

BCDV1013 Blockchain Platforms

Assignment #2 - Solana

Demonstrate your ability to use Solana CLI with Solana Devnet

- Create a file system wallet on Solana Devnet.
- Airdrop the wallet some SOL tokens.
- Create a second file system wallet.
- Transfer some SOL from Wallet 1 to Wallet 2.
- Create a staking account funded from Wallet 1.
- Delegate your SOL tokens in the staking account to any validator.

1) Create the project folder

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.832]
(c) Microsoft Corporation. All rights reserved.

C:\BCDV1011>mkdir solana

C:\BCDV1011>cd solana

C:\BCDV1011\solana>mkdir my-solana-wallet

C:\BCDV1011\solana>cd my-solana-wallet

C:\BCDV1011\solana\my-solana-wallet>
```

2) Create a file system wallet on Solana Devnet.

<https://docs.solana.com/wallet-guide/file-system-wallet>

command: `solana-keygen new --outfile my-keypair.json`

```
C:\BCDV1011\solana\my-solana-wallet>solana-keygen new --outfile my-keypair.json
Generating a new keypair

For added security, enter a BIP39 passphrase

NOTE! This passphrase improves security of the recovery seed phrase NOT the
keypair file itself, which is stored as insecure plain text

BIP39 Passphrase (empty for none):

Wrote new keypair to my-keypair.json
=====
pubkey: 7HGozXonTAi4HWoTEHgbqypowWJWZwMAYZfyS1NYGwFX
=====
Save this seed phrase and your BIP39 passphrase to recover your new keypair:
legend ring property laptop brand rocket orbit distance plate cancel pitch consider
=====

C:\BCDV1011\solana\my-solana-wallet>
```

3) To display its public key, run:

command: `solana-keygen pubkey my-keypair.json`

```
C:\BCDV1011\solana\my-solana-wallet>solana-keygen pubkey my-keypair.json
7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX
```

It will output a string of characters, such as:

7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX

This is the public key corresponding to the keypair in `my-keypair.json`. The public key of the keypair file is your *wallet* address.

4) Verify your Address against your Keypair file

<https://docs.solana.com/wallet-guide/file-system-wallet#verify-your-address-against-your-keypair-file>

command: `solana-keygen verify 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX my-keypair.json`

To verify you hold the private key for a given address, use `solana-keygen verify`:

```
C:\BCDV1011\solana\my-solana-wallet>solana-keygen verify 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX my-keypair.json
Verification for public key: 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX: Success
```

`solana-keygen verify 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX my-keypair.json`

The command will output "Success" if the given address matches the one in your keypair file, and "Failed" otherwise.

5) Airdrop the wallet some SOL tokens.

<https://docs.solana.com/cli/transfer-tokens>

Airdrop some tokens to get started

First, *airdrop* yourself some play tokens on the devnet.

command: `solana airdrop 2 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com`

```
C:\BCDV1011\solana\my-solana-wallet>solana airdrop 2 7HGoZxonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com
Requesting airdrop of 2 SOL
Signature: 5gYLJdhchEBWfZBrBiWP6oDikPYdBnGV0QPHV9uEVkkFkp5PPKtTSUYpGcJ9E8LF1zSPu7d1okW7yTXdubB4153R
2 SOL
```

Confirm the airdrop was successful by checking the account's balance.

command: `solana balance 7HGozXonTAi4HWOtEHgbqypowWjWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com`

```
C:\BCDV1011\solana\my-solana-wallet>solana balance 7HGozXonTAi4HWOtEHgbqypowWjWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com
2 SOL
```

6) Create a second file system wallet.

We will need a new address to receive our tokens. Create a second keypair and record its pubkey:

Create another folder for the second wallet:

```
C:\BCDV1011\solana\my-solana-wallet>cd ..
C:\BCDV1011\solana>mkdir to-solana-wallet
C:\BCDV1011\solana>cd to-solana-wallet
C:\BCDV1011\solana\to-solana-wallet>_
```

Create the second file system wallet on Solana Devnet.

C:\BCDV1011\solana\to-solana-wallet>`solana-keygen new --outfile to-keypair.json`

```
C:\BCDV1011\solana\to-solana-wallet>solana-keygen new --outfile to-keypair.json
Generating a new keypair

For added security, enter a BIP39 passphrase

NOTE! This passphrase improves security of the recovery seed phrase NOT the
keypair file itself, which is stored as insecure plain text

BIP39 Passphrase (empty for none):

Wrote new keypair to to-keypair.json
=====
pubkey: A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAcd7
=====
Save this seed phrase and your BIP39 passphrase to recover your new keypair:
unlock sun tortoise finger alien volcano dragon glove spatial smile title salute
=====
```

Second wallet public key:

pubkey: A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAcd7

7) Transfer some SOL from Wallet 1 to Wallet 2.

<https://docs.solana.com/cli/transfer-tokens>

Verify the second account:

```
solana-keygen verify A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 to-keypair.json
```

```
C:\BCDV1011\solana\to-solana-wallet>solana-keygen verify A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 to-keypair.json
Verification for public key: A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7: Success
```

Get balance of the second account:

```
solana balance A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 --url
https://api.devnet.solana.com
```

```
C:\BCDV1011\solana\to-solana-wallet>solana balance A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 --url https://api.devnet.solana.com
0 SOL
```

Now, transfer some SOL from Wallet 1 to Wallet 2

command:

```
solana transfer --from my-keypair.json
A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 0.5 --allow-unfunded-recipient --url
https://api.devnet.solana.com --fee-payer my-keypair.json
```

```
C:\BCDV1011\solana\my-solana-wallet>solana transfer --from my-keypair.json A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 0.5
--allow-unfunded-recipient --url https://api.devnet.solana.com --fee-payer my-keypair.json
Signature: 2hKsUiYQngw4GxbH1cpsUxuFbMDSdfkrQkHQjCBZ8CL7ZwjsHnN4DhBciFFWfAsWKcDGqd2KvnkSSHAsRqDmKqYu
```

Check the balance of both accounts:

```
C:\BCDV1011\solana\my-solana-wallet>solana balance 7HGozXonTAi4HWoTEHgbqypowWJWZwMAYZfyS1NYGwFX --url
https://api.devnet.solana.com
1.499995 SOL

C:\BCDV1011\solana\my-solana-wallet>solana balance A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 --url
https://api.devnet.solana.com
0.5 SOL
```

8) Create a staking account funded from Wallet 1

<https://docs.solana.com/cli/delegate-stake>

To delegate stake, you will need to transfer some tokens into a stake account. To create an account, you will need a keypair. Its public key will be used as the stake account address.

command:

```
solana-keygen new --no-passphrase -o stake-account.json
```

```
C:\BCDV1011\solana\my-solana-wallet>solana-keygen new --no-passphrase -o stake_account.json
Generating a new keypair
Wrote new keypair to stake_account.json
=====
pubkey: Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH
=====
Save this seed phrase to recover your new keypair:
join funny cousin kangaroo scatter forget toss reason tribe possible gather book
=====
```

The output will contain the public key after the text `pubkey`:

pubkey: Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH

Now, create a stake account:

command: **solana create-stake-account --from my-keypair.json stake_account.json 0.5 --stake-authority my-keypair.json --withdraw-authority my-keypair.json --fee-payer my-keypair.json**

```
C:\BCDV1011\solana\my-solana-wallet>solana create-stake-account --from my-keypair.json stake_account.json 0.5
--stake-authority my-keypair.json --withdraw-authority my-keypair.json --fee-payer my-keypair.json
Signature: 5tkJeBpfjvYuC6kc5zyswYaYsmLeTfGbnS7XedVaRdGgGxtLvcAiMAvWA2HEsEz2u3NFS2MVTgovd1P9bLax75Wc
```

View the stake account with the `solana stake-account` command:

solana\my-solana-wallet>solana stake-account stake_account.json

```
C:\BCDV1011\solana\my-solana-wallet>solana stake-account stake_account.json
Balance: 0.5 SOL
Rent Exempt Reserve: 0.00228288 SOL
Stake account is undelegated
Stake Authority: 7HGozXonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX
Withdraw Authority: 7HGozXonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX
```

Also, you can check the balance of your first account after staking to stake account.json:

solana balance 7HGozXonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com

```
C:\BCDV1011\solana\my-solana-wallet>solana balance 7HGozXonTAi4HWoTEHgbqypoWwJWZwMAYZfyS1NYGwFX --url https://api.devnet.solana.com
0.999985 SOL
```

- 9) Delegate your SOL tokens in the staking account to any validator.
<https://docs.solana.com/cli/delegate-stake#delegate-stake>

To delegate your stake to a validator, you will need its vote account address. Find it by querying the cluster for the list of all validators and their vote accounts with the `solana validators` command:

| Identity | Vote Account | Commission | Last Vote | Root Slot | Skip Rate | Credits | Version | Active |
|--|--|------------|-----------------|----------------|-----------|---------|---------|--------|
| 4eneXCLCHRxF4MUUkYqim7zvHnPkKwNsFRNUGsEsKFU | CRCYwDpCUV2Uaqau934fquPwB35XXUM4PKoalRpVMTe5 | 100% | 151126088 (-13) | 151126035 (-8) | - | 276856 | 1.10.31 | 0 |
| ! 000000000 SOL (0.00%) | | | | | | | | |
| ! 55X3uY8Fg6EUngXWoVdWwQeUPPJ2AqJCMbtutvG6swm | jxt4fpdcgfYbHMKDCawM632ErXdnYTwvrWzWPMxYPPF | 1% | - | - | - | 0 | unknown | 0 |
| ! 009282880 SOL (0.00%) | | | | | | | | |
| ! AVn878QCUufcB6Q2Ywq3FCN3qQ9i9dVr633qa2LT6PKY | 9TXpjRf54ZSKKF9PztXw7AxbFk7eHeYThNWM7KeJX8d | 100% | 130344162 | 130344116 | - | 0 | unknown | 0 |
| ! 043473920 SOL (0.00%) | | | | | | | | |
| ! DF98oW3M2urbNPgeq4QNbYqT8tnaqa5jCuQFVojbHZZH | CzQumNFTV6D3ZKAFk8FpABgDno77aJnssm656toYZD4 | 100% | 149341679 | 149341648 | - | 0 | 1.11.3 | 0 |
| ! 500000000 SOL (0.00%) | | | | | | | | |
| ! 2FeApjK7R6dFnFadgesXFURvAYdSgfcISr9j5TeuVMWw | J4HALVNIeg2wmXk156ztFuvS35pDnCXoKEKmqY6PKud | 100% | 150350415 | 150350378 | - | 0 | unknown | 0 |
| ! 907717120 SOL (0.00%) | | | | | | | | |
| ! AuDp3dCot4Te1HTNerQvUNE3xgqnnuHWGLNchTRtc | 8WgeFAHU152EqLpdat3JGuij1T1Se6yQ8b3y2MAA36g | 100% | 136241770 | 136241728 | - | 0 | unknown | 0 |
| ! 907717120 SOL (0.00%) | | | | | | | | |
| ! GLJ9c37PbMMBmkNBXDPDAirVZGjgk3dw6Kjn8gcbn1 | 3AtPCNBwXQ1v3HRT39t718U2kjJj9GTUgdI85UuQ8DrA | 100% | 145911655 | 145911602 | - | 0 | unknown | 0 |
| ! 907717120 SOL (0.00%) | | | | | | | | |
| ! hNvzwj7P2EVx4R1ML5uHETa4tJB3cpdYjEvbne1QYL | HxtBFtNZApkQNa79XaC7LZb1oqzSKp633YeRd7RqUMV | 100% | - | - | - | 0 | unknown | 1 |
| ! 178478387 SOL (0.00%) | | | | | | | | |
| ! H9j39GJxdUy9evvUw1csVhtYFBCAW3So15HUvSkuzVrH | GqXvQrLZQLwzMFg5jGRBmdCyuzTxcAaAgfbSND7qJMB | 100% | 61951755 | 61951724 | - | 0 | unknown | 1 |
| ! 217478387 SOL (0.00%) | | | | | | | | |
| ! 74vtGFH4ATs8gywoCm43s3qdGV5xBBASyAkQdQxixyj | 982uGvVXKTRDh7JVSj1K1cd6aaGKtLeNBn1PYpawS3uH | 100% | 62204608 | 62204577 | - | 0 | unknown | 1 |
| ! 232401458 SOL (0.00%) | | | | | | | | |
| ! 9G7cXAgWbNedC78e33b1mRHdQt3rV3VRK81WwQmmHRB | GxKoV3wtwyoeZARTEPaab1W1eAUNXHS7VJwUSDMRjCq1 | 100% | 96340413 | 96340382 | - | 0 | unknown | 1 |
| ! 275195507 SOL (0.00%) | | | | | | | | |
| ! C4y4VFX5KjcaSufxy1bKteYV3k4ynebP13KC38Nz5sbg | E5Rzs97VXVGU7MpYzgX4soz2acmFF2oFcjMTCo6KPCuK | 100% | 118364664 | 118364627 | - | 0 | unknown | 1 |
| ! 372912627 SOL (0.00%) | | | | | | | | |
| ! 2xG1HNTGyJUTtoexYdZzmUnk15F9FuNptUycieKqDu | AopDQCxHyZTK4V7wCsQ54eiQyawshtmJPUB91K6P9tv8 | 100% | 138671999 | 138671962 | - | 0 | 1.9.17 | 1 |
| ! 500000000 SOL (0.00%) | | | | | | | | |
| ! GazuK0Q0sevtL8qk7VpdVnHC2fwuhG8xEpQW7xvpN2mN | 96bkZndLhCqzuuHcSoBG6WiG6ZwCfHbHcFpqj9VoATe | 100% | 55984945 | 55984914 | - | 0 | unknown | 1 |
| ! 675195507 SOL (0.00%) | | | | | | | | |
| ! 7dxQprRsDhxygaHTu3P8U9jkFhaERXMoJfSorGtXKbX | FLRkStZ1KT1RDGvHg83EkzZPajiqTFL2fJzxaD3zY7pe | 100% | 74468368 | 74468337 | - | 0 | unknown | 1 |
| ! 775195507 SOL (0.00%) | | | | | | | | |
| ! FgFMASFF4UDyQBoYkWiZtkBHT6K7v54HFVJR3oqw4rY | 9HsHeqNsY14ozRappATHN4p8fVU14gAvoJbH9c1MgUA | 100% | 89275666 | 89275629 | - | 0 | unknown | 1 |

....

| | |
|---|--|
| Active Stake: 169790791.431999713 SOL | |
| Current Stake: 152025483.740040123 SOL (89.54%) | |
| Delinquent Stake: 17765307.691959579 SOL (10.46%) | |
| Stake By Version: | |
| 1.10.21 | - 0 current validators (0.00%), 1 delinquent validators (0.00%) |
| 1.10.25 | - 1 current validators (0.00%) |
| 1.10.26 | - 0 current validators (0.00%), 1 delinquent validators (0.00%) |
| 1.10.30 | - 2 current validators (22.39%) |
| 1.10.31 | - 3 current validators (0.00%), 1 delinquent validators (0.00%) |
| 1.10.32 | - 4 current validators (67.15%) |
| 1.11.3 | - 0 current validators (0.00%), 1 delinquent validators (0.00%) |
| 1.9.17 | - 0 current validators (0.00%), 1 delinquent validators (0.00%) |
| 1.9.25 | - 0 current validators (0.00%), 1 delinquent validators (0.00%) |
| unknown | - 0 current validators (0.00%), 216 delinquent validators (10.46%) |

The first column of each row contains the validator's identity and the second is the vote account address. Choose a validator and use its vote account address in `solana delegate-stake`:

Then Delegate Stake

command: `solana delegate-stake --stake-authority my-keypair.json Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH vgcDar2pryHvMgPkKaZfh8pQy4BJxv7SpwUG7zinWjG --fee-payer my-keypair.json`

```
C:\BCDV1011\solana\my-solana-wallet>solana delegate-stake --stake-authority my-keypair.json Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH vgcDar2pryHvMgPkKaZfh8pQy4BJxv7SpwUG7zinWjG --fee-payer my-keypair.json
Signature: 4p2specoYMDy2GtGsVyGQnDX1pduZUTFYo4EbcwfkRTEYMPbkS8CX8Lk8cEgbTJTjY12Dj8YzYgxbg222sqC9Q1
```

Check the balance of staking account:

```
C:\BCDV1011\solana\my-solana-wallet>solana balance Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH
0.5 SOL
```

After delegating stake, use `solana stake-account` to observe the changes to the stake account:

command: `solana stake-account Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH`

You will see new fields "**Delegated Stake**" and "**Delegated Vote Account Address**" in the output.

```
C:\BCDV1011\solana\my-solana-wallet>solana stake-account Bz5mPEjuEj4AjdcYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH
Balance: 0.5 SOL
Rent Exempt Reserve: 0.00228288 SOL
Delegated Stake: 0.49771712 SOL
Active Stake: 0 SOL
Activating Stake: 0.49771712 SOL
Stake activates starting from epoch: 349
Delegated Vote Account Address: vgcDar2pryHvMgPkKaZfh8pQy4BJxv7SpwUG7zinWjG
Stake Authority: 7HGoZxonTAi4HwoTEHgbqypoWwJWzWmAYZfyS1NYGwFX
Withdraw Authority: 7HGoZxonTAi4HwoTEHgbqypoWwJWzWmAYZfyS1NYGwFX
```

Overview and check accounts and transactions on the Solana devnet explorer:

<https://explorer.solana.com/?cluster=devnet>

1. View account 1:

<https://explorer.solana.com/address/7HGoZxonTAi4HwoTEHgbqypoWwJWzWmAYZfyS1NYGwFX?cluster=devnet>

Cluster StatsSupplyInspector

Devnet

Search for blocks, accounts, transactions, programs, and tokens

DETAILS

Account

Overview

Address

7HGozXonTAi4HMoTEHgbqpoMwJWZwMAYZfyS1NVGwFX

Balance (SOL)

0.99998

Allocated Data Size

0 byte(s)

Assigned Program Id

System Program

Executable

No

History

Tokens

Domains

Transaction History

Refresh

| TRANSACTION SIGNATURE | SLOT | AGE | RESULT |
|--|-------------|-------------|---------|
| 4p2specoYmQdy2GtGsVyGQnDX1pduZUTFYo4EbcwfkRTEYPMpbkS8CX8Lk8cEgbTJTy12Dj8YzYgxbg222sqC9Q1 | 151,138,884 | an hour ago | Success |
| 5tkJe8pfjvYuC6kc5zyswYaYsmLeTFGbnS7XedVaRdGgGXtLvcAiMAvWA2HEsEz2u3NFS2MVTgovd1P9bLax75Wc | 151,123,192 | 2 hours ago | Success |

2. A transaction that shows transferring 0.5 sol from account-1 to account-2:

DETAILS
Transaction

Overview

Inspect
Refresh

Signature

2hKsU1YQngw4GxbH1cpsUxuFbMDSdfkrQkHQjCBZ8CL7ZwjshN4Dh8c1FFWfAsWKcDGqd2KvnkSSHAsRqDmKqYu

Result

Success

Timestamp

Jul 27, 2022 at 21:22:45 Eastern Daylight Time

Confirmation Status

FINALIZED

Confirmations

MAX

Slot

150,988,448

Recent Blockhash

3RqseF35kd3XEZzJRiVLYM99Xq5z9n34kgASTKkNCReo

Fee (SOL)

0.000005

Account Input(s)

| # | ADDRESS | CHANGE (SOL) | POST BALANCE (SOL) | DETAILS |
|---|--|--------------|--------------------|-----------------------------|
| 1 | 7HGozXonTAi4HMoTEHgbqypowWJWZwMAYZfyS1NYGwFX | -0.500005 | 0.499995 | Fee Payer, Writable, Signer |
| 2 | A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7 | +0.5 | 0.5 | Writable |
| 3 | System Program | 0 | 0.00000001 | Program |

3. View account 2:

<https://explorer.solana.com/address/A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7?cluster=devnet>

SOLANA EXPLORER (BETA)

Cluster StatsSupplyInspector

Devnet

Search for blocks, accounts, transactions, programs, and tokens

Q

DETAILS

Account

Overview

Address

A3LUrr2ZTQ5H8Haorhu3Z8ReHLDf914CBQhJkmQbAc7

Balance (SOL)

0.5

Allocated Data Size

0 byte(s)

Assigned Program Id

System Program

Executable

No

History

Tokens

Domains

Transaction History

Refresh

| TRANSACTION SIGNATURE | SLOT | AGE | RESULT |
|--|-------------|--------------|---------|
| 2hKsUiYQngw4GxbH1cpsUxuFbMDSdFkrQkHQjCBZ8CL7ZwjsHnN4DhBciFFWFAsWKcDgqd2KvnkSSHAsRqDmKqYu | 150,988,440 | 16 hours ago | Success |

Fetch full history

4) View stake-account:

<https://explorer.solana.com/address/Bz5mPEjuEj4AjdCYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH?cluster=devnet>

Stake Account

Refresh

Address

Bz5mPEjuEj4AjdCYpo7Q62Zy8CPJ2pJEN97pDUWFk5RH

Balance (SOL)

0.5

Rent Reserve (SOL)

0.00228288

Stake Delegation

Status

Delegated (activating)

Delegated Stake (SOL)

0.49771712

Active Stake (SOL)

0

Inactive Stake (SOL)

0.49771712

Delegated Vote Address

vgcDar2pryhVmgPkKazfh8pQy4Bjxv75pwUG7z1rhJG

Activation Epoch

349

Deactivation Epoch

-

Authorities

Stake Authority Address

7HGozXonTA14HwTEHgbqypowJwZwMAYZfyS1NYGwFX

Withdraw Authority Address

7HGozXonTA14HwTEHgbqypowJwZwMAYZfyS1NYGwFX

History

Rewards

Tokens

Domains

Transaction History

Refresh

TRANSACTION SIGNATURE

SLOT

AGE

RESULT

4p2specoYmQdy2GtGsVyGQnDX1pduZUTFYo4EbcwFkRTEYPPbkS8CX8LkBcEgbT3Ty12Dj8YzYgxbg222sQC9Q1

151,130,084

an hour ago

Success

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