Sui CLI Cheat Sheet

Addresses & Aliases

Command	Description
sui client active-address	Get the active address
sui client addresses	List the addresses, their aliases, and the active address
sui client new-address ed25519	Create a new address with ED25519 scheme
sui client new-address ed25519 MY_ALIAS	Create a new address with ED25519 scheme and alias
sui client switch --address ADDRESS	Make this the active address (accepts also an alias)
sui keytool convert PRIVATE_KEY	Convert private key in Hex or Base64 to new format (Bech32 encoded 33 byte flag || private key starting with "suiprivkey")
sui keytool generate ed25519	Generate a new keypair with ED25519 scheme and save it to file
sui keytool import INPUT KEY_SCHEME	Add a new key to Sui CLI Keystore using either the input mnemonic phrase or a Bech32 encoded 33-byte flag || privkey starting with "suiprivkey"
sui keytool update-alias OLD_ALIAS NEW_ALIAS	Update the alias of an address

Faucet & Gas

Command	Description
sui client faucet	Get a SUI coin from the faucet associated with the active network
sui client faucet --address ADDRESS	Get a SUI coin for the address (accepts also an alias)
sui client faucet --url CUSTOM_FAUCET_URL	Get a SUI coin from custom faucet
sui client gas	List the gas coins for the active address
sui client gas ADDRESS	List the gas coins for the given address (accepts also an alias)

Network

Command	Description
sui client active-env	Get the active environment
sui client envs	List defined environments
sui client new-env --rpc URL --alias ALIAS	Create a new environment with URL and alias
sui client switch --env ENV_ALIAS	Switch to the given environment
sui genesis	Bootstrap and initialize a new Sui network
sui start	Start the local Sui network
sui-faucet	Start a local faucet. Note this is a different binary

Create, Build, and Test a Move Project

Command	Description
sui move build	Build the Move project in the current directory
sui move build --path PATH	Build the Move project from the given path
sui move migrate PATH	Migrate to Move 2024 for the package at provided path
sui move new PROJECT_NAME	Create a new Move project in the given folder
sui move test	Test the Move project in the current directory

Executing Transactions

Command	Description

sui client call \
  --package PACKAGE \
  --module MODULE \
  --function FUNCTION
	Call a Move package

sui client merge-coins \
  --primary-coin COIN_ID \
  --coin-to-merge COIN_ID
	Merge two coins

sui client split-coins \
  --coin-id COIN_ID \
  --amounts 1000
	Split a coin into two coins: one with 1000 MIST and the rest

sui client pay-sui --input-coins COIN_ID \
  --recipients ADDRESS \
  --amounts 100000000
	Transfer 0.1 SUI to an address and use the same coin for gas

sui client transfer-sui \
  --sui-coin-object-id COIN_ID \
  --to ADDRESS \
	Transfer SUI object to an address and use the same coin for gas

Programmable Transaction Blocks (PTBs)

Command	Description
sui client ptb --move-call p::m::f "<type>" args	Call a Move function from a package and module
sui client ptb --make-move-vec "<u64>" "[1000,2000]"	Make a Move vector with two elements of type u64

sui client ptb \
  --split-coins gas "[1000]" \
  --assign new_coins \
  --transfer-objects "[new_coins]" ADDRESS
	Split a gas coin and transfer it to address

sui client ptb --transfer-objects "[object_id]" ADDRESS	Transfer an object to an address. Note that you can pass multiple objects in the array

sui client ptb \
  --move-call sui::tx_context::sender \
  --assign sender \
  --publish "." \
  --assign upgrade_cap \
  --transfer-objects "[upgrade_cap]" sender
	Publish a Move package, and transfer the upgrade capability to sender