

MINICASH DOCUMENTATION

Version Alpha

Socket ports

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

Currency details

1 cash = 1 000 000 microcash = 1000 millicash

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...',
  }
}
```

Explanations:

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...'
    }
  }
}
```

Explanations:

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...'
    }
  }
}
```

Explanations:

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...'
    }
  }
}
```