Rest API-v1.0 Introduction

1 Account Interface

1.1 Make a request for a new wallet

Interface：/V1/Wallet/new，GetMethod

Example：

https://test-rest.sdchain.io/v1/wallet/new

Results：
```
{
    "wallet": {
        "address": "6wDwUi99cwgiEv8Zb3whNUzqWpyi7Jm6KX",
        "secret": "ss6Vi          QBdr13pDAJ"
    },
    "success": true
}
```
Result return parameter：

Parameters	Type	Description
success	Boolean	Request results
wallet	Object	Wallet
address	String	Wallet address of SDChain (public key)
secret	String	Private key

Note: The newly acquired wallet is inactive. Activation method: Use Payment interface to transfer 20 SDA from activated account to the new one.

1.2 Get account balance

Interface：/V1/accounts/balances/{:address}，GetMethod

Interface parameters:

Parameters	Type	Description
Address	String	User address of SDChain

Example：

https://test-rest.sdchain.io/v1/accounts/balances/6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5

Results：

```
{
    "ledger": 92261,
    "balances": [
        {
            "value": "1959.99994",
            "currency": "SDA",
            "counterparty": ""
        }
    ],
    "success": true
}
```

Returned result information:

Parameters	Type	Description
success	Boolean	Request results
ledger	String	Block height
balances	Array	Balances, array of objects
value	String	Number
currency	String	Sign of token
counterparty	String	Issuer, empty when the pass is SDA

2 Payment interfaces

2.1 Payment Request

Interface：/v1/accounts/payments/{:source_address}?submit=true，POST method

Interface parameters:

Parameters	Type	Description
source_address	String	Payer's SDChain address

Details of Submit parameter:

Parameters	Type	Description
secret	String	Payer's private key of wallet
payment	Object	Payment object
source_account	String	Initiate account
destination_account	String	Target account
amount	String	Amount paid
memos	Array	Payment memo; Array of objects; Option
MemoType	String	Memo type, English plus number
MemoData	String	Content of memo

Example：

https://test-rest.sdchain.io/v1/accounts/payments/6faLUhmp9gNgS9jXS3rAWbg8hFfi9Pb
WH5?submit=true

Submitted data:

```
{
    "secret": "saNYbpu          A3Hhg8kRu",
    "payment": {
        "source_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
        "destination_account": "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
        "amount":"20",
        "memos": [
                {
                    "MemoType": "memos",
```

```
                "MemoData": "First deal"
            }
        ]
    }
}
```
Results：
```
{
    "hash":
"12C323E8DEAF789B790E4837438E5E59E95CA888979B4BE1311CA4BEDAF7C05E"
,
    "status_url":
"https://test-rest.sdchain.io/v1/accounts/payments/6faLUhmp9gNgS9jXS3rAWbg8hFfi9Pb
WH5/12C323E8DEAF789B790E4837438E5E59E95CA888979B4BE1311CA4BEDAF7C
05E",
    "success": true
}
```
Result return parameter：

Parameters	Type	Description
success	Boolean	Request results
hash	String	Hash of payment transaction
status_url	String	View address of transaction status

2.2 Get payment information

Interface：/V1/accounts/payments/{:address}/{:Hash}，GetMethod

Interface parameters:

Parameters	Type	Description
address	String	SDChain address of payment user
hash	String	Hash of payment transaction

Example：

https://test-rest.sdchain.io/v1/accounts/payments/6faLUhmp9gNgS9jXS3rAWbg8hFfi9Pb
WH5/12C323E8DEAF789B790E4837438E5E59E95CA888979B4BE1311CA4BEDAF7C
05E

Results：

```
{
```

```
    "hash":
"12C323E8DEAF789B790E4837438E5E59E95CA888979B4BE1311CA4BEDAF7C05E"
,
    "ledger": "86520",
    "state": "validated",
    "source_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
    "destination_account": "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
    "amount": "20",
    "direction": "outgoing",
    "timestamp": "2018-03-06T08:15:42.000Z",
    "fee": "0.000012",
    "memos": [
        {
            "Memo type": "6D656D6F73",
            "Memo data": "E7ACACE4B880E7AC94E4BAA4E69893",
            "parsed_memo_type": "memos"
        }
    ],
    "success": true
}
```

Returned result information:

Parameters	Type	Description
success	Boolean	Request results
hash	String	Hash of payment
ledger	String	Block height
state	String	State（Validated : Completed; Pending: Trading)
source_account	String	Payment party
destination_account	String	Payee
direction	String	Type of transaction
amount	String	Transaction amount
timestamp	String	Trading time
fee	String	Fee
memos	Array	Payment memo; Array of object; Option
MemoType	String	Memo type; English plus number
MemoData	String	Content of memo

2.3 Get payment history

Interface：/V1/accounts/payments/{:address}，GetMethod

Interface parameters:

Parameters	Type	Description
address	String	Payment-related SDChain address

Submit parameter Details:

Parameters	Type	Description
source_account	String	SDChain address of Payer, optional
destination_account	String	SDChain address of Payee, optional
direction	String	Type of transaction, optional value Incoming: Paid Outgoing: Pay, optional
start_ledger	Integer	Starting block height, optional
end_ledger	Integer	End block height, optional
per_page	Integer	Page quantity, optional
page	Integer	Page number, optional

Example：

https://test-rest.sdchain.io/v1/accounts/payments/6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5

Results：

```
{
    "payments": [
        {
            "hash":
"D11971630D8038BFFA69A5538C5C1DCF906E95008C1612CF597C5DAA19A30938",
            "ledger": "86224",
            "source_account": "6Hb9CJAWyB46j91VRWn9rDkukG4bwdtyTh",
            "destination_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
            "amount": "2000",
            "direction": "incoming",
            "timestamp": "2018-03-06T08:01:00.000Z",
            "fee": "0.000012",
```

```json
        "memos": [
            {
                "MemoType": "6D656D6F73",
                "MemoData": "E7ACACE4B880E7AC94E4BAA4E69893",
                "parsed_memo_type": "memos"
            }
        ]
    },
    {
        "hash":
"96DFC38DE2841A9AD5E83016D462E45F0D88164E923B30D881FA7A2EEB3395B6"
,
        "ledger": "86459",
        "source_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
        "destination_account": "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
        "amount": "2000",
        "direction": "outgoing",
        "timestamp": "2018-03-06T08:12:41.000Z",
        "fee": "0.000012",
        "memos": [
            {
                "MemoType": "6D656D6F73",
                "MemoData": "E7ACACE4B880E7AC94E4BAA4E69893",
                "parsed_memo_type": "memos"
            }
        ]
    },
    {
        "hash":
"BB3D605366CBDD5F199D2DAD609EE72ABBD2270C85BAD7C76CAF718088430D
73",
        "ledger": "86517",
        "source_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
        "destination_account": "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
        "amount": "20",
        "direction": "outgoing",
        "timestamp": "2018-03-06T08:15:33.000Z",
        "fee": "0.000012",
        "Memos": [
            {
                "MemoType": "6D656D6F73",
                "MemoData": "E7ACACE4B880E7AC94E4BAA4E69893",
                "Parsed_memo_type": "memos"
            }
        }
```

            ]
        },
        {
            "hash":
"12C323E8DEAF789B790E4837438E5E59E95CA888979B4BE1311CA4BEDAF7C05E"
,
            "ledger": "86520",
            "source_account": "6faLUhmp9gNgS9jXS3rAWbg8hFfi9PbWH5",
            "destination_account": "6PrXdWVoXzmGCmi56wTFTC3e6xezLWh2dc",
            "amount": "20",
            "direction": "outgoing",
            "timestamp": "2018-03-06T08:15:42.000Z",
            "fee": "0.000012",
            "memos": [
                {
                    "MemoType": "6D656D6F73",
                    "MemoData": "E7ACACE4B880E7AC94E4BAA4E69893",
                    "parsed_memo_type": "memos"
                }
            ]
        }
    ],
    "success": true
}

The result returned is the data for the next page, and the result information returned:

Parameters	Type	Description
success	Boolean	Request results
payments	Array	Payment history, information in the same transaction record