Multi blockchain, multi node network tests

The Volentix team
sylvain@volentixlabs.com

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1   Preparation

Hardware

1. 2TB SSD

2. 32GB RAM*

3. latest CPU*

4. open ports tcp/8888, tcp-udp/9010, tcp-udp/9011, tcp-udp/9012

5. Home setup

   (a) Gigabit internet

   (b) Linksys WRT 32000 ACM router with ddwrt

   (c) might require gigabit media converter `https://www.amazon.ca/TP-Link-MC220L-Converter-supp`
       `dp/B003CFATL0/ref=sr_1_1?dchild=1&gclid=EAIaIQobChMIm93YoIu67AIVl4rICh3TSwOaEAAYASA`
       `D_BwE&hvadid=283962748757&hvdev=c&hvlocphy=9000525&hvnetw=`
       `g&hvqmt=b&hvrand=1421286694374843535&hvtargid=kwd-296092944459&`
       `hydadcr=19010_10097738&keywords=tp+link+mc220l&qid=1602884818&`
       `sr=8-1&tag=googcana-20`

EOSIO

1. 2 node test network DONE

2. add more nodes ONGOING

ETHEREUM TODO

1. Set up a distributed ethereum test network with openethereum.

2. Deploy the 777 contract onto it

3. Setup openzeppelin tests

4. Mint 2 test pools of 100000.00000000 ERC-777 VTX on Ropsten

Docker network TODO

1. Keosd proxy

2. Eos Node

3. Openethereum

4. Bridging oracle

5. Bitcoin node

6. Vdex node

2 Tests

1. **Staking test**

2. **Persistency test**

    (a) Uptime TODO

    (b) Less than 8 nodes check TODO

    (c) Register and unregister nodes, updates TODO

3. **Authority tests**

    (a) Keosd running as a reverse proxy in docker network

    (b) Reward test DONE

    (c) Oracle test

        i. Load tests

        ii. Ressources test

    (d) Ethereum TODO

        i. bridging oracle/custodian contract

        ii. prevent issuing on the Ethereum side if there are less than 8 nodes

3 Conclusions/Todo

(a) Bridging oracle on ethereum watching eos pool

(b) Reverse proxy
A Nginx HTTPS reverse proxy is an intermediary proxy service which takes a client request, passes it on to one or more servers, and subsequently delivers the server's response back to the client. In our case for key management keosd has to be launched as daemon behind reverse proxy(nginx) nginx will be used to enable password based authentication.

(c) Ethereum oracle finance mechanism will be determined in next iteration

(d) Bridging oracle persistency lock

(e) Vdexnode config mechanism