

# POPCHAIN Interface Design Specification

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Product :	POPCHAIN interface Design Specification	Subsystem:	

# About the book

## Overview

- This book is the POPCHAIN interface design specification, for the POPCHAIN Foundation project, POPCHAIN.
- POPCHAIN Foundation provides hardware and software design and implementation solutions for the project.
- POPCHAIN Foundation has the final right to modify and interpret this document and program.

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## I. Introduction

Due to the POPCHAIN project requirements, data interaction with the current POPCHAIN system server is required. According to the discussion and decision of the R&D department, the client requests the POPCHAIN backend system by POST/GET method through the HTTP network protocol and returns the result data by the POPCHAIN platform to realize data transmission of multiple systems. The data transmission format adopts a JSON format with convenient conversion and high readability.

## II. POPCHAIN Interface Definition

### 1. POPCHAIN gets the verification code interface according to the mobile phone number

- 1) Request mode : POST
- 2) Request address : getVerifyCodeByPhoneNumber.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	url	String	
parms	Request parameter	Character string	phoneNumber

### 4) Return parameters

Return success or failure

Sample :

Request :

http://localhost:8081/POPCHAIN/memberAction/getVerifyCodeByPhoneNumber.  
Action

Return :

```
{  
  "code": "0",  
  "message": "success",  
  "result": "ok"  
}
```

## 2. POPCHAIN register interface

- 1) Request mode : POST
- 2) Request address : register.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	request parameter	JSON	PhoneNumber : (must) Password : (must) Verification code : (must) os: os brand: brand model: model version: version imei: imei

- 4) Return parameter

Returns registered user information

Sample :

Request :

<http://localhost:8081/POPCHAIN/memberAction/register.Action>

Return :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "memberId": 4,
    "loginName": "14789872248",
    "nickName": "User1886",
    "gender": "0",
    "loginErrorTimes": 0,
    "registerTime": "2018-03-31 01:52:45",
    "lastLoginTime": "2018-03-31 01:52:45",
    "locked": false,
```

```
    "loginNum": 0,  
    "authStatus": 0,  
    "updateTime": "2018-03-31 01:52:45",  
    "lastUpdateTime": "2018-03-31 01:52:45",  
    "createTime": "2018-03-31 01:52:45"  
  }  
}
```

### 3. POPCHAIN login interface

- 1) Request method : POST
- 2) Request address : login.Action
- 3) Request parameter :

Request parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	phoneNumber: (must) password: (must)

- 4) Return parameters

Returns registered user information

Sample :

Request : <http://localhost:8081/POPCHAIN/memberAction/login.Action>

Return :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "memberId": 4,
    "loginName": "14789872248",
    "nickName": "User1886",
    "gender": "0",
    "loginErrorTimes": 1,
    "registerTime": "2018-03-31 01:52:45",
    "lastLoginTime": "2018-03-31 01:53:59",
    "locked": false,
    "loginNum": 0,
    "authStatus": 0,
    "updateTime": "2018-03-31 01:53:59",
    "lastUpdateTime": "2018-03-31 01:52:45",
    "createTime": "2018-03-31 01:52:45"
  }
}
```



#### 4. POPCHAIN reset the password to get the verification code interface

- 1) Request method : POST
- 2) Request address : getModifyPasswordVerifyCode.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	URL	String	
Parms	Request parameter	JSON	phoneNumber :

- 4) Return parameter

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/memberAction/getModifyPasswordVerifyCode.  
Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": "ok"
}
```

## 5. POPCHAIN reset password interface

- 1) Request method : POST
- 2) Request address : commitNewPassword.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	phoneNumber : (must) verification Code : (must) New password : (must)

- 4) Return parameters

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/memberAction/commitNewPassword.ActionReturn :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "memberId": 4,
    "loginName": "14789872248",
    "nickName": "User1886",
    "gender": "0",
    "loginErrorTimes": 1,
    "registerTime": "2018-03-31 01:52:45",
    "lastLoginTime": "2018-03-31 01:53:59",
    "locked": false,
    "loginNum": 0,
    "authStatus": 0,
    "updateTime": "2018-03-31 01:53:59",
    "lastUpdateTime": "2018-03-31 01:52:45",
    "createTime": "2018-03-31 01:52:45"
  }
}
```

---

```
}
```

## 6. POPCHAIN obtains the funds password verification code

- 1) Request method : POST
- 2) Request address : `getAccountPasswordVerify.Action`
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	memberID

- 4) Return parameters

Return interface information

Sample :

Request :

`http://localhost:8081/POPCHAIN/accountAction/getAccountPasswordVerify.Action`

Return :

```
{
  "code": "0",
  "message": "success",
  "result": "ok"
}
```

## 7. POPCHAIN set fund password

- 1) Request method : POST
- 2) Request address : commitAccountPassword.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	MemberId : Verification Code : Trade password :

- 4) Return parameters

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/accountAction/commitAccountPassword.Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "accountRecordId": 5,
    "memberId": 6,
    "balance": 3,
    "createTime": "2018-04-02 07:04:50",
    "updTime": "2018-04-02 12:35:03"
  }
}
```

## 8. POPCHAIN obtains account information through memberId

- 1) Request method : POST
- 2) Request address : getAccountByMemberId.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	MemberId :

- 4) Return parameters

Return interface information

Sample :

Request :

<http://localhost:8081/POPCHAIN/accountAction/getAccountByMemberId.Action>

Return :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "accountRecordId": 5,
    "memberId": 6,
    "balance": 3,
    "createTime": "2018-04-02 07:04:50",
    "updTime": "2018-04-02 12:35:04"
  }
}
```

## 9. POPCHAIN saves system information

- 1) Request method : POST
- 2) Request address : saveMessage.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	messageText : system information

- 4) Return parameters

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/messageAction/saveMessage.Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": "ok"
}
```

## 10. POPCHAIN gets all system information

- 1) Request method : POST
- 2) Request address : getAllMessage.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	

- 4) Return parameters

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/messageAction/getAllMessage.Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": [
    {
      "messageId": 1,
      "messageText": "test"
    },
    {
      "messageId": 2,
      "messageText": "test"
    }
  ]
}
```

## 11. POPCHAIN obtains system information by id

- 1) Request method : POST
- 2) Request address : getMessageById.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	messageld : 会员 id

- 4) Return parameters

Return interface information

Sample :

Request :

http://localhost:8081/POPCHAIN/messageAction/getMessageById.Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": {
    "messageld": 1,
    "messageText": "test"
  }
}
```



## 12. POPCHAIN views the coin withdrawal record

- 1) Request method : POST
- 2) Request address : getExtractInfo.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	messageId : PageNumber : PageSize :

- 4) Return parameters

Return interface information

Sample :

Request :

<http://localhost:8081/POPCHAIN/tradeAction/getExtractInfo.Action>

Return :

```
{
  "code": "0",
  "message": "success",
  "result": [
    {
      "tradeRecordId": 1,
      "memberId": 6,
      "serviceType": "1",
      "status": 0,
      "postTime": "2018-04-02 09:01:22",
      "balance": 0
    },
    {
      "tradeRecordId": 2,
      "memberId": 6,
      "serviceType": "1",
      "status": 0,
```

```
    "balance": 0  
  }  
]  
}
```

### 13. POPCHAIN withdraw coins

- 1) Request method : POST
- 2) Request address : cashToPrivatePCHAddress.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	messageld : Verification Code : tradePassword : tradeSendAddress : balance :

- 4) Return parameters

Return interface information

Sample :

Request :

<http://localhost:8081/POPCHAIN/tradeAction/cashToPrivatePCHAddress.Action>

Return :

```
{  
  "code": "0",  
  "message": "success",  
  "result": "ok"  
}
```

## 14. POPCHAIN home page interface

- 1) Request method : POST
- 2) Request address : getDeviceBenefitData.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	memberId : pageNo : pageSize :

- 4) Return parameter

Return record data

Accumulated income

Device data (Device list record)

Daily revenue

Paging data

Sample :

Request :

http://localhost:8081/POPCHAIN/deviceAction/getDeviceBenefitData.Action

Return :

```
{
  "code" : "0",
  "message" : "success",
  "result" : {
    "benefitByDay" : 5,
    "deviceCount" : [
      {
        "deviceId" : 1,
        "memberId" : 1,
        "deviceAddress" :
          "0xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx",

```

```
        "bandWidth" : 100 ,
        "hardDiskSize" : 100 ,
        "usedSize" : 50 ,
        "externalIP" : "192.168.0.1" ,
        "internalIP" : "192.168.0.2" ,
        "deviceLastUpTime" : "2018-04-03 11:49:16" ,
        "status" : 0 ,
        "version" : "1.0" ,
        "createTime" : "2018-04-03 11:49:23" ,
        "reservedField" : "1111"
    }
],
"tradeRecord" : [
    {
        "tradeRecordId" : 1 ,
        "memberId" : 1 ,
        "deviceId" : "1" ,
        "serviceType" : "0" ,
        "status" : 1 ,
        "postTime" : "2018-03-30 06:57:00" ,
        "balance" : 10 ,
        "onLineTime" : 10 ,
        "tradeSendAddress" : "System Address" ,
        "tradeReciveAddress" :
"0xfdd3dgdgdfgdfgsdf343" ,
        "createTime" : "2018-03-30 06:57:00" ,
        "reservedField" : "System Send"
    }
],
"benefitCount" : 10
}
```

## 15. POPCHAIN user binds device interface

- 1) Request method : POST
- 2) Request address : deviceBind.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	memberId : deviceAddress :

- 4) Return parameter

Return success information

Note: Content-Type needs to be set to application/json

Sample :

Request :

http://localhost:8081/POPCHAIN/tradeAction/deviceBind.Action

Return :

```
{  
  "code": "0",  
  "message": "success",  
  "result": "ok"  
}
```

## 16. POPCHAIN user unbinds device interface

- 1) Request method : POST
- 2) Request address : deviceUnBind.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	deviceId : memberId :

- 4) Return parameter

Return interface information

Note: Content-Type needs to be set to application/json

Sample :

Request :

http://localhost:8081/POPCHAIN/tradeAction/deviceUnBind.Action

Return :

```
{
  "code": "0",
  "message": "success",
  "result": "ok"
}
```

## 17. POPCHAIN CDN uploads device initial data interface

- 1) Request method : POST
- 2) Request address : upDeviceData.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
Parms	Request parameter	JSON	deviceAddress: bandWidth: hardDiskSize: usedSize: externalIP: internalIP: Version:

- 4) Return parameter

Return interface information

Note: Content-Type needs to be set to application/json

Sample :

Request :

http://localhost:8081/POPCHAIN/tradeAction/deviceUnBind.Action

Return :

```
{  
  "code": "0",  
  "message": "success",  
  "result": "ok"  
}
```



## 18. POPCHAIN device uploads information interface every 5 minutes

- 1) Request method : POST
- 2) Request address : upDeviceRecordData.Action
- 3) Request parameter :

Parameter	Parameter name	Type (Length)	Parameter description
url	Uniform Resoure Locator	String	
parms	Request parameter	JSON	deviceId: memberId : deviceAddress: bandWidth: hardDiskSize: usedSize: externalIP: internalIP: Version:

- 4) Return parameter

Return interface information

Note: Content-Type needs to be set to application/json

Sample :

Request :

<http://localhost:8081/POPCHAIN/tradeAction/deviceUnBind.Action>

Return :

```
{
  "code": "0",
  "message": "success",
  "result": "ok"
}
```