

# Neutron standalone docker

This page contains information about building and running a Neutron node in a standalone way.

## Prerequisites

- Docker engine;
- Golang v1.20 ([go releases and instructions](#))
- ).

## Build and run

### 1. Make sure you have the required golang version

go version The output should comply with the golang version mentioned in the [Prerequisites](#) section.

### 2. Clone Neutron core repository and cd into it

```
git clone -b v2.0.3 https://github.com/neutron-org/neutron.git cd neutron
```

### 3. Build a Neutron node image

```
make build-docker-image
```

### 4. Run a Neutron node as a docker container

make start-docker-container A Neutron node is now running in the background. To see the app logs, run:

docker ps And use the neutron-node container ID in the following command:

docker logs -f To stop the node, run

```
make stop-docker-container
```

## Usage

### Ports

The Neutron node exposes several ports to be used by you and your applications:

- 1317:1317 — the REST server;
- 26657:26657 — the Tendermint RPC server;
- 26656:26656 — the Tendermint P2P server;
- 9090:8090 — the gRPC server.

### Interaction with the node using neutrnd

The Neutron node is available to be interacted with using `neutrnd` command. The following command will install `neutrnd` at your computer:

make install It will build `theneutrnd` based on the current version of the Neutron core and place the result binary to your `GOBIN` directory. Make sure `GOBIN` is defined and is a part of the `PATH` env variable. If you have any troubles at this step, try to shoot them by verifying you have the golang related env variables set properly.

Once installation is done, `theneutrnd` is ready to be used:

```
neutrnd query bank total
```

### Making transactions

There are several accounts added at the genesis state that possess NTRN and are at your service. See the [genesis init script](#) to find out more details about it. The following command will list you all the preallocated addresses:

docker exec neutrnd keys list --keyring-backend test --home data/test-1/ We suggest you to add the accounts from the init script mentioned above to your local test keyring to make them useful directly from command line. To do so, copy a mnemonic from the script and use it in a keypair recovery procedure:

neutrnd keys add --recover --keyring-backend test

Enter your bip39 mnemonic After that, you'll be able to make transactions on behalf of the account and fund your applications and smart contracts. [Previous Neutron build from sources](#) [Next Cosmopark](#)