

COZ Weekly Report #10 - 2017.09.11

City Of Zion (COZ) is a group of open source developers that formed to support NEO. We provide weekly reports that summarize our goals, projects, and progress. In exchange, the NEO Council is supporting these contributions through NEO rewards.

Our governance can be seen [clicking here](#).

Our donation address is AXSoNQEKjmqPBNPg5cNrHyWivfjok3Vj9D

The community has decided to reward 339 NEO for the efforts listed below
COZ Council members are excluded from any weekly reward or COZ competitions

COZ is driving two campaigns:

1 - The dApps competition at <https://cityofzion.io/dapps/1>

2 - The stack exchange site at

<http://area51.stackexchange.com/proposals/110921/neo-blockchain>

The following is a list of work on COZ projects completed this week:

Neo Core

- Neo Unit Tests - Ongoing testing of the core Neo project.

Admin Portal

- More working on new feature (support helpdesk)
- Bugfixing

neo-js-blockchain

- The npm module is available as 'neo-blockchain-js'
- Full and Light node support
- Auto-sync and blockchain verification mode implemented
- Hot-switching between local and remote nodes as blocks are available
- JS Smart Contract 'compilation' initiative begins
- On Deck: Expanded Blockchain API calls (like NEP5) and development roadmap

Mobile Wallet (Android/IOS)

- Testing of functionality
- Refactor code
- Working on Address Book to save addresses

Neon JS SDK:

- Refactor to support new 0x transaction naming.

Neo Python

- Smart Contract Invoke functionality (both local 'test' invoke and real invoke)

```

neo> testinvoke eb45a22e65f6e6da1d3d2d5fbf5d480f0949606 add 32 7
Invoking contract - AWESOMECALCULATOR
Method signature ( String ) ( ByteArray ) ( ByteArray ) -> ByteArray
[neo.SmartContract.StateReader] -> RUNTIME.Notify: Array: [xneo.VM.InteropService.Integer object at 0x10b725668]

-----
Test invoke successful
Results ['Integer: 39 ']
Invoke TX gas cost: 1.0
-----

You may now invoke this on the blockchain by using the 'invoke' command with no arguments or type 'cancel' to cancel invoke

neo> invoke
Relayed Tx: bdf85e725e1c535451e5fb7327d97800d8f927f88521f96c30f5bb1f3a22a0ac
neo>

```

- Smart Contract Deploy functionality

```

neo> import contract Contracts/awm/calculator3.awm 070505 05 True
Please fill out the following contract details:
[Contract Name] > Fun
[Contract Version] > Cool
[Contract Author] > Rad
[Contract Email] > Awesome@Bomb.com
[Contract Description] > Woot
Creating smart contract....
  Name: Fun
  Version: Cool
  Author: Rad
  Email: Awesome@Bomb.com
  Description: Woot
  Needs Storage: True
{
  "returntype": "05",
  "hash": "830fc84f783c98af791198f7adccc770ea7a0984",
  "parameters": "070505",
  "script": "5fc56b6c766b00527ac46c766b51527ac46c766b52527ac4616168164e656f2e53746f726167652e476574436f6e746578746c766b53527ac46c766b53c306726573756c7465733996f7065726174696c766b00c3615272680f4e656f2e53746f726167652e47657461006c766b55527ac46c766b51c361657e016c766b56527ac46c766b52c361656e016c766b575c36c766b56c36c766b57c3936c766b55527ac46162c0006c766b00c303737562876c766b5a527ac46c766b5ac3641a00616c766b50c36c766b57c3946c766b55527ac4616290006c766b00c3036c3956c766b55527ac4616260006c766b00c303646976876c766b5c527ac46c766b5c3641a00616c766b56c36c766b57c3966c766b55527ac4616230006c766b00c3036d6f64876c766b5d52716c766b55c3616542006c766b58527ac451c576006c766b55c3c46168124e656f2e52756c74696d652e4e6f74696679616c766b58c36c766b5e527ac46203006c766b5ec3616c756653c56b6c37ac46203006c766b52c3616c756653c56b6c766b00527ac461516c766b00c36a527a527ac46c766b51c36c766b52527ac46203006c766b52c3616c7566"
}

-----
Test deploy invoke successful
Results ['IO: Interface: xneo.Core.State.ContractState.ContractState object at 0x10bef1e0 ']
Deploy Invoke TX gas cost: 490
-----

You may now deploy this contract on the blockchain by using the 'invoke' command with no arguments or type 'cancel' to cancel deploy

neo>

```

- Updated CLI help and other methods to display help for functionality like account view, account search, asset view, asset search, contract view, contract search, contract invoke/deploy, etc
- View usage and demo of Smart Contract load/deploy and other functionality here: <https://www.youtube.com/watch?v=bOgdbaem6Yg>

NeoScan

- Auto-repair algorithm.
- CI and docker support(@steffenix).

Documentation

- Japanese translations of framework/dotnet/smart contracts documentation
- Improved English documentation

Neo Swift SDK

- All blockchain read operations
- Cryptographic wallet generation (private key, wif, address, public address)



- Send asset transaction for both neo and gas
- First step towards native NEO applications on iOS and macOS

Join us in slack, we hope new developers will find support from the community in #develop channel.

FCC, on behalf of COZ Council.