

# Solana CLI Reference and Usage

The [solana-cli crate](#) provides a command-line interface tool for Solana

## Examples

### Get Pubkey

```
// Command solana-keygen pubkey
```

```
// Return < PUBKEY
```

### Airdrop SOL/Lamports

```
// Command solana airdrop 1
```

```
// Return "1 SOL"
```

### Get Balance

```
// Command solana balance
```

```
// Return "3.00050001 SOL"
```

### Confirm Transaction

```
// Command solana confirm < TX_SIGNATURE
```

```
// Return "Confirmed" / "Not found" / "Transaction failed with error"
```

### Deploy program

```
// Command solana program deploy < PATH
```

```
// Return < PROGRAM_ID
```

## Usage

### solana-cli

solana-cli 1.18.4 (src:356c6a38; feat:3352961542, client:SolanaLabs) Blockchain, Rebuilt for Scale

USAGE: solana [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quick Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

SUBCOMMANDS: account Show the contents of an account address Get your public key address-lookup-table Address lookup table management airdrop Request SOL from a faucet authorize-nonce-account Assign account authority to a new entity balance Get your balance block Get a confirmed block block-height Get current block height block-production Show information about block production block-time Get estimated production time of a block catchup Wait for a validator to catch up to the cluster close-vote-account Close a vote account and withdraw all funds remaining cluster-date Get current cluster date, computed from genesis creation time and network time cluster-version Get the version of the cluster entrypoint completion Generate completion scripts for various shells config Solana command-line tool configuration settings confirm Confirm transaction by signature create-address-with-seed Generate a derived account address with a seed. For program derived addresses (PDAs), use the find-program-derived-address command instead create-nonce-account Create a nonce account create-stake-account Create a stake account create-stake-account-checked Create a stake account, checking the withdraw authority as a signer create-vote-account Create a vote account deactivate-stake Deactivate the delegated stake from the stake account decode-transaction Decode a serialized transaction delegate-stake Delegate stake to a vote account

epoch Get current epoch epoch-info Get information about the current epoch feature Runtime feature management fees Display current cluster fees (Deprecated in v1.8.0) find-program-derived-address Generate a program derived account address with a seed first-available-block Get the first available block in the storage genesis-hash Get the genesis hash gossip Show the current gossip network nodes help Prints this message or the help of the given subcommand(s) inflation Show inflation information largest-accounts Get addresses of largest cluster accounts leader-schedule Display leader schedule live-slots Show information about the current slot progression logs Stream transaction logs merge-stake Merges one stake account into another new-nonce Generate a new nonce, rendering the existing nonce useless nonce Get the current nonce value nonce-account Show the contents of a nonce account ping Submit transactions sequentially program Program management program-v4 Program V4 management redelegate-stake Redefine active stake to another vote account rent Calculate rent-exempt-minimum value for a given account data field length. resolve-signer Checks that a signer is valid, and returns its specific path; useful for signers that may be specified generally, eg. usb:~~ledger sign-offchain-message Sign off-chain message slot Get current slot split-stake Duplicate a stake account, splitting the tokens between the two stake-account Show the contents of a stake account stake-authorize Authorize a new signing keypair for the given stake account stake-authorize-checked Authorize a new signing keypair for the given stake account, checking the authority as a signer stake-history Show the stake history stake-minimum-delegation Get the stake minimum delegation amount stake-set-lockup Set Lockup for the stake account stake-set-lockup-checked Set Lockup for the stake account, checking the new authority as a signer stakes Show stake account information supply Get information about the cluster supply of SOL transaction-count Get current transaction count transaction-history Show historical transactions affecting the given address from newest to oldest transfer Transfer funds between system accounts upgrade-nonce-account One-time idempotent upgrade of legacy nonce versions in order to bump them out of chain blockhash domain. validator-info Publish~get Validator info on Solana validators Show summary information about the current validators verify-offchain-signature Verify off-chain message signature vote-account Show the contents of a vote account vote-authorize-voter Authorize a new vote signing keypair for the given vote account vote-authorize-voter-checked Authorize a new vote signing keypair for the given vote account, checking the new authority as a signer vote-authorize-withdrawer Authorize a new withdraw signing keypair for the given vote account vote-authorize-withdrawer-checked Authorize a new withdraw signing keypair for the given vote account, checking the new authority as a signer vote-update-commission Update the vote account's commission vote-update-validator Update the vote account's validator identity wait-for-max-stake Wait for the max stake of any one node to drop below a percentage of total. withdraw-from-nonce-account Withdraw SOL from the nonce account withdraw-from-vote-account Withdraw lamports from a vote account into a specified account withdraw-stake Withdraw the unstaked SOL from the stake account

## **solana-account**

solana-account Show the contents of an account

USAGE: solana account [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair -o, --output-file Write the account data to this file --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: Account contents to show. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-address**

solana-address Get your public key

USAGE: solana address [FLAGS] [OPTIONS]

FLAGS: --confirm-key Confirm key on device; only relevant if using remote wallet -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-address-lookup-table**

solana-address-lookup-table Address lookup table management

USAGE: solana address-lookup-table [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

SUBCOMMANDS: close Permanently closes a lookup table create Create a lookup table deactivate Permanently deactivates a lookup table extend Append more addresses to a lookup table freeze Permanently freezes a lookup table get Display information about a lookup table help Prints this message or the help of the given subcommand(s)

## **solana-airdrop**

solana-airdrop Request SOL from a faucet

USAGE: solana airdrop [FLAGS] [OPTIONS][RECIPIENT\_ADDRESS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: The airdrop amount to request, in SOL Account of airdrop recipient. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-authorize-nonce-account**

solana-authorize-nonce-account Assign account authority to a new entity

USAGE: solana authorize-nonce-account [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

-u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--ws WebSocket URL for the solana cluster

ARGS: Nonce account. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair

URL (i.e. usb:~~ledger) Account to be granted authority of the nonce account. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-balance**

solana-balance Get your balance

USAGE: solana balance [FLAGS] [OPTIONS] [ACCOUNT\_ADDRESS]

FLAGS: -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: Account balance to check. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-block**

solana-block Get a confirmed block

USAGE: solana block [FLAGS] [OPTIONS] [SLOT]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS:

## **solana-block-height**

solana-block-height Get current block height

USAGE: solana block-height [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-block-production**

solana-block-production Show information about block production

USAGE: solana block-production [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version

information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --epoch Epoch to show block production for [default: current epoch] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --slot-limit Limit results to this many slots from the end of the epoch [default: full epoch] --ws WebSocket URL for the solana cluster

## **solana-block-time**

solana-block-time Get estimated production time of a block

USAGE: solana block-time [FLAGS] [OPTIONS] [SLOT]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: Slot number of the block to query

## **solana-catchup**

solana-catchup Wait for a validator to catch up to the cluster

USAGE: solana catchup [FLAGS] [OPTIONS] [ARGS]

FLAGS: --follow Continue reporting progress even after the validator has caught up -h, --help Prints help information --log Don't update the progress inplace; instead show updates with its own new lines --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --our-localhost Guess Identity pubkey and validator rpc node assuming local (possibly private) validator [default: 8899] --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: Identity of the validator. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) JSON RPC URL for validator, which is useful for validators with a private RPC service

## **solana-close-vote-account**

solana-close-vote-account Close a vote account and withdraw all funds remaining

USAGE: solana close-vote-account [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --authorized-withdrawer Authorized withdrawer [default: cli config keypair] --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON

RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --output Return information in specified output format [possible values: json, json-compact]

--ws WebSocket URL for the solana cluster

ARGS: Vote account to be closed. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) The recipient of all withdrawn SOL. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-cluster-date**

solana-cluster-date Get current cluster date, computed from genesis creation time and network time

USAGE: solana cluster-date [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

## **solana-cluster-version**

solana-cluster-version Get the version of the cluster endpoint

USAGE: solana cluster-version [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

## **solana-completion**

solana-completion Generate completion scripts for various shells

USAGE: solana completion [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] -s, --shell [default: bash] [possible values: bash, fish, zsh, powershell, elvish] --ws WebSocket URL for the solana cluster

## **solana-config**

solana-config Solana command-line tool configuration settings

USAGE: solana config [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

**SUBCOMMANDS:** export-address-labels Export the current address labels get Get current config settings help Prints this message or the help of the given subcommand(s) import-address-labels Import a list of address labels set Set a config setting

## **solana-confirm**

solana-confirm Confirm transaction by signature

**USAGE:** solana confirm [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

**ARGS:** The transaction signature to confirm

**Note:** This will show more detailed information for finalized transactions with verbose mode (-v/--verbose).

**Account modes:** [srwx] s: signed r: readable (always true) w: writable x: program account (inner instructions excluded)

## **solana-create-address-with-seed**

solana-create-address-with-seed Generate a derived account address with a seed. For program derived addresses (PDAs), use the find-program-derived- address command instead

**USAGE:** solana create-address-with-seed [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --from From (base) key, [default: cli config keypair]. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

**ARGS:** The seed. Must not take more than 32 bytes to encode as utf-8 The program\_id that the address will ultimately be used for, or one of NONCE, STAKE, and VOTE keywords

## **solana-create-nonce-account**

solana-create-nonce-account Create a nonce account

**USAGE:** solana create-nonce-account [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information

information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

-u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce-authority Assign noncing authority to this other entity. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) --output Return information in specified output format [possible values: json, json-compact]

--seed Seed for address generation; if specified, the resulting account will be at a derived address of the NONCE\_ACCOUNT pubkey --ws WebSocket URL for the solana cluster

ARGS: Keypair of the nonce account to fund The amount to load the nonce account with, in SOL; accepts keyword ALL

## **solana-create-stake-account**

solana-create-stake-account Create a stake account

USAGE: solana create-stake-account [FLAGS] [OPTIONS]

FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--custodian Authority to modify lockups. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. --from Source account of funds [default: cli config keypair] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --lockup-date The date and time at which this account will be available for withdrawal

--lockup-epoch The epoch height at which this account will be available for withdrawal

--with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli/examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--seed Seed for address generation; if specified, the resulting account will be at a derived address of the STAKE\_ACCOUNT\_KEYPAIR pubkey --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster --withdraw-authority Authorized withdrawer [default: cli config keypair]

ARGS: Stake account to create (or base of derived address if --seed is used) The amount to send to the stake account, in SOL; accepts keyword ALL

## **solana-create-stake-account-checked**

solana-create-stake-account-checked Create a stake account, checking the withdraw authority as a signer



USAGE: solana create-stake-account-checked [FLAGS] [OPTIONS]

FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. --from Source account of funds [default: cli config keypair] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli-examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--seed Seed for address generation; if specified, the resulting account will be at a derived address of the STAKE\_ACCOUNT\_KEYPAIR pubkey --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster --withdraw-authority Authorized withdrawer [default: cli config keypair]

ARGS: Stake account to create (or base of derived address if --seed is used) The amount to send to the stake account, in SOL; accepts keyword ALL

## **solana-create-vote-account**

solana-create-vote-account Create a vote account

USAGE: solana create-vote-account [FLAGS] [OPTIONS]

FLAGS: --allow-unsafe-authorized-withdrawer Allow an authorized withdrawer pubkey to be identical to the validator identity account pubkey or vote account pubkey, which is normally an unsafe configuration and should be avoided. --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --authorized-voter Authorized voter [default: validator identity pubkey]. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) --blockhash Use the supplied blockhash --commission The commission taken on reward redemption (0-100) [default: 100]

--commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli-examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--seed Seed for address generation; if specified, the resulting account will be at a derived address of the VOTE ACCOUNT pubkey --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster

ARGS: Vote account keypair to create Keypair of validator that will vote with this account Authorized withdrawer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-deactivate-stake**

solana-deactivate-stake Deactivate the delegated stake from the stake account

USAGE: solana deactivate-stake [FLAGS] [OPTIONS]

FLAGS: --delinquent Deactivate abandoned stake that is currently delegated to a delinquent vote account --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quick Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli/examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--seed Seed for address generation; if specified, the resulting account will be at a derived address of STAKE\_ACCOUNT\_ADDRESS --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster

ARGS: Stake account to be deactivated (or base of derived address if --seed is used). Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-decode-transaction**

solana-decode-transaction Decode a serialized transaction

USAGE: solana decode-transaction [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quick Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

ARGS: transaction to decode transaction encoding [default: base58] [possible values: base58, base64]

## **solana-delegate-stake**

solana-delegate-stake Delegate stake to a vote account

USAGE: solana delegate-stake [FLAGS] [OPTIONS]

**FLAGS:** --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized]

--with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit.

-C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml]

--fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost]

-k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli/examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction

--output Return information in specified output format [possible values: json, json-compact]

--signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster

**ARGS:** Stake account to delegate. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) Vote account to which the stake will be delegated. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger)

## **solana-epoch**

solana-epoch Get current epoch

**USAGE:** solana epoch [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

## **solana-epoch-info**

solana-epoch-info Get information about the current epoch

**USAGE:** solana epoch-info [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster

## **solana-feature**

solana-feature Runtime feature management

USAGE: solana feature [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

SUBCOMMANDS: activate Activate a runtime feature help Prints this message or the help of the given subcommand(s) status Query runtime feature status

## **solana-fees**

solana-fees Display current cluster fees (Deprecated in v1.8.0)

USAGE: solana fees [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --blockhash Query fees for BLOCKHASH instead of the the most recent blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-find-program-derived-address**

solana-find-program-derived-address Generate a program derived account address with a seed

USAGE: solana find-program-derived-address [FLAGS] [OPTIONS][SEED]...

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

ARGS: The program\_id that the address will ultimately be used for, or one of NONCE, STAKE, and VOTE keywords ... The seeds. Each one must match the pattern PREFIX:VALUE. PREFIX can be one of [string, pubkey, hex, u8] or matches the pattern [u,i][16,32,64,128][le,be] (for example u64le) for number values [u,i] - represents whether the number is unsigned or signed, [16,32,64,128] - represents the bit length, and [le,be] - represents the byte order - little endian or big endian

## **solana-first-available-block**

solana-first-available-block Get the first available block in the storage

USAGE: solana first-available-block [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana

cluster

## **solana-genesis-hash**

solana-genesis-hash Get the genesis hash

USAGE: solana genesis-hash [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-gossip**

solana-gossip Show the current gossip network nodes

USAGE: solana gossip [FLAGS] [OPTIONS]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-help**

solana-help Prints this message or the help of the given subcommand(s)

USAGE: solana help [subcommand]...

ARGS: ... The subcommand whose help message to display

## **solana-inflation**

solana-inflation Show inflation information

USAGE: solana inflation [FLAGS] [OPTIONS] [SUBCOMMAND]

FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

SUBCOMMANDS: help Prints this message or the help of the given subcommand(s) rewards Show inflation rewards for a set of addresses

## **solana-largest-accounts**

solana-largest-accounts Get addresses of largest cluster accounts

USAGE: solana largest-accounts [FLAGS] [OPTIONS]

**FLAGS:** --circulating Filter address list to only circulating accounts -h, --help Prints help information --no-address-labels Do not use address labels in the output --non-circulating Filter address list to only non-circulating accounts --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-leader-schedule**

solana-leader-schedule Display leader schedule

**USAGE:** solana leader-schedule [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --epoch Epoch to show leader schedule for [default: current] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-live-slots**

solana-live-slots Show information about the current slot progression

**USAGE:** solana live-slots [FLAGS] [OPTIONS]

**FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

## **solana-logs**

solana-logs Stream transaction logs

**USAGE:** solana logs [FLAGS] [OPTIONS] [ADDRESS]

**FLAGS:** -h, --help Prints help information --include-votes Include vote transactions when monitoring all transactions --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information

**OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

**ARGS:**

*Account to monitor [default: monitor all transactions except for votes]. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-merge-stake[]*  
(<https://docs.solanalabs.com/#solana-merge-stake>) solana-merge-stake Merges one stake account into another **USAGE:**

solana merge-stake [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster ARGS: Stake account to merge into. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) Source stake account for the merge. If successful, this stake account will no longer exist after the merge. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-new-nonce[(https://docs.solanalabs.com/#solana-new-nonce) solana-new-nonce Generate a new nonce, rendering the existing nonce useless USAGE: solana new-nonce [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ARGS: Nonce account. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-nonce[(https://docs.solanalabs.com/#solana-nonce) solana-nonce Get the current nonce value USAGE: solana nonce [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ARGS: Nonce account to display. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-nonce-account[(https://docs.solanalabs.com/#solana-nonce-account) solana-nonce-account Show the contents of a nonce account USAGE: solana nonce-account [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ARGS: Nonce account to display. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-ping[]

(<https://docs.solanalabs.com/#solana-ping>) solana-ping Submit transactions sequentially USAGE: solana ping [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output -D, --print-timestamp Print timestamp (unix time + microseconds as in gettimeofday) before each line --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -c, --count Stop after submitting count transactions -i, --interval Wait interval seconds between submitting the next transaction [default: 2] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] -t, --timeout Wait up to timeout seconds for transaction confirmation [default: 15] --ws WebSocket URL for the solana cluster ### solana-program[](<https://docs.solanalabs.com/#solana-program>) solana-program Program management USAGE: solana program [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster SUBCOMMANDS: close Close a program or buffer account and withdraw all lamports deploy Deploy an upgradeable program dump Write the program data to a file extend Extend the length of an upgradeable program to deploy larger programs help Prints this message or the help of the given subcommand(s) set-buffer-authority Set a new buffer authority set-upgrade-authority Set a new program authority show Display information about a buffer or program upgrade Upgrade an upgradeable program write-buffer Writes a program into a buffer account ### solana-program-v4[](<https://docs.solanalabs.com/#solana-program-v4>) solana-program-v4 Program V4 management USAGE: solana program-v4 [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster SUBCOMMANDS: deploy Deploy a program dump Write the program data to a file finalize Finalize a program to make it immutable help Prints this message or the help of the given subcommand(s) redeploy Redeploy a previously deployed program show Display information about a buffer or program undeploy Undeploy~close a program ### solana-redelegate-stake[](<https://docs.solanalabs.com/#solana-redelegate-stake>) solana-redelegate-stake Redelegate active stake to another vote account USAGE: solana redelegate-stake [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster ARGS: Existing delegated stake account that has been fully activated. On success this stake account will be scheduled for deactivation and the rent-exempt balance may be withdrawn once fully deactivated. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) Vote account to which the stake will be



redelegated. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~ledger`) Stake account to create for the redelegation. On success this stake account will be created and scheduled for activation with all the stake in the existing stake account, exclusive of the rent-exempt balance retained in the existing account **### solana-rent**[(<https://docs.solanalabs.com/#solana-rent>)] **solana-rent** Calculate rent-exempt-minimum value for a given account data field length. **USAGE:** `solana rent [FLAGS] [OPTIONS]` **FLAGS:** `-h, --help` Prints help information `--lamports` Display rent in lamports instead of SOL `--no-address-labels` Do not use address labels in the output `--skip-seedphrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quick` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: `processed`, `confirmed`, `finalized`] `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--output` Return information in specified output format [possible values: `json`, `json-compact`] `--ws` WebSocket URL for the solana cluster **ARGS:** Length of data field in the account to calculate rent for, or moniker: [nonce, stake, system, vote] **### solana-resolve-signer**[(<https://docs.solanalabs.com/#solana-resolve-signer>)] **solana-resolve-signer** Checks that a signer is valid, and returns its specific path; useful for signers that may be specified generally, eg. `usb:~ledger` **USAGE:** `solana resolve-signer [FLAGS] [OPTIONS]` **FLAGS:** `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--skip-seedphrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quick` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: `processed`, `confirmed`, `finalized`] `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--output` Return information in specified output format [possible values: `json`, `json-compact`] `--ws` WebSocket URL for the solana cluster **ARGS:** The signer path to resolve **### solana-sign-offchain-message**[(<https://docs.solanalabs.com/#solana-sign-offchain-message>)] **solana-sign-offchain-message** Sign off-chain message **USAGE:** `solana sign-offchain-message [FLAGS] [OPTIONS]` **FLAGS:** `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--skip-seedphrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quick` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: `processed`, `confirmed`, `finalized`] `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--output` Return information in specified output format [possible values: `json`, `json-compact`] `--version` The off-chain message version [default: 0] `--ws` WebSocket URL for the solana cluster **ARGS:** The message text to be signed **### solana-slot**[(<https://docs.solanalabs.com/#solana-slot>)] **solana-slot** Get current slot **USAGE:** `solana slot [FLAGS] [OPTIONS]` **FLAGS:** `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--skip-seedphrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quick` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: `processed`, `confirmed`, `finalized`] `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--output` Return information in specified output format [possible values: `json`, `json-compact`] `--ws` WebSocket URL for the solana cluster **### solana-split-stake**[(<https://docs.solanalabs.com/#solana-split-stake>)] **solana-split-stake** Duplicate a stake account, splitting the tokens between the two **USAGE:** `solana split-stake [FLAGS] [OPTIONS]` **FLAGS:** `--dump-transaction-message` Display the base64 encoded binary transaction message in sign-only mode `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--sign-only` Sign the transaction offline `--skip-seedphrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quick` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--blockhash` Use the supplied blockhash `--commitment` Return information at the selected commitment level [possible values: `processed`, `confirmed`, `finalized`] `--with-compute-unit-price` Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `--fee-payer` Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate `--signer` argument is also passed. Defaults to the client keypair. `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--with-memo` Specify a memo string to include in the transaction. `--nonce` Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> `--nonce-authority` Provide the nonce authority keypair to use when signing a nonced transaction `--output` Return information in

specified output format [possible values: json, json-compact] --rent-exempt-reserve-sol Offline signing only: the rent-exempt amount to move into the new stake account, in SOL --seed Seed for address generation; if specified, the resulting account will be at a derived address of SPLIT\_STAKE\_ACCOUNT --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster ARGs: Stake account to split (or base of derived address if --seed is used). Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) Keypair of the new stake account The amount to move into the new stake account, in SOL ### solana-stake-account[] (<https://docs.solanalabs.com/#solana-stake-account>) solana-stake-account Show the contents of a stake account USAGE: solana stake-account [FLAGS] [OPTIONS] FLAGS: --csv Format stake rewards data in csv -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information --with-rewards Display inflation rewards OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --num-rewards-epochs Display rewards for NUM recent epochs, max 10 [default: latest epoch only] --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ARGs: Stake account to display. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-stake-authorize[] (<https://docs.solanalabs.com/#solana-stake-authorize>) solana-stake-authorize Authorize a new signing keypair for the given stake account USAGE: solana stake-authorize [FLAGS] [OPTIONS] --new-stake-authority --new-withdraw-authority FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --no-wait Return signature immediately after submitting the transaction, instead of waiting for confirmations --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --custodian Authority to override account lockup --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --new-stake-authority New authorized staker. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) --new-withdraw-authority New authorized withdrawer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster --withdraw-authority Authorized withdrawer [default: cli config keypair] ARGs: Stake account in which to set a new authority. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-stake-authorize-checked[] (<https://docs.solanalabs.com/#solana-stake-authorize-checked>) solana-stake-authorize-checked Authorize a new signing keypair for the given stake account, checking the authority as a signer USAGE: solana stake-authorize-checked [FLAGS] [OPTIONS] --new-stake-authority --new-withdraw-authority FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --no-wait Return signature immediately after submitting the transaction, instead of waiting for confirmations --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in

increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] --custodian Authority to override account lockup --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --new-stake-authority New authorized staker --new-withdraw-authority New authorized withdrawer --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --stake-authority Authorized staker [default: cli config keypair] --ws WebSocket URL for the solana cluster --withdraw-authority Authorized withdrawer [default: cli config keypair] ARGS: Stake account in which to set a new authority. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-stake-history[(<https://docs.solanalabs.com/#solana-stake-history>) solana-stake-history Show the stake history USAGE: solana stake-history [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --limit Display NUM recent epochs worth of stake history in text mode. 0 for all [default: 10] --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ### solana-stake-minimum-delegation[(<https://docs.solanalabs.com/#solana-stake-minimum-delegation>) solana-stake-minimum-delegation Get the stake minimum delegation amount USAGE: solana stake-minimum-delegation [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --lamports Display minimum delegation in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ### solana-stake-set-lockup[(<https://docs.solanalabs.com/#solana-stake-set-lockup>) solana-stake-set-lockup Set Lockup for the stake account USAGE: solana stake-set-lockup [FLAGS] [OPTIONS] <--lockup-epoch |--lockup-date |--new-custodian > FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] --custodian Keypair of the existing custodian [default: cli config pubkey] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --lockup-date The date and time at which this account will be available for withdrawal --lockup-epoch The epoch height at which this account will be available for withdrawal --with-memo Specify a memo string to include in the transaction. --new-custodian New lockup custodian. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGS: Stake account for which to set lockup parameters. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed

phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-stake-set-lockup-checked[]  
<https://docs.solanalabs.com/#solana-stake-set-lockup-checked>) solana-stake-set-lockup-checked Set Lockup for the stake account, checking the new authority as a signer USAGE: solana stake-set-lockup-checked [FLAGS] [OPTIONS] <--lockup-epoch |--lockup-date |--new-custodian > FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] --custodian Keypair of the existing custodian [default: cli config pubkey] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --lockup-date The date and time at which this account will be available for withdrawal --lockup-epoch The epoch height at which this account will be available for withdrawal --with-memo Specify a memo string to include in the transaction. --new-custodian Keypair of a new lockup custodian --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGS: Stake account for which to set lockup parameters. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-stakes[](<https://docs.solanalabs.com/#solana-stakes>) solana-stakes Show stake account information USAGE: solana stakes [FLAGS] [OPTIONS] [VOTE\_ACCOUNT\_PUBKEYS]... FLAGS: -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster --withdraw-authority Only show stake accounts with the provided withdraw authority. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ARGS: ... Only show stake accounts delegated to the provided vote account. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) ### solana-supply[](<https://docs.solanalabs.com/#solana-supply>) solana-supply Get information about the cluster supply of SOL USAGE: solana supply [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --print-accounts Print list of non-circulating account addresses --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ### solana-transaction-count[](<https://docs.solanalabs.com/#solana-transaction-count>) solana-transaction-count Get current transaction count USAGE: solana transaction-count [FLAGS] [OPTIONS] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --ws WebSocket URL for the solana cluster ### solana-transaction-history[]

(<https://docs.solanalabs.com/#solana-transaction-history>) **solana-transaction-history** Show historical transactions affecting the given address from newest to oldest **USAGE:** **solana transaction-history [FLAGS] [OPTIONS]**

**FLAGS:** **-h, --help** Prints help information **--no-address-labels** Do not use address labels in the output **--show-transactions** Display the full transactions **--skip-seed-phrase-validation** Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list **--use-quic** Use QUIC when sending transactions. **--use-udp** Use UDP when sending transactions. **-V, --version** Prints version information **-v, --verbose** Show additional information **OPTIONS:** **--before** Start with the first signature older than this one **--commitment** Return information at the selected commitment level [possible values: processed, confirmed, finalized] **-C, --config** Configuration file to use [default: `~.config~solana~cli~config.yml`] **-u, --url** URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] **-k, --keypair** Filepath or URL to a keypair **--limit** Maximum number of transaction signatures to return [default: 1000] **--output** Return information in specified output format [possible values: json, json-compact] **--until** List until this transaction signature, if found before limit reached **--ws** WebSocket URL for the solana cluster **ARGS:**

Account to query for transactions. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~~ledger`) **### solana-transfer[]**(<https://docs.solanalabs.com/#solana-transfer>) **solana-transfer** Transfer funds between system accounts **USAGE:** **solana transfer [FLAGS] [OPTIONS]** **FLAGS:** **--allow-unfunded-recipient** Complete the transfer even if the recipient address is not funded **--dump-transaction-message** Display the base64 encoded binary transaction message in sign-only mode **-h, --help** Prints help information **--no-address-labels** Do not use address labels in the output **--no-wait** Return signature immediately after submitting the transaction, instead of waiting for confirmations **--sign-only** Sign the transaction offline **--skip-seed-phrase-validation** Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list **--use-quic** Use QUIC when sending transactions. **--use-udp** Use UDP when sending transactions. **-V, --version** Prints version information **-v, --verbose** Show additional information **OPTIONS:** **--blockhash** Use the supplied blockhash **--commitment** Return information at the selected commitment level [possible values: processed, confirmed, finalized] **--with-compute-unit-price** Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. **-C, --config** Configuration file to use [default: `~.config~solana~cli~config.yml`] **--fee-payer** Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate **--signer** argument is also passed. Defaults to the client keypair. **--from** Source account of funds [default: cli config keypair]. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~~ledger`) **-u, --url** URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] **-k, --keypair** Filepath or URL to a keypair **--with-memo** Specify a memo string to include in the transaction. **--nonce** Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> **--nonce-authority** Provide the nonce authority keypair to use when signing a nonced transaction **--output** Return information in specified output format [possible values: json, json-compact] **--signer ...** Provide a public-key~signature pair for the transaction **--ws** WebSocket URL for the solana cluster **ARGS:** Account of recipient. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~~ledger`) The amount to send, in SOL; accepts keyword ALL **### solana-upgrade-nonce-account[]**(<https://docs.solanalabs.com/#solana-upgrade-nonce-account>) **solana-upgrade-nonce-account** One-time idempotent upgrade of legacy nonce versions in order to bump them out of chain blockhash domain. **USAGE:** **solana upgrade-nonce-account [FLAGS] [OPTIONS]** **FLAGS:** **-h, --help** Prints help information **--no-address-labels** Do not use address labels in the output **--skip-seed-phrase-validation** Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list **--use-quic** Use QUIC when sending transactions. **--use-udp** Use UDP when sending transactions. **-V, --version** Prints version information **-v, --verbose** Show additional information **OPTIONS:** **--commitment** Return information at the selected commitment level [possible values: processed, confirmed, finalized] **--with-compute-unit-price** Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. **-C, --config** Configuration file to use [default: `~.config~solana~cli~config.yml`] **-u, --url** URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] **-k, --keypair** Filepath or URL to a keypair **--with-memo** Specify a memo string to include in the transaction. **--output** Return information in specified output format [possible values: json, json-compact] **--ws** WebSocket URL for the solana cluster **ARGS:** Nonce account to upgrade. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~~ledger`) **### solana-validator-info[]**(<https://docs.solanalabs.com/#solana-validator-info>) **solana-validator-info** Publish~get Validator info on Solana **USAGE:** **solana validator-info [FLAGS] [OPTIONS]** **FLAGS:** **-h, --help** Prints help information **--no-address-labels** Do not use address labels in the output **--skip-seed-phrase-validation** Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list **--use-quic** Use QUIC when sending transactions. **--use-udp** Use UDP when sending transactions. **-V, --version** Prints version information **-v, --verbose** Show additional information **OPTIONS:** **--commitment** Return information at the selected commitment level [possible values: processed, confirmed, finalized] **-C, --config** Configuration file to use [default: `~.config~solana~cli~config.yml`] **-u, --url** URL for Solana's JSON RPC or moniker (or

their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster

**SUBCOMMANDS:** get Get and parse Solana Validator info help Prints this message or the help of the given subcommand(s) publish Publish Validator info on Solana [### solana-validators\[\]](https://docs.solanalabs.com/#solana-validators)(<https://docs.solanalabs.com/#solana-validators>) solana-validators Show summary information about the current validators **USAGE:** solana validators **[FLAGS] [OPTIONS]** **FLAGS:** -h, --help Prints help information --keep-unstaked-delinquents Don't discard unstaked, delinquent validators --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output -n, --number Number the validators -r, --reverse Reverse order while sorting --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information **OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --delinquent-slot-distance Minimum slot distance from the tip to consider a validator delinquent [default: 128] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json-compact] --sort Sort order (does not affect JSON output) [default: stake] [possible values: delinquent, commission, credits, identity, last-vote, root, skip-rate, stake, version, vote-account] --ws WebSocket URL for the solana cluster [### solana-verify-offchain-signature\[\]](https://docs.solanalabs.com/#solana-verify-offchain-signature)(<https://docs.solanalabs.com/#solana-verify-offchain-signature>) solana-verify-offchain-signature Verify off-chain message signature **USAGE:** solana verify-offchain-signature **[FLAGS] [OPTIONS]** **FLAGS:** -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -v, --verbose Show additional information **OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --output Return information in specified output format [possible values: json, json- compact] --signer Message signer [default: cli config keypair]. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~::~ledger) --version The off-chain message version [default: 0] --ws WebSocket URL for the solana cluster **ARGS:** The text of the original message The message signature to verify [### solana-vote-account\[\]](https://docs.solanalabs.com/#solana-vote-account)(<https://docs.solanalabs.com/#solana-vote-account>) solana-vote-account Show the contents of a vote account **USAGE:** solana vote-account **[FLAGS] [OPTIONS]** **FLAGS:** --csv Format rewards in a CSV table -h, --help Prints help information --lamports Display balance in lamports instead of SOL --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information --with-rewards Display inflation rewards **OPTIONS:** --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --num-rewards-epochs Display rewards for NUM recent epochs, max 10 [default: latest epoch only] --output Return information in specified output format [possible values: json, json- compact] --ws WebSocket URL for the solana cluster **ARGS:** Vote account. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~::~ledger) [### solana-vote-authorize-voter\[\]](https://docs.solanalabs.com/#solana-vote-authorize-voter)(<https://docs.solanalabs.com/#solana-vote-authorize-voter>) solana-vote-authorize-voter Authorize a new vote signing keypair for the given vote account **USAGE:** solana vote-authorize-voter **[FLAGS] [OPTIONS]** **FLAGS:** --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information **OPTIONS:** --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in



specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGs: Vote account in which to set the authorized voter. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) Current authorized vote signer. New authorized vote signer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-vote-authorize-voter-checked[] (<https://docs.solanalabs.com/#solana-vote-authorize-voter-checked>) solana-vote-authorize-voter-checked Authorize a new vote signing keypair for the given vote account, checking the new authority as a signer USAGE: solana vote-authorize-voter-checked [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGs: Vote account in which to set the authorized voter. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) Current authorized vote signer. New authorized vote signer. ### solana-vote-authorize-withdrawer[] (<https://docs.solanalabs.com/#solana-vote-authorize-withdrawer>) solana-vote-authorize-withdrawer Authorize a new withdraw signing keypair for the given vote account USAGE: solana vote-authorize-withdrawer [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGs: Vote account in which to set the authorized withdrawer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) Current authorized withdrawer. New authorized withdrawer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~ledger) ### solana-vote-authorize-withdrawer-checked[] (<https://docs.solanalabs.com/#solana-vote-authorize-withdrawer-checked>) solana-vote-authorize-withdrawer-checked Authorize a new withdraw signing keypair for the given vote account, checking the new authority as a signer USAGE: solana vote-authorize-withdrawer-checked [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment

Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGS: Vote account in which to set the authorized withdrawer. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) Current authorized withdrawer. New authorized withdrawer. ### solana-vote-update-commission[] (<https://docs.solanalabs.com/#solana-vote-update-commission>) solana-vote-update-commission Update the vote account's commission USAGE: solana vote-update-commission [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGS: Vote account to update. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) The new commission Authorized withdrawer keypair ### solana-vote-update-validator[] (<https://docs.solanalabs.com/#solana-vote-update-validator>) solana-vote-update-validator Update the vote account's validator identity USAGE: solana vote-update-validator [FLAGS] [OPTIONS] FLAGS: --dump-transaction-message Display the base64 encoded binary transaction message in sign-only mode -h, --help Prints help information --no-address-labels Do not use address labels in the output --sign-only Sign the transaction offline --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list --use-quic Use QUIC when sending transactions. --use-udp Use UDP when sending transactions. -V, --version Prints version information -v, --verbose Show additional information OPTIONS: --blockhash Use the supplied blockhash --commitment Return information at the selected commitment level [possible values: processed, confirmed, finalized] --with-compute-unit-price Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. -C, --config Configuration file to use [default: ~/.config~solana~cli~config.yml] --fee-payer Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate --signer argument is also passed. Defaults to the client keypair. -u, --url URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster ARGS: Vote account to update. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) Keypair of new validator that will vote with this account Authorized withdrawer keypair ### solana-wait-for-max-stake[] (<https://docs.solanalabs.com/#solana-wait-for-max-stake>) solana-wait-for-max-stake Wait for the max stake of any one node to drop below a percentage of total. USAGE: solana wait-for-max-stake [FLAGS] [OPTIONS] [PERCENT] FLAGS: -h, --help Prints help information --no-address-labels Do not use address labels in the output --skip-seed-phrase-validation Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word



`list --use-quic` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: processed, confirmed, finalized] `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--output` Return information in specified output format [possible values: json, json-compact] `--ws` WebSocket URL for the solana cluster **ARGS:** `### solana-withdraw-from-nonce-account`] (<https://docs.solanalabs.com/#solana-withdraw-from-nonce-account>) `solana-withdraw-from-nonce-account` Withdraw SOL from the nonce account **USAGE:** `solana withdraw-from-nonce-account [FLAGS] [OPTIONS]` **FLAGS:** `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--skip-seed-phrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quic` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--commitment` Return information at the selected commitment level [possible values: processed, confirmed, finalized] `--with-compute-unit-price` Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--with-memo` Specify a memo string to include in the transaction. `--nonce-authority` Provide the nonce authority keypair to use when signing a nonced transaction `--output` Return information in specified output format [possible values: json, json-compact] `--ws` WebSocket URL for the solana cluster **ARGS:** Nonce account to withdraw from. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~ledger`) Recipient of withdrawn SOL. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~ledger`) The amount to withdraw from the nonce account, in SOL `### solana-withdraw-from-vote-account`] (<https://docs.solanalabs.com/#solana-withdraw-from-vote-account>) `solana-withdraw-from-vote-account` Withdraw lamports from a vote account into a specified account **USAGE:** `solana withdraw-from-vote-account [FLAGS] [OPTIONS]` **FLAGS:** `--dump-transaction-message` Display the base64 encoded binary transaction message in sign-only mode `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--sign-only` Sign the transaction offline `--skip-seed-phrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quic` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--authorized-withdrawer` Authorized withdrawer [default: `cli config keypair`] `--blockhash` Use the supplied blockhash `--commitment` Return information at the selected commitment level [possible values: processed, confirmed, finalized] `--with-compute-unit-price` Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `--fee-payer` Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate `--signer` argument is also passed. Defaults to the client keypair. `-u, --url` URL for Solana's JSON RPC or moniker (or their first letter): [mainnet-beta, testnet, devnet, localhost] `-k, --keypair` Filepath or URL to a keypair `--with-memo` Specify a memo string to include in the transaction. `--nonce` Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com~cli~examples~durable-nonce> `--nonce-authority` Provide the nonce authority keypair to use when signing a nonced transaction `--output` Return information in specified output format [possible values: json, json-compact] `--signer ...` Provide a public-key~signature pair for the transaction `--ws` WebSocket URL for the solana cluster **ARGS:** Vote account from which to withdraw. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~ledger`) The recipient of withdrawn SOL. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. `usb:~ledger`) The amount to withdraw, in SOL; accepts keyword ALL, which for this command means account balance minus rent-exempt minimum `### solana-withdraw-stake`] (<https://docs.solanalabs.com/#solana-withdraw-stake>) `solana-withdraw-stake` Withdraw the unstaked SOL from the stake account **USAGE:** `solana withdraw-stake [FLAGS] [OPTIONS]` **FLAGS:** `--dump-transaction-message` Display the base64 encoded binary transaction message in sign-only mode `-h, --help` Prints help information `--no-address-labels` Do not use address labels in the output `--sign-only` Sign the transaction offline `--skip-seed-phrase-validation` Skip validation of seed phrases. Use this if your phrase does not use the BIP39 official English word list `--use-quic` Use QUIC when sending transactions. `--use-udp` Use UDP when sending transactions. `-V, --version` Prints version information `-v, --verbose` Show additional information **OPTIONS:** `--blockhash` Use the supplied blockhash `--commitment` Return information at the selected commitment level [possible values: processed, confirmed, finalized] `--with-compute-unit-price` Set compute unit price for transaction, in increments of 0.000001 lamports per compute unit. `-C, --config` Configuration file to use [default: `~.config~solana~cli~config.yml`] `--custodian` Authority to override account lockup `--fee-payer` Specify the fee-payer account. This may be a keypair file, the ASK keyword or the pubkey of an offline signer, provided an appropriate `--signer` argument is also passed. Defaults to the client keypair. `-u, --url` URL for Solana's JSON RPC or moniker

(or their first letter): [mainnet-beta, testnet, devnet, localhost] -k, --keypair Filepath or URL to a keypair --with-memo Specify a memo string to include in the transaction. --nonce Provide the nonce account to use when creating a nonced transaction. Nonced transactions are useful when a transaction requires a lengthy signing process. Learn more about nonced transactions at <https://docs.solanalabs.com/cli/examples/durable-nonce> --nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in specified output format [possible values: json, json-compact] --seed Seed for address generation; if specified, the resulting account will be at a derived address of STAKE\_ACCOUNT\_ADDRESS --signer ... Provide a public-key~signature pair for the transaction --ws WebSocket URL for the solana cluster --withdraw-authority Authorized withdrawer [default: cli config keypair] ARGS: Stake account from which to withdraw (or base of derived address if --seed is used). Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) Recipient of withdrawn stake. Address is one of: \* a base58-encoded public key \* a path to a keypair file \* a hyphen; signals a JSON-encoded keypair on stdin \* the 'ASK' keyword; to recover a keypair via its seed phrase \* a hardware wallet keypair URL (i.e. usb:~~ledger) The amount to withdraw from the stake account, in SOL; accepts keyword ALL [Previous Introduction to the Solana CLI](<https://docs.solanalabs.com/cli/intro>) [Next Command Line Wallets](<https://docs.solanalabs.com/cli/wallets/>)