

Conflux

Conflux PoW() + PoS() RPC node (client

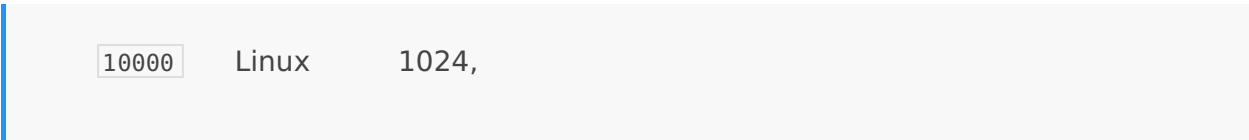
ArchiveNode VS FullNode

Conflux (ArchiveNode) (FullNode) (LightNode)
 , RPC ArchiveNode.

ArchiveNode

- CPU 4Core
- 16G
- 1T

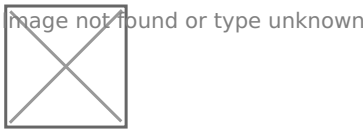
Fullnode



G7 AWS m5.xlarge

RPC ESSD AWS GP3 6000IOPS Provisioned IOPS SSD

Conflux Github [Release](#) [Conflux-rust](#) [Release](#) [Release](#) Window



conflux-vx.x.x, conflux-vx.x.x-testnet.

zip run

```
→ tree
.
├── conflux #
├── log.yaml #
├── pos_config # pos
│   ├── genesis_file
│   ├── initial_nodes.json
│   └── pos_config.yaml
├── start.bat # windows
├── start.sh # unix
├── hydra.toml #
└── throttling.toml #
```

0 directories, 6 files

conflux hydra.toml(tethys.toml), wind(conflux.exe

hydra.toml (tethys.toml), testnet.toml. bootnodes chainId conflux-rust Github run
hydra.toml testnet.toml

()

- node_type: full (archive, light

chainId

- chainId 1029, 1 ID)
- evm_chain_id eSpace chainId, 1030, 71 ()

Miner related

- `mining_address`: hex40 CIP-37 (`minint_type` of `stratum` chainId)
- `mining_type`: `stratum`, `cpu`, `disable`
- `stratum_listen_address`: `stratum`
- `stratum_port`: `stratum`
- `stratum_secret`: `stratum`

RPC related

- `jsonrpc_cors`: `none`, `all`, ()
- `jsonrpc_http_keep_alive`: `false` or `true` rpc HTTP connections KeepAlive
- `jsonrpc_ws_port`: websocket rpc
- `jsonrpc_http_port`: http rpc
- `public_rpc_apis`: `rall`, `safe`, `txpool`, `pos`, `cfx`, `debug`, `pubsub`, `test`, `trace`
(`safe=cfx+pubsub`) `safe`
- `persist_tx_index`: `true` or `false` transaction RPCs , Archiv
- `executive_trace`: `true` or `false` trace EVM execution trace database
- `get_logs_filter_max_epoch_range`: Event log `cfx_getLogs` epoch
- `get_logs_filter_max_limit`: `cfx_getLogs` log
- `jsonrpc_http_eth_port` = 8545 eSpace http
- `jsonrpc_ws_eth_port` = 8546 eSpace websocket
- `public_evm_rpc_apis` = "evm" eSpace RPC namespace

Snapshot

- `additional_maintained_snapshot_count`: stable checkpoint snapshot 0 stable (snapshot

directories

- `conflux_data_dir`: block data, state data, node database
- `block_db_dir`: block `conflux_data_dir` `blockchain_db`
- `netconf_dir`: network `net_key`

Log related

- `log_conf`: `log.yaml` `log_level`
- `log_file`: log stdout
- `log_level`: `error`, `warn`, `info`, `debug`, `trace`, `off`

log

(dev)

Conflux-rust (dev) RPC

- `bootnodes` :
- `mode` : `dev`
- `dev_block_interval_ms` : , (ms)

`Conflux-rust v2.0` `dev` http RPC port

genesis

`dev` `genesis_secrets.txt` `genesis` `genesis_secrets` 0x , :

```
genesis_secrets = './genesis_secrets.txt'
```

`10000,000,000,000,000,000,000` Drip 1w CFX

- `net_key` : 256 bit node id 64 hex
- `tx_pool_size` : 50W (
- `tx_pool_min_tx_gas_price` : gas (

`dev_pos_private_key_encryption_password`

```
#  
$ ./start.sh
```

stdout :

```
2021-04-14T11:54:23.518634+08:00 INFO main network::thr -  
throttling.initialize: min = 10M, max = 64M, cap = 256M
```

```

2021-04-14T11:54:23.519229+08:00 INFO main conflux -
:'#####::'#####::'##::##'#####'##:::##'##::'##'#####'##
'##...##'##...#####:##.##.....:##:::##:##.##:'##:
##:::##:##:##.###.##.##:::##:##:##:##.##.##.##:
##:::##:##.##.##.###.##.##:::##:##:##:##.##.##.##:
##:::##:##.##.##.###.###.#####:##:##:##:##.##.###:
##:::##:##.##.##.###.##.##:::##:##:##:##:##.##.##.##:
##::.##.##:##.##.###.##.##:::##:##:##:##:##.##.##.##:
.#####.#####:##.##.##.##:#####.#####:##.##.##
:.....
Current Version: 1.1.3-testnet

```

```

2021-04-14T11:54:23.519271+08:00 INFO main conflux - Starting full
client...

```

```
blockchain_data, log
```

catch up

epoch

```

2021-04-16T14:49:11.896942+08:00 INFO IO Worker #1 cfxcore::syn - Catch-up mode:
true, latest epoch: 102120 missing_bodies: 0
2021-04-16T14:49:12.909607+08:00 INFO IO Worker #3 cfxcore::syn - Catch-up mode:
true, latest epoch: 102120 missing_bodies: 0
2021-04-16T14:49:13.922918+08:00 INFO IO Worker #1 cfxcore::syn - Catch-up mode:
true, latest epoch: 102120 missing_bodies: 0
2021-04-16T14:49:14.828910+08:00 INFO IO Worker #1 cfxcore::syn - Catch-up mode:
true, latest epoch: 102180 missing_bodies: 0

```

```
cfx_getStatus
```

epochNumber

scan

epoch

RPC

RPC

Dapp

RPC url

.

```
http://node-ip:12537
```

Portal

SDK

.

Docker

Docker Docker pull image

image

tag pipeline:

- x. x. x-mainnet :
- x. x. x-testnet :
- x. x. x :

Conflux v2.0 Updates

Conflux v2.0 (Hydra) 8 CIP PoS eSpace

tethys.toml hydra.toml

- evm_chain_id = 1030 eSpace chainId1030 71
- jsonrpc_http_eth_port = 8545 eSpace http
- jsonrpc_ws_eth_port = 8546 eSpace websocket
- public_evm_rpc_apis = "evm" eSpace RPC namespace
- dev_pos_private_key_encryption_password = "your-password" () PoS pos_k
dev_pos_private_key_encryption_password

bootnodes

pos_config

V2.0 hardfork pos_config PoS genesis

- genesis_file
- initial_nodes.json
- pos_config.yaml

pos_config .

pos_key , PoS

conflux binary dev_pos_private_key_encryption_password pos_key ,

Conflux 1 200G 1T(ArchiveNode)

PoS

- PoS PoS PoS PoS
- pos_key PoS
 - pos_key CFX PoS
 - (foreRetired) PoS unlock unlock 14 PoS

PoS forceRetired

- PoS
1. PoS ./conflux rpc local pos stop_election null PoS PoS
 2. PoS null PoS
 3. null PoS 2-3 PoS

PoS pos_key

PoS pos_key pos_db/secure_storage.json pos_key

checkpoint replay checkpoint .

?

?

:

- `persist_tx_index`
- `executive_trace`

.

archive node ?

2022.8.1

300 G

?

GPU

archive node

[fullnode-node](#)

error ?

`start.sh` `stderr.txt`

IP

RPC

Conflux

IP

v2

No such device or address

v1.x

v2

`dev_pos_private_key_encryption_password`


```
Error: "failed to start full client: \"0s { code: 6, kind: Uncategorized, message: \\\"No such device or address\\\" }\""
```

-
-

Revision #7

Created 11 June 2022 14:49:03 by Pana

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