基础链接口文档

版本v1.0

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 版本 | 编写人员 | 时间 | 备注 |  |  |
| 1.0 | 张 |  |  |  |  |
|  |  |  |  |  |  |

# 接口参数说明

## 所有红色参数均为必传项。

## 请求格式统一为application/json。

## 请求方式均为post请求。

## 默认请求http端口为7001， ws端口为7002

## 系统默认账户

用户名：1，

私钥5JNHfZYKGaomSFvd4NUdQ9qMcEAC43kujbfjueTHpVapX1Kzq2n

## 请求基本格式为：

{"jsonrpc":"2.0","params":["param1","param2",{body}],"id":-1,"method":"call"}

说明： param1，调用对象名称。

param2， 调用的方法名称。

body，请求数据的参数。

id， 标示请求的序列。

其他为固定格式， 不需要修改。

以下文档不再说明json全部结构体，声明param1， param2， body3个参数。

例如：{"jsonrpc":"2.0","params":["database\_api","get\_dynamic\_global\_property", {}],"id":-1,"method":"call"}

## 请求基本返回格式：

{"jsonrpc":"2.0","result":{},"error":null,"id":-1}

说明： result：为返回结果， 可能为空

error：错误信息。无错误信息error为null。

## 默认字母都是小写

# 查询接口

## 查询当前全局属性

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| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 张 | |
| 更新时间 | 2018.7.17 | |
| 备注 | 查询当前全局属性 | |
| param1 | database\_api | |
| param2 | get\_dynamic\_global\_property | |
| body | 空 | |
| 返回值说明 | result |  |
| id | 0 |
| head\_block\_num | 当前区块高度 |
| head\_block\_id | 当前区块id |
| time | 当前时间 |
| current\_producer | 当前见证人 |
| last\_irreversible\_block\_num | 确认区块号 |
| 示例 | {  "jsonrpc": "2.0",  "result": {  "id": 0,  "head\_block\_num": 228,  "head\_block\_id": "000000e4b7550277fd73628762179e2d152d274f",  "time": "2018-07-17T02:58:42",  "current\_producer": 0,  "last\_irreversible\_block\_num": 207  },  "error": null,  "id": -1  } | |

## 获取用户

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| --- | --- | --- | --- | --- | --- |
| 版本 | 1.0 | | | | |
| 编写人员 | 张 | | | | |
| 更新时间 | 2018.7.17 | | | | |
| 备注 | 获取用户基本信息 | | | | |
| param1 | database\_api | | | | |
| param2 | get\_accounts | | | | |
| Body | Key | Value | | 备注 | |
|  | “accounts” | [] | | 用户名数组 | |
| 返回值说明 | result | |  | | |
|  | accounts | | 数组 | | |
|  |  | | name | | 用户地址 |
|  |  | | creator | | 创建者地址 |
|  |  | | balance | | 用户持币 |
|  |  | | create\_time | | 创建时间 |
| 示例 | {"jsonrpc":"2.0","result":{"accounts":[{"name":1,"creator":0,"balance":"10000.00000000, NEWT","create\_time":"1970-01-01T00:00:00"}]},"error":null,"id":-1} | | | | |

* 1. 获取交易哈希值

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| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 欧 | |
| 更新时间 | 2018.7.17 | |
| 备注 | 获取签名交易的哈希值 | |
| param1 | database\_api | |
| param2 | get\_transactions\_hex | |
| Body | trx |  |
| ref\_block\_num | 前一个区块高度 |
| ref\_block\_prefix | 区块前缀 |
| expiration | 到期时间 |
| operations | 操作数据 |
| signatures | 交易签名 |
| 示例 | {"jsonrpc":"2.0", "params":["database\_api", "get\_transactions\_hex", {"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-18T03:54:50","operations":[],"signatures":["202d50846057b2f6c24e1e6319ae71b1288b16140dce02460714a6d58d5c2900790568e99741270c9597fe4b93d803a2ab459768644e69b9278ab26deaaf33e189"]}}], "method":"call", "id":111} | |
| 返回值说明 | result |  |
| hash | 该交易的哈希文本串 |
| 示例 | {"jsonrpc":"2.0","result":{"hash":"0000000000000aba4e5b0001202d50846057b2f6c24e1e6319ae71b1288b16140dce02460714a6d58d5c2900790568e99741270c9597fe4b93d803a2ab459768644e69b9278ab26deaaf33e189"},"error":null,"id":111} | |

* 1. 获取交易
  2. 获取区块头部

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| --- | --- | --- | --- |
| 版本 | 1.0 | | |
| 编写人员 | 欧 | | |
| 更新时间 | 2018.7.17 | | |
| 备注 | 获取区块头部 | | |
| param1 | block\_api | | |
| param2 | get\_block\_header | | |
| Body | block\_num | | 区块高度 |
| 示例 | {"jsonrpc":"2.0","params":["block\_api","get\_block\_header",{"block\_num":1}], "method":"call", "id":111}' | | |
| 返回值说明 | result |  | |
| header |  | |
| timestamp | 区块生成时间戳 | |
| producer | 见证人 | |
| transaction\_merkle\_root | 交易merkle根哈希 | |
| previous | 前一区块 | |
| version | 当前区块链版本 | |
| 示例 | {"jsonrpc":"2.0","result":{"header":{"timestamp":"2018-07-17T06:55:33","producer":1,"transaction\_merkle\_root":"0000000000000000000000000000000000000000000000000000000000000000","previous":"0000000000000000000000000000000000000000","version":"0.0.1"}},"error":null,"id":111} | | |

* 1. 获取区块

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| --- | --- | --- | --- |
| 版本 | 1.0 | | |
| 编写人员 | 欧 | | |
| 更新时间 | 2018.7.17 | | |
| 备注 | 获取区块 | | |
| param1 | block\_api | | |
| param2 | get\_block | | |
| Body | block\_num | | 区块高度 |
| 示例 | {"jsonrpc":"2.0", "params":["block\_api", "get\_block", {"block\_num":1}], "method":"call", "id":111} | | |
| 返回值说明 | result |  | |
| block |  | |
| timestamp | 区块生成时间戳 | |
| producer | 见证人 | |
| transaction\_merkle\_root | 交易merkle根哈希 | |
| previous | 前一区块 | |
| version | 当前区块链版本 | |
| producer\_signature | 见证人签名 | |
| transactions | 当前区块包括的所有交易列表 | |
| 示例 | {"jsonrpc":"2.0","result":{"block":{"timestamp":"2018-07-17T06:55:33","producer":1,"transaction\_merkle\_root":"0000000000000000000000000000000000000000000000000000000000000000","previous":"0000000000000000000000000000000000000000","version":"0.0.1","producer\_signature":"207a157072ef6ac7738de2f6c5f3ff56ec224ee58cdeece7fdf7eaf095c38354155d9cd30703ac1d2374b49f3e0f222e5866a151861fdb74a1b57bfeadf29a194c","transactions":[]}},"error":null,"id":111} | | |

* 1. 创建帐户

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| --- | --- | --- | --- |
| 版本 | 1.0 | | |
| 编写人员 | 欧 | | |
| 更新时间 | 2018.7.17 | | |
| 备注 | 创建帐户 | | |
| param1 |  | | |
| param2 |  | | |
| Body | aaa | | 区块高度 |
| 示例 | {"jsonrpc":"2.0","params":["network\_broadcast\_api","broadcast\_transaction",{"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-19T03:57:46","operations":[{"type":"create\_account\_operation","value":{"name":1945957427,"creator":1,"public\_key":"NT7UFU3edd1SS9qtoYDejyLSyFBe8pbZsbYhF7bXkggQtKrYvmLY"}}],"signatures":["20797877ca4814953d004fbd4ad472696c62f15d3a946bfdfacad2ca5057aae2e64c5d831a48330d296775d6bd80a829412f2e667d199108b1a25be18e76bd9be3"]}}],"id":-1,"method":"call"} | | |
| 返回值说明 | result |  | |
| block |  | |
| timestamp | 区块生成时间戳 | |
| producer | 见证人 | |
| transaction\_merkle\_root | 交易merkle根哈希 | |
| previous | 前一区块 | |
| version | 当前区块链版本 | |
| producer\_signature | 见证人签名 | |
| transactions | 当前区块包括的所有交易列表 | |
| 示例 | {"jsonrpc":"2.0","result":{},"error":null,"id":-1} | | |

* 1. 获取单个帐户交易历史

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| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 欧 | |
| 更新时间 | 2018.7.17 | |
| 备注 | 查询从start交易起始号反向搜索，start必须大于等于limit，查询结果是按序号升序呈现的。 | |
| param1 | account\_history\_api | |
| param2 | get\_account\_history | |
| Body | name | 待查帐户 |
| start | 查询交易起始编号（-1<无符号为4294967295>表示从最新近的交易开始） |
| limit | 查询结果集数量上限值（不大于1000,即最多查1000条） |
| 示例 | {"jsonrpc":"2.0","params":["account\_history\_api","get\_account\_history",{"name":1,"start":4294967295,"limit":1000}],"id":-1,"method":"call"} | |
| 返回值说明 | result |  |
| trx\_id | 交易ID哈希值 |
| block | 交易被打包所在的区块高度 |
| trx\_in\_block | 该交易在该区块的位置序列号 |
| op\_in\_trx | 操作在该交易中的位置序列号 |
| timestamp | 时间戳 |
| op | 具体的操作数组列表 |
|  |  |
|  |  |
| 示例 | {"jsonrpc":"2.0","result":{"trxs":[[9,{"trx\_id":"5eb267aef6fa66fa5be0feaaa4ba318e394bfa32","block":3604,"trx\_in\_block":0,"op\_in\_trx":0,"timestamp":"2018-07-19T07:11:57","op":{"type":"transfers\_operation","value":{"from":1,"to\_names":[[71,"0.00000010, NEWT"],[72,"0.00000010, NEWT"],[73,"0.00000010, NEWT"],[74,"0.00000010, NEWT"]],"memo":""}}}]]},"error":null,"id":-1} | |

* 1. 获取交易

|  |  |  |
| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 欧 | |
| 更新时间 | 2018.7.17 | |
| 备注 |  | |
| param1 | account\_history\_api | |
| param2 | get\_transaction | |
| Body | trx\_id | 待查交易ID |
|  |  |
|  |  |
| 示例 | {"jsonrpc":"2.0","params":["account\_history\_api","get\_transaction",{"trx\_id":"5eb267aef6fa66fa5be0feaaa4ba318e394bfa32"}],"id":-1,"method":"call"} | |
| 返回值说明 | result |  |
| ref\_block\_num | 前一个区块序号 |
| ref\_block\_prefix | 区块前缀 |
| expiration | 截止时间 |
| operations | 操作数据 |
| signatures | 签名 |
| trx\_id | 交易ID |
| block\_num | 交易所在的区块高度 |
| transaction\_num | 交易在区块上的序号 |
| 示例 | {"jsonrpc":"2.0","result":{"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-19T07:15:51","operations":[{"type":"transfers\_operation","value":{"from":1,"to\_names":[[71,"0.00000010, NEWT"],[72,"0.00000010, NEWT"],[73,"0.00000010, NEWT"],[74,"0.00000010, NEWT"]],"memo":""}}],"signatures":["20258d3fb32b6ad3d5e7787214e8dd75e66c653fe76e7a3128304c29aba6c1836f18fc8e3ecaa0e49c079d27955215048159abf785ad2b8f68fef6620029fd25b9"],"trx\_id":"5eb267aef6fa66fa5be0feaaa4ba318e394bfa32","block\_num":3604,"transaction\_num":0}},"error":null,"id":-1} | |

* 1. NEXT

# 上链接口

* 1. 创建用户信息

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 版本 | 1.0 | | | |
| 编写人员 | 张、欧 | | | |
| 更新时间 | 2018.7.17 | | | |
| 备注 | 创建用户并广播 | | | |
| param1 | network\_broadcast\_api | | | |
| param2 | broadcast\_transaction | | | |
| Body | key | value | | 备注 |
|  | trx | ref\_block\_num | | 前一个区块序号 |
|  |  | ref\_block\_prefix | | 区块前缀 |
|  |  | expiration | | 截止时间 |
|  |  | operations | | 操作数据 |
|  |  | type | | create\_account\_operation |
|  |  | value | | {} 为json |
|  |  | name | | 被创建者的地址 |
|  |  | creator | | 创建者地址 |
|  |  | public\_key | | 被创建者公钥 |
|  |  | signatures | | 创建者签名 |
| 示例 | {"jsonrpc":"2.0","params":["network\_broadcast\_api","broadcast\_transaction",{"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-18T08:51:09","operations":[{"type":"create\_account\_operation","value":{"name":976567355,"creator":1,"public\_key":"NT4z24rESCoDh8SBBD87rfZD9rubdi9ihwccgPhL71tdiuG7uUcQ"}}],"signatures":["1f6cf97b290b2e033274df2a2dc97440017ef185b136940ec1afa059ae32f9b54f09943fbe4f56afe183f28a610ef04377c7123fc44d7b1fb918bbd660149b6e33"]}}],"id":-1,"method":"call"} | | | |
| 返回值说明 | result | | 本API无返回结果数据。 | |
| error | | null为成功，非空为失败。 | |
| 示例 | {"jsonrpc":"2.0","result":{},"error":null,"id":-1} | | | |

* 1. 单一转帐（一个帐户转一个帐户）

|  |  |  |
| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 欧 | |
| 更新时间 | 2018.7.17 | |
| 备注 |  | |
| param1 | network\_broadcast\_api | |
| param2 | broadcast\_transaction | |
| Body | ref\_block\_num | 前一个区块序号 |
| ref\_block\_prefix | 区块前缀 |
| expiration | 截止时间 |
| operations | 操作数据 |
| type | transfer\_operation |
| from | 转出的帐号 |
| to | 转入的帐号 |
| amount | 转帐金额 |
| memo | 备注 |
| signatures | 交易签名 |
|  |  |
| 示例 | {"jsonrpc":"2.0","params":["network\_broadcast\_api","broadcast\_transaction",{"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-19T06:07:12","operations":[{"type":"transfer\_operation","value":{"from":1,"to":2,"amount":"0.00000001, NEWT","memo":""}}],"signatures":["1f6766f43f30e32be23933eb4345786e211b5d98512d2e9b9e005dbebd4a3a7b9b59edc20c088e38edde55a52faa629e1fedfe811a943f9845afc497361895fb61"]}}],"id":-1,"method":"call"} | |
| 返回值说明 | result | 本API无返回结果数据。 |
| error | null为成功，非空为失败。 |
| 示例 | {"jsonrpc":"2.0","result":{},"error":null,"id":-1} | |

* 1. 多笔转帐（一个帐户转多个帐户）

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| --- | --- | --- |
| 版本 | 1.0 | |
| 编写人员 | 欧 | |
| 更新时间 | 2018.7.17 | |
| 备注 |  | |
| param1 | network\_broadcast\_api | |
| param2 | broadcast\_transaction | |
| Body | ref\_block\_num | 前一个区块序号 |
| ref\_block\_prefix | 区块前缀 |
| expiration | 截止时间 |
| type | transfers\_operation |
| from | 转出的帐号 |
| to\_names | 转入的帐号/金额数组 |
| memo | 备注 |
| signatures | 交易签名 |
|  |  |
|  |  |
|  |  |
| 示例 | {"jsonrpc":"2.0","params":["network\_broadcast\_api","broadcast\_transaction",{"trx":{"ref\_block\_num":0,"ref\_block\_prefix":0,"expiration":"2018-07-19T07:15:51","operations":[{"type":"transfers\_operation","value":{"from":1,"to\_names":[[71,"0.00000010, NEWT"],[72,"0.00000010, NEWT"],[73,"0.00000010, NEWT"],[74,"0.00000010, NEWT"]],"memo":""}}],"signatures":["20258d3fb32b6ad3d5e7787214e8dd75e66c653fe76e7a3128304c29aba6c1836f18fc8e3ecaa0e49c079d27955215048159abf785ad2b8f68fef6620029fd25b9"]}}],"id":-1,"method":"call"} | |
| 返回值说明 | result | 本API无返回结果数据。 |
| error | null为成功，非空为失败。 |
| 示例 | {"jsonrpc":"2.0","result":{},"error":null,"id":-1} | |

* 1. NEXT