

- WANFi Control and Billing System
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# WANFi Control and Billing System

## 准备工作

- 硬件要求

```
CPU:    >= 4 core
Memory: >= 16GiB
Storage:
  OS:    >= 50GiB
  /opt/wfc: >= 50GiB # work and database storage
  /var/lib/docker: >= 50GiB
```

- 系统环境

```
Linux >= Ubuntu 22.04
JDK >= 1.8 (Recommended version 1.8) (用于Omada SDN Controller)
Omada SDN Controller > 5.15.6.7
docker >= 24.0.7, build 24.0.7-0ubuntu2~22.04.1
docker-compose >= v2.10.0
```

- 安装docker和docker-compose

```
sudo apt-get update
sudo apt-get install -y docker.io
sudo curl -L
"https://github.com/docker/compose/releases/download/v2.10.0/docker-
compose-$(uname -s | tr '[:upper:]' '[:lower:]')-$(uname -m)" -o
/usr/bin/docker-compose
sudo chmod +x /usr/bin/docker-compose
```

- 请确认docker和docker-compose的版本是否符合要求

```
docker -v  
docker-compose -v
```

## 获取安装包

---

- TAR安装包

文件名：wfc-1.0.7-20250221.tar.gz

- DEB安装包

文件名：wfc-1.0.7-20250221.deb

说明：

- 版本号：1.0.7
- 构建日期：20250221

根据情况获取最新版本的软件安装包

## 安装和配置软件

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### TAR包安装方式

- 创建安装目录

全新安装时需要此步骤，如果升级安装，则保留原有目录

```
sudo mkdir /opt/wfc
```

- 解压软件包至安装目录

```
sudo tar xvfz wfc-1.0.7-20250221.tar.gz -C /opt/wfc
```

## DEB包安装方式

- 安装软件包

```
sudo dpkg -i wfc-1.0.7-20250221.deb
```

- 安装后目录树

```
/opt/wfc                                     # work root directory
├── bin                                       # shell script and binary file
├── docker                                   # docker compose work directory
│   ├── env                                 # default docker environment file, will be copy
│   │                                       to docker compose work directory
│   ├── java                                # java image directory
│   ├── mysql                               # mysql database container directory
│   │   ├── conf
│   │   ├── conf.d
│   │   ├── data
│   │   ├── db
│   │   ├── logs
│   │   └── tmp
│   ├── nacos                              # nacos container directory
│   │   ├── conf
│   │   └── logs
│   ├── nginx                              # nginx container directory
│   │   ├── conf
│   │   ├── conf.d
│   │   ├── html
│   │   │   └── dist
│   │   │       ├── sys                    # system portal
│   │   │       └── u                      # user portal
│   │   └── logs
│   ├── redis                              # redis container directroy
│   │   ├── conf
│   │   └── data
│   └── wfc                                 # wfc container root directory
│       ├── auth                           # auth root directory
│       │   └── jar
│       ├── gateway                         # gateway root directory
│       │   └── jar
│       ├── modules                         # modules root directory
│       │   ├── file
│       │   │   └── jar
│       │   ├── gen
│       │   │   └── jar
│       │   ├── job
│       │   │   └── jar
│       │   ├── payment
│       │   │   └── jar
│       │   ├── system
│       │   │   └── jar
│       └── user
```

```

├── upload          └─ jar          # file upload directory
│   └── visual
│       ├── monitor
│       └── jar
└── systemd        # service daemon file ,will be copy to
    /etc/systemd/system
        └── system

```

- 配置软件环境

```

cd /opt/wfc/bin
sudo ./wfcsetup.sh env 192.168.13.128 # 参数2是宿主机IP地址

```

- 修改docker环境参数

根据实际情况修改如下环境参数配置，说明：**\*\* WFC\_SERVER\_IP**的地址已经在上面配置过程被替换 **\*\* TZ**替换为宿主机系统时区

```

cd /opt/wfc/docker
cat .env
WFC_CONFIG_DATABASE=wfc_config_db
WFC_SYSTEM_DATABASE=wfc_system_db
WFC_USER_DATABASE=wfc_user_db
MYSQL_SERVICE_NAME=wfc-mysql
MYSQL_SERVICE_PORT=3306
MYSQL_ROOT_PASSWORD=123456
MYSQL_SERVICE_USER=root
MYSQL_SERVICE_PASSWORD=123456
REDIS_PORT=6379
NACOS_PROFILE_NAME=prod
NACOS_NAME_SPACE=wfc-prod
NACOS_SERVER_NAME=wfc-nacos
WFC_SERVER_PORT=80
NACOS_SERVER_PORT=8848
GATEWAY_SERVER_PORT=8080
AUTH_SERVER_PORT=8081
WFC_FILE_PORT=9201
WFC_JOB_PORT=9203
WFC_PAYMENT_PORT=9204
WFC_SYSTEM_PORT=9205
WFC_USER_PORT=9206
WFC_SERVER_IP=192.168.13.128
NACOS_SERVER_IP=${WFC_SERVER_IP}
GATEWAY_SERVER_IP=${WFC_SERVER_IP}
RESTART_OPTION=on-failure:5
TZ=Asia/Shanghai
#docker容器的时区

```

如果这些容器环境参数没有更改，可以直接运行如下命令设置环境和创建容器：

```
cd /opt/wfc/bin
sudo ./wfcsetup.sh all 192.168.13.128 # 参数2是宿主机IP地址
```

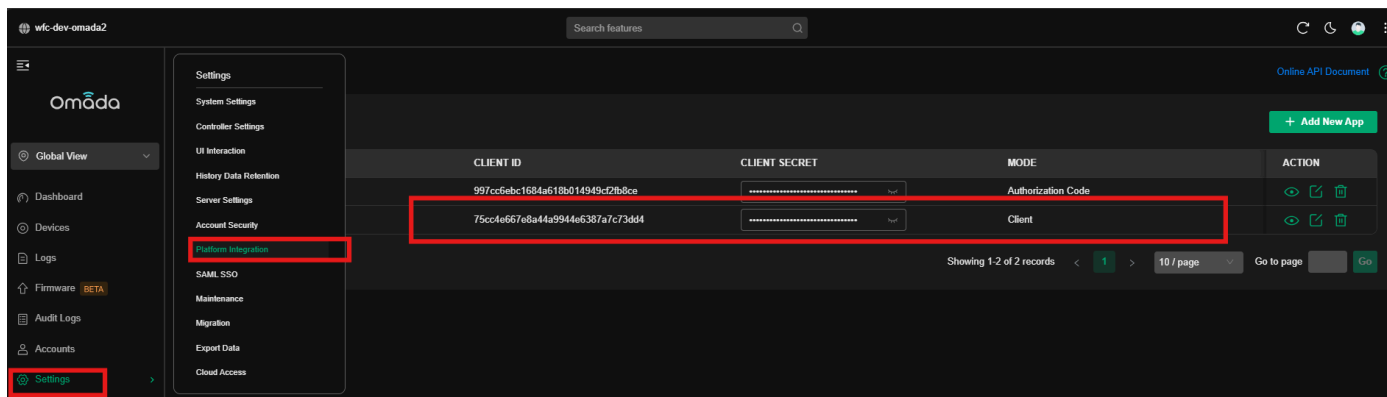
- 创建docker容器

如果已经运行'sudo ./wfcsetup.sh all 192.168.13.128'，如下命令可省略

```
cd /opt/wfc/bin
sudo ./wfcsetup.sh all
```

## 配置整合Omada平台的连接参数

- 从Omada服务中获取门户平台整合连接参数，如下图：



注意：连接的MODE采用Client，具体的配置方式可参考Omada的相关文档

- 修改配置文件
  - 修改如下omada的配置项, 用于与Omada进行平台整合

```
cd /opt/wfc/docker/conf
cat application-common.yml

...

# Omada config
omada:
# web url or host exp: 'https://192.168.2.249:8043'
omada-url: 'https://aps1-omada-northbound.tplinkcloud.com'
omadac-id: 'c4decfb73f80094019d664506ec9b4d4'
```

```
client-id: '6110a77822234243a033e652d1e8a3ae'  
client-secret: '651957da95f14f45b719876bb68bd6f5'
```

```
...
```

- 修改如下email的配置项, 用于发送邮箱验证码

```
cd /opt/wfc/docker/conf  
cat application-common.yml  
  
...  
  
mail:  
  enabled: true  
  host: mail.agrandtech.com  
  port: 25  
  # Enable authentication  
  auth: true  
  # Sender, follows RFC-822 standard  
  from: smtpext <smtpext@agrandtech.com>  
  # User name  
  user: smtpext  
  # Password  
  pass: Smtpl23@agt  
  # Use TLS security connection  
  starttlsEnable: false  
  # Use SSL security connection  
  sslEnable: false  
  # Timeout value for sending mail, in milliseconds  
  timeout: 0  
  # Connection timeout value, in milliseconds  
  connectionTimeout: 0  
  
...
```

- 修改支付配置项

```
cd /opt/wfc/docker/wfc/modules/payment/conf/  
cat application.yml  
  
...  
  
# payment configuration,  
# alipay configuration  
alipay:  
  appId: 9021000122699258  
  privateKey:  
MIIEvwIBADANBgkqhkiG9w0BAQEFAASCBBKkwggSlAgEAAoIBAQC7YAcIXV5GJlTWB0oBcrV  
G1zKxHunznSjYXwTS2DM3YgloxzKye4apfcmBDVnoL93m4QrJTtbiHYvu4yJjJfJsQEY+Wo  
44IczhDypyu+Il6JpQ0wylTs94/+3aaQ1wThsDaGs8edaFGteuw+1pUVl4nxF00fS1VoIR3  
0riqAGFAXrPhcSA6Y9c8HK1htxCelICnPzjppqC4s8ZjrjS7FoyHP2ZAay5fx1VEtah30E4R
```

```
vycFfV/i2+k3JGF0SeevdCx6Ufu+9Y/RaG4Sh84QuYRQUhAHUswlFDHpRrAnxHzt0zDk0kg
3BrCT7vMtBbS0P9BdIhpVTaZm4diQdNbLSl4hAgMBAAECggEAKb1Xc7aQ1KGfTlmj4xSxaw
lvIm0XjAwbWC+6fFlq91BgdjXBhl7b/Y+mvpfBymY3UUIaTAPC/HXGgT2ZoGqImTKsMyGrA
rgM0qm1M//EfdtV3L96rqxirTqduoSjWL0dawHuWXduoRH8r9K3ZTmY67TLh7FpiKevq9mI
7fqs8/qgq5QAN4UPFb3Cq9hDNTU4l6+Bywdg1KkwJ2Jc98SlrIdVl+1eCMAguelR0aNHTob
yPBZ/KfwGRV00Q3QqjLVgL3zlbzuylYhaZqPgxxd46vgWwkyMiiv7u20yCetq4LFd+tcNDz
0Yqk6rK9/S0oxbN8NM5DLkpwFh/433BoPS3QKBgQD/dsxNr2PYdPLp6p0vw7H2AFMH8CkwT
lRg+2f/0fgQF14rJwZgEU6fL5A2JvQeRRC5mCff2m5tDqrS321JNyH/JIKJ+4J8I34GEo/k
SCHL3RmyvJG00Q/EpEyxpP8BV3ob6U03LR58D0GLJr8eTsr3Y8o9cAMuknCNxvSD2LvybWk
BgQC7xKkx4KIPBny6sC0tCh0kgIrY3h0Ci+ZsHQVESXKzeku0NkH/qrAG+S9pb1XCzXdM2H
rzkMeuz6tqi+2TY8n0RyY2DZHNW7Fqzkaiz/N02AgGILALq1ZfJZke2MxgtBnxSsQ03gfXP
9opu/FsLH9a+s6edfHPvKD4kHxllBfAbwKBgQDYvr6QmuKn4HHJLZGoau0uvw+ziHwp1Aub
TTLrxgYmA02Qx0eNcQG2RfChQW0V2xtZnFMYhodyWCNvTsm2e0SLSTRIP3ByStq95DnZgan
LAGivsXX/W6qZ0J0poCTryob79enSHKHktjksmjDFS6zBQRVYevtqJDcC03Rz2lN8WQKBgQ
CCoJE4otb7bv7s/ccEBE0eaNKvhue5xUwbYKEeXZ6PYAA0sh5+GCf34flq90qJiFl7u4r10
Y4pfk35hLlV9XEasYLSzePmIuktrak0hpTNABus8MgRjJsjYsvAmwCsMf9uTx5qzSBVThWf
PSH6qIY9LAj8Un9UjxzJb/Mqi19GvwKBgQC0/KB+3robTqy9K0V4iEKJ4kmnXDRu7ecpMyc
8k5HzpolIHcXLZHkBK9pMCXBQ9Kwy6BjRGNnUZ0ahS+tvnMcyjHpwdhu90r7D51GXW/+PeFt
phYTscFhHvlyuWbbojzhKf69pZnsVmyllIBqRgtbks2WNHxWo/peCg47TcLaQNMA==
```

publicKey:

```
MIIBIjANBgkqhkiG9w0BAQEFAA0CAQ8AMIIBCgKCAQEAhBZoE6p1TKpd/WsAJRTA2D6yUTz
qLmZ73scxbPxxKwPIg2ys2Ap21u/lVmqBW09Wf2Z7wUwr/6BP1PQqVpg0GAqU3yjjZ0LGFb
itzMBMbGr10LqJQ3PKgnUNmn0dLR4FlHCAjKtuyxjHkxBTHg/L4punk4lkfJQD8YvzFrYa1
S6WYw5j1/oq080NbcjPirPCRlsU7MRraQuUqStDpwm2iHkroKwCEbGv+RtNJCf0kKNQVtRF
FgPGMhU4nQ620gdfzsGJsNFKVJnD5SjeDwniBabaGaVF4rEfKJPe6+XrcMg3h+9Fz+A2IU1
KCCoht2neEZEaU1t0KBGxXIuo4efi/QIDAQAB
```

appCertPath: \u5E94\u7528\u516C\u94A5\u8BC1\u4E66

aliPayCertPath: \u652F\u4ED8\u5B9D\u516C\u94A5\u8BC1\u4E66

aliPayRootCertPath: \u652F\u4ED8\u5B9D\u6839\u8BC1\u4E66

serverUrl: https://openapi-

sandbox.dl.alipaydev.com/gateway.do

domain: http://192.168.2.249

testDomain: http://129.204.171.210:8085

```
# wxpay configuration
```

```
wxpay:
```

```
  appId:
```

```
  appSecret:
```

```
  mchId:
```

```
  partnerKey:
```

```
  certPath:
```

```
  domain: http://192.168.2.249/u
```

```
...
```

- 启动/查看/停止/版本软件

```
cd /opt/wfc/bin
```

```
sudo ./wfccontrol.sh start/restart/status/stop/version
```

# 通过浏览器访问客户平台和用户平台

---

- 客户平台门户地址：

`http://192.168.13.128/sys`

- 用户平台门户地址：

`http://192.168.13.128/u`