# Cosmopark

This page contains information about building and running Neutron node interconnected with a Gaia node by a Hermes IBC Relayer and a Neutron ICQ Relayer. This is a more advanced section than the basic sole Neutron node flow which is based on the Neutron's integration tests setup.

# **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 necessary repositories

You'll have to clone several repositories into a single parent folder. Choose a parent directory and make clonings from it. This is crucial to have all the repositories cloned and stored in the same parent folder.

#### **Clone Neutron repositories**

git clone -b v2.0.3 https://github.com/neutron-org/neutron.git git clone https://github.com/neutron-org/neutron-integration-tests.git git clone -b v0.2.0 https://github.com/neutron-org/neutron-query-relayer.git

#### Clone and prepare Gaia

We use the Gaia network as a target network for interchain operations. We use v14.0.0 for the tests.

git clone https://github.com/cosmos/gaia.git cd gaia git checkout v14.0.0

#### 3. Build images

The commands from this section are available from thesetup folder in theneutron-integration-tests project.

If it's the first time you're here, run

make build-all If you have the images built and you want to rebuild one of them, the following commands which build each component separately are also available:

make build-gaia make build-neutron make build-hermes make build-relayer

#### 4. Download Neutron DAO contracts

Neutron has Neutron DAO contracts in genesis, so before running you need to download the latest version of contracts:

npx @neutron-org/get-artifacts neutron-dao -b main -d contracts

### 5. Run Cosmopark

The commands from this section are available from thesetup folder in theneutron-integration-tests project.

make start-cosmopark A Neutron node, a Gaia node, a Hermes instance and an ICQ Relayer instance are now running in the background. To see the apps logs, run:

docker ps And use the container ID you want to observe logs of:

docker logs -f Cumulative logs are available via running

docker-compose logs -f To stop cosmopark, run

make stop-cosmopark

# 6. Usage

#### **Neutron node**

The Neutron node usage guidelines (exposed ports, CLI, prepared accounts) for Cosmopark are the same as for the sole run. Please refer to the corresponding section to see more details on it.

#### Hermes

For more information about Hermes, refer to the dedicated section and its configuration folder in the neutron-integraton-tests repo.

# **ICQ** Relayer

For more information about ICQ Relayer, refer to the dedicated section and its configuration via docker-compose file in the integration-tests repo.

#### Gaia

The Gaia node running in the Cosmopark is configured viadocker-compose file . Previous Neutron standalone docker Next Localnet