Command Line Arguments

About the Arguments:

BLOCK_ENGINE_URL, RELAYER_URL, and SHRED_RECEIVER_ADDR reference addresses on the [mainnet](#) and [testnet](#) connection pages.

- --tip-payment-program-pubkey
- Address of the tip payment program
-
    - The tip payment program address can be found [here](#)
-
    - Read more about the program [here](#)
- *
- --tip-distribution-program-pubkey
- Address of the tip distribution program
-
    - The tip payment program address can be found [here](#)
-
    - Read more about the program [here](#)
- *
- --merkle-root-upload-authority
- Authority that uploads MEV airdrop merkle roots to the validator's MEV "piggy bank".
-
    - This authority automates the airdrop and claim process, so stakers don't need to manually claim rewards.
-
    - if you set it to Jito -GZctHpWXmsZC1YHACTGGcHhYxjdRqQvTpYkb9LMvxDib
-
    - , Jito will run the airdrop and claim process for you.
-
    - If you set it to any other address, you will need to run the [claim workflow](#)
-
    - yourself.
- *
- --commission-bps
- the MEV commission your validator takes (stored in basis points)
- --relayer-url
- Address the validator connects to in order to get packets from the relayer
-
    - The relayer URLs are available [here](#)
- *
- --block-engine-url
- Address of the block engine where the validator connects
-
    - The block engine URLs are available [here](#)
- *
- --shred-receiver-address
- Address where shreds are sent
-
    - The shred receiver addresses are available [here](#)
- *
-

Mainnet Arguments

Please look at [mainnet connection information](#) for the values of BLOCK_ENGINE_URL, RELAYER_URL, and SHRED_RECEIVER_ADDR.

```

Copy BLOCK_ENGINE_URL= RELAYER_URL= SHRED_RECEIVER_ADDR= solana-validator \ --tip-payment-program-pubkey T1pyyaTNZsKv2WcRAB8oVnk93mLJw2XzjtVYqCsaHqt \ --tip-distribution-program-pubkey 4R3gSG8BpU4t19KYj8CfnbtRpnT8gtk4dvTHxVRwc2r7 \ --merkle-root-upload-authority GZctHpWXmsZC1YHACTGGcHhYxjdRqQvTpYkb9LMvxDib \ --commission-bps 800 \ --relayer-url {RELAYER_URL} \ --block-engine-url {BLOCK_ENGINE_URL} \ --shred-receiver-address {SHRED_RECEIVER_ADDR}

```

Testnet Arguments

Please look at testnet connection information for the values of BLOCK_ENGINE_URL, RELAYER_URL, and SHRED_RECEIVER_ADDR.

```
```

```
Copy BLOCK_ENGINE_URL= RELAYER_URL= SHRED_RECEIVER_ADDR= solana-validator \ --tip-payment-program-pubkey DCN82qDxJAQuSqHhv2BJuAgi41SPeKZB5ioBCTMNDrCC \ --tip-distribution-program-pubkey F2Zu7QZiTYUhPd7u9ukRVwxh7B71oA3NMJcHuCHc29P2 \ --merkle-root-upload-authority GZctHpWXmsZC1YHACTGGcHhYxjdRqQvTpYkb9LMvxDib \ --commission-bps 800 \ --relayer-url {RELAYER_URL} \ --block-engine-url {BLOCK_ENGINE_URL} \ --shred-receiver-address {SHRED_RECEIVER_ADDR}
```

```
```

Changing Command Line Arguments

Several configuration parameters for the Jito-Solana validator can be changed at runtime - including some of the Jito-specific CLI arguments - without the need to restart a running validator. To see a list of validator admin RPC operations for your Solana version, runsolana-validator help and examine the list of subcommands.

Test Admin RPC

If you have never used the admin RPC before, we suggest you start with the monitor command to avoid making unwanted changes to your running validator. Runsolana-validator monitor --help to see the documentation for the monitor command (same syntax to get other commands help).

After runningsolana-validator -l monitor , you should see something like the following:

```
```

```
Copy Ledger location: /solana/ledger Identity: 2Nnw9RZvT2qeKq74rkw8hWDJZUDSKxiBarmQMFxHzzCt Genesis Hash: 4uhcVJyU9pJkvQyS88uRDiswHXSCkY3zQawwpjk2NsNY 697:54:24 | Processed Slot: 210229427 | Confirmed Slot: 210229425 | Finalized Slot: 210229388 | Full Snapshot Slot: 210227247 | Incremental Snapshot Slot: 210229270 | Transactions: 264554057258 | ⊚1599.903590025
```

```
```

If this doesn't work, check your ledger path. All admin RPC commands will require the ledger path.

Changing Jito-Specific Config

Currently, there are 3 admin RPC commands to adjust Jito-specific validator configuration, and for versions starting with Jito-Solana v1.14.18, the ability to change identity at runtime is fully supported.

Command Action set-block-engine-config Set configuration for connection to a block engine set-identity Set the validator identity set-relayer-config Set configuration for connection to a relayer set-shred-receiver-address Changes shred receiver address These commands allow you to set (or change) the URLs for Jito connections. E.g., runningsolana-validator -l set-block-engine-config --block-engine-url https://nyc.testnet.block-engine.jito.wtf willl set the block engine URL to point to Jito Labs' testnet block engine in NY.

Other URLs can be set with similar syntax, as well as a few other flags and relayer heartbeat configuration.

Identity Hotswap

For Jito-Solana 1.14.18 and up, the ability to change identity at runtime is fully supported.

Command Action set-identity Set the validator identity You can follow standard procedures for changing a validator's identity at runtime. Connections to backend services will be automatically reset and attempted under the new identity. The following 2 guides provide detailed instructions: MVines Guide

Pumpkin's Guide