XEngine Service Docment

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| --- | --- | --- | --- |
| File Status：  [ ] Draft  [√] Release | File Name： | XEngine Service Docment | |
| Be A Version： | V1.1.0.1001 | |
| Released： | 2022-07-15 | |
| 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.

## 1.3 Detailed Protocol

The TCP private protocol adopts the protocol defined by XEngine. You can refer to the protocol document of XEngine to learn more about the definition and interpretation of the protocol

# 二 Configure Environment

## 2.1 XEngien Env

Need to download XEngine.

Configure the environment as described in the XEngine Readme file

### 2.2 Windows

### 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: Xengine environment can be copied to your compilation directory through vscopy script, provided that you configure your xengine environment

## 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 MacOS

MacOS requires 12 or above versions, and the compilation and operation mode can refer to linux

## 2.4 Version Requirements

### 2.4.1 System Version

Minimum version requirements:

WINDOWS: win7 sp1

Ubuntu:20.04

Centos:8.x

MacOS:12

### 2.4.2 Software Version

Minimum version requirements:

XEngine:V7.30

# 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:

Protocol Body:DATA in tail

#### 3.1.1.2 Reply

Protocol Header:

## 3.2 HTTP

### 3.2.1 Request

Method:

Address:

### 3.2.2 Reply

# 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
* nHttp2Port:HTTP2 port
* nWSPort:websocket 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
* nHttp2Thread:http2 process threads number
* nWSThread:websocket process threads number

### 4.1.3 Time Configure

XTime Configure

* nTimeCheck:check time
* nCenterTimeOut:how time check once
* nHttpTimeOut:same nTCPTimeOut
* nHttp2TimeOut:HTTP2 client timeout
* nWSTimeOut:websocket client timeout

### 4.1.4 Log Configure

XLog Configure

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

# 五 Advanced configuration

# 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