

# The Interface Introduction of Pre Loan Audit Service V 1.0 2016-04

## Edit Records

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## Abbreviation Table

Abbreviation	Full Name
PLAS	Pre Loan Audit Service
TDRC	Tong Dun Risk Cloud
API	Application Programming Interface

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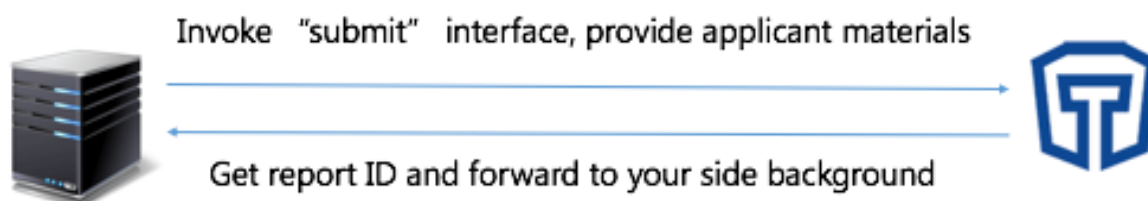
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## 一、GENERALITY OF INTERFACE

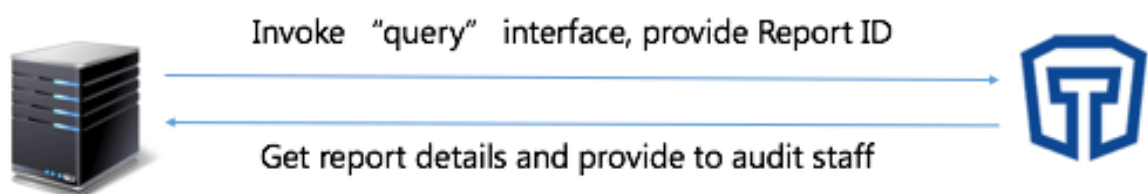
The Pre Loan Audit Service(PLAS) is provided by Tong Don Risk Cloud(TDRC), specifically for application phase of lending. This service can help your platform verify the borrower' s application materials, distinguish borrowers with bad credit records or multi-platform application information. Moreover, base on TDRC dynamic model of online anti-fraud, our service can effectively identify some behavior like organized cheat application, agency application. Thereby help our customer reduce risk, avoid financial losses.

Your side can integrate with TDRC through API according these two steps:

First Step 【necessary】 :At personal information review phase, invoke the interface “submit” to get Report ID.



Second Step 【necessary】 : At personal information review phase, invoke the interface “query” to get Report details.



Third Step 【Optional】 :Integrate with Tong dun Device Fingerprint service to enhance anti-fraud ability.

(You can get details of field information and sample code after login our TDRC)

## 二、THE INTRODUCTION OF INTERFACE "SUBMIT"

### 1、API INVOKE URL

<https://apitest.tongdun.cn/preloan/apply/v3>

### 2、API INVOKE MANNER

Invoke Manner	Encode Format	Output Format	Character sSet
POST	application/x-www-form-urlencoded	JSON	UTF-8

### 3、API INPUT FIELDS

#### 3.1 URL INPUT PARAMETERS

Field Name	Explanation	Type	Remark
partner_code	Partner Code	String	<b>necessary</b> distribute by TongDun and use for verification
partner_key	Partner Key	String	<b>necessary</b> distribute by TongDun and use for verification
app_name	Application name	String	<b>necessary</b> distribute by TongDun

#### 3.2 POST INPUT PARAMETERS

Field Name	Field type	Remark
loan_amount	Double	Unit is RMB
loan_term	Integer	
loan_term_unit	String	Default is month , Two options: DAY,MONTH
loan_date	String	Format is : yyyy-MM-dd Default is current date
name	String	<b>necessary</b>
id_number	String	<b>necessary</b>

mobile	String	necessary
phone	String	format(area code+fixed number) :0571-1111111
email	String	
qq	String	QQ(The most popular IM tool in China) number
card_number	String	
diploma	String	Please refer to table 3.3
marriage	String	Please refer to table 3.4
registered_address	String	
home_address	String	
company_name	String	
company_address	String	
contact_address	String	
industry	String	Please refer to table 3.5
occupation	String	Please refer to table 3.6
is_cross_loan	Boolean	
is_id_checked	Boolean	
contact1_relation	String	Please refer to table 3.7
contact1_name	String	
contact1_id_number	String	
contact1_mobile	String	
contact1_addr	String	
contact1_com_name	String	
contact1_com_addr	String	
contact2_relation	String	Please refer to table 3.7
contact2_name		

contact2_id_number		
contact2_mobile	String	
contact2_addr	String	
contact2_com_name	String	
contact2_com_addr	String	
contact3_relation	String	Please refer to table 3.7
contact3_name	String	
contact3_id_number	String	
contact3_mobile	String	
contact3_addr	String	
contact3_com_name	String	
contact3_com_addr	String	
contact4_relation	String	Please refer to table 3.7
contact4_name	String	
contact4_id_number	String	
contact4_mobile	String	
contact4_addr	String	
contact4_com_name	String	
contact4_com_addr	String	
contact5_relation	String	Please refer to table 3.7
contact5_name	String	
contact5_id_number	String	
contact5_mobile	String	
contact5_addr	String	
contact5_com_name	String	
contact5_com_addr	String	
ip_address	String	
token_id	String	Use for device Fingerprint Web
black_box	String	Use for device Fingerprint APP



### 3.3 DIPLOMA TABLE

Parameter	Description
PRE_HIGH_SCHOOL	Under high school
HIGH_SCHOOL	high school
JUNIOR_COLLEGE	college
UNDER_GRADUATE	undergraduate
POST_GRADUATE	postgraduate

### 3.4 MARRIAGE STATES TALBE

Parameter	Description
SPINSTERHOOD	unmarried
MARRIED	married
DIVORCED	divorced
WIDOWED	widowed
REMARY	remarry
REMARY_FORMER	remarry with former

### 3.5 INDUSTRY TABLE

Parameter	Description
FINANCE	finance/bank/insurance
COMPUTER	PC/internet/communication/ electric
TRADE_CONSUMPTION_MANUFACTURE	trade/consumption/manufac ture
MEDICAL_PHARMACY	medical/pharmacy
ADS_MEDIA	Ads/media
BUILDING_REALESTATE	building/real estate
EDUCATION_TRAIN_CONSULT	education/train/consult
SERVICE	include restaurants, hotels,

	leisure, beauty, sport etc.
ENERGY_MATERIAL	energy/material
GOV_NGO	government/NGO

### 3.6 POSITION TABLE

Parameter	Description
ADVANCED	Senior technical staff
INTERMEDIATES	Intermediate technical staff
BEGINNERS	Assistants staff
PRACTICE	practice staff
SENIOR	Senior management
MIDDLE	Intermediate management
JUNIOR	Junior management
NORMAL	Normal staff

### 3.7 SOCIAL RELATIONSHIP TABLE

Parameter	Description
father	borrower' s father
mother	borrower' s mother
spouse	borrower' s spouse
other_relative	borrower' s other relative
friend	borrower' s friend
coworker	borrower' s coworker
others	others

#### 4、API INPUT SAMPLE

https://apitest.api.tongdun.cn/preloan/apply/v2?partner\_code=xxx&partner\_key=xxx&app\_name=xxx

POST DATA:

loan\_amount=100000&  
loan\_term=5&  
loan\_term\_unit=MONTH&  
loan\_date=2015-01 - 01&  
name=张三&  
id\_number=48392029190002034031&  
mobile=18392049382&  
phone=0571-1111111&  
email=example@qq.com&  
qq=74733929&  
card\_number=6220039483930293830&  
diploma=UNDER\_GRADUATE&  
marriage=MARRIED&  
registered\_address=杭州市余杭区文一西路998号海创园18号楼209-211&  
home\_address=杭州市余杭区文一西路998号海创园18号楼209-211&  
company\_name=杭州同盾科技有限公司&  
company\_address=杭州市余杭区文一西路998号海创园18号楼209-211&  
contact\_address=杭州市余杭区文一西路998号海创园18号楼209-211&  
industry=FINANCE&  
occupation=ADVANCED&  
is\_cross\_loan=false&  
is\_id\_checked=true&  
contact1\_name=王二&  
contact1\_mobile=18375849382&  
contact1\_addr=杭州市余杭区文一西路998号海创园18号楼209-211&  
contact1\_com\_name=杭州同盾科技有限公司&  
contact1\_com\_addr=杭州市余杭区文一西路998号海创园18号楼209-211&

```
contact2_name=王六&
contact2_mobile=18373728293&
contact2_addr=杭州市余杭区文一西路998号海创园18号楼209-211&
contact2_com_name=杭州同盾科技有限公司&
contact2_com_addr=杭州市余杭区文一西路998号海创园18号楼209-211&
contact3_name=王小二&
contact3_mobile=18375849382&
contact3_addr=杭州市余杭区文一西路998号海创园18号楼209-211&
contact3_com_name=杭州同盾科技有限公司&
contact3_com_addr=杭州市余杭区文一西路998号海创园18号楼209-211&
ip_address=192.168.1.32&
token_id=432432&
black_box=%7B%22id%22:%22321%22,%22ua%22:%22mac%22%7D
```

## 5、API OUTPUT FIELD DESCRIPTION

Name	Description	Field Type	Remark
success	invoke success or not	Boolean	false: invoke failure ; true: invoke success
reason_code	reason code when invoke failure	String	Don' t respond when invoke success, pleaser refer to 5.9
reason_desc	failure reason description	String	No response when success
report_id	PLAS report ID	String	

## 6、API output sample

### 6.1 INVOKE SUCCESS

```
{
  "success": true,
  "report_id": "ER20150611234700000001"
}
```

## 6.2 INVOKE FAILURE

```
{
  "success": false,
  "reason_code": "104",
  "reason_desc": "参数验证不通过"
}
```

## 三、THE INTRODUCTION OF INTERFACE “QUERY”

### 1、API INVOKE URL

<https://apitest.tongdun.cn/preloan/report/v1>

### 2、API INVOKE MANNER

invoker manner	input format	output format	Characters Set
GET	application/x-www-form-urlencoded	JSON	UTF-8

### 3、API INPUT FIELDS

#### 3.1 URL INPUT PARAMETER

Field Name	Explanation	Type	Remark
partner_code	Partner Code	String	<b>necessary</b> distribute by TongDun and use for verification
partner_key	Partner Key	String	<b>necessary</b> distribute by TongDun and use for verification
app_name	Application name	String	<b>necessary</b> distribute by TongDun
report_id	Report ID	String	<b>necessary</b> generate by TDRC and respond by interface “submit”

### 4、API INPUT SAMPLE

---

[https://apitest.api.tongdun.cn/preloan/report/v1?  
partner\\_code=demo&partner\\_key=21232f297a57a5a743894a0e4a801fc3&app\\_name  
=web\\_demo&report\\_id=ER201507061746210001](https://apitest.api.tongdun.cn/preloan/report/v1?partner_code=demo&partner_key=21232f297a57a5a743894a0e4a801fc3&app_name=web_demo&report_id=ER201507061746210001)

---

## 5、API OUTPUT SAMPLE

### 5.1 INVOKE FAILURE

```
{  
  "success":false,  
  "reason_code":"204",  
  "reason_desc":"报告还未生成"  
}
```

or

```
{  
  "success":false,  
  "reason_code":"404",  
  "reason_desc":"报告不存在"  
}
```

### 5.2 INVOKE SUCCESS

```
{  
  "success": true,  
  "final_score": 80,  
  "final_decision": "Review",  
  "report_id": "ER2015070617512600000001",  
  "apply_time": 1436841918368,  
  "report_time": 1436842025749,  
  "device_info": {  
    "accept": "*/*",  
    "acceptEncoding": "gzip,deflate,sdch",  
    "acceptLanguage": "zh-CN,zh;q=0.8",  
    "browser": "chrome",
```

```
"browserType": "chrome",
"browserVersion": "31.0.1650.63",
"canvas": "57d1ed3766927be5de7018e7c43db5e4",
"cookieEnabled": "true",
"deviceId": "f14fd49ac7da52f751c791ca16391c51",
"deviceType": "Windows XP",
"flashEnabled": "true",
"fontId": "a90699a33ca21b53ae8a4fa16d11829e",
"fpCookie":
"B0F75E91DAF193D39C192D6275F282E09EAF23E240ED347327C712B8BBCDBDEC4DF39C04F05E0C3697
88A2F483D735889A6BD108DE818070",
"identifier": "1436805698330-8099812",
"langRes": "zh-CN^^-^^-^^-^^-",
"languageRes": "zh-CN^^-^^-^^-^^-",
"os": "Windows XP",
"pluginList": "ee52cdfa3df5df56001962d1ed9b6d3c",
"refer": "http://www.aixuedai.com/user/authentication?refer=reg",
"referrer": "http://www.aixuedai.com/user/authentication?refer=reg",
"screenRes": "1920^^1080^^72^^color",
"smartId": "s_8e679e4d305546702c51413a14a43643",
"softId": "b8cb9b155130972ca833300a65ed4db8",
"tcpOs": "Windows XP",
"tokenId": "aixuedaigv7ehqk0aq7sps08bchbes9qv1",
>trueIp": "116.207.145.134",
"userAgent": "Mozilla/5.0 (Windows NT 5.1) AppleWebKit/537.36 (KHTML, like Gecko)
Chrome/31.0.1650.63 Safari/537.36",
"version": "0.0.3"
},
"geo_ip": {
  "ip": "49.74.194.234",      // ip地址
  "lip": 826983146,         // long 型ip
```

```
"country": "中国",          // IP地址所处国家
"province": "江苏省",      // 所在省份
"city": "南京市",          // IP地址所处城市
"county": "南京市",        // IP地址所处区县
"isp": "电信",              // 互联网服务提供商, 此处为电信
"latitude": 32.1008,        // 纬度
"longitude": 118.926        // 经度
},
"geo_trueip": {
  "ip": "49.74.194.234",    // ip地址
  "lip": 826983146,         // long 型ip
  "country": "中国",        // IP地址所处国家
  "province": "江苏省",     // 所在省份
  "city": "南京市",         // IP地址所处城市
  "county": "南京市",       // IP地址所处县
  "isp": "电信",            // 互联网服务提供商, 此处为电信
  "latitude": 32.1008,      // 纬度
  "longitude": 118.926     // 经度
},
"risk_items": [
  {
    "item_id": 1,
    "item_name": "身份证是否是一代身份证",
    "risk_level": "low"
  },
  {
    "item_id": 2,
    "item_name": "身份证是否出现在网贷黑名单",
    "risk_level": "high",
    "item_detail": {
      "discredit_times": 1,
```



```
        "overdue_details": [  
            {  
                "overdue_amount": 3475.0,  
                "overdue_count": 1,  
                "overdue_day": 69  
            }  
        ]  
    }  
},  
{  
    "item_id": 3,  
    "item_name": "身份证是否在多平台进行借贷申请",  
    "risk_level": "medium",  
    "item_detail": {  
        "platform_detail": ["信贷理财:2"],  
        "platform_count": 2  
    }  
},  
{  
    "item_id": 4,  
    "item_name": "第一联系人手机号码是否出现在网贷黑名单",  
    "risk_level": "high",  
    "item_detail": {  
        "discredit_times": 2,  
        "overdue_details": [  
            {  
                "overdue_amount": 5628.4,  
                "overdue_count": 2,  
                "overdue_day": 37  
            },  
            {
```

```

        "overdue_amount": 1000,
        "overdue_count": 1,
        "overdue_day": 56
      }
    ]
  }
}
]
}

```

### 5.3 API OUTPUT FIELD DESCRIPTION

Name	Description	Field Type	Remark
success	invoke result	Boolean	false: invoke fail ; true: invoke success
reason_code	reason code	String	Available when invoke failure, pleaser refer to 5.9
reason_desc	reason description	String	Available when invoke failure
final_score	final risk score	Integer	
final_decision	final description	String	please refer to 5.4
report_id	report ID	String	
device_type	device type	String	Available when send token_id or black_box
proxy_info	proxy information	Array	Available when send token_id or black_box
apply_time	apply time	Long	UNIX timestamp, Unit ms
report_time	report time	Long	UNIX timestamp, Unit ms
device_info	device information	Object	Available when send token_id or black_box
geo_ip	location information	Object	Available when send

			ip_address
geo_trueip	true location information	Object	Available when send token_id or black_box
risk_items	risk items	Array	please refer to 5.5

#### 5.4 RISK RESULT INTRODUCTION

Name	Description
Accept	Recommend Accept by TDRC
Review	Recommend Review by TDRC
Reject	Recommend Reject by TDRC

#### 5.5 RISK ITEMS TABLE

name	description	field type	remark
item_id	item ID	Integer	
item_name	item name	String	
risk_level	risk level	String	three levels: high; medium; low
group	group	String	
item_detail	item detail	Object	different item detail has different format, please refer to 5.6

#### 5.6 ITEM DETAIL TABLE

field name	description	field type	remark
discredit_times	Discredit times	Integer	hit the blacklist rule
overdue_details	Overdue details	Array	Please refer to 5.7
platform_count	multi-platform application	Integer	
platform_detail	multi-platform amounts	Array	multi-platform amounts (no specify platform name)

high_risk_areas	high risk areas	Array	define the areas by Chinese ID number
hit_list_datas	agent key words	Array	company name like agent suspect
court_details	court executed details	Array	court executed details, pleas refer to 5.8
fraud_type	the fraud type of black/gray list	String	
frequency_detail	frequency detail	Array	

## 5.7 OVERDUE AMOUNT

Field name	field type	remark
overdue_amount	Double	
overdue_count	Integer	
overdue_day	Integer	

## 5.8 COURT DETAIL TABLE

Field name	Description	field type	remark
fraud_type	fraud type	String	three situations: "court dishonesty" , " court execute" , " court closed"
name	name of debtors	String	
age	age of debtors	String	
gender	gender of debtors	String	
province	province of courts	String	
filing_time	filing time	String	

court_name	court name	String	
execution_department	execute department	String	
duty	Legal obligations	String	
situation	debtors fulfillment	String	
discredit_detail	debtors behavior	String	
execution_base	execute number	String	
case_number	case number	String	
execution_number	execute subject	String	
execution_status	execute status	String	

## 5.9 REASON CODE

reason code	description	remark
000	Authentication failed	some mistake which caused by system authenticate
001	partner authentication failed	authentication failed which caused by partner code or key
100	Illegal parameter	It caused an unknown error parameters
101	Parameter can not be empty	example : Required parameter is not sent
102	Parameter type is incorrect	example : send Integer date to String
103	Parameter exceeds the maximum length	Parameter exceeds the maximum length
104	Parameter format is incorrect	example : Time string parameter format is incorrect
105	Time parameters range is incorrect	example : star time is earlier than end time

106	Enumerate value does not exist	example :send a not exist enumerate value to String enumerate type
200	Request has been completed	
204	No response	example: the report has not generate
206	Response not complete	
400	not available	example: the report generate failure
401	unauthorized	Not to obtain unauthorized access to resources
402	Payment required	volume is run out, please pay again
403	No access	Can not access even get authorization
404	Resource not found	example: the report not found
405	Method Not Allowed	example: not support PUT operation
410	Authorization has expired	Authorization has expired
500	internal error	some mistake caused by internal error
501	Not executed	Server refused to fulfill the request resource