One. Ether

A simple all-in-one for Ethereum users.

One. Board, Chain, Dice, Estimate, Pool, Unit,

September 12, 2015



One Board: Ethereum Dashboard



One Chain: Ethereum Blockchain Explorer



One Dice: Ethereum Dice Game



One Unit: Ethereum Currency Converter

Inspiration and Mission Statement.

We strive to bring all of Ethereum's needs into one, easy-to-use platform.

This means:

- No searching the web for finding basic tools like currency converters and profitability calculators
- An integrated source of information for common necessities involving Ethereum
- More infrastructure and ongoing development for an amazing cryptocurrency and its community



Additionally, we believe that Ethereum is different. Ethereum is not merely a currency, but *a movement*. And in this movement, sits a number of **ideals on which we absolutely refuse to compromise**.

Our Values

Here's what we believe in, and we hope you share some of our values.

- **Security and Privacy** We don't require, nor want, your personal information. No accounts. All of our services can be accessed with your address, and your address only.
- **Transparency** All of our services are transparent. We provide instantaneous feedback on everything from dice rolls to mining shares. All of it is displayed, live, in front of you, for you to verify. Our dedicated staff is responsive over email for any stray questions that you may have.
- **Open Source Community** Some of the services out there are driven by market-driven greed. Corrupt pool operators, untrusty dice websites, IPO scams are just the tip of the iceberg for what can go wrong when it comes to unregulated markets. We strongly believe in our code, and will open source every component of **One.** as time goes on.
- **Diversity** We wanted another copy of Ethereum's chain on the internet. We don't use Etherscan or Etherchain at any point on our site.
- **Excellence** We strive to offer the best Ethereum web experience, whether it comes to UI or reliability. One. pool operates on a pay-per-share basis, which puts the onus on us to maximize your profits. One. dice involve no accounts, and pays out quickly. One. chain, board, estimate, and unit were all designed to integrate with each other and have a more user friendly, and beautiful experience for our users.

Overview

Here's a rundown of what we have to offer.

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One. Board: The Homepage of Ethereum

Network statistics, balance, exchange rates, and news feeds on one screen.

http://oneether.com/board

Why:

The developers at One. thought that it was exceedingly annoying having to visit different websites to find information. We'd go to one website for network information, hop back to

Reddit to find some news, cross reference that with a tool that converts units back and forth, and hop to a different website again to find information about mining profitability.

No more of that nonsense.

How:

With Board, all of your information is reliably in one place. Exchange rates are fetched live from Poloniex, and balance/network information are all precomputed from a server-side copy of the Ethereum blockchain and stored into a MongoDB database.

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One. Chain: An Ethereum Blockchain Explorer

Comprehensive, beautiful information on accounts, transactions, and blocks on the network.

http://oneether.com/chain

Why:

Our own blockchain explorer was created out of necessity for many of our other products to run seamlessly. Instead of relying on external API's for checking the validity of our payments and displaying information to our users, which may lead to security issues and unreliability, we decided to code our own blockchain explorer. Additionally, our explorer lends to greater integration across our site.

The chain adds another blockchain explorer to Ethereum's family of other explorers, which adds redundancy to the network and builds upon its infrastructure.

How:

Blocks are processed live server side and stored in a MongoDB database using a multi-threaded Go framework. The last 8 blocks are marked "pending" and stored in a separate database. Once 8 blocks have cleared, they enter the main chain.

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One. Dice: A Satoshi-dice style Dice Game

A 2% house edge, provably fair dice game on the Ethereum network.

http://oneether.com/dice

Why:

As of now, there are no other Satoshi-dice style, reliable dice sites out there. We decided to make one so that people can play.

Above that, we wanted to make a beautiful, trustworthy environment for our users. That means, no deposits, and instant communications of how your rolls went, displayed live on our website.

How:

We use **One.** chain to detect when you've paid our dice accounts, and pay you back after 2 confirmations with our Go payment server.



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One. Estimate: A Mining Profitability Calculator

A comprehensive tool for figuring out exactly how much you make from mining.

http://oneether.com/estimate

Why:

Current mining profitability calculators have a lot of lag, don't look good, and/or don't provide up-to-date information.



We wanted to provide one that used the latest values from Board and Chain, interfaced well with Pool and Unit, and provided a good interface.

How:

All of the code is done client-side. Values come from Chain and Poloniex.

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One. Pool: A Pay-Per-Share Mining Pool

A zero variance and a trustworthy, responsive mining experience. Payouts every 24 hrs.

http://oneether.com/pool

Why:



There are no other pay-per-share mining pools for Ethereum. EthPool recently went down because of payments, and Nanopool is getting too large. We wanted to offer a fully transparent alternative to existing pools out there.

How:

All mining is done on a multi-threaded Go server. All valid submitted shares are rewarded by the network, and relayed to the web client instantly. Balances and payments are completely transaparent.

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One. Unit: A Currency Converter for Ethereum

A zero variance and a trustworthy, responsive mining experience. Payouts every 24 hrs.

http://oneether.com/unit

Why:

There are no convenient currency converters out there. We wanted to make a service to use both internally and externally to fill this void.

We wanted to offer an easy-to-use currency converter that covers an array of both fiat and cryptocurrency units, as well as Ethereum-specific units like Finneys and Szabos.

How:

Like Estimate, all the code is client-side. We pull in data from Poloniex, Coinbase, and an open source, third-party API for fiat-to-fiat exchange rates.

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Release Schedule

- September 14th, 2015: Release of One. Board, Chain, Dice, Estimate, Pool, and Unit
- September 17th, 2015: Source code for Estimate, and Unit released
- September 21st, 2015: 5% account released for Dice.
- September 24th, 2015: Source code for Board released

- September 29th, 2015: Source code for Dice, Chain and Pool released.
- September 30th, 2015: Launch of One. Investment
- October and onwards: Ongoing development to make sure the platform is secure

One. Investment: How You Can Join Us

Note: This is not released yet. We will release this on September 30th, 2015.

Long term, PPS mining pools and dice websites make money. In the short term, they can lose money. Because of the short-term risks for the pool operator inherent with Pay-per-share, and the short-term risks associated with running a dice website, a proper bankroll is important for the following reasons:

- Lowering Pool Fees Currently, One. Pool is running at a 2% pool fee. We believe that can be lower. However, we need to ensure that miners get paid even during high periods of drought, or when unfavorable variance presents itself.
- **Raising Maximum Bets** The maximum bet is tied to the bankroll of the dice account, to ensure that the probability of busting the bank is very low. The larger the bankroll, the more flexibility we can allow for users of **One.** Dice to bet greater quantities.

Investing in **One.** involves the following breakdown:

For each Ether spent, 100 Finneys goes towards increasing the bankroll of the Pool, and 900 Finneys goes towards Dice, with the specific amounts targeted to balance out the bankrolls of each dice account.

Return on investment is calculated via an Ethereum contract, as follows:

• **Deposit:** When an investor deposits Ether into the contract, we store the initial value of the incoming address onto the contract, as well as the amount. Each address will carry



two balances: an *initial balance*, which stays constant over the course of investment, and a *current balance*, which fluctuates with the performance of One.

- **Returns:** Balances are updated every N blocks. The balance for each address is updated as follows:
 - The *total balance* from investors is calculated by adding up the balances of all investments in the contract.
 - The total bankroll of One. is computed by adding up the balances of all Pool and Dice accounts, publicly computed via the contract, minus the balance of One. before investments.
 - The *incremental difference* is calculated by subtracting the *total balance* from the *total bankroll*. That's the total amount of money that was either won or lost in the last update period.
 - The *incremental difference* is split up evenly by all investors. That is, if you own 1% of the *total balance*, your balance is affected by 1% of the *incremental difference*. This changes your *current balance*. Your *initial balance*, remains constant during the lifetime of the investment.
- Withdrawal: Upon withdrawal, the contract records publicly an IOU in a separate table for the *current balance*. If the *current balance* was greater than your *initial balance*, there is a flat 20% fee on the earnings. Otherwise, no fee is charged. Balance can be withdrawn at any time in full without penalty. The IOU cannot be cleared except for when money is sent to the contract; during this time, the contract distributes money to clear outstanding IOU's. Because of the nature of Ethereum contracts, outstanding IOU's are publicly visible to anyone.

