XEngine API Service Docment

目录

[XEngine API Service Docment 1](#_Toc24587)

[Preface 4](#_Toc9800)

[Reader 4](#_Toc6819)

[Overview 4](#_Toc3020)

[Associate Module 4](#_Toc9045)

[一 Technical structure 4](#_Toc23200)

[1.1 TCP 4](#_Toc15930)

[1.2 HTTP 4](#_Toc11628)

[二 Configure Env 4](#_Toc11911)

[2.1 WINDOWS 4](#_Toc10512)

[2.1.1 Configure Environment 5](#_Toc16917)

[2.1.2 complie and run 5](#_Toc5784)

[2.2 LINUX 5](#_Toc19978)

[2.2.1 Evnironment Configure 5](#_Toc3504)

[2.2.2 Complie and Run 5](#_Toc19965)

[2.3 Version Requirements 5](#_Toc15303)

[2.3.1 System Version 5](#_Toc8459)

[2.3.2 Software Version 6](#_Toc30022)

[三 Interface Protocol 6](#_Toc31922)

[3.1 TCP 6](#_Toc27013)

[3.1.1 Example 6](#_Toc11123)

[3.2 HTTP 7](#_Toc22374)

[3.2.1 IP Address Inforamtion Query 7](#_Toc7555)

[3.2.2 IDCard Information Query 8](#_Toc20411)

[3.2.3 Phone Information Query 10](#_Toc17434)

[3.2.4 Bank Number Check 11](#_Toc15326)

[3.2.5 Language Convert 12](#_Toc13341)

[3.2.6 Translation 13](#_Toc21039)

[3.2.7 Password 13](#_Toc13111)

[3.2.8 Zodiac 14](#_Toc12113)

[四 Configure Description 15](#_Toc10913)

[4.1 Service Configure 15](#_Toc16974)

[4.1.1 basic configure 15](#_Toc5404)

[4.1.2 Max Configure 15](#_Toc27425)

[4.1.3 Time Configure 15](#_Toc27129)

[4.1.4 Log Configure 15](#_Toc26154)

[4.1.5 DB Interface Configure 15](#_Toc21792)

[4.1.6 插件配置 16](#_Toc13458)

[4.2 Language Configure 16](#_Toc19563)

[4.3 Plugin Configure 16](#_Toc28863)

[五 Advanced Mode 16](#_Toc21724)

[5.1 Plugin Written 16](#_Toc14125)

[appendix 16](#_Toc7790)

[Appendix 1 Type Define 16](#_Toc20346)

[Appendix 2 Protocol Define 17](#_Toc5018)

[Appendix 3 Transformation Definition 17](#_Toc24163)

[Appendix 4 update log 17](#_Toc8637)

|  |  |  |  |
| --- | --- | --- | --- |
| File Status：  [ ] Draft  [√] Release | File Name： | XEngine Api Service Docment | |
| Be A Version： | V2.1.0.1001 | |
| Released： | 2022-04-29 | |
| Writer： qyt | | |

# Preface

## Reader

Development ,tester,qa

## **Overview**

This document contains related technical descriptions and interface definitions

## Associate Module

The service used XEngine as Network Toolki.if you want to use code,you have to installed XEngine

# 一 Technical structure

The Service implemented through c/c++,protocol through tcp and http.

## TCP

The TCP protocol uses the standard protocol header of XEngine to realize message communication. The TCP protocol is faster and has more functions.

## HTTP

Send and recv Message through post and get method.

# 二 Configure Env

## 2.1 WINDOWS

Need to download XEngine.

Complie and run and debug by vs.

Download address:https://gitee.com/xyry/libxengine

https://github.com/libxengine/xengine

### 2.1.1 Configure Environment

Follow the instructions in the XEngine Readme file to configure the environment.

### 2.1.2 complie and run

When you complete with configuration.you can come in code path.open XEngine.sln by vs

If environment not have error.complie is succesed

And you need copy file under XEngine\_Release to your complied dir.next step copy file under XEngine depend module to your complied dir.

Note: You can run the program directly, the system will prompt you what you need, you can directly enter the XEngine directory to search,you can also use vscopy-\*.bat to copy dependent module.

## 2.2 LINUX

### 2.2.1 Evnironment Configure

If you use linux.you must running on ubuntu20.04 or centos8.x(Compatible with Centos-like systems)...

### 2.2.2 Complie and Run

Configure complete.you can complie it.open terminal in you xengine\_storage dir and execute command.

complie:make

install:make FLAGS=InstallAll

clean:make FLAGS=CleanAll

If there is no error.you can see complied XEngine\_\*App file in XEngine\_Release

## 2.3 Version Requirements

### 2.3.1 System Version

Minimum version requirements:

WINDOWS: win7 sp1

Ubuntu:20.04

Centos:8.x

### 2.3.2 Software Version

Minimum version requirements:

XEngine:V7.33

# 三 Interface Protocol

## 3.1 TCP

Please Note:The wReserver field of the protocol header will be used as the server reply processing result. 0 means the processing is successful, other values mean failure  
 whether protocol load is general protocol or HTTP protocol,they can be load json data.

### 3.1.1 Example

#### 3.1.1.1 Request

Protocol Header:

wHeader = XENGIEN\_COMMUNICATION\_PACKET\_PROTOCOL\_HEADER

xhToken = 0

unOperatorType = ENUM\_XENGINE\_COMMUNICATION\_PROTOCOL\_TYPE\_XMQ

unOperatorCode = XENGINE\_COMMUNICATION\_PROTOCOL\_OPERATOR\_CODE\_MQ\_REQPOST

unPacketSize = MSGLEN

byVersion = 1

byIsReply = TRUE

wReserve = 0

wPacketSerial = 0

wTail = XENGIEN\_COMMUNICATION\_PACKET\_PROTOCOL\_TAIL

Protocol Body:DATA in tail

#### 3.1.1.2 Reply

Protocol Header:

wHeader = XENGIEN\_COMMUNICATION\_PACKET\_PROTOCOL\_HEADER

xhToken = 0

unOperatorType = ENUM\_XENGINE\_COMMUNICATION\_PROTOCOL\_TYPE\_XMQ

unOperatorCode = XENGINE\_COMMUNICATION\_PROTOCOL\_OPERATOR\_CODE\_MQ\_REPPOST

unPacketSize = 0

byVersion = 1

byIsReply = FALSE

wReserve = 0

wPacketSerial = 0

wTail = XENGIEN\_COMMUNICATION\_PACKET\_PROTOCOL\_TAIL

## 3.2 HTTP

### 3.2.1 IP Address Inforamtion Query

#### 3.2.1.1 Request

Method:GET

参数:params1 = IP Address

params2 = Response typpe,1 or 0

Address:http://127.0.0.1:5501/api?function=ip&params1=1.29.164.255&params2=0

#### 3.2.1.2 Reply Type 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"tszIPAddr"**:**"1.29.164.255"**,  
        **"tszIPAddress"**:**"内蒙古通辽市霍林郭勒市"**,  
        **"tszIPCity"**:**"通辽市"**,  
        **"tszIPCountry"**:**"中国"**,  
        **"tszIPCounty"**:**"霍林郭勒市"**,  
        **"tszIPEnd"**:**"1.29.164.255"**,  
        **"tszIPISP"**:**"联通"**,  
        **"tszIPProvince"**:**"内蒙古"**,  
        **"tszIPStart"**:**"1.29.164.0"**,  
        **"tszIPTime"**:**"2021-11-03 07:33:50"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.1.3 Reply Type 1

0

1.29.164.255

1.29.164.0

1.29.164.255

中国

内蒙古

通辽市

霍林郭勒市

内蒙古通辽市霍林郭勒市

联通

2021-11-03 07:33:50

#### 3.2.1.4 Error Reply

If http is not 200 or code is not 0,that’s mean is incorrent.

Msg field is json have.stream return type just is code msg only has json return type, data stream return type is only code, the same below

{  
    **"code"**:**1001**,  
    **"msg"**:**"parse is incorrent"**  
}

### 3.2.2 IDCard Information Query

ID check will verify that the ID number is correct

#### 3.2.2.1 Request

Method:GET

Parament:params1 = IP Address

params2 = type 0 or 1 is Reply

Address:http://127.0.0.1:5501/api?function=id&params1=511025191101018792&params2=0

Reply:nSex:1 male 0 Women.

nCheck:Checksum

nPoliceID:Police ID

#### 3.2.2.2 Reply Type 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"nBirthDay"**:**1**,  
        **"nBirthMonth"**:**7**,  
        **"nBirthYear"**:**1988**,  
        **"nCheck"**:**2**,  
        **"nPoliceID"**:**87**,  
        **"nSex"**:**1**,  
        **"tszCity"**:**"内江市"**,  
        **"tszCounty"**:**"资中县"**,  
        **"tszIDNumber"**:**"511025191101018792"**,  
        **"tszProvincer"**:**"四川省"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.2.3 Reply Type1

0

511025191101018792

1911

1

1

87

1

四川省

内江市

资中县

### 3.2.3 Phone Information Query

#### 3.2.3.1 Request

Method:GET

Parament:params1 = Phone Number

params2 = Return type,0 or 1

Address:http://127.0.0.1:5501/api?function=phone&params1=13699428888&params2=0

#### 3.2.3.2 Reply 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"nAreaCode"**:**28**,  
        **"nPhoneNumber"**:**13699428888**,  
        **"nZipCode"**:**610000**,  
        **"tszCity"**:**"成都"**,  
        **"tszProvincer"**:**"四川"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.3.3 Reply 1

0

13699428888

四川

成都

610000

28

### 3.2.4 Bank Number Check

#### 3.2.4.1 Request

Method:GET

Parament:params1 = Bank Number

params2 = type 0 or 1 is Reply

Address:http://127.0.0.1:5501/api?function=bank&params1=621400000&params2=0

#### 3.2.4.2 Reply Type 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"enBankType"**:**2**,  
        **"tszBankAbridge"**:**"CMB"**,  
        **"tszBankName"**:**"招商银行"**,  
        **"tszBankNumber"**:**"621400000"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.4.3 Reply Type 1

0

62140000000

招商银行

CMB

2

### 3.2.5 Language Convert

#### 3.2.5.1 Request

Method:GET

Parament:params1 = Convert Lanauge

params2 = Reply 0 or 1

Param3 = language choice

Address:http://192.168.1.12:5501/api?function=language&params1=繁体到简体&params2=0&params3=1

#### 3.2.5.2 Reply 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"enType"**:**1**,  
        **"tszDestStr"**:**"繁體到簡體"**,  
        **"tszSourceStr"**:**"繁体到简体"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.5.3 Reply 1

0

繁体到简体

繁體到簡體

1

### 3.2.6 Translation

#### 3.2.6.1 Request

Method:GET

Parament:params1 = Translation Source String

params2 = Return type 0 or 1

params3 = Translation Type,,Refer:ENUM\_XENGINE\_APISERVICE\_TRANSLATION\_TYPE

Address:http://192.168.1.12:5501/api?function=translation&params1=中国&params2=0&params3=0

#### 3.2.6.2 Reply 0

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"enType"**:0,  
        **"tszDestStr"**:**"china"**,  
        **"tszSourceStr"**:**"中国"**  
    },  
    **"msg"**:**"success"**  
}

#### 3.2.6.3 Reply 1

0

中国

china

0

### 3.2.7 Password

#### 3.2.7.1 Request

Method:GET

Parament:params1 = Generated type, 1 is random

params2 = Password length

Address:http://192.168.1.12:5501/api?function=pass&params1=1&params2=4

#### 3.2.7.2 Reply

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"tszParamLength"**:**"4"**,  
        **"tszParamType"**:**"1"**,  
        **"tszPassword"**:**"9xKm"**  
    },  
    **"msg"**:**"success"**  
}

### 3.2.8 Zodiac

#### 3.2.8.1 Request

Method:GET

Parament:params1 = process date,example:1988 year 1 month 21day is:19880121

Address:http://192.168.1.12:5501/api?function=zodiac&params1=19880121

#### 3.2.8.2 Reply

{  
    **"code"**:**0**,  
    **"data"**:{  
        **"tszChineseZodiac"**:**"龙"**,  
        **"tszDate"**:**"19880121"**,  
        **"tszEnglishZodiac"**:**"水瓶座"**  
    },  
    **"msg"**:**"success"**  
}

# 四 Configure Description

## 4.1 Service Configure

Basic Configure File:XEngine\_Config.json

### 4.1.1 basic configure

* tszIPAddr: location ip address
* bDeamon: 1 deamon process run 0 is terminal run
* nCenterPort:tcp port
* nHttpPort:http port

### 4.1.2 Max Configure

XMax Configure

* nMaxClient Allow Max Client Count
* nMaxQueue Allow Max Queue
* nIOThread:network io process threads number
* nCenterThread:tcp process threads number
* nHttpThread:http process threads number

### 4.1.3 Time Configure

XTime Configure

* nTimeCheck:check time
* nCenterTimeOut:how time check once
* nHttpTimeOut:same nTCPTimeOut

### 4.1.4 Log Configure

XLog Configure

* MaxSize:Log file size
* MaxCount:Log File Number
* LogLeave:Allow save level

### 4.1.5 DB Interface Configure

XDatabase Configure

* tszIPData:IP Database address
* tszIDData:ID Database address
* tszPhoneData:phone database address
* tszBankUrl:Bank card verification interface address
* tszTranslationUrl:translate interface address

### 4.1.6 插件配置

XPlugin Configure

* bEnable:whether enable plugin
* tszPluginList:plugin configure file

## 4.2 Language Configure

Configure File XEngine\_OPenccConfig.json

## 4.3 Plugin Configure

Configure File:XEngine\_PluginConfig.json

This is json array:

* PluginEnable:whether is enable
* PluginMethod:The name of the method to be registered, when function= this name, the system will automatically hand it over to the module for processing
* PluginFile:module file address

# 五 Advanced Mode

## 5.1 Plugin Written

# appendix

## Appendix 1 Type Define

reference file:XEngine\_CommHdr.h

## Appendix 2 Protocol Define

reference file:XEngine\_ProtocolHdr.h

## Appendix 3 Transformation Definition

reference file:XEngine\_Types.h only LINUX

## Appendix 4 update log