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。

以下文档不在说明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**

|  |  |  |
| --- | --- | --- |
| 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**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 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} | | | | |

* 上链接口
* 创建用户信息

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 版本 | 1.0 | | | |
| 编写人员 | 张 | | | |
| 更新时间 | 2018.7.17 | | | |
| 备注 | 创建用户 | | | |
| 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 |
| 返回值说明 | result | |  | |
|  | success | | true为成功，false为失败 | |
|  | error | | 失败提示 | |

创建用户

* 创建用户

{

**"jsonrpc"**:**"2.0"**,//固定  
    **"params"**:[  
        **"network\_broadcast\_api"**,//固定  
        **"broadcast\_transaction"**,//固定  
        {  
            **"trx"**:{//固定  
                **"ref\_block\_num"**:**0**, //固定  
                **"ref\_block\_prefix"**:**0**, //固定  
                **"expiration"**:**"2018-08-06T08:16:02"**,//交易过期时间,一般交易发起时间+半小时  
                **"operations"**:[//固定  
                    {  
                        **"type"**:**"create\_account\_operation"**,//固定  
                        **"value"**:{  
                            **"name"**:**1000**,//被创建的用户名 int类型  
                            **"creator"**:**1**,//创建者  
                            **"posting"**:{  
                                **"key"**:**"NT4weJXiRiDFsSVb7tNyEzeifebcxG5npEXnVbYr6anbxS2Z9Y72"**,//公钥（现对私钥需要客服端保存）  
                                **"weight\_type"**:**1 //固定**  
                            },  
                            **"owner"**:{  
                                **"key"**:**"NT7zooKrWj9V7rD1Z9w87vJsH5qQAj7W4d7dTJm9xGH15qh7snag"**,//保留字段  
                                **"weight\_type"**:**1 //固定**  
                            }  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"1f3bd83d03c808d36bf13f3f9d8c0a8afa1ce0bbee9f5a8dd08d60a7bedb57b5817463b88f8f55530b94c4b2d9104102d0720a4b62396a17169dc99d399d521308"**  
                ] //创建者私钥签名  
            }  
        }  
    ],  
    **"id"**:**100**,//交易流水号，服务端原值返回，需要保证每次id不一样  
    **"method"**:**"call" //固定**  
}

* 转账

{  
    **"jsonrpc"**:**"2.0"**,**//固定**  
    **"params"**:[  
        **"network\_broadcast\_api"**,**//固定**  
        **"broadcast\_transaction"**,**//固定**  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**, **//固定**  
                **"ref\_block\_prefix"**:**0**, **//固定**  
                **"expiration"**:**"2018-08-06T09:32:17"**,//交易过期时间,一般交易发起时间+半小时  
                **"operations"**:[  
                    {  
                        **"type"**:**"transfer\_operation"**,**//固定**  
                        **"value"**:{  
                            **"from"**:**200001**,//转出者  
                            **"to"**:**200512**,//转入者  
                            **"amount"**:**"0.00000375, NEWT"**,//金额  
                            **"memo"**:**"1757" //备注，原值返回，可以为空**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"202180fb98b16bbff1cff7e8e8178f995b52f598257c56ffa6ea4e9ce1a5920bf92e6184b0060e64f4b81fa6740d07062f43ae9fb3b3c7c5b4d785a3dddd60c629"**  
                ] //转入者私钥签名  
            }  
        }  
    ],  
    **"id"**:**1757**, //交易流水号，服务端原值返回，需要保证每次id不一样  
    **"method"**:**"call"//固定**  
}

* 批量转账

    **"jsonrpc"**:**"2.0"**,  
    **"params"**:[  
        **"network\_broadcast\_api"**,  
        **"broadcast\_transaction"**,  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**,  
                **"ref\_block\_prefix"**:**0**,  
                **"expiration"**:**"2018-08-06T10:01:32"**,交易过期时间,一般交易发起时间+半小时  
                **"operations"**:[  
                    {  
                        **"type"**:**"transfers\_operation"**,  
                        **"value"**:{  
                            **"from"**:**305985**,转出者  
                            **"to\_names"**:[  
                                [  
                                    **6333**,//转入者1  
                                    **"0.00005171, NEWT"**转入者金额  
                                ],  
                                [  
                                    **10204**, //转入者2  
                                    **"0.00005171, NEWT"**//转入者2金额  
                                ],  
                                [  
                                    **16046**, //转入者N  
                                    **"0.00005171, NEWT"**//转入者N金额  
                                ]

                            ],  
                            **"memo"**:**"68882"**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"1f50b43b338e322fd9910af161b33abb4e85d0e042b2ca6632b7dfd61daa7dfd2125429233665c3822b355f96f6d46437f40dfd29d4fd056b98f29b08e7d736da2"**  
                ] //转入者私钥签名  
            }  
        }  
    ],  
    **"id"**:**68882**,  
    **"method"**:**"call"**  
}

* 创建用户，转账，批量转账返回(判断error是否为空)

正确示例

{  
    **"jsonrpc"**:**"2.0"**,  
    **"result"**:{  
  
    },  
    **"error"**:**null**, //error为空，交易成功  
    **"id"**:**101 //请求中的id**  
}

错误示例

{  
    **"jsonrpc"**:**"2.0"**,  
    **"result"**:**null**,  
    **"error"**:{ //error非空，交易失败  
        **"code"**:**-32000**,  
        **"message"**:**"Assert Exception:itr.find(o.name) == itr.end(): user 1000000 is existed."**,  
        **"data"**:{  
            **"code"**:**10**,  
            **"name"**:**"assert\_exception"**,  
            **"message"**:**"Assert Exception"**,  
            **"stack"**:[  
                {  
                    **"context"**:{  
                        **"level"**:**"error"**,  
                        **"file"**:**"news\_eveluator.cpp"**,  
                        **"line"**:**21**,  
                        **"method"**:**"news::chain::create\_account\_evaluator::do\_apply"**,  
                        **"hostname"**:**""**,  
                        **"timestamp"**:**"2018-08-08T03:23:29"**  
                    },  
                    **"format"**:**"itr.find(o.name) == itr.end(): user ${n} is existed."**,  
                    **"data"**:{  
                        **"n"**:**1000000**  
                    }  
                },  
                {  
                    **"context"**:{  
                        **"level"**:**"warn"**,  
                        **"file"**:**"database.cpp"**,  
                        **"line"**:**738**,  
                        **"method"**:**"news::chain::database::\_apply\_transaction"**,  
                        **"hostname"**:**""**,  
                        **"timestamp"**:**"2018-08-08T03:23:29"**  
                    },  
                    **"format"**:**""**,  
                    **"data"**:{  
                        **"op"**:{  
                            **"type"**:**"create\_account\_operation"**,  
                            **"value"**:{  
                                **"name"**:**1000000**,  
                                **"creator"**:**1**,  
                                **"posting"**:{  
                                    **"key"**:**"NT7nusn1JJcUVg67NCnXJmGbcciuWBMSDCQve9m9piA46b2xifWE"**,  
                                    **"weight\_type"**:**1**  
                                },  
                                **"owner"**:{  
                                    **"key"**:**"NT6ZqQyBmWpvvBbJevAbNnxJu96cN2Uf4TssfKasY5aVP6wWwTpw"**,  
                                    **"weight\_type"**:**1**  
                                }  
                            }  
                        }  
                    }  
                },  
                {  
                    **"context"**:{  
                        **"level"**:**"warn"**,  
                        **"file"**:**"database.cpp"**,  
                        **"line"**:**551**,  
                        **"method"**:**"news::chain::database::push\_transaction"**,  
                        **"hostname"**:**""**,  
                        **"timestamp"**:**"2018-08-08T03:23:29"**  
                    },  
                    **"format"**:**""**,  
                    **"data"**:{  
                        **"trx"**:{  
                            **"ref\_block\_num"**:**0**,  
                            **"ref\_block\_prefix"**:**0**,  
                            **"expiration"**:**"2018-08-08T03:28:29"**,  
                            **"operations"**:[  
                                {  
                                    **"type"**:**"create\_account\_operation"**,  
                                    **"value"**:{  
                                        **"name"**:**1000000**,  
                                        **"creator"**:**1**,  
                                        **"posting"**:{  
                                            **"key"**:**"NT7nusn1JJcUVg67NCnXJmGbcciuWBMSDCQve9m9piA46b2xifWE"**,  
                                            **"weight\_type"**:**1**  
                                        },  
                                        **"owner"**:{  
                                            **"key"**:**"NT6ZqQyBmWpvvBbJevAbNnxJu96cN2Uf4TssfKasY5aVP6wWwTpw"**,  
                                            **"weight\_type"**:**1**  
                                        }  
                                    }  
                                }  
                            ],  
                            **"signatures"**:[  
                                **"1f3859b065274c30385c1196936c8dbc0a63089366aaae953cf4bc72a9f7f65370405334d00ca9d5d73d6b9e9f50022813234908c279d1f7d71f4697e553f3a5bb"**  
                            ]  
                        }  
                    }  
                }  
            ]  
        }  
    },  
    **"id"**:**100**  
}

* 发布、评论文章

{  
    **"jsonrpc"**:**"2.0"**,  
    **"params"**:[  
        **"network\_broadcast\_api"**,  
        **"broadcast\_transaction"**,  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**,  
                **"ref\_block\_prefix"**:**0**,  
                **"expiration"**:**"2018-08-06T03:10:18"**,  
                **"operations"**:[  
                    {  
                        **"type"**:**"comment\_operation"**,  
                        **"value"**:{  
                            **"author"**:**1**,  
                            **"title"**:**"title"**,  
                            **"body"**:**""**,  
                            **"permlink"**:**"9620974f-aacf-4ce3-827d-1dd0db95cd67"**,  
                            **"parent\_author"**:**0**,  
                            **"parent\_permlink"**:**""**,  
                            **"metajson"**:**"{a:text;}"**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"1f51944059b35e7ade3ee68fbfd3a76014921685dbe00f8c52c60aafad42870ac94f7042bbcf5744c0ad0e817e43a4b130373de475b11424a577565e0ca0e48e30"**  
                ]  
            }  
        }  
    ],  
    **"id"**:**104**,  
    **"method"**:**"call"**  
}

* 文章投票

{  
    **"jsonrpc"**:**"2.0"**,  
    **"params"**:[  
        **"network\_broadcast\_api"**,  
        **"broadcast\_transaction"**,  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**,  
                **"ref\_block\_prefix"**:**0**,  
                **"expiration"**:**"2018-08-06T03:29:02"**,  
                **"operations"**:[  
                    {  
                        **"type"**:**"comment\_vote\_operation"**,  
                        **"value"**:{  
                            **"voter"**:**100**,  
                            **"author"**:**2**,  
                            **"permlink"**:**"feeed65b-ee4f-45bb-b29b-7b931feda08d"**,  
                            **"ticks"**:**50**,  
                            **"memo"**:**"a112sad"**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"204924ed215ca177d140993ee7949ea174be491c8a8aa5d25565683332c638d83c502f8cb7450049b5da1ca731b49c43cbdfe0c13889df504e05ceed5d37cce556"**  
                ]  
            }  
        }  
    ],  
    **"id"**:**100**,  
    **"method"**:**"call"**  
}

* 文章阅读

{  
    **"jsonrpc"**:**"2.0"**,  
    **"params"**:[  
        **"network\_broadcast\_api"**,  
        **"broadcast\_transaction"**,  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**,  
                **"ref\_block\_prefix"**:**0**,  
                **"expiration"**:**"2018-08-06T03:29:02"**,  
                **"operations"**:[  
                    {  
                        **"type"**:**"comment\_read\_operation"**,  
                        **"value"**:{  
                            **"reader"**:**100**,  
                            **"author"**:**2**,  
                            **"permlink"**:**"feeed65b-ee4f-45bb-b29b-7b931feda08d"**,  
                            **"memo"**:**"a112sad"**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"204924ed215ca177d140993ee7949ea174be491c8a8aa5d25565683332c638d83c502f8cb7450049b5da1ca731b49c43cbdfe0c13889df504e05ceed5d37cce556"**  
                ]  
            }  
        }  
    ],  
    **"id"**:**100**,  
    **"method"**:**"call"**  
}

* 文章分享

{  
    **"jsonrpc"**:**"2.0"**,  
    **"params"**:[  
        **"network\_broadcast\_api"**,  
        **"broadcast\_transaction"**,  
        {  
            **"trx"**:{  
                **"ref\_block\_num"**:**0**,  
                **"ref\_block\_prefix"**:**0**,  
                **"expiration"**:**"2018-08-06T03:29:02"**,  
                **"operations"**:[  
                    {  
                        **"type"**:**"comment\_shared\_operation"**,  
                        **"value"**:{  
                            **"shareder"**:**100**,  
                            **"author"**:**2**,  
                            **"permlink"**:**"feeed65b-ee4f-45bb-b29b-7b931feda08d"**,  
                            **"hasreadeds"**:**120**,  
                            **"memo"**:**"123231adf"**  
                        }  
                    }  
                ],  
                **"signatures"**:[  
                    **"204924ed215ca177d140993ee7949ea174be491c8a8aa5d25565683332c638d83c502f8cb7450049b5da1ca731b49c43cbdfe0c13889df504e05ceed5d37cce556"**  
                ]  
            }  
        }  
    ],  
    **"id"**:**100**,  
    **"method"**:**"call"**  
}