

Available Solana Clusters

Solana maintains several different clusters with different purposes.

Before you begin make sure you have first [installed the Solana command line tools](#)

Explorers:

- <http://explorer.solana.com/>
- .
- <http://solanabeach.io/>
- .

Devnet

- Devnet serves as a playground for anyone who wants to take Solana for a
- test drive, as a user, token holder, app developer, or validator.
- Application developers should target Devnet.
- Potential validators should first target Devnet.
- Key differences between Devnet and Mainnet Beta: * Devnet tokens are not real
-
- Devnet includes a token faucet for airdrops for application testing
-
- Devnet may be subject to ledger resets
-
- Devnet typically runs the same software release branch version as Mainnet Beta,
-
- but may run a newer minor release version than Mainnet Beta.
- Gossip endpoint for Devnet: `entrypoint.devnet.solana.com:8001`
- Metrics environment variable for Devnet:

export

SOLANA_METRICS_CONFIG

"host=https://metrics.solana.com:8086,db=devnet,u=scratch_writer,p=topsecret" * RPC URL for Devnet: `https://api.devnet.solana.com`

Examplesolana

command-line configuration

`solana config set --url https://api.devnet.solana.com`

Examplesolana-validator

command-line

```
solana-validator \ --identity validator-keypair.json \ --vote-account vote-account-keypair.json \ --known-validator  
dv1ZAGvdsz5hHLwWXsVnM94hWf1pjbKVau1QVkaMJ92 \ --known-validator  
dv2eQHeP4RfRjZ6UeiZWoc3XTtmtZCUKxxCApCDcRNV \ --known-validator  
dv4ACNkpYPcE3aKmYDqZm9G5EB3J4MRoeE7WNRBVBVB \ --known-validator  
dv3qDFk1DTF36Z62bNvrCXe9sKATA6xvVy6A798xxAS \ --only-known-rpc \ --ledger ledger \ --rpc-port 8899
```

```
\ --dynamic-port-range 8000 -8020 \ --entrypoint entrypoint.devnet.solana.com:8001 \ --entrypoint  
entrypoint2.devnet.solana.com:8001 \ --entrypoint entrypoint3.devnet.solana.com:8001 \ --entrypoint  
entrypoint4.devnet.solana.com:8001 \ --entrypoint entrypoint5.devnet.solana.com:8001 \ --expected-genesis-hash  
EtWTRABZaYq6iMfeYKouRu166VU2xqa1wcaWoxPkrZBG \ --wal-recovery-mode skip_any_corrupted_record \ --limit-  
ledger-size The --known-validator s are operated by Solana Labs
```

Testnet

- Testnet is where the Solana core contributors stress test recent release features on a live
- cluster, particularly focused on network performance, stability and validator
- behavior.
- Testnet tokens are not real

- Testnet may be subject to ledger resets.
- Testnet includes a token faucet for airdrops for application testing
- Testnet typically runs a newer software release branch than both
- Devnet and Mainnet Beta
- Gossip endpoint for Testnet: `entrypoint.testnet.solana.com:8001`
- Metrics environment variable for Testnet:

export

SOLANA_METRICS_CONFIG

"host=https://metrics.solana.com:8086,db=tds,u=testnet_write,p=c4fa841aa918bf8274e3e2a44d77568d9861b3ea" * RPC URL for Testnet: `https://api.testnet.solana.com`

Examplesolana

command-line configuration

`solana config set --url https://api.testnet.solana.com`

Examplesolana-validator

command-line

```
solana-validator \
  --identity validator-keypair.json \
  --vote-account vote-account-keypair.json \
  --known-validator 5D1fNXzvv5NjV1ysLjirC4WY92RNsVH18vjmcSzZd8on \
  --known-validator dDzy5SR3AXdYWWqbDEkVFdvSPCtS9ihF5kJKHCtXoFs \
  --known-validator Ft5fbkqNa76vnsjYNwjDZUXoTWpP7VYm3mtsAQckQADN \
  --known-validator eoKpUABi59aT4rR9HGS3LcMecfut9x7zJyodWWP43YQ \
  --known-validator 9QxCLckBiJc783jnMvXZubK4wH86Eqqvashtwvcskv \
  --only-known-rpc \
  --ledger ledger \
  --rpc-port 8899
```

```
\
  --dynamic-port-range 8000-8020 \
  --entrypoint entrypoint.testnet.solana.com:8001 \
  --entrypoint entrypoint2.testnet.solana.com:8001 \
  --entrypoint entrypoint3.testnet.solana.com:8001 \
  --expected-genesis-hash 4uhcVJyU9pJkvQyS88uRDiswHXSCkY3zQawwpjk2NsNY \
  --wal-recovery-mode skip_any_corrupted_record \
  --limit-ledger-size
```

The identities of the [--known-validator s](#) are:

- 5D1fNXzvv5NjV1ysLjirC4WY92RNsVH18vjmcSzZd8on
- - Solana Labs
- dDzy5SR3AXdYWWqbDEkVFdvSPCtS9ihF5kJKHCtXoFs
- - MonkeDAO
- Ft5fbkqNa76vnsjYNwjDZUXoTWpP7VYm3mtsAQckQADN
- - Certus One
- eoKpUABi59aT4rR9HGS3LcMecfut9x7zJyodWWP43YQ
- - SerGo
- 9QxCLckBiJc783jnMvXZubK4wH86Eqqvashtwvcskv
- - Algo|Stake

Mainnet Beta

A permissionless, persistent cluster for Solana users, builders, validators and token holders.

- Tokens that are issued on Mainnet Beta are real
- SOL
- Gossip endpoint for Mainnet Beta: `entrypoint.mainnet-beta.solana.com:8001`
- Metrics environment variable for Mainnet Beta:

export

SOLANA_METRICS_CONFIG

"host=https://metrics.solana.com:8086,db=mainnet-beta,u=mainnet-beta_write,p=password" * RPC URL for Mainnet

Beta:https://api.mainnet-beta.solana.com

Examplesolana

command-line configuration

solana config set --url https://api.mainnet-beta.solana.com

Examplesolana-validator

command-line

```
solana-validator \ --identity ~/validator-keypair.json \ --vote-account ~/vote-account-keypair.json \ --known-validator  
7Np41oeYqPefeNQEHsv1UDhYrehxin3NStELsSKCT4K2 \ --known-validator  
GdnSyH3YtwcxFvQrVVJMm1JhTS4QVX7MFsX56uJLUfiZ \ --known-validator  
DE1bawNcRJB9rVm3buyMVfr8mBEoyyu73NBovf2oXJsJ \ --known-validator  
CakcnaRDHka2gXyfbEd2d3xsvkJkqsLw2akB3zsN1D2S \ --only-known-rpc \ --ledger ledger \ --rpc-port 8899
```

```
\ --private-rpc \ --dynamic-port-range 8000 -8020 \ --entrypoint entrypoint.mainnet-beta.solana.com:8001 \ --entrypoint  
entrypoint2.mainnet-beta.solana.com:8001 \ --entrypoint entrypoint3.mainnet-beta.solana.com:8001 \ --entrypoint  
entrypoint4.mainnet-beta.solana.com:8001 \ --entrypoint entrypoint5.mainnet-beta.solana.com:8001 \ --expected-genesis-  
hash 5eykt4UsFv8P8NJdTREpY1vzqKqZKvdpKuc147dw2N9d \ --wal-recovery-mode skip_any_corrupted_record \ --limit-  
ledger-size info The above four --known-validator s are operated by Solana Labs. Previous Overview of a Solana Cluster  
Next Benchmark a Cluster
```