MINICASH DOCUMENTATION

Version Alpha

Socket ports

```
minicashd.py:
      command line: 2223
      server: 2222
minicashPS.py:
      server: 9999
```

Currency details

1 cash = 100 000 000 picocash = 1 000 000 minicash = 1000 microcash

Network protocol

Every packet contains a ‘Type’ key that is one of the:
HELLO
REQ_LEDGER
RESP_LEDGER
REQ_INTRO_KEY
RESP_INTRO_KEY
REQ_INTRO_KEY_END
REQ_PAY
RESP_PAY
REQ_PAY_END

Also contains a ‘Data’ key.

Examples

HELLO:

```
{‘Type’:’HELLO’,
 ‘Data’:[
          {‘Fingerprint’:'C4ED6700DFB2A1DF', 'ProofOfWork':2514606},
          {'Fingerprint':'A22F2D8422520966', 'ProofOfWork':722303}
        ]
}
```

REQ_LEDGER:

```
{
  'Type':'REQ_LEDGER',
  'Data': {}
}
```

RESP_LEDGER:

```
{
  ‘Type’:’RESP_LEDGER’,
  ‘Data’:{
           ‘Ledger’:{
                      'C4ED6700DFB2A1DF_2514606':45423343,
                      ‘A22F2D8422520966_3454529’:45560343
                    },
           ‘Signatures’:{
                         'C4ED6700DFB2A1DF':'-----BEGIN PGP...’,
                         ‘A22F2D8422520966’:’-----BEGIN PGP...’
                        }
         }
}
```

REQ_INTRO_KEY:

```
{
  ‘Type’:’REQ_INTRO_KEY’,
  ‘Data’:{
           ‘Key’:’C4ED6700DFB2A1DF_2514606',
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Sig’:’-----BEGIN PGP...’,
         }
}
```

Explainations:

Key: key to add with the proof of work
Checksum: the checksum of the ledger after adding the key
Sig: signature of the checksum with the key

RESP_INTRO_KEY:

```
{
  ‘Type’:’RESP_INTRO_KEY’,
  ‘Data’:{
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Signatures’: {
             ‘C4ED6700DFB2A1DF’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’,
             ‘A22F2D8422520966’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’
            }
         }
}
```

Explainations:

Checksum: The checksum of the request packet that was received before
Signatures: Fingerprints for keys and signatures of the checksum above

REQ_INTRO_KEY_END

```
{
  ‘Type’:’REQ_INTRO_KEY_END’,
  ‘Data’:{
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Signatures’: {
             ‘C4ED6700DFB2A1DF’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’,
             ‘A22F2D8422520966’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’
            }
          }
}
```

REQ_PAY:

```
{
  ‘Type’:’REQ_PAY’,
  ‘Data’:{
           ‘Fromkey’:’C4ED6700DFB2A1DF',
           ‘Tokey’:’A22F2D8422520966’,
           ‘Amount’:345449,
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Sig’:’-----BEGIN PGP...’,
         }
}
```

RESP_PAY:

```
{
  ‘Type’:’RESP_PAY’,
  ‘Data’:{
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Signatures’: {
             ‘C4ED6700DFB2A1DF’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’,
             ‘A22F2D8422520966’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’
            }
         }
}
```

Explainations:

Checksum: The checksum of the request packet that was received before
Signatures: Fingerprints for keys and signatures of the checksum above

REQ_PAY_END

```
{
  ‘Type’:’REQ_PAY_END’,
  ‘Data’:{
           ‘Checksum’:’e811ba851763f04a1c54591bb748a424’,
           ‘Signatures’: {
             ‘C4ED6700DFB2A1DF’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’,
             ‘A22F2D8422520966’:‘-----BEGIN PGP SIGNED MESSAGE-----\nHa...’
            }
          }
}
```