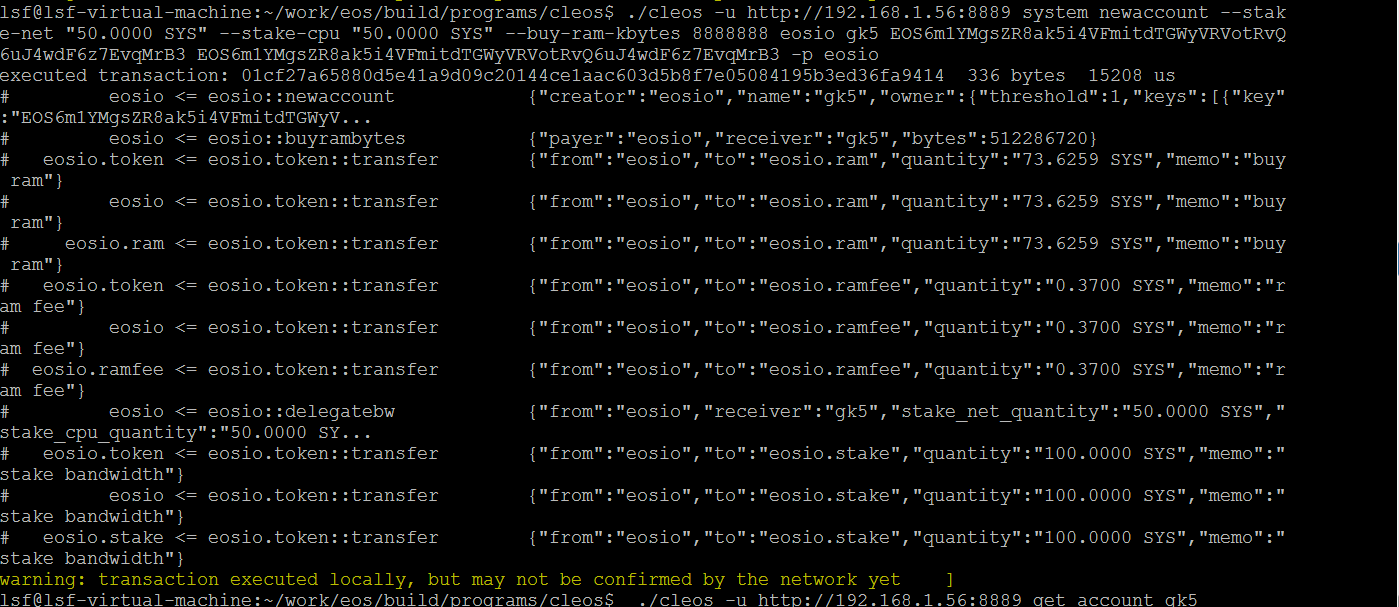
rpc 创建可投票账户



**eosio账户的公私钥：**

EOS6MRyAjQq8ud7hVNYcfnVPJqcVpscN5So8BhtHuGYqET5GDW5CV

5KQwrPbwdL6PhXujxW37FSSQZ1JiwsST4cqQzDeyXtP79zkvFD3

要创建的账户umidata的公私钥

EOS8BDvHYmbzqyJzLqQTE3eCPDarAeJgAAuAYH75Y28iKG3vjPZbD

5JxHgKWimh792pScgJ8VEQv46RthLBcSnsXDSdGMYHwwemGwF4e

**解锁钱包**

curl http://192.168.1.56:8888/v1/wallet/unlock -X POST -d '["default", "PW5JJN8KLE2akHa62NeTCmjkUbmetLfA2edAvb3ge5TR59oDASpi3"]'

**私钥导入钱包**

./cleos wallet import --private-key 5JxHgKWimh792pScgJ8VEQv46RthLBcSnsXDSdGMYHwwemGwF4e

**将umidata账户的私钥导入钱包default**

curl http://192.168.1.56:8888/v1/wallet/import\_key -X POST -d '["default","5JxHgKWimh792pScgJ8VEQv46RthLBcSnsXDSdGMYHwwemGwF4e"]'

**查看钱包内的公钥**

cleos -u http://192.168.1.56:8889 wallet keys

**获取链最新信息**

**curl http://192.168.1.56:8889/v1/chain/get\_info**

{"server\_version":"e87d245d","chain\_id":"cf057bbfb72640471fd910bcb67639c22df9f92470936cddc1ade0e2f2e7dc4f","head\_block\_num":94839,"last\_irreversible\_block\_num":94838,"last\_irreversible\_block\_id":"00017276ae6ed097defdf8013ec0697d853bacfb221ddd7b95d6786c219f076d","head\_block\_id":"00017277f8711bdbbbd1ddeae51af35895d344ca2f21cedfde7e8f58e2b2c88d","head\_block\_time":"2018-09-18T03:17:49.000","head\_block\_producer":"eosio","virtual\_block\_cpu\_limit":200000000,"virtual\_block\_net\_limit":1048576000,"block\_cpu\_limit":199900,"block\_net\_limit":1048576,"server\_version\_string":"v1.2.3-dirty"}

**以下操作要用到的信息**

"chain\_id":"cf057bbfb72640471fd910bcb67639c22df9f92470936cddc1ade0e2f2e7dc4f"

"head\_block\_num":94839

**查看最新块信息**

**curl http://192.168.1.56:8889/v1/chain/get\_block -X POST -d '{"block\_num\_or\_id":**94839**}'**

{"timestamp":"2018-09-18T03:17:49.000","producer":"eosio","confirmed":0,"previous":"00017276ae6ed097defdf8013ec0697d853bacfb221ddd7b95d6786c219f076d","transaction\_mroot":"0000000000000000000000000000000000000000000000000000000000000000","action\_mroot":"6e41a647d348bf6f1a5513c910b4d02994ed588bfa68755632023a27e9adc669","schedule\_version":0,"new\_producers":null,"header\_extensions":[],"producer\_signature":"SIG\_K1\_KjTK3tqmeAWioZz396A7CvDqJY3qza6T5b1QugBDoewv3FjQUFiWZpr39Hf9LSn4C6aNNAAkACAXmnmPSwDJjJ4xV1BkLb","transactions":[],"block\_extensions":[],"id":"00017277f8711bdbbbd1ddeae51af35895d344ca2f21cedfde7e8f58e2b2c88d","block\_num":94839,"ref\_block\_prefix":3940405691}

**以下操作要用到的信息**

"timestamp":"2018-09-18T03:17:49.000"

"block\_num":94839 //块号

"ref\_block\_prefix":3940405691 //块号相关信息

**1、POST http://192.168.1.56:8889/v1/chain/abi\_json\_to\_bin （序列化新建账号的 json）**

newaccount 的data:

curl http://192.168.1.56:8889/v1/chain/abi\_json\_to\_bin -X POST -d

'{

"code": "eosio",

"action": "newaccount",

"args": {

"creator": "eosio",

"name": "umidata",

"owner": {

"threshold": 1,

"keys": [

{

"key": "EOS8BDvHYmbzqyJzLqQTE3eCPDarAeJgAAuAYH75Y28iKG3vjPZbD",

"weight": 1

}

],

"accounts": [

],

"waits": [

]

},

"active": {

"threshold": 1,

"keys": [

{

"key": "EOS8BDvHYmbzqyJzLqQTE3eCPDarAeJgAAuAYH75Y28iKG3vjPZbD",

"weight": 1

}

],

"accounts": [

],

"waits": [

]

}

}

}'

{"binargs":"0000000000ea3055000000c064939cd401000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc0100000001000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc01000000"}

buyram 的 data

curl http://192.168.1.56:8889/v1/chain/abi\_json\_to\_bin -X POST -d

'{

"code": "eosio",

"action": "buyram",

"args": {

"payer": "eosio",

"receiver": "umidata",

"quant": "20.0000 SYS",

}

}'

{"binargs":"0000000000ea3055000000c064939cd4400d0300000000000453595300000000"}

delegatebw的data

curl http://192.168.1.56:8889/v1/chain/abi\_json\_to\_bin -X POST -d

'{

"code": "eosio",

"action": "delegatebw",

"args": {

"from": "eosio",

"receiver": "umidata",

"stake\_net\_quantity": "20.0000 SYS",

"stake\_cpu\_quantity": "20.0000 SYS",

"transfer": 0,

}

}'

{"binargs":"0000000000ea3055000000c064939cd4400d0300000000000453595300000000400d030000000000045359530000000000"}

**2、POST http://192.168.1.56:8888/v1/wallet/sign\_transaction（签名新建账号的交易）**

**curl http://192.168.1.56:8888/v1/wallet/sign\_transaction -X POST -d**

'[

{

"ref\_block\_num": 94839,

"ref\_block\_prefix": 3940405691,

"expiration": "2018-09-18T03:45:49.000",

"actions": [

{

"account": "eosio",

"name": "newaccount",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd401000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc0100000001000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc01000000"

},

{

"account": "eosio",

"name": "delegatebw",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd4400d0300000000000453595300000000400d030000000000045359530000000000"

},

{

"account": "eosio",

"name": "buyram",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd4400d0300000000000453595300000000"

}

],

"signatures": [

]

},

[

"EOS6MRyAjQq8ud7hVNYcfnVPJqcVpscN5So8BhtHuGYqET5GDW5CV"

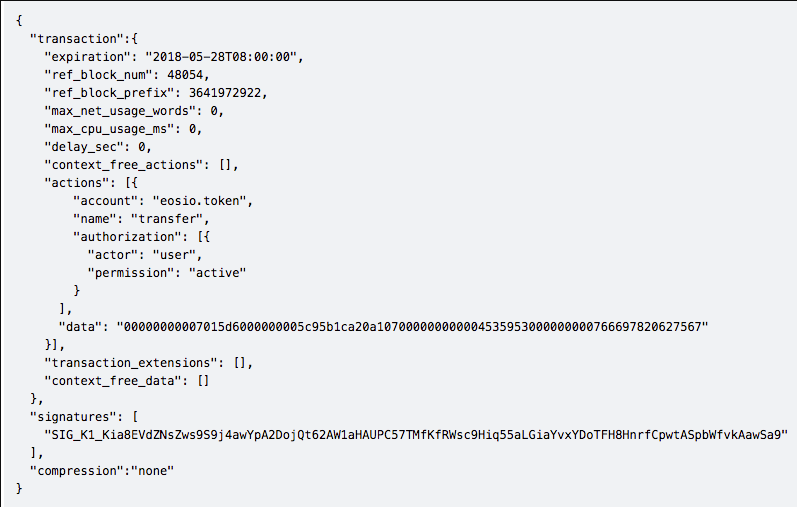
],

"cf057bbfb72640471fd910bcb67639c22df9f92470936cddc1ade0e2f2e7dc4f"

]'

{"expiration":"2018-09-18T03:45:49","ref\_block\_num":29303,"ref\_block\_prefix":3940405691,"max\_net\_usage\_words":0,"max\_cpu\_usage\_ms":0,"delay\_sec":0,"context\_free\_actions":[],"actions":[{"account":"eosio","name":"newaccount","authorization":[{"actor":"eosio","permission":"owner"}],"data":"0000000000ea3055000000c064939cd401000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc0100000001000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc01000000"},{"account":"eosio","name":"delegatebw","authorization":[{"actor":"eosio","permission":"owner"}],"data":"0000000000ea3055000000c064939cd4400d0300000000000453595300000000400d030000000000045359530000000000"},{"account":"eosio","name":"buyram","authorization":[{"actor":"eosio","permission":"owner"}],"data":"0000000000ea3055000000c064939cd4400d0300000000000453595300000000"}],"transaction\_extensions":[],"signatures":["SIG\_K1\_KmSw3Fy1zPxmKVk19zJgQLGWVi9wbAM79Rz3BCCps77YTeW3oyjrtyKwgSvQwbhhx8jHtanRyhrEe7sYXhSWoMiS5bAAj3"],"context\_free\_data":[]}

**3、http://192.168.1.56:8889/v1/chain/push\_transaction （把签名后的交易push 推送到 EOS 系统中，即新建账号完成）**



curl http://192.168.1.56:8889/v1/chain/push\_transaction -X POST -d

'{

"transaction": {

"expiration": "2018-09-18T03:45:49.000",

"ref\_block\_num": 94839,

"ref\_block\_prefix": 3940405691,

"max\_net\_usage\_words": 0,

"max\_cpu\_usage\_ms": 0,

"delay\_sec": 0,

"context\_free\_actions": [

],

"actions": [

{

"account": "eosio",

"name": "newaccount",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd401000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc0100000001000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc01000000"

},

{

"account": "eosio",

"name": "delegatebw",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd4400d0300000000000453595300000000400d030000000000045359530000000000"

},

{

"account": "eosio",

"name": "buyram",

"authorization": [

{

"actor": "eosio",

"permission": "owner"

}

],

"data": "0000000000ea3055000000c064939cd4400d0300000000000453595300000000"

}

],

"transaction\_extensions": [

],

"context\_free\_data": [

]

},

"signatures": [

"SIG\_K1\_KmSw3Fy1zPxmKVk19zJgQLGWVi9wbAM79Rz3BCCps77YTeW3oyjrtyKwgSvQwbhhx8jHtanRyhrEe7sYXhSWoMiS5bAAj3"

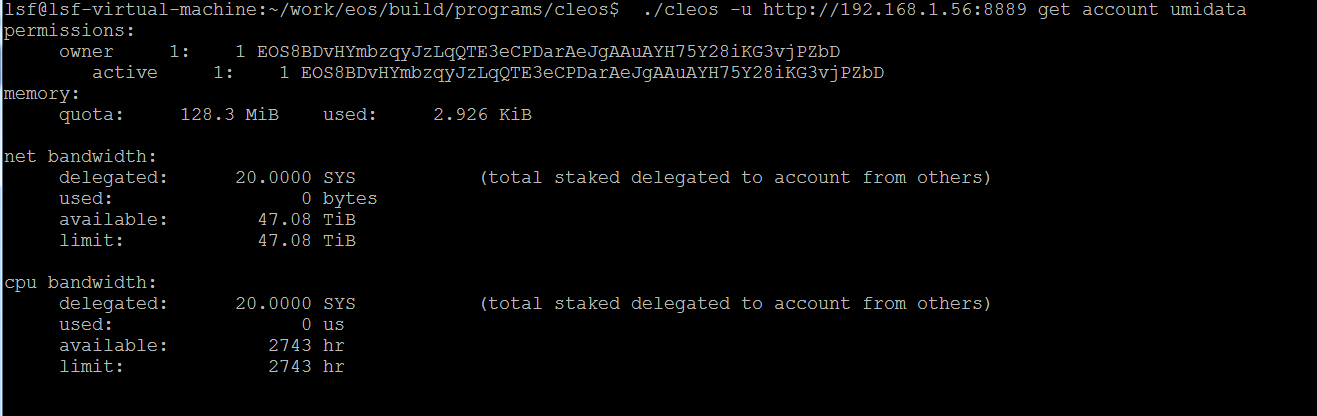
],

"compression": "none"

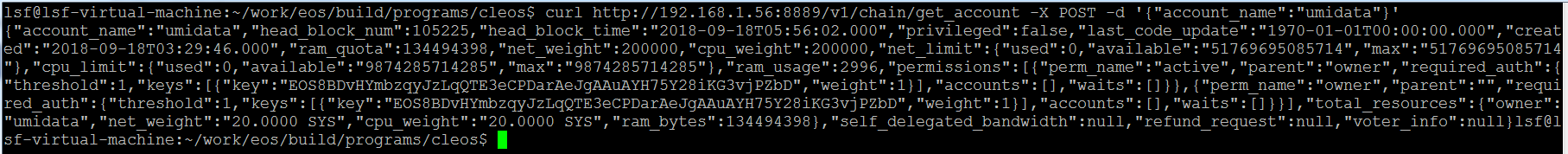
}'

**查看创建的账户信息**

./cleos -u http://192.168.1.56:8889 get account umidata



curl http://192.168.1.56:8889/v1/chain/get\_account -X POST -d '{"account\_name":"umidata"}'



{"transaction\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","processed":{"id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95 e29b53138306f03a8270","receipt":{"status":"executed","cpu\_usage\_us":40031,"net\_usage\_words":43},"elapsed":40031,"net\_usage":344,"scheduled":false,"a ction\_traces":[{"receipt":{"receiver":"eosio","act\_digest":"6c67afef718d3618a71b89e41f96c1d9d63ca96624073a9794954e7eb63f9d7c","global\_sequence":9630 8,"recv\_sequence":96298,"auth\_sequence":[["eosio",96305]],"code\_sequence":2,"abi\_sequence":2},"act":{"account":"eosio","name":"newaccount","authoriz ation":[{"actor":"eosio","permission":"owner"}],"data":{"creator":"eosio","name":"umidata","owner":{"threshold":1,"keys":[{"key":"EOS8BDvHYmbzqyJzLq QTE3eCPDarAeJgAAuAYH75Y28iKG3vjPZbD","weight":1}],"accounts":[],"waits":[]},"active":{"threshold":1,"keys":[{"key":"EOS8BDvHYmbzqyJzLqQTE3eCPDarAeJg AAuAYH75Y28iKG3vjPZbD","weight":1}],"accounts":[],"waits":[]}},"hex\_data":"0000000000ea3055000000c064939cd401000000010003b115ab056de0a9026a8f83e29c3 f9aa8450b09ac02ac60d4cb1196a7e9682efc0100000001000000010003b115ab056de0a9026a8f83e29c3f9aa8450b09ac02ac60d4cb1196a7e9682efc01000000"},"elapsed":7255 ,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[]},{"re ceipt":{"receiver":"eosio","act\_digest":"4e80137b1c49c8e33693006930ea10ac994c8add44e51359310d9ee1e706a92e","global\_sequence":96309,"recv\_sequence":9 6299,"auth\_sequence":[["eosio",96306]],"code\_sequence":2,"abi\_sequence":2},"act":{"account":"eosio","name":"delegatebw","authorization":[{"actor":"e osio","permission":"owner"}],"data":{"from":"eosio","receiver":"umidata","stake\_net\_quantity":"20.0000 SYS","stake\_cpu\_quantity":"20.0000 SYS","tran sfer":0},"hex\_data":"0000000000ea3055000000c064939cd4400d0300000000000453595300000000400d030000000000045359530000000000"},"elapsed":15555,"cpu\_usage ":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[{"receipt":{"recei ver":"eosio.token","act\_digest":"07c6b6234b5321b6c8c09f7671713c095ae2f5cc4362a913e401057d21ed2354","global\_sequence":96310,"recv\_sequence":7,"auth\_s equence":[["eosio",96307]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.token","name":"transfer","authorization":[{"actor":"eosio","p ermission":"active"}],"data":{"from":"eosio","to":"eosio.stake","quantity":"40.0000 SYS","memo":"stake bandwidth"},"hex\_data":"0000000000ea305500143 41903ea3055801a06000000000004535953000000000f7374616b652062616e647769647468"},"elapsed":4858,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id" :"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[{"receipt":{"receiver":"eosio","act\_digest":"07c6b6234b5321b6c8 c09f7671713c095ae2f5cc4362a913e401057d21ed2354","global\_sequence":96311,"recv\_sequence":96300,"auth\_sequence":[["eosio",96308]],"code\_sequence":1,"a bi\_sequence":1},"act":{"account":"eosio.token","name":"transfer","authorization":[{"actor":"eosio","permission":"active"}],"data":{"from":"eosio","t o":"eosio.stake","quantity":"40.0000 SYS","memo":"stake bandwidth"},"hex\_data":"0000000000ea30550014341903ea3055801a06000000000004535953000000000f73 74616b652062616e647769647468"},"elapsed":244,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e2 9b53138306f03a8270","inline\_traces":[]},{"receipt":{"receiver":"eosio.stake","act\_digest":"07c6b6234b5321b6c8c09f7671713c095ae2f5cc4362a913e401057d2 1ed2354","global\_sequence":96312,"recv\_sequence":2,"auth\_sequence":[["eosio",96309]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.tok en","name":"transfer","authorization":[{"actor":"eosio","permission":"active"}],"data":{"from":"eosio","to":"eosio.stake","quantity":"40.0000 SYS"," memo":"stake bandwidth"},"hex\_data":"0000000000ea30550014341903ea3055801a06000000000004535953000000000f7374616b652062616e647769647468"},"elapsed":49 ,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[]}]}]}, {"receipt":{"receiver":"eosio","act\_digest":"07a775ba34180afece53c03919ef9e97c0e98aa23079ffbe31e727751b44d611","global\_sequence":96313,"recv\_sequenc e":96301,"auth\_sequence":[["eosio",96310]],"code\_sequence":2,"abi\_sequence":2},"act":{"account":"eosio","name":"buyram","authorization":[{"actor":"e osio","permission":"owner"}],"data":{"payer":"eosio","receiver":"umidata","quant":"20.0000 SYS"},"hex\_data":"0000000000ea3055000000c064939cd4400d030 0000000000453595300000000"},"elapsed":5607,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b 53138306f03a8270","inline\_traces":[{"receipt":{"receiver":"eosio.token","act\_digest":"57965ea8734debacd298a43a4dfb745a3972475f268f3090f80103f29be8df 65","global\_sequence":96314,"recv\_sequence":8,"auth\_sequence":[["eosio",96311]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.token"," name":"transfer","authorization":[{"actor":"eosio","permission":"active"}],"data":{"from":"eosio","to":"eosio.ram","quantity":"19.9000 SYS","memo":" buy ram"},"hex\_data":"0000000000ea3055000090e602ea305558090300000000000453595300000000076275792072616d"},"elapsed":1813,"cpu\_usage":0,"console":""," total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[{"receipt":{"receiver":"eosio","act\_ digest":"57965ea8734debacd298a43a4dfb745a3972475f268f3090f80103f29be8df65","global\_sequence":96315,"recv\_sequence":96302,"auth\_sequence":[["eosio",9 6312]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.token","name":"transfer","authorization":[{"actor":"eosio","permission":"active"} ],"data":{"from":"eosio","to":"eosio.ram","quantity":"19.9000 SYS","memo":"buy ram"},"hex\_data":"0000000000ea3055000090e602ea30555809030000000000045 3595300000000076275792072616d"},"elapsed":241,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e 29b53138306f03a8270","inline\_traces":[]},{"receipt":{"receiver":"eosio.ram","act\_digest":"57965ea8734debacd298a43a4dfb745a3972475f268f3090f80103f29b e8df65","global\_sequence":96316,"recv\_sequence":2,"auth\_sequence":[["eosio",96313]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.toke n","name":"transfer","authorization":[{"actor":"eosio","permission":"active"}],"data":{"from":"eosio","to":"eosio.ram","quantity":"19.9000 SYS","mem o":"buy ram"},"hex\_data":"0000000000ea3055000090e602ea305558090300000000000453595300000000076275792072616d"},"elapsed":48,"cpu\_usage":0,"console":"" ,"total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[]}]},{"receipt":{"receiver":"eosio .token","act\_digest":"d5977652ed4c2f0adaf5cd9740d5808d02fc2c31849467fae8dd4181799c6105","global\_sequence":96317,"recv\_sequence":9,"auth\_sequence":[[ "eosio",96314]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.token","name":"transfer","authorization":[{"actor":"eosio","permission": "active"}],"data":{"from":"eosio","to":"eosio.ramfee","quantity":"0.1000 SYS","memo":"ram fee"},"hex\_data":"0000000000ea3055a0d492e602ea3055e8030000 0000000004535953000000000772616d20666565"},"elapsed":1788,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c45 9f6daeb5e95e29b53138306f03a8270","inline\_traces":[{"receipt":{"receiver":"eosio","act\_digest":"d5977652ed4c2f0adaf5cd9740d5808d02fc2c31849467fae8dd4 181799c6105","global\_sequence":96318,"recv\_sequence":96303,"auth\_sequence":[["eosio",96315]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"e osio.token","name":"transfer","authorization":[{"actor":"eosio","permission":"active"}],"data":{"from":"eosio","to":"eosio.ramfee","quantity":"0.100 0 SYS","memo":"ram fee"},"hex\_data":"0000000000ea3055a0d492e602ea3055e80300000000000004535953000000000772616d20666565"},"elapsed":239,"cpu\_usage":0, "console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e397968c459f6daeb5e95e29b53138306f03a8270","inline\_traces":[]},{"receipt":{"receiv er":"eosio.ramfee","act\_digest":"d5977652ed4c2f0adaf5cd9740d5808d02fc2c31849467fae8dd4181799c6105","global\_sequence":96319,"recv\_sequence":2,"auth\_s equence":[["eosio",96316]],"code\_sequence":1,"abi\_sequence":1},"act":{"account":"eosio.token","name":"transfer","authorization":[{"actor":"eosio","p ermission":"active"}],"data":{"from":"eosio","to":"eosio.ramfee","quantity":"0.1000 SYS","memo":"ram fee"},"hex\_data":"0000000000ea3055a0d492e602ea3 055e80300000000000004535953000000000772616d20666565"},"elapsed":49,"cpu\_usage":0,"console":"","total\_cpu\_usage":0,"trx\_id":"89bc656dab82c3cdfbfad79e

{"code":500,"message":"Internal Service Error","error":{"code":3010010,"name":"packed\_transaction\_type\_exception","what":"Invalid packed transaction","details":[{"message":"Missing signatures","file":"abi\_serializer.hpp","line\_number":496,"method":"extract"},{"message":"Failed to deserialize variant","file":"abi\_serializer.hpp","line\_number":604,"method":"from\_variant"},{"message":"Invalid packed transaction","file":"chain\_plugin.cpp","line\_number":1401,"method":"push\_transaction"}]}}

{"code":500,"message":"Internal Service Error","error":{"code":3040005,"name":"expired\_tx\_exception","what":"Expired Transaction","details":[{"message":"expired transaction ad674a86fbd889e63f02ab446426fc4c0c84931be30d98a0b6d6fd8311024f6b","file":"producer\_plugin.cpp","line\_number":356,"method":"on\_incoming\_transaction\_async"}]}}

{"code":500,"message":"Internal Service Error","error":{"code":3090004,"name":"missing\_auth\_exception","what":"Missing required authority","details":[{"message":"missing authority of acooleosgeek","file":"apply\_context.cpp","line\_number":131,"method":"require\_authorization"},{"message":"pending console output: ","file":"apply\_context.cpp","line\_number":61,"method":"exec\_one"}]}}

(代币转账 和 新建账号的 sign\_transaction、push\_transaction 类似，主要就是 智能合约的不同 和 调用的action 的不同 以及 action 中具体的参数不同。)

新建账号（newaccount）需要用 「已有的账号」 **创建**「 新账号」

内部是 **已有账号** 调用**系统智能合约eosio**中的 **newaccount** 的 action

新建账号的交易需要用 **创建者** 的 **私钥签名交易**（sign\_transaction），然后 **推送签名后的交易** (push\_transaction)到区块链中。