the future business and financial condition of the Company.

There is no assurance of any success of Privatix Platform or any Future Business Line

The value of, and demand for, the PRIX Tokens hinges heavily on the performance of the Privatix platform. There is no assurance that the Privatix platform will gain traction after its launch and achieve any commercial success. Although the Company has performed some testing, including QA-testing of the Privatix platform with relatively positive results, the Privatix platform has not been fully developed and finalized and is subject to further changes, updates and adjustments prior to its launch. Such changes may result in unexpected and unforeseen effects on its projected appeal to users, possibly due to the failure to meet users' preconceived expectations based on the beta version, and hence impact its success. Limited usage of the Privatix platform and potential lack of trust for its crowdsourced predictive accuracy would impact the public demand for the PRIX Tokens and correspondingly the trading price of the PRIX Tokens.

The trading price of the PRIX Tokens may fluctuate following the Token Generation Event

The prices of cryptographic tokens in general tend to be relatively volatile, and can fluctuate significantly over short periods of time. The demand for, and corresponding the market price of, the PRIX Tokens may fluctuate significantly and rapidly in response to, among others, the following factors, some of which are beyond the control of the Company:

(a) new technical innovations;

(b) analysts' speculations, recommendations, perceptions or estimates of the PRIX Token's market price or the Company's financial and business performance;

(c) changes in market valuations and token prices of entities with businesses similar to that of the Company that may be listed on the same cryptocurrency exchanges as the PRIX Tokens;

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(d) announcements by the Company of significant events, for example partnerships, sponsorships, new product developments;

(e) fluctuations in market prices and trading volume of cryptocurrencies on cryptocurrency exchanges;

(f) additions or departures of key personnel of the Company;

(h) success or failure of the Company's management in implementing business, development and growth strategies;

(i) changes in conditions affecting the blockchain or sport technology industry, the general economic conditions or market sentiments, or other events or factors.

The funds raised in the Token Sale are exposed to risks of theft

Further, upon receipt of the funds, the Company will make every effort to ensure that the funds received will be securely held through the implementation of security measures. Notwithstanding such security measures, there is no assurance that there will be no theft of the cryptocurrencies as a result of hacks, sophisticated cyber-attacks, distributed denials of service or errors, vulnerabilities or defects on the Token Sale website, in the smart contract(s), if used, on which the escrow wallet and the Token Sale may rely, on the Ethereum or any other blockchain, or otherwise. Such events may include, for example, flaws in programming or source code leading to exploitation or abuse thereof. In such event, even if the Token Sale is completed, the Company may not be able to receive the cryptocurrencies raised and may not be able to use such funds for the development of the Privatix platform and/or for launching the Privatix platform, including but not limited to the structuring and through developing of the Privatix peer-to-peer bandwidth marketplace. In such case, the launch of the Privatix platform might be temporarily or permanently curtailed. As such, distributed PRIX Tokens may hold little worth or value, and this would impact its trading price.

RISKS RELATING TO PRIVATIX TOKEN LIMITED.

The Privatix platform is developed, operated and maintained by Privatix Token Limited. Any events or circumstances which adversely affect Privatix Token Limited or any of its successor operating entities (collectively referred to herein as "Privatix Token Limited") may have a

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corresponding adverse effect on the Privatix platform. Such adverse effects would correspondingly have an impact on the utility, liquidity, and the trading price of the PRIX Tokens.

Privatix Token Limited may be materially and adversely affected if it fails to effectively manage its operations as its business develops and evolves, which would have a direct impact on its ability to maintain the Privatix platform. The sport media technology and cryptocurrency industries, and the markets in which Privatix Token Limited competes have grown rapidly over the past years and continue to evolve in response to new technological advances, changing business models and other factors. As a result of this constantly changing environment, Privatix Token Limited may face operational difficulties in adjusting to the changes, and the sustainability of Privatix Token Limited will depend on its ability to manage its operations and ensure that it hires qualified and competent employees, and provides proper training for its personnel. As its business evolves, Privatix Token Limited must also expand and adapt its operational infrastructure. Privatix Token Limited's business relies on its blockchain-based software systems, cryptocurrency wallets or other related token storage mechanisms, blockchain technology and smart contract technology, if used, and on machine learning and artificial intelligence platforms. All of these systems and tools represent complex, costly, and rapidly changing technical infrastructure. In order to demonstrate continued ability to effectively manage technical support infrastructure for the Privatix platform, Privatix Token Limited will need to continue to upgrade and improve its data systems and other operational systems, procedures and controls. These upgrades and improvements will require a dedication of resources, are likely to be complex and increasingly rely on hosted computer services from third parties that Privatix Token Limited does not control. If Privatix Token Limited is unable to adapt its systems and organization in a timely, efficient and cost-effective manner to accommodate changing circumstances, its business, financial condition and results of operations may be adversely affected. If the third parties whom Privatix Token Limited relies on are subject to a security breach or otherwise suffer disruptions that impact the services Privatix Token Limited uses, the integrity and availability of its internal information could be compromised, which may consequently cause the loss of confidential or proprietary information, and economic loss. The

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loss of financial, labor or other resources, and any other adverse effect on Privatix Token Limited's business, financial condition and operations, would have a direct adverse effect on Privatix Token Limited's ability to maintain the Privatix platform. Any adverse effects affecting Privatix Token Limited's business or technology are likely to also adversely impact the utility, liquidity, and trading price of the PRIX Tokens.

Privatix Token Limited may experience system failures, unplanned interruptions in its network or services, hardware or software defects, security breaches or other causes that could adversely affect Privatix Token Limited's infrastructure network, and/or the Privatix platform.

Privatix Token Limited is not able to anticipate when there would be occurrences of hacks, cyber- attacks, distributed denials of service or errors, vulnerabilities or defects in the Privatix platform, in the smart contracts, if used, or on the Ethereum or any other blockchain technology. Such events may include, for example, flaws in programming or source code leading to exploitation or abuse thereof. Privatix Token Limited may not be able to detect such hacks, cyber-attacks, distributed denials of service errors vulnerabilities or defects in a timely manner, and may not have sufficient resources to efficiently cope with multiple service incidents happening simultaneously or in rapid succession.

Privatix Token Limited's network or services, which would include the Privatix platform, could be disrupted by numerous events, including natural disasters, equipment breakdown, network connectivity downtime, power losses, or even intentional disruptions of its services, such as disruptions caused by software viruses or attacks by unauthorized users, some of which are beyond Privatix Token Limited's control. Although Privatix Token Limited has taken steps against malicious attacks on its platform or its infrastructure, which are critical for the maintenance of the Privatix platform, there can be no assurance that cyber-attacks, such as distributed denials of service, will not be attempted in the future, that Company's enhanced security measures will be effective. Privatix Token Limited may be prone to attacks on its infrastructure intended to steal information about its technology, financial data or user information or take other actions that would be damaging to the Company and/or holders of the PRIX Tokens. Any significant breach of the Company's security measures or other disruptions

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resulting in a compromise of the usability, stability and security of the Privatix platform may adversely affect the utility, liquidity and/or trading price of the PRIX Tokens.

We are dependent in part on the location and data center facilities of third parties

Privatix Token Limited's current infrastructure network is in part established through servers which it owns and houses at the location facilities of third parties, and servers that it rents at data center facilities of third parties. If the Company is unable to renew its data facility lease on commercially reasonable terms or at all, Privatix Token Limited may be required to transfer its servers to a new data center facility, and may incur significant costs and possible service interruption in connection with the relocation. These facilities are also vulnerable to damage or interruption from, among others, natural disasters, arson, terrorist attacks, power losses, and telecommunication failures. Additionally, the third party providers of such facilities may suffer a breach of security as a result of third party action, employee error, malfeasance or otherwise, and a third party may obtain unauthorized access to the data in such servers. As techniques used to obtain unauthorized access to, or to sabotage systems change frequently and generally are not recognized until launched against a target, Privatix Token Limited and the providers of such facilities may be unable to anticipate these techniques or to implement adequate preventive measures. Any such security breaches or damages which occur which impact upon the Company's infrastructure network and/or the Privatix platform may adversely impact the utility, liquidity, and/or trading price of the PRIX Tokens.

General global market and economic conditions may have an adverse impact on Privatix Token Limited operating performance, results of operations and cash flows

Privatix Token Limited has been and could continue to be affected by general global economic and market conditions. Challenging economic conditions worldwide have from time to time, contributed, and may continue to contribute, to slowdowns in the information technology industry at large. Weakness in the economy could have a negative effect on the Company's business, operations and financial condition, including decreases in revenue and operating cash flows, and inability to attract future equity and/or debt financing on commercially reasonable terms. Additionally, in a down-cycle economic environment, Privatix Token Limited may experience the negative effects of a slowdown in trading and usage of the Privatix platform.

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Suppliers on which Privatix Token Limited relies for servers, bandwidth, location and other services could also be negatively impacted by economic conditions that, in turn, could have a negative impact on the Company's operations or expenses. There can be no assurance, therefore, that current economic conditions or worsening economic conditions or a prolonged or recurring recession will not have a significant adverse impact on Privatix Token Limited's business, financial condition and results of operations and hence the Privatix platform. Any such circumstances would then correspondingly negatively impact the utility, liquidity, and/or trading price of the PRIX Tokens.

The Company or the PRIX Tokens may be affected by newly implemented regulations

Cryptocurrency trading and token sales are generally unregulated worldwide, but numerous regulatory authorities across jurisdictions have been outspoken about considering the implementation of regulatory regimes which govern cryptocurrency or cryptocurrency markets. The Company or the PRIX Tokens may be affected by newly implemented regulations relating to cryptocurrencies or cryptocurrency markets, including having to take measures to comply with such regulations, or having to deal with queries, notices, requests or enforcement actions by regulatory authorities, which may come at a substantial cost and may also require substantial modifications to the Privatix platform. This may impact the appeal of the Privatix platform for users and result in decreased usage of the Privatix platform and the PRIX Tokens. Further, should the costs (financial or otherwise) of complying with such newly implemented regulations exceed a certain threshold, maintaining the Privatix platform may no longer be commercially viable and the Company may opt to discontinue the Privatix platform and/or the PRIX Tokens. Further, it is difficult to predict how or whether governments or regulatory authorities may implement any changes to laws and regulations affecting distributed ledger technology and its applications, including the Privatix platform and the PRIX Tokens. Privatix Token Limited may also have to cease operations in a jurisdiction that makes it illegal to operate in such jurisdiction, or make it commercially unviable or undesirable to obtain the necessary regulatory approval(s) or license(s) to operate in such jurisdiction. In scenarios such as the foregoing, the utility, liquidating, and/or trading price of PRIX Tokens will be adversely affected or PRIX Tokens may cease to be traded.

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There may be unanticipated risks arising from the PRIX Tokens

Cryptographic tokens such as the PRIX Tokens are a relatively new and dynamic technology. In addition to the risks included in the above discussion of Risk Factors, there are other risks associated with your purchase, holding and use of the PRIX Tokens, including those that Privatix Token Limited cannot anticipate. Such risks may further appear as unanticipated variations or combinations of the risks discussed above.

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