

[illegible]

```

000000000000000000000000E0000app_id, version, 000E000000

```

□□□□□□□□□□RSA□□RSA□□□□

- `APP_PRIVATE_KEY`
- `APP_PUBLIC_KEY`

RSA




--	--	--	--	--	--	--	--

1.1 openssl

```
CMD> openssl
```

2. □□□□RSA□□

```
OpenSSL> genrsa -out rsa_private_key.pem 2048
```

- [rsa_private_key.pem 2048 
-  openssl  PKCS#1-PEM

3. RSA

```
OpenSSL> rsa -in rsa_private_key.pem -pubout -out rsa_public_key.pem
```

- [rsa_private_key.pem rsa_public_key.pem        ]

4. JavaPKCS8

```
OpenSSL> pkcs8 -topk8 -inform PEM -in rsa_private_key.pem -out rsa_private_key.pkcs8 -nocrypt
```

- [rsa_private_key.pem rsa_private_key.pkcs8] PKCS8



1.请求头

名称	值
请求方法	POST HTTPS 请求
请求头	POST (application/json)
请求体	JSON
请求编码	UTF-8
请求签名	SHA256WithRSA
请求内容	请求体内容

2.请求体

请求体内容

序号	名称	类型	示例值	格式	说明
1	action	String	queryPmsProjectProduct	字符串	请求动作
2	app_id	String	2014072300007148	应用ID	应用ID
3	biz_content	String	BASE64	字符串BASE64	请求内容BASE64
4	timestamp	String	1483372334	Unix时间戳	时间戳
5	version	String	20171212	版本	版本号
6	sign	String	7E65B60DCFA42B04	签名	请求签名

请求体

- 请求体biz_content字符串BASE64编码

JSON

```
{
  "xiaoActivityProductId": "XZXMCG2024005377"
}
```

- BASE64编码

```
ewogICAgICAgICAidHJhY2VObyl6ICI5OTAwMDAwOTEwMDAxMDEwMTczMjEyMyIsCiAgICAgICAgICJvcmlnaW5hbFRyYWNITm8iOiAiOTkwMDAwMDkxMDAwMTAxMDE3MzIxMjQiCiAgICAgfQ==
```

- `biz_content`
- `app_id` `sign`

JSON

```
{
  "action" : "queryPmsProjectProduct",
  "app_id" : "2014072300007148",
  "biz_content" :
  "ewogICAgICAgICAidHJhY2VObyl6ICI5OTAwMDAwOTEwMDAxMDEwMTczMjEyMyIsCiAgICAgICAgICJvcmlnaW5hbFRyYWNITm8iOiAiOTkwMDAwMDkxMDAwMTAxMDE3MzIxMjQiCiAgICAgfQ==",
  "timestamp" : "1483372334",
  "version" : "20171212",
  "sign" : "7E65B60DCFA42B04"
}
```

3.

a.

`sign` `ASCII` `ASCII`

- `biz_content` `Base64`

b.

`"="` `&`

c.

`SHA256WithRSA` `APP_PRIVATE_KEY` `Base64`

```
{
  "action" : "queryPmsProjectProduct",
  "app_id" : "102410000",
  "biz_content" :
"ewogICAgICAgICAidHJhY2VObyl6ICI5OTAwMDAwOTEwMDAxMDEwMTczMjEyMyIsCiAgICAgICAgICJvcmlnaW5hbFRyYWNITm8iOiAiOTkwMDAwMDkxMDAwMTAxMDE3MzIxMjQiCiAgICAgfQ==",
  "timestamp" : "1483372334",
  "version" : "20171212",
  "sign" : "7E65B60DCFA42B04"
}
```

APP_PRIVATE_KEY

-----BEGIN RSA PRIVATE KEY-----

MIIEvQIBADANBgkqhkiG9w0BAQEFAASCBAcwggSjAgEAAoIBAQCdR0+PdnzkvvaNbSEp5Q8RpaelnrHu4msHAPiw1/DJXFPucoEPqPmDAq4loaW02/mbvHQGr8d/g/g+cbCqUVctI8ygigTvlOAsOWJWrd76gk9IK+SsQBx3BN1pMbPADAljtFS3ojw10MjCg/wlgmwWaqdCRB1QGwjzw3HnripbHr59BKMv/VYPvgDjx+ohQrfLd9fysbjRcsQKqCs72jxD8U9KHO87upvpZtjT2QYdVrntsWL1UUXfyElKmZy2Lf3UZvqKC4sahgH6pQhCMIhwBWm06FyktRji1ewNfF6zlpkCla/HvJzfqXaqhouXJm2qgRjj/crftJONdd/9iuNIAgMBAAECggEAS4GbwY0p4ouHRFha7okIVfmlZautUrkilscxnXzeHV2U8cnjCiKePvY/ZOd t7UkaKVks/rTO+vn5aMkd/nZ0evAAjiYUvoxjnymPU3u/q9Z5IWGgM83HnKAaR9FTsWRV8ab2cP3LYM6uQywoCFHM4GotiFO5GucMo1T2Tzq/HOUAjmZQASQ0ywaANZvNoZDw6ScMPUGnYnHWbs34l7F2abyKyDiNo7sPtMtRpFYi+go+S7dygMX0G1IFoClr4X2HNu/4e3XIFvjzoUhCF/byDcM992LvcWVgM3Ke/F1oBm+bCFit67hN6mxoi2SEARdQGnBysvVo1FLPHKZ60FVQKBgQDidFk8hq8YKEvcjqPSJSd8Oo30zeyWf0R/QNLQOAlqYKCJAcAiHDcYMx5clQQxjFTYXriY+B1J3he6w3+5NStZqL1o1lcy5w7dhcVFXt1yn2KwUiO6YSJ25KeJHvXtDH66WGIQJMmbg90J2u4HRJxYNODmeVdS1seK5qaL0uxs6wKBgQCxzHbdbkoiJgFd/c7BdTKnZh2h6x7SsX44lcbTqKsx7za61ogoegHaKB4yq3xaR8Gm9uazo5SCtbjS0bO5iQLrv8oLUDaNm5Ckm2ENk/M+TB0Hq24eFytiwUAS6FmdCncjq4xb2x8mqOQQiGvlyD91Na4HRBwxP16Wqwhz3Nac7wKBgAY1IIDRXJm3+SSKELnhZOzGGkBdKSCTSSiGeYFWF9Ebpys6jg8hYO1b8XguadgF9gmcx0kCfKMa4OGxHJ5yc8bYlqD6R5fQuBqg4WDehqHO9wDlr8wbf7ts158t5yZh0IO/uqigqZqHCheMFjzCx9qvUH9hUmCmHQCVBHoPBYaTAoGBAJcixAPURaYjglQAdOIUE3vivNuvvqLBCBb090tifCvVM71AMBuegsaMBadyCECECY6iL85FPvLN1HVuh3DzrzRahEV3VmgXGLgRa7CDintj1u+qLthXjr0xN+NrOdmRwIGSCio6iD1vfAj1vwbrX2X5Nf+WKywPlp7BpNerPv3AoGALv4iJpOJVAW3Pmuvmc1a3cAsAvv0DGjiGOXn+lyBdX9tJtKppVPEwElibNALtvvgWX++5ctYD2SXNQLV56rkZCmauXP2gTPG3tCutH4jNiNIBUCfDXIt9DDyQAe0KfRFemzla5rTWA7wRNsVTCm3n4ZqPIKfMC4HmOGU2hgN3LY=

-----END RSA PRIVATE KEY-----

String

List

action=queryPmsProjectProduct&app_id=2014072300007148&biz_content=ewogICAgICAgICAidHJhY2VObyl6ICI5OTAwMDAwOTEwMDAxMDEwMTczMjEyMyIsCiAgICAgICAgICJvcmlnaW5hbFRyYW50OTkwMDAwMDkxMDAwMTAxMDE3MzlxMjQiCiAgICAgfQ==×tamp=1483372334&version=20171212



gUTdEB0IAS/EckP98weSHf6k31Fmd4hcw0zPG8ewbMTfDFSubKlel/1C16upb2AHzN873HMwUlkcTg7ZuN92KDikfsblNd2lwVY2tWMvKt5O8gqC2a8XbS25ZObUILK5zZmU7mQ/DLbyY+EAhkYdGnwsKloJkydi2zmLv99xT5G01yXBLSNiTrPBTsc2OhBkA44kknok0x+hS4HfcgQwGPMG4y+V5aT1bhPDypwdbfAg+EN/5XoSECslcsvBirdk+BGPjBluwHHF+Hir/3E3i20lmtlowBc6jwh5qFOVqGN/w2UEPfg6xJxHyW04FBipt6mw7huD4PA4pA4qZRnsg==

Revision #2
Created 17 June 2024 13:55:39 by zhangshuai
Updated 17 June 2024 14:22:56 by zhangshuai