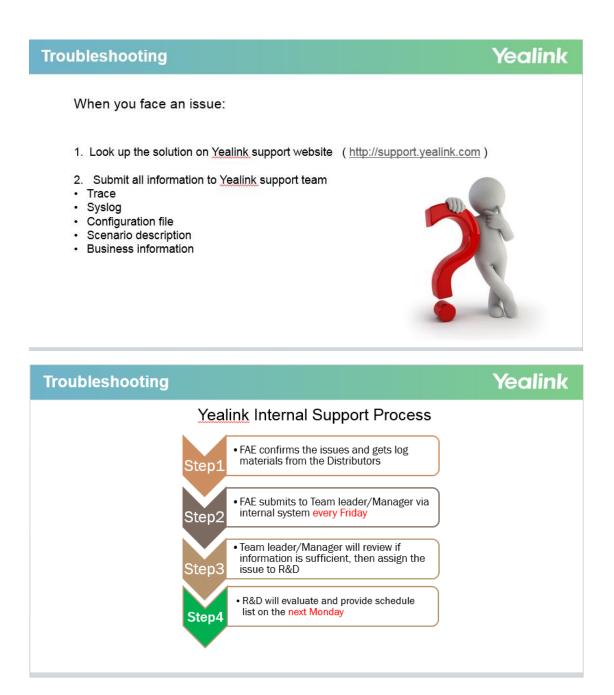
How to Do the Troubleshooting

Version	Change log	Editor	Review	Approval	Date
V1. 0	How to do the troubleshooting	Wilson			2017-8
V2. 0	Update the format ,change the info based on new product and new version features	Nicole			2017-9-11
V2.1	Update the key of trace capture	Gerry			2018-1-3
V3.0	Add how to do YMS troubleshooting Update the info based on new product and new version features	Wilson			2018-4-26

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1. Yealink Internal Support Process



2. Yealink Meeting Server (YMS)

2.1 Capturing Packets

To connect to the YMS via SSH connection.

The command to Start PCAP Trace.

tcpdump -i any -s 0 -w /tmp/test.pcap

The command to download to local tmp directory.

sz /tmp/test.pcap

2.2 Server Logs

2.2.1Syslog Server Settings

You can configure remote syslog server to collect operation logs and system logs.

To configure the syslog server settings:

- 1. Click System->System Log->Server log.
- 2. On the top-right of page, click Syslog server settings.

3. Configure the syslog server.

Syslog server settings	
Server address	10.2.61.200
	The IP address of the remote syslog server.
Port(1~65535)*	514
	The port on the remote syslog server.
Transport protocol*	UDP
	The transport protocol used to connect to the remote syslog server.
	Confirm Cancel

Parameters are described below:

Parameter	Description							
Server	Specify the IP address of the remote syslog							
address	server.							
Port	Specify the port on the remote syslog server.							
(1~65535)	Default: 514							
	Configure the type of transport protocol used to communicate with the remote syslog server.							
Transport protocol	 UDP—provides best-effort transport via UDP. TCP—provides reliable transport via TCP. TLS—provides secure communication. 							
	Default: UDP							

4. Click Confirm.

2.2.20peration Logs

Operation logs record the change logs, including access logs or

configuration changes.

To view the operation log:

- 1. Click System->System Log->Server log.
- 2. Select **Operation log** to enter the page of operation log.
- 3. Click Today, Nearly 3 days, Nearly 7 days or All, the page will display the operation log during the selected time.

You can also select the start time and end time in the date selection box.

/ste	m log													୍ଦ୍ର	Syslog	j serve	er setti
		O	peration log								S	ystem	log				
ſoda	y Nearly	y 3 days Nearl	y 7 days All	2017-0	7-0 4 -	- 2017-	-07-04			Search	1					Q	
	Export			+		Ju	ıl 2017			→	÷		Ju	ıl 2017	,		
	Name	IP address	Operation m	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	admin	10.2.5.29	Login module	26	27	28	29	30	1	2	26	27	28	29	30	1	2
		40.0 54 475		3	4	5	6	7	8	9	3	4	5	6	7	8	9
2	9999	10.2.61.176	Login module	10	11	12	13	14	15	16	10	11	12	13	14	15	16
3	admin	10.2.61.156	Login module	17	18	19	20	21	22	23	17	18	19	20	21	22	23
4	admin	10.2.5.29	Login module	24	25	26	27	28	29	30	24	25	26	27	28	29	30
5	admin	10.2.5.29	Login module	31	1	2	3	4	5	6	31	1	2	3	4	5	6
6	1036	10.2.62.103	Login module							Confir	m Ca	ancel					

4. Click Export to export the operation logs.

The following is an example of operation logs:

NO.	UserName	Module Menu	OperationTime	Remark
1	admin	SystemManager Configuration backup/restore	2016-12-07T16:02:41Z	Download the backup successful!
2	admin	Login Login	2016-12-07T16:01:05Z	Account:admin login success!
3	admin	Login Login	2016-12-07T15:57:10Z	Account:admin login success!
4	2221	Login Login	2016-12-07T15:56:45Z	Account:2221 login success!
5	admin	Login Login	2016-12-07T15:42:32Z	Account:admin login success!
6	admin	SystemManager Configuration backup/restore	2016-12-07T15:36:05Z	Download the backup successful!
7	admin	SystemManager Configuration backup/restore	2016-12-07T15:36:01Z	Download the backup successful!
8	admin	SystemManager/TerminalAutoUpgrade	2016-12-07T15:21:53Z	Delete termianl config success!
9	admin	翌录模块 登录模块	2016-12-07T15:19:28Z	账号admin登录成功!
10	4201	Login Login	2016-12-07T15:18:53Z	Account:4201 login success!
11	4201	Login Login	2016-12-07T15:17:31Z	Account:4201 login success!
12	admin	翌录模块 登录模块	2016-12-07T15:16:34Z	账号admin登录成功!
13	2221	Login Login	2016-12-07T15:14:44Z	Account:2221 login success!
14	admin	Login Login	2016-12-07T15:14:31Z	Logout success!
15	1222	Login Login	2016-12-07T15:13:08Z	Account: 1222 login success!
16	admin	登录模块 登录模块	2016-12-07T15:10:39Z	账号admin登录成功!
17	1256	登录模块 登录模块	2016-12-07T15:08:35Z	账号1256登录成功!
18	admin	Login Login	2016-12-07T15:02:09Z	Account:admin login success!
19	admin	SystemManager/TerminalAutoUpgrade	2016-12-07T15:00:53Z	Add termianl config success!
20	4004	Login Login	2016-12-07T14:57:18Z	Account:4004 login success!
21	4004	Login Login	2016-12-07T14:57:16Z	Account:4004 login success!
22	admin	Login Login	2016-12-07T14:57:02Z	Logout success!
23	4004	Login Login	2016-12-07T14:56:44Z	Account:4004 login success!
24	4004	Login Login	2016-12-07T14:56:39Z	Account:4004 login success!
25	admin	Login Login	2016-12-07T14:56:34Z	Logout success!
26	4002	Login Login	2016-12-07T14:55:41Z	Account:4002 login success!
27	admin	Login Login	2016-12-07T14:55:33Z	Logout success!

2.2.3System Logs

System logs record conference logs.

You can export Web, FreeSwitch, MCU, TURN, WebRTC or GateKeeper logs and save these in your computer to view logs.

To view the system log:

- 1. Click Maintenance->Support Log->Server log.
- 2. Select System log to enter the page of system log.
- 3. Select the desired type of system logs, and then click **Signaling**, **media**, **Web**, or system, the selected type is blue.

Operation Log	System Log	Device Log							
Please select the d	esired time to expo	ort logs :							
2018-12-24	-	2018-12-24	Export Syslog						
Please select the module that need to export server logs									
🗹 Signalling 🛛 🗸	Media 🛛 Web	🗸 System							

4. Click Today, Nearly 3 days, Nearly 7 days or All.

You can also select the start time and end time in the date selection box.

Fiease	select t	he des	ired t	ime to e	export	logs :	
iii 20	018-12-3	24		-		2018-1	2-24 Export Syslog
«	<	2018	3年	12月	>	> >>	ver logs
日	_	=	Ξ	四	五	六	
25	26	27	28	29	30	1	r logs
2	3	4	5	6	7	8	Selected nodes (0)
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	

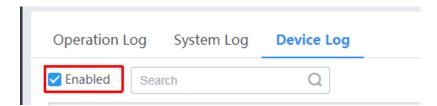
5. Click Export to export the system logs and save in your computer to view system logs.

2.3 Device Logs

You can enable the **Device log** feature. After you enable it, the device logs will occupy a certain amount of bandwidth. System's actual performance may vary based on the number of devices. Device logs contain SIP information, when devices interact with YMS, the information are generated.

To view the device log:

- 1. Click Maintenance->Support Log->Device log.
- 2. Check the Enable checkbox to enable the Device log feature.



3. Click on the right download device log.

Operation Log System Log	Device Log				
C Enabled Search	Q		Please sel	ect the desired time to export logs :	2018-12-24 - 2018-12-24
Name	Account	Device Model	IP Address	Online/Offline	Operation
六二0八	6208	T49G	10.81.43.28	Online	<u>.</u>
六二	6211	T49G	10.81.43.18	Online	t.
七四00	7400 6211	Test	10.86.0.211	Online	<u>,</u>

3 VCS

Troubleshooting Methods

The system can provide feedback in a variety of forms, such as log files, packets, status indicators and so on, which can help an administrator to find the system problem more easily and resolve it.

The following sections will help you to better understand and resolve the working status of the system.

- •Viewing Log Files
- •Capturing Packets
- •Getting Information from Status Indicators
- •Analyzing Configuration Files
- •Viewing Call Statistics
- •Using Diagnostic Methods

3.1 Viewing Log Files

The log files are Yealink specific debug files which may be requested by the Yealink support organization if you need technical support. The current log files are time stamped event log files. You can export the log files to a syslog server or the local system. The administrator can specify the location where the log will be exported to and the severity level of the log. System Log Level specifies the log level to be recorded. The default system log level is 6.

System log level parameters are described below:

Parameter	Description	Configuration Method
	Specify where the system log will be exported. Valid values:	
Export System Log	 Local-export the system log to the local computer. Server-export the 	Web User Interface
	system log to the specified server. Default: Local	
Server Name	Specifytheserveraddresswherethelogbeexported.Note:Itparameter"ExportSystemLog"issetto	Web User Interface
System Log Level	Specify the system log level. Note: The supported level is 0-6.	Web User Interface

Parameter	Description	Configuration Method
	Higher value indicates	
	more detailed content.	
	Default : 6	

To configure the system log level via web user interface:

- 1. Click on Setting->Configuration.
- 2. Select the desired level from the pull-down list of System Log Level.

					A	bout	Language v	Logo	ut
Yealink vc800	Home	Status	Account	Networ	k E	Setting	Direc	tory	Security
General	Imp	oort Configuration					Browse	Import	t
Date & Time	Exp	ort Configuration		Export					
Call Features		-							
Video & Audio									
Camera	Pca	p Feature		Start	Stop	Expo	ort		
Auto-Provision	Pac	ket Capture Coun	t	5					
Configuration	Pac	ket Capture Clip E	Bytes	1024					
Upgrade	Pca	p Filter Type		Custom		•			
Tones									
Wireless Micphone	Paci	ket Filter String							
3rd-Party VMR									
Conference Setting	Exp	ort System Log		Eocal	Serv	ver Ex	port		
Remote Control									
	Syst	tem Log Level		6		•			

3. Click Confirm to accept the change.

To export a log file to the local system via web user interface:

1. Click on Setting->Configuration.

2. Mark the Local radio box In the Export System Log field.

				About	Language 🔻	Logout
Yealink vc800	Home Status	Account	Network	Setting	Direct	ory Security
General	Import Configuratior	ı			Browse	Import
Date & Time	Export Configuration	1	Export			
Call Features			Liport			
Video & Audio						
Camera	Pcap Feature		Start	top	ort	
Auto-Provision	Packet Capture Cour	nt	5			
Configuration	Packet Capture Clip I	Bytes	1024			
Upgrade	Pcap Filter Type		Custom	Ţ		
Tones						
Wireless Micphone	Packet Filter String					
3rd-Party VMR						
Conference Setting	Export System Log		🖲 Local 🛛	Server Ex	port	
Remote Control						
	System Log Level		6	T		

3. Click Export to open the file download window, and then save the file to your local system.

The following figure shows a portion of a log file:

496 root	8876 SW /yealink/bin/ggsvca_ipp
497 root	8876 SW /yealink/bin/ggsvca_ipp
498 root	8876 SW /yealink/bin/ggsvca ipp
499 root	8876 SW /yealink/bin/ggsvca_ipp
500 root	8876 SW /yealink/bin/ggsvca_ipp
501 root	8876 SW /yealink/bin/ggsvca_ipp
507 root	16424 SW /yealink/bin/Screen.exe
508 root	10344 SW /yealink/bin/sipServer.exx
509 root	10344 SW /yealink/bin/sipServer.exx
515 root	16424 SW /yealink/bin/Screen.exe
517 root	16424 SW /yealink/bin/Screen.exe
519 root	10344 SW /yealink/bin/sipServer.exx
521 root	16424 SW /yealink/bin/Screen.exe
522 root	16424 SW /yealink/bin/Screen.exe
523 root	16424 SW /yealink/bin/Screen.exe
524 root	10344 SW /yealink/bin/sipServer.exx
525 root	SW< [IRQ 45]
526 root	10344 SW /yealink/bin/sipServer.exx
527 root	16424 SW /yealink/bin/Screen.exe
528 root	16424 SW /yealink/bin/Screen.exe
529 root	16424 SW /yealink/bin/Screen.exe
1147 root	1788 SWN sleep 1000
1227 root	10120 SWN ConfigManApp.com
1228 root	4624 SW /yealink/bin/mini_httpd -p 80 -d /yealink/html -c cgi
1229 root	2812 SWN sh -c cd /tmp;ifconfig >> Messages;ps >> Messages;tar
1230 root	2812 RWN ps
	mini_httpd[388]: mini_httpd.c(1510):child process 1227 exit!
	mini_httpd[1232]: mini_httpd.c(1997):path:/cgi-bin/ConfigManApp.com,query:Id=27
	mini_httpd[388]: mini_httpd.c(1510):child process 1232 exit!
Feb 29 06:01:12	mini_httpd[1233]: mini_httpd.c(1997):path:/cgi-bin/ConfigManApp.com,query:Id=27
Feb 29 06:01:12	mini httpd[388]: mini httpd.c(1510):child process 1233 exit!
Feb 29 06:01:12	mini_httpd[1234]: mini_httpd.c(1997):path:/cgi-bin/ConfigManApp.com,query:Id=27
Feb 29 06:01:12	mini_httpd[388]: mini_httpd.c(1510):child process 1234 exit!

To export a log file to a syslog server via web user interface:

1. Click on Setting->Configuration.

- 2. Mark the Server radio box in the Export System Log field.
- 3. Enter the IP address or domain name of the syslog server in the Server Name field.

					About	Lang	juage v	Logo	ut
Yealink vc800	Home	Status	Account	Networ	k Sett	ing	Direct	ory	Security
General	Imp	ort Configuration				В	rowse	Import	t]
Date & Time	Exp	ort Configuration		Export					
Call Features									
Video & Audio									
Camera	Pca	p Feature		Start	Stop	Export			
Auto-Provision	Pac	ket Capture Coun	t	5					
Configuration	Packet Capture Clip Bytes		1024						
Upgrade	Pca	p Filter Type		Custom		•			
Tones				Castom		_			
Wireless Micphone	Pac	ket Filter String							
3rd-Party VMR									
Conference Setting	Exp	ort System Log		Local	Server	Export			
Remote Control	Sen	ver Name		10.200.110).199				
	Curd	tem Log Level		6		•			
	Sys	tem Log Level		0		•			

4. Click Confirm to reboot the system immediately.

3.2 Capturing Packets

The administrator can capture packets in three ways:

- Capturing the packets via web user interface (Only using in issue happen within 20s)
- Capturing the packets via remote control and USB flash driver
- Using the Ethernet software.

Engineers can analyze the packets to troubleshoot problems.

Packets parameters are described below:

Parameter	Description	Configuration Method
Pcap Feature	Start and stop capturing packets or export the captured packets.	Web User Interface

Parameter	Description	Configuration Method
Packet Capture Count	Configures the count of the number of packets to capture. Default: 5	Web User Interface
Packet Capture Clip Bytes	Configures the number of bytes (in kb) of the packet to capture. Default: 1024	Web User Interface
Pcap Filter Type	 Configures the filter type of the packet to capture. Valid Values: Custom—Customize the packet filter string. SIP or H245 or H225—Capture SIP, H245 and H225 packets. RTP—Capture RTP packets. Default: Custom 	Web User Interface
Packet Filter String	Customizes the packet filter string. Syntax: Protocol+Direction+Host(s)+ Value +Logical Operations+Other Expression Protocol: Values: ether, fddi, ip, arp, rarp, decnet, lat, sca,	Web User Interface

Parameter	Description	Configuration Method
	moprc, mopdl, tcp and udp.	
	Application-level protocol,	
	such as http, dns and sip are	
	not supported.	
	If no protocol is specified,	
	all the protocols are used.	
	Direction:	
	Values: src, dst, src and	
	dst, src or dst	
	If no source or destination	
	is specified, the "src or	
	dst" keywords are applied.	
	For example: "host 10.2.2.2"	
	is equivalent to "src or dst	
	host 10.2.2.2".	
	Host(s):	
	Values: net, port, host,	
	portrange.	
	If no host(s) is specified,	
	the "host" keyword is used.	
	For example: "src 10.1.1.1"	
	is equivalent to "src host	
	10. 1. 1. 1".	
	Logical Operations:	
	Values: not, and, or.	

Parameter	Description	Configuration Method
	Negation ("not") has highest	
	precedence. Alternation	
	("or") and concatenation	
	("and") have equal	
	precedence and associate	
	left to right.	
	For example:	
	"not tcp port 3128 and tcp	
	port 23" is equivalent to	
	"(not tcp port 3128) and tcp	
	port 23".	
	"not tcp port 3128 and tcp	
	port 23" is NOT equivalent to	
	"not (tcp port 3128 and tcp	
	port 23)".	
	Example : (src host 10.4.1.12	
	or src net 10.6.0.0/16) and	
	tcp dst port range 200-10000	
	and dst net 10.0.0.0/8	
	Displays packets with source	
	IP address 10.4.1.12 or	
	source network 10.6.0.0/16,	
	the result is then	
	concatenated with packets	
	having destination TCP port	
	range from 200 to 10000 and	

Parameter	Description	Configuration Method
	destination IP network	
	10. 0. 0. 0/8.	
	Default: Blank	
	Note: It only works if the	
	parameter "Pcap Filter	
	Type" is set to Custom.	

To capture packets via web user interface:

- 1. Click on Setting->Configuration.
- 2. Enter the desired value in the Packet Capture Count field.
- 3. Enter the desired value in the Packet Capture Clip Bytes field.
- Select the desired value from the pull-down list of Pcap Filter Type.

If Custom is selected, enter the desired packet filter string

in the Packet Filter String field.

- 5. Click Start to start capturing signal traffic.
- 6. Reproduce the issue to get stack traces.
- 7. Click Stop to stop capturing.
- 8. Click **Export** to open the file download window, and then save the file to your local system.

					About	Lang	uage v	Logout
Yealink vc800	Home	Status	Account	Network	Sett	ing	Directory	y Security
General	Imp	ort Configuration				Br	owse I	mport
Date & Time	Exp	ort Configuration		Export				
Call Features		2						
Video & Audio							1	
Camera	Pca	p Feature		Start	Stop	Export		
Auto-Provision	Pac	ket Capture Count	t	5				
Configuration >	Pac	ket Capture Clip B	lytes	1024				
Upgrade	Pca	p Filter Type		Custom		•		
Tones								
Wireless Micphone	Pac	ket Filter String						
3rd-Party VMR								
Conference Setting	Exp	ort System Log		Local	Server	Export		
Remote Control	Sen	/er Name		10.200.110	199			

To export a PCAP trace via remote control and USB flash driver: Before capturing packets, make sure a USB flash driver is connected to VC800/VC500/VC200 codec, VCH50 video conferencing hub or CP960 conference phone and the USB feature is enabled.

- Long press when the system is idle or during a call. The display device prompts "Onekey-capture has been turned on, press the Backspace key for 2s to turn off it".
- Long press for 2 seconds to stop capturing packets.
 The packets are saved in the yealink.debug folder on your USB flash driver.

To capture packets using the Ethernet software:

Connect the Internet ports of the system and the PC to the same HUB, and then use Sniffer, Ethereal or Wireshark software to capture the signal traffic. You can also set mirror port on a switch to monitor the port connected to the system.

3.3 Getting Information from Status Indicators

In some instances, status indicators are helpful for finding system troubles. Status indicators may consist of the power LED, icons on the status bar of the display device or prompt messages. The following shows two examples of obtaining the system information from status indicators:

- •If a LINK failure of the system is detected, the status bar of the display device prompts "Network disconnected".
- If the power LED does not light, it indicates the system is not powered on.

3.4 Analyzing Configuration Files

Wrong configurations may have an impact on your system use. You can export configuration file to check the current configuration of the system and troubleshoot if necessary.

3.5 Viewing Call Statistics

You can enter the view call statistics screen during an active call. Information includes:

- •Total Bandwidth: Uplink Bandwidth and Downlink Bandwidth.
- •Video: Resolution, Codec, Bandwidth, Frame Rate, Jitter, Total Packet Lost, Packet Lost(%).
- •Protocol used during a call.
- •Device information of the far site.
- •Audio: Codec, Bandwidth, Sample Rate, Jitter, Total Packet Lost, Packet Lost(%)
- •Share: Resolution, Codec, Bandwidth, Frame Rate.

To view call statistics during an all via web user interface:

- 1. Click Home.
- 2. Hover your cursor over the desired particip(), and then click to view call statistics.

To view call statistics during an all via the remote control:

- 1. Press \blacksquare or $(\circ\kappa)$ to open Talk Menu.
- 2. Press \blacktriangle or \blacktriangledown to scroll to Call Statistics and then $(\overset{\circ}{})$ press .
- 3. Press \blacktriangle or \blacktriangledown to view call statistics for every participant.
- 4. Press 🖕 to return.

To view call statistics during an all via the CP960 conference phone:

1. Tap **(III)** during a call.

The touch screen displays all participants.

2. Tap the desired participant to view call statistics.

3.6 Using Diagnostic Methods

The system supports the following diagnostic methods:

- •Audio Diagnose: Test the audio input device and audio output device.
- •Camera Diagnose: Test whether the camera can pan and change focus normally.
- •**Ping**: Test whether the system can establish contact with a far-site IP address t entered.
- •Trace Route: Tests the routing path between the local system and the IP address entered.

Above diagnostic methods can be configured using remote control.

Ping and Trance Route can also be configured via web user interface.

To diagnose audio via the remote control:

- 1. Select More->Setting-> Diagnose.
- 2. Select Audio Diagnose, and then pre\$s*)
- 3. Speak into the microphone.
- 4. Check whether the microphone can pick up audio and play back the audio properly.

If the system plays back the audio normally, it means that audio works well.

5. Press (ox) to stop audio diagnostics.

To diagnose the camera via the remote control:

- 1. Select More->Setting-> Diagnose.
- 2. Select Camera Diagnose, and then pres(sor)
- 3. Press navigation keys to adjust the camera position.
- 4. Press Θ or Θ to adjust the focus.

If the camera can move and zoom normally, it means that the c

amera works properly.

5. Press 🗩 to stop camera diagnose.

To diagnose network via web user interface:

- 1. Click on Network->Diagnose.
- 2. Select the desired diagnostic method from the pull-down list of Command.
- 3. Click Start to start diagnosing.

You can also enter any IP address in the IP Address field.

The web page displays the diagnosis:

					About La	nguage v Lo	gout
Yealink vc800	Home	Status	Account	Network	Setting	Directory	Security
LAN Configuration	Diagn	ose					
Advanced	Com	nmand		Ping	Ŧ		
Diagnose	IP A	ddress		yealinkvc.com	Ŧ		
	PIN	NG yealinkvc.com	ı				
	PIN	NG yealinkvc.com	n (118.178.226.0)	: 56 data bytes			
	64	bytes from 118.	178.226.0: seq=0	ttl=53 time=30.35	9 ms		
	64	bytes from 118.	178.226.0: seq=1	ttl=53 time=40.04	6 ms		
	64	bytes from 118.	178.226.0: seq=2	ttl=53 time=28.14	4 ms		
	64	bytes from 118.	178.226.0: seq=3	ttl=53 time=28.35	5 ms		
	64	bytes from 118.	178.226.0: seq=4	ttl=53 time=28.12	8 ms		
	64	bytes from 118.	178.226.0: seq=5	ttl=53 time=28.33	6 ms		

4. Click Stop to complete diagnosing.

You can click Copy to copy the content to the clipboard.

To diagnose network via the remote control:

- 1. Select More->Setting-> Diagnose->Ping.
- 2. Select Start, and then press
- **3.** The system will Ping **yealinkvc. com** address by default. This will check whether the system can establish contact with the public IP address.
- **4.** You can also enter any IP address (for example, the IP address of the remote system) in the **Ping** field.

It measures the round-trip time from transmission to reception and reports errors and packet loss. The results of the test include a statistical summary of the response packets received, including the minimum, maximum, and the mean round-trip times.

5. Press **5** to return to the Diagnose menu.

Trace Route:

- 1. Select More->Setting-> Diagnose ->Trace Route.
- 2. Select Start, and then press
- 3. The system will trace yealinkvc.com address by default.
- 4. You can also enter any IP address (for example, the IP address of the remote system) in the **Trace Route** field.

If the test is successful, the system lists the hops between the system and the IP address you entered. You can check whether congestion happens via the time cost between hops.

5. Press **5** to return to the Diagnose menu.

4 T49G

4.1 Situation 1: Web Interface

The Issue is easy to be repeated within 20s, then to get information through web interface,

Please see the picture below and follow the steps:

- 1) Login to the web interface of the device.
- 2) Go to Settings->Configuration: change the syslog log level to 6 and confirm, press Start button.
- 3) Repeat the issue step by step.
- Press Stop->Export marked in red. You can get pcap, syslog and config.bin in one package

	Status Account N	letwork DSSKey Features Settings
Preference	Export or Import Configu	rration Browse No file selected.
Time & Date		Import Export
Call Display	Export CFG Configuration	File Local Configurati 🔻 Export 🥥
Upgrade	' 5	
Auto Provision	Import CFG Configuration	File Browse No file selected.
Configuration		Local Configurati 🔻 Import
Dial Plan	Pcap Feature	Start Stop Export ?
Voice	Export System Log	Local Server Ftp/Tftp Server
Ring		Export
Tones	System Log Level	6 • ?
Softkey Layout	Export All Diagnostic File	s Start Stop Export
TR069		

If the firmware on your device is lower than V80, please refer to: http://forum.yealink.com/forum/showthread.php?tid=1319

4.2 Situation 2: Span to PC

If you are suffering a randomly happened issue or need to do a long time test, phone's memory will not enough to record the useful information. Please use the method below:

Capture pcap with Wireshark:

1) On Yealink IP phone, we have a feature named Span to PC. Please login to the web interface of Yealink Phone and go to Network->Advance page to enable Span to PC, then hit Confirm.

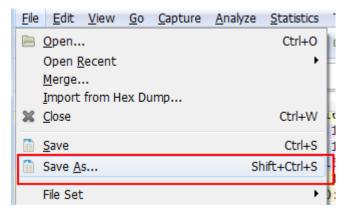
Span to PC	0			
		Span to PC Port	Enabled	•

2) Connect PC port of Yealink phone to your PC and Internet port to network.

3) On Wireshark, press **Start**, repeat the steps on phone to reproduce the issue. All the pcap will be recorded. Then hit Stop to stop trace.

					-								-									
<u> </u>	<u>E</u> dit	View	<u>G</u> o	<u>Capt</u>	ure	<u>A</u> na	yze	<u>S</u> tatis	stics	Tel	epho	ny	Tools	In	ternals	<u>H</u> elp)					
	۰					×	Z	Q	\$	\$	١	7	2			Q	Q	Q		×.	¥	ł
Fift	art		Sto	р										•	Expre	ssion.	C	ear	Apply	Sa	ive	

4) Save the file and send to Yealink support.



Capture syslog using syslog server (please do it at the same time with pcap trace):

1) On Yealink IP phone, please visit web below to change the configuration:

	Status	Account	Network	DSSKey	Features	Settings	D
Preference	Б	xport or Import C	onfiguration	Browse	to file selected.	0	1
Time & Date				Import	Export		4
Call Display	Б	xport CFG Config	uration File	Local Configu	rati • Export	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Upgrade	-					•	
Auto Provision	In	nport CFG Config	uration File	Browse	No file selected.	0	1
Configuration				Local Configu	rati 🕶 🗌 Import		
Dial Plan						_	i
Voice		cap Feature xport System Log		Start	Stop Expo		
Ring		erver Name		10.2.2.10	server in rip/ rip se		1
Tones	Sy	ystem Log Level		6	• 0		

2) On syslog server (take 3CDaemon as an example): configure the syslog server and set up a directory to store the syslog file.

TFTP Server	Time	IP	Msg T	Message		
FTP Server	May 08 11:40:27	local	user.info	Listening for Syslog messages on IP address: 1		
Syslog Server	3CDaemon Configuration					
Configure Syslog Server	General Conf FTP Profile		-	TFTP Configuration Syslog Configuration		
Syslog Server is started. Click here to stop it.	Directory for Who can log to	this	C:\Users\ Anyone.	y10808\Desktop\		
Clear list. View Log files.	Log messages		One file:	Syslog 🔽		

3) Repeat the operations on Yealink phone to reproduce the problem. All the messages will be recorded to syslog server.

5 VCD

Troubleshooting Methods

The Yealink VC Desktop can provide feedback in two forms, they are packets and call statistics, which can help you to find the problem more easily and then solve it.

You can check the working status in the following two ways and find the fault cause quickly:

- Capturing Packets
- Capturing Logs File
- •
- Viewing Call Statistics

5.1 Capturing Packets

You can capture packets using the Ethernet software, and then analyze it to troubleshoot problems.

To capture packets using the Ethernet software:

Use Sniffer, Ethereal or Wireshark software to capture the signal traffic.

5.2 Capturing Logs File

The log of VCD can be found under VCD installation directory. It is named as log. Compress the file and send it to Yealink. From syslog, Yealink can detail information and confirm what cause an issue.

bin	2016/4/12 0:20	文件夹	
config	2015/12/4 15:33	文件夹	
data	2016/9/12 8:58	文件夹	
log	2016/9/12 13:41	文件夹	
phone	2015/12/4 15:33	文件夹	
update	2016/8/5 14:25	文件夹	
Chinese_s.lic	2015/12/18 18:11	LIC 文件	22 KB
Chinese_T.lic	2015/12/18 18:11	LIC 文件	22 KB
] English.lic	2015/12/18 18:11	LIC 文件	22 KB
] Ink-manifest.xml	2016/7/29 9:32	XML 文档	1 KB
] manifest.xml	2016/8/4 14:22	XML 文档	45 KB
] reg-manifest.xml	2016/7/29 9:32	XML 文档	2 KB
Uninstall.exe	2016/8/5 14:27	快捷方式	1 KB

5.3 Viewing Call Statistics

If voice quality is poor during a call, you can enter the Call Statistics screen to view the current status of the call to find out the reason.

The call statistics mainly contain the parameters about audio, video and share. You can know about the call quality by viewing codec, bandwidth, total packet lost and other parameters. For example, when a delay occurs or the video has a 'mosaic' look, you can view the total packet loss to check whether the packet has been lost.

To view call statistics during a call:

1. On the lower-left of your screen, hover the mouse over f. The $\overline{\equiv}$ icon changes according to your network signal strength.

2. (Optional) Clic • to turn to the next page.

	Total Bandwidth	Decu(202 kh /s)	Cond(60 kb/s)	11/19/19		
	TOTAL DATIONIULI	Recv(383 kb/s)	Send(69 kb/s)	State of the second sec		
	Resolution	640 X 360	640 X 360	10		
	Codec	H.264 High Profile	H.264 High Profile			
	Bandwidth	335 kb/s	21 kb/s			
Video	Frame Rate	10 fps	2 fps	UE		
	Jitter	60 ms	20 ms	1 contores		
	Total Packet Lost	0	0			
	Packet Loss(%)	0%	0%	No.		
Protocol	H.323					
Device Info	Yealnk VC400 30.23.0.5	38/2			Allas	
	•	•			S In	

You can enter the view call statistics screen during an active call. Information includes:

- Total Bandwidth: Receive Bandwidth and Send Bandwidth.
- Video: Resolution, Codec, Bandwidth, Frame Rate, Jitter, Total Packet Lost, Packet Lost (%).
- Audio: Codec, Bandwidth, Sample Rate, Jitter, Total Packet Lost, Packet Lost (%)
- Protocol used during a call.
- Device information of the far site.
- Share: Resolution, Codec, Bandwidth, Frame Rate.

6 VCM

Troubleshooting Methods

The Yealink VC Mobile can provide feedback by viewing call statistics, which can help you to find the problem more easily and then solve it.

3.1 Viewing Call Statistics

If voice quality is poor during a call, you can enter the Call Statistics screen to view the current status of the call to find out the reason.

The call statistics mainly contain the parameters about audio, video and share. You can know about the call quality by viewing codec, bandwidth, total packet lost and other parameters. For example, when a delay occurs or the video has a 'mosaic' look, you can view the total packet loss to check whether the packet has been lost. To view call statistics during a call:

3. Tap .

× Current	call statistics
	rotocol:H.323 k VCDesktop 1,23.0.43 38/2
Send	Recv
'ideo	
Resolution	640*360
Codec	H.264
Bandwidth	7 kb/s
Frame Rate	2 fps
Jitter	16 ms
Total Packet Lost	0
Packet Lost(%)	0%

The **i**con changes according to your network signal strength.

You can enter the view call statistics screen during an active call. Information includes:

•Total Bandwidth: Receive Bandwidth and Send Bandwidth.

- •Protocol used during a call.
- •Device information of the far site.
- •Video: Resolution, Codec, Bandwidth, Frame Rate, Jitter, Total Packet Lost, Packet Lost (%).
- •Audio: Codec, Bandwidth, Sample Rate, Jitter, Total Packet Lost, Packet Lost (%)
- •Share: Resolution, Codec, Bandwidth, Frame Rate.

3.2 Capturing logs file

IOS system: Settings->Diagnoses->send system logs->email to
ios_support@yealink.com
Android system: VCM installation folder->log->copy log folder and send
it to Yealink support team.