

How to set up a full node

Pre-requisite

1. Linux (Ubuntu Server 22.04.3 recommended)
2. 8-cpu (ARM or x86_64), 64 GB RAM, 500 GB SSD NVME Storage

Get the dydxprotocolcld binary and initialize the data directory

Note: the example values below align with the deployment by DYDX token holders . For alternatives, please visit the [Network Constants page \(opens in a new tab\)](#) . 1. From [https://github.com/dydxprotocol/v4-chain/releases/\(opens in a new tab\)](https://github.com/dydxprotocol/v4-chain/releases/(opens in a new tab)) 2. | Look for the protocol 3. assets. 4. For example, as of 10/19/2023 5. , this was the correct binary to use: 6. Download, extract, and rename the binary to dydxprotocolcld 7. . Move it to a directory in your PATH 8. . Now, initialize the data directory (create the directory first if it doesn't exist).

CHAIN_ID

```
dydx-mainnet- 1 DYDX_HOME = /home/vmware/.dydx-mainnet- 1 NODE_NICKNAME = mydydxfullnode
```

```
dydxprotocolcld init
```

```
--chain-id=CHAIN_ID
```

```
--home=DYDX_HOME NODE_NICKNAME
```

Get the latest applicable genesis.json file and install

Note: the example values below align with the deployment by DYDX token holders . For alternatives, please visit the [Network Resources page](#) . 1. Use

```
curl https://dydx-ops-rpc.kingnodes.com/genesis
```

```
| python3 -c
```

```
'import json,sys;print(json.dumps(json.load(sys.stdin))["result"]["genesis"], indent=2)'
```

genesis.json to get the applicable Genesis state of the network.

1. Copy the applicable genesis.json
2. file to the data directory's config/
3. directory
4. (Alternatives): If the RPC endpoint above does not work, there are these alternatives:
5. [https://dydx-dao-rpc.polkachu.com/genesis\(opens in a new tab\)](https://dydx-dao-rpc.polkachu.com/genesis(opens in a new tab))
6. [https://dydx-mainnet-full-rpc.public.blastapi.io/genesis\(opens in a new tab\)](https://dydx-mainnet-full-rpc.public.blastapi.io/genesis(opens in a new tab))
7. Also check [Full node endpoints → RPC](#)

Install Bware's snapshot (optional but saves days)

Note: the example values below align with the deployment by DYDX token holders . For alternatives, please visit the [Network Resources page](#) . 1. From [https://bwarelabs.com/snapshots/dydx\(opens in a new tab\)](https://bwarelabs.com/snapshots/dydx(opens in a new tab)) 2. Download and extract (using `lz4 -dc < snapshotfile.tar.lz4 | tar xf -` 3.) the snapshot contents in the data directory (make sure you are in the data directory before running the tar command). Important: The home directory (DYDX_HOME 4. or /home/vmware/.dydx-mainnet- 1 5. in our example) contains another data/ 6. directory. 7. (Alternatives): If the above is not available, there are these alternatives:

- [https://polkachu.com/tendermint_snapshots/dydx\(opens in a new tab\)](https://polkachu.com/tendermint_snapshots/dydx(opens in a new tab))
- [https://dydx-archive-snapshot.kingnodes.com/\(opens in a new tab\)](https://dydx-archive-snapshot.kingnodes.com/(opens in a new tab))
- Also check [Snapshot service](#)

Start the full node

Note: the example values below align with the deployment by DYDX token holders . For alternatives, please visit the [Network Resources page](#) . 1. Start the full node. Note that you may need to change the --p2p.seeds 2. parameter depending on the applicable v4 software blockchain network – you can find an example on [Resources page under "Seed nodes"](#)

DYDX_HOME

```
/home/vmware/.dydx-mainnet- 1
```

```
nohup dydxprotocolcld
```

```
start
```

```
--p2p.seeds=
```

```
"ade4d8bc8cbe014af6ebdf3cb7b1e9ad36f412c0@seeds.polkachu.com:23856,65b740ee326c9260c30af1f044e9cda63c73f7c1@seeds.kingnodes.net:23856,f04a77b92d0d86725cdb2d6b7a7eb0eda8c2mainnet-seed.bwarelabs.com:36656,20e1000e8812569826445a884812746c2eb4807@seeds.lavenderfive.com:23856,c2c2fcb5e6e4755e06b83b499aff93e97282f8e8@tenderseed.ccvalidators.com:26401,4f2(nest.com:26656,a9cae4047d5c34772442322b10ef5600d8e54900@dydx-mainnet-seednode.allthatnode.com:26656,802607c6db8148b0c68c8a9ec1a86fd3ba606af6@64.227.38.88:26656,4c30c8a95e26b07b249813b677caab28bf0c54eb@rpc.dydx.nodestake.top:666,ebc272824924e-mainnet-seed.autostake.com:27366"
```

```
--home=DYDX_HOME
```

```
--non-validating-full-node=true
```

```
/tmp/fullnode.log
```

```
2>&1
```

& 1. You can tail the log to see the progress.

```
tail -f
```

/tmp/fullnode.log 1. The full node is now syncing. To determine whether the full node is caught up with the chain head, please check the applicable block explorer to determine when it reaches the current block – an example block explorer is shown on [https://www.mintscan.io/dydx\(opens in a new tab\)](https://www.mintscan.io/dydx(opens in a new tab))

Things you can do with the full node

GET CURRENT BLOCK: You can get the current block with this program [https://github.com/chiwalfirm/dydxexamples/blob/main/v4block_subscribe.py\(opens in a new tab\)](https://github.com/chiwalfirm/dydxexamples/blob/main/v4block_subscribe.py(opens in a new tab))

Run it with the full node IP address and port 26657 :

```
python3 v4block_subscribe.py
```

```
ws:// < IPADDRESS
```

```
: 26657 Where is the IP address of your full node.
```

Last updated on April 30, 2024 [Required Node Configs Running a Full Node](#)