Docker for Super Node

1. Make a docker file with below info

(Dockerfile and pastel-utility file need to be in same destination).

FROM ubuntu:20.04

RUN apt-get update \

&& apt-get install -y wget \

&& apt-get -qq -y install curl\

&& apt-get install -y libgomp1\

&& apt-get install -y iputils-ping\

&& apt-get install -y zip unzip php-zip\

&& rm -rf /var/lib/apt/lists/\*

COPY ./pastel-utility /

RUN chmod 777 /pastel-utility

1. Build docker image with below command.

$ sudo docker build -t ubuntu-demo .

1. Make 2 containers from that image.

$ sudo docker run --name miner -d -t ubuntu-demo

$ sudo docker run --name supernode -d -t ubuntu-demo

1. Install super node in each container.

$ sudo docker exec miner /bin/sh -c "./pastel-utility install supernode"

$ sudo docker exec supernode /bin/sh -c "./pastel-utility install supernode --peers 192.168.114.1"

1. Create Network for docker containers and assign IP to containers

$ sudo docker network create --subnet 192.168.0.0/16 --ip-range 192.168.240.0/20 pastel-host-network

$ sudo docker network connect --ip 192.168.114.1 pastel-host-network miner

$ sudo docker network connect --ip 192.168.114.2 pastel-host-network supernode

1. Update pastel.conf file in each container.

$ sudo docker exec miner /bin/sh -c "echo 'testnet=1\ngen=1' >> /root/.pastel/pastel.conf"

$ sudo docker exec supernode /bin/sh -c "echo 'testnet=1' >> /root/.pastel/pastel.conf"

1. Run pasteld in each container

$ sudo docker exec miner /bin/sh -c "/root/.pastel/pasteld --mine --daemon --testnet --reindex"

$ sudo docker exec supernode /bin/sh -c "/root/.pastel/pasteld --daemon --testnet --reindex"

-You could check pasteld is running properly.

$ sudo docker exec supernode /bin/sh -c "/root/.pastel/pastel-cli getinfo"

$ sudo docker exec miner /bin/sh -c "/root/.pastel/pastel-cli getinfo"

1. Get account address in supernode container

$ sudo docker exec supernode /bin/sh -c "/root/.pastel/pastel-cli getaccountaddress ''"

E.g output: **tPTrtD4BKx5Qr2LLQE8Wb4HWh52VGfoiuf9**

1. Send coins from miner to supernode container with account address, get transaction id.

$ sudo docker exec miner /bin/sh -c "/root/.pastel/pastel-cli sendmany '' '{\"**tPTrtD4BKx5Qr2LLQE8Wb4HWh52VGfoiuf9**\": 1000000}'"

Expected error: "Account has insufficient funds: needs 1000000.00 coins; has only 0.00 coins spendable "

(In this case, need to copy exact pasteld file into miner container and retry.)

$ sudo docker exec miner /bin/sh -c "pkill pasteld"

$ sudo docker cp pasteld miner:/root/.pastel/

$ sudo docker exec miner /bin/sh -c "/root/.pastel/pasteld --mine --daemon --testnet --reindex"

$ sudo docker exec miner /bin/sh -c "/root/.pastel/pastel-cli sendmany '' '{\"**tPTrtD4BKx5Qr2LLQE8Wb4HWh52VGfoiuf9**\": 1000000}'"

E.g output: **c96d64f13beb3ff55277b03f11d0fa2445b2dda537ca1026a23b748895df83b3**

1. Start super node with outputted transaction id in supernode container

$ sudo docker exec supernode /bin/sh -c "./pastel-utility start supernode --name=masternode1 --ip=188.43.136.32 --create --rpc-ip=192.168.114.147 --rpc-port=9933 --txid=**c96d64f13beb3ff55277b03f11d0fa2445b2dda537ca1026a23b748895df83b3** --ind=1 --passphrase=4342 --network=testnet"

1. Wait until sync

-You could check sync status with below cmd

$ sudo docker exec supernode /bin/sh -c "/root/.pastel/pastel-cli mnsync status"

-Once it synced and output like below it means success.

File created: /root/.pastel/supernode/supernode.yml

Configuring supernode was finished

Start supernode

Waiting for supernode started...

Supernode was started successfully