云盘对接

一、获取token

对接信息：

```
开放平台接口地址:https://npan.novastar.tech:6001/openapi
开放平台鉴权地址: https://npan.novastar.tech:6001/openoauth

client_id: c4f14972-951f-4a9f-9060-5a30131dbeac
client_secret: 185823b1-8d0e-4335-827e-958a4d3eba68
enterprise_id: 115
platform_id: 2
```

获取token示例代码

```java
 import com.alibaba.fastjson.JSON;
import com.alibaba.fastjson.JSONObject;
import org.apache.http.HttpEntity;
import org.apache.http.HttpResponse;
import org.apache.http.client.methods.HttpPost;
import org.apache.http.impl.client.DefaultHttpClient;
import org.apache.http.util.EntityUtils;
import java.util.*;

public class DemoSimple {

    static String clientId = "c4f14972-951f-4a9f-9060-5a30131dbeac";
    static String clientSecret = "185823b1-8d0e-4335-827e-958a4d3eba68";

    // jwt密钥文件中的enterprise_id，生成企业token使用
    static long enterpriseId = 115L;
    // jwt密钥文件中的platform_id
    static long platformId = 2L;
    // 用户id，通过接口获取，生成个人token使用，530是超级管理员的用户id，每个人的token的权限是不一样的
    static long userId = 530L;
    // 开放平台获取token地址(专有云需要修改)
    static String oauthHost = "https://npan.novastar.tech:6001/openoauth";

    public static void main(String[] args) throws Exception {

        // 生成企业token
        JSONObject accessTokenAdmin= getAccessToken(oauthHost, clientId, clientSecret, enterpriseId, false);
        System.out.println("accessTokenAdmin" + JSON.toJSONString(accessTokenAdmin));
        // 生成个人token
        JSONObject accessTokenUser = getAccessToken(oauthHost, clientId, clientSecret, userId, true);
        System.out.println("accessTokenUser" + JSON.toJSONString(accessTokenUser));
  }

    public static JSONObject getAccessToken (String oauthUrl, String appKey, String appSecret, Long id, Boolean isUser) {
        try{
             Map<String, String> dataMap = new HashMap<>();
             String yifangyun_sub_type = "";
             if (isUser) {
                yifangyun_sub_type = "user";
              } else {
               yifangyun_sub_type = "enterprise";
             }

             dataMap.put("yifangyun_sub_type", yifangyun_sub_type); //授权对象类型enterprise为企业   user为用户
             dataMap.put("sub", String.valueOf(id)); //如果授权对象类型为企业 这里输入企业id，如果授权对象类型为user这边输入userid
             dataMap.put("exp", String.valueOf(getExpirationTimeSecondsInTheFuture(60).getTime()/1000));//过期时间戳，不能超过iat(若iat不存在则记请求到达服务器时间)60s
             dataMap.put("iat", String.valueOf(new Date().getTime()/1000));//当前 时间
             dataMap.put("jti", System.currentTimeMillis() + UUID.randomUUID().toString());//随机字符串

             String dataJson = JSON.toJSONString(dataMap);
             String encodeJson = Base64.getEncoder().encodeToString(dataJson.getBytes());
             return getToken(encodeJson, oauthUrl, appKey, appSecret);
        }catch (Exception e){
             e.printStackTrace();
        }
        return null;
    }


    /**
    * 获取token
    * @param compactJwt jwt字符串
    * @param oauthUrl 接口地址
    * @param appKey client_id
    * @param appSecret client_secret
    * @return 返回接口token
    */
    private static JSONObject getToken(String compactJwt, String oauthUrl, String appKey, String appSecret){
          String res = "";
          DefaultHttpClient httpclient;
          try {
                httpclient = new DefaultHttpClient();//https请求 存在证书问题，通过此方式信任所有证书

                String url = oauthUrl + "/oauth/token?grant_type=jwt_simple&assertion=" + compactJwt;
                System.out.println(url);
                HttpPost httppost = new HttpPost(url);

                String client = appKey + ":" + appSecret;  //组装client_id和client_secret
                byte[] bytes = client.getBytes();
                String base64Client = Base64.getEncoder().encodeToString(bytes);//base64加密
                System.out.println(base64Client);
                httppost.addHeader("Authorization","Basic "+base64Client);
                HttpResponse response = httpclient.execute(httppost);

                HttpEntity entity = response.getEntity();
                res = EntityUtils.toString(entity);
                return JSONObject.parseObject(res);

          }catch (Exception e){
                e.printStackTrace();
                return null;
          }
    }

    private static Date getExpirationTimeSecondsInTheFuture(int seconds) {
          Calendar calendar = Calendar.getInstance();
          calendar.setTime(new Date());
          calendar.add(Calendar.SECOND, seconds);
          return calendar.getTime();
    }
}
```

二、创建文件夹

> 创建文件夹

- **URL**

  ```
  https://npan.novastar.tech:6001/openapi/api/v2/folder/create
  ```

- **HTTP请求方法**

  POST

  需要使用根据用户id生成的用户级别token

- **请求参数**

参数字段	字段类型	是否必须	字段说明
name	string	是	文件夹名，文件夹名称必须是1到222个字符，并且不能含有/ ? : * " > < \
parent_id	long	是	父文件夹id
department_id	long	否	部门id，parent_id传0时有效，不填则在个人空间根目录创建，填写则在部门空间根目录创建

- **返回字段说明**

返回字段	字段类型	字段说明
type	string	固定为"folder"
id	long	文件夹id
name	string	文件夹名称
size	long	文件夹大小
created_at	timestamp	文件夹创建时间，单位为秒
modified_at	timestamp	文件夹更新时间，单位为秒
modified_by	mini_user	文件夹修改者
description	string	文件夹描述
path	path_folder列表	所有祖先文件夹的简略信息
owned_by	user	文件夹所有者
parent	path_folder	父文件夹简略信息
sequence_id	long	文件夹次序号
item_count	int	包含item的数量
folder_type	string	文件夹类型

> 返回示例

```
{
    "space":{
        "type":"personal"
    },
    "item_count":0,
    "type":"folder",
    "id":203000426996,
    "name":"new folders",
    "size":0,
    "created_at":1625039303,
    "modified_at":1625039303,
    "description":"",
    "path":[
        {
            "type":"folder",
            "id":0,
            "name":"全部文件"
        }
    ],
    "owned_by":{
        "id":13214349,
        "name":"yfytest01",
        "login":"venus@venus.fangcloud.com",
        "enterprise_id":431512
    },
    "parent":{
        "type":"folder",
        "id":0
    },
    "sequence_id":0,
    "in_trash":false,
    "is_deleted":false,
    "is_frequently_used":false
}
```

- 错误码列表
    - permission_denied
    - folder_name_conflict
    - folder_not_found
    - item_name_invalid
- **完整示例**

```
curl --location --request POST 'https://npan.novastar.tech:6001/openapi/api/v2/folder/create' \--header 'Authorization: Bearer 54bb7062-8135-4a22-8ad5-1f95d6e5d23b' \--header 'Content-Type: application/json' \--data-raw '{     "name": "new folders",     "parent_id": 0,     "target_space": {         "type": "personal",         "id": 179000000086     }}'
```

三、上传文件

- **URL**

```
https://npan.novastar.tech:6001/openapi/api/v2/file/upload_v2
```

- **HTTP请求参数**

  POST

  需要使用根据用户id生成的用户级别token

- **请求参数说明**

参数字段	字段类型	是否必须	字段说明
parent_id	Long	是	父文件夹id
name	String	是	文件名
upload_type	String	是	上传类型，目前固定为api

> 请求示例

```
{
  "parent_id": "0",
  "name": "测试文档xxxqqq.docx",
  "upload_type": "api"
}
```

- **返回字段说明**

返回字段	字段类型	字段说明
presign_url	string	上传链接，接下来往该链接上传即可上传文件，只能被使用一次

> 返回示例

```
{
    "presign_url": "https://upload01.fangcloud.net/upload/ad973f8df9fd48818453a6a0c74ef2bf/cfd856987a685972f6c21f4ddc3f8617dc08775aa602012f50649289c0f6f6ef"
}
```

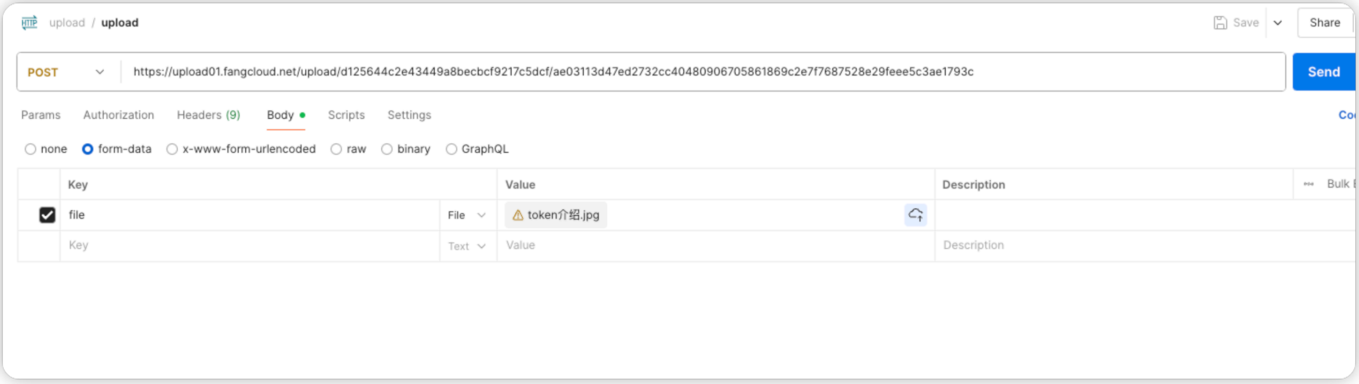
- **完整示例**

```
curl --location --request POST 'https://npan.novastar.tech:6001/openapi/api/v2/file/upload' \
--header 'Authorization: Bearer 266bb39e-533e-4948-b0f0-beeb13eaa236' \
--header 'Content-Type: application/json' \
--data-raw '{
  "parent_id": "0",
  "name": "测试文档xxxqqq.docx",
  "upload_type": "api"
}'
```

- 真正上传文件请求示例，上传地址为上面接口返回的文件真正上传地址，上传文件后会返回文件详情：

```
curl --location 'https://upload01.fangcloud.net/upload/d125644c2e43449a8becbcf9217c5dcf/ae03113d47ed2732cc40480906705861869c2e7f7687528e29feee5c3ae1793c' \
--form 'file=@"/Users/liangxiaosheng/FangcloudV2/personal_space.localized/个人工作文件/个人/开放平台/开放平台使用文档/token介绍.jpg"'
```

上传文件postman示例



POST https://upload01.fangcloud.net/upload/d125644c2e43449a8becbcf9217c5dcf/ae03113d47ed2732cc40480906705861869c2e7f7687528e29feee5c3ae1793c

○ none ● form-data ○ x-www-form-urlencoded ○ raw ○ binary ○ GraphQL

	Key		Value	Description
☑	file	File	token介绍.jpg	
	Key	Text	Value	Description

四、删除文件至回收站

- **URL**

```
https://npan.novastar.tech:6001/openapi/api/v2/file/{id}/delete
```

- **HTTP请求参数**

  POST

  需要使用根据用户id生成的用户级别token

- **路径参数**

参数字段	字段类型	字段说明
id	long	文件id

- **返回字段说明**

返回字段	字段类型	字段说明
success	boolean	表示是否删除成功

> 返回示例

```
{     "success" : "true"}
```

- 错误码列表
  - file_not_found
  - permission_denied
  - file_deleted
- **完整示例**

```
curl --location --request POST 'https://npan.novastar.tech:6001/openapi/api/v2/file/179000100375/delete' \--header 'Authorization: Bearer 0e7051d6-bc29-4486-b540-e8b28aa07089'
```

四、搜索文件

> 搜索文件

- **URL**

```
https://npan.novastar.tech:6001/openapi/api/v2/item/search
```

- **HTTP请求方式**

  GET

- **请求参数说明**

参数字段	字段类型	是否必须	字段说明
query_words	string	是	搜索关键词，不能为空
type	string	否	搜索类型，分为file，folder，all三种，默认为all
page_id	int	否	第几页，每页默认20，默认为第0页
search_in_folder	long	否	指定父文件夹，匹配的结果都是该文件夹的子文件或子文件夹
query_filter	string	否	搜索过滤类型，分为file_name，content，creator, all四种，默认为all
updated_time_range	string	否	指定更新时间范围搜索

注意：updated_time_range参数格式为开始和结束时间戳，并以逗号分隔（如:'1509954358,1509954360'），两个时间戳均可以不传，为空就表示不对开始或结束时间进行限制，但是逗号必须传（如：',1509954360' 或 '1509954358,' 或 ','）

- **返回字段说明**

返回字段	字段类型	字段说明
folders	list	搜索到的folder的list
files	list	搜索到的file的list
total_count	long	所有匹配结果的数量
page_id	int	页号，从0开始
page_capacity	int	页容量
page_count	int	总页数

> 返回示例

```
{
    "files":[
        {
            "sha1":"1f5243f2ba7872206aef7197ea92762eddf47555",
            "comments_count":0,
            "extension_category":"document",
            "type":"file",
            "id":3990311,
            "name":"新建 Microsoft Word 文档.doc",
            "size":26112,
            "created_at":1461919825,
            "modified_at":1461919826,
            "modified_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "description":"",
            "path":[
                {
                    "type":"folder",
                    "id":0,
                    "name":"全部文件"
                },
                {
                    "type":"folder",
                    "id":720342,
                    "name":"download error"
                }
            ],
            "owned_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "parent":{
                "type":"folder",
                "id":720342,
                "name":"download error"
            },
            "sequence_id":1
        },
        {
            "sha1":"1f5243f2ba7872206aef7197ea92762eddf47555",
            "comments_count":0,
            "extension_category":"document",
            "type":"file",
            "id":3990312,
            "name":"新建 Microsoft Word 文档.doc",
            "size":26112,
            "created_at":1461919867,
            "modified_at":1461919868,
            "modified_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "description":"",
            "path":[
                {
                    "type":"folder",
                    "id":0,
                    "name":"全部文件"
                }
            ],
            "owned_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "sequence_id":0
        },
        {
            "sha1":"21033782df2fa91ba5fe8c86b0d61d5c88b85903",
            "comments_count":0,
            "extension_category":"document",
            "type":"file",
            "id":3990313,
            "name":"qwewq12.ppt",
            "size":102400,
            "created_at":1461919871,
            "modified_at":1462957860,
            "modified_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "description":"",
            "path":[
                {
                    "type":"folder",
                    "id":0,
                    "name":"全部文件"
                }
            ],
            "owned_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "sequence_id":2
        },
        {
            "sha1":"8cfed9a789a37cc8f195510ca34bd1c2800ea2a6",
            "comments_count":0,
            "extension_category":"document",
            "type":"file",
            "id":3990314,
            "name":"12.xls",
            "size":23040,
            "created_at":1461919873,
            "modified_at":1462783210,
            "modified_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "description":"",
            "path":[
                {
                    "type":"folder",
                    "id":0,
                    "name":"全部文件"
                }
            ],
            "owned_by":{
                "id":468,
                "name":"tt2",
                "login":"tt@t.com",
                "enterprise_id":1
            },
            "sequence_id":3
        }
    ],
    "folders":[

    ],
    "total_count":4,
    "page_id":0,
    "page_capacity":20,
    "page_count":1
}
```

- **完整示例**

```
curl --location --request GET 'https://npan.novastar.tech:6001/openapi/api/v2/item/search?query_words=test1&type=all&page_id=0&query_filter=all' \--header 'Authorization: Bearer 5c665f6c-30c2-4f1d-93c0-6ab623001dd6' \--header 'Content-Type: application/json'
```