ECR.MONEY

Free, decentralized digital form of payment powering the global economy

White paper v 1.0

www.ecr.money

INTRODUCTION

Money 3.0

Cryptocurrencies are blockchain-powered digital forms of value exchange. The difference between digital and physical currency is that the former allows for instantaneous transactions and borderless transfer of ownership. The decentralized nature of cryptocurrency makes it independent of any single authority minimizing the risk for single-point-of-failure attacks and empowering communities to have an economic stake in the network.

On the architectural level, a cryptocurrency is a ledger powering the transactions of its community or organization. The heavy encryption mechanisms that cryptocurrencies use whether it is Skrypt, SHA-256 or CryptoNote, make the ledger immutable which means no single party can possibly alter the records once they are written and confirmed.

In this new network-based economy every active participant (peer) plays the role of their own bank by authorizing the transactions and maintaining the integrity of the open Ledger.

	EUR	ECR
Value exchange	✅	✅
International	❌	✅
Fast transactions	❌	✅
Decentralized	❌	✅
Fees	❌	✅

Leading the Future of Financial Technologies

For many, cryptocurrencies became the main topic of conversation in 2017. It was heated with the hype over Initial Coin Offerings (ICO) and Token Generation Events (TGE). Yet, Bitcoin, the world's first cryptocurrency use case has been climbing its way to the top of mass-interest for over 10 years. Invented by an anonymous Satoshi Nakamoto, it started as an open-source community proposal in 2009. And for several years following Bitcoin has been a topic of interest for very niche small Internet communities of developers, cryptographic enthusiasts, and engineers.

Following the Bitcoin's success in 2011-2014, a number of alternative cryptocurrencies were designed to evolve Satoshi's ideas and improve the speed of transactions, anonymity, and usability of the encrypted digital currencies. During this time, Vitalik Buterin, a computer scientist and the co-founder of Bitcoin Magazine, developed the ground-breaking technology called Ethereum which would later start a new era in the evolution of blockchain applications.

"The amount of sustainable usage of blockchain is very low. Although it exists, there are a lot of people giving value to cryptocurrencies, yet the amount of useful stuff happening is still much lower than the $200 billion market cap makes it seem. The main challenge for the industry as I see it is basically understanding how to bridge that gap and get to the point where there is $200 billion in some sense of actual final value being generated.

Vitalik Buterin, Forbes, August, 2018

Vitalik's invention of the Ethereum Virtual Machine (EVM) made it possible for literally anyone in the world to run their decentralized apps (dApps) and power them with self-executing (smart) contracts. The Ethereum token mania resulted in hundreds of over-evaluated young companies raising millions of dollars without having any product or even significant experience of working together. Token sales became a flagship of the second wave of cryptocurrencies. Many of them were fraudulent others simply did not deliver on their promises. The mass-adoption of blockchain technologies will happen through the continuous evolution of a single use-case. Blockchain is first and foremost a powerful accounting tool and should become a standard in financial transactions before it is applied to new markets.

The Realities of Crypto-Economy

According to the "Global Cryptocurrency Benchmarking Study" conducted by Dr. Garrick Hileman and Michael Rauchs at the University of Cambridge, the number of currently active users of cryptocurrency wallets varies between 2.9 million and 5.8 million. The active growth of the user-base, legalization of Bitcoin in Japan, and the astronomical amount of funds raised for early-stage companies during the ICO-mania have increased the capitalisation of the total cryptocurrency market over the past few years.

Yet despite the disruptive potential that cryptocurrencies have for the financial sector many of them face a number of challenges.
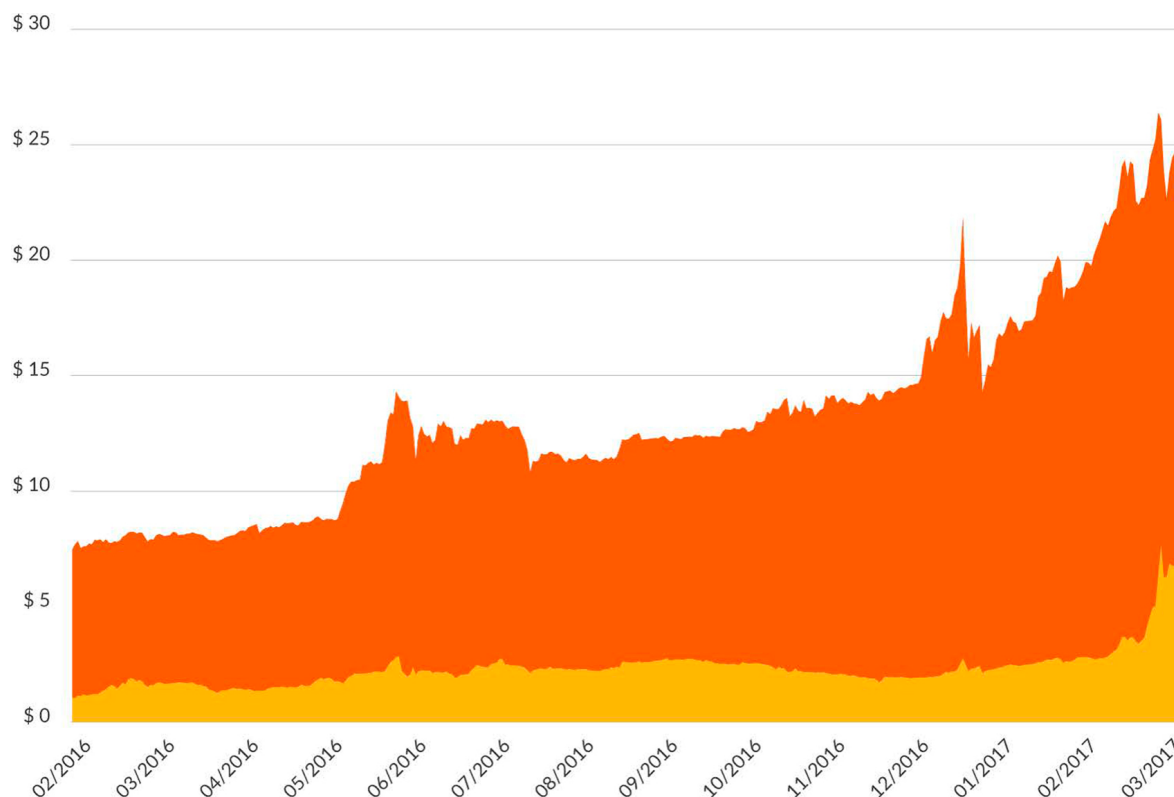
The total cryptocurrency market capitalisation has increased more than 3x since early 2016, reaching nearly $25 billion in March 2017

Fees

The exponential growth of the user-base of the major cryptocurrency ledgers increases the bandwidth load. As a consequence miners responsible for writing new transactions into ledgers raise the fees for their work. The ECR.money team believes that an approach where the mining difficulty increase triggers the rush for rewards damages the health of a financial network. Such measures bring absolute power to the node owners and are a throwback to the Central Bank system which currently stifles global business interactions and needs to be replaced with a progressive decentralized approach. ECR.money allows businesses to innovate their payment plans by introducing a highly-secure distributed digital currency with zero-fees!

We are at war. With Banks. With Governments. With the entire, corrupt system of power. If you deny this, you have been asleep. The questions are: Will you stand up? And if so, with whom?

John McAfee on Twitter

Simplicity

One of the biggest problems for cryptocurrency transactions is the expected delivery speed. Which means that businesses exchanging values in Ether, for instance, are contingent on the amount of Gas its payers are getting for a transaction. To help businesses efficiently accept crypto payments without hurting their cash flow with delays, ECR.money made it a priority to establish the frictionless ecosystem supporting up to 100 transactions per second.

Trust

ECR.money is a new generation of cryptocurrency designed to facilitate the international trading relationships between individuals and commercial organizations. Borderless ECR. network allows for free, instantaneous transactions while the user-friendly ECR.wallet interface streamlines the process of financial communications. ECR.money aims to upgrade the layer of financial transactions in the corporate world.

Ecology

ECR blocks require minimum computational equipment to sign the transactions, which minimizes the electric consumption levels and lowers the cost of running a blockchain node. The future of global transactions should not compromise the future of the planet.

SOLUTION

SOLUTION

ECR.money is a self-funded decentralized cryptocurrency designed to enhance international B2C and B2B transactions. The independence of the ECR blockchain guarantees fast transaction speed and zero fees for modern, forward-looking companies and their customers. Inspired by Litecoin's performance, the company has recognized the need in the market for a reliable, trustworthy payment system that does not depend on the greed of the miners or any other centralized institution. ECR.money was pre-mined and launched at the beginning of 2017 and since then has already accumulated a number of businesses and communities effortlessly interacting with each other on a daily basis.

The convenient ECR web wallet allows users to send and receive almost instantaneous transactions without the need to download the entire blockchain history or run a node. On the other hand, more advanced users are encouraged to run their nodes to increase the level of trust in the network by expanding the number of signing participants. Since ECR.money is a pre-mined currency, nodes on the network do not receive coin rewards. The total supply is 333,333,333 ECR coins, and no more coins will ever be minted.

The nodes in the network sign the blocks of transactions. The first block was signed on Monday, January 1, 2018, at 00:00:00 GMT. The signing difficulty level increases slowly over time. By demotivating the chase for mining rewards, ECR blockchain decreases the load on the processing equipment needed to keep it up and the consumption of electricity, which makes it a democratic and eco-friendly model. ECR.nodes could be launched on computers with just 1Ghz of processing speed and 2Gb of RAM memory.

You can visit https://ecr.money/ to monitor all the latest transactions, transaction volume over time, and the largest wallets. Visit our Github to view the ECR blockchain source code and the history of 14,000+ commits by over 400 contributors.

To sign the blocks, ECR.money uses the Scrypt encryption algorithm instead of SHA-256. The working principle of the Scrypt algorithm lies in the fact that it artificially complicates the selection of options to solve a cryptographic task by filling it with "noise". Noise is randomly generated numbers to which the algorithm refers, increasing the work time. In the end, to check the original key, Scrypt would take almost no time. However, if a fraudster tried to break down the core using the exhaustive search method, Scrypt would make it a very costly attack.

The algorithm was designed in 2009 by Colin Percival from Tarsnap, a secure online backup service that encrypts data on the cloud web services like Amazon S3. It makes the performance of large-scale custom hardware attacks costly by requiring large amounts of memory. Scrypt was published in 2016 by IETF as RFC 7914. Recently a number of cryptocurrencies including Litecoin have adopted a simplified version of Scrypt to use with their proof-of-work consensus algorithms. By introducing the benefits of Scrypt to the ECR blockchain without requiring heavy mining equipment we have eliminated the need to mine for the blocks and focused instead on the PoW signatures.

The ECR.blockchain is inclusive. Using the Scrypt algorithm allows everyone, not just miners, to run ECR nodes without investing in new equipment. We at ECR.team believe that by attracting the users to interact on the network without fees and block rewards, we create an eco-system driven by innovation

where the functionality is valued over temporary profits. Blockchain mass-adoption will come with stability and a user-friendly experience. We see continued incentivization for mining pool dominance as a redundant page in the history of the decentralized internet.

ECR.money brings the world of blockchain benefits to the masses. Bitcoin's confirmations are super secure, yet they require more computations and time to process. To be part of the Bitcoin community requires an advanced understanding of Blockchain and patience. By concentrating on being excellent payment processors for small merchants, we aim ECR.money at transaction speeds without compromising much of the security. Keep in mind that not every business requires a military-grade level of security in their daily

micro-transactions. Merchants are safer with Bitcoin when it comes to the store of value. Bitcoin's security applied to real life is Fort Knox. But when it comes to micro-transactions ECR clients will be able to process a 10 time larger volume with decent levels of security with no fees.

To join ECR.blockchain go to https://ecr.money/ and claim your free wallet. ECR.money is available for purchase on ECR platform and various exchanges.

As mentioned earlier the total pre-mined supply is 333,333,333 coins.

ECR Wallet

Registration

To register the ECR.wallet:

• Go to the ecr.money website

• Click on the 'Get a free wallet' in the sidebar

• You'll be prompted to fill out your email and confirm the password twice

• You then receive a 6-digit code in your email. Use it to finalize the verification of the account on the website.
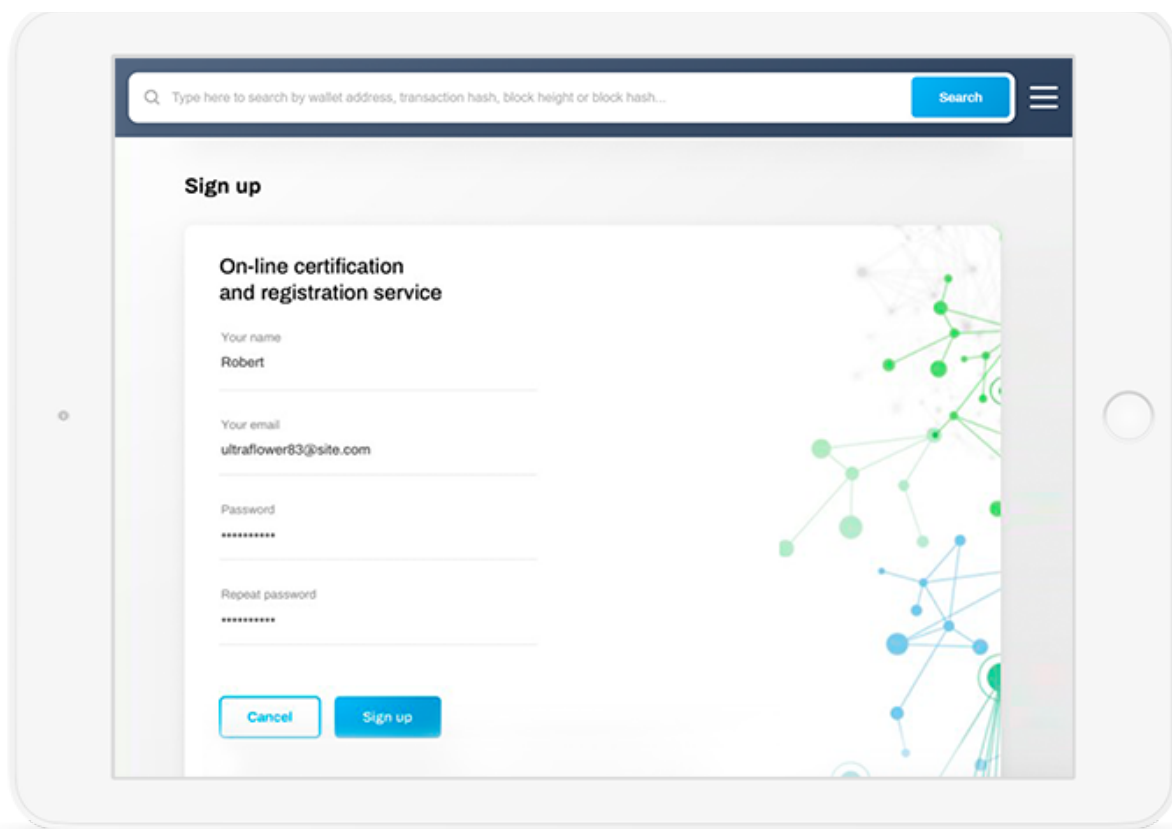

Sign up screen
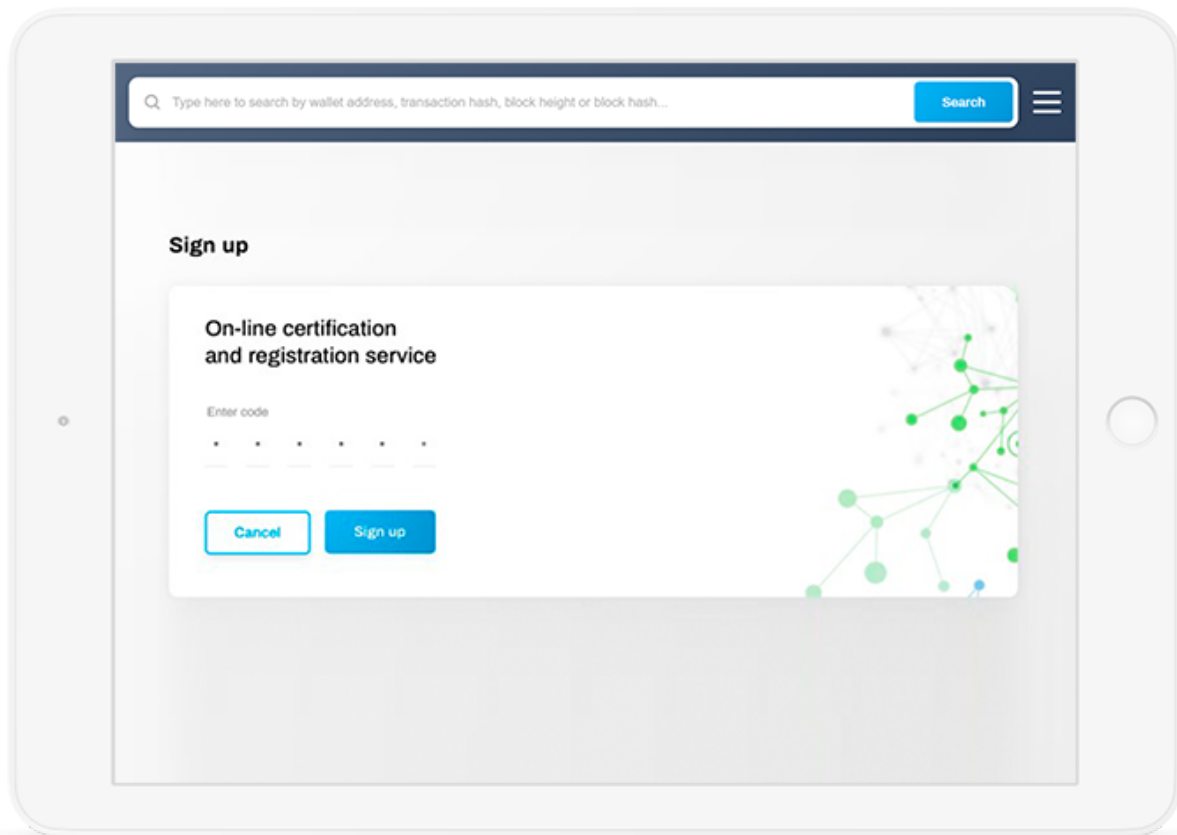
Use the 6-digit code to complete the sign up process

Authorization

To log-in to your account:

- Use a login and password to enter the account

- You'll receive a 6-digit code in your email. Use it to complete the authentication.

- You can use the function 'Remember me' to stay logged in at your convenience

- If you forgot the password use the 'Forgot your password' function to restore the access to your account. Detailed instructions will be sent to the associated email.

Sing in form

www.ecr.money
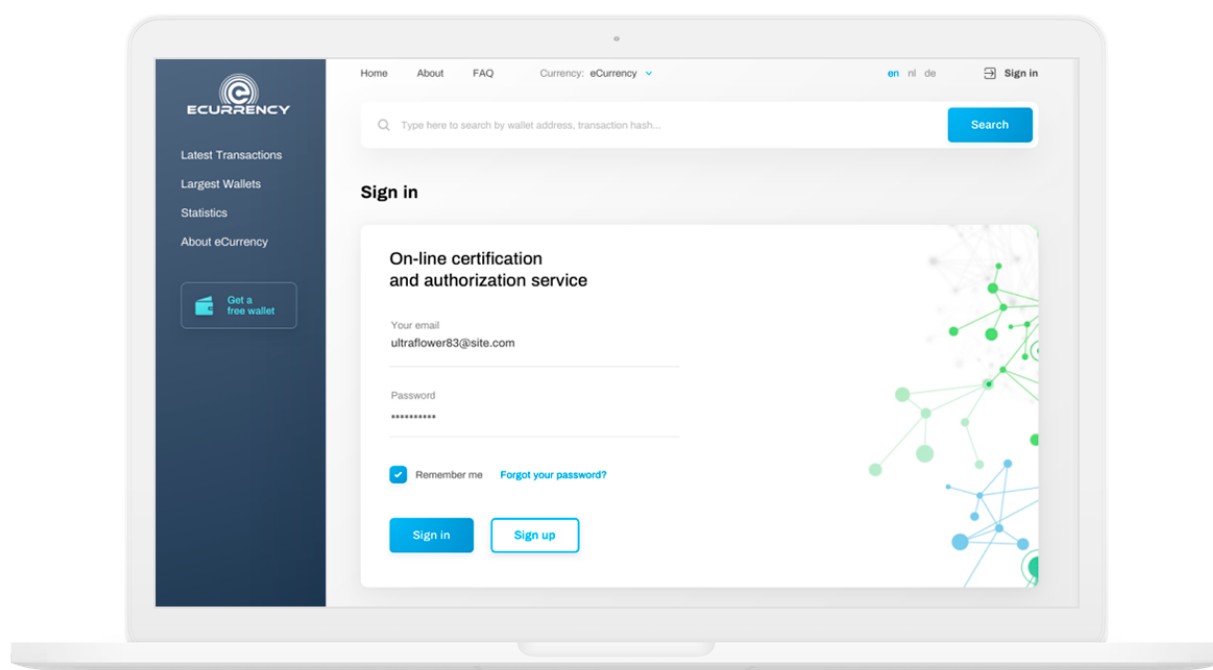
Creating ECR wallets

Each user has one wallet by default. It is created automatically during user registration and has one public address assigned to it. Each address is a string of 34 symbols. Use this address to refill your wallets or request a payment. Currently, the ECR team is developing additional functionality which will allow you to connect an existing address to a new wallet manually. This way users will be able to connect previously created addresses with funds to their wallets inside the ECR accounts.
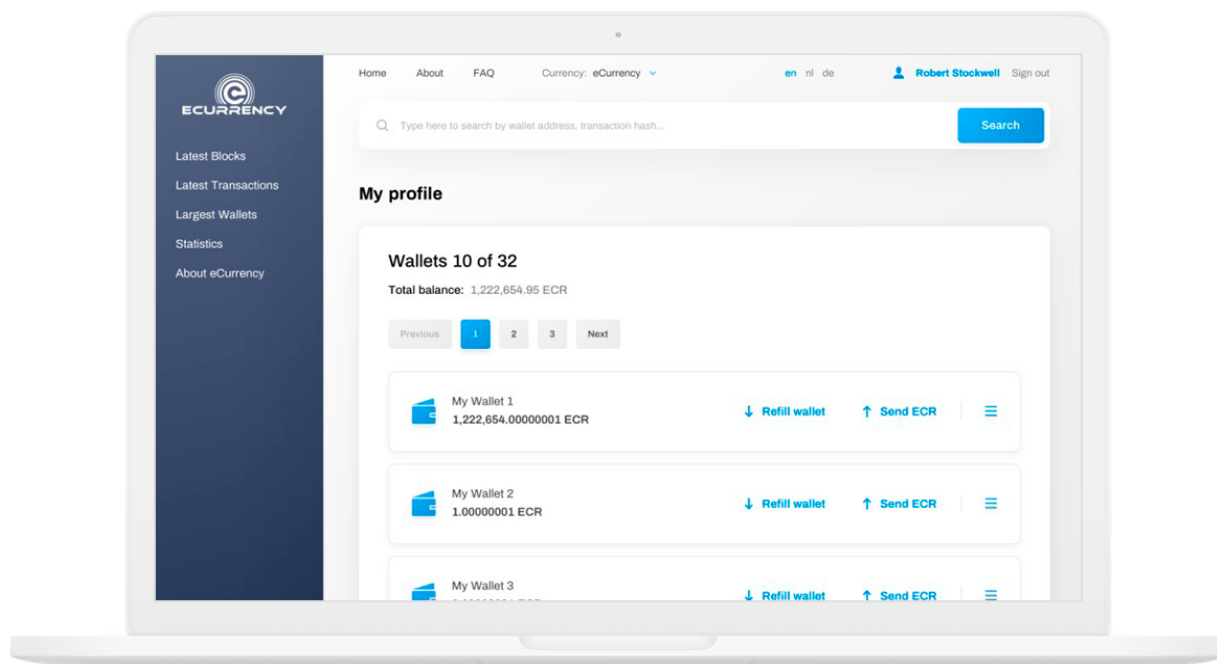
Account dashboard

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Users are not limited in the number of free wallets they can create to fulfill their needs. Use 'Create new wallet' button to set up a new wallet manually. During the set up you have an option to assign your wallet with a name and description for the convenient management of funds. For instance, you can have an account for Savings, Traveling, Car leasing, Everyday spending, etc. Wallets are isolated from each other in the account, and each stores its own log of transactions which you can access by clicking on 'more details'. You can edit the name and description of a wallet by clicking 'Edit' both from the dashboard and while inside one of them.
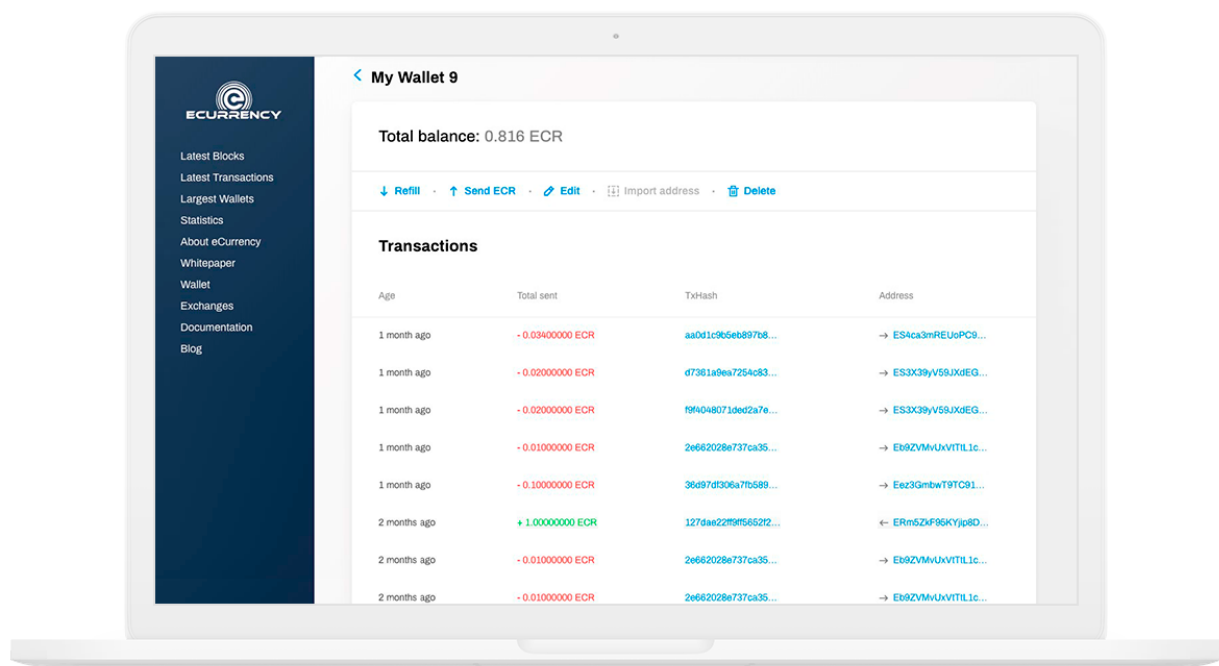
Inside an ECR wallet

Refilling ECR Wallets

To fund your wallet, you can either click on 'refill wallet' when in your dashboard or enter any particular wallet and click on 'refill'. The system will prompt you with a pop-up message with a wallet name, its address, a 'copy' button next to it, and a QR code with the wallet's address in it. You can either copy and paste the address or scan it with a QR code to refill using any compatible third-party wallet or web-service where you'll also need to enter the amount to transfer. That side of the interface differs, depending on the third-party service used. Click on 'cancel' to go back but remember that in this case any entered details will be lost when you re-open the pop-up form.
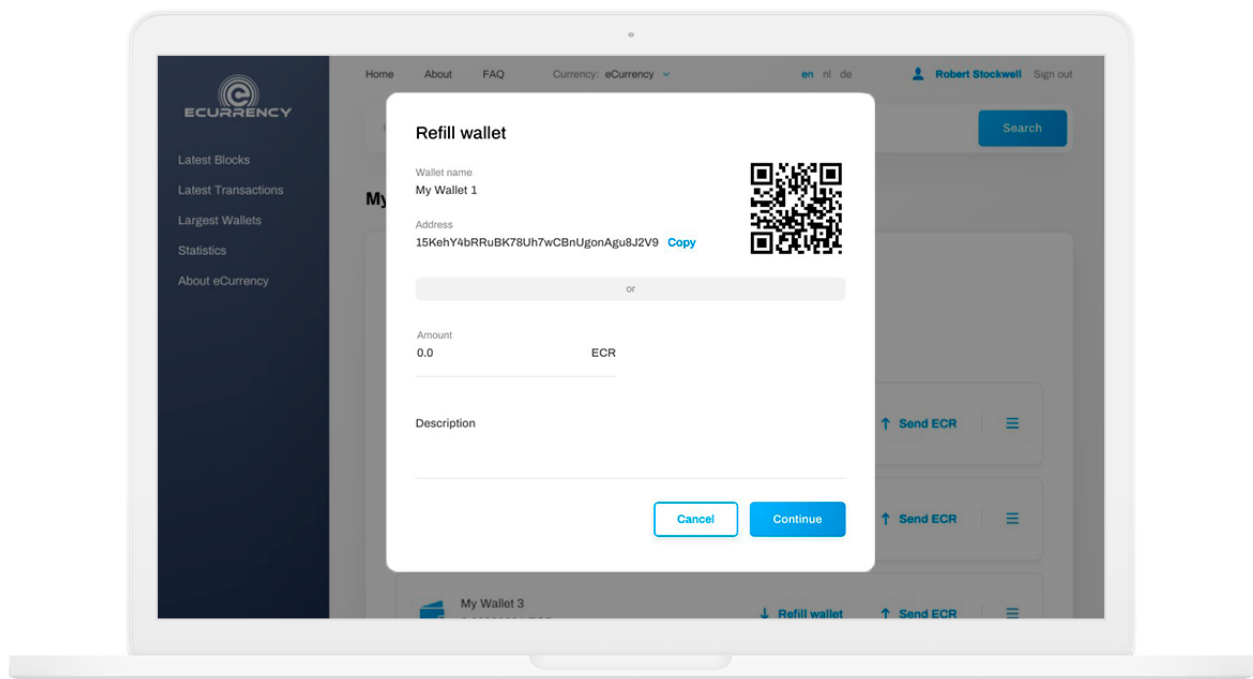
Refill wallet pop-up form

Requesting Funds

To request funds from a third party, you can continue with the pop-up window. Simply enter the necessary amount in the corresponding field and, if required, include the description for the request.
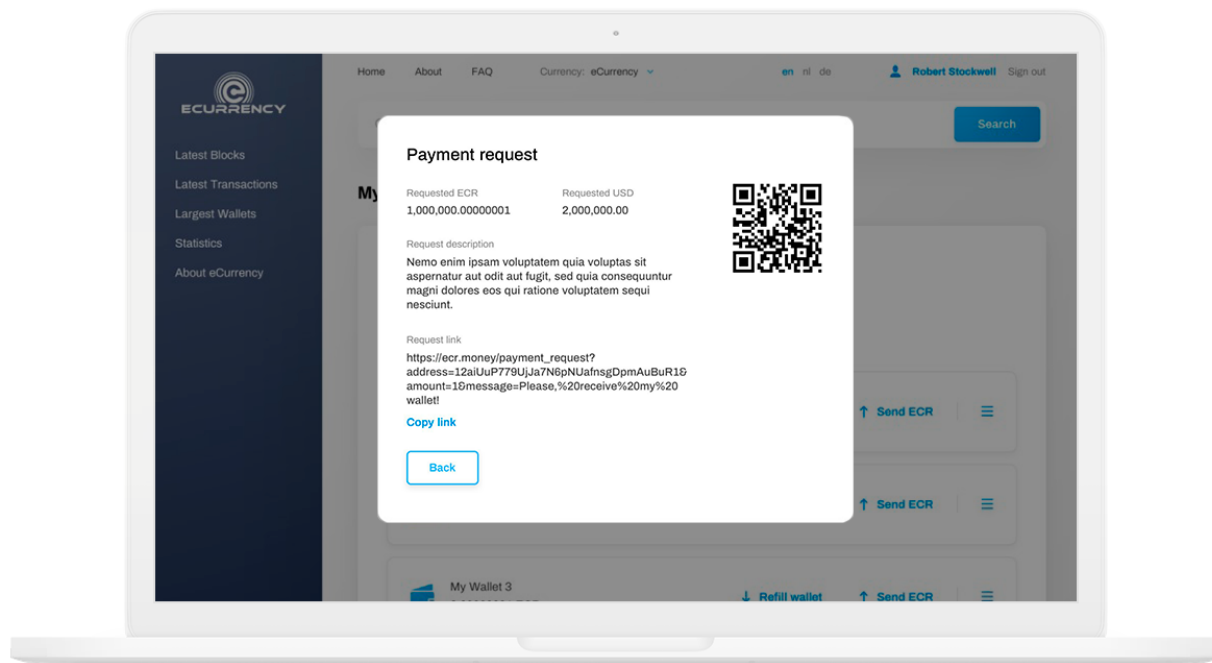
Payment request pop-up form

Once you fill out the fields and click 'continue' you'll see another pop-up window where you can verify all of the inputs: (1) requested amount in ECR, (2) its USD equivalent, (3) request description, (4) request link. Copy the request link generated by the system and forward it to the payer. Using the request link, they will enter their account on https://ecr.money/ and complete the transaction.

If they don't have an ECR account, a registration form will be prompted, and they would need to fill their wallet with sufficient funds before completing the request.

Once the user is authenticated or registered and has sufficient funds to complete the transaction, the system prompts a 'Send ECR' pop-up. The details of the payment (amount, receiving address, and description) are filled-in automatically according to the data in the original request form. The user can now choose the wallet they wish to use for the payment. By default, the system selects the wallet with the largest balance. In the drop-down menu, the wallets are arranged in order from the largest to the smallest. Users can open the drop-down menu to select any wallet as long as it has sufficient funds for the operation.

Sending Money with ECR Wallet

To send funds using an ECR wallet go to 'My profile' and choose the wallet you wish to use to complete the transaction. Click on 'Send ECR' either in the Dashboard or from inside the wallet. The system prompts the 'Send ECR' pop-up. You'll see three static fields: 'Currency' which indicates the cryptocurrency being used for the transaction, a wallet name, and the set fee amount which is set to '0.0'.

Use the address field to paste into the receiver's address or use the 'Read QR code' button to scan the QR code with their address. Indicate the amount to be sent. Choose the processing speed from the drop-down menu. By default, the system always selects 'Regular'. Use the optional description field to include notes on the transfer.

Once all of the mandatory fields are filled click on 'Send' to complete the transfer or hit 'Cancel' to go back. Once the payment is processed successfully the system prompts a confirmation 'Payment sent' pop-up. Click 'Continue' to go back to the previous page. In case the transaction was not processed, the system would prompt the 'Error' pop-up. Click 'Continue' to go back to the previous page and try again.

Deleting Your Wallet

To delete a wallet in your account, you would first need to transfer its funds to another address using the 'Send ECR' pop-up form. In case you can't transfer funds to another wallet or the amount isn't significant use the 'burn remainder' button. The system will then destroy the remaining funds in the wallet. Once the wallet is empty click on 'delete wallet', and the system prompts the pop-up for you to confirm the operation. Click 'Delete' to confirm or 'Cancel' to go back. The system then checks the balance on the wallet, and if it is empty, the operation is completed. If the system detects the funds on the account the 'Send ECR' pop-up is prompted, and the user is asked to transfer the funds elsewhere before the wallet is deleted. Note that according to the GDPR regulations every user has the right to delete their ECR account which will automatically delete all of their data.

Tech Support

If you're experiencing any technical difficulties or have a question regarding the service, please address our support team by clicking on 'Send message to support' in your account. You'll be prompted with a pop-up form to fill two fields: request title and text. Once the fields are completed click on 'Send message' to proceed. The button is not active unless the fields are completed with an adequate amount of information.

ECR PROJECTED ADOPTION

ECR.money bridges the gap between the cryptocurrency market and real-world applications. Our roadmap includes integration with tourism services, car leasing centers, and online marketplaces. Here are just a few examples of how ECR.money brings value to the average internet user.

Buy airplane tickets   **Lease a car**   **Shop on an online Marketplace**   **Make a business transaction**

Destination economy

ECR Go-to-market strategy aims at the adoption through small and medium size global businesses. Thus, the tourism ecosystem is one of our primary targets and we understand that the tourism agencies and web services are the gatekeepers to the industry offering guided tours, travel services, and partnering with a spectrum of service providers such as hotels, transfers, local guides, restaurants, shows, artists, entertainers, and even car rentals.

Here is a use case when a customer would use ECR.money to shop online for a tour.

- They would visit the website of a tourism agency (within the ECR partner network)
- Enter the trip details and choose the desired tour
- Click on 'pay with ECR' at the checkout
- To prompt a pop-up window with their ECR wallet and a 'Send ECR' pop-up
- The receiver address would be automatically be copied into the corresponding field
- The customer would complete the transaction by entering their password key and clicking 'send' to finalize the transaction.

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In a very similar fashion businesses can then interact with each other. In fact, nearly instant, free transactions would certainly boost their cash flow operation which might modernize the entire tourism industry.

The circulation of ECR money between the businesses may cause mass adoption among the traveling population. The benefits are obvious because with ECR they are literally playing the roles of their independent banks (authorities that were historically created to move funds between people over a distance). At ECR, we believe that both companies and their customers would profit immensely from a convenient and fast distributed form of value exchange that doesn't impose predatory fees and currency exchange rates.

Car Leasing and Online Shopping

To lease a car using ECR.wallet is just as simple as the travel tour purchase. You would go on a car-leasing website that supports ECR, pick a car of your preference and finalize the deal by making a first installment. A pop-up window with your ECR wallet will help you make a first installment. Going forward you'll be receiving automated monthly email notifications from the dealer with ECR quick pay buttons.

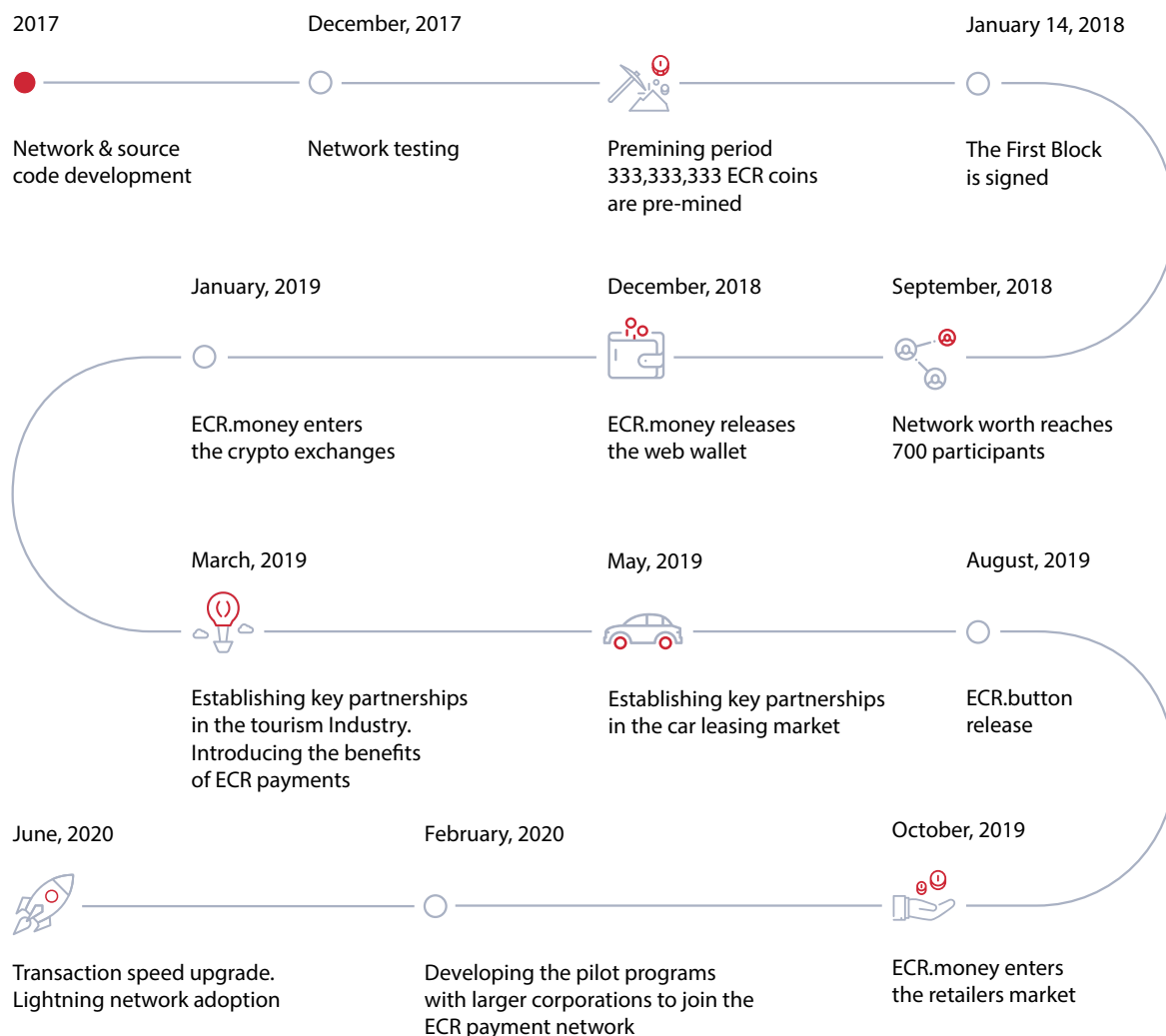| You would go on a car-leasing website that supports ECR	Pick a car of your preference and finalize the deal by making a first installment	A pop-up window with your ECR wallet will help you make a first installment	Going forward you'll be receiving automated monthly email notifications from the dealer with ECR quick pay buttons

Finally, to scale the ECR adoption we are planning to introduce an elementary API in a form of a pay button. This way each online marketplace would be able to expand its business by effortlessly integrating ECR.money to serve a growing number of cryptocurrency users.

ROADMAP

ECR.money aims to become the standard for cross-border digital transactions and eventually replacing the domination of the US dollar. As the network grows, the transaction throughput demands will rise as well. Currently, the ECR.network is able to process 100 transactions per second. We're planning to increase the transaction speed when the need arises by implementing Lightning Network (LN), the "second layer" payment protocol on top of the ECR.blockchain.

2017
Network & source
code development

December, 2017
Network testing

Premining period
333,333,333 ECR coins
are pre-mined

January 14, 2018
The First Block
is signed

January, 2019
ECR.money enters
the crypto exchanges

December, 2018
ECR.money releases
the web wallet

September, 2018
Network worth reaches
700 participants

March, 2019
Establishing key partnerships
in the tourism Industry.
Introducing the benefits
of ECR payments

May, 2019
Establishing key partnerships
in the car leasing market

August, 2019
ECR.button
release

June, 2020
Transaction speed upgrade.
Lightning network adoption

February, 2020
Developing the pilot programs
with larger corporations to join the
ECR payment network

October, 2019
ECR.money enters
the retailers market

Originally introduced as Bitcoin's scalability solution, LN enables a peer-to-peer system of micro-payments supported with smart-contracts. Instead of placing every transaction in a block, peers on the LN would open a virtual tab (smart-contract). Their transactions would be recorded on that tab, and once it is closed, the result goes as a single transaction into a block. Such an upgrade would make ECR transactions almost instantaneous.

ECR.SUMMARY

The advances in communication technology are driving the economic shift known as globalization. The growth of cross-border transactions accelerates international trade, ideas, and culture. Financial instruments like money, stocks, and bonds are going through rapid changes to support the modernization of the global economy. With a current threshold of 100 transactions per second, ECR.money is one of the fastest, safest and free forms of digital currencies available to connect businesses and customers.

Unlike other blockchains, ECR does not incentivize the race for rewards among its node-holders focusing instead on building a fair, eco-friendly, and trustworthy community. For the same reason, the management has decided to bootstrap the project with friends and family funding and resources instead of launching an unnecessary coin offering.

ECR.nodes could be launched on computers with just 1Ghz of processing speed and 2Gb of RAM memory, which allows for fast network growth. The ECR network is a solution designed to scale from both philosophical and technological points of view. Transaction speed solutions such as Lighting Network protocol would allow ECR to become virtually the fastest free form of digital payment worldwide.