# **微信协议分析和机器人实现**

1. 打开首页，分配一个随机uuid，
2. 根据该uuid获取二维码图片。
3. 微信客户端扫描该图片，在客户端确认登录。
4. 浏览器不停的调用一个接口，如果返回登录成功，则调用登录接口
5. 此时可以获取联系人列表，可以发送消息。然后不断调用同步接口。
6. 如果同步接口有返回，则可以获取新消息，然后继续调用同步接口。

* Java版实现源码：<https://github.com/biezhi/wechat-robot> 或 <http://git.oschina.net/biezhi/wechat-robot>
* Python实现：<https://github.com/Urinx/WeixinBot>
* C#实现：<https://github.com/sherlockchou86/WeChat.NET>
* QT实现：<https://github.com/xiangzhai/qwx>

## **执行流程**

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| | | | | |

| Get UUID | | Get Contact | | Status Notify |

| | | | | |

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| | |

| +-------+ +--------+

| | |

+-------v------+ +-----+--+------+ +--------------+

| | | | | |

| Get QRCode | | Weixin Init +------> Sync Check <----+

| | | | | | |

+-------+------+ +-------^-------+ +-------+------+ |

| | | |

| | +-----------+

| | |

+-------v------+ +-------+--------+ +-------v-------+

| | Confirm Login | | | |

+------> Login +---------------> New Login Page | | Weixin Sync |

| | | | | | |

| +------+-------+ +----------------+ +---------------+

| |

|QRCode Scaned|

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## **WebWechat API**

### **1. 获取UUID（参考方法 getUUID）**

| **API** | **获取 UUID** |
| --- | --- |
| url | <https://login.weixin.qq.com/jslogin> |
| method | GET |
| data | URL Encode |
| params | ****appid**** : wx782c26e4c19acffb <br> ****fun**** : new <br> ****lang****: zh\_CN <br> ****\_**** : 时间戳 |

返回数据(String):

window.QRLogin.code = 200; window.QRLogin.uuid = "xxx"

### **2. 显示二维码（参考方法 showQrCode）**

| **API** | **显示二维码** |
| --- | --- |
| url | <https://login.weixin.qq.com/qrcode/{uuid}> |
| method | POST |
| params | ****t**** : webwx <br/> ****\_**** : 时间戳 |

<br>

### **3. 等待登录（参考方法 waitForLogin）这里是微信确认登录**

| **API** | **二维码扫描登录** |
| --- | --- |
| url | <https://login.weixin.qq.com/cgi-bin/mmwebwx-bin/login> |
| method | GET |
| params | ****tip**** : 1:未扫描 0:已扫描 <br> ****uuid**** : 获取到的uuid <br> ****\_**** : 时间戳 |

返回数据(String):

window.code=xxx;

xxx:

408 登陆超时

201 扫描成功

200 确认登录

当返回200时，还会有

window.redirect\_uri="https://wx.qq.com/cgi-bin/mmwebwx-bin/webwxnewloginpage?ticket=xxx&uuid=xxx&lang=xxx&scan=xxx";

### **4. 登录获取Cookie（参考方法 login）**

| **API** | **webwxnewloginpage** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxnewloginpage> |
| method | GET |
| params | ****ticket**** : xxx <br> ****uuid**** : xxx <br> ****lang**** : zh\_CN <br> ****scan**** : xxx <br> ****fun**** : new |

返回数据(XML):

<error>

<ret>0</ret>

<message>OK</message>

<skey>xxx</skey>

<wxsid>xxx</wxsid>

<wxuin>xxx</wxuin>

<pass\_ticket>xxx</pass\_ticket>

<isgrayscale>1</isgrayscale>

</error>

在这一步获取xml中的 skey, wxsid, wxuin, pass\_ticket

### **5. 微信初始化（参考方法 wxInit）**

| **API** | **webwxinit** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxinit> |
| method | POST |
| data | JSON |
| header | Content-Type: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { <br>          Uin: xxx, <br>          Sid: xxx, <br>          Skey: xxx, <br>          DeviceID: xxx, <br>      } <br> } |

返回数据(JSON):

{

"BaseResponse": {

"Ret": 0,

"ErrMsg": ""

},

"Count": 11,

"ContactList": [...],

"SyncKey": {

"Count": 4,

"List": [

{

"Key": 1,

"Val": 635705559

},

...

]

},

"User": {

"Uin": xxx,

"UserName": xxx,

"NickName": xxx,

"HeadImgUrl": xxx,

"RemarkName": "",

"PYInitial": "",

"PYQuanPin": "",

"RemarkPYInitial": "",

"RemarkPYQuanPin": "",

"HideInputBarFlag": 0,

"StarFriend": 0,

"Sex": 1,

"Signature": "Apt-get install B",

"AppAccountFlag": 0,

"VerifyFlag": 0,

"ContactFlag": 0,

"WebWxPluginSwitch": 0,

"HeadImgFlag": 1,

"SnsFlag": 17

},

"ChatSet": xxx,

"SKey": xxx,

"ClientVersion": 369297683,

"SystemTime": 1453124908,

"GrayScale": 1,

"InviteStartCount": 40,

"MPSubscribeMsgCount": 2,

"MPSubscribeMsgList": [...],

"ClickReportInterval": 600000

}

这一步中获取 SyncKey, User 后面的消息监听用。

### **6. 开启微信状态通知（参考方法 wxStatusNotify）**

| **API** | **webwxstatusnotify** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxstatusnotify> |
| method | POST |
| data | JSON |
| header | Content-Type: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { Uin: xxx, Sid: xxx, Skey: xxx, DeviceID: xxx }, <br>      Code: 3, <br>      FromUserName: 自己的ID, <br>      ToUserName: 自己的ID, <br>      ClientMsgId: 时间戳 <br> } |

返回数据(JSON):

{

"BaseResponse": {

"Ret": 0,

"ErrMsg": ""

},

...

}

### **7. 获取联系人列表（参考方法 getContact）**

| **API** | **webwxgetcontact** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxgetcontact> |
| method | POST |
| data | JSON |
| header | ContentType: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { <br>          Uin: xxx, <br>          Sid: xxx, <br>          Skey: xxx, <br>          DeviceID: xxx, <br>      } <br> } |

返回数据(JSON):

{

"BaseResponse": {

"Ret": 0,

"ErrMsg": ""

},

"MemberCount": 334,

"MemberList": [

{

"Uin": 0,

"UserName": xxx,

"NickName": "Urinx",

"HeadImgUrl": xxx,

"ContactFlag": 3,

"MemberCount": 0,

"MemberList": [],

"RemarkName": "",

"HideInputBarFlag": 0,

"Sex": 0,

"Signature": "我是二蛋",

"VerifyFlag": 8,

"OwnerUin": 0,

"PYInitial": "URINX",

"PYQuanPin": "Urinx",

"RemarkPYInitial": "",

"RemarkPYQuanPin": "",

"StarFriend": 0,

"AppAccountFlag": 0,

"Statues": 0,

"AttrStatus": 0,

"Province": "",

"City": "",

"Alias": "Urinxs",

"SnsFlag": 0,

"UniFriend": 0,

"DisplayName": "",

"ChatRoomId": 0,

"KeyWord": "gh\_",

"EncryChatRoomId": ""

},

...

],

"Seq": 0

}

### **8.消息检查（参考方法 syncCheck）**

| **API** | **synccheck** |
| --- | --- |
| url | <https://webpush2.weixin.qq.com/cgi-bin/mmwebwx-bin/synccheck> |
| method | GET |
| data | JSON |
| header | ContentType: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { <br>          Uin: xxx, <br>          Sid: xxx, <br>          Skey: xxx, <br>          DeviceID: xxx, <br>      } <br> } |

返回数据(String):

window.synccheck={retcode:"xxx",selector:"xxx"}

retcode:

0 正常

1100 失败/登出微信

selector:

0 正常

2 新的消息

7 进入/离开聊天界面

### **9. 获取最新消息（参考方法 webwxsync）**

| **API** | **webwxsync** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxsync?sid=xxx&skey=xxx&pass_ticket=xxx> |
| method | POST |
| data | JSON |
| header | ContentType: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { Uin: xxx, Sid: xxx, Skey: xxx, DeviceID: xxx }, <br>      SyncKey: xxx, <br>      rr: 时间戳取反 <br> } |

返回数据(JSON):

{

'BaseResponse': {'ErrMsg': '', 'Ret': 0},

'SyncKey': {

'Count': 7,

'List': [

{'Val': 636214192, 'Key': 1},

...

]

},

'ContinueFlag': 0,

'AddMsgCount': 1,

'AddMsgList': [

{

'FromUserName': '',

'PlayLength': 0,

'RecommendInfo': {...},

'Content': "",

'StatusNotifyUserName': '',

'StatusNotifyCode': 5,

'Status': 3,

'VoiceLength': 0,

'ToUserName': '',

'ForwardFlag': 0,

'AppMsgType': 0,

'AppInfo': {'Type': 0, 'AppID': ''},

'Url': '',

'ImgStatus': 1,

'MsgType': 51,

'ImgHeight': 0,

'MediaId': '',

'FileName': '',

'FileSize': '',

...

},

...

],

'ModChatRoomMemberCount': 0,

'ModContactList': [],

'DelContactList': [],

'ModChatRoomMemberList': [],

'DelContactCount': 0,

...

}

### **10. 发送消息（参考方法 webwxsendmsg）**

| **API** | **webwxsendmsg** |
| --- | --- |
| url | <https://wx2.qq.com/cgi-bin/mmwebwx-bin/webwxsendmsg?pass_ticket=xxx> |
| method | POST |
| data | JSON |
| header | ContentType: application/json; charset=UTF-8 |
| params | { <br>      BaseRequest: { Uin: xxx, Sid: xxx, Skey: xxx, DeviceID: xxx }, <br>      Msg: { <br>          Type: 1 文字消息, <br>          Content: 要发送的消息, <br>          FromUserName: 自己的ID, <br>          ToUserName: 好友的ID, <br>          LocalID: 与clientMsgId相同, <br>          ClientMsgId: 时间戳左移4位随后补上4位随机数 <br>      } <br> } |

返回数据(JSON):

{

"BaseResponse": {

"Ret": 0,

"ErrMsg": ""

},

...

}

更多资料： <https://github.com/xiangzhai/qwx> <https://github.com/Urinx/WeixinBot> <http://www.07net01.com/2016/01/1201188.html> <http://www.cnblogs.com/xiaozhi_5638/p/4923811.html>

转载于:https://my.oschina.net/biezhi/blog/618493