

花旗API

Authorize（用户验证）

- 花旗的用户验证分为两类。一类验证是不涉及个人用户数据的接口，验证比较容易，第二类涉及到用户较多的隐私信息，因此验证方法比较复杂，要先有自己的URL，在本文中，只进行第一类验证。
- 调用方法（JAVA）（需要用的jar包从群文件中下载） package com.company;

```
import okhttp3.*;

import java.io.IOException;

public class Main {

    public static void main(String[] args) {
        // write your code here
        OkHttpClient client = new OkHttpClient();

        MediaType mediaType = MediaType.parse("application/x-www-form-urlencoded");
        RequestBody body = RequestBody.create(mediaType, "grant_type=client_credentials&scope=api");
        Request request = new Request.Builder()
            .url("https://sandbox.apihub.citi.com/gcb/api/clientCredentials/oauth2/token/au/gcb")
            .post(body)
            .addHeader("accept", "application/json")
            .addHeader("authorization", "Basic NTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzZmNGI2N2RiO1c2d1kwbEg4ckw0c0s2bFg2YlA3YUw2ZUMyd1gx")
            .addHeader("content-type", "application/x-www-form-urlencoded")
            .build();

        try{
            Response response = client.newCall(request).execute();
            ResponseBody RB = response.body();
            System.out.println(RB.string());
        }
        catch (IOException e){
            System.out.println("request error");
        }
    }
}
```

- 返回结果: { "token_type": "bearer", "access_token": "AAIkNTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzZmNGI2N2RiO1c2d1kwbEg4ckw0c0s2bFg2YlA3YUw2ZUMyd1gxWDq8teeiI8WIM7xbles8NLY3Ho0uXj0ex4dcVF3HqKz7k2q39A4ZsYhoGefQazu8sKF9rDgd1QDuECK11a6mZZ3uCWTEcRWcCWdD7tCldUq-k358AAShkpT9x0FOTqoj9smq3-yxX5WQo4iaOFNikh9uDDG1EiE7ecq7thmYWNmVwnPk9PrMLKzpZ5AwyA", "expires_in": 1800, "consented_on": 1530708586, "scope": "api" }
- access_token是我们获取的重点这是后续调用所有api的凭证，1800秒的有效时间

pay with points

- The Pay with Points API lets Citi customers use their Citi Points to pay for all or part of a transaction on your app. To simplify integration, transaction payments are processed through your existing payment gateway. A matching statement credit is then applied to the customer's Citi account, usually within 1-3 days.
- 简述：这个API的功能是利用消费者的积分进行相关业务和产品的兑换。
- 接口1：以用户的卡号后4位和手机号作为凭证，获取一个linkcode，指向用户对应的积分信息，这个linkcode需要在后面的代码中被激活才能使用

```
public static void paywithawards1(){
    OkHttpClient client = new OkHttpClient();

    MediaType mediaType = MediaType.parse("application/json");
    RequestBody body = RequestBody.create(mediaType, "{\"lastFourDigitsCardNumber\":\"7411\", \"citiCardHolderPhoneNumber\":\"2608191234\"}");
    Request request = new Request.Builder()
        .url("https://sandbox.apihub.citi.com/gcb/api/v1/apac/rewards/linkage")
        .post(body)
        .addHeader("authorization", "Bearer AAIkNTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzZmNGI2N2RiIwrPu6jt69NKAWQSo127_Y2MDTnSc0hBbGkZ9Ayf-q2")
        .addHeader("uuid", "b4149df3-b7fb-460f-b79e-29492d55bdd9")
        .addHeader("accept", "application/json")
        .addHeader("content-type", "application/json")
        .addHeader("accept-language", "REPLACE_THIS_VALUE")
        .addHeader("client_id", "55465026-31d3-4881-a29a-419c364b67db")
        .build();

    try{
        Response response = client.newCall(request).execute();
        ResponseBody RB = response.body();
        System.out.println(RB.string());
    }
```

```

    }catch (IOException e){
        System.out.println("error");
    }
}

```

- 接口2：激活在上一步中提供的码

```

public static void paywithawards2(){
    OkHttpClient client = new OkHttpClient();
    MediaType mediaType = MediaType.parse("application/json");
    RequestBody body = RequestBody.create(mediaType, "{\"linkageConfirmationCode\":\"735937\"}");
    Request request = new Request.Builder()
        .url("https://sandbox.apihub.citi.com/gcb/api/v1/apac/rewards/9988799798383690000/activations")
        .put(body)
        .addHeader("uuid", "19941865-338e-4fcf-bf3d-cbba7d07075e")
        .addHeader("accept", "application/json")
        .addHeader("client_id", "55465026-31d3-4881-a29a-419c364b67db")
        .addHeader("content-type", "application/json")
        .addHeader("authorization", "Bearer AAIkNTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzM2NGI2N2RiIwrPu6jt69NKAWQSo127_Y2MDTnSc0hBbGK")
        .addHeader("accept-language", "en-us")
        .build();

    try{
        Response response = client.newCall(request).execute();
        ResponseBody RB = response.body();
        System.out.println(RB.string());
    }catch (IOException e){
        System.out.println("error");
    }
}

```

- 接口3：显示可用点数，点数的兑换率 and 使用的货币类型和最大兑换额度和最小兑换额度

```

public static void paywithawards3(){
    OkHttpClient client = new OkHttpClient();

    Request request = new Request.Builder()
        .url("https://sandbox.apihub.citi.com/gcb/api/v1/apac/rewards/9988799798383690000/pointBalance")
        .get()
        .addHeader("authorization", "Bearer AAIkNTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzM2NGI2N2RidnnqEesPwCSxiM8pCHUqHTo-vgr1N7KpibY")
        .addHeader("uuid", "10de44d2-254f-4d7d-b296-4b69ad4ac377")
        .addHeader("accept", "application/json")
        .addHeader("client_id", "55465026-31d3-4881-a29a-419c364b67db")
        .addHeader("accept-language", "en-us")
        .build();

    try{
        Response response = client.newCall(request).execute();
        ResponseBody RB = response.body();
        System.out.println(RB.string());
    }catch (IOException e)
    {
        System.out.println("error");
    }
}

```

- 返回示例：

```

{"availablePointBalance":"10000","programConversionRate":"0.1","currencyCode":"AUD","maximumPointsToRedeem":"11000","minimumPointsToRedeem":"2000"}

```

- 接口4：完成订单，显示订单号和当前剩余的可用点数

```

public static void paywithawards4(){
    OkHttpClient client = new OkHttpClient();

    MediaType mediaType = MediaType.parse("application/json");
    RequestBody body = RequestBody.create(mediaType, "{\"transactionReferenceNumber\":\"132323454de6234543\", \"redemptionOrder\":{\"tra
    Request request = new Request.Builder()
        .url("https://sandbox.apihub.citi.com/gcb/api/v1/apac/rewards/9988799798383690000/redemption")
        .post(body)
        .addHeader("authorization", "Bearer AAIkNTU0NjUwMjYtMzFkMy00ODgxLWEyOWEtNDE5YzM2NGI2N2RidnnqEesPwCSxiM8pCHUqHTo-vgr1N7KpibY")
        .addHeader("uuid", "fdf95328-2856-486a-a4d2-398252ce9e79")
        .addHeader("accept", "application/json")
        .addHeader("content-type", "application/json")
        .addHeader("client_id", "55465026-31d3-4881-a29a-419c364b67db")
        .addHeader("accept-language", "en-us")
        .build();

    try{
        Response response = client.newCall(request).execute();
        ResponseBody RB = response.body();
    }
}

```

```
        System.out.println(RB.string());  
    }catch (IOException e){  
        System.out.println("error");  
    }  
}
```

- 返回示例: {"orderId":"99798383879398","availablePointBalance":7995}