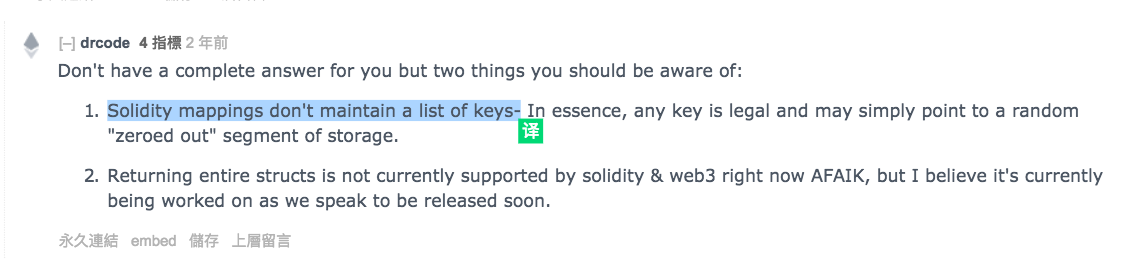
Ethereum Solidity Mapping获取调查报告

Last Edit: 2018-05-29 10:27:52

Version: 1.0

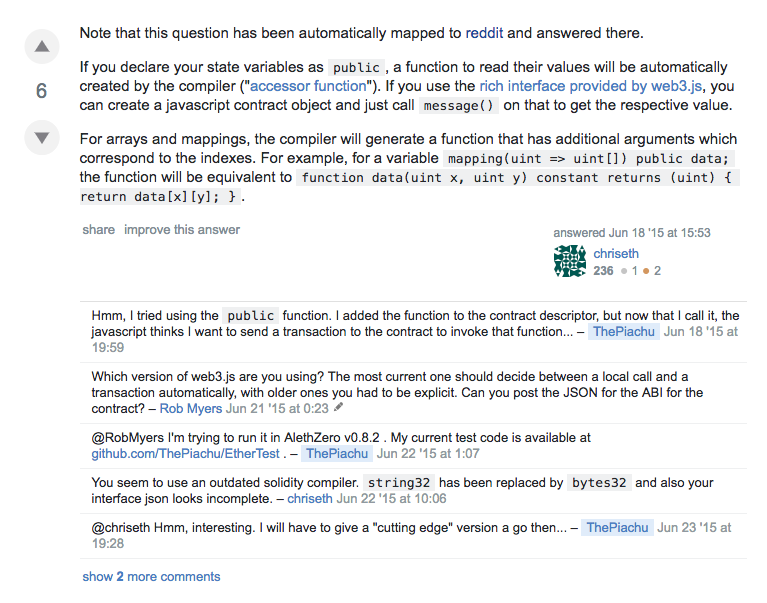
Author: WildSaoFeng

1. 底层机制调查
2. 以太坊底层不维护Mapping的List



地址：

<https://www.reddit.com/r/ethereum/comments/3a8oi0/is_there_a_way_to_access_ethereum_smart_contracts/>



1. 动态变量查询会转成特定下标的单个元素查询

地址： <https://bitcoin.stackexchange.com/questions/38070/is-there-a-way-to-access-ethereum-smart-contracts-variables-by-name-in-javascri>

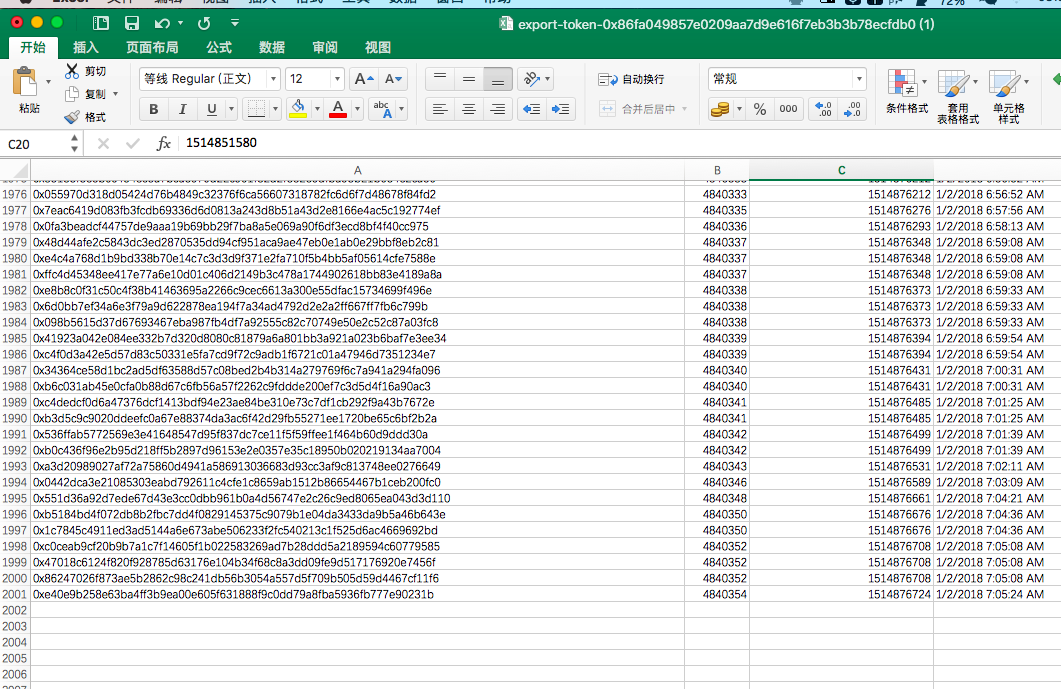
1. 引申结论
   1. 开发、调试时无法获取Mapping类的动态数据
   2. 调用web3的addressAt只能获取mapping的第一个量
2. 解决方法
3. 网页爬虫+本地分析

利用Etherscan把所有跟EOS的数据爬下来，在本地求取所有相关交易的Address数组。好处是不需要搭建全节点，缺点是网页要反反爬虫、带宽要求高

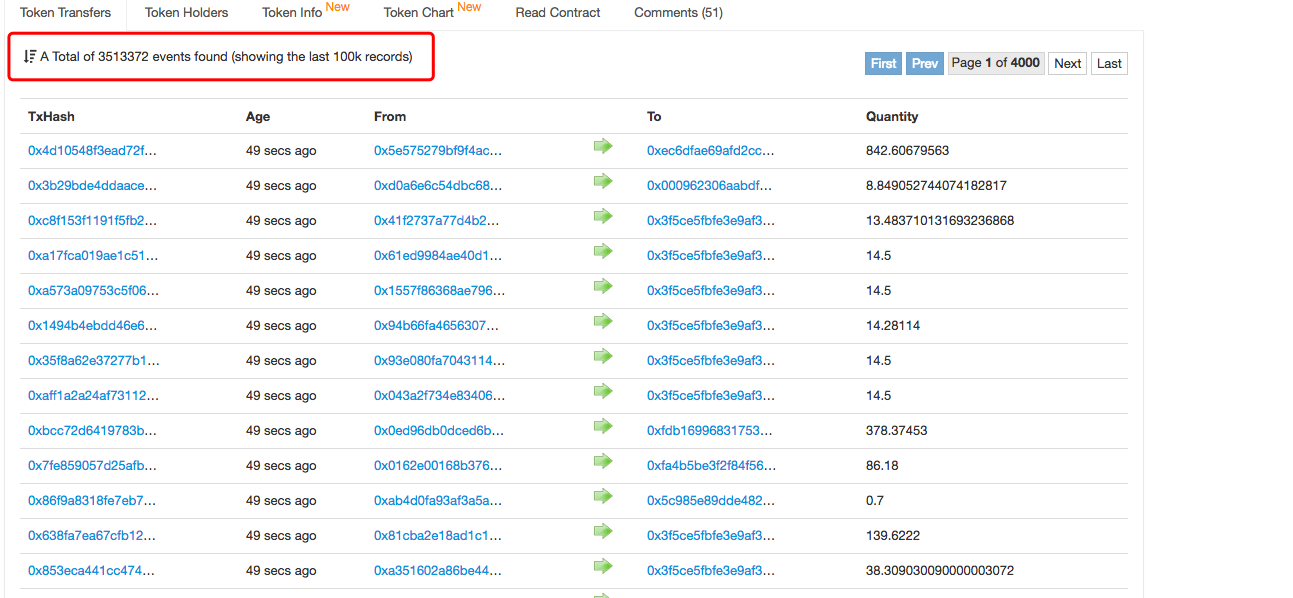
Git仓库： <https://github.com/WildSaoFeng/P008-EthereumMapping> 75%完成

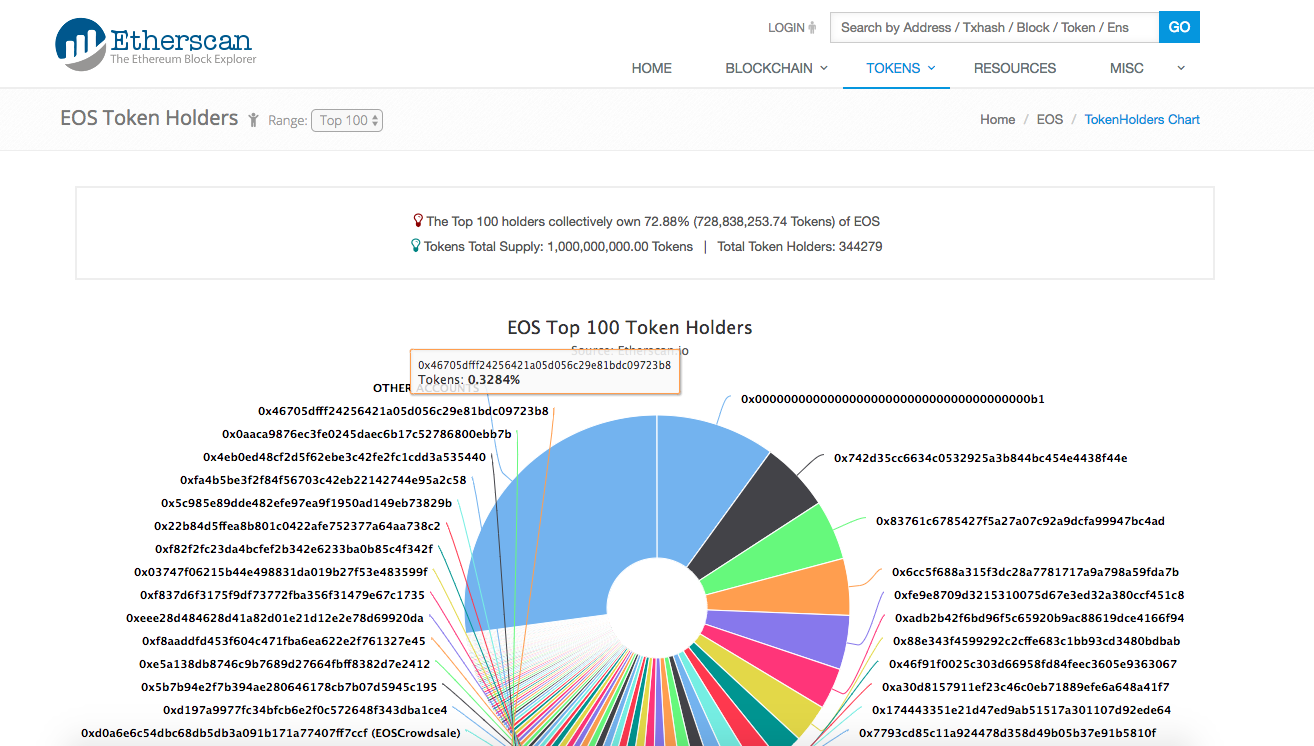
【更新日志】2018年05月31日14:28:38 方法一不可行，原因是Etherscan不提供全部数据

* + 1. CSV文件下载不全，仅有部分Transaction数据



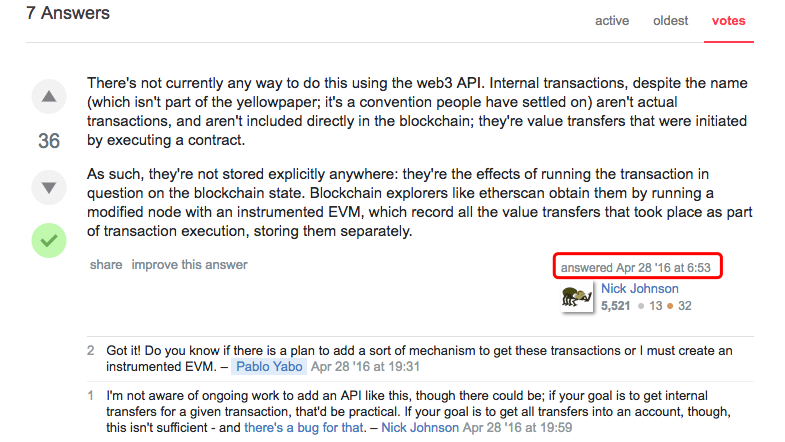
* + 1. Etherscan查询交易



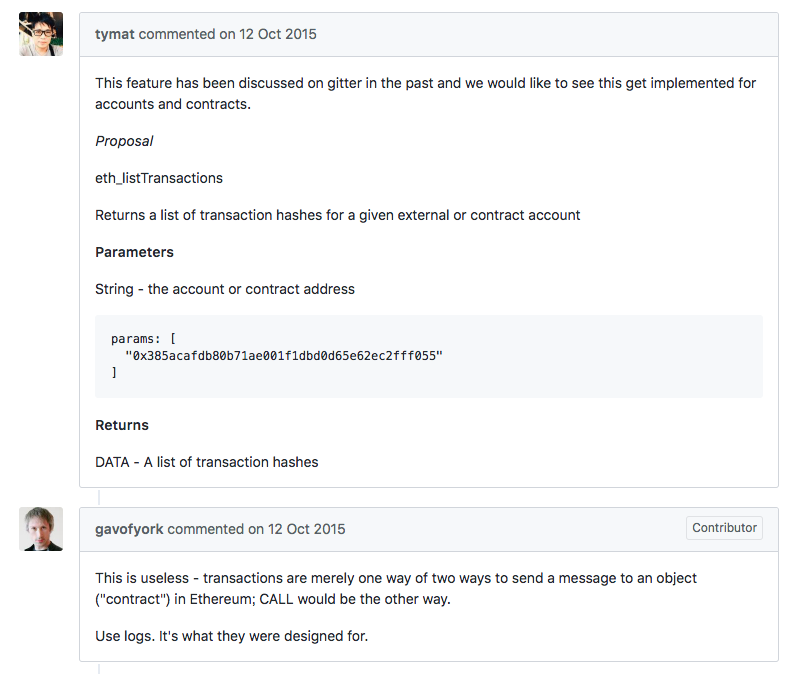
* + 1. Etherscan用户排名
    2. 

1. 本地获取+本地分析

通过Web3与本地Ethereum全节点交互，批量处理查询js脚本，最后获取Address数据。注，Balance有Public方法：balanceOf()。好处是速度快，方便，缺点需要搭建全节点环境

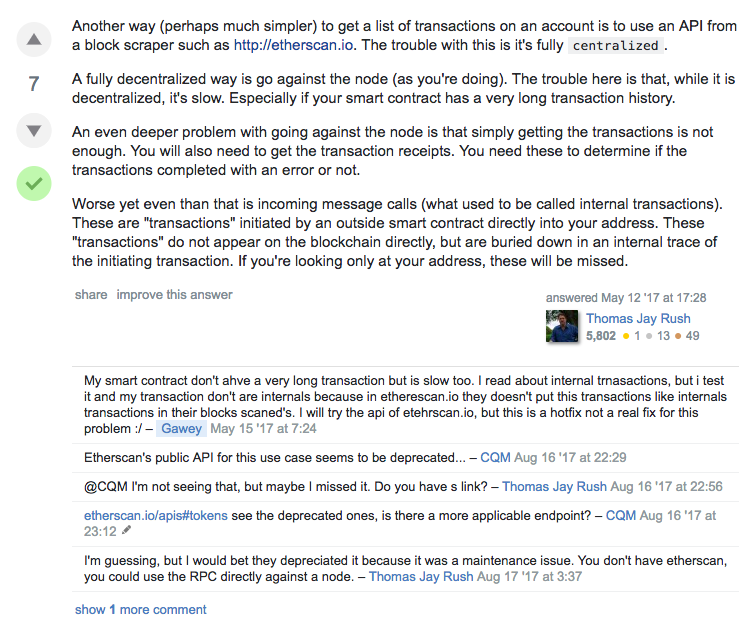


<https://ethereum.stackexchange.com/questions/3417/how-to-get-contract-internal-transactions>



<https://github.com/ethereum/go-ethereum/issues/1897>

总结

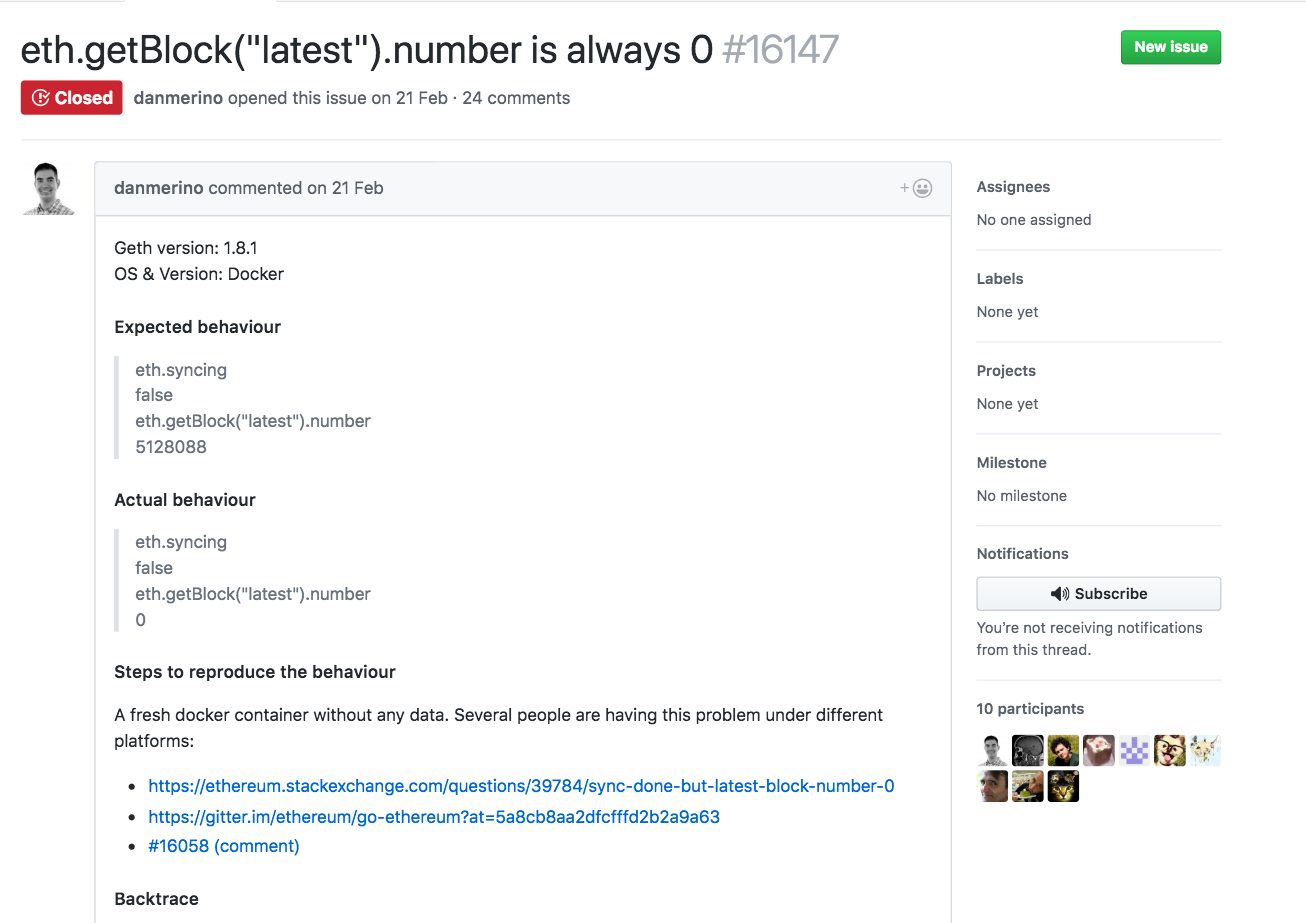


<https://ethereum.stackexchange.com/questions/16112/how-to-obtain-all-transaction-of-a-contract>



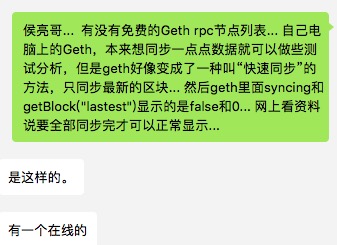
<https://ethereum.stackexchange.com/questions/35605/how-do-i-checkout-all-the-token-transactions-in-a-ether-transaction-using-geth>

遇到问题：Geth同步总是显示BlockNumber为0

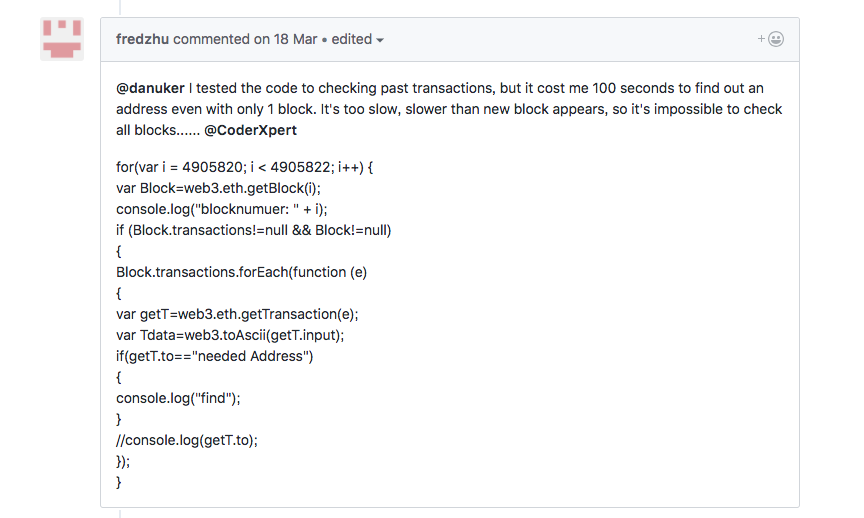


<https://github.com/ethereum/go-ethereum/issues/16147>

解决方法：



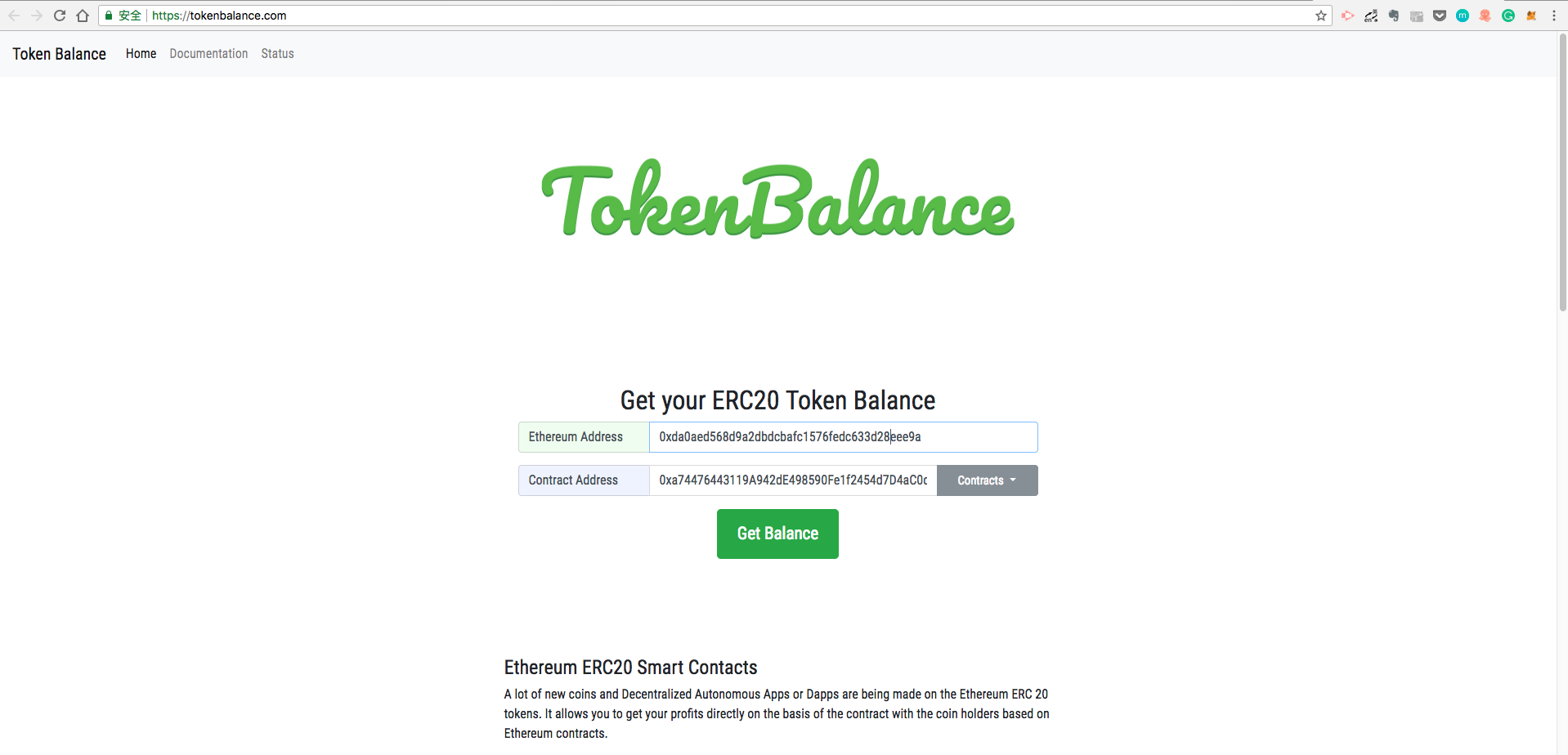
<https://mp.weixin.qq.com/s/-seaz9M7dvAskfPoCpdHpg>



<https://github.com/ethereum/web3.js/issues/580>

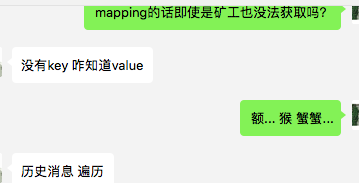
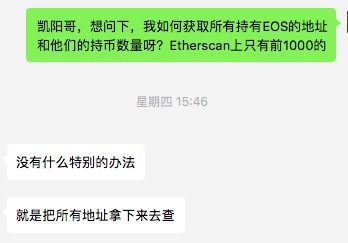
于是去了Infura官网申请

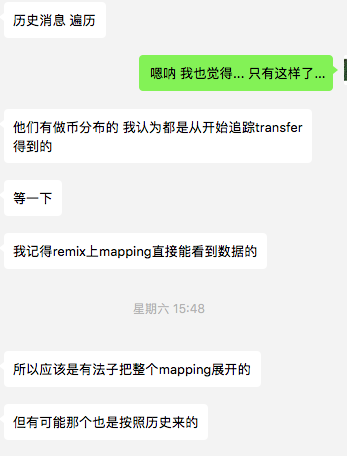
关于Erc20 Token Balance 采用tokenbalance的api查询



1. 附录

询问调查





最后还是没有在Remix上找到相应部分