I/O DIGITAL

APPLICATION BASED
BLOCKCHAIN

I/O COIN
Dions API V1.0

I/O Digital

Dev Team

I/O Coin
DIONS API V1.0

February 13, 2018
Document revision 1.0
Author D. Hatton

Contents

aliasRegistration

alias

alias <alias>

Register a new alias in encrypted form

The results in an RSA key pair to public ioc address association. The given alias is encrypted on the resulting transaction.

Example

alias d/my_domain_name ["354e7d9d6393a10f77ec8cac9a04e110fb189f68de8e15149ab9eee6da6afe30",]

The call returns the transaction id. Data fees are currently 0.01 IOC minimum plus 0.01 for every 1Kb. The alias remains valid at the time of writing for 210000 blocks from any given update.

decryptAlias

Decrypt an alias with associated key address.

decryptAlias <alias> <address>

Example : **decryptAlias example.com <address>**

updateEncrypt

updateEncrypt <name> <content_file>

Associate data with the given (encrypted) alias. The data is extracted, compressed and encrypted on the blockchain using AES 256 encryption.

Example

updateEncrypt d/my_name CONTENT_FILE

downloadDecrypt

Download the payload associated with the given encrypted alias

downloadDecrypt <alias> <CONTENT_FILE>

Example

downloadDecrypt example.com datafile

transferAlias

Transfer a given alias to the target address or alias.

transferAlias <alias> <target>

Example : **transferAlias x mi61b69nHuK46cyKwaB5uDKnoumXb4Fbxu**
transferAlias x y

returns : tx id

transferEncryptedAlias

Transfer an encrypted alias over a channel.

transferEncryptedAlias <alias> <address> <address>

Example :

transferEncryptedAlias example.com <end address> <end address>

sendPublicKey

Send public key to endpoint address.

sendPublicKey <address> <address>

Returns the tx id and the signature.

returns :

sendPublicKey myM3CdMNTawe28TphKKp7GTMnC8QuZi4rN mi5raK1YBZNo9HfSd9NDjJSp2x9Y5cbefJ
[

"3d7fe77c9bb90ec08bb538a361a7b6aa219517d22b3437ca776294bb8362442c",

"Hx4b/oMXPrXwlfC+cjF0f3Eo8v8Gqsxi2OO5J9oeYLWNnuCmgA31pa7SwjOA6FzgQ G6WC84AVnfhtpT2FhQv4mM="
]

statusList

List all iocoin addresses that have RSA key pairs associated with them. One of these addresses must be selected as address for a subsequent

name_new <name> <address> operation.

iocoind my_rsa_keys

returns :

[“address” : “iZtzwcBgniFecienvBPAW4MUV6x4dTBtdr” “address” : “...”,

]

sendMessage

Send an encrypted message over an established channel.

sendMessage <endpoint address> <message> <endpoint address>

Returns the tx id on success.

Example :

sendMessage myM3CdMNTawe28TphKKp7GTMnC8QuZi4rN “hello” mi5raK1YBZNo9HfSd9NDjJSp2x9Y5cbefJ

decryptedMessageList

List the encrypted messages received. Encrypted messages are locally decrypted for viewing in plain text. Returns encrypted messages received with the sender, recipient endpoints, encrypted message, time and locally decrypted message.

Example :

data2 decryptedMessageList [

{
"sender" : "myM3CdMNTawe28TphKKp7GTMnC8QuZi4rN", "recipient" : "mi5raK1YBZNo9HfSd9NDjJSp2x9Y5cbefJ", "encrypted_message" : "GeYlv7zZr/mWHBENSc4SVg==", "time" : "2018-02-10 00:51:39 UTC", "plain_text" : "hello",
"iv128Base64" : "/aHimoHiFMFSTCuDkmvqJg==", "signature" :

"lDsgUAe8t13M8x/Pqpckzztd3i6lTCP4iJaOL/Gnb/5YY29kmHF58P+sXHxPUV9HuG2L fKuVQAz2B3ny0aVHCM8="

}]