



ZYCOO Certified IP Telephony Associate

CooVox Series IPPBX

Presenter: Emily Luo

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PART 01

Products Overview



4FXO



4FXS



2FXOS



2GSM



4GSM



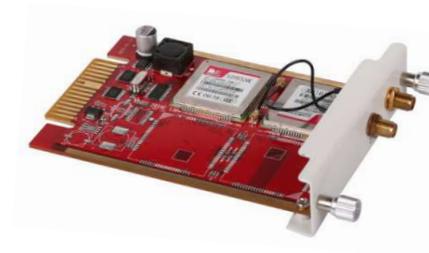
1GSM



4BRI



1E1/T1



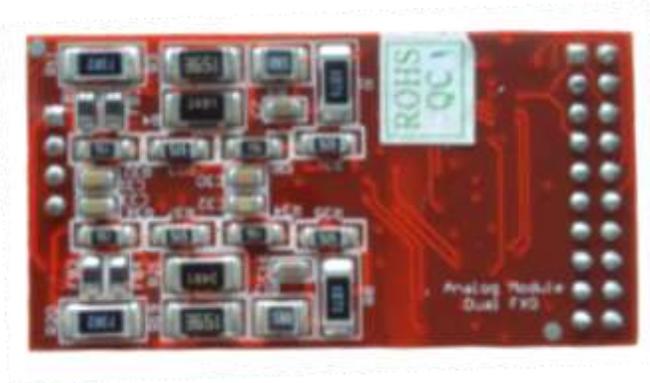
2WCDMA



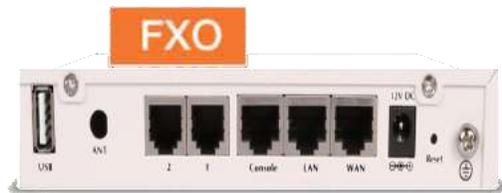
4WCDMA

Foreign Exchange Office

2FXO



2FXO – 2xRJ11 FXO Interfaces for PSTN



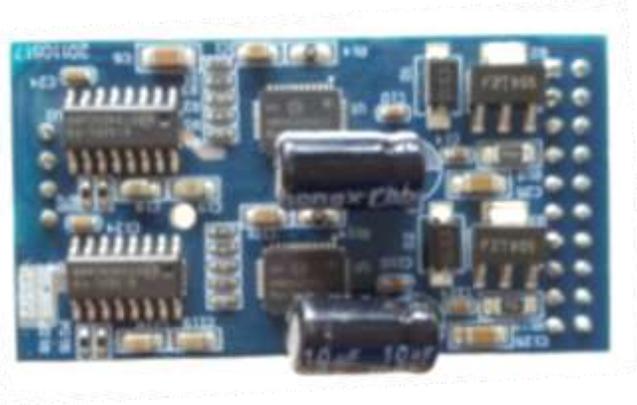
Telephone Company (PSTN)



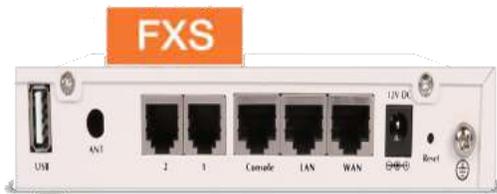
4FXO

Foreign Exchange Subscriber

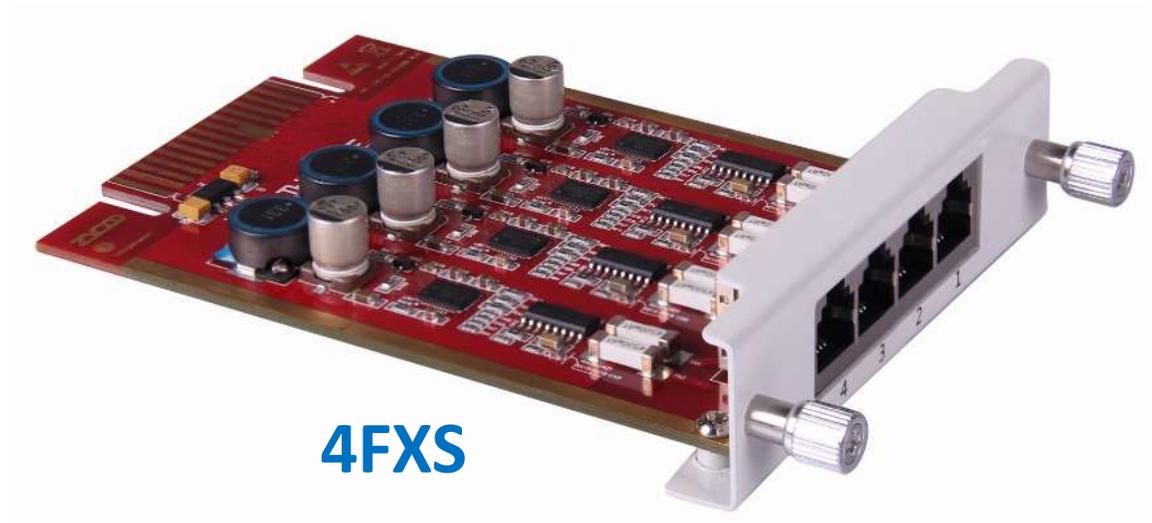
2FXS



2FXS – 2xRJ11 FXS Interfaces for analog phones or fax machines



Analog Phone



4FXS

FXOS



FXOS – 1xRJ11 FXO Interfaces for PSTN
1xRJ11 FXS Interfaces for analog phones or fax machines



2FXOS



1GSM

U20 only

Frequencies : 850/900/1800/1900MHz

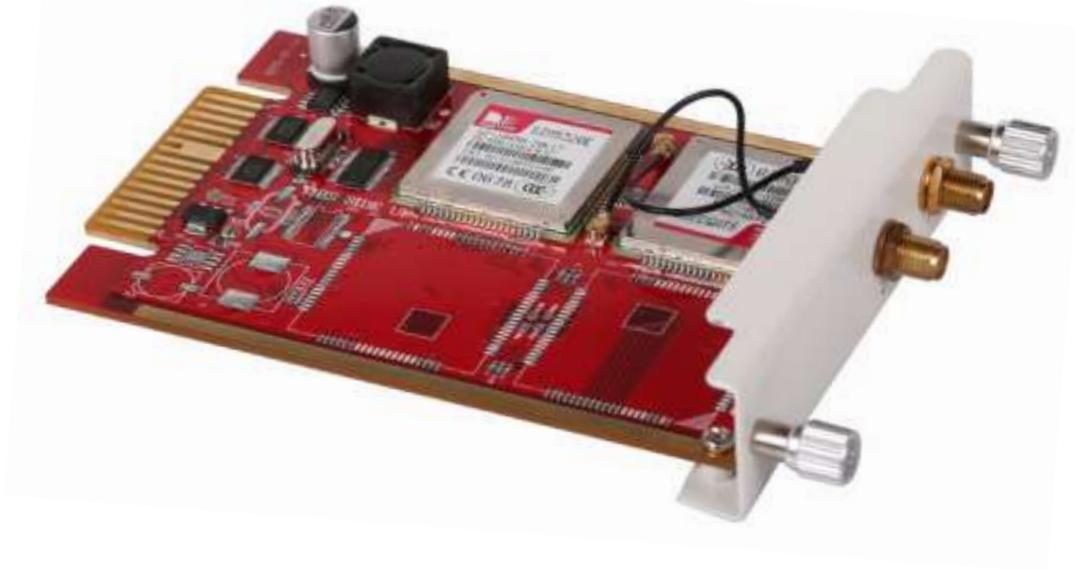
2GSM



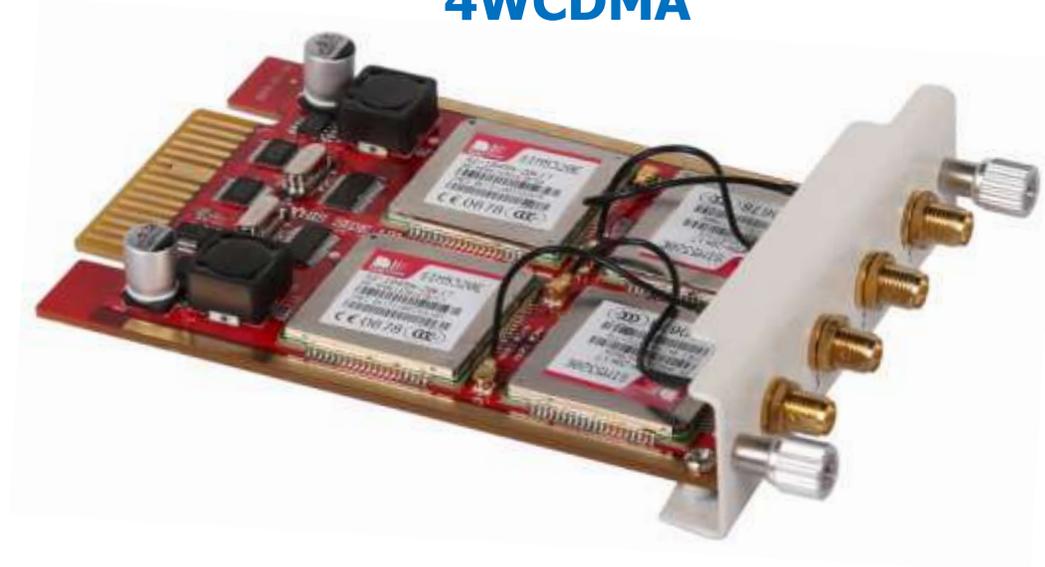
4GSM



2WCDMA



4WCDMA



➤ Working Frequencies :

UMTS/HSDPA: 850/1900MHz

GSM/GPRS/EDGE: 850/900/1800/1900MHz

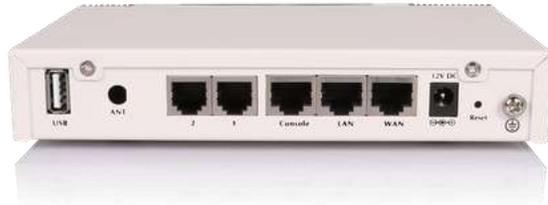
4BRI



E1/T1



➤ E1 PRI or T1 Digital Trunk Interface(RJ48)



CooVox-U20



CooVox-U60



CooVox-U50



CooVox-U80



CooVox-U100



FXOS

2FXS



2FXO

1GSM

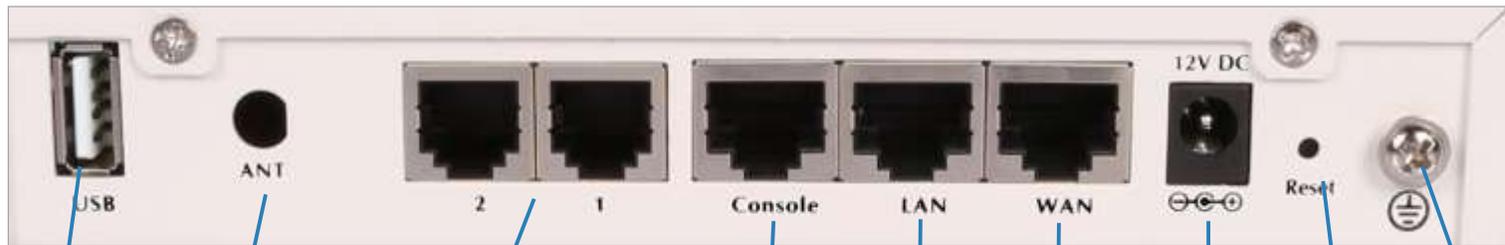
Capacity & Facilities

Concurrent Calls	Max.15	CPU	1GHz Dual Core A7 Processor
Extensions / Users	Max.32	RAM	512MB DDR3
Voicemail & Recordings	150hrs	Storage	16GB SD Card
Conference Attendees	15	USB	FAT,FAT32,EXTFAT,NTFS,EXT3,EXT4
VoIP Trunks	Unlimited	Telephony Interfaces	2*RJ11 Interfaces (FXO/FXS); 1*GSM (Optional)
IVR	Unlimited		

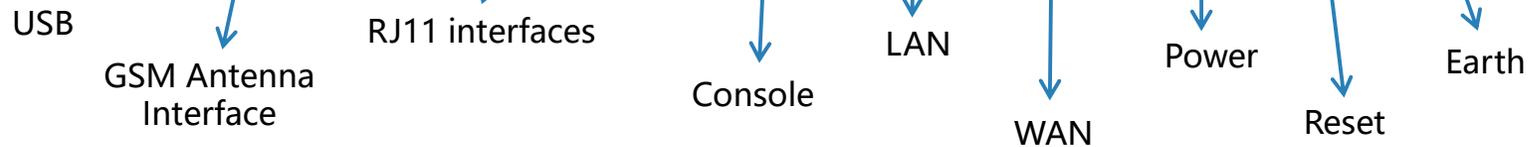
CooVox U20



Front



Back



Notice:

RST button can be used to reset all configurations or reset whole IPPBX SD card file system.

While system is running, hold the RST button for 6-8 sec, release the button will reset all configurations.

When the device is power off, press the RST button then plug power cord in, hold the RST button for 6-8 sec until the SYS led goes on, it will reset the whole system. Wait around 8 mins, system will bootup.



Capacity & Facilities

Concurrent Calls

Max.30

CPU

1GHz Dual Core A7 Processor

Extensions / Users

Max.100

RAM

1GB DDR3

**Voicemail &
Recordings**

150hrs

Storage

16GB SD Card

**Conference
Attendees**

30

USB

FAT,FAT32,EXTFAT,NTFS,EXT3,EXT4

VoIP Trunks

Unlimited

**Telephony
Interfaces**

Max.8*FXO/FXS/GSM/WCDMA

IVR

Unlimited



2FXOS

4FXO

4FXS



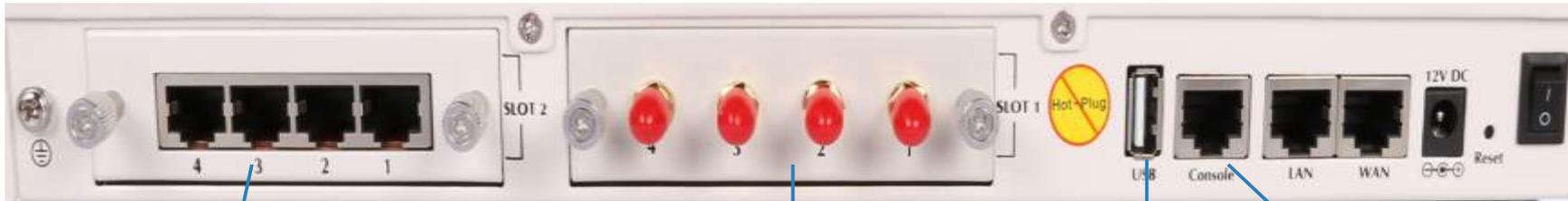
2GSM

4GSM

CooVox U50



Front



Back

RJ11
interfaces

GSM
interface

USB port

Console

Notice:

USB port is used for USB data storage.

CONSOLE port is used for debug purpose.

RST button is the same usage as U20.



FXOS

2FXS



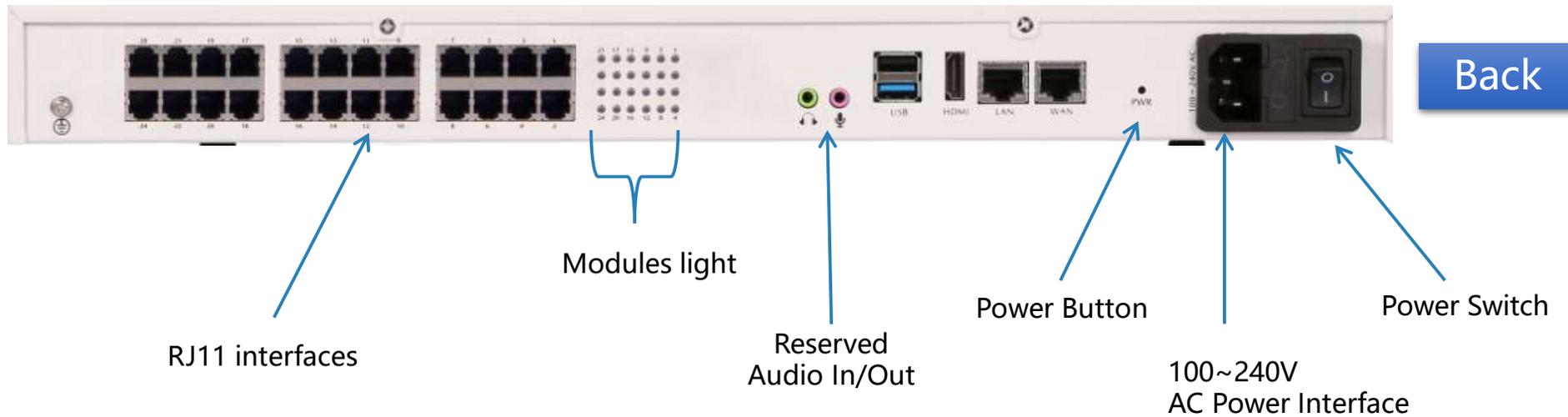
2FXO

Capacity & Facilities

Concurrent Calls	Max.60	CPU	2.41GHz Dual-core Intel Processor
Extensions / Users	Max.200	RAM	2GB DDR3L
Voicemail & Recordings	150hrs	Storage	16GB EMMC
Conference Attendees	60	USB	FAT,FAT32,EXTFAT,NTFS,EXT3,EXT4
VoIP Trunks	Unlimited	Telephony Interfaces	24*RJ11 Interfaces (FXO/FXS)
IVR	Unlimited		

CooVox U60

Front



Notice:

Power button is used to reboot the system.

USB port is used to connect USB keyboard for debug purpose and USB storage.

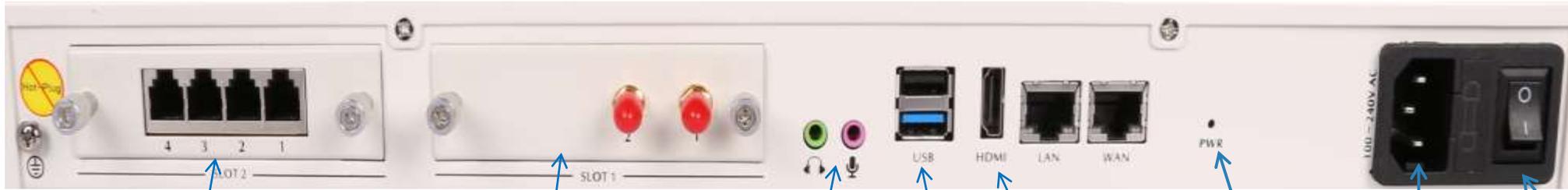
Audio In/Output interfaces are reserved.



Capacity & Facilities			
Concurrent Calls	Max.60	CPU	2.41GHz Dual-core Intel Processor
Extensions / Users	Max.200	RAM	2GB DDR3L
Voicemail & Recordings	150hrs	Storage	16GB EMMC
Conference Attendees	60	USB	FAT,FAT32,EXTFAT,NTFS,EXT3,EXT4
VoIP Trunks	Unlimited	Telephony Interfaces	8*FXO/FXS/GSM/WCDMA/ 2*E1/T1/ 4*BRI
IVR	Unlimited		

CooVox U80

Front



Back

RJ11 Interfaces

GSM Interfaces

Reserved
Audio In/Output

USB2.0

HDMI

Power Button

100~240V
AC Power Interface

Power Switch



2FXOS

4FXO

4FXS



2/4GSM

E1/T1

4BRI

Capacity & Facilities

Concurrent Calls	Max.100	CPU	2.41GHz Dual-core Intel Processor
Extensions / Users	Max.500	RAM	4GB DDR3L
Voicemail & Recordings	7500hrs	Storage	16GB EMMC + 500GB HDD
Conference Attendees	60	USB	FAT,FAT32,EXTFAT,NTFS,EXT3,EXT4
VoIP Trunks	Unlimited	Telephony	8*FXO/FXS/GSM/WCDMA/
IVR	Unlimited	Interfaces	2*E1/T1/ 4*BRI

CooVox U100

Front



Back

RJ11 Interfaces

GSM Interfaces

Audio In/Output

USB2.0

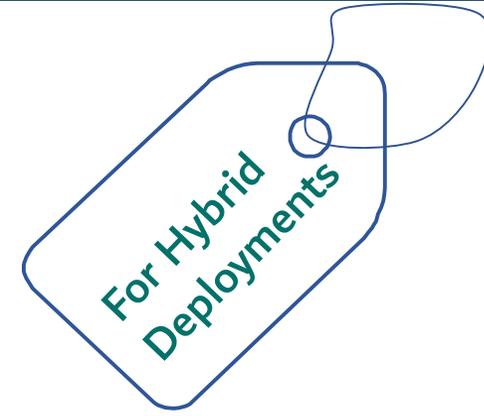
HDMI

EX16S Expansion Box

ZYCOO Co., Ltd.



Support 16 FXS



Model	Recommended Deployment	Analog Extensions
CooVox-U20	2 units	2*16=32 sets
CooVox-U50	6 units	6*16=96 sets
CooVox-U60	12 units	12*16=192 sets
CooVox-U80	12 units	12*16=192 sets
CooVox-U100	31 units	31*16=496 sets



Model	H81/H81P	H83
Screen	128*48 dot-matrix with backlight	2.8 inch (320*240) LCD color-screen
SIP Lines	2	4
Handset	HD Handset	HD Handset
Hands-free	HD Hands-free Speaker & Microphone	HD Hands-free Speaker & Microphone
PoE	802.3AF POE Class 1 Enabled (H81P)	802.3AF POE Class 1 Enabled
DSS Keys	NA	8 Keys mapping to Virtually 28 DSS Keys



PART 02

Basic Setup

What should I do after receiving my PBX?

Access your CooVox IPPBX



Set up Modules



Register IP Extensions



Making Outbound Calls



Making Inbound Calls



Access the CooVox IPPBX

What if I can't access the default IP address?

Easy way

Step-1: adding the network segment to your local computer.

For example: 192.168.10.1

Step-2: connect the IPPBX with your computer.

Step-3: access the system using default LAN port.

Step-4: Modify Network settings.



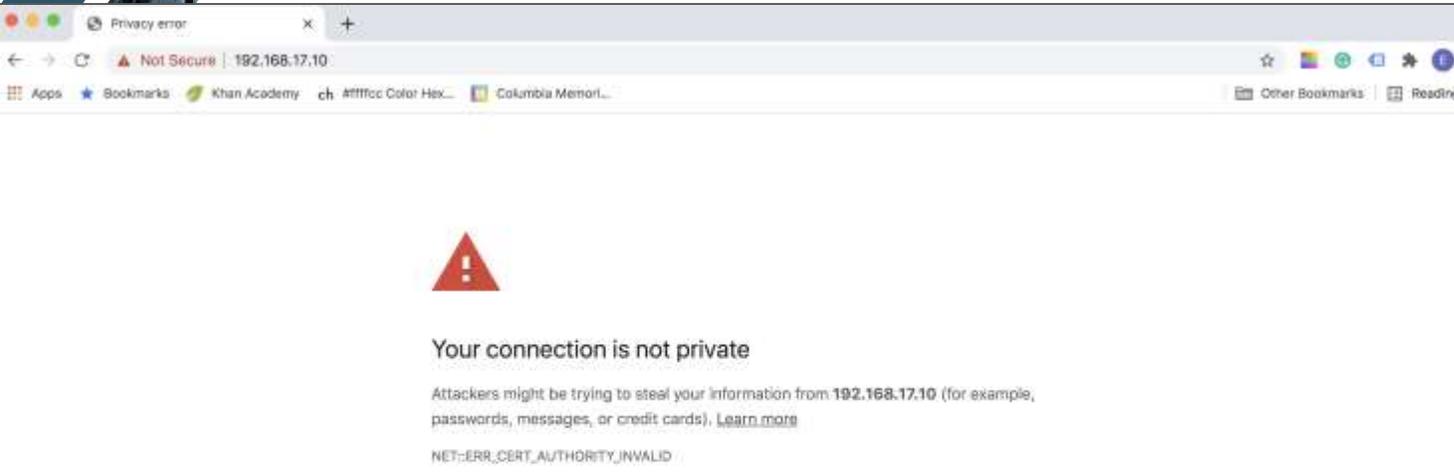
LAN

Default:

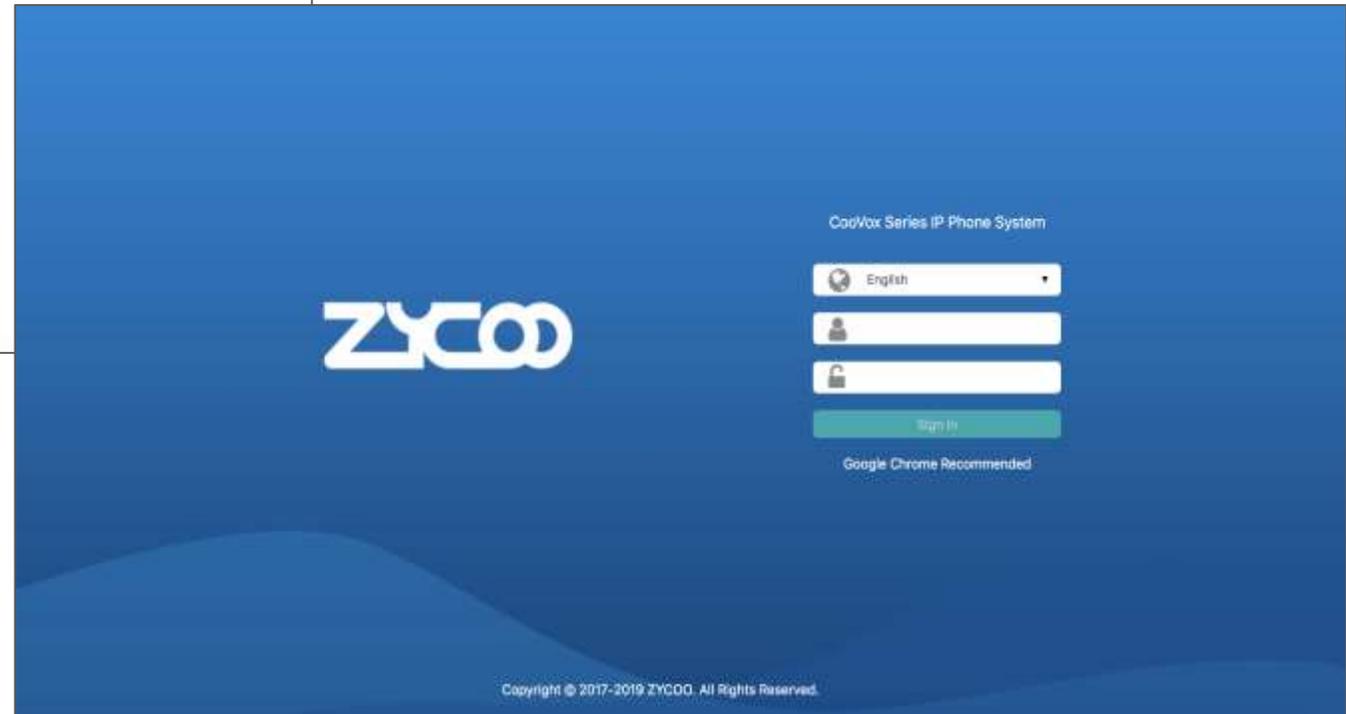
WAN port : 192.168.1.100

LAN port : 192.168.10.100

Access the CooVox IPPBX



Default Login credential:
Username: admin
Password: admin



Access the CooVox IPPBX

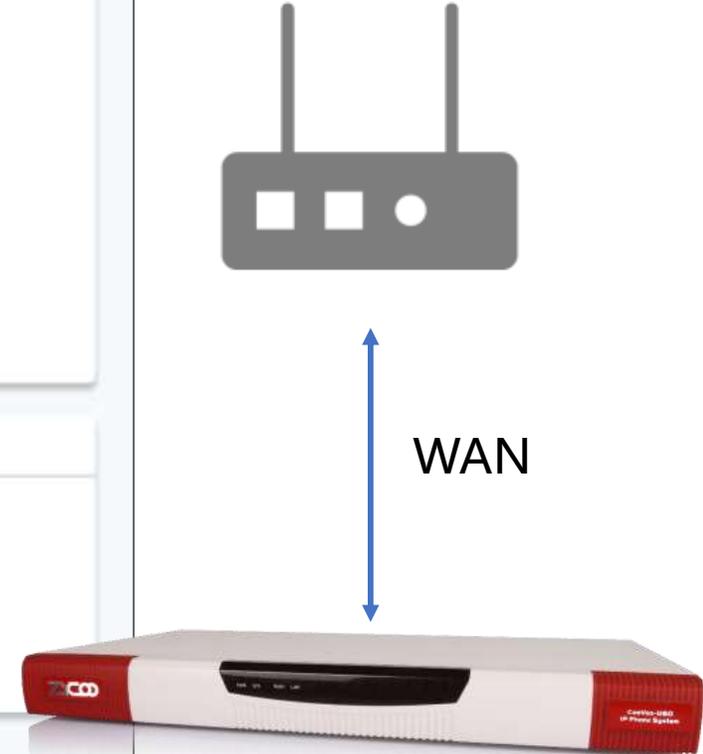
Path: *System -> Network -> Network Profiles*

The screenshot displays the Zycoo web interface for configuring Network Profiles. The top navigation bar includes the Zycoo logo, user information (User Name: admin, Current Time: 2021-06-05 17:34:20), and a search icon. The left sidebar contains a menu with items like Status, Telephony, Reports, System, Storage, Region and Time, Network (highlighted with a red box), Security Center, Email Services, Web Access, Maintenance, and Addons. The main content area shows the 'Network Profiles' section with tabs for IPv6, Local Domain Name Service, VLAN, VPN, Static Routing, DHCP Server, and DDNS. The 'WAN' profile is highlighted with a red border and contains the following settings:

- Network Mode: Static IP
- IP Address: 192.168.17.10
- Netmask: 255.255.255.0
- Gateway: 192.168.17.1
- Primary DNS: 8.8.8.8
- Alternative DNS: 114.114.114.114
- Enable Virtual IP: Off

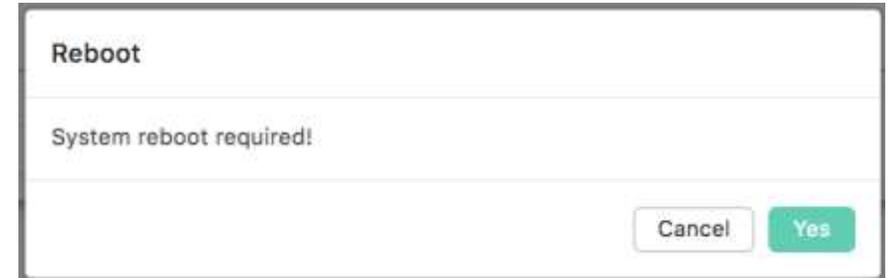
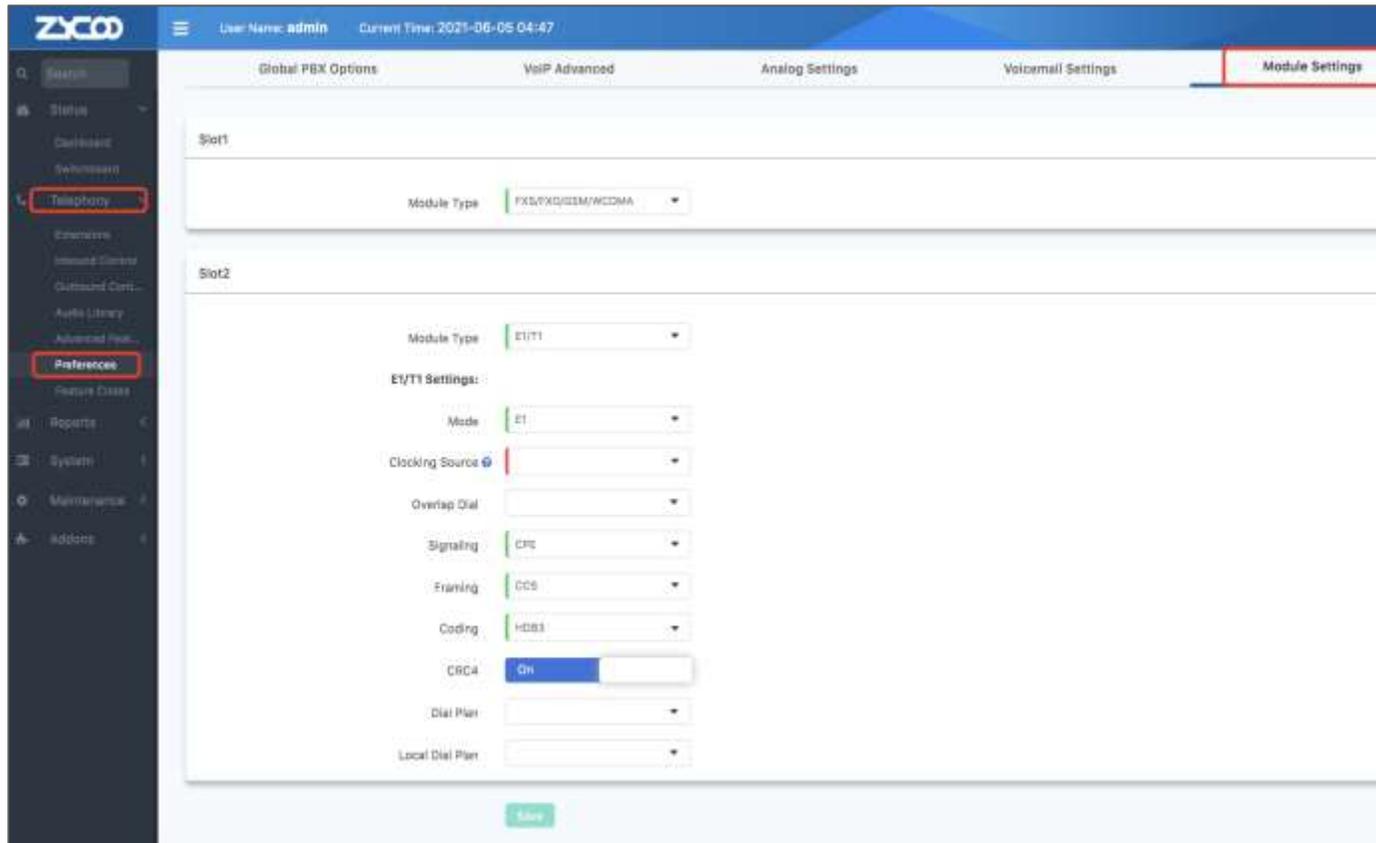
The 'LAN' profile is also visible below the WAN profile with the following settings:

- IP Address: 192.168.10.100
- Netmask: 255.255.255.0
- Enable Virtual IP: Off



Setup Modules

Path: *Telephony -> Preference -> Module Settings*



Module slots are defaulted in the 'FXS/FXO/GSM/WCDMA' option.

Manually change the Module Type if you are using a BRI/PRI module.

Setup Modules

Check module status under path: *Status* -> *Switchboard* -> *Trunks*

The screenshot displays the ZYCOO web interface. The top navigation bar shows the user name as 'admin' and the current time as '2021-06-05 17:54'. The left sidebar contains a search bar and a menu with categories: Status, Telephony, Reports, System, Maintenance, and Addons. The 'Status' menu is expanded, showing 'Switchboard' as the selected option. The main content area is divided into three sections:

- Trunks:** A table listing five trunks with their respective modes, server addresses, reachability, and status.
- IAX Trunks:** A section indicating that there are no IAX trunks currently displayed.
- Analog Lines:** A table listing eight analog lines, all of which are connected and in an idle channel status.

Trunk Name	Type	Server Address	Reachability(Millisecond)	Status
abc	Client Mode	192.168.18.251	0.000	Rejected
coocenter	Client Mode	192.168.18.186	0.000	Unregistered
toallcenter	Client Mode	192.168.11.66	2.827	Registered
toipaudiocenter	Client Mode	192.168.11.109	1.864	Registered
www	Server Mode		0.00	Unregistered

5 Total

Trunk Name	Type	Server Address	Reachability(Millisecond)	Status
No items to display.				

0 Total

Port	Type	BLF	Status	Channel Status
1	FXO	001	Connected	idle
2	FXO	002	Connected	idle
3	FXO	003	Connected	idle
4	FXO	004	Connected	idle
5	FXO	005	Connected	idle
6	FXO	006	Connected	idle
7	FXO	007	Connected	idle
8	FXO	008	Connected	idle

8 Total

Register IP Extensions

Path: *Telephony -> Extensions -> IP Extensions*

The screenshot shows the ZYCOO web interface for managing IP Extensions. The top navigation bar includes 'Departments', 'IP Extensions', 'Analog Extensions', 'Phone Provisioning', and 'Expansion Box'. The 'IP Extensions' tab is active. On the left sidebar, 'Extensions' is highlighted. The main content area features a table with columns: Name, Extension Number, Outbound CID 1, Outbound CID 2, Department Name, Quick Register Code, Dial Permission, Options, and QR Code. Two rows are visible: one for extension 100 and another for 101. Above the table are buttons for 'Add', 'Bulk Add', 'Bulk Edit', 'Delete Selected', and 'Delete All'. Below the table, it shows '0 Selected / 2 Total'.

The 'Add' form is used to create a new IP extension. It has three tabs: 'User Profiles', 'Features', and 'Advanced'. The 'User Profiles' tab is selected. The form contains the following fields:

- Enable: A toggle switch set to 'On'.
- Extension Number: A text input field containing '102'.
- Name: A text input field containing '102'.
- Password (Strong): A text input field containing 'Cth30LeE*!'.
- Email: An empty text input field.
- Outbound CID 1: An empty text input field.
- Mobile Number: An empty text input field.
- Dial Permission: A dropdown menu set to 'DialPlan1'.
- Language: A dropdown menu set to 'English'.
- Music On Hold: A dropdown menu set to 'default'.
- Outbound CID 2: An empty text input field.

At the bottom right, there are 'Cancel' and 'Submit' buttons.

Outbound Calls – Dial Rules

Path: *Telephony -> Outbound Control -> Dial Rules*

The screenshot displays the ZYCOO web interface. At the top, the user is logged in as 'admin' and the current time is 2021-06-05 05:42. The navigation bar includes tabs for Trunks, Dial Rules (highlighted with a red box), Dial Permission, Outbound Fax, and PIN Sets. The left sidebar shows a menu with 'Outbound Cont...' highlighted (also with a red box). The main content area features a table with the following columns: Dial Rule Name, Prepend, Dial Prefix, Dial Pattern, Outbound CID, Trunks, and Options. The table is currently empty, showing 'No items to display.' and '0 Total'. A green 'Add' button is located at the top left of the table area.

Outbound Calls - Dial Rules

Add

Dial Rule Name:

Dial Pattern

Time Rules: None

Prepend:

Dial Prefix:

Dial Pattern:

PIN Sets: None

Outbound CID: Outbound CID 1

Call Time limit(Sec): 60-3600

Via Trunk/Trunks

Call Method: Linear

Available Trunks: PRI-1, test

Selected Trunks:

Cancel Submit

Add

Dial Rule Name: DemoTest

Dial Pattern

Time Rules: None

Prepend:

Dial Prefix:

Dial Pattern: xx.

PIN Sets: None

Outbound CID: Outbound CID 1

Call Time limit(Sec): 60-3600

Via Trunk/Trunks

Call Method: Linear

Available Trunks: test

Selected Trunks: PRI-1

Cancel Submit

Dial Pattern

X -> any digits between 0-9
N -> any digits between 2-9
Z -> any digits but not zero
. -> wildcard any digits & letter
[] -> match one digit in the []

XX. => The number that is starting with 2 digits and it has to be at least 3 digits/characters long.

The 'Dial Rule Name', 'Dial Pattern', and 'Selected Trunks' are required to fill out for each dial rule.

Outbound Calls – Dial Permission

Path: *Telephony -> Outbound Control -> Dial Permission*

The screenshot displays the ZYCOO web interface. The top navigation bar includes the ZYCOO logo, a search bar, and the user name 'admin' with the current time '2021-06-05 05:50'. The main navigation tabs are 'Trunks', 'Dial Rules', 'Dial Permission' (highlighted with a red box), 'Outbound Fax', and 'PIN Sets'. The left sidebar contains a search bar and a list of menu items: 'Status', 'Dashboard', 'Switchboard', 'Telephony' (expanded), 'Extensions', 'Inbound Control', 'Outbound Cont...' (highlighted with a red box), 'Audio Library', 'Advanced Feat...', 'Preferences', 'Feature Codes', 'Reports', 'System', 'Maintenance', and 'Addons'. The main content area shows a table with the following data:

Dial Permission Name	Dial Rules Included	Options
DialPlan1		

1 Total

Outbound Calls – Dial Permission

Add ✕

Dial Permission Name

Dial Rules

Available Rules

- eee
- emily

Selected Rules

⇄

Internal Permissions

Extension	<input checked="" type="checkbox"/>	Paging & Intercom	<input checked="" type="checkbox"/>
Department	<input checked="" type="checkbox"/>	Call Parking	<input checked="" type="checkbox"/>
Conference	<input checked="" type="checkbox"/>	Call Pickup	<input checked="" type="checkbox"/>
DISA	<input checked="" type="checkbox"/>	Call Queue	<input checked="" type="checkbox"/>
Feature Codes	<input checked="" type="checkbox"/>	Call Spy	<input type="checkbox"/>
IVR	<input checked="" type="checkbox"/>	Seize CO Line	<input type="checkbox"/>
Audio Console	<input type="checkbox"/>		

Include the Dial Rule you created here.

Extension Dial Permission

Path: *Telephony -> Extensions-> IP Extensions -> Select the extension -> Edit*

The screenshot shows the Zycod IP Extensions management interface. The top navigation bar includes the Zycod logo, user name 'admin', and current time '2021-06-05 19:45'. The main content area is titled 'IP Extensions' and contains a table of extension records. The table has columns for Name, Extension Number, Outbound CID 1, Outbound CID 2, Department Name, Quick Register Code, Dial Permission, Options, and QR Code. The 'Dial Permission' column for all listed extensions is 'DialPlan1'. A modal window titled 'Edit 100' is overlaid on the right side of the screen, showing the configuration for extension 100. The 'Dial Permission' dropdown menu in the modal is open, showing 'DialPlan1' as the current selection and 'TESTING' as the selected option.

Name	Extension Numb	Outbound CID 1	Outbound CID 2	Department Name	Quick Register Code	Dial Permission	Options	QR Code
101	101			509		DialPlan1		
102	102			547		DialPlan1		
103	103			223		DialPlan1		
104	104			859		DialPlan1		
105	105			298		DialPlan1		
106	106			404		DialPlan1		
107	107			246		DialPlan1		
108	108			322		DialPlan1		
109	109			882		DialPlan1		
110	110			941		DialPlan1		

The 'Edit 100' modal window is shown, displaying the configuration for extension 100. The 'Dial Permission' dropdown menu is open, showing 'DialPlan1' as the current selection and 'TESTING' as the selected option. The modal includes fields for Name (100), Password (123456), Email, Outbound CID 1, Music On Hold (default), Mobile Number, and Language (English). The 'Submit' button is highlighted in green.

Field	Value
Enable	On
Name	100
Password (Weak)	123456
Email	
Outbound CID 1	
Music On Hold	default
Mobile Number	
Dial Permission	TESTING
Language	English
Outbound CID 2	

Inbound – Inbound Routes

Path: *Telephony -> Inbound Control -> Inbound Routes*

Office Closed

Office Closed Destination: ivr | eee(0600)

Status: Disabled

Submit

Trunk Name	Destination Type	Inbound Destination	Distinctive Ringtone	Options
<input type="checkbox"/> test	IVR	eee(0600)		<input type="checkbox"/>
<input type="checkbox"/> PRI-1	IVR	eee(0600)		<input type="checkbox"/>

0 Selected / 2 Total

Setting the inbound destination for the trunks.

Edit test

Inbound Destination:

- IVR
- ✓ Extension
- Voicemail
- Trunk
- Department
- Conference
- Queue
- Paging
- DISA
- Hangup
- Fax
- None
- Time Rules

Cancel Submit



PART 03

Advance Setup

Direct Routing

Path: *Telephony -> Inbound Control -> Direct Routing*

What if you are using an E1/T1 trunk with 20 lines? All calls go to Ex101?

Using the DID numbers to set different inbound destinations according to the called number.

Ex:

123456 -> IVR

987654 -> Extension 101

DID Number	Destination Type	Inbound Destination	Distinctive Ringtone	Options
123	IVR	***[0600]		<input type="checkbox"/> <input type="checkbox"/>
234	Extension	101[101]		<input type="checkbox"/> <input type="checkbox"/>

Add

DID Number: 123456

Inbound Destination:

- IVR
- Extension
- Voicemail
- Trunk
- Department
- Conference
- Queue
- Paging
- DISA
- Hangup
- Fax
- None
- Time Rules

Distinctive Ringtone: 101[101]

Cancel Submit

Path: *Telephony -> Inbound Control -> IVR*

The screenshot shows the ZYCOO IVR management interface. The top navigation bar includes the ZYCOO logo, user name 'admin', and current time '2021-06-05 19:23'. The main menu on the left lists various telephony features, with 'Inbound Control' selected. The main content area displays a table of IVR configurations under the 'IVR' tab.

Name	Number	Voice Prompts	Dial Permission	Options
eee	0600	closed_cn	Extension	 

1 Total

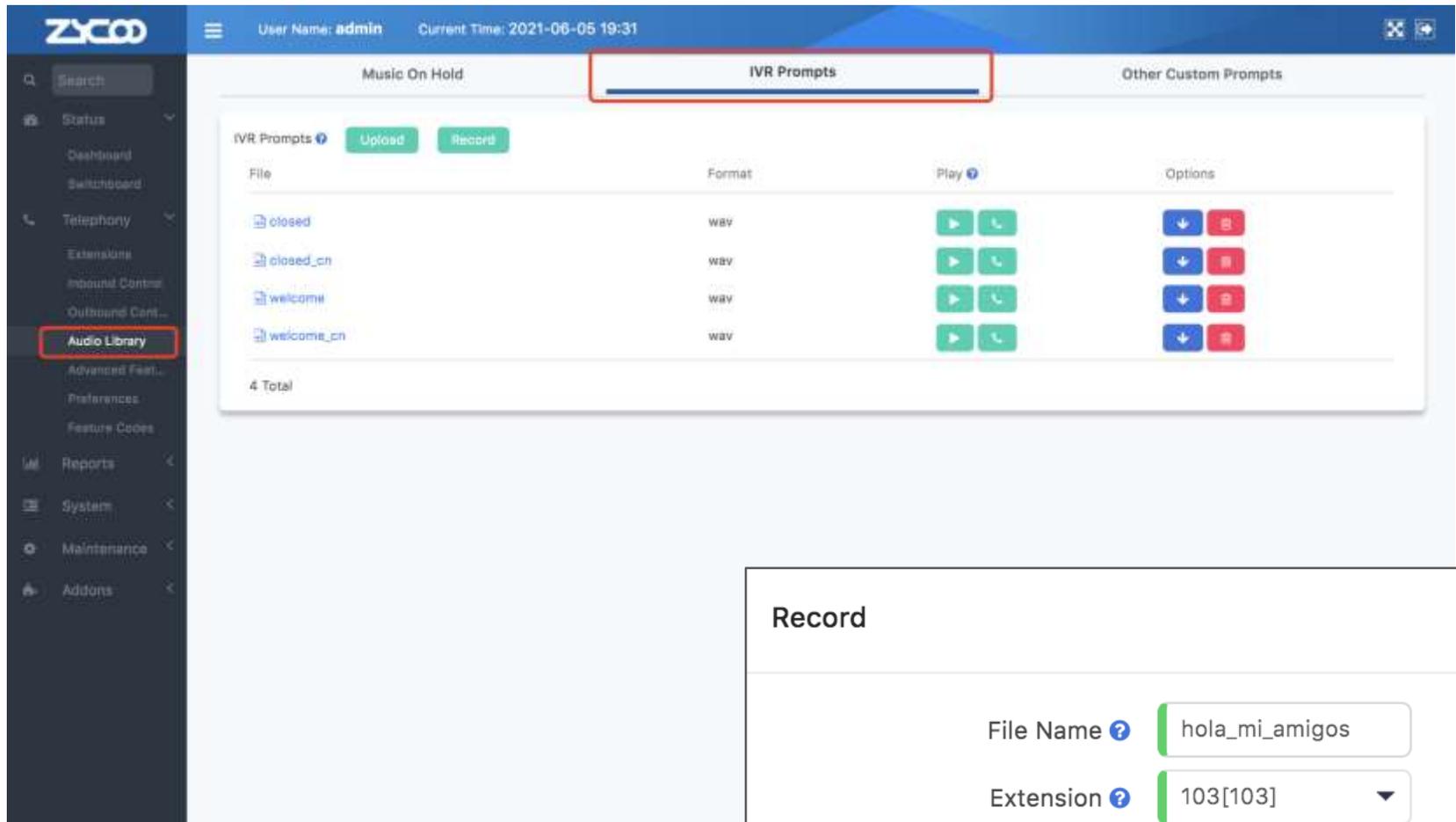
Unlimited layers

The 'Add' form is used to create a new IVR configuration. It includes the following fields and options:

- Name: TESTING
- Number: 0601
- Voice Prompts: welcome
- Loop Count: 1
- Dial Extension: On
- Dial Permission: Extension
- Language: Default
- Press Key Timeout(s): 3
- Events:
 - Invalid Key: Hangup
 - No Press: Hangup
 - Press 0: Extension
 - Press 1: Extension
- Additional options: 102[102] and Please Select (each with a delete icon)
- Buttons: Cancel and Submit

IVR Prompts

Path: *Telephony -> Audio Library -> IVR Prompts*



The screenshot shows the Zycoo web interface for managing IVR prompts. The top navigation bar includes the Zycoo logo, user name 'admin', and current time '2021-06-05 19:31'. The main content area has three tabs: 'Music On Hold', 'IVR Prompts' (highlighted with a red box), and 'Other Custom Prompts'. Below the 'IVR Prompts' tab, there are 'Upload' and 'Record' buttons. A table lists four prompts:

File	Format	Play	Options
closed	wav	[Play] [Phone]	[Down] [Red]
closed_cn	wav	[Play] [Phone]	[Down] [Red]
welcome	wav	[Play] [Phone]	[Down] [Red]
welcome_cn	wav	[Play] [Phone]	[Down] [Red]

At the bottom left of the interface, the 'Audio Library' menu item is highlighted with a red box.

Option-1: upload IVR prompts from local.

Option-2: record IVR prompts by using an extension.



The 'Record' dialog box contains the following fields:

- File Name:
- Extension:

Buttons: [Cancel] [Submit]



Call Queue

Path: *Telephony -> Inbound Control -> Queue*

ZYCOO User Name: admin Current Time: 2021-06-06 19:19

IVR **Call Queue** Time Conditions Inbound Routes Direct Routing Inbound Fax Blacklist

Add

Call Queue Name	Queue Number	Options
***	0300	 

1 Total

Search
Status
Dashboard
Switchboard
Telephony
Extensions
Inbound Control
Outbound Calls
Audio Library
Advanced Features
Preferences
Feature Codes
Reports
System
Maintenance
Admin

Add

General Settings Advanced Settings Announcements

Call Queue Name

Queue Number

Ring Strategy

Music On Hold

Agent Penalty Off

Static Agents

Dynamic Agents

Destination if no answer

Cancel Submit

Auto receive calls

Need to manually login

Call Queue 	
Agent Login	*62
Agent Logout	*062
Agent Pause	*95
Agent Unpause	*095

Time Conditions

Path: *Telephony -> Inbound Control -> Time Conditions*

The screenshot shows the ZYCOO web interface. The top navigation bar includes the ZYCOO logo, a search bar, and the user name 'admin' with the current time '2021-06-05 19:25'. The main navigation tabs are 'IVR', 'Call Queue', 'Time Conditions' (highlighted with a red box), 'Inbound Routes', 'Direct Routing', 'Inbound Fax', and 'Blacklist'. The left sidebar has 'Inbound Control' highlighted with a red box. The main content area displays three sections: 'Time Rules' with one entry '技术支持', 'Weekdays' with two entries 'default office time' and '111', and 'Holidays' with two entries 'hol' and 'eee'. Each entry has edit and delete icons.

Set up:

1. Weekdays
2. Holidays
3. Rules

The 'Add' modal form contains the following fields:

- Name:
- Weekdays:
- Business Hours:
- Non-business Hours:
- Holidays:

Call Forward

Path: *Telephony -> Advanced Features -> Call Forward*

Call Forward

Follow Me Wake Up Call Conference DISA Paging & Intercom

Advanced Options

Notify Caller before Forwarding Off

Save

Add Activate Selected Deactivate Selected Delete Selected Delete All

Extension Number	Forward Type	Destination	Timeout(Sec)	Options
<input type="checkbox"/> 100	Forward All	2222	0	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> On

0 Selected / 1 Total

Add

Extension Number 101(101)

Forward Type Forward On Busy

Destination 123456789

Enable On

- Forward All
- ✓ Forward On Busy
- Forward When Unavailable
- No Answer and Busy
- No Answer and Unavailable

Cancel Submit

Follow me

Path: *Telephony -> Advanced Features -> Follow me*

ZYCOO User Name: admin Current Time: 2021-06-05 19:39

Call Forward **Follow Me** Wake Up Call Conference DISA Paging & Intercom

Configure

Always Take Call On

Record Caller Name Off

Save

Add

Extension Number	Ring Duration(Sec)
No items to display.	
0 Total	

Forward a call to multiple destinations and dial the number one by one in the follow-me list.

Add

Extension Number 101[101]

Ring Duration(Sec) 30

Follow Me List

- 123 -- 30(Sec)
- 234 -- 30(Sec)
- 345 -- 30(Sec)

Number Timeout(Sec) 30

Cancel Submit

Paging

Path: *Telephony -> Advanced Features -> Paging & Intercom*

The screenshot displays the Zycoo web interface. The top navigation bar includes the Zycoo logo, user name 'admin', and current time '2021-08-05 19:41'. The main navigation tabs are 'Call Forward', 'Follow Me', 'Wake Up Call', 'Conference', 'DISA', and 'Paging & Intercom'. The 'Paging & Intercom' tab is highlighted. The left sidebar contains various menu items, with 'Advanced Features' highlighted. The main content area shows a table with one entry:

Name	Group Number	Mode	Options
eee	0500	Duplex	 

Below the table, it indicates '1 Total'. An 'Add' button is located above the table.

The 'Add' modal form contains the following fields:

- Group Number: 0501
- Name: (empty)
- Mode: Duplex
- Group Members: 101[101] x, 102[102] x

Buttons: Cancel, Submit

User can register other SIP-enabled devices such as SIP speaker to the Coovox IPPBX and achieve the paging and intercom purpose.

Whitelist

Path: *Telephony -> Advanced Features -> Whitelist*

The screenshot shows the Zycoo admin interface. The top navigation bar includes the Zycoo logo, user name 'admin', and current time '2021-06-05 19:43'. The main navigation menu on the left has 'Advanced Feat...' highlighted. The main content area shows the 'Whitelist' configuration page with a table containing one entry:

Name	Number List	Options
eee	2222	 

Below the table, it indicates '1 Total'.

Only the numbers in the whitelist are able to the extension.

The 'Add' dialog box is open, showing the following fields:

- Name:** Emily's whitelist
- Number List:** 123, 234, 345, 456

At the bottom of the dialog, there are 'Cancel' and 'Submit' buttons.

Whitelist

Path: *Telephony -> Extensions -> IP Extensions -> Select & Edit extension*

Apply the whitelist to the selected extension.

Name	Extension Number	Outbound CID 1	Outbound CID 2	Department Name	Quick Register Code	Dial Permission	Options	QR Code
<input type="checkbox"/>	101	101			509			
<input type="checkbox"/>	102	102			547			
<input type="checkbox"/>	103	103			223			
<input type="checkbox"/>	104	104			859			
<input type="checkbox"/>	105	105			299			
<input type="checkbox"/>	106	106			404			
<input type="checkbox"/>	107	107			246			
<input type="checkbox"/>	108	108			322			
<input type="checkbox"/>	109	109			882			
<input type="checkbox"/>	110	110			941			

Edit 101

User Profiles **Features** Advanced

Voicemail On

Remote Extension Off

Video Call Off

Web Portal Off

Call Spy Off

Pickup Group

Voicemail Password

Simultaneous Register Count

Video Codecs

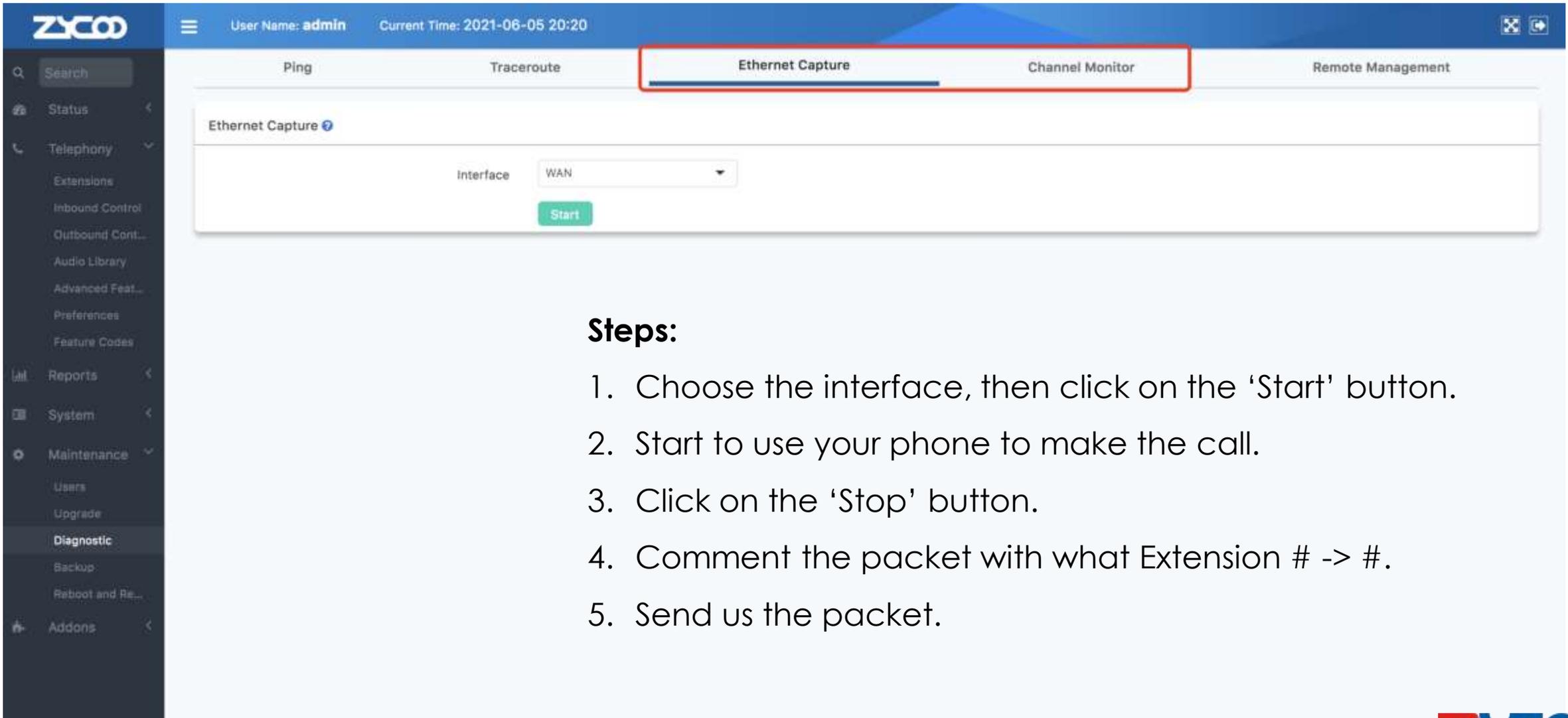
Call Recording

Register Expiration

Whitelist None
admin
333
444

Diagnostic

Path: *Maintenance -> Diagnostic -> Ethernet Capture / Channel Monitor*



The screenshot displays the ZYCOO web interface. At the top, the user is logged in as 'admin' and the current time is 2021-06-05 20:20. The navigation menu on the left includes options like Search, Status, Telephony, Reports, System, Maintenance, and Addons. The main content area shows a tabbed interface with 'Ethernet Capture' selected and highlighted by a red box. Below the tabs, there is a form titled 'Ethernet Capture' with a dropdown menu for 'Interface' set to 'WAN' and a green 'Start' button.

Steps:

1. Choose the interface, then click on the 'Start' button.
2. Start to use your phone to make the call.
3. Click on the 'Stop' button.
4. Comment the packet with what Extension # -> #.
5. Send us the packet.



PART 02

Common Issues

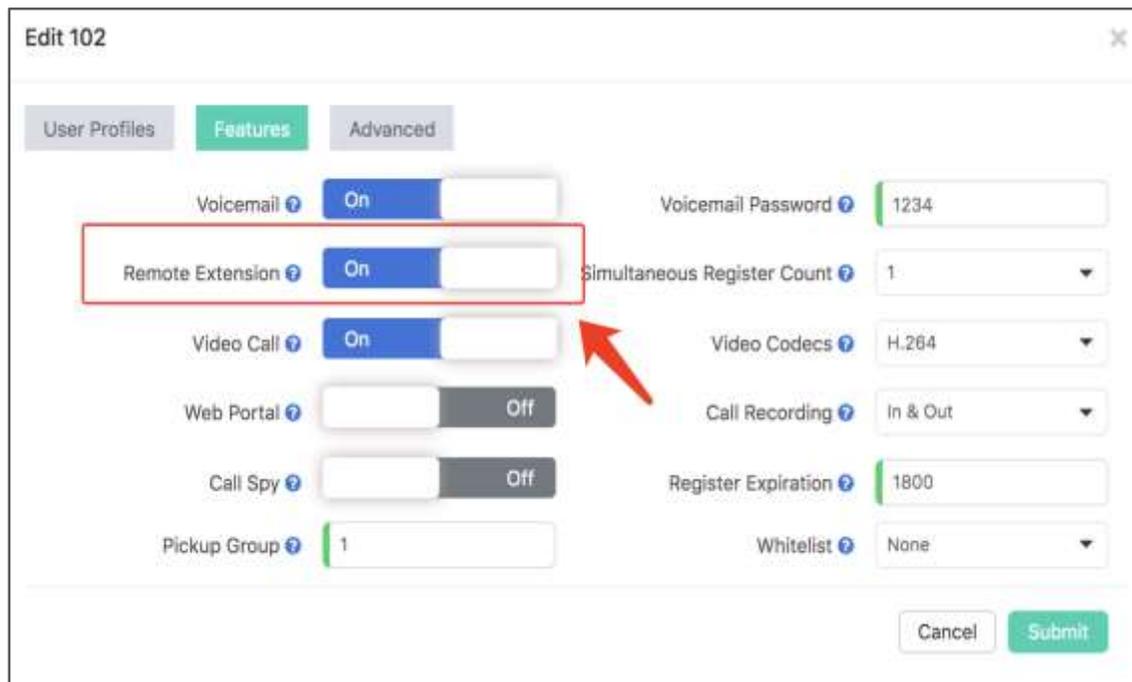
Register Extensions

401 Unauthorized:

The request requires user authentication.

- Make sure the Remote Extension is ON.
- Check the Permit IP

Path: *Telephony -> Extension -> IP Extensions -> Edit the extension -> Features/Advanced*



Edit 102

User Profiles | **Features** | Advanced

Voicemail On | Voicemail Password 1234

Remote Extension On | Simultaneous Register Count 1

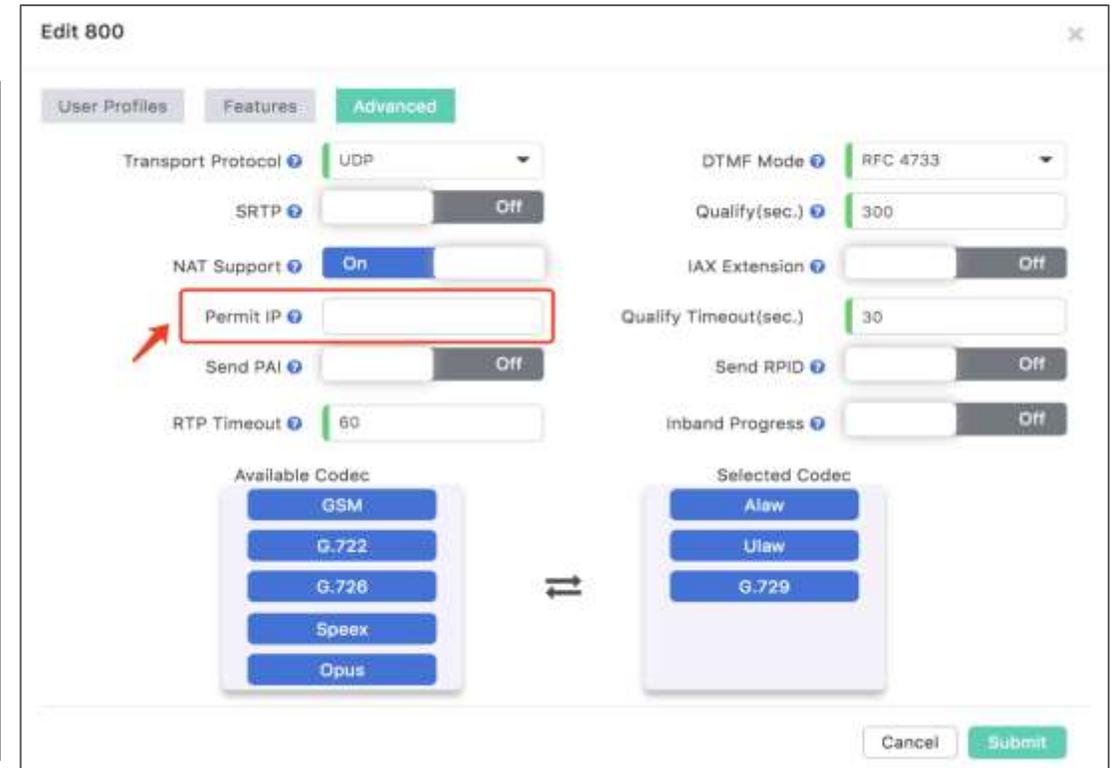
Video Call On | Video Codecs H.264

Web Portal Off | Call Recording In & Out

Call Spy Off | Register Expiration 1800

Pickup Group 1 | Whitelist None

Cancel Submit



Edit 800

User Profiles | Features | **Advanced**

Transport Protocol UDP | DTMF Mode RFC 4733

SRTP Off | Quality 300

NAT Support On | IAX Extension Off

Permit IP | Quality Timeout 30

Send PAI Off | Send RPID Off

RTP Timeout 60 | Inband Progress Off

Available Codec | Selected Codec

GSM | Alaw

G.722 | Ulaw

G.726 | G.729

Speex

Opus

Cancel Submit

403 Forbidden –

The server understood the request, but is refusing to fulfill it.

- Check the account password

404 Not Found –

The server has not found anything matching the Request-URI

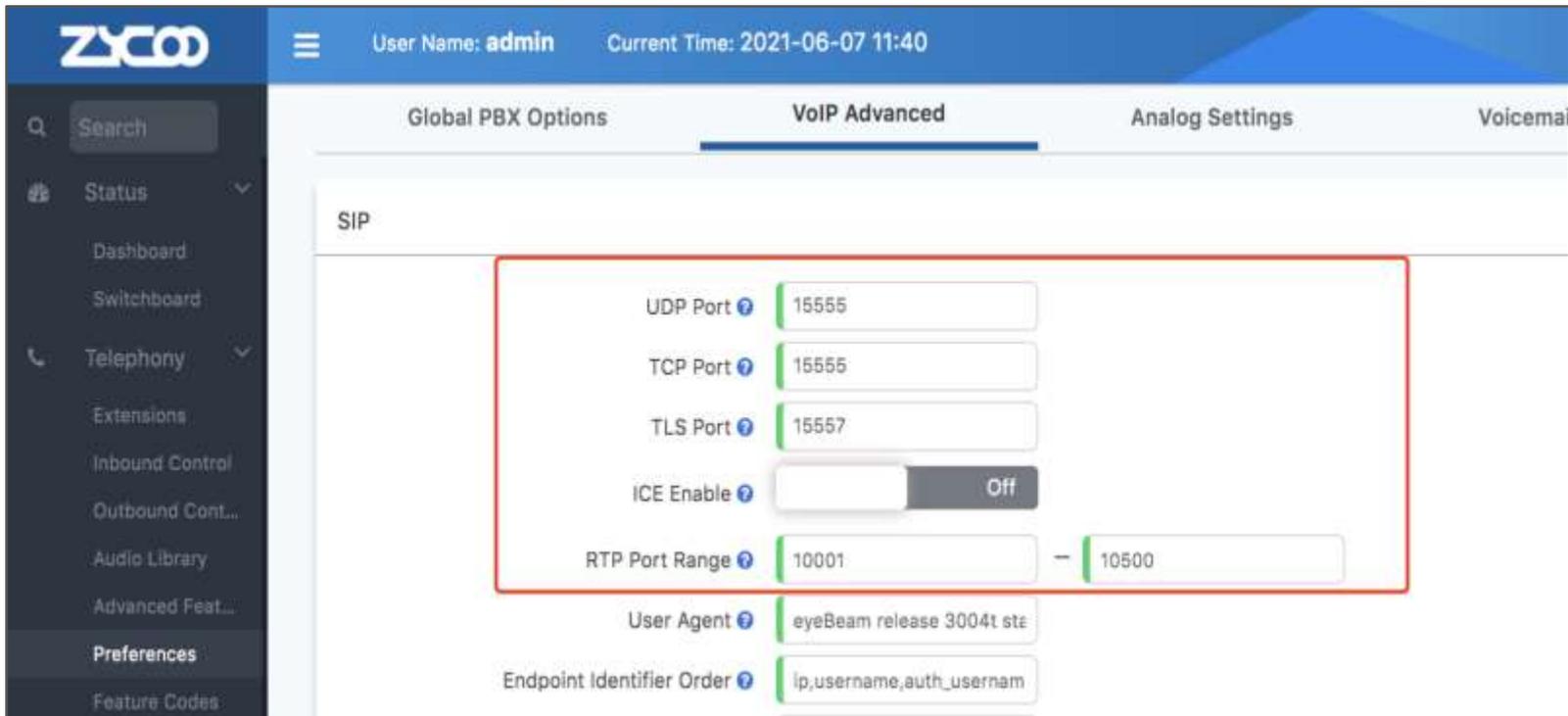
- Check the account username



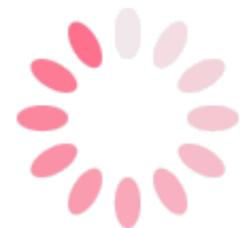
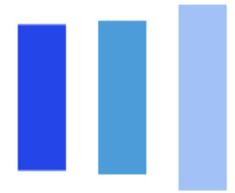
Register Extensions

No reply, keep trying trying and trying:

- Check the port forwarding on router .
Path: *Telephony -> Preferences -> Analog Settings*



- Check the IP phone register port.



Can't make calls - Analog Lines

1) Make sure the analog module is workable.

Step-1

The screenshot shows the 'Add' IVR configuration form. The 'Voice Prompts' dropdown is highlighted with a red box and set to 'welcome'. Other fields include Name: IVR-test-1, Number: 0001, Loop Count: 1, Dial Extension: On, Language: Default, Press Key Timeout(s): 3, and Events for Invalid Key, No Press, Press 0, and Press 1.

Step-2

The screenshot shows the 'Edit test' form for an Inbound Route. The 'Inbound Destination' dropdown is highlighted with a red box and set to 'IVR'. The 'Inbound Destination' dropdown is highlighted with a red box and set to 'IVR test-1[0001]'. Below the form is a table with columns: Trunk Name, Destination Type, Inbound Destination, Distinctive Ringtone, and Options.

Trunk Name	Destination Type	Inbound Destination	Distinctive Ringtone	Options
test	IVR	ivr[0001]		✓
PR-1	IVR	ivr[0001]		✓

Step-1: Create a new IVR with default Voice Prompt.

Step-2: Edit the analog trunk with the created IVR in Inbound Routes.

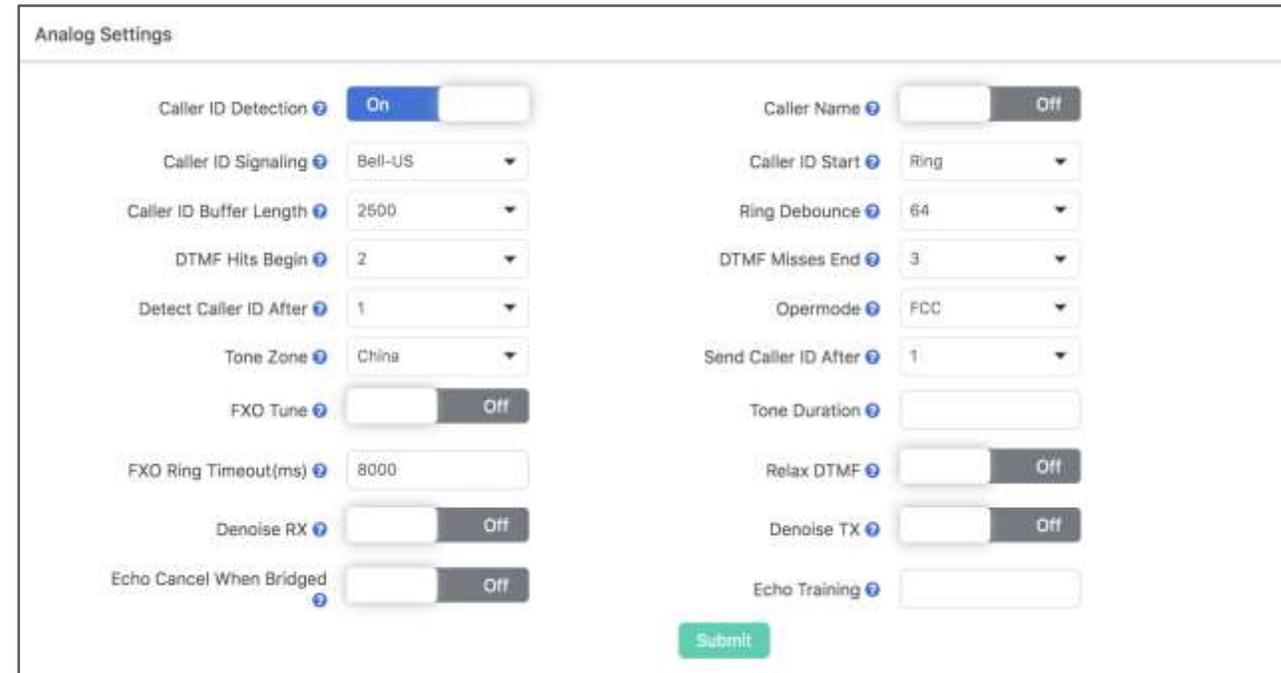
Step-3: Using your phone to call the analog trunk number.

Step-4: If you can't hear the IVR audio, it means the analog module might be damage.

Can't make calls - Analog Lines

2) Check for analog settings

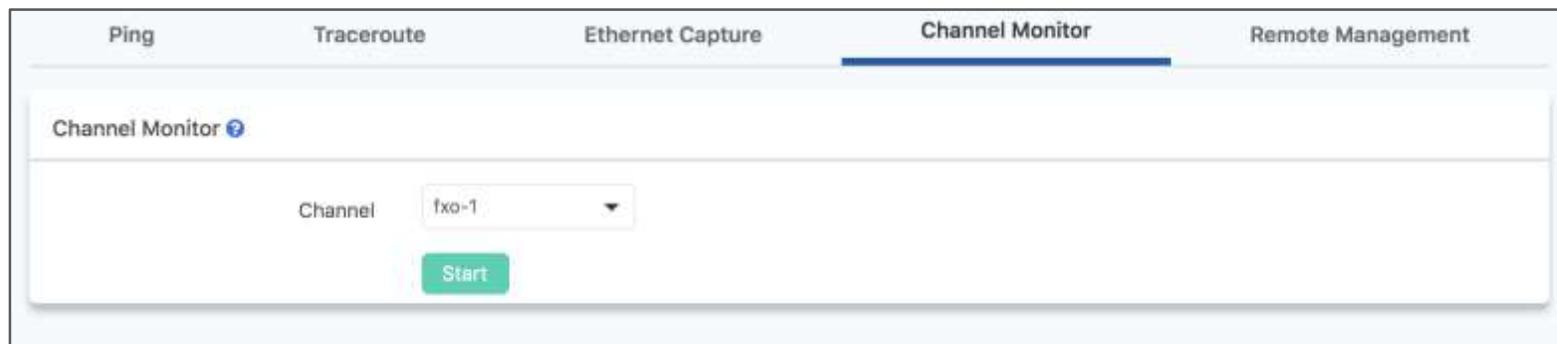
Path: *Telephony -> Preferences -> Analog Settings*



The screenshot shows the 'Analog Settings' configuration page. It contains two columns of settings. The left column includes: Caller ID Detection (On), Caller ID Signaling (Bell-US), Caller ID Buffer Length (2500), DTMF Hits Begin (2), Detect Caller ID After (1), Tone Zone (China), FXO Tune (Off), FXO Ring Timeout(ms) (8000), Denoise RX (Off), and Echo Cancel When Bridged (Off). The right column includes: Caller Name (Off), Caller ID Start (Ring), Ring Debounce (64), DTMF Misses End (3), Opermode (FCC), Send Caller ID After (1), Tone Duration (empty), Relax DTMF (Off), Denoise TX (Off), and Echo Training (empty). A green 'Submit' button is located at the bottom right.

2) Analyze signal

Path: *Maintenance -> Diagnostic -> Channel Monitor -> Capture package*



The screenshot shows the 'Channel Monitor' diagnostic tool. It has a navigation bar with tabs for 'Ping', 'Traceroute', 'Ethernet Capture', 'Channel Monitor', and 'Remote Management'. The 'Channel Monitor' tab is active. Below the navigation bar, there is a 'Channel Monitor' section with a 'Channel' dropdown menu set to 'fxo-1' and a green 'Start' button.

Can't make calls - PRI Trunks:

1) Outbound CID

Path: *Telephony -> Extensions -> IP Extensions -> Edit the extension -> Fill out Outbound CID*

Edit 102

User Profiles Features Advanced

Enable On

Name 102

Password (Fair) 123456@a

Email

Outbound CID 1 55555555

Music On Hold default

Mobile Number

Dial Permission DialPlan1

Language English

Outbound CID 2

Cancel Submit

ZYCOO

View Name: 48000 Current Time: 2021-06-05 04:47

Global PBX Options VoIP Advanced Analog Settings Miscall Settings Module Settings

Slot1

Module Type FXS/FXO/SIP/COMA

Slot2

Module Type E1/T1

E1/T1 Settings:

Mode E1

Docking Name

Overlap Dial

Signaling CPE

Framing SS7

CRC4 On

Dial Plan

Local Dial Plan

Save

2) CRC4 on module

Path: *Preference -> Module Setting -> Slot # -> Switch CRC4 ON/OFF*

Can't make calls – SIP Trunks

- Outbound CID

Path: *Telephony -> Extensions -> IP Extensions -> Edit the extension -> Fill out Outbound CID*



Additional Options

Send PAI Off

Dial Permission Default

Available Codec

- GSM
- G.722
- G.726
- Speex
- Opus
- AMR

Selected Codec

- Alaw
- Ulaw
- G.729

Advanced

Outbound CID 1

- SIP headers needed

Path: *Telephony -> Outbound Control-> Trunks-> Select & Edit SIP Trunk -> Additional Options*



Check on Dial Permission & Send PAI

Can't Hang-up Calls - Analog Lines

Path: *Telephony -> Outbound Control -> Trunks -> Edit trunk*

- 1) Check Hangup Polarity Detection
- 2) Adjust Busy Count to a smaller number

Edit FXO-1

Call Recording

Output Volume

Input Volume

Answer Polarity Detection Off

Hangup Polarity Detection Off

Fax Detect Off

Caller ID Signaling

Fax Wait Time(sec)

Remark

Prompts Language

Busy Count

Busy Pattern

Busy Detection On

Quick Send Number Off

Caller ID Start

Fax Email Address

Cancel Submit

Can't Hang-up Calls – SIP trunks

Path: *Telephony -> Preference -> VoIP Advanced*

SIP

UDP Port [?](#)

TCP Port [?](#)

TLS Port [?](#)

ICE Enable [?](#) Off

RTP Port Range [?](#) –

User Agent [?](#)

Endpoint Identifier Order [?](#)

External Media Address [?](#)

External Signaling Address [?](#)

External UDP Signaling Port [?](#)

External TCP Signaling Port [?](#)

External TLS Signaling Port [?](#)

Local Net(IP/Netmask Length) 1 [?](#)

Local Net(IP/Netmask Length) 2 [?](#)

Local Net(IP/Netmask Length) 3 [?](#)

When Port forwarding is involved, fill out all the External XX options on VoIP Advanced.



Thank you!

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