ioeX.ORG.Wallet.Service

Introduction

Node has a Restful API with URL endpoints corresponding to actions that users can perform with their channels. The endpoints accept and return JSON encoded objects. The API URL path always contains the API version in order to differentiate queries to different API versions. All queries start with: /api/<version>/ where <version> is an integer representing the current API version.

create a IOEX wallet

/api/1/createWallet	GET /api/1/createWallet HTTP/1.1
response	

<pre>{
    "result":{
        "privateKey":"492F67D441F563AA4746497EB77C89906A3D3C06B242030BA966BC5604482EF7",
        "publicKey":"035EBC0D70C9E34006C932D7BB47474159C136A8944C92416A94481212379751CB",
        "address":"EJonBz8U1gYnANjSafRF9EAJW9KTwRKd6x"
    },
    "status":200
}</pre>	

generate mnemonic phrases

/api/1/eng/mnemonic	GET /api/1/eng/mnemonic HTTP/1.1
response	

<pre>{
    "result":"obtain pill nest sample caution stone candy habit silk husband give net",
    "status":200
}</pre>	

/api/1/cn/mnemonic	GET /api/1/cn/mnemonic HTTP/1.1
response	

<pre>{
    "result":"命 氨 静 粘 汤 介 璃 沟 腰 贸 里 菜",
    "status":200
}</pre>	

Using mnemonic to retrieve wallet

/api/1/hd	POST /api/1/hd HTTP/1.1
request	

<pre>{
    "mnemonic":"obtain pill nest sample caution stone candy habit silk husband give net",
    "index":1
}</pre>	

response	

<pre>{
    "result": {</pre>	

```
        "privateKey": "7A87D1C43FBDF76689A5A66A369B34E92391748F64D2952BCE3E6D5E06A8D8CD",

        "publicKey": "02345363ACEA3A744DC149193171A87B6888F4CD108821CC1F9AD689CCA53489AC",

        "publicAddress": "EXoaGjh6H9afjDX7DUBY1MpsdLz4Vo16Qa"

    },

    "status": 200

}
```

/api/1/hd	POST /api/1/hd HTTP/1.1
request	

```
{

    "mnemonic":"obtain pill nest sample caution stone candy habit silk husband give net",

    "start":1,

    "end":5

}
```

| **response** | |

```
{

    "result": [

        {

            "privateKey": "7A87D1C43FBDF76689A5A66A369B34E92391748F64D2952BCE3E6D5E06A8D8CD",

            "publicKey": "02345363ACEA3A744DC149193171A87B6888F4CD108821CC1F9AD689CCA53489AC",

            "publicAddress": "EXoaGjh6H9afjDX7DUBY1MpsdLz4Vo16Qa"

        },

        {

            "privateKey": "D0E8FB87B32EC69EC8527486AF6780DB06983F395F8394372B88F9F29F738A91",

            "publicKey": "02371040B81C28B3A194826E1F8905687E06E94D5AEB1292C72051BF6ED314888D",

            "publicAddress": "EfPZc1VdGHztzeRag9ayb4MLPZA7psGuGs"

        },

        {

            "privateKey": "5892859E60028872E63AEC018217F6A9A38AFC05F4FA4DB2FA2D07455B6C46E1",

            "publicKey": "0371EAD623897AEA29CBFB2ABC9A361E5862DCAEF68A265C6D4F8A506D3353CFC8",

            "publicAddress": "EPc6Mmx78YN8Mwa11qjLgSAgPjAWU7LJZu"

        },

        {

            "privateKey": "9F8A564E7CC0E4880006B8029A1FA220A60AF426D2CD90DEB52F4CCD5E89087C",

            "publicKey": "0323671B0FB55471D885300445E25893A1EF304484C73BD6F380959BF90987A0A9",

            "publicAddress": "EPgRBCe4BwNVpWFdNhLhTEebQG35b9MoFz"

        },

        {

            "privateKey": "CDA64875FED6B901595C732BD71F925C6CACF5DBC503F7C472D950975A90EF05",

            "publicKey": "027B4AEFD9208E25BD27F0416729E73187CB22B58859D40E756451D3B73079FD54",

            "publicAddress": "EKi96gzJSQj3zQ6LybXwNPmEguj66H8SjN"

        },

    ],

    "status": 200

}
```

Signing message using private key

/api/1/sign	POST /api/1/sign HTTP/1.1

request	

{
 	
    "privateKey":"0D5D7566CA36BC05CFF8E3287C43977DCBB492990EA1822643656D85B3CB0226",
 	
    "msg":"你好，世界"
 	
}	

response	

{
 	
    "result": {
 	
        "msg": "E4BDA0E5A5BDEFBC8CE4B896E7958C",
 	
        "pub": "02C3F59F337814C6715BBE684EC525B9A3CFCE55D9DEEC53E1EDDB0B352DBB4A54",
 	
        "sig":
 	
"E6BB279CBD4727B41F2AA8B18E99B3F99DECBB8737D284FFDD408B356C912EE21AD478BCC0ABD65246938F17DDE64
 	
258FD8A9684C0649B23AE1318F7B9CEEEC7"
 	
    },
 	
    "status": 200
 	
}	

transfer IOEX using private key

/api/1/transfer	POST /api/1/transfer HTTP/1.1
request	

{
 	
    "sender":[
 	
        {
 	
            "address":"EHLhCEbwViWBPwh1VhpECzYEA7jQHZ4zLv",
 	
            "privateKey":"C740869D015E674362B1F441E3EDBE1CBCF4FE8B709AA1A77E5CCA2C92BAF99D"
 	
        },
 	
    ],
 	
    "memo":"测试",
 	
    "receiver":[
 	
        {
 	
            "address":"EbxU18T3M9ufnrkRY7NLt6sKyckDW4VAsA",
 	
            "amount":"2.4"
 	
        }
 	
    ]
 	
}	

response	

{
 	
    "result": "7bcb5fbf7d6e8f673d50999709d695030dbd6d60a00281221540498cf2830f59",
 	
    "status": 200
 	
}	

get transaction by transaction id

/api/1/tx/(string:`txid`)	GET /api/1/tx/(`txid`) HTTP/1.1
response	

{
 	
    "result":{	

```
    "vsize":346,
    "locktime":0,
    "txid":"62637968e72b06e4fa1de91542a3b71bd2462ba1d29e9c14c2ecfd042d1937ab",
    "confirmations":6756,
    "type":8,
    "version":0,
    "vout":[
        {
            "outputlock":0,
            "address":"XQd1DCi6H62NQdWZQhJCRnrPn7sF9CTjaU",
            "assetid":"a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0",
            "value":"0.10010000",
            "n":0
        },
        {
            "outputlock":0,
            "address":"EbxU18T3M9ufnrkRY7NLt6sKyckDW4VAsA",
            "assetid":"a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0",
            "value":"0.50249300",
            "n":1
        }
    ],
    "blockhash":"4021e5c0ace86221016d3aa2b114adbd84bb03692bb6ddc6034794260834c570",
    "size":346,
    "blocktime":1538279155,
    "payload":{
        },
    "vin":[
        {
            "sequence":0,
            "txid":"ba7bd41aae0a1371d9689ad04508f0754bb4a5333386411bccbdec718ce61625",
            "vout":1
        }
    ],
    "payloadversion":0,
    "attributes":[
        {
            "data":"32323432343239353130383035363838303230",
            "usage":0
        }
    ],
    "time":1538279155,
    "programs":[
        {
            "code":"21021421976fdbe518ca4e8b91a37f1831ee31e7b4ba62a32dfe2f6562efd57806adac",
            parameter":"40cf6b8a18c861fcad1c23816221cc40a0d2e7d43065c070e66905ff7d6c634068542dd2a9b0bbb24de6
a5a547b57767f908fc384cd6dc06298de11ebc3338aa79"
        }
    ],
```

```
            "hash":"62637968e72b06e4fa1de91542a3b71bd2462ba1d29e9c14c2ecfd042d1937ab"
    },
    "status":200
}
```

get transactions

/api/1/tx	POST /api/1/tx HTTP/1.1
request	
["64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8", "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c9", "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8"]	
response	
{ "result": [{ "vsize": 288, "locktime": 0, "txid": "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8", "confirmations": 13, "type": 2, "version": 0, "vout": [{ "outputlock": 0, "address": "8NJ7dbKsG2NRiBqdhY6LyKMiWp166cFBiG", "assetid": "a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0", "value": "1", "n": 0 }, { "outputlock": 0, "address": "EbxU18T3M9ufnrkRY7NLt6sKyckDW4VAsA", "assetid": "a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0", "value": "977.89999500", "n": 1 }], "blockhash": "75d78222e8f8b7622ab45902fd7a79c03edf08bceb1078335e9a8caf90cee612", "size": 288, "blocktime": 1539919032, "vin": [{ "sequence": 0, "txid": "f176d04e5980828770acadcfc3e2d471885ab7358cd7d03f4f61a9cd0c593d54", "vout": 1 }	

                ],
                "payloadversion": 0,
                "attributes": [
                    {
                        "data": "e6b58be8af95",
                        "usage": 129
                    }
                ],
                "time": 1539919032,
                "programs": [
                    {
                        "code": "21021421976fdbe518ca4e8b91a37f1831ee31e7b4ba62a32dfe2f6562efd57806adac",
                        "parameter":
"403792fa7dd7f29a810ab247e6476ca814ae51c550419f101948db6141004b364b645d84aaecdcb96790bd8cd7606dde04c7ca494ed51
b893f460d06517778e8c1"
                    }
                ],
                "hash": "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8"
        },
        "Unknown Transaction",
        {
                "vsize": 288,
                "locktime": 0,
                "txid": "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8",
                "confirmations": 13,
                "type": 2,
                "version": 0,
                "vout": [
                    {
                        "outputlock": 0,
                        "address": "8NJ7dbKsG2NRiBqdhY6LyKMiWp166cFBiG",
                        "assetid": "a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0",
                        "value": "1",
                        "n": 0
                    },
                    {
                        "outputlock": 0,
                        "address": "EbxU18T3M9ufnrkRY7NLt6sKyckDW4VAsA",
                        "assetid": "a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0",
                        "value": "977.89999500",
                        "n": 1
                    }
                ],
                "blockhash": "75d78222e8f8b7622ab45902fd7a79c03edf08bceb1078335e9a8caf90cee612",
                "size": 288,
                "blocktime": 1539919032,
                "vin": [
                    {
                        "sequence": 0,

```
                "txid": "f176d04e5980828770acadcfc3e2d471885ab7358cd7d03f4f61a9cd0c593d54",

                "vout": 1

            }

        ],

        "payloadversion": 0,

        "attributes": [

            {

                "data": "e6b58be8af95",

                "usage": 129

            }

        ],

        "time": 1539919032,

        "programs": [

            {

                "code": "21021421976fdbe518ca4e8b91a37f1831ee31e7b4ba62a32dfe2f6562efd57806adac",

                "parameter":

"403792fa7dd7f29a810ab247e6476ca814ae51c550419f101948db6141004b364b645d84aaecdcb96790bd8cd7606dde04c7ca494ed51
b893f460d06517778e8c1"

            }

        ],

        "hash": "64955791d225fddae4bba01547712c53f97ce3fb38252c01dbb9d6d9b7b982c8"

    }

],

"status": 200

}
```

get utxos of specific address

/api/1/utxos/(string:`address`)	GET /api/1/utxos/(string:`address`) HTTP/1.1
response	

```
{

    "result":[

        {

            "AssetId":"a3d0eaa466df74983b5d7c543de6904f4c9418ead5ffd6d25814234a96db37b0",

            "AssetName":"IOEX",

            "Utxo":[

                {

                    "Txid":"4213d73e3764750cbab09593db213ac1ea222947d91e6e6d2c243d2461bd034c",

                    "Value":"0.00010000",

                    "Index":0

                }

            ]

        }

    ],

    "status":200

}
```

Check the current network block height

/api/1/currHeight	GET /api/1/currHeight HTTP/1.1
response	
{ "result": 128797, "status": 200 }	

get the balance of address

/api/1/balance/(string:`public_address`)	GET /api/1/balance/(string:`public_address`) HTTP/1.1
response	
{ "result":"2.11059400", "status":200 }	

Get the transactions of specific block height

/api/1/txs/(int:`block_height`)	GET /api/1/txs/10 HTTP/1.1
response	
{ "result": { "Transactions": ["53b06e08da9362abf50003e26f8b99b38bd32b6a7dfad83203ef5bb9da2f4a05"], "Height": 10, "Hash": "1166ae059fd6914a44edde9aa8a2765138da0ab868ddaeb51d20d21908c488da" }, "status": 200 }	

create offline transaction

/api/1/createTx
request
{   "inputs"   : ["EU3e23CtozdSvrtPzk9A1FeC9iGD896DdV"],   "outputs" : [{   "addr":"EPzxJrHefvE7TCWmEGQ4rcFgxGeGBZFSHw",   "amt" :1000   }   ] }
response
{   "result": {   "Transactions": [

```json
        {
            "UTXOInputs": [
                {
                    "address": "EU3e23CtozdSvrtPzk9A1FeC9iGD896DdV",
                    "txid": "fa9bcb8b2f3a3a1e627284ad8425faf70fa64146b88a3aceac538af8bfeffd91",
                    "index": 1
                }
            ],
            "Fee": 100,
            "Outputs": [
                {
                    "amount": 1000,
                    "address": "EPzxJrHefvE7TCWmEGQ4rcFgxGeGBZFSHw"
                },
                {
                    "amount": 99997800,
                    "address": "EU3e23CtozdSvrtPzk9A1FeC9iGD896DdV"
                }
            ]
        }
    ]
    },
    "status": 200
}
```