Yealink

Yealink Meeting Server Installation Guide

Version 21.0.0.10
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About This Guide

This guide introduces how to install the YMS software.

YMS installation method includes stand-alone installation or cluster installation.

The differences between them are described as below:

Type	Description
Stand-Alone installation	One stand-alone YMS but with all services.
Cluster installation	Multiple YMSs, including the following node types: • **Master node**: it includes all the YMS services. • **Sub-master node**: if you want to realize the disaster recovery for all features, it must contain 2 sub-master nodes. • **Business node**: you can distribute the desired service on each business node according to the enterprise deployment need. The services contain SIP service, MCU service and others.

Hardware Recommendations

When deploying YMS, you can refer to the following recommendations so YMS can run properly.

Hardware Recommendations for Virtualization Deployment

If you install YMS in the virtual environment, you can refer to the following recommendations.

CPU Model	Clock Speed	CPU Amount	VCore Amount	RAM	Concurrent Capacity (the video + the shared content + SRTP)	
					(720p30fps+1080p5fps+SRTP)	(1080p30fps+1080p5fps+SRTP)
Xeon(R) Platinum 8163 CPU	2.5GHZ	1	12	24G	18	9
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	1	10	20G	17	8
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	1	10	20G	18	6
Xeon(R) Platinum 8163 CPU	2.5GHZ	1	24	48G	36	18
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	1	20	40G	34	17
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	1	20	40G	37	18
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	2	16	32G	55	27
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	16	32G	59	29
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	2	20	40G	69	34
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	20	40G	74	37
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	24	48G	89	44
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	2	32	64G	111	55
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	32	64G	119	59
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	16	32G	59	29
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	16	32G	59	29
Intel(R) Xeon(R) CPU E5-2666 v3	2.9GHZ	2	20	40G	69	34
Intel(R) Xeon(R) Gold 6149 CPU	3.1GHZ	2	20	40G	74	37
Cluster deployment						

Note

Concurrent capacity of 720p=VCore amount*clock speed*0.6.

Concurrent capacity of 1080p= VCore amount* clock speed *0.3.

One 720p recording consumes one 720P concurrent call capability.

The amount of VCPU is the VCPU you assigned to this VM rather than the total capability of the CPU. We recommend 300G Disk for formal deployment. For internal testing of YMS2.0, 100G is acceptable.

The VCPU resource assigned to this YMS server cannot be occupied by other services in any case; otherwise, the concurrent call cannot reach the number we provide.

Hardware Recommendations for Non-Virtualization Deployment

Hardware Recommendations of Intel E5

If you use Intel E5 to install CentOS and then install YMS 2.0, you can refer to the following recommendations.

CPU Model	Clock Speed	CPU Amount	Core Amount	RAM	Concurrent Capacity (the video + the shared content + SRTP)	
					(720p30fps+1080p5fps+SRTP)	(1080p30fps+1080p5fps+SRTP)
E5-2620 v3	2.4GHz	1	6	4*8G (2133MHz)	17	8
E5-2620 v3	2.4GHz	2	12	8*8G (2133MHz)	34	16
E5-2620 v4	2.1GHz	1	8	4*8G (2400MHz)	20	10
E5-2620 v4	2.1GHz	2	16	8*8G (2400MHz)	40	20
E5-2660 v3	2.6GHz	1	10	4*8G (2133MHz)	31	15
E5-2660 v3	2.6GHz	2	20	8*8G (2133MHz)	62	31
E5-2680 v4	2.4GHz	1	14	4*8G (2400MHz)	40	20
E5-2680 v4	2.4GHz	2	28	8*8G (2400MHz)	80	40
E5-2695 v4	2.1GHZ	2	36	8*8G (2400MHz)	92	46
E5-2699 V4	2.2GHz	2	44	8*8G (2400MHz)	116	58

Note

Concurrent capacity of 720p= Core amount* clock speed *1.2.

Concurrent capacity of 1080p= Core amount* clock speed *0.6.

The RAM should be installed as 8G each, E5 V3 CPU frequency 2133MHz, E5 V4 CPU frequency 2400MHz.

Hardware Recommendations of Intel Silver & Gold

If you use Intel Silver & Gold to install CentOS and then install YMS 2.0, you can refer to the following recommendations.

CPU Model	Clock Speed	CPU Amount	Core Amount	RAM	Concurrent Capacity (the video + the shared content + SRTP)	
					(720p30fps+1080p5fps+SRTP	(1080p30fps+1080p5fps+SRTP)
Intel Xeon Silver 4114	2.1GHz	1	8	6*8G (2400MHz)	20	10
Intel Xeon Silver 4114	2.2GHz	2	20	12*8G (2400MHz)	50	25
Intel Xeon Silver 4116	2.1GHz	1	12	6*8G (2400MHz)	30	15
Intel Xeon Silver 4116	2.1GHz	2	24	12*8G (2400MHz)	60	30
Intel Xeon Gold 6132	2.6GHz	1	14	6*8G (2666MHz)	40	20
Intel Xeon Gold 6132	2.6GHz	2	28	12*8G (2666MHz)	80	40
Intel Xeon Gold 6152	2.1GHZ	1	22	6*8G (2666MHz)	50	25
Intel Xeon Gold 6152	2.1GHz	2	44	12*8G (2666MHz)	100	50

Note
Concurrent capacity of 720p= Core amount* clock speed *1.2. Concurrent capacity of 1080p= Core amount* clock speed *0.6. The RAM should be 8G per each, RAM frequency for silver CPU should be 2400MHz, RAM frequency for Gold CPU should be 2666MHz.

In This Guide

This guide contains the following chapters:

Chapter 1 Creating a Data Backup for YMS 1.X

Chapter 2 Uninstalling YMS 1.X

Chapter 3 YMS Stand-Alone Installation

Chapter 4 Expanding the Stand-Alone YMS

Chapter 5 Installing the Cluster YMS

Chapter 6 Uninstalling YMS 2.0

Table of Contents

About This Guide iii

Hardware Recommendations iii
In This Guide vi

Table of Contents iii

Creating a Data Backup for YMS 1.X 1

Saving the Important Data by Taking Screenshot 1
Exporting All Call Statistics 2
Making a Backup for the System Data 3

Uninstalling YMS 1.X 5

YMS Stand-Alone Installation 7

Installing the Stand-Alone YMS with the Existing CentOS 7
Installing YMS by Importing OVA/OVF Files 8

Expanding the Stand-Alone YMS 13

Installing the Cluster YMS 15

Uninstalling YMS 2.0 19

Creating a Data Backup for YMS 1.X

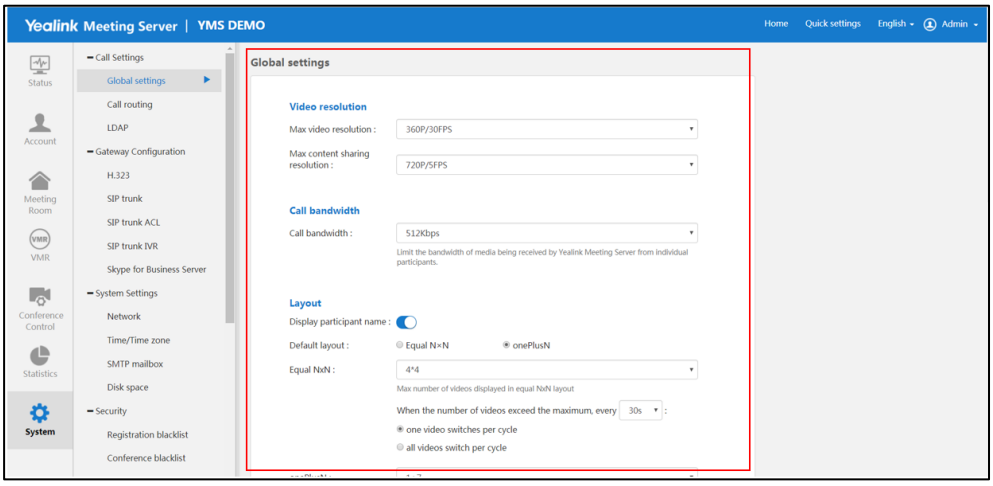
If you use YMS 1.X, you need to make a data backup first. Because when you upgrade YMS 1.X to YMS 2.0, you need to uninstall YMS 1.X and the data on it will be deleted.

After the data backup, please contact Yealink to do the data migration.

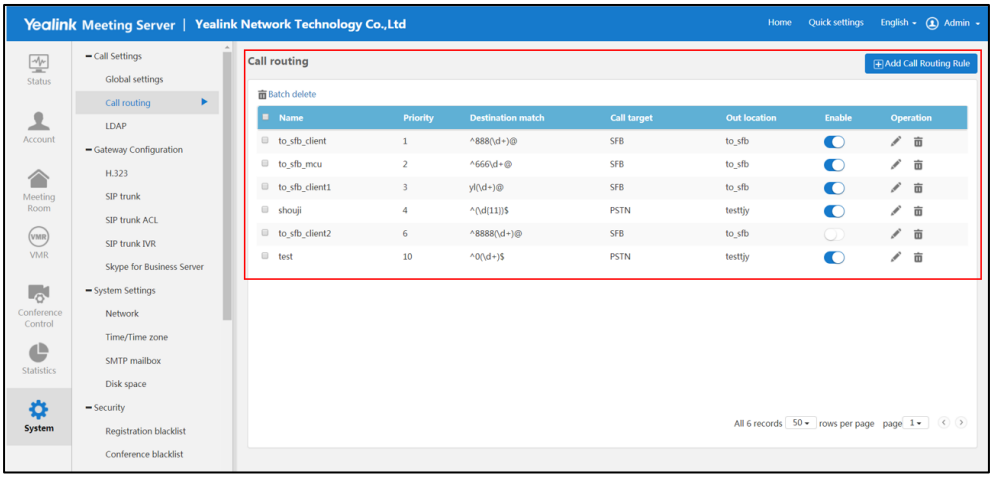
Saving the Important Data by Taking Screenshot

We recommend that you save the following configuration by taking screenshot:

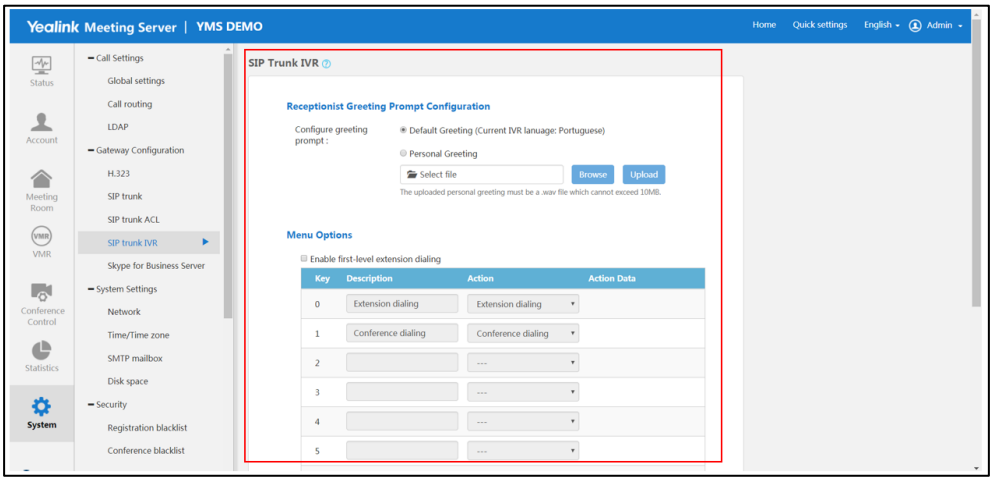
- Click **System**->**Call Settings**->**Global settings**, and take screenshots of the entire configuration.



- Click **System**->**Call Settings**->**Call routing**, and take screenshots of the entire configuration.



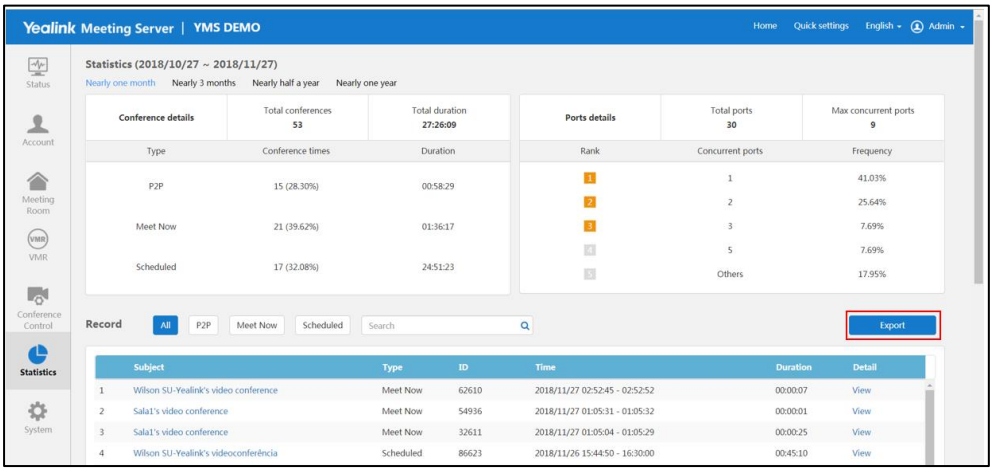
- Click **System**->**Gateway Configuration**->**SIP trunk IVR**, and take screenshots of the entire configuration.



Exporting All Call Statistics

Procedure:

1. Click **Statistics**->**Export**.

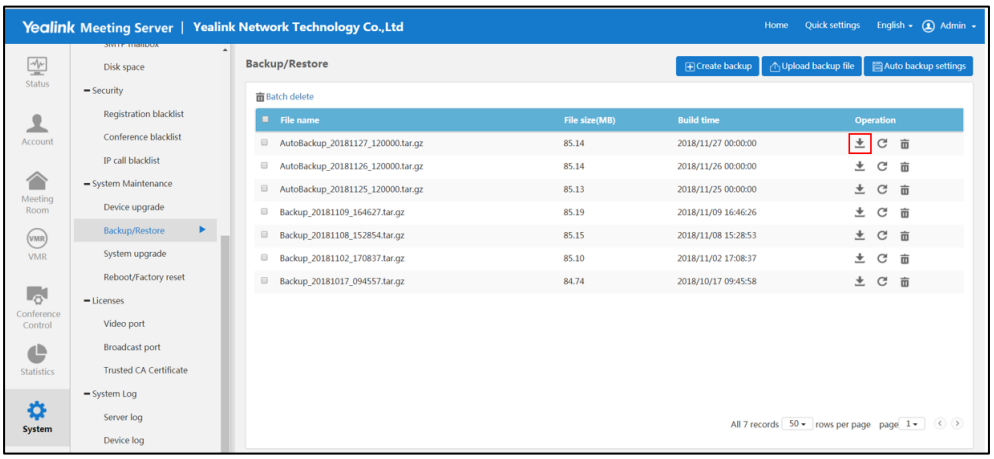


Making a Backup for the System Data

Make sure there are no ongoing conferences before making the backup.

Procedure:

1. Click **System**->**System Maintenance**->**Backup/Restore**->**Create Backup**.
2. Click on the right side of the created backup to download it to your computer.



Uninstalling YMS 1.X

If you use YMS 1.X, you need to uninstall it before installing YMS 2.0.

Procedure (log into CentOS as the root):

1. Open Terminal.

2. Do one of the following:

- If the server can access the external network, run the command below:

  curl -O https://download.yealinkops.com/support/YMS/YMS1.4_Uninstall/apollo_util.sh
  chmod u+x apollo_util.sh

  ./apollo_util.sh uninstall 11055011 no

- If the server cannot access the external network, do the following:

  a. Click https://download.yealinkops.com/support/YMS/YMS1.4_Uninstall/apollo_util.sh to download the script for uninstalling.

  b. Upload the script to /root on CentOS via lrzsz, and use SecureCRT to go to CentOS via SSH and then run the following command:

  cd /root

  rz

  Select the scrtipt for uninstalling

  c. Run the command below:

  chmod u+x apollo_util.sh

  ./apollo_util.sh uninstall 11055011 no

YMS Stand-Alone Installation

You can select one of the following ways to install YMS:

- Installing the Stand-Alone YMS with the Existing CentOS
- Installing YMS by Importing OVA/OVF Files

Installing the Stand-Alone YMS with the Existing CentOS

Before you begin:

If the installation environment cannot access the external network, we recommend that you use CentOS 7.5 or later. If it can access the external network, the operating system can be CentOS 7.0 or later.

Procedure:

1. Put the installation package in the path of /usr/local under CentOS root directory.

   For example, upload the file to CentOS by using lrzsz, and you can do the following:

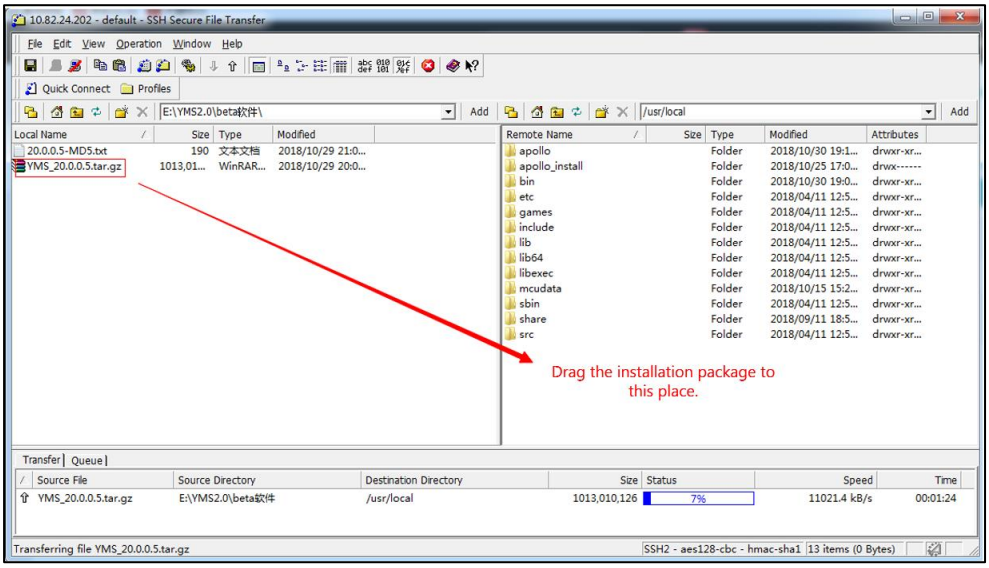
   Use SecureCRT to go to CentOS via SSH and run the command below:

   yum -y install lrzsz

   cd /usr/local

   rz

   Select the installation package you want to upload.



2. Use SecureCRT to go to CentOS via SSH and run the command below:

   cd /usr/local

   tar xvzf YMS_21.0.0.10.tar.gz

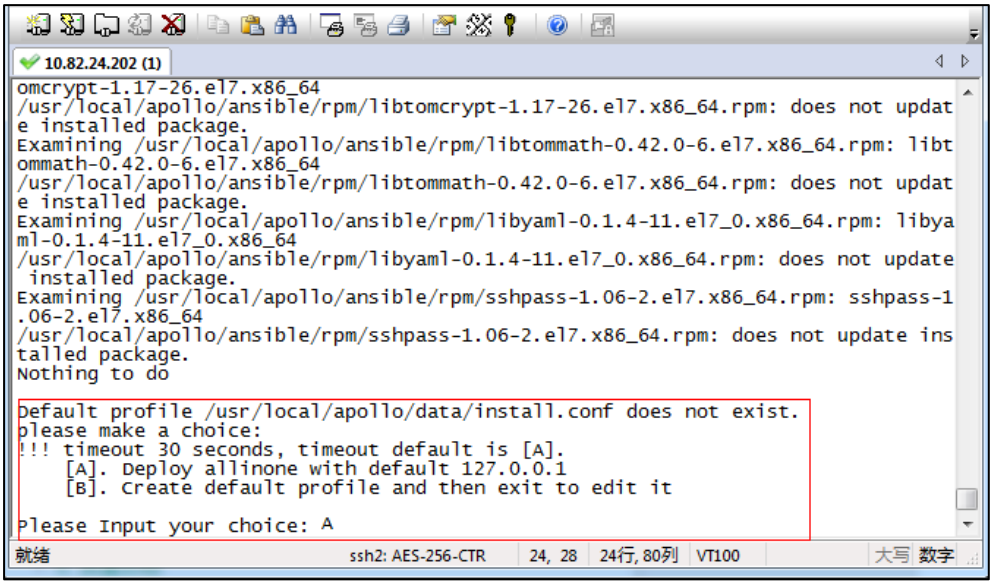
   cd apollo_install

   tar xvzf install.tar.gz

   ./install.sh

3. Enter A to select the stand-alone installation.

   If you do not select within 30 seconds, the system will select the stand-alone installation automatically. The installation will be finished in about 10 minutes. Please wait.



The installation succeeds if the page displays the following part:

Installing YMS by Importing OVA/OVF Files

Before you begin

You should check the following points:

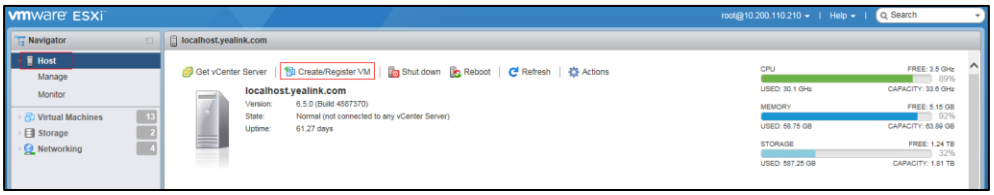
- If you want to install YMS to a virtual machine, the following types of the virtual machine are recommended:

Feature	Description
Type	• VMware ESXi 6.5 or later • Microsoft Hyper-V Server 2012 or later

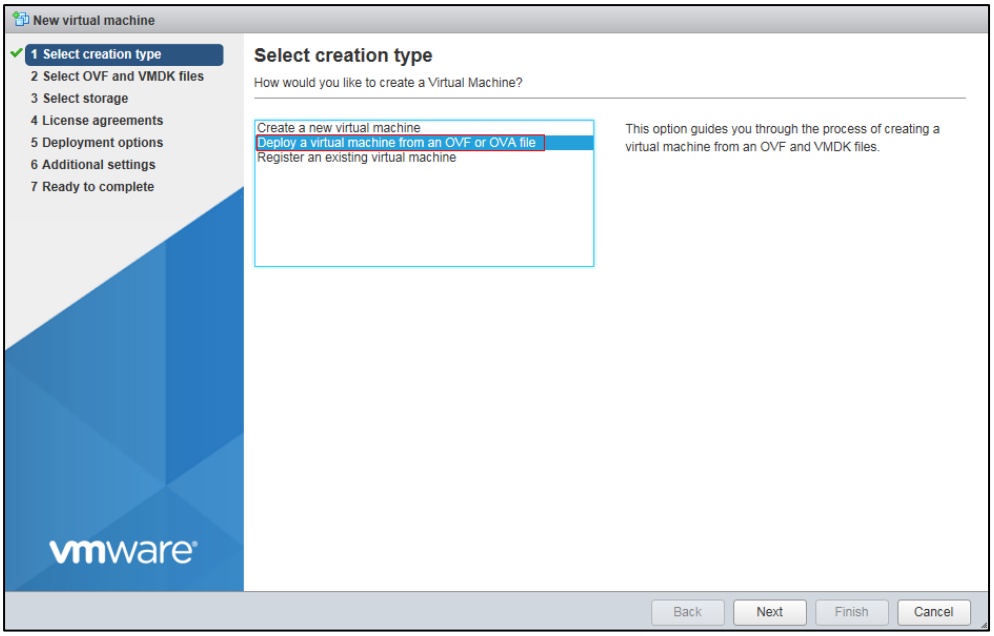
- You can obtain the YMS setup file from the Yealink distributor or Yealink technical support engineer, and the YMS setup file contains the OVF and VMDK file or OVA file.

Procedure:

1. Log into the ESXi host.
2. Click **Host** in the Navigator, and then select **Create/Register VM** to create a virtual machine.

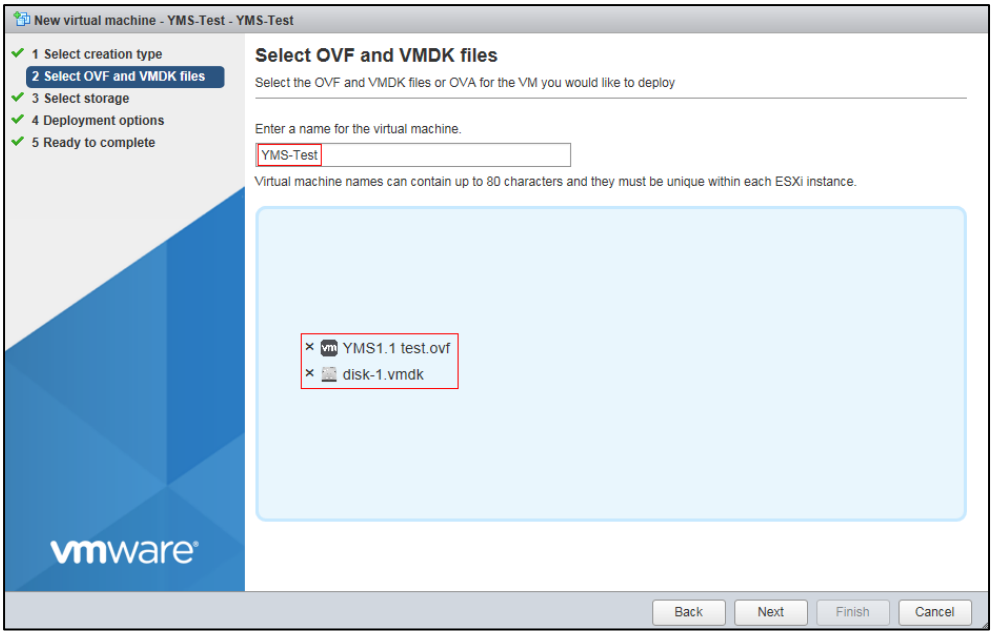


3. Select **Deploy a virtual machine from an OVF or OVA file**.



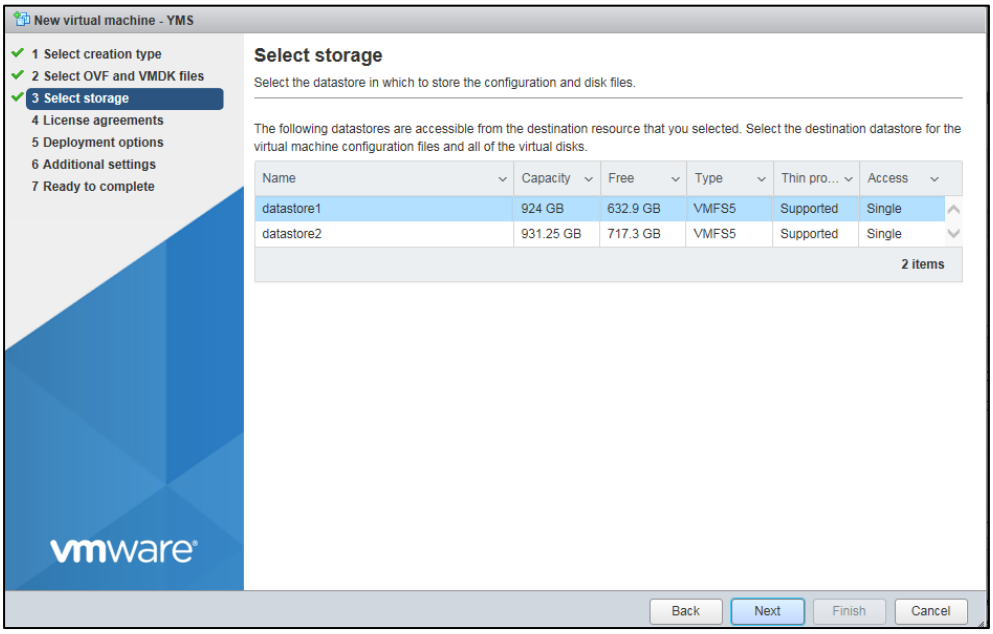
4. Click **Next** to continue.

5. Enter the name for the virtual machine, and then upload the OVF and VMDK file or OVA file.



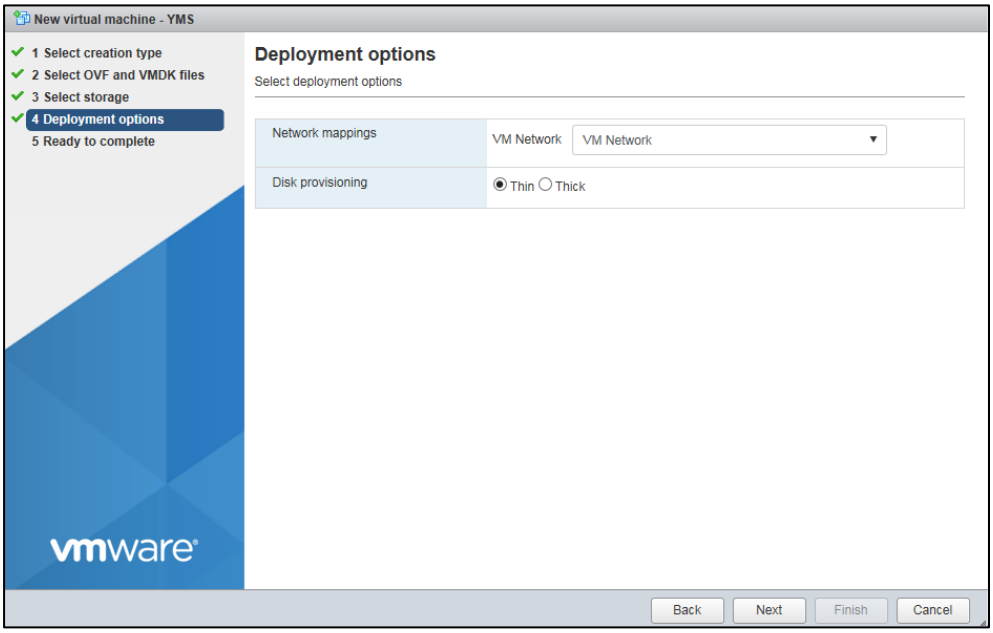
(Take the OVF and VMDK file as an example)

6. Click **Next** to continue.



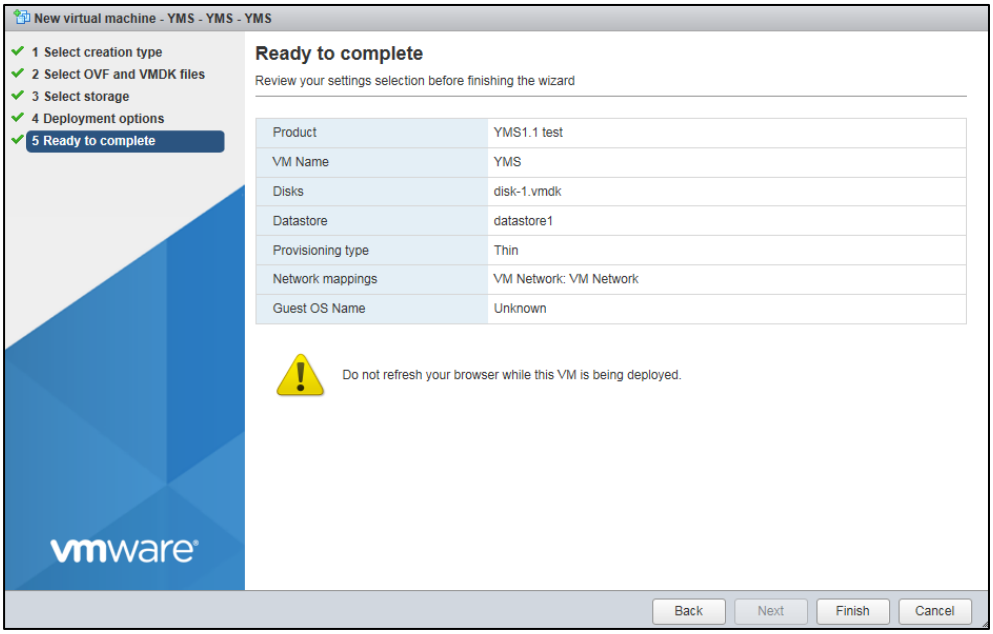
7. Select the default destination datastore for the virtual machine configuration files and all of the virtual disks.

8. Click **Next** to continue.



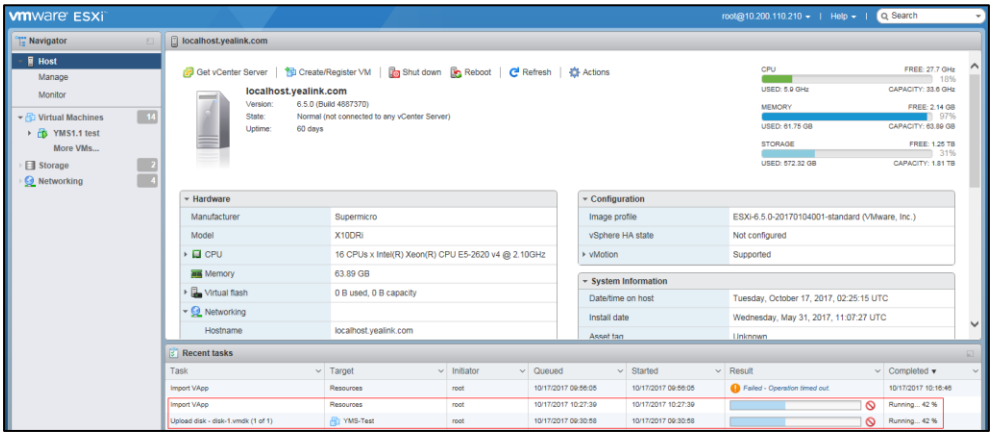
9. Select **VM Network** from the drop-down menu of **VM Network**, and then select **Thin** in the Disk provisioning field.

10. Click **Next** to continue.



11. Click **Finish**.

You can view the progress of uploading the files in the **Recent tasks** list.



After the files are uploaded successfully, the installation is completed.

Expanding the Stand-Alone YMS

For the stand-alone YMS, if you want to strengthen its MCU by making it become 1+N (N can be 1.2.3.4.5.6.....) with one master node and N business nodes, you can expand your YMS.

Before you begin:

- If the installation environment cannot access the external network, we recommend that you use CentOS 7.5 or later. If it can access the external network, the operating system can be CentOS 7.0 or later.
- The network among all of the nodes can be accessed. We recommend that all of the nodes can access the external network.
- YMS is not installed in all the business nodes.

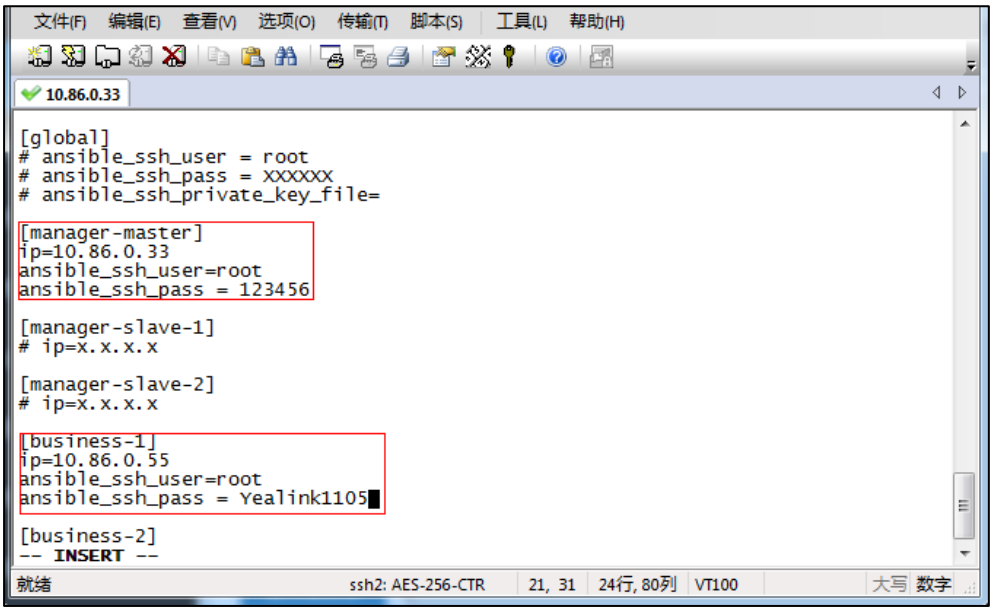
Procedure:

1. Use SecureCRT to log into CentOS via SSH to run the following command:

vi /usr/local/apollo/data/install.conf

2. Enter A to edit the configuration file.

For example, set 10.86.0.33 as the master node, and 10.86.0.55 as the business node.



3. Press Esc to exit, and run the following command:

:wq

cd /usr/local/apollo_install

./install.sh

The installation succeeds if the page displays the following part:

```
PLAY RECAP *********************************************************************
business-1                 : ok=609  changed=291  unreachable=0    failed=0
business-2                 : ok=609  changed=291  unreachable=0    failed=0
manager-master             : ok=1126 changed=541  unreachable=0    failed=0
```

Installing the Cluster YMS

There are two plans for installing cluster YMS:

Plan A: 1+N（N can be 1.2.3.4.5.6……）, 1 master node and N business nodes. It does not have the disaster recovery feature, but it has multiple business nodes, with good service capability and low coupling.

Plan B: 3+N（N can be 1.2.3.4.5.6……）, 1 master node, 2 sub-master nodes, and N business nodes. It has the disaster recovery feature (multi-machine backup feature).

Note that, there is no 2+N plan, that is 1 master node, 1 sub-master node and N business nodes. Because the sub-master node cannot be installed successfully, which makes it have the same effect as the plan A.

Before you begin:

- If the installation environment cannot access the external network, we recommend that you use CentOS 7.5 or later. If it can access the external network, the operating system can be CentOS 7.0 or later.
- The network among all of the nodes can be accessed. We recommend that all of the nodes can access the external network.
- YMS is not installed in all the business nodes.

Procedure:

1. Put the installation package in the path of /usr/local of the master node.

For example, upload the file to CentOS by using lrzsz, and you can do the following:

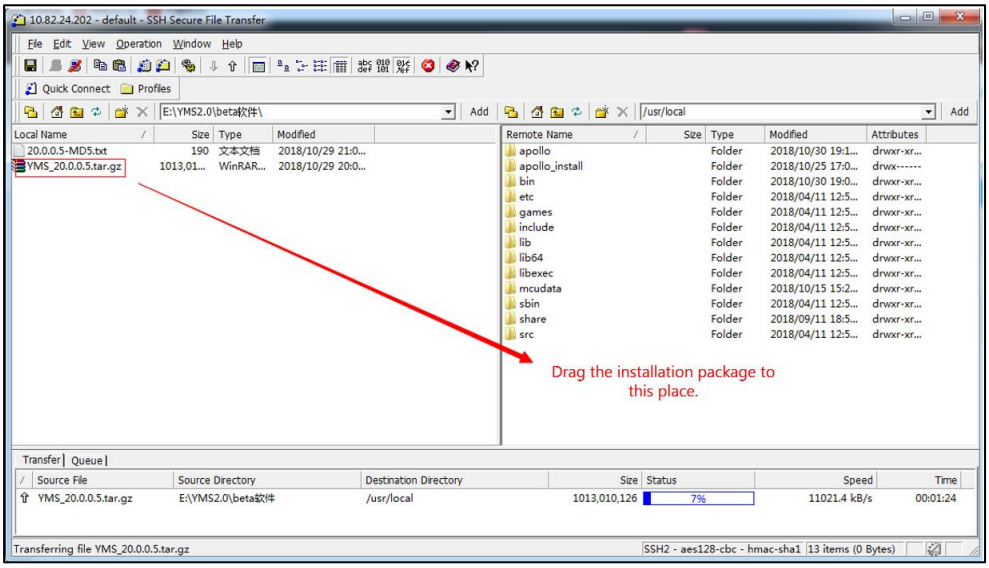
Use SecureCRT to go to CentOS via SSH and run the command below:

yum -y install lrzsz

cd /usr/local

rz

Select the installation package you want to upload.



2. Use SecureCRT to go to CentOS via SSH and run the following command:

cd /usr/local

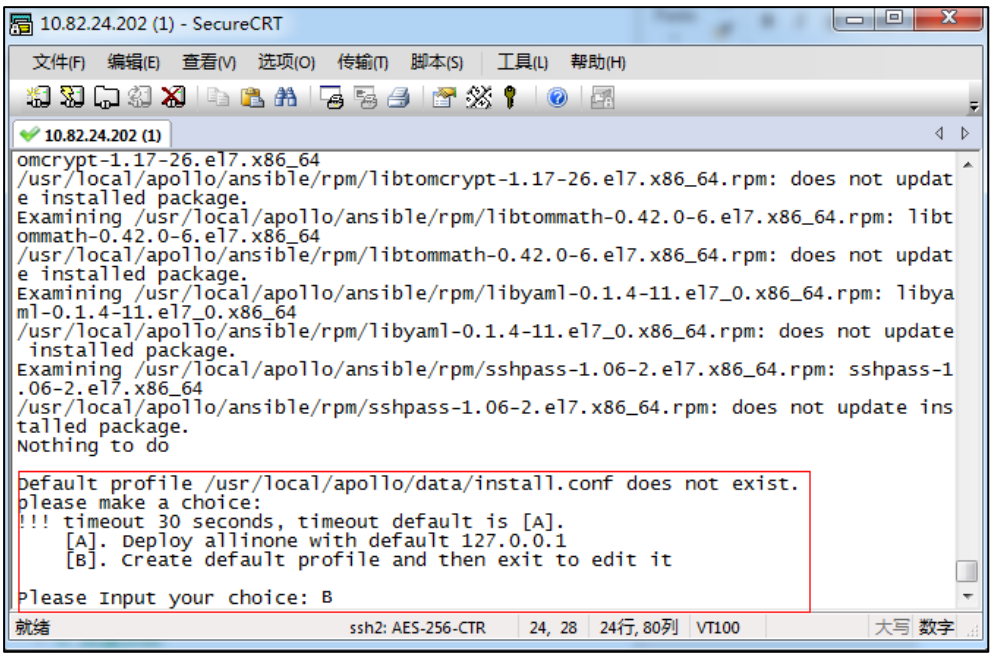
tar xvzf Apollo_21.0.0.10.tar.gz

cd apollo_install

tar xvzf install.tar.gz

./install.sh

3. Enter B to select the cluster installation.

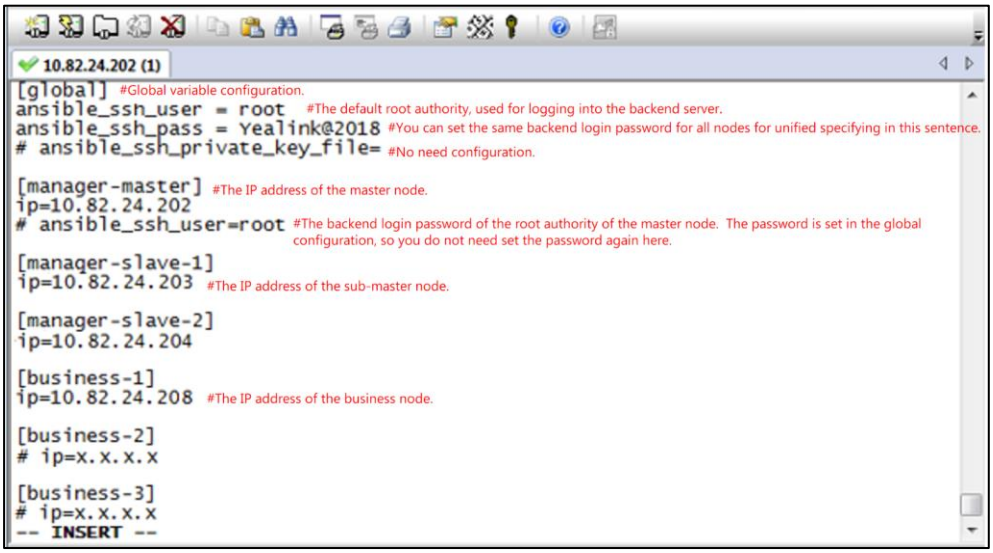


4. Run the command: vi /usr/local/apollo/data/install.conf

5. Enter A to edit the configuration file.

For example, set 10.86.0.202 as the master node, set 10.86.0.203 and 10.86.0.204 as the

sub-master nodes, and set 10.86.0.208 as the business node.

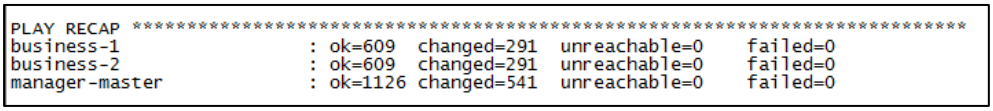


6. Press Esc to exit, and run the following command:

:wq

./install.sh

The installation succeeds if the page displays the following part:



Uninstalling YMS 2.0

Procedure (log into CentOS as the root user):

1. Open Terminal.
2. Run the command: ./apollo-uninstall

   For the cluster installation, you need to run this command on each node.
3. Enter the password which can be obtained from Yealink.

Customer Feedback

We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to *DocsFeedback@yealink.com*.

Technical Support

Visit Yealink WIKI (*http://support.yealink.com/*) for the latest firmware, guides, FAQ, Product documents, and more. For better service, we sincerely recommend you to use Yealink Ticketing system (*https://ticket.yealink.com*) to submit all your technical issues.