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-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: 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, checking the withdraw authority as a signer create-vote-account Create a vote account deactivate-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 Redelegate 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-offchainmessage 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-setlockup 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 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-updatevalidator 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-voteaccount 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 entrypoint

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 -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-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]
- --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-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: 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

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[]
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(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, --printtimestamp 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/#solanaprogram) 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) setbuffer-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-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: Length of data field in the account to calculate rent for, or moniker: [nonce, stake, system, vote] ### solana-resolve-signer[](https://docs.solanalabs.com/#solanaresolve-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-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 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-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] --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-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-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-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

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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
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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): [mainnetbeta, 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, jsoncompact] --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/#solanastake-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-stakeset-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-seedphrase-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-unitprice 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. --newcustodian 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

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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-circualting 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[]
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(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 --signonly 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 JSONencoded 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~durablenonce --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 base58encoded 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

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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) 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) 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) 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) 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 --
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nonce-authority Provide the nonce authority keypair to use when signing a nonced transaction --output Return information in

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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
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```
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:
ison, ison-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 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 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/)