InternalContract for XDC price feed integration

InternalContract is the one which performs all the functions pertaining to blockchain connection, registering the feed's job, initiating the jobs to fetch individual feed results. We have abstracted all those complexities under the hood, which is our internal contract and created a Consumer contract to access the same.

End users should be able to use the "Consumer contract" and access the oracle accordingly.

Internal contract gets data from 4 data sources such as Cryptocompare, Coinmarketcap, Kucoin and Bittrue for XDC/USDT feeds and aggregates the price to return a final value.

We got an additional feature in this internalContract, which is getting the aggregate value for each request by passing the requestID. By this the end user will receive the value for their contract initiation, so we can avoid showing the old fetched value by other users.

consumerContract for XDC price feed integration

Please note, as a user you should have enough "#PLI" token to pay oracle fee in order to access the price feed. For instance, the provided consumer contract needs to be deposited with minimum 1 PLI to max 100. For which, we have provided a small widget right below.

The consumerContract needs to be "Approved" and "Deposited" before using it in actual. We created a widget for the "Approval" & "Deposit", which can be downloaded from github and the steps to install the widget with github link is given below.

Steps to use the widget

Step 1:

Clone the git package to your local pc

Git clone
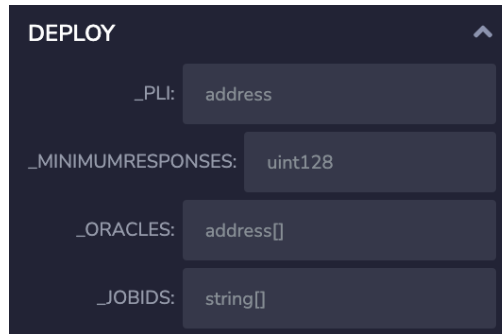**https://github.com/GoPlugin/fathom-plugin-integration-mainnet.git**

Step 2:

Go to 'fathom-plugin-integration-mainnet/internal-contract/' folder and open the file InternalContract.sol file and deploy it in remix

To deploy in remix, please use the below mentioned parameters for remix.

_PLI: 0xff7412ea7c8445c46a8254dfb557ac1e48094391
_MINIMUMRESPONSES: 3
_ORACLES:
["0xE6613113E6e404486B695ACeb9b52cEe25874c2e","0x4465Bc1dc4059984dE0869799CC21951bE24f454","0x8732AC6CC231FF7eb0dD07e58d3D63Ef68ab840B","0x0446d293AF65f3a287C1a464044C7Cc6a15a5155"]
_JOBIDS:
["ba5695f3c6c148df995f960f2fdf6a35","de27392a9abb4c2fbb696d4f16a3e8e5","f497b108821e4453a972d2c15521c1ba","e67dea7ec7f94e89b9d455eacf6443ec"]

Once the contract is deployed, copy the **internal contract address.**

Step 3:

 On command line go to **fathom-plugin-integration-mainnet/client** folder and do

```
npm install
```

Step 4:

 On command line and run below command to install dependencies

```
npm install
```

Step 5:

On command line initiate the widget using the below mentioned command

```
npm start
```

Once the widget is installed, the server interface opens up through http://localhost:3000. The UI is given below for the understanding.

Approve	**Deposit**
Internal Contract	**Internal Contract**
0x762f8d092cB579322616E5465215aEF6ebD6a977	0x762f8d092cB579322616E5465215aEF6ebD6a977
PLI	**PLI**
1	1
Approve	Deposit

Step 6:

In the widget Approve the "internal contract address" copied from **Step 2**, and then Deposit the "Internal Contract" using your PLI tokens from your wallet.

NOTE:

1) The minimum PLI token you can approve and deposit is 1
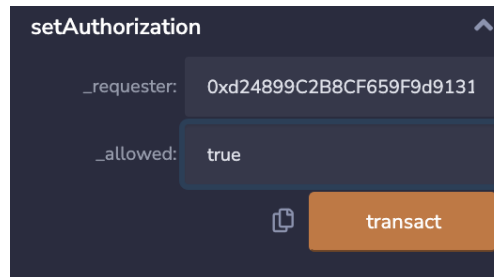2) The maximum PLI token you can approve and deposit is 100

Based on the estimated usage you can deposit the PLI in between minimum and maximum, this PLI will be reserved in the InternalContract and whenever the end user use this feed, the ORACLE FEE of 0.1 will be deducted, in aggregation 0.1 * 4 source = 0.4 PLI will be deducted.

Step 7:

1. Go to 'fathom-plugin-integration-mainnet/consumer-contract/' folder and open the file
2. ConsumerContract.sol file and override the CONTRACTADDR at line number 11 with the **internal contract address** copied in **Step 2**, while overriding the address change "xdc'" in the internal contract address '0x'.
3. Now deploy ConsumerContract in remix
4. After deploying ConsumerContract copy the **ConsumerContract address**

Step 8:

Pass the **ConsumerContract address** as '_requester' and true as '_allowed' in the setAuthorization function of InternalContract deployment and click on 'transact', this will allow ConsumerContract to interact with Internal contract.

Step 9:

1. In the ConsumerContract deployment in remix, click on 'getPriceInfo'.
2. After 30 seconds click on the requestId to get the requestId in 'uint'.
3. Pass the requestId in "show" function and click on "show" to get the aggregate value of XDC/USDT.