Archive Nodes

Archive All Blockchain Data.

An archive node keeps all the past blocks. An archive node makes it convenient to query the past state of the chain at any point in time. Finding out what an account's balance, stake size, etc at a certain block was, or which extrinsics resulted in a certain state change are fast operations when using an archive node. However, an archive node takes up a lot of disk space - nearly 2TB for secret-4 as of Feb 1, 2023.

Recommended Requirements

- 32GB RAM
- 3TB NVMe SSD
- 2 dedicated cores of any Intel Skylake processor (Intel® 6th generation) or better (Xeon gen3 (Ice Lake) NOT supported)
- Motherboard with support for SGX in the BIOS
-

More on hardware support here .

Note that syncing from scratch/following these instructions takes several weeks, since state-sync is not available for Archive Nodes. To setup your archive node you can follow the instructions below:

Install latest secretd

Download the secretd .deb from the latest release .

Note : As of writing these lines the latest release is v1.6.0 will be referenced as so for the rest of this document.

Node : Archive nodes are only available with goleveldb . If this doesn't mean anything to you, just proceed with this guide as usual.

```

Copy

# Get the v1.6.0 binaries

wget "https://github.com/scrtlabs/SecretNetwork/releases/download/v1.6.0/secretnetwork_1.6.0_mainnet_goleveldb_amd64.deb"

# Verify the v1.6.0 binaries

echo 'ce9ba85d346fa460ed3fc98871f2a254b269fafa835fc555c9184f6405d8c80a secretnetwork_1.6.0_mainnet_goleveldb_amd64.deb' | sha256sum --check
```

Install secretd

```

Copy sudo dpkg -i secretnetwork_1.6.0_mainnet_goleveldb_amd64.deb

# verify installation

secretd version

## 1.6.0

```

Setup the Node

Setup the node using the Running a Full Node guide. You should stop at the Set minimum-gas-price Parameter step.

Do NOT begin syncing yet!

Install v1.2.0-archive secretd

Now that you have registered the node with the latest version, install v1.2.0-archive .

```

Copy

# Get the v1.2.0-archive binaries

wget "https://github.com/scrtlabs/SecretNetwork/releases/download/v1.2.0-archive/secretnetwork_1.2.0-archive_amd64.deb"

# Install the v1.2.0-archive binaries

sudo dpkg -i secretnetwork_1.2.0-archive_amd64.deb
```

Set Pruning Parameter

```

Copy pruning="nothing" sed -i -e "s/^pruning =./pruning = \"pruning\"/" $HOME/.secretd/config/app.toml
```

Begin Syncing

Note that the secret-node system file is created in a previous step.

```

Copy sudo systemctl enable secret-node && sudo systemctl start secret-node
```

If everything above worked correctly, the following command will show your node streaming blocks (this is for debugging purposes only, kill this command anytime with Ctrl-C). It might take a while for blocks to start streaming, so grab some   while you wait!

```

Copy journalctl -f -u secret-node
```

```
Copy -- Logs begin at Mon2020-02-1016:41:59UTC. -- Nov0911:16:31scrt-node-01secretd[619529]:11:16AM INF indexed block height=12module=txindex Nov0911:16:35scrt-node-01secretd[619529]:11:16AM INF Ensure peers module=pex numDialing=0numInPeers=0numOutPeers=0numToDial=10 Nov0911:16:35scrt-node-01secretd[619529]:11:16AM INF No addresses to dial. Falling back to seeds module=pex Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF Timed out dur=4983.86819height=13module=consensus round=0step=1 Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF received proposal module=consensus proposal={"Type":32,"block_id":
{"hash":"0AF9693538AB0C753A7EA16CB618C5D988CD7DC01D63742DC4795606D10F0CA4","parts":
{"hash":"58F6211ED5D6795E2AE4D3B9DBB1280AD92B2EE4EEBAA2910F707C104258D2A0","total":1}},"height":13,"pol_round":-
1,"round":0,"signature":"eHY9dH8dG5hEINEGbw1U5rWqPp7nXC/VvOIAbF4DeUQu/+q7xv5nmc0ULljGEQR8G9fhHaMQuKjgrxP2KsGICg=="}
Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF received complete proposal block
hash=0AF9693538AB0C753A7EA16CB618C5D988CD7DC01D63742DC4795606D10F0CA4height=13module=consensus Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF finalizing commit
of block hash=0AF9693538AB0C753A7EA16CB618C5D988CD7DC01D63742DC4795606D10F0CA4height=13module=consensus
num_txs=0root=E4968C9B525DADA22A346D5E158C648BC561EEC351F402A611B9DA2706FD8267 Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF minted coins from module account
amount=6268801uscrt from=mint module=x/bank Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF executed block height=13module=state num_invalid_txs=0num_valid_txs=0
Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF commit synced
commit=436F6D6D697449447B5B373520353520323020352032342031312032333382035332038372031313720313337203132302031363820323430203530203232320203537203435203636203138322
Nov0911:16:36scrt-node-01secretd[619529]:11:16AM INF committed state app_hash=4B371405180BEE3557758978A8F032DC392D42B6BDEF63F94C2670361703EC2F height=13module=state
num_txs=0 ^C
```

You now have an Archive node running!

Execute upgrades

Syncing a node from scratch means that from time to time you'll need to perform an upgrade (at the block height that the upgrade was originally took place on mainnet).

You will need to use the designated archive-node binaries when available. For the rest of the upgrades, use the binaries for the respective version from the releases page .

As of the writing of these lines, the upgrade timing (in block-height) are:

- v1.3.0 - block height3,343,000
- (binaries
-).
- v1.4.0 - block height5,309,200
- (binaries
-).
- v1.5.0 - block height5,941,700
- (binaries
-).
- v1.6.0 - block height6,537,300
- (binaries
-).
-

For more detailed upgrade instructions, you can refer to the v1.5.0 upgrade instructions .

Was this helpful? Edit on GitHub Export as PDF