

NMS Troubleshooting



Foreword

- This course is mainly:
 - Guide Solutions for Common installation issues
 - Guide Offline Solutions For Device

Course Objective

Through this course
you will be able to



How To Solve Common Installation Issues



How To Solve Device Offline



Understand Common Commands

- 1** Chapter One Installation Problem Solutions
- 2 Chapter Two Offline Solution For Device

Chapter One

Installation Problem Solutions

01

Installation Problem Solutions

- Port 80 or 443 is occupied

When starting NMS, it was found that server port 80 or 443 was occupied, causing the service to fail to start

Modify the dmagent web in the docker-compose.yml file:

1. Delete '-80:80'
2. Modify '-443:443' to '-8443:443'
3. When accessing the NMS system after saving, it is <https://ip:8443>

```
dmagent-web:
  image: registry.cn-shenzhen.aliyuncs.com/dmcloudv2/dmagent-web:v2.65.1.9.rc1
  container_name: dmagent-web
  restart: always
  ports:
    - 80:80
    - 443:443
    - 3006:3006
    - 3334:3334
    - 8081-8082:8081-8082
    - 20007:20007
    - 12000:12000
  volumes:
    - /dmagent/www/resources:/var/data/www/resources
  networks:
    dmagent:
      aliases:
        - dmagent-web
  depends_on:
    - dmagent-user-server
  logging:
    driver: 'json-file'
    options:
      max-file: '3'
      max-size: '50M'

networks:
  dmagent:
    driver: 'bridge'
```



Installation Problem Solutions

- Port occupied when starting device server

When starting NMS, the port is occupied, causing the service to fail to start

1. Modify the dmagent-web configuration item in the docker-compose.yml file, as shown in the following figure
2. Stop NMS : `docker-compose -f /dmagent/docker-compose.yml down`
3. Start NMS : `docker-compose -f /dmagent/docker-compose.yml up -d`

```
ash: unmae: command not found
oot@iZ23h1ldu2aZ dmagent]# uname -a
Linux iZ23h1ldu2aZ 3.10.0-1160.59.1.el7.x86_64 #1 SMP Wed Feb 23 16:47:03 UTC
oot@iZ23h1ldu2aZ dmagent]# docker-compose up -d
Creating network "dmagent_dmagent" with driver "bridge"
Creating dmagent-redis ... done
Creating mysql ... done
Creating dmagent-device-server ...
Creating dmagent-device-server ... error
Creating dmagent-web ... done
WARNING: Host is already in use by another container
ERROR: for dmagent-device-server Cannot start service dmagent-device-server:
e3df9863a04ef7a98cedb): Error starting userland proxy:
```

```
entrypoint: java -xms256m -mx512m -jar /dmagent/server/tenant/tenant-web-server.jar --spring.profiles.active=test
dmagent-device-server:
  build:
    context: ./device-connect/
    dockerfile: ./Dockerfile
  image: registry.cn-shenzhen.aliyuncs.com/dmcloudv2/dmagent-device-connect:v2.65.1.12
  container_name: dmagent-device-server
  restart: always
  environment:
    - ENV_HOST=172.28.1.100
    - REDIS_HOST=dmagent-redis
    - DATABASE_HOST=dmagent-mysql
    - PORT_RANGE=5001,5032
    - TZ=Asia/Shanghai
    - FORMAT_MESSAGES_PATTERN_DISABLE_LOOKUPS=true
  ports:
    - 3002:3002
    - 3005:3005
    - 3333:3333
    - 3300:3300
    - 5000:5000
    - 5001-5032:5001-5032
    - 30000-30900:30000-30900
    - 20006:20006
    - 2555:2555/udp
    - 5061:5061/udp
  volumes:
    - /dmagent/logs:/tmp/logs
    - /dmagent/www/resources:/var/data/www/resources
    - /etc/localtime:/etc/localtime
    - /etc/letsencrypt:/dmagent/license
    - /dmagent:/dmagent/server/device-connect
  networks:
    dmagent:
      aliases:
        - dmagent-device-server
  depends_on:
    - dmagent-mysql
```

Installation Problem Solutions

- Port conflict in remote web

When starting NMS, the port is occupied, causing the service to fail to start

1. Modify the nms-server configuration item in the docker-compose.yml file as shown in the figure
2. Stop NMS : `docker-compose -f /dmagent/docker-compose.yml down`
3. Start NMS : `docker-compose -f /dmagent/docker-compose.yml up -d`

```
max-file: 3
max-size: '50M'

nms-server:
  build:
    context: ./nms
    dockerfile: Dockerfile
  image: registry.cn-shenzhen.aliyuncs.com/dmcloudv2/nms-server:v2.65.1.17
  container_name: nms-server
  restart: always
  environment:
    - TZ=Asia/Shanghai
    - ENV_HOST=172.28.1.100
    - REDIS_HOST=nms-redis
    - DATABASE_HOST=nms-mysql
  ports:
    - 2555:2555/udp
    - 3005:3005
    - 3333:3333
    - 5001-5032:5001-5032
    - 20006:20006
    - 30000-30127:30000-30127
  volumes:
    - /dmagent/logs:/tmp/logs
    - /dmagent/www/resources:/var/data/www/resources
    - /etc/localtime:/etc/localtime
    - /etc/hosts:/dmagent/hosts
    - /sbin/dmidecode:/sbin/dmidecode
    - /dmagent/properties:/dmagent/properties
    - /dev/mem:/dev/mem
  depends_on:
    - nms-mysql
    - nms-redis
```

Common Commands

- Start Service

```
Bash  
docker-compose -f /dmagent/docker-compose.yml up -d
```

- Stop Service

```
Bash  
docker-compose -f /dmagent/docker-compose.yml down
```

- Restart the Service

```
Bash  
docker-compose -f /dmagent/docker-compose.yml restart
```

1 Chapter One Installation Problem Solutions

2 Chapter Two Offline Solution For Device

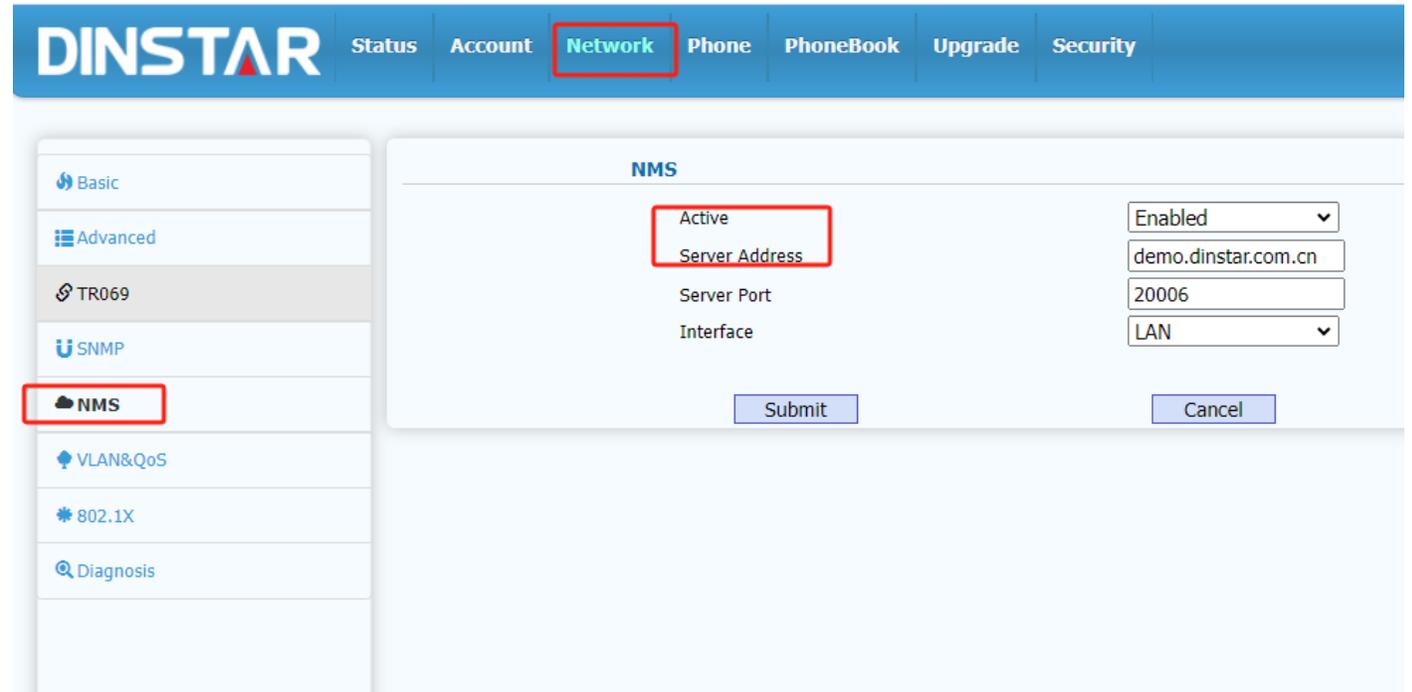
Chapter Two

Offline Solution For Device

02

Offline Solution For Device

- View Configuration-Device
 1. Check if NMS is enabled
 2. Check if the IP address is correct



Offline Solution For Device

- View Configuration-NMS

Click **Device**-> **Device** ,check if the device SN is correct

The screenshot shows the NMS Device Manager interface. On the left is a dark sidebar with navigation options: Home, Device (selected), Task, Operation Log, Device Online Log, Alarm, Diagnosis, Site Management, and Device Resource. The main content area is titled 'Device / Device Manager' and contains search filters for Device Search, Site, and Product Type. Below the filters are action buttons: Batch Recovery, Reset Device, Batch Restart, Firmware Update, Configure Backup, Set Up Site, Delete, Add, and Open. A yellow notification banner displays the device activation process steps. The central part of the interface is a table with the following columns: Device Name, Serial Number (highlighted with a red box), Site, Device Type, Running Status, MAC, Local IP, Software Versio, and Control. The table lists three devices: 'iphone', 'sbc3000e_ly', and 'Chester_test_8'.

Device Name	Serial Number	Site	Device Type	Running Status	MAC	Local IP	Software Versio	Control
iphone	DED1-0709-7064-0063	willy	C62S	online	F8:A0:3D:67:55:A8	172.28.51.105	2.62.11.112.2.	WEB CMD More
sbc3000e_ly	1111-2222-2222-1111		SBC3000 Pro	online	ba:dd:ca:d7:07:01	172.23.1.239	2.93.2.0ppsp5	WEB CMD More
Chester_test_8	DE19-C123-8051-0234		C408P	offline	00:1F:C1:22:23:DC	10.3.2.193	5.25.8.1	WEB CMD More

Offline Solution For Device

- View Configuration-NMS
- 2. Click **System->System setting->System Authorization**, check if there are any remaining NMS authorized devices
- 3. Click **System->System setting->System Authentication**, view allowed access device models

Authorization Type	Authorized Quantity	Used Quantity
Terminal quantity authorization	2300	1420
Gateway quantity authorization	1002	226

Update Authorization
Machine Code: 53ea18eee2a9b43de273064522c2c806

Device Access Settings

Product Access Type

- Analog VoIP Gateway
- IP PBX
- GSM/3G/4G VoIP Gateway
- Digital VoIP Gateway
- Session Border Controller
- Enterprise IP Phone
- SIP Intercom
- Video Phone

Offline Solution For Device

- View Configuration-NMS

4.Using VPN to map internal NMS servers to the public network, Need to check if the port mapping is complete or if the internal network server IP was used during service installation

```
root@sbc8000:~/dmagent_install# ./new_nms.sh install
=== Installation configuration confirmation ===
The following configuration will be used for installation:

No.  Name          : Value          Desc
-----
1    ENV_HOST       : 172.28.26.200  external ip address,0.0.0.0 - default
2    REDIS_HOST     : 127.0.0.1      redis url/ip
3    REDIS_PASSWD   : Comsns@2018!@# redis password
4    DATABASE_HOST  : 127.0.0.1      mysql url/ip
5    DATABASE_NAME  : dmagent        mysql database
6    DATABASE_USERNAME : dinstar        mysql user
7    DATABASE_PASSWD : Dinstar@2011!@# mysql password
8    TZ             : Asia/Shanghai  Asia/Shanghai
9    VERSION       : v2.65.2.2.official version
10   TYPE          : host           default/singleton/old
11   INSTANCE      : ens33          network interface name
12   FLOATING_IP    : 172.28.74.208  floating IP address

... There are still23 advanced configurations not displayed. Enter 13 to view all configurations ...

1. proceed to installation
2. edit basic configuration
3. edit advanced configuration
4. cancel installation
Please choose an action [1-4]: █
```

- 80:80 -- Web HTTP access port
- 443:443 -- Web HTTPS access port
- 2555:2555/udp -- UDP probe for device
- 3005-3006:3005-3006 -- TCP channel between equipment and network management
- 3300:3300 -- Telnet channel for browsers and network administrators
- 3333-3334:3333-3334 -- Telnet channel between equipment and network management
- 5001-5032:5001-5032 -- TCP channel established between browser and network administrator for remote web access
- 30000-30900: 30000-30900 -- TCP channel established between browser and network administrator for remote web access
- 5000:5000 -- https The port for device API commands is only for remote calling of DWG devices
- 20006-20007:20006-20007 -- HTTPS device registration port

Offline Solution For Device

PING

1. SSH login to NMS server
2. Ping the device IP and test if it can be pinged

```
System load:          0.06
Usage of /:           28.0% of 97.87GB
Memory usage:        32%
Swap usage:          0%
Processes:           155
Users logged in:     1
IPv4 address for eth0: 172.28.26.200
IPv6 address for eth0: 2020::81
IPv6 address for eth0: 2020::be24:11ff:fea3:8953
IPv6 address for eth0: 2020::26:200

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
  just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

146 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

*** System restart required ***
Last login: Fri Aug 1 09:19:10 2025 from 172.28.3.252
root@sbc8000:~# ping 172.28.51.105
PING 172.28.51.105 (172.28.51.105) 56(84) bytes of data:
64 bytes from 172.28.51.105: icmp_seq=1 ttl=64 time=0.304 ms
64 bytes from 172.28.51.105: icmp_seq=2 ttl=64 time=0.282 ms
64 bytes from 172.28.51.105: icmp_seq=3 ttl=64 time=0.282 ms
64 bytes from 172.28.51.105: icmp_seq=4 ttl=64 time=0.304 ms
64 bytes from 172.28.51.105: icmp_seq=5 ttl=64 time=0.279 ms
64 bytes from 172.28.51.105: icmp_seq=6 ttl=64 time=0.301 ms
64 bytes from 172.28.51.105: icmp_seq=7 ttl=64 time=0.280 ms
64 bytes from 172.28.51.105: icmp_seq=8 ttl=64 time=0.269 ms
64 bytes from 172.28.51.105: icmp_seq=9 ttl=64 time=0.278 ms
64 bytes from 172.28.51.105: icmp_seq=10 ttl=64 time=0.310 ms
64 bytes from 172.28.51.105: icmp_seq=11 ttl=64 time=0.280 ms
64 bytes from 172.28.51.105: icmp_seq=12 ttl=64 time=0.270 ms
64 bytes from 172.28.51.105: icmp_seq=13 ttl=64 time=0.268 ms
64 bytes from 172.28.51.105: icmp_seq=14 ttl=64 time=0.294 ms
64 bytes from 172.28.51.105: icmp_seq=15 ttl=64 time=0.272 ms
64 bytes from 172.28.51.105: icmp_seq=16 ttl=64 time=0.273 ms
64 bytes from 172.28.51.105: icmp_seq=17 ttl=64 time=0.282 ms
64 bytes from 172.28.51.105: icmp_seq=18 ttl=64 time=0.263 ms
64 bytes from 172.28.51.105: icmp_seq=19 ttl=64 time=0.285 ms
64 bytes from 172.28.51.105: icmp_seq=20 ttl=64 time=0.274 ms
64 bytes from 172.28.51.105: icmp_seq=21 ttl=64 time=0.268 ms
```

Offline Solution For Device

Capture & Log

Device packet capture or log download to locate specific issues

The screenshot displays the DINSTAR web interface. At the top, a blue navigation bar contains the DINSTAR logo and menu items: Status, Account, Network, Phone, PhoneBook, Upgrade, and Security. On the left side, a vertical sidebar lists various system functions: Upgrade, Auto Provision, System log, PCAP, Configuration, PnP, and Custom language. The main content area is titled 'Network Capture' and features a dropdown menu set to 'LAN' and two buttons, 'Start' and 'Stop', with the 'Start' button highlighted by a red rectangular box. Below this, a 'Mirror' section shows an 'Ethernet Port Mirror' dropdown menu set to 'Disabled'.



THANKS



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