Unisoft

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Documentation

Unisoft Gate for Ucoin- Authorization, Wallet, Payment, Transfer etc.

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1. Changes

Date	Version	Changes
15-Nov-2021	1.0	Models added: Wallet, Card, Hold, Payment and Transfer
19-Nov-2021	1.0	Models added: Clearing
11-May-2022	2.0	Transaction create method add

2. Terms and Definitions

Term	Definition
Processing center	Processing center which is
Client	Partner that allowed to use Unisoft Gate
User	Partners clients is preferred as User for Unisoft
Request	Request for some data
Response	Respond for the request
Database	Database which interacts Gate
Registry	Registry service that register evere sensitivity data
Uzcard	Uzcard Online
Humo	Humo - processing center owned by Central Bank of Uzbekistan
Transfer	Peer to Peer operation
Payment	Payment for services or debit operation in some cases
Exchange Conversion	Conversion of currency according Universalbank JSC
CBU	Central Bank of Uzbekistan (in some reference used as CB)
Sender	Sender debit
Receiver	Receiver credit
Cheque	Cheque that made for receiver which is waiting for payment from sender

3. Project Overview

For Opening Virtual Cards without identification

3.1 Usage

3.2 General scenario

Connect save token send to usage

3.3 Connection

HOST https://wallet.unired.uz/api/v2/gw

3.3.1 Authorization

Authorization client must send on header as:

Unisoft-Authorization: Bearer {{access_token}}	Access-Token will be returned by login method
Content-type: Application/json	Gate serves for only json request
Accept: Application/json	If client sends valid request Gate response will be in json format

3.3.2 Encryption container

Will be implemented soon ...

3.4 Format

Jsonrpc 2.0

Request sample

```
POST

{
    "jsonrpc": "2.0",
    "id": "1",
    "method": "name",
    "params": {
        "key": "value"
    }
}
```

jsonrpc	String	2.0
id	String or numeric	Request id (preferred uuid or client name + time : company_12345)
method	String	Method name
params	Array	Required params as method structure

Success - Sample Response

```
{
    "jsonrpc": "2.0",
    "id": "1",
    "status": true,
    "origin": "login",
    "result": {
        "message": { ~ }
    },
    "host": {
        "host": "UniSoft",
        "time_stamp": "2020-01-20 11:59:59"
    }
}
```

id	String	Request id emitted
status	boolean	true in success response
origin	String	Origin of response in Gate
result	Object	Required params as method structure

message	Object	Result message
host	Object	Info about host

Error- Sample Response

```
{
    "jsonrpc": "2.0",
    "status": false,
    "origin": "login",
    "error": {
        "code": 401,
        "message": { ~ }
},
    "id": null,
    "host": {
        "host": "UniSoft",
        "time_stamp": "2020-01-20 11:59:59"
}
```

id	String	null
status	boolean	false in error response
origin	String	Origin of response in Gate
error	Object	Required params as method structure
code	Integer	Error code
message	Object	Error message
host	Object	Info about host

3.5 Data types

Name	Туре	Description
number	String	Plain card number 16 characters
receiver	String	Plain card number 16 characters
expire	String	In format mmyy 4 characters

amount	Numeric	With precision 00 identifies tiyin, minimum amount 100000
message	Object	
host	Object	
error	Object	
result	Object	
code	Integer	

4. Login

Login method used to get access token

Request

login	String	Client login
password	String	Client password

```
POST

{
    "id": "1",
    "method": "login",
    "params": {
        "login": "Partner-login",
        "password": "Partner-password"
    }
}
```

```
access_token String access_token - will be used to authorize other requests.Default validity of Access-Token is 1 year (365 days)
```

```
{
    "jsonrpc": "2.0",
    "id": "1",
    "status": true,
    "origin": "login",
```

```
"result": {
           "access_token": "*****************,
           "message": { //~ }
     },
"host": {
           "host": "UniSoft",
           "time_stamp": "2020-01-20 11:59:59"
     }
}
{
     "jsonrpc": "2.0",
     "status": false,
"origin": "login",
     "error": {
    "code": 401,
           "message": {
    "uz": "Bunday foydalanuvchi mavjud emas",
    "ru": "Неавторизованный пользователь",
    "en": "Unauthorized user"
           }
     },
"id": null,
     "host": {
    "host": "UniSoft",
           "time stamp": "2020-10-09 16:30:13"
     }
}
```

5. Wallet Create

Wallet create method used to open new wallet

method	String	wallet.create
name	String	Name of client
phone	String	Phone number of client
wallet_name	String	Wallet name optional

```
"phone": "998991234567",
    "wallet_name": "Muzaffar Makhkamov",
}
```

```
{
    "jsonrpc": "2.0",
    "id": "7216376d-eddb-409b-a303-700aecbd38e4",
    "status": true,
    "origin": "wallet.create",
    "result": {
        "card_number": "8606488811111111",
        "expire": "0127"
    },
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 09:36:23"
    }
}
```

6. Wallet info

Method desired to get full info about wallet

Request

method	String	wallet.register
number	String	Number of wallet
expire	String	Expire date of wallet

```
POST

{
    "id": "1",
    "method": "wallet.register",
    "params": {
        "number": "{{number}}",
        "expire": "{{expire}}",
    }
}
```

card_number	String	Number of wallet
expire	String	Expire date of wallet
phone	String	Phone number of client
name	String	Name of client
wallet_name	String	Wallet name
balance	Double	Balance of wallet
status	integer	1-Active, 0 - noActive

```
{
    "jsonrpc": "2.0",
    "id": "57c96f7c-b6e4-4343-bb3a-dd7e51e28927",
    "status": true,
    "origin": "wallet.info",
    "result": {
        "card_number": "8606488811111111",
        "expire": "0327",
        "phone": "99999999999",
        "name": "new name",
        "wallet_name": "New Wallet name",
        "balance": 900,
        "status": 1
   },
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 09:43:01"
    }
}
```

7. Wallet name

Method use to get wallet name

method	String	wallet.name
card_number	String	

```
POST

{
    "id": "1",
    "method": "wallet.info",
    "params": {
```

```
"number": "8606488811111111"
}
}
```

```
{
    "jsonrpc": "2.0",
    "id": "c0b2b7c0-bba0-4517-9fb8-1fb2d715de57",
    "status": true,
    "origin": "wallet.name",
    "result": {
        "wallet_name": "Wallet name"
    },
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 09:50:01"
    }
}
```

8. Wallet History

Get wallet history

method	String	wallet.history
number	String	Number of wallet
start_date	String	2022-03-10
end_date	String	2022-03-20

```
POST
{
    "id": "1",
```

```
"method": "wallet.history",
    "params": {
          "number": "{{number}}",
          "expire": "{{expire}}",
          "start_date": "20201012",
          "end_date": "20201015"
    }
}
```

method	String	Method name (payment.proceed or transfer.proceed)
number	String	Number of wallet (get)
receiver	String	Number of wallet (fill)
amount	String	Amount
tr_id	String	Transaction id
date	Date	Transaction date
status	integer	0=> process, 1=>done, 2=>clearing, -1=>Transaction error, -2=>Transaction cancel

```
|,
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 10:27:17"
     }
}
```

9. Wallet Update

Update wallet information

method	String	wallet.update
number	String	Wallet of number, Uzcard of number, Humo of number
expire	String	Expire date
status	integer	1-active, 0-noActive
wallet_name	String	
name	String	
phone	String	Phone number

```
POST

{
    "jsonrpc": "2.0",
    "id": "{{$randomUUID}}}",
    "method": "wallet.update",
    "params": {
        "number":"{{number}}",
        "expire":"0327",
        "phone":"9999999999",
```

```
"name":"new name",
    "wallet_name":"New Wallet name",
    "status":1
}
```

9. Payment

We can solve The monry from uzcard, humo and wallet.

Request

method	String	payment.proceed
number	String	Wallet of number, Uzcard of number, Humo of number
expire	String	Expire date
amount	Integer	Amount

```
POST

{
    "id": "1",
    "method": "payment",
    "params": {
        "number": "{{number}}",
        "expire": "{{expire}}",
        "amount": 10000
    }
}
```

|--|

```
POST

{
    "jsonrpc": "2.0",
    "id": "e76c702d-ea01-4e01-8fc8-f0e9f590f21e",
    "status": true,
    "origin": "payment.proceed",
    "result": {
        "tr_id": "e22d68b7f6dd"
    },
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 05:24:00"
    }
}
```

10. Payment Cancel

Method cancels the transaction

method	String	payment.cancel
tr_id	String	

```
POST

{
    "id": "1",
    "method": "payment.cancel",
    "params": {
        "tr_id": "{{tr_id}}"
    }
}
```

```
"jsonrpc": "2.0",
    "id": "5ddac73a-0f4f-43f7-a9f0-0bffabac81d9",
    "status": true,
    "origin": "payment.cancel",
    "result": {
        "canceled": true
    },
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 11:00:52"
    }
}
```

11. Payment State

Method returns about transaction information

method	String	payment.check
tr_id	String	

```
POST

{
    "id": "1",
    "method": "payment.check",
    "params": {
        "tr_id": "{{tr_id}}"
    }
}
```

method	String	Method name (payment.proceed or transfer.proceed)
number	String	Number of wallet (get)
amount	String	Amount
tr_id	String	Transaction id
status	integer	0=> process, 1=>done, 2=>clearing, -1=>Transaction error, -2=>Transaction cancel

```
{
   "jsonrpc": "2.0",
    "id": "53021f80-e8e2-4efa-ba9e-b13fe9ec2d2f",
    "status": true,
    "origin": "payment.state",
    "result": [
       {
            "number": "8600488811111111",
            "expire": "0127",
            "amount": 100,
            "tr_id": "6d08-4dfb-b3b5-b54b9f58ea66",
            "status": 1,
            "method": "payment.proceed"
       }
   ],
    "host": {
        "name": "Laravel",
        "time_stamp": "2022-03-18 11:08:58"
   }
}
}
```

12. Peer to Peer(Transfer proceed)

[PUT Method description]

Request

method	String	transfer.proceed
number	String	
expire	String	
receiver	String	
amount	Integer	

```
POST

{
    "id": "1",
    "method": "transfer.proceed",
    "params": {
        "number": "{{number}}",
        "expire": "{{expire}}",
        "receiver": "{{card_number}}",
        "amount": 10000
    }
}
```

```
"jsonrpc": "2.0",
    "id": "9ee942b7-fc89-47cd-b8b6-534abcc13d46",
    "status": true,
    "origin": "transfer.proceed",
    "result": {
        "tr_id": "2388-4720-8e6a-b118ef14da76"
    },
    "host": {
```

```
"name": "Laravel",
    "time_stamp": "2022-03-18 11:14:01"
}
```

13. Peer to Peer Cancel

Method cancels the transaction

Request

method	String	transaction.cancel
tr_id	String	

```
POST

{
    "id": "1",
    "method": "transfer.cancel",
    "params": {
        "tr_id": "{{tr_id}}"
    }
}
```

14. Peer to Peer State

Method returns about transaction information

method	String	transaction.check
tr_id	String	

```
POST
```

```
{
    "id": "1",
    "method": "transfer.check",
    "params": {
        "tr_id": "{{tr_id}}"
    }
}
```

15. Transaction create

Method is used to transfer money (TRANZIT to R/S)

Request

method	String	transaction.cancel
amount	String	

```
POST

{
    "id": "1",
    "method": "transaction.create",
    "params": {
        "amount": "100"
    }
}
```

```
{
    "jsonrpc": "2.0",
    "id": "747442f5-79c0-4fe3-94c7-ba1e9beb3509",
    "status": true,
    "origin": "transaction.create",
    "result": {
        "tr_id": "d8665e8a-82fc-494f-be73-247c72d387f7"
    },
```

```
"host": {
        "name": "Laravel",
        "time_stamp": "2022-05-11 13:11:30"
}
```

15. Error Codes

All error codes and their descriptions

Code	Description	
1 - Authorization		
12000	Analysis and design stage, gather data and create system mockup	
-36001	Required params are empty	
-36002	Invalid method name	
-36042	Invalid token	
-36058	Unsupported method request	
400	Missing required params	
500	The service is temporarily unavailable	
2 - Card		
-31100	Processing center unavailable. At this time, the processing center is not available, it is impossible to receive card data	
-31101	No card with this number was found	
-31102	Invalid card expiration date	
-31000	Processing center unavailable. At this time, the processing center is not available, it is impossible to receive card data	
-37000	Mapping error. Details will be returned in message object	
-200	Card not found	
-201	Card expired, capture card!	

-202	Pan invalid, wrong format!
-100	Empty parameters
-101	Error while executing the request, try again
-203	Card not reissue!!
-204	Card status is not active
-205	Card blocked
-206	SMS is not active
3 - Termina	ıl
-236	Supported terminal not found
-237	Merchant not found!
-249	Terminal Id and Merchant Id already exists in the database
-250	Wrong Terminal type
-251	Wrong format Terminal Id
-252	Wrong format Merchant Id
-253	Terminal Id and Merchant Id not found in SV
-254	Terminal Id and Merchant Id not found in the database
-255	Terminal Id and Merchant Id not registered
4 - Hold	
-238	Account not found
-239	Improper funds for holding
-240	Insufficient funds
-241	Wrong period for holding
-242	Hold not found
5 - Paymen	t

16. Server Status Codes

Server status codes are actually not fully implemented however in some cases they may be useful to check GATE connection etc.

Code	Description
2xx - Mode	l name
200	
201	
208	
3xx - Mode	l name
300	
301	
302	
303	
304	
305	
4xx - Mode	l name
400	
403	
404	
405	
5xx - Deplo	pyment
500	
501	Deployment to smartphones