### **调用Ec接口认证**

💡调用Ec接口需要获取Ec系统的Token，访问具体业务接口时需要把获取到的Token放入到接口**Header**中，key为 **token** ，Ec会提供具体的业务调用 **APPID** ，也需要放入到接口的Header中，key为 **appid。**Ec提供的参数如下：

| **appid** | NC |
| --- | --- |
| 系统访问地址 | [http://10.11.99.37](http://10.11.100.76:8888" \t "/Users/lvchao/Documents%5C%5Cx/_blank) （测试机） |
| spk | MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB |
| secret | 9f4596ae-18d7-4fdf-89d7-6b54c1449bed |

#### **1. 获取Token**

访问地址

http://10.11.99.37/api/ec/dev/auth/applytoken

请求方式：POST

请求参数（Header）

| **参数** | **类型** | **说明** |
| --- | --- | --- |
| appid | String | Ec提供的**APPID** (NC) |
| secret | String | 用Ec提供的**spk** (MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB)、**secret** (9f4596ae-18d7-4fdf-89d7-6b54c1449bed) 参数，通过RSA加密算法计算 |

返回结构:{"msg":"获取成功!","code":0,"msgShowType":"none","status":true,"token":"7099a965-7ef4-4e2d-a1e2-a4d66a10e945"}

结构说明:code = 0 时代表获取Token成功，token为具体的值

secret 加密算法示例:

RSA rsa = new RSA(null,"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB");

String encryptSecret = rsa.encryptBase64("9f4596ae-18d7-4fdf-89d7-6b54c1449bed", CharsetUtil.CHARSET\_UTF\_8, KeyType.PublicKey);

String data = HttpRequest.post("http://10.11.99.37/api/ec/dev/auth/applytoken")

           .header("appid","NC")

           .header("secret",encryptSecret)

           .header("time","3600")

           .execute().body();

### **流程提交接口 (默认人员10431)**

访问地址：http://10.11.99.37/api/workflow/paService/submitRequest

请求方式：application/x-www-form-urlencoded

请求参数（Header）

| **参数** | **类型** | **说明** |
| --- | --- | --- |
| appid | String | Ec提供的**APPID** (NC) |
| token | String | 获取Token接口返回的值 |
| userid | String | 用Ec提供的**spk** (MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB) 、**userid** (1) 参数，通过RSA加密算法计算 |

secret 加密算法示例

RSA rsa = new RSA(null,"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB");

String userid = rsa.encryptBase64("10431",CharsetUtil.CHARSET\_UTF\_8,KeyType.PublicKey);

请求参数（Body）

| **参数名** | **类型** | **必填** | **描述** | **示例** |
| --- | --- | --- | --- | --- |
| **remark** | String | 非必填 | 签字意见，默认值流程默认意见若未设置则为空 |   |
| **requestId** | Int | 必填 | 流程Id（请求id） |   |
| **detailData** | String | 非必填 | 明细表数据，特殊参数说明："deleteAll":"1"(删除该流程原有明细)，"deleteKeys":"12,13"（删除该流程明细id=12，13d的明细行） | 如下 |
| **mainData** | String | 非必填 | 主表数据，例子请参考新建流程接口说明 |   |
| **otherParams** | String | 非必填 | 其他参数，比如src （动作类型 save表示只保存 ，submit 为提交 ，默认为提交）； judgeFormMustInput(验证表单字段必填，1为验证，默认不验证)； | 如下 |

detailData 示例

    "tableDBName": "formtable\_main\_1356\_dt1",

    "deleteAll": "1",

    "deleteKeys": "12,13",

    "workflowRequestTableRecords": [

     {

        "recordOrder": 0,

        "workflowRequestTableFields": [

         {

            "fieldName": "drl",

            "fieldValue": "2978"

         },

         {

            "fieldName": "xlk",

            "fieldValue": "0"

         }

       ]

     }

   ]

 }

]

otherParams 示例

{

  "src": "save"

}

返回值类型

JSON

返回示例

{

 "code": "SUCCESS",

 "errMsg": {},

 "reqFailMsg": {

 "keyParameters": {},

 "msgInfo": {},

 "otherParams": {

 "doAutoApprove": "0"

 }

 }

}

返回参数说明

| **code** | String | 返回数据状态 SUCCESS：成功，PARAM\_ERROR：参数错误，NO\_PERMISSION：无权限，SYSTEM\_INNER\_ERROR：程序异常，USER\_EXCEPTION：用户异常 |
| --- | --- | --- |
| **errMsg** | Json | 接口异常信息：例如状态为PARAM\_ERROR 则返回错误参数信息 |

示例代码

RSA rsa = new RSA(null,"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB");

        String encryptSecret = rsa.encryptBase64("9f4596ae-18d7-4fdf-89d7-6b54c1449bed", CharsetUtil.CHARSET\_UTF\_8, KeyType.PublicKey);

        String userid = rsa.encryptBase64("10431",CharsetUtil.CHARSET\_UTF\_8,KeyType.PublicKey);

        // 获取Token

        String token = HttpRequest.post("http://10.11.99.37/api/ec/dev/auth/applytoken")

               .header("appid","NC")

               .header("secret",encryptSecret)

               .header("Content-Type","application/x-www-form-urlencoded")

               .execute().body();

        String tokenStr = com.alibaba.fastjson.JSONObject.parseObject(token).getString("token");

        System.out.println(tokenStr);

        Map submitMap = MapUtil.builder()

               .put("remark","测试提交接口")

               .put("requestId","868868")

               .build();

        // 测试提交流程

        String submitResult = HttpRequest.post("http://10.11.99.37/api/workflow/paService/submitRequest")

               .header("appid","NC")

               .header("token",tokenStr)

               .header("userid",userid)

               .header("Content-Type","application/x-www-form-urlencoded")

               .form(submitMap)

               .execute().body();

        System.out.println(submitResult);

#### **流程退回接口 (默认人员10431)**

访问地址：http://10.11.99.37/api/workflow/paService/rejectRequest

请求方式

application/x-www-form-urlencoded

请求参数（Header）

| 参数 | 类型 | 说明 |
| --- | --- | --- |
| appid | String | Ec提供的**APPID** (NC) |
| token | String | 获取Token接口返回的值 |
| userid | String | 用Ec提供的**spk** (MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB) 、**userid** (1) 参数，通过RSA加密算法计算 |

secret 加密算法示例：

RSA rsa = new RSA(null,"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB");

String userid = rsa.encryptBase64("10431",CharsetUtil.CHARSET\_UTF\_8,KeyType.PublicKey);

请求参数（Body）

| **参数名** | **类型** | **必填** | **描述** | **示例** |
| --- | --- | --- | --- | --- |
| **requestId** | Int | 必填 | 流程Id（请求ID） |   |
| **remark** | String | 非必填 | 签字意见 |   |

返回示例

{

 "code": "SUCCESS",

 "errMsg": {},

 "reqFailMsg": {

 "keyParameters": {},

 "msgInfo": {},

 "otherParams": {

 "doAutoApprove": "0"

 }

 }

}

返回参数说明

| **code** | String | 返回数据状态 SUCCESS：成功，PARAM\_ERROR：参数错误，NO\_PERMISSION：无权限，SYSTEM\_INNER\_ERROR：程序异常，USER\_EXCEPTION：用户异常 |
| --- | --- | --- |
| **errMsg** | Json | 接口异常信息：例如状态为PARAM\_ERROR 则返回错误参数信息 |

示例代码

RSA rsa = new RSA(null,"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAo1KpSxL8NPbHGTeh/t/JB2sFI3xBsd0xOnz1D63xHFY8auVjaFGd7Or+DdtdQrAlJ8eCVi0r73tvuZs7cbve2kfbvSzbelaV04keyXCfHfvRN5bjXDeLhR2mNdLn+2uUnugwYBmX1TrSk3hTBrMNKcALYYFF4TLKiu/L183CxNB7y9vb0iMFI9dU11NQYwc62d5P4KZHsIP8jiwQBiHYuJp9GwREGhm6bPYByQdQ5pVvC0XL0g2Cv3W+d9HOB0gYT8BfzDYE0RK7PaLb1LDzhTfsGpbCtCmqRqzFc7w7UI4PoaF4bwanA9+x+zzwRWMAeTKTfj2pvYBmnUAQXv/HiwIDAQAB");

        String encryptSecret = rsa.encryptBase64("9f4596ae-18d7-4fdf-89d7-6b54c1449bed", CharsetUtil.CHARSET\_UTF\_8, KeyType.PublicKey);

        String userid = rsa.encryptBase64("10431",CharsetUtil.CHARSET\_UTF\_8,KeyType.PublicKey);

        // 获取Token

        String token = HttpRequest.post("http://10.11.99.37/api/ec/dev/auth/applytoken")

               .header("appid","NC")

               .header("secret",encryptSecret)

               .header("Content-Type","application/x-www-form-urlencoded")

               .execute().body();

        String tokenStr = com.alibaba.fastjson.JSONObject.parseObject(token).getString("token");

        System.out.println(tokenStr);

        Map submitMap = MapUtil.builder()

               .put("requestId","868868")

               .build();

        String submitResult = HttpRequest.post("http://10.11.99.37/api/workflow/paService/rejectRequest")

               .header("appid","NC")

               .header("token",tokenStr)

               .header("userid",userid)

               .header("Content-Type","application/x-www-form-urlencoded")

               .form(submitMap)

               .execute().body();

        System.out.println(submitResult);