Smart Park Transcoding Platform Deployment Guide

（Slave Node）

V4.0.4

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# 1 Deployment Preparation

**Environmental input information (provided by the customer)**

Provide the following four SSH connection information of the server

**Here are some examples:**

IP: 192.168.52.11 Port : 22   
Username : root Password: xxxxx

# 2 Operating Environment

## 2.1 Hardware Resources

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| project name | system | CPU | Memory | harddisk | Remark |
| Huawei Transcoding | openEuler 22.03 LTS | 8 cores | 16 G | **500G business disk**  **/data**  jaws service running  download  middle  ops  log  paasfss  data data storage  **Storage disk with a capacity of 500G or more**  / record 500G | You need to ensure that the corresponding directory exists |
|  |  |  |  |  |  |

## 2.2. Software Resources

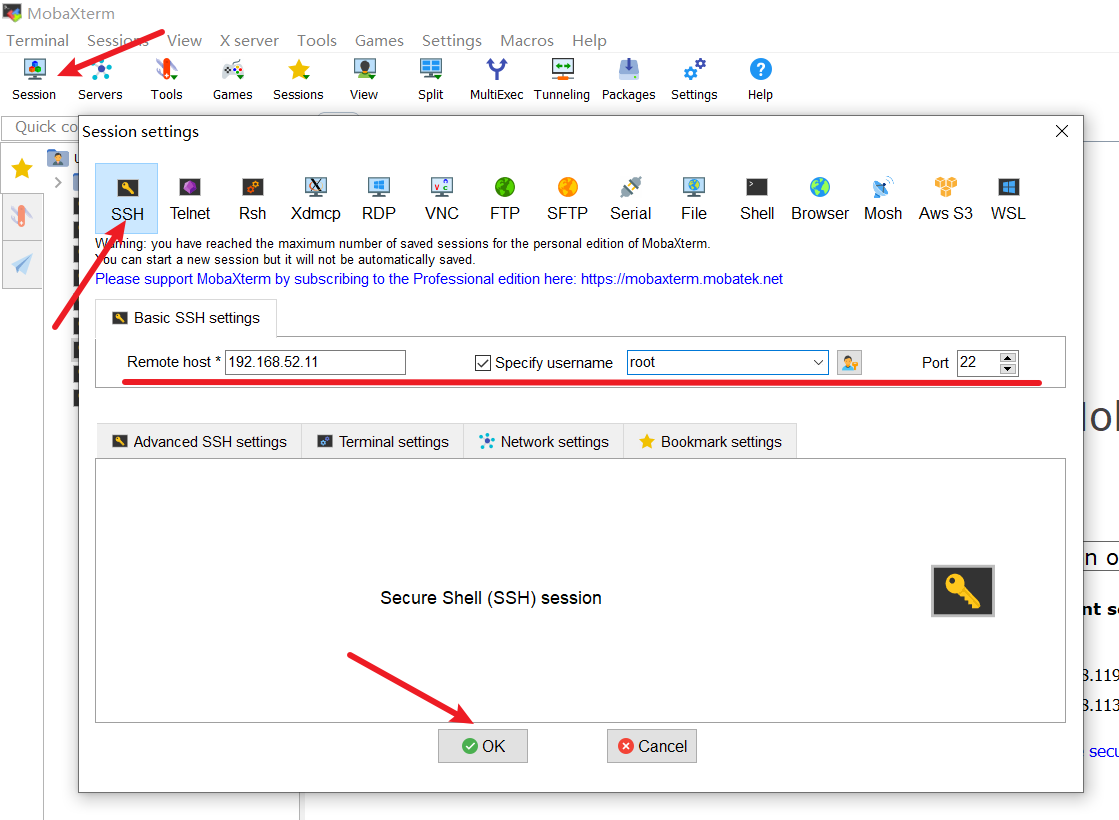
|  |  |  |  |
| --- | --- | --- | --- |
| project name | name of software | Software version | Remark |
| Huawei Transcoding | transcode | V4.0.4 |  |
| middleware | nginx | 1.28.0 |  |
| RabbitMQ | 3.10.0 |  |
| opengauss | 6.0.0 |  |
| redis | 7.4.2 |  |
| consul | 1.18.0 |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | jre1.8.0\_401 | 1.8.0\_451​ |  |
| application | MobaXterm | 2 2.0 |  |
| Chrome browser | 102.0.5005.63 |  |
| Firefox |  |  |

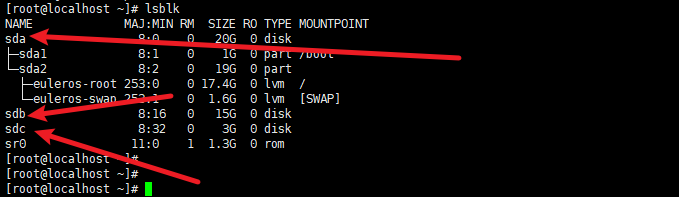
# 3 Installation and Deployment

## 3.1 mobaxterm connect to server

## 3.1.2 Log in as root user when using SSH

Click on the session and select SSH. Enter the remote host IP address, username and port number.

## 3.1.3 Log in as root user when using SSH



sda represents the system disk, sdb represents the data disk, and sdc represents the storage disk.

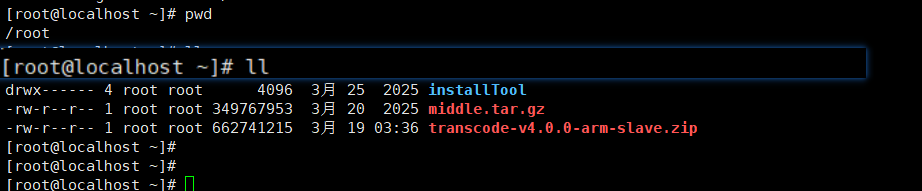
Use the lsblk command to view the current three disks. The following deployment services will be written to sdb and stored in sdc

Note: Please carefully confirm whether the current disk name is vdc vdb (the default is vdb vdc)

Upload the transcode- x .xx .tar.gz deployment package to the root directory

Use (unzip package name to decompress): unzip transcode- x .xx .tar.gz

After decompression, middle.tar.gz and installTool directories will appear.

**4.2 Script execution method**

The step path is: c d /root/ installTool directory (executed by root user )

Execution Order

1: The operation method is as follows



The above picture shows the effect of cross-domain parameter transmission

The explanation is as follows:

./install.sh : Required format

The first parameter is required for : listening IP address

The second parameter is required for: business IP address

The third parameter is required for: Gateway

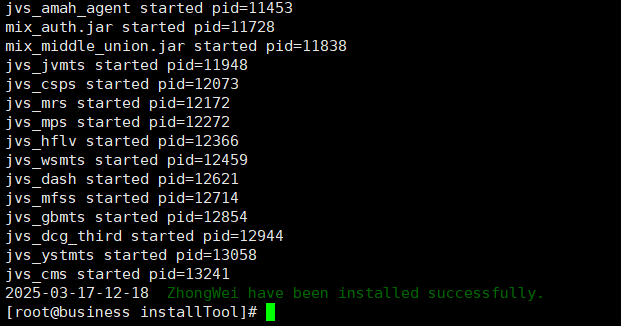
The fourth parameter is required for: language distinction ZH represents Chinese EN represents English (must be capitalized)

The fifth parameter is optional and is used for: cross-domain parameter transmission. If no parameter is passed, the default value is \* (see the effect diagram above and below)



The above picture shows the effect without parameter passing

The fifth digit of nginx cross-domain parameter transmission (domain name of the park platform: if there is no parameter transmission requirement, it does not need to be filled in, the default value is \* )

If the deployment is successful, it will return: ZhongWei have been installed successfully. (and the corresponding module pid number will pop up)

If the deployment fails, it will return: ZhongWei installed falied. If the deployment fails and prints the log record

And output the error log to the /root/installTools/zhongwei.txt file

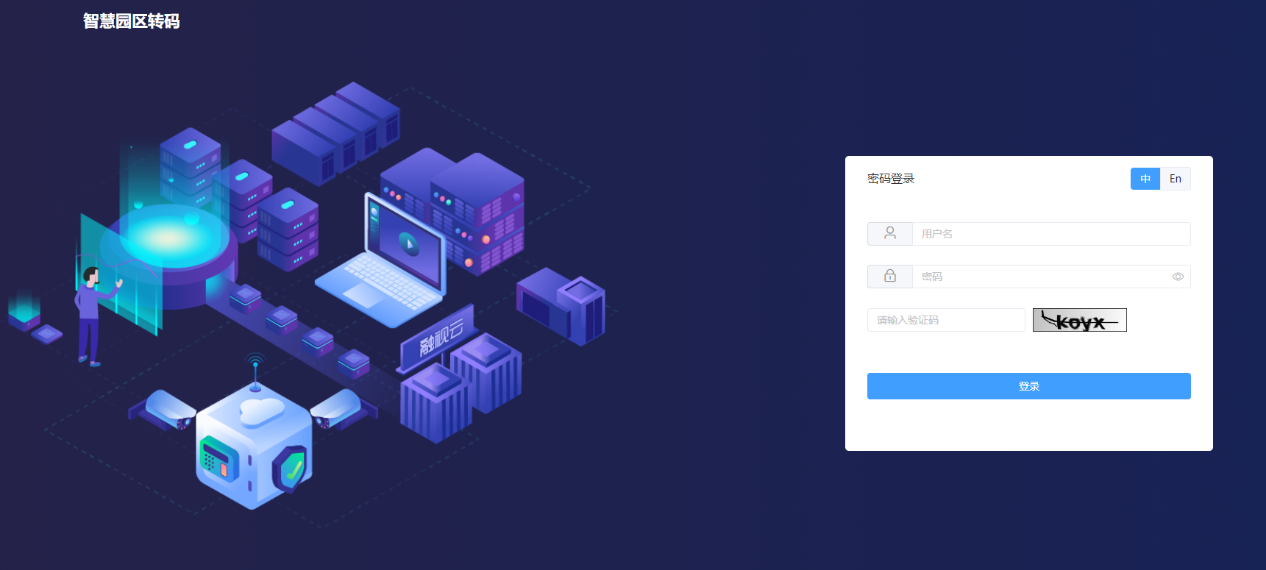
If the storage hard disk is not mounted, the mrs service does not display the P ID .

### Authentication method

1. curl http://127.0.0.1:8500/v1/agent/checks | grep Status

Check whether the returned value is passing, which means it is normal.

2. Verify whether the business can be logged in normally



### Get authorization information

6.1 Enter the website ( [https ://IP:9099](https://IP:9099) )

After receiving the authorization file from Zhongwei, upload it to the platform for authorization

Note: The main focus of nginx port records are as follows

9099 (https) Business port

9098 (https) Trust jump page httpsflv2.html This file is provided by Huawei Test

### 6.2 Router Mapping Table (All Mappings)

## Deployment Checklist

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Serial number** | **Service type** | **Service List** | **use** | **Remark** |
| 1 | Sinking node server | mix\_middle | Basic service module |  |
| 2 | mix\_auth | Authentication Service |  |
| 3 | web | Rongshi Cloud Management Platform Web |  |
| 4 | AmahAgent | Local Agent Service |  |
| 5 | csps | Platform video playback service |  |
| 6 | dash | HLS protocol media forwarding service |  |
| 7 |  | dcg\_third | Third-party device access gateway |  |
| 8 | gbmts | GB Media Gateway |  |
| 9 | hflv | FLV protocol media forwarding service |  |
| 10 | jvmts | JVMP protocol media forwarding service |  |
| 11 |  | mfss | File upload and download service |  |
| 12 | mps | RTSP&RTMP media forwarding service |  |
| 13 | mrs | Platform video storage service |  |
| 14 | ystmts | Third-party equipment access to the media gateway |  |
| 15 |  | cms | Master-slave cluster service |  |
| 16 |  | Wsmts | Media forwarding |  |

## Router Mapping Table (All Mappings)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Public IP | Source Port | Intranet IP​ | Destination Port | agreement type | name |
| WAN port IP | 8110 | Streaming IP | 8110 | TCP | Client long connection |
| WAN port IP | 9099 | Streaming IP | 9099 | TCP | Business WEB portal |
| WAN port IP | 9098 | Streaming IP | 9098 | TCP | httpsflv2.html |
| WAN port IP | 7231 | Streaming IP | 7231 | TCP | Platform video playback JVMP protocol |
| WAN port IP | 7070 | Streaming IP | 7070 | TCP | Device streaming jvmp |
| WAN port IP | 7072 | Streaming IP | 7072 | TCP | Device streaming rtmp |
| WAN port IP | 203 77 | Streaming IP | 20377 | TCP | Media forwarding RTMP protocol |
| WAN port IP | 203 55 | Streaming IP | 203 55 | TCP | Media forwarding RTSP protocol |
| WAN port IP | 20398 | Streaming IP | 20398 | TCP | Media forwarding HLS protocol |
| WAN port IP | 1 5060 | Streaming IP | 1 5060 | TCP & UDP | GB 28181 protocol equipment online 1 |
| WAN port IP | Range 30000-40000 | Streaming IP | Range 30000-40000 | TCP & UDP | GB 28181 protocol media gateway |
| WAN port IP | 22000 | Streaming IP | 22000 | TCP | JVMP streaming port |
| WAN port IP | 20376 | Streaming IP | 20376 | TCP | Client streaming (live/device video playback ) -HTTPS |
| WAN port IP | 7210 | Streaming IP | 7210 | TCP | Device cloud recording control |
| WAN port IP | 20100 | Streaming IP | 20100 | TCP | Master-slave cluster service |
| WAN port IP | 20380 | Streaming IP | 20380 | TCP | Media forwarding WSS protocol |
| WAN port IP | 20381 | Streaming IP | 20381 | TCP | Media forwarding WS  protocol |

## Factory IP and password

The initial password of the 909 9 webpage

|  |  |
| --- | --- |
| username​ | system |
| password | 123456a? |

2. Database account password

|  |  |
| --- | --- |
| Username | gaussdb |
| password | Jovision321$~2024yqzm |
| port | 5433 |

3. RabbitMQ message queue

|  |  |
| --- | --- |
| username​ | mix |
| password | Rabbitmq123$~2024yqzm |
| port | 15672 |

4. redis cache database

|  |  |
| --- | --- |
| username​ | admin |
| password | Mix-redis123$~2024yqzm |
| port | 6379 |

### FAQ​

1. **How to determine whether the current user is mix\_usr or root**

su means switch

su mix\_usr is to switch mix\_usr

su root is to switch to root

When a low-level user switches to a high-level user, you will be prompted to enter the password. The password is not displayed by default. Just press Enter after entering.

1. **How to configure config.ini**

Simplified operation,

First replace all IPs with the currently required IPs . If there are intranet and extranet scenarios, the 6 public IPs must also be replaced.

Then you just need to change the following three variables to the intranet IP of the streaming media.

IPADDR=streaming media intranet IP

NETWORK\_LANADDR=streaming media intranet IP

NETWORK\_LANADDR\_1=streaming media intranet IP

The final verification configuration result of config.ini is as follows

IPADDR=streaming media intranet IP

NETWORK\_LANADDR=streaming media intranet IP

NETWORK\_LANADDR\_1=streaming media intranet IP

If it is an intranet or intranet scenario, the following parameters need to be replaced with the public IP corresponding to the streaming media:

NETWORK\_WANADDR=streaming media public network IP

NETWORK\_WANADDR\_1= streaming media public network IP

NETWORK\_CMCCADDR=streaming media public network IP

NETWORK\_CUCCADDR=streaming media public network IP

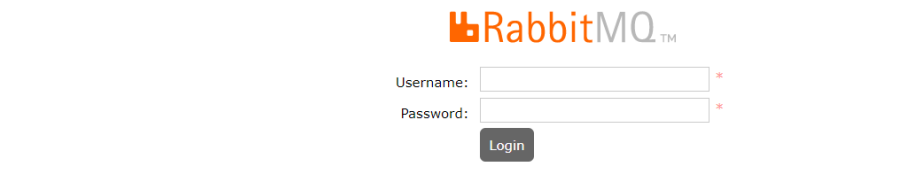
NETWORK\_CTCADDR=streaming media public network IP

HOST\_DOMAIN=streaming media public network IP

NETWORK\_CIDR= streaming media intranet IP /24

BUSINESS\_INNERIP\_REG= streaming media intranet IP /24

1. **How to open rabbitmq's web management port 15672**



The port does not allow external access and needs to be opened.

vim /data/middle/rabbitmq/etc/rabbitmq/rabbitmq.conf Modify the listening address and restart the service and module service or reboot

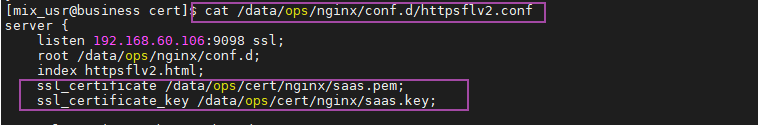
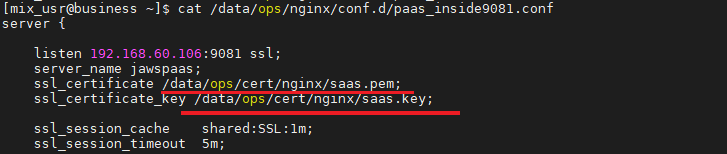
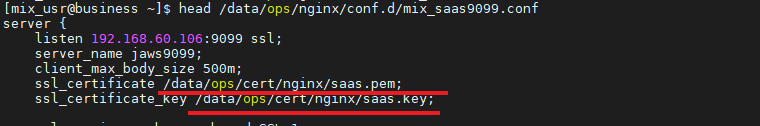
1. **What is the impact of the certificate?**

If the certificate is not uploaded, you will not be able to access business-related functions and other resources normally;

1. **Certificate replacement method**
2. The relevant certificate path is: /data/ops/cert
3. Media certificate name: media.key media.pem (under the path /data/ops/cert)
4. Nginx certificate name: saas.key saas.pem (path /data/ops/cert/nginx)
5. SDC certificate name: huawei\_sdc.key huawei\_sdc.pem huawei\_sdc\_ca.pem (path /data/ops/cert)
6. Replace the certificate method, and change the certificate file in the specified path

/data/ops/config.ini configuration file





1. After the replacement, you need to restart the related services to take effect
2. Related service activation methods

pkill nginx

/data/middle/nginx/dog start

/data/ops/control server restart (manage related module services under the /data/jaws/ directory)

/data/ jaws/mrs start

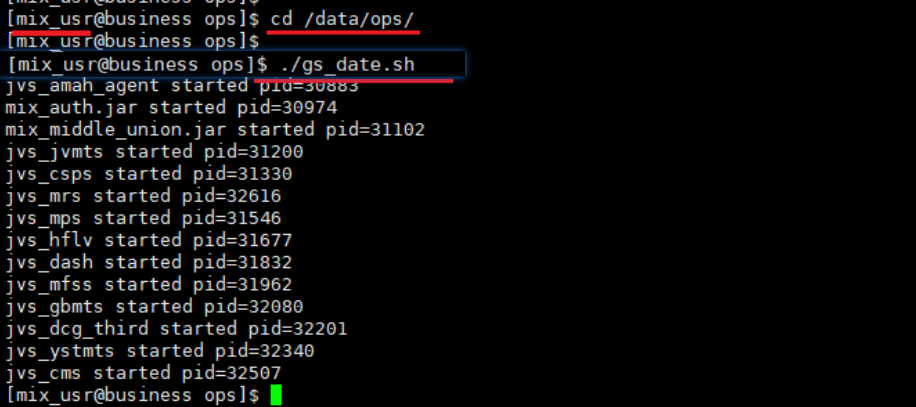
/data/ops/control server status (shows pid is normal)

1. **Synchronize database operation method after operating system time zone change**

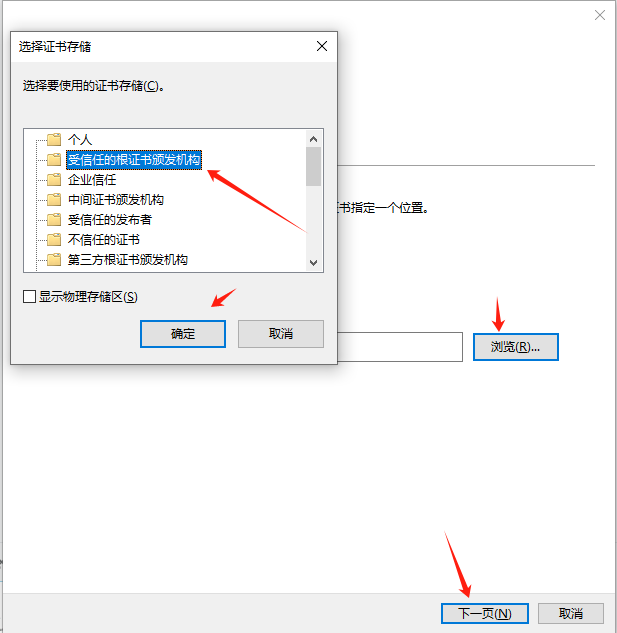
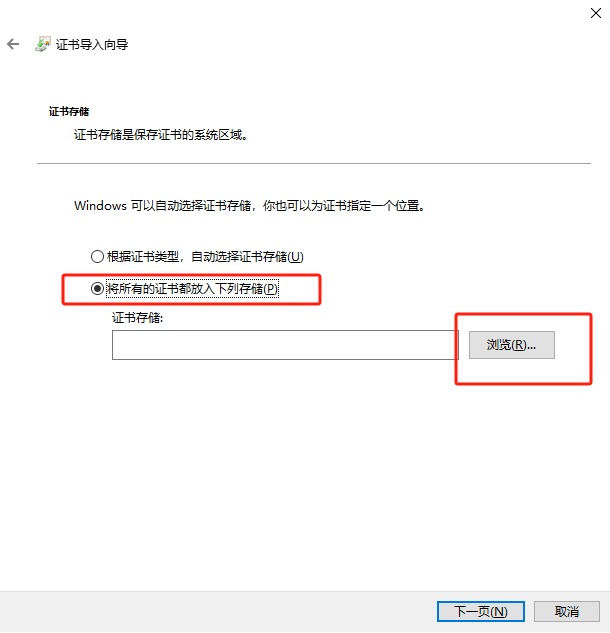
After the operating system time zone changes, it is necessary to synchronize the database

cd /data/ops (Enter the specified directory)

./mysql\_date.sh （After executing the time zone synchronization script, it is necessary to wait for 1-5 minutes, which involves service restart. The status of each module is displayed with a PID indicating successful startup）



1. **How to install the current certificate as a trusted certificate**

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