

Yealink Meeting Server Network Deploymeny Guide

Version 20.0.0.5 Dec.2018

About This Guide

This guide introduces how to deploy and configure YMS.

The deployment structure of YMS includes standard version and enterprise version, also called the stand-alone deployment and the cluster deployment.

In This Guide

This guide contains the following chapters:

- Stand-Alone Deployment on page 1
- Cluster Deployment on page 20

Summary of Changes

Changes for Release 20, Guide Version 20.0.0.5

The following section are new for this version:

• Cluster Deployment on page 20

Major updates have occurred to the following sections:

- Scenario 1: A Single Network Adapter in the Internal Network on page 1
- Scenario 2: A Single Network Adapter in the External Network on page 3
- Scenario 3: A Single Network Adapter and Static NAT on page 5
- Scenario 4: Dual Network Adapters in the Internal Network and the External Network on page 11
- Scenario 5: Dual Network Adapters and Static NAT on page 14

Changes for Release 23, Guide Version 10.23.0.60

Major updates have occurred to the following section:

Port Mapping Requirements on page 5

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Stand-Alone Deployment

Scenario 1: A Single Network Adapter in the Internal Network

Setting the Network

If you register YMS accounts, place point-to-point calls or join video conferences only in the internal network, you can deploy YMS by this method.

You just need configure the internal network adapter on YMS to finish the deployment.



Procedure:

- 1. Log into YMS, and click System Setting->Node Management.
- 2. Click i and the server will identity the IP address of the internal network adapter by default, and then configure the network parameter to ensure the network connectivity.

Note Make sure that DNS server is available. Otherwise, the service will be abnormal. The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. The web service address is used for the devices to access the server or the YMS contacts, to download the firmware from the server and so on.

Procedure:

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- 2. Configure the primary domain name and the web service address.

* Primary domain :	10.82.24.202.xip.io	
WEB service address :	Service network :	Service URL :
	Internal network	http://10.82.24.202

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Setting the Registration Service

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- **2.** Configure the registration service for the internal network.

Enabled :			
* Name :	internal registration		8
* Node :	Default(10.82.24.202)		~
Service address	*Network 10.82.24.202 + Add	*TLS Port 5061	×

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Registering the Device

The users in the internal network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

😧 System Settings				_ ×
Cloud Account	Cloud Account			
Basic Settings		Yealink Meeting Server	~	
🕋 Manual bind		2549	-	
Call Functions		a		T I '
📚 H.323 Registration		10.82.24.202.xip.io		 The primary domain name.
SIP Registration		Remember password		
SIP SIP IP Call		Advanced Options		The IP address
Device		10.02.12.11.204		network.
🐼 Network		Login		
E License	Basic Settings			
About	Site name	Yealink VC Desktop		
	Language	English	~	
	Start on boo	ot		

Scenario 2: A Single Network Adapter in the External Network

Setting the Network

If you register YMS accounts, place point-to-point calls or join video conferences only in the Internet, you can deploy YMS by this method.

You just need configure the external network adapter on YMS to finish the deployment.



Procedure:

Note

- **1.** Log into YMS, and click **System Setting**->**Node Management**.
- 2. Click ☑ on the right side of the default node, and the server will identity the IP address of the external network adapter by default, and then configure the network parameter to ensure the network connectivity.

Make sure that DNS server is available. Otherwise, the service will be abnormal. The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. The web service address is used for the devices to access the server or the YMS contacts, to download the firmware from the server and so on.

Procedure:

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- **2.** Configure the primary domain name and the web service address.

* Primary domain :	183.251.103.229.xip.xo			
WEB service address :	Service network :	Service URL :		
	External network	http://183.251.103.229		
	+ Add service address			

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Setting the Registration Service

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- 2. Configure the registration service for the external network.

Enabled :		
* Name :	External registration	\bigotimes
* Node :	Default(10.86.0.201)	~
Service address	*Network *TLS Port 183.251.103.229 5061 + Add) ×

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Registering the Device

The users in external network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

System Settings			_ × _
Cloud Account	Cloud Account		
Basic Settings		Yealink Meeting Server	-
Manual bind		2549	v
Call Functions			
📚 H.323 Registration		183.251.103.229.xip.io	domain name.
SIP Registration		✓ Remember password	
SIP SIP IP Call		Advanced Options	The IP address
Device		105.251.105.227	network.
Network		Login	
E License	Basic Settings		
About	Site name	Yealink VC Desktop	
	Language	English	▼
	Start on boo	t	

Scenario 3: A Single Network Adapter and Static NAT

Port Mapping Requirements

If the following ports are restricted in your network, you need open these ports. If YMS is deployed in an intranet, you should map the following ports to the Internet to realize the interconnection between the private and the Internet.

Module	Port	UDP/TCP	Description
	443	тср	HTTPS port
Web port	444	ТСР	YMS can be trusted by the Yealink devices even if the web HTTPS certificate is replaced by YMS.
	80	ТСР	HTTP port
Rsyslog log service port	514	UDP/TCP	YMS server can collect the device log via this port.
	1719	UDP/TCP	The RAS listener port of the gatekeeper.
H.323port	1720	UDP/TCP	The H.225 listener port of the gateway.
	1722	UDP/TCP	The H.225 listener port of the gatekeeper.

Module	Port	UDP/TCP	Description
	3478	UDP/TCP	The listener port of the traversal service.
Turnserver	3479	UDP/TCP	The backup listener port.
port	9688	UDP/TCP	This port, which has impact on the traversal service, should be mapped as long as there is IP mapping.
	5060	UDP/TCP	It is used for the IP call service.
	5061	UDP/TCP	It is used for the registration service.
SIP port	5062-5070	UDP/TCP	It is used for the third-party service, the PSTN gateway service, the peer trunk service, REG trunk service, and Skype for Business service.
Media port	10000-65535	UDP/TCP	It is used for the MCU service, IVR, BFCP/FECC, the conference stack signaling, the conference stack media, and the traversal service (UDP is compulsory but TCP is optional).

Setting the Network

To ensure the YMS security and maintain the internal network, you can deploy YMS in the internal network and map the address by static NAT through the router and YMS, so that users in external network can access YMS.



For example, a YMS in the internal network with the IP address 10.86.0.220 and the domain name 10.86.0.220.xip.io, after static NAT mapping, its IP address and domain name are 124.72.94.3 and yms220.yealink.com respectively. Therefore, the mapped IP address and domain name can be used by the user for access and registration. In order to make the user in the internal network can register accounts, we need configure another IP address on the internal network, that is IP address 10.86.0.221. Note that YMS is allowed to configure multiple IP addresses on one network adapter.

- 1. Log into YMS, and click System Setting->Node Management.
- 2. Click i on the right side of the default node, and configure the network parameter to ensure the network connectivity.
- 3. Click Add and configure the second IP address for this network adapter.

AddNetwork		
Enabled :		
Public IP :	OFF	
* Name :	10.86.0.221	
* IP address :	10.86.0.221	
* Subnet mask :	255.255.255.0	3
	Save	

- 4. Click Save.
- **5.** Select the corresponding IP address, and enable **Public IP** to allow the access and registration for the user in the external network.

Edit Node						
Enabled :						
* Node name :	Default(10.82.24.203)					
	Save Cancel					
		Network and Rou	iting Configuration			
ens32	Zenabled Network status : C	Connected				
	Network Gateway	DNS Routing Rules 📀				
	Selected 0					+ Add
	Name	IP Address	Subnet Mask	Public IP	Enabled	Operation
	10.86.0.220	10.86.0.220	255.255.255.0	ONO		Ľ

- 6. Click Save.
- **Note** Make sure that DNS server is available. Otherwise, the service will be abnormal. The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. For security reason, you can set the service addresses for the internal and external network respectively, to realize the separation of the internal and external network when the device is accessing the server or YMS contacts, downloading the firmware from the server.

Procedure:

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- 2. Configure the primary domain name and the web service address.

* Primary domain :	10.86.0.220.xip.io	
WEB service address :	Service network :	Service URL :
	Internal network	http://10.86.0.221
	External network	http://yms20.yealink.com
	+ Add service address	

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Setting the Registration Service

You can configure the registration service to allow the user in the internal and external network to register a YMS account.

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- 2. Configure the registration service for the internal network.

Add		
Enabled :		
* Name :	Internal registration	8
* Node :	10.86.0.220-stand-alone	~
Service address	*Network *TLS Port 10.86.0.221	×
Enable security policy	OFF	

- 3. Click Save.
- 4. Operate according to prompts and click OK.

5. Repeat the steps from 1 to 4 to configure the registration service for the external network.

Add		
Enabled :		
* Name :	Internal registration	8
* Node :	10.86.0.220-stand-alone	~
Service address	*Network *TLS Port	
	10.86.0.220 > 5061 + Add	×
Enable security policy	OFF	

After the configuration, the page is shown as below:

Registration Service				+ Add
Search	Q			
Selected 0				
Name	Node	Network(IP : Port)	Enabled	Operation
External registration	10.86.0.220-stand-alone	10.86.0.220(10.86.0.220)/5061		ß
Internal registration	10.86.0.220-stand-alone	10.86.0.221(10.86.0.221)/5061	ON	ß

Configuring the Address Port Mapping

When configuring the registration service for the external network, the port 5060 and 5061 of 10.86.0.220 are mapped to the port 5060 and 5061 of 124.72.94.3, therefore, you need add address port mapping on YMS.

- 1. Log into YMS, and click System Setting->Address Port Mapping->Add.
- **2.** Configure the address port mapping.

* Enable :	OFF
* Name :	address port mapping-1
* Public IP :	124.72.94.3
* Public Port :	5060 ~ 5061
* Internal IP :	10.86.0.220
* Internal Port :	5060 ~ 5061

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Registering the Device

The users in the internal network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

🛇 System Settings			_ × _
Cloud Account	Cloud Account		
Basic Settings		Yealink Meeting Server 👻	
Manual bind		1 2549 •	
Call Functions			TI .
H.323 Registration		10.86.0.220.xip.io	domain name.
SIP Registration		Remember password	
SIP SIP IP Call		Advanced Options	The IP address
Device		10.00.0.221	network.
Network		Login	
E License	Basic Settings		
About	Site name	Yealink VC Desktop	
	Language	English 💌	
	Start on boot	:	

The users in external network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

System Settings				_ × _
Cloud Account	Cloud Account			
🛟 Basic Settings		Yealink Meeting Server	~	
🕿 Manual bind		1 2549	~	
Call Functions				T I .
📚 H.323 Registration		10.86.0.220.xip.io		domain name.
SIP Registration		Remember password		The NAT IP
SIP SIP IP Call		Advanced Options		address of the
Device				external network.
Network		Login		
E License	Basic Settings			
About	Site name	Yealink VC Desktop		
	Language	English		
	Start on boo	t		

Scenario 4: Dual Network Adapters in the Internal Network and the External Network

Setting the Network

If you register YMS accounts, place point-to-point calls or join video conferences in both the internal network and the Internet, you can deploy YMS by this method.

You need configure the internal and external network adapter on YMS to finish the deployment.



- 1. Log into YMS, and click System Setting->Node Management.
- 2. Click i and the server will identity the IP addresses of the internal and external network adapters by default, and then configure the network parameter to ensure the network connectivity.
- 3. Select the desired adapter, and enable Public IP.
- 4. Click Save.

Note Make sure that DNS server is available. Otherwise, the service will be abnormal. The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. For security reason, you can set the service addresses for the internal and external network respectively, to realize the separation of the internal and external network when the device is accessing the server or YMS contacts, downloading the firmware from the server.

Procedure:

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- 2. Configure the primary domain name and the web service address.

* Primary domain :	10.86.0.201.xip.io				
WEB service address :	Service network :	Service URL :			
	Internal network	http://10.86.0.201/			
	External network	http://183.251.103.229			
	+ Add service address				

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Setting the Registration Service

You can configure the registration service to allow the user in both the internal and external network to register a YMS account.

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- 2. Configure the registration service for the internal network.

Add		
Enabled :		
* Name :	Internal registration	\otimes
* Node :	Default(10.86.0.201)	~
Service address	*Network *TLS Port 10.86.0.221 5061 + Add	×
Enable security policy	OFF	

- 3. Click Save.
- 4. Operate according to prompts and click OK.

5. Repeat the steps from 1 to 4 to configure the registration service for the external network.

Add		
Enabled :		
* Name :	External registration	8
* Node :	Default(10.86.0.201)	~
Service address	*Network *TLS Port 183.251.103.229 5061 + Add	×
Enable security policy	OFF	

After the configuration, the page is shown as below:

Registra	Registration Service				
Search	1	Q			
Selee	cted 0 👼 Delete				
	Name	Node	Network(IP : Port)	Enabled	Operation
	External registration	Default(10.86.0.201)	183.251.103.229(183.251.103.229)/5061		Ľ
	Internal registration	Default(10.86.0.201)	10.86.0.201(10.86.0.221)/5061		

Registering the Device

The users in the internal network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

			_ ×
Cloud Account	Cloud Account		
Basic Settings		Yealink Meeting Server	
Manual bind		1 2549	
Call Functions			
H.323 Registration		10.82.24.201.xip.io	domain name.
SIP SIP Registration		✓ Remember password	
SIP IP Call		Advanced Options	The IP address
Device		10.02.24.201	network.
Network		Login	
E License	Basic Settings		
About	Site name	Yealink VC Desktop	
	Language	English	r
	Start on boot	t	

The users in the external network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

System Settings			_ ×
Cloud Account	Cloud Account		
Basic Settings		Yealink Meeting Server 👻	
Manual bind		1 2549 •]
Call Functions]
H.323 Registration		10.82.24.201.xip.io	domain name.
SIP Registration		✓ Remember password	
SIP SIP IP Call		Advanced Options	The IP address
Device		105.251.105.225	network.
Network		Login	
E License	Basic Settings		
About	Site name	Yealink VC Desktop]
	Language	English 💌]
	Start on boot	t	

Scenario 5: Dual Network Adapters and Static NAT

Port Mapping Requirements

If the following ports are restricted in your network environment, you need open these ports. If the YMS is deployed in an intranet, you should map the following ports to the Internet on the router to realize the interconnection between the private and the Internet.

Module	Port	UDP/TCP Description	
	443	ТСР	HTTPS port
Web port	444	ТСР	YMS can be trusted by the Yealink devices even if the web HTTPS certificate is replaced by YMS.
	80	ТСР	HTTP port
Rsyslog log service port	514	UDP/TCP	YMS server can collect the device log via this port.
H.323port	1719	UDP/TCP	The RAS listener port of the gatekeeper.
	1720	UDP/TCP	The H.225 listener port of the gateway.
	1722	UDP/TCP	The H.225 listener port of the gatekeeper.
Turnserver	3478	UDP/TCP	The listener port of the traversal service.
port	3479	UDP/TCP	The backup listener port.
	9688	UDP/TCP	This port, which has impact on the

Module	Port	UDP/TCP	Description
			traversal service, should be mapped as long as there is IP mapping.
	5060	UDP/TCP	It is used for the IP call service.
	5061	UDP/TCP	It is used for the registration service.
SIP port	5062-5070	UDP/TCP	It is used for the third-party service, the PSTN gateway service, the peer trunk service, the REG trunk service, and Skype for Business service.
Media port 10000-65535 UDP/TCP		UDP/TCP	It is used for the MCU service, IVR, BFCP/FECC, the conference stack signaling, the conference stack media, and the traversal service (UDP is compulsory but TCP is optional).

Setting the Network

To ensure the YMS security and maintain the internal network, you can deploy YMS in the internal network and configure the address by static NAT mapping through the router and YMS, so that users in external network can access YMS.

You need configure the internal and external network adapter on YMS to finish the deployment.



For example, a server in the internal network, with the IP address of LAN port as 10.82.24.149 and the primary domain name as 10.82.24.149.xip.io, is used for the user in the internal network to access and register. The IP address (10.81.62.14) and domain name of this server's WAN port, after the static NAT mapping, is 218.107.197.142 and ymstest2.yealink.com respectively, which can be used for the user in the external network to access and register.

- 1. Log into YMS, and click System Setting->Node Management.
- 2. Click i and the server will identity the IP addresses of the internal and external network adapter by default, and then configure the network parameter to ensure the network connectivity.
- 3. Select the desired adapter, and enable Public IP.

✓ Enabled Network stat	us : Connected				
Network Gateway	DNS Routing Rules 🕢				
Selected 0					+ Add
Name	IP Address	Subnet Mask	Public IP	Enabled	Operation
10.81.62.14	10.81.62.14	255.255.255.0			ß

4. Click Save.

Note

Make sure that DNS server is available. Otherwise, the service will be abnormal. The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. For security reason, you can set the service addresses for the internal and external network respectively, to realize the separation of the internal and external network when the device is accessing the server or YMS contacts, downloading the firmware from the server.

Procedure:

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- 2. Configure the primary domain name and the web service address.

* Primary domain :	10.82.24.149.xip.io	
WEB service address :	Service network :	Service URL :
	Internal network	http://10.82.24.149
	External network	http://ymstest2.yealink.com
	+ Add service address	

3. Click Save.

4. Operate according to prompts and click OK.

Setting the Registration Service

You can configure the registration service to allow the user in the internal and external network to register a YMS account.

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- 2. Configure the registration service for the internal network.

Add					
Enabled :					
* Name :	Internal registration	8			
* Node :	Default(10.82.24.149)				
Service address	*Network *TLS Port 10.82.24.149 5061 + Add	×			
Enable security policy	OFF				

- 3. Click Save.
- 4. Operate according to prompts and click **OK**.

5. Repeat the steps from 1 to 4 to configure the registration service for the external network.

Add		
Enabled :		
* Name :	External registration	
* Node :	Default(10.82.24.149)	~
Service address	*Network *TLS Port 10.81.62.14 + Add	×
Enable security policy	OFF	

After the configuration, the page is shown as below:

Registration Service + Add					
Search	h	Q			
Sele	cted 0 🗇 Delete				
	Name	Node	Network(IP : Port)	Enabled	Operation
	External registration	Default(10.82.24.149)	10.81.62.14(10.81.62.14)/5061		ß
	Internal registration	Default(10.82.24.149)	10.82.24.149(10.82.24.149)/5061		ß

Configuring the Address Port Mapping

Because the port 5060 and 5061 of 10.81.62.14 are mapped to the port 5060 and 5061 of 218.107.197.142, you need add address port mapping on YMS.

- 1. Log into YMS, and click System Setting->Address Port Mapping->Add.
- 2. Configure the address port mapping.

* Enable :				
* Name :	address port mapping-1			
* Public IP :	218.107.197.142			
* Public Port :	5060	2	5061	
* Internal IP :	10.81.62.14		~	
* Internal Port :	5060	~	5061	

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Registering the Device

The users in the internal network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

🕑 System Settings				_ × _
Cloud Account	Cloud Account			
Basic Settings		Yealink Meeting Server	T	
🕿 Manual bind		1 2549	Ŧ	
Call Functions				
📚 H.323 Registration		10.82.24.149.xip.io		domain name.
SIP Registration		Remember password		
SIP IP Call		Advanced Options		The IP address
Device				network.
Network		Login		
E License	Basic Settings			
1 About	Site name	Yealink VC Desktop		
	Language	English	▼	
	Start on boo	ot		

System Settings				_ ×
Cloud Account	Cloud Account			
🔅 Basic Settings		Yealink Meeting Server	Ŧ	
🔷 Manual bind		2549	-	
🕸 Call Functions				
😻 H.323 Registration		10.82.24.149.xip.io		 The primary domain name.
SIP Registration		Remember password		
SIP SIP IP Call		Advanced Options		address of the
Device		210.107.197.142		external
Network		Login		incliveria.
E License	Basic Settings			
About	Site name	Yealink VC Desktop		
	Language	English		
	Start on boo	ot		

The users in external network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

Cluster Deployment

If your enterprise uses cluster deployment, you need configure each node according to the deployment plan.

The following part takes this environment as an example and introduces how to configure the registration service. For other services, refer to Yealink Meeting Service Administrator Guide.



The above topology IP is described as below:

- Three master nodes: 10.86.254.11 (the master node), 10.86.254.12 (the sub-master node), 10.86.254.13 (the sub-master node), with 10.86.254.10 and 10.86.254.11 configured on one network adapter and 10.86.254.10 mapped to the external network 110.87.96.14 by NAT.
- Nine business nodes which include the following:

Three edge nodes (providing signaling service): 172.17.2.21, 172.17.2.22, 172.17.2.23, with 172.17.2.41 and 172.17.2.21 configured on one network adapter and 172.17.2.41 mapped to the external network 110.87.96.14 by NAT.

Three edge nodes (providing media service): 172.17.2.11, 172.17.2.12, 172.17.2.13, with 172.17.2.31 and 172.17.2.11 configured on one network adapter and 172.17.2.31 mapped to the external network 110.87.96.14 by NAT.

Three MCUs: 10.86.254.21, 10.86.254.22, 10.86.254.23.

Port Mapping Requirements

If the following ports are restricted in your network environment, you need open these ports. If the YMS is deployed in an intranet, you should map the following ports to the Internet on the router and YMS to realize the interconnection between the private and the Internet.

Requirements of the internal service port: make sure that the following ports in every node of the cluster can communicate with each other.

Port	UDP/TCP	Description	
8000-9000	UDP+TCP	The internal service port.	
27017	UDP+TCP	This port is used for database accessing.	
22	ТСР	This port is used for installing or upgrading YMS by SSH.	

Requirements	for	the	External	Service	Port:
--------------	-----	-----	----------	---------	-------

Module	Port	UDP/TCP	The detailed mapping information based on the above network topology
	443	ТСР	Map the port 443 of 172.17.2.41 to the port 8443 of the external network 110.87.96.14.
Web port	444	ТСР	unmapped
	80	UDP/TCP	Map the port 80 of 172.17.2.41 to the port 8080) of the external network 110.87.96.14.
Rsyslog service log port	514	UDP/TCP	unmapped
	1719	UDP/TCP	Map a port (from 1719 to
H.323 port	1720	UDP/TCP	1722) of 172.17.2.41 to a port (from 1719 to 1722) of the
	1722	UDP/TCP	external network 110.87.96.14.
	3478	UDP/TCP	Map a port (from 3478 to
Turnserver port	3479	UDP/TCP	34/9) of 1/2.1/.2.31 to a port (from 3478 to 3479) of the external network 110.87.96.14.
	9688	UDP/TCP	unmapped
	5060	UDP/TCP	Map a port (from 5060 to
SIP port	5061	UDP/TCP	5061) of 172.17.2.41 to a port (from 5060 to 5061) of the external network 110.87.96.14.
	5062-5070	UDP/TCP	unmapped
Media Port	10000-65535	UDP/TCP	Map a port (from 10000 to 29999) of 172.17.2.41 to a port (from 10000 to 29999) of the external network 110.87.96.14.

Setting the Network

You need configure the internal network to ensure a smooth internal network first and then configure the external network mapping. Note that the name of each node is default, you can edit them for convenient management and recognition.

Procedure:

- 1. Log into YMS, and click System Setting->Node Management.
- 2. Click and the server will identity the IP address of each node by default, and configure the network parameter to ensure the network connectivity.

Node I	Node Management							
Search	1	Q						
Selec	tted 0							
	Name 💠	IP List	CPU	Memory	Status	Description	Enabled	Operation
	YMS-manager-1	10.86.254.11	16 * 2.10GHz	20.6GB	Online		ON	
	YMS-manager-3	10.86.254.13	16 * 2.10GHz	20.6GB	Online			Z 🗠
	YMS-manager-2	10.86.254.12	16 * 2.10GHz	20.6GB	Online			ı 🗠
	YMS-edge-media-1	172.17.2.11,172.17	8 * 2.40GHz	8.0GB	Online			
	YMS-edge-signal-2	172.17.2.22	8 * 2.40GHz	12.1GB	Online			2 k
	YMS-mcu-1	10.86.254.21	8 * 2.10GHz	16.3GB	Online			2 12
	YMS-mcu-3	10.86.254.23	8 * 2.10GHz	16.3GB	Online			
	YMS-edge-media-3	172.17.2.13	8 * 2.40GHz	8.0GB	Online			2 🗠
	YMS-edge-signal-3	172.17.2.23	8 * 2.40GHz	12.1GB	Online			

Note

Make sure that DNS server is available. Otherwise, the service will be abnormal.

The routing rules came with the server cannot be deleted. If they are deleted, other added routing rules will be abnormal.

You cannot edit the IP address of the master node on the management platform but you can edit it in the installation file and re-install it.

Setting the Primary Domain Name and the Web Service Address

When you register an account, the server address you enter is the primary domain name. For security reason, you can set the service addresses for the internal and external network respectively, to realize the separation of the internal and external network when the device is accessing the server or YMS contacts, downloading the firmware from the server.

- 1. Log into YMS, and click System Setting->Common Setting->Network Association.
- 2. Configure the primary domain name and the web service address.

WEB service address :	Service network :		Service URL :	
	Internal network	~	https://10.86.254.11	×
	External network	~	https://110.87.96.14:8443	⊗ ×
	+ Add service address			

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Configuring the Address Port Mapping

Because the port 443 of the internal network 172.17.2.41 is mapped to the port 8443 of the external network 110.87.96.14, you need add address port mapping on YMS.

Procedure:

- 1. Log into YMS, and click System Setting->Address Port Mapping->Add.
- 2. Configure the address port mapping.

* Name :	Address port mapping-1		
* Public IP :	110.87.96.14		
* Public Port :	8443	~	8443
* Internal IP :	172.17.2.41		~
* Internal Port :	443	~	443

- 3. Click Save.
- 4. Operate according to prompts and click **OK**.

Setting the Registration Service

You can configure the registration service to allow the user in the internal and external network to register a YMS account.

- 1. Log into YMS, and click Service->SIP Service->Registration Service->Add.
- 2. Configure the registration service for the internal network.

Selec	tted 0 👼 Delete			
	Name	Node	Network(IP : Port)	Enabled
	Internal registration 1	YMS-edge-signal-1	172.17.2.41(172.17.2.41:5061)	OFF
	Internal registration 2	YMS-manager-1	YMS-manager-1(10.86.254.11:5061)	ON

3. Configure the registration service for the external network.

For example, add 172.17.2.41 (introduced in the above topology) to the server address.

Enabled :		
* Name :	external registration-1	
* Node :	YMS-edge-signal-1	~
Service address	*Network *TLS Port 172.17.2.41 (Enabled) 5061 4 Add	

After the configuration, the page is shown as below:

Selec	Selected 0						
	Name	Node	Network(IP : Port)	Enabled			
	external registration	YMS-edge-signal-1	172.17.2.41(172.17.2.41:5061)				
	Internal registration 1	YMS-edge-signal-1	172.17.2.41(172.17.2.41:5061)	OFF			
	Internal registration 2	YMS-manager-1	YMS-manager-1(10.86.254.11:5061)	ON			

Configuring the Address Port Mapping

Because the port 5060 and 5061 of 172.17.2.41 are mapped to the port 5060 and 5061 of 110.87.96.14, you need add address port mapping on YMS.

- 1. Log into YMS, and click System Setting->Address Port Mapping->Add.
- 2. Configure the address port mapping.

* Name :	edge signaling-1		
* Public IP :	110.87.96.14		
* Public Port :	5060	~	5061
* Internal IP :	172.17.2.41		×]
* Internal Port :	5060	~	5061

- 3. Click Save.
- 4. Operate according to prompts and click OK.

Registering the Device

The users in the internal and external network can register YMS accounts via Yealink VC Desktop. It is shown as the picture below:

\otimes	System Settings					_ ×
•	Cloud Account	Cloud Account				
₽	Basic Settings		Yealink Meeting Server	Ŧ		
6	Manual bind		1 2549	w.		
¢	Call Functions		A •••••			-
۲	H.323 Registration		ytkc.yealinkops.com		-	The primary domain name.
SIP	SIP Registration		🗹 Remember password			
SIP	SIP IP Call		Advanced Options •			
0)	Device		Login			
100	Network	Basic Settings				
	License	Site name	Yealink VC Desktop			
0	About	Language	English	Ŧ		
		Start on boot				
		Manual bind				

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