

Kaspa Common Stratum Protocol

Kaspa Common Stratum Protocol is standardized by kaspapool, WoolyPooly, F2Pool and HumPool.

mining.subscribe

params: ["IceRiverMiner-v1.1", "EthereumStratum/1.0.0"]

result: [true, "Protocol version"]

// request:

```
{
  "id":1,
  "method":"mining.subscribe",
  "params":[
    "IceRiverMiner-v1.1",
    "EthereumStratum/1.0.0"
  ]
}
```

// response:

```
{
  "id":1,
  "result":[
    true,
    "EthereumStratum/1.0.0"
  ],
  "error":null
}
```

mining.set_difficulty

params: [Nth integer of 2]

```
{
  "id":2,
  "method":"mining.set_difficulty",
  "params":[
    4096
  ]
}
```

mining.set_extranonce

```
{
  "id":3,
  "method":"mining.set_extranonce",
  "params":[
    "0001"
  ]
}
```

nonce-prefix is first part of the block header nonce (in hex).

By protocol, Kaspa's nonce is 8 bytes long. The miner will pick nonce2 such that $\text{len}(\text{nonce2}) = 8 - \text{len}(\text{nonce-prefix}) = 8 - 2 = 6$ bytes.

mining.authorize

params: ["username", "password"]

result: true

```
{
```

```
"id":3,
"method":"mining.authorize",
"params":[
"kaspa:qzepf7uwa4w22qskhrlv9f958zv4pwtfllu5dhkpk4hyedzmh1wdsjele0fcy.
workname",
""
]
}
{"id":3,"params":"mining.authorize","result":true}
mining.notify
params: ["jobId", "header hash"]
{
"id":1,
"method":"mining.notify",
"params":[
"34",
"2461684d90ef4e9fa55ca550ed4f9dd472d7bde502e01bf45ab7a3336d43cc9d4b9c
7b4886010000"
]
}
mining.submit
params: [ "username", "jobId", "nonce" ]
result: true / false
{
"id":140,
"method":"mining.submit",
"params":[
"kaspa:qzepf7uwa4w22qskhrlv9f958zv4pwtfllu5dhkpk4hyedzmh1wdsjele0fcy.
workname",
"34",
"00011f7a5745732a"
]
}
{"id":140,"result":true,"error":null} // accepted share response
{"id":140,"result":null,"error":[30,"Low difficulty share",null]} //
rejected share response
nonce2 is the second part of the nonce.
```