

Build an Interface for the Gnosis Gas Station

Project Goal

The primary goal of this project is to create and host an interface for a “Gnosis Gas Station.” This interface should have a clean UI that details Gas price estimates, Gas price calculator, Gas price history, as well as an FAQ.

Background

If you have performed a transaction on Ethereum you have already been exposed to the concept of gas. Gas is the unit which measures the computational work of running a transaction or smart contract in the Ethereum network. Different transactions require different amounts of gas. To ensure that a transaction will go through and take a reasonable time it is important to set the correct gas costs.

Currently the [EthGasStation](#) is the most common source of information for gas price estimates. According to their website it computes its estimate over the last 1,500 blocks. We have observed that EthGasStation reacts slowly to changes in the network load and gas price peaks.

This means that one often encounters cases where EthGasStation underestimates the gas price. This can cause huge problems when using a single account, as if just one tx executed, you get transactions after it which cannot be mined. We encountered this problem regularly with bots running on the DutchX. After starting our own gas station, no more of those incidents occurred.

So what is different about the Gnosis Gas Station?

The main differences are the following: Ethgasstation looks at the last 1,500 blocks whereas the Gnosis Gas station takes only the last 200 blocks into account. This makes the latter more adaptive to sudden gas price spikes which can be annoying to users. Furthermore, the Gnosis gas station gets the different speeds as follows:

- *Lowest* and *fastest* are the lowest and highest gas prices found in the last 200 blocks, respectively.
- *safeLow* is the 30th percentile of all gas prices found in the last 200 blocks, *standard* is the 50th percentile and *fast* is the 75th percentile.

We would like to have a proper interface for the Gnosis Gas Station to make it available for all people.

Existing work/documentation

- *API*
 - <https://safe-relay.gnosis.pm>
 - <https://safe-relay.rinkeby.gnosis.pm>
 - *Historical data:* <https://safe-relay.gnosis.pm/api/v1/gas-station/history/>

Requirements/Features

*Within this project we want you to build and host an interface for the Gnosis Gas Station.
The interface should have the following attributes:*

General:

- **Public website**
 - *Implementing and hosting*
 - *Operating on Rinkeby and Mainnet*
- **Library and frameworks:**
 - Use high quality existing libraries/ frameworks such as React, Vue, Angular, Svelte, etc with good documentation
- **Open-sourced**
 - *The project should be open-sourced*
 - *You should provide a README on how to setup the website on a server*

UX/UI:

- **Speed**
 - The interface should display the gas price for the speeds fast, standard and safe low
 - Info section on how they are calculated
- **Payment token**
 - The user should have the opportunity to pick other payment tokens
 - Here an info section should be included explaining why another payment option is possible
 - You can fetch the payment tokens and their info from <https://safe-relay.gnosis.pm/api/v1/tokens/?gas=true>
- **Gas price Calculator**
 - It should include a gas price calculator that asks for the Gas used and the Gas price and displaying the Tx fee in the chosen payment option and in USD.
 - Exchange rates should be displayed when choosing another payment option than ETH

- Exchanges rates can be fetched from <https://docs.uniswap.io/smart-contract-api/exchange>
 - Centralized exchange as backup option.
- **History**
 - The user should have the chance to observe the changes in gas price over the time
 - This should be displayed in a graph price vs time for all three speeds
 - The user should be able to choose the start and end date and the payment option
 - The user should be able to see details of the displayed time when moving on a specific point in the graph
- **FAQ**
 - What is gas?
 - What are the different speeds - fast, standard and safe low?
 - How is the speed calculated?
 - How is the Gnosis Gas station different?
 - Why can I choose different payment options?
 - And any other questions you feel are helpful on this website

Others

- Should include information when the website was updated
- Create a screencast guiding through the website

See our mockup slides for guidance:

API

FAQ

Last updates 07.08.2019 11:08:00 AM

Gnosis Gas Station¹

fast

18

GWei

standard

15

GWei

safe low

10

GWei

Choose your Payment option²

ETH

OWL

DAI

REP

KNC

...

Gas price Calculator:

Gas used	Gas price	Tx fee in	Tx fee in \$
<input type="text" value="21,000"/>	<div style="display: flex; justify-content: space-between;"> <div> <div>fast</div> <div>safe slow</div> </div> <div> <div>standard</div> <div>17</div> </div> </div>	<div>ETH</div> <div>0.002</div>	<div>0.12</div>

API

FAQ

Last updates 07.08.2019 11:08:00 AM

Gnosis Gas Station¹

fast
.12
OWL

standard
.10
OWL

safe low
.08
OWL

Choose your Payment option[?]

ETH

OWL

DAI

REP

KNC

...

1 OWL = 0.01244 ETH

Gas price Calculator:

Gas used	Gas price	Tx fee in	Tx fee in \$
21,000	<div>fast</div> <div>standard</div> <div>safe low</div>	0.11	0.12

Others

API

FAQ

Last updates 07.08.2019 11:08:00 AM

Gnosis Gas Station¹

fast
18
GWei

standard
15
GWei

Choose your Payment option[?]

ETH

OWL

DAI

REP

KNC

...

What is gas?
.....

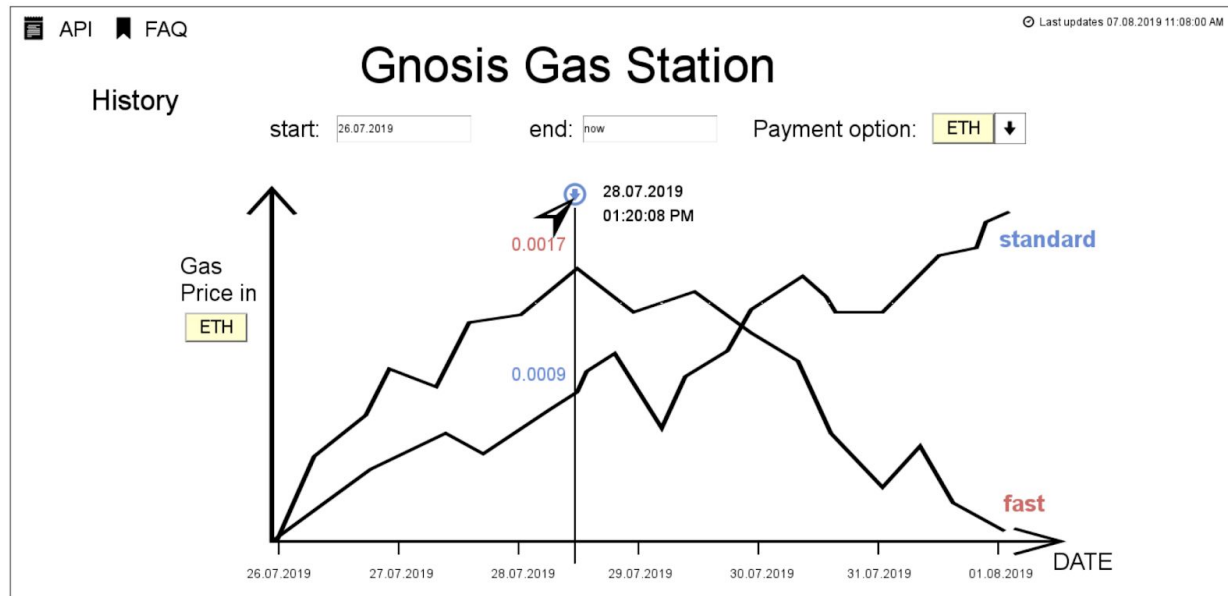
What do the different speeds mean - fast, standard and safe low?
.....

How does the Gnosis Gas Stations calculates the different speeds?
.....

Why can I pay tx in fees in tokens?
The Gnosis Safe allows.....

Gas price Calculator:

Gas used	Gas price	Tx fee in	Tx fee in \$
21,000	<div>fast</div> <div>standard</div> <div>safe slow</div>	0.002	0.12



Note: This are only mockup slide and should be used as a rough guide. You can adjust the slides.

Skills/Knowledge

We are looking for teams that are experienced with front-end development frameworks such as React, Vue, Angular, Svelte, etc. The team should have knowledge in UX design. Furthermore, they should be familiar with the concept of Gas price and the Gnosis Safe

Timeframe

We would expect that this project needs 1-2 months to be implemented.

Funding

We will provide funding of \$5,000 for this project.

Application Deadline

You should submit your working proposal until the end of the next GECCO submission deadline (30.09.2019)

Contact

If you have further questions please reach out to <https://gitter.im/gnosis/GECCO> or via Email GECCO@gnosis.pm