How to run a single node test network

It can be very useful to be able to run a single node network for testing purposes when undergoing contract development. This document outlines the steps required in order to configure afetchd network of 1 node (i.e.single node network).

Network setup

ℹ These steps only need to be carried outonce to setup the local network correctly. 1. Build the ledger from source 2. : follow theinstallation ↗ 3. instructions in order to compile the latest version of the Ledger. 4. Remove any existing networks 5. : since we are starting a new network, we need to remove any local files that we have in our system from a previous network. You can do so by running: 6. rm -Rf ~/.fetchd 7. Create an initial genesis 8. : let's now create the initial genesis file (~/.fetchd/config/genesis.json 9.) with the following command: 10. fetchd init --chain-id localnet-1 my-local-node-name 11. ℹ 12. * localnet-1 13. * is the chain id 14. * my-local-node-name 15. * is the moniker for the node 16. If you want to make any updates to the genesis, it is a good time to make these updates now. 17. Create a validator key 18. : let's now create a validator key which will be used as the public/private keypair for our node. Let's create a new key calledvalidator 19. using the following command: 20. fetchd keys add validator 21. ℹ 22. validator 23. is the name of the key in the keyring. 24. For more information, checkout the completekeys ↗ 25. documentation. 26. Add the validator to the network 27. : let's now set the initial state for the network, allocating10000000000000000000 28. stake 29. tokens to the validator which can be bonded. This is performed with the following command: 30. fetchd add-genesis-account validator 10000000000000000000stake 31. ℹ 32. stake 33. is the default test token denomination in the cosmos ecosystem, but you could useafet 34. ,BTC 35. , and so on. 36. Generate a transaction 37. : now, let'sgenerate a validator transaction 38. . You can get your validator to sign the genesis block, and to agree that this is the correct genesis starting point, using the following command: 39. fetchd gentx validator 10000000000000000000stake --chain-id localnet-1 40. ℹ 41. validator 42. is the name that you have given to the key. 43. Build final genesis configuration 44. : finally, we would need tobuild the complete and final genesis configuration 45. for the network by running the following command: 46. fetchd collect-gentxs

After running this command, the network will be successfully configured and you have computed the final genesis configuration for the network.

Running the local node

Let's now run the network. We need to use the following command:

fetchd start

Resetting the network

It may happen that you may want to clear out all the data from the network and start it again. You can do this in a local network, by simply running the following command:

fetchd tendermint unsafe-reset-all

This will reset the chain back to genesis configuration.

⚠ YouDO NOT need to perform the network setup steps again. After running this command, you can simply run thefetchd start command again.

Was this page helpful?

How to join a testnet Governance