

# Administrator's Guide

Version 15.18.0.21

Yeastar Technology Co., Ltd.



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# **1. Introduction**

### **MyPBX** – IP-PBX for Medium Businesses/Home Office

New products MyPBX U100&U200 is a standalone embedded hybrid PBX for medium businesses and remote branch offices of larger organizations (1-200 users per site). MyPBX U100&U200 also offers a hybrid solution (a combination of VoIP applications using PSTN/BRI/GSM/UMTS/FXS equipment) alternative for enterprises who are not yet ready to migrate to a complete VoIP solution.

Auto-provision	Follow me
Audio in/out	• Interactive Voice Response (IVR)
BLF Support	Intercom / Zone Intercom
Blacklist	Music On Hold
Call transfer	Hot standby
Call Detail Records(CDR)	Paging / Zone Paging
Call Forward	PIN Users
Call Parking	• Queue
Call Recording	• QOS
• Call Pickup	Ring Group
Call Routing	Route by Caller ID
Call Transfer	Spy functions
Call Waiting	• Skype Integration (Skype Connect)
• Caller ID	Three-way Calling
Call Back	Mobility Extension
Conference	External Storage
Speed Dial	• DDNS
Define Office Time	• OpenVPN
<ul> <li>Direct Inward System Access(DISA)</li> </ul>	• T.38
• DIDs	Voicemail
Distinctive Ringtone	• VLAN
Do Not Disturb(DND)	• WAN
Dial by Name	• PPPoE
• Firewalls	Static Route

### 1.1 Features

URL of U100: http://www.yeastar.com/products/MyPBX-U100.asp URL of U200: http://www.yeastar.com/Products/MyPBX-U200.asp



### **1.2 Hardware Specifications**

### **1.2.1 Exterior Appearance**

#### **Front Panel**



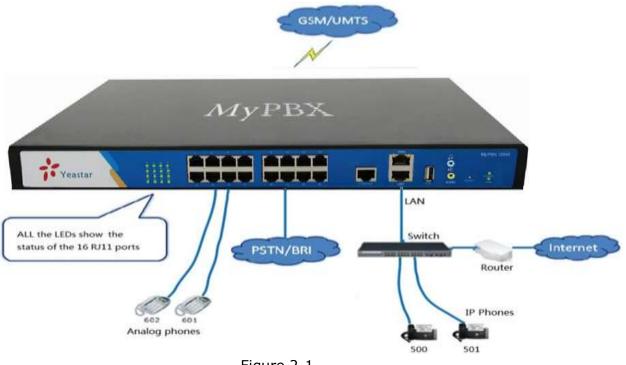


No.	Indication
1	16 Green LEDs
2	16 RJ11 ports
3	Console port (RJ45)
4	WAN/LAN port
5	USB 2.0 port
6	Audio in/out
$\overline{O}$	Reset Button
8	Power and Run indicator



# 2. System Setup

### **2.1 Connection Drawing**



#### Figure 2-1

### **2.2 Connecting Ethernet Line**

MyPBX provides two 10/100M Ethernet ports with RJ45 interface and LED indicator. Plug Ethernet line into MyPBX's Ethernet port, and then connect the other end of the Ethernet line with a hub, switch, router, LAN or WAN. Once connected, check the status of the LED indicator. A yellow LED indicates the port is in the connection process, and a green LED indicates the port is properly connected.



### 2.3 Supplying Power

Please follow the steps below to connect the MyPBX unit to a power outlet:

- Connect the small end of the power cable to the power input port on the MyPBX back panel, and plug the other end of the cable into a 100V~240V AC power outlet.
- 2. Check the Power LED on the front panel. A solid green LED indicates that power is being supplied correctly.

# **3 Administrator Login**

From your web browser, input the IP address of the MyPBX server. If this is the first time you are configuring MyPBX, please use the default settings as below (your PC should be in the same local network with MyPBX): IP Address: http://192.168.5.150 Username: admin Password: password

#### In this example, the IP address is 192.168.5.149

Hybrid IP PBX for Your Businesses



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Figure 3-1

This is the welcome page of MyPBX U100&U200 after successful login.



# 4 Status

Click to start to check the status of MyPBX U100&U200, where we can check the status of extension, trunk, network and system information.

### 4.1 Line status

In this page, we can check the status of extension and trunks

### 4.1.1 Extension Status

	🧳 Ringing	Inavailable	<b>a</b> Held	ar Buny	S Free		
I 19458	I 202(SP)	1P)	I MAR		<b>201(SIP)</b>	200(SIP)	q
		(5)	2 612/FX		2 601(FXS)	305(SIP)	12

Figure 4-1

#### **MyPBX Status Description:**

#### Extensions:



5) 🚳 : Extension is on hold



### 4.1.2 Trunk Status

Status	Signal	Trunk Name	Туре	User Name	Port/Hostname/IP	Reachability
Registered		Yeastar	SIP	305	192.168.5.146	ок
OK (7 ms)		Support	SP-SIP		192.168.4.141	OK (7 ms)
Disconnected		pstn13	FXO		Port 13	
Disconnected		pstn14	FXO		Port 14	
Idle	Tall	GSM1	GSM		Port 1	
Disconnected		BriTrunk3	BRI		Port 3	
Disconnected		BriTrunk4	BRI		Port 4	
Disconnected		BriTrunk7	BRI		Port 7	
Disconnected		BriTrunk8	BRI		Port 8	

Figure 4-2

#### Trunks:

#### **VOIP Trunk**:

#### Status

Unregistered: Trunk registration failed.

Registered: Successful registration, trunk is ready for use.

Request Send: Registering.

Waiting: Waiting for authentication.

#### Service Provider:

#### Status

OK: Successful registration, trunk is ready for use.

Unreachable: The trunk is unreachable.

Failed: Trunk registration failed.

#### FXO Trunk:

#### Status

Idle: The port is idle.

Busy: The port is in use.

Disconnected: The port hasn't connected to the PSTN line.

More detail message, please refer to the LED indication of front panel.

#### GSM/UMTS Trunk:

#### Status

Idle: The port is idle.

Busy: The port is in use.

#### Signal

🍸 : Poor.

**₩**ı : Average.

Yul : Good.

**Yıll**: Excellent.



#### BRI Trunk:

**Status** Ok: The ports connect correctly. Disconnected: The port hasn't connected to the BRI line



### 4.2 System Status

In this page, we can check the status of MyPBX system, including the hardware, firmware version and the network status of LAN and WAN ports.

### 4.2.1 System Info

In this page, we can check the hardware/firmware version, or the disk usage of MyPBX.

General		
Product 1 Ry78X U		
	r Version: DDS-0000	
Firmware 11.19.0		
Uptime: 22:04:4	5 up 4:54	
Disk Use	49	
Disk Usa		system. The object viscemal messages, call record files and call log files will be automatically deleted as recession
Elashi	Used/Total(1K-blocks) 3072/309120	24
Mannary		
Memory	Usaget	
tion:	Deed/Total(1E+blocks) 172476/417776	1249¥ 624

Figure 4-3

### 4.2.2 Network Status

In this page, the IP address of LAN and WAN port will appear, if OpenVPN and VLAN are configured well, they will be display here too.

LAN		
	Nostname : HyTEX	
	MAC Address : \$4:25:49:06:01:34	
	IP Address : 192.168.5.149	
	Subret Mask : 200.205.204.0	
	Gateway: 132.100.1.1	
	Primary DRS: 192.188.8.1	
	Secondary DNS 1	
WAN		
	Status : Connern	
	MAC Address : 24:55:40:00:01:31	
	IP Address : 192.168.1.149	
	Subnet Mask ( 255.255.255.0	
	Gateway: 192.149.1.1	
	Primary DNS: 192.169.1.1	
	Secondary DNS: 0.0.0.0	
	Type: Static 1D Address	

Figure 4-4



# **5** System



In this page, we can configure the network settings, firewall settings, storage management and some other preferences like firmware update and hot standby.

### **5.1 Network Preferences**

### 5.1.1 LAN Settings

Settings	
LAN Settings	
	DHCP: No 💌
	Enable SSH: No 💌 Port: 8022
	Hostname: MyPBX
	IP Address: 192.168.5.150
	Subnet Mask : 255.255.255.0
	Gateway : 192.168.5.1
	Primary DNS: 192.168.5.1
	Secondary DNS :
	IP Address2:
	Subnet Mask2:
	✓ Save X Cancel

Figure 5-1

#### ·DHCP

If this option is set, MyPBX will use DHCP to get an available IP address from your local network. Not recommended or you cannot access MyPBX without the right IP address

#### •Enable SSH

This is the advance way to access the device, you can use the putty software to access the device. In the SSH access, you can do more advanced setting and debug, it's disabled by default.

•Port: the default is 8022; you change it to another one



•Hostname Set the host name for MyPBX.

·IP Address

Set the IP Address for MyPBX. Recommend to configure a static IP address for MyPBX

#### Subnet Mask

Set the subnet mask for MyPBX.

•Gateway Set the gateway for MyPBX.

•**Primary DNS** Set the primary DNS for MyPBX.

#### ·Secondary DNS

Set the secondary DNS for MyPBX.

#### ·IP Address2

Set the second IP Address for MyPBX.

#### Subnet Mask2

Set the second subnet mask for MyPBX.

### 5.1.2 WAN Settings

in Settings			
	Use WAN 12		
	C DHCP		
	State IP Address		
	IF Address	192.168.1.149	
	Subnet Mask	255 255 255 8	
	Default Galeway	192 168 1.1	
	Primary DNS	192.168.1.1	
	Secondary DNS	1888	
	O PPPoE		
	Liser Name		
	Password		

Figure 5-2

It supports three connection types: DHCP (obtain an IP automatically), PPPoE, Static IP Address.

Note:



- 1. WAN port is disabled by default
- 2. WAN port cannot be used as a router to route the internet packages from WAN port to LAN port.

#### ·DHCP

.If your ISP says that you are connecting through DHCP or a dynamic IP address from your ISP, perform these steps:

Step1: Select **DHCP** as the WAN Connection Type.

Step2: Click **Save** button to save the settings.

Step3: Reboot the device.

Step4: Check the WAN's Status (Status  $\rightarrow$  Network status).

#### **·Static IP Address**

If your ISP says that you are connecting through a static or fixed IP address from your ISP, perform these steps:

Step1: Select **Static IP Address** as the WAN Connection Type.

Step2: Enter the IP Address.

Step3: Enter the Subnet Mask.

Step4: Enter the Gateway Address.

Step5: Enter the Primary DNS and Secondary DNS.

Step6: Click the **Save** button to save the settings.

Step7: Reboot the device.

Step8: Check the WAN's Status (Status  $\rightarrow$  Network status).

#### ·PPPoE

If your DSL provider says that you are connecting through PPPoE or if you normally enter a user name and password to access the Internet, perform these steps:

Step1: Select **PPPoE** as the WAN Connection Type.

Step2: Enter the User Name.

Step3: Enter the Password.

Step4: Click the **Save** button to save the settings.

Step5: Reboot the device.

Step6: Check the WAN's Status (Status  $\rightarrow$  Network status)

### 5.1.3 DHCP Server

Dynamic Host Configuration Protocol (DHCP) is a network protocol that enables a server to automatically assign an IP address to a computer from a defined range of numbers (i.e., a scope) configured for a given network. You can set a local network NTP server for MyPBX here too

Note: MyPBX U100&U200 can be working as a DHCP server, but cannot be regarded as a router.

HCP Server		
DHCI	is running	
10 E	Eruhle	
Router	192.198.5.1	
Submit Mask	255 255 255 0	
Primary DNS :	192 168:5.1	
Secondary DNS		
Allow IP Address From	192 188 5 2	
Τα	192.166.5.254	
TFTP Server@	ttp://192.168.5.148	
NTP Server.		

Figure 5-3

### 5.1.4 VLAN Settings

A VLAN (Virtual LAN) is a logical local area network (or LAN) that extends beyond a single traditional LAN to a group of LAN segments, given specific configurations.

#### Note:

MyPBX U100&U200 is not the VLAN server, a 3-layer switch is still needed, please configure the VLAN information there first, then input the details in MyPBX, so that the packages via MyPBX will be added the VLAN label before sending to that switch.



CAR OWELAN	
NO 1.	
VLAN Number	
VLAR IP Address	
VLAN Subret Mask	
Default Gallennay	
102	0
VLAN hamber	
VLAN IP Address	
VLAN Subret Mask	
Debuit Gateriay	
LAR Deer WAR	
90.1	0
VLAV Number	
VLAN IP Address	
VLAN Subnet Mask:	
Default Gateway	
N0 2	0
VLAN Number	
VLAK IP Address	
VLAN Subref Mask	
Default Galeway	

Figure 5-4

#### 1) VLAN Over Lan

#### ·NO.1

Click the NO.1 you can edit the first VLAN over Lan.

#### **·VLAN Number**

.The VLAN Number is a unique value you assign to each VLAN on a single device.

#### **·VLAN IP Address**

Set the IP Address for MyPBX VLAN over Lan.

#### ·VLAN Subnet Mask

Set the Subnet Mask for MyPBX VLAN over Lan.

#### ·Default Gateway

Set the Default Gateway for MyPBX VLAN over Lan

#### •NO.2

Click the NO.2 you can edit the first VLAN over Lan.

#### **·VLAN Number**

.The VLAN Number is a unique value you assign to each VLAN on a single device.

#### **·VLAN IP Address**

Set the IP Address for MyPBX VLAN over Lan.

#### ·VLAN Subnet Mask

Set the Subnet Mask for MyPBX VLAN over Lan.





#### ·Default Gateway

Set the Default Gateway for MyPBX VLAN over Lan.

2) VLAN Over Wan

#### •NO.1

Click the NO.1 you can edit the first VLAN over Wan.

#### **·VLAN Number**

.The VLAN Number is a unique value you assign to each VLAN on a single device.

#### **·VLAN IP Address**

Set the IP Address for MyPBX VLAN over Wan.

#### ·VLAN Subnet Mask

Set the Subnet Mask for MyPBX VLAN over Wan.

#### ·Default Gateway

Set the Default Gateway for MyPBX VLAN over Wan.

#### •NO.2

Click the NO.2 you can edit the first VLAN over Wan.

#### **·VLAN Number**

.The VLAN Number is a unique value you assign to each VLAN on a single device.

#### **·VLAN IP Address**

Set the IP Address for MyPBX VLAN over Wan.

#### **·VLAN Subnet Mask**

Set the Subnet Mask for MyPBX VLAN over Wan.

#### ·Default Gateway

Set the Default Gateway for MyPBX VLAN over Wan.

### 5.1.5 VPN Settings

A virtual private network (VPN) is a method of computer networking--typically using the public internet--that allows users to privately share information between remote locations, or between a remote location and a business' home network. A VPN can provide secure information transport by authenticating users, and encrypting data to prevent unauthorized persons from reading the information transmitted. The VPN can be used to send any kind of network



traffic securely. MyPBX supports OpenVPN.

VPN Settings	
VPN Settings	
Enable VPN:	0
Enable VPN Import VPN Config 0	
	Import
🧭 Save	Cancel

Figure 5-5

#### •Enable VPN

#### ·Import VPN Config

Import configuration file of OpenVPN.

Note: Don't configure "user" and "group" in the "config" file. You can get the config package from the OpenVPN provider.

### **5.1.6 DDNS Settings**

DDNS(Dynamic DNS) is a method / protocol / network service that provides the capability for a networked device, such as a router or computer system using the Internet Protocol Suite, to notify a Domain Name System (DNS) name server to change, in real time, the active DNS configuration of its configured hostnames, addresses or other information.

DKB Settings			
DONS Settings			
fone DDNS allows you to access your network using domain names instant of IP adde our must align up for service through dyndmicory threadm alread org. www.no.ip.com. w	ees. The service man www.iscines@c.com	eges chiinge	g IP address and opdates your domain information dynamically
	S is not running		
Enable DDNS			
DDNS Server:	dyndes org		
User Name:			
Password			
Host Name			

Figure 5-6

#### •Enable DDNS

#### **·DDNS Server**

Select the DDNS server you sign up for service.

#### ·User Name



User name the DDNS server provides you.

#### Password

User account's password.

#### ·Host Name

**Note**: DDNS allows you to access your network using domain names instead of IP address. The service manages changing IP address and updates your domain information dynamically. You must sign up for service through dyndns.org, freedns.afraid.org, www.no-ip.com, www.zoneedit.com

### 5.1.7 Static Route

MyPBX will have more than one internet connection in some situations but it has only one default gateway. You will need to set some Static Route for MyPBX to force it goes out through different gateway when access to different internet. The default gateway priority of MyPBX from high to low is OpenVPN $\rightarrow$ WAN port $\rightarrow$ LAN port.

		g Table		
Overlandion	Subter Mask	Gelenny	Metric	Interface
192 168 1.0	255 255 255 0	0.0.0	0	WAN
192.165.4.0	255.255.254.0	0.0.0.0	0	LAN
224.0.0.0	224.0.0.0	0.0.0.0	D,	LAN
0.0.0	0.0.0	192.168.1.1	0	WAN
	Static Ro	uta Rules		
Destination 0	Subtref Mask Gateway	Metro O	Interfac	e LAN 👻 🕂 Ada

Figure 5-7

#### 1) Route table

The current route rules of MyPBX

#### Destination

The destination network to be accessed to by MyPBX

#### Subnet Mask

Specify the destination network portion.

#### Gateway

Define which gateway MyPBX will go through when access to the destination network.



#### Metric

The cost of a route is calculated by using what are called routing metric. Routing metrics are assigned to routes by routing protocols to provide measurable statistic which can be used to judge how useful (how low cost) a route is.

#### Interface

Define which internet port to go through.

2) Static Route Rules

You can add new static route rules here.

### 5.2 Firewall Settings

Firewalls are used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria.

### 5.2.1 Firewall Rules

General Settings	
Note: 1.You must reboot the system after enabling or disabling frewall	
2.11 to strongly recommonded to add local onwork address to a common rule with the 'action' to 'accept', or it may be disagged into the blackflat.	
IV OEnatis Firewal	
C ODivable Ping	
C Orop Al	Firswall has started accurate
Common Rules	
📥 Add Rule	
No Common Rules Defined	
Auto Defense	
Add Rule	
No Auto Defense Rules Defined	
🐷 Save 💢 Cancel	

Figure 5-8

#### 1) General Settings

#### ·Enable Firewall

Enable the firewall to protect the device. You should reboot the device to make the firewall run successfully.

#### ·Disable Ping

Enable this item, net ping from remote hosts will be dropped.

#### ·Drop All

When you enable "Drop All" feature, system will drop all packets or connection from other hosts if there are no other rules defined. To avoid locking the devices, at least one "TCP" accept common rule must be created for port used for SSH access, port used for HTTP access and port sued for CGI access.

#### 2) Common Rules

There is no default rule, you can create them as required.



Add Firewall Rule					
Name 💷 :					
Description 3:				*	
				*	
Protocol 0: UD	P				
Port <sup>1</sup> :	5				
IP:		1			
MAC Address					
Action 🕄 Dr	p 💌				
	🖌 Save		Cancel		
	Fi	gure 5-9	Ð		

#### •Name

A name for this rule, e.g. "HTTP".

#### Description

Simple description for this rule. E.g.: Accept the specific host to access the web interface for configuration.

#### Protocol

The protocols for this rule.

#### •Port

Initial port should be on the left and end port should be on the right. The end port must be equal to or greater than start port.

#### ·IP

The IP address for this rule. The format of IP address is: IP/mask Ex: 192.168.5.100/255.255.255.255 for IP 192.168.5.100 Ex: 216.207.245.47/255.255.255.255 for IP 216.207.245.47 Ex:192.168.5.0/255.255.255.0 for IP from 192.168.5.0 to 192.168.5.255 .

#### MAC Address

The format of MAC Address is XX:XX:XX:XX:XX:XX, X means 0~9 or A~F in hex, the A~F are not case sensitive.

**Note**: The MAC address will be changed when it's remotely device, so it will not be working to filter using MAC for remote devices.

#### Action

Accept: Accept the access from remote hosts. Drop: Drop the access from remote hosts. Ignore: Ignore the access.



### 5.2.2 IP blacklist

You can set some packets accept speed rules here. When a IP address which hasn't been accepted in common rules sends packets faster than the allowed speed, it will be set as black IP address and blocked automatically.

Add Rute					
Port	Protocol	Rate			
5060	UDP	120/60s		- X.	
1060	UDP	40/21	( <i>H</i>	×	
8022	TCP	5601	8	8	
ckint					

Figure 5-10

#### 1) Blacklist rules

We can add the rules for IP blacklist rate as your demand

Add Auto Blacklist Rules	X
Port <sup>1</sup> :	
Protocol 🛈 : UDP 💌	
IP Packets 🛈 :	
Time Interval 0: seconds	
🗸 Save 🔀 Cancel	

Figure 5-11

#### ·Port

Auto defense port

#### Protocol

Auto defense protocol. TCP or UDP.

#### **·IP** Packets

Allowed IP packets number in the specific time interval.

#### ·Time interval

The time interval to receive IP packets. For example, IP packets 90, time interval 60 means 90 IP packets are allowed in 60 seconds.

#### 2) IP blacklist

The blocked IP address will display here, you can edit or delete it as your wish.



### **5.3 System Preference**

In this page, we can set other system preference, like the password for admin/user/cdr account, system date and time, firmware update, hot standby, backup and restore, reset and reboot.

### 5.3.1 Password Settings

MyPBX has 3 accounts: admin, user, and cdr. User and cdr account is disabled by default.

Admin account:

The default password for account "admin" is "**password**". To change the password, select "admin" in "User", enter the old password and new password, click "Save". The system will then prompt you to re-login using your new password.

After you enter the new password, MyPBX will prompt the password strength. It is recommended that you use numbers, upper-case letters, and lower-case letters to increase the security.

When you log in MyPBX using "admin" account, you can enable "user" and "cdr" account; also, you can change their passwords.

Charge Paweword						
	U	løør:	admin 👻			
	Enter Old Password					
	Enter New Passw	end:		-	and the second se	
	Retype New Passw	ord				
(NecSetting)						
	Enable User Acco	ant	Ne 🗸			
	Enstie CDR Acco	ina	No *			

Figure 5-12

User account:

User account is disabled by default and its default password is "password". When enabling "user" account for the first time, MyPBX will ask you to change "user" password. If you don't change it, you can't enable "user" account. To change the password, select "user" in "User", enter the old password and new password, click "Save". The system will then prompt you to re-login using your new password.

After you enter the new password, MyPBX will prompt the password strength. It is recommended that you use numbers, upper-case letters, and lower-case letters to increase the security.



Theoge Presented	1 patient			
	User	and the second se		
	Enter Old Pasewort			
	Enter New Password:		net me and Diving	
	Retype New Passwort			
	224			
Ser Britting				
	Enable User Account.	Yes 🗸		
	Enable CDR Account	No v		

Figure 5-13

After enabling "user" account, you can log in MyPBX using "user". "user" account can change its own password.

CDR account:

"cdr" account is disabled by default and its default password is "password". You can enable it after you log in MyPBX using "admin" account.

To change the password, select "cdr" in "User", enter the old password and new password, click "Save". The system will then prompt you to re-login using your new password.

After you enter the new password, MyPBX will prompt the password strength. It is recommended that you use numbers, upper-case letters, and lower-case letters to increase the security.

Change Personnal	
User	cdr v
Enter Oid Password:	
Enter New Parencert	
Retype New Password	
2002-2007-01	
User Setting	
Enable Uner Account	Yes V
Enable CDR Account	Yes V

Figure 5-14

After enabling "cdr" account, you can log in MyPBX using "cdr". "cdr" account can change its own password.

### 5.3.2 Date and Time

Set the date and time for MyPBX.



Server Time:	Tue Jul 30 22 51 40 2013		
Time Zone:	-8 United States - Pacific Time	Y	
Deylight Saving Time	Disabled		
	Automatically Synchronize With A NTP Serve: pool rtip org	n Internet Time Server	
0	Set Date & Time Manually		
	Date		
	Time 🗸 V MM	w.	

Figure 5-15

#### •Time Zone

You can choose your time zone here.

#### ·Daylight Saving Time

Set the mode to Automatic or disabled

#### •Automatically Synchronize With an Internet Time Server

Input the NTP server so that MyPBX will update the time automatically

#### •Set Date & Time Manually

You can set the time to your local right time manually here

### 5.3.3 Firmware Update

Upgrading of the firmware is possible through the Administrator web interface using a TFTP Server or an HTTP URL.

Enter your TFTP Server IP address and firmware file location, then click start to update the firmware

#### Note:

1. If enabled "Reset configuration to Factory Defaults", System will restore to factory default settings.

2. When update the firmware, please don't turn off the power. Or the system will get damaged.

3. More information for the steps to update the firmware, please refer to this link: http://www.yeastar.com/download/MyPBX-U100\_U200/MyPBX\_U100&U200\_F irmwareUpgrade\_cn.pdf



Update System Firmware	
	Firmware Download Source:
	HTTP URL      TFTP Server  HTTP URL:
	Reset Configuration to Factory Defaults:
	▶ Start

Figure 5-16

### 5.3.4 Backup and Restore

We can backup up the configurations before reset MyPBX U100&U200 to factory defaults, and then restore it using this package.

#### Note:

- 1. Only configurations, custom prompts will be backed up, the voicemail and recording files are not included.
- 2. When you have updated the firmware version, it's not recommended to restore using old package.

Create a Now Bax	ckup 👷 Upłoad a Backup				
		List Of Previous Configuration Backups			
	Name	Time		Optio	m):
t he	eckup_2012oct14_185039.tar	Sun Oct 14 2 48 35 2012	*	40	x

Figure 5-17

### 5.3.5 Reset and Reboot

We can reset or reboot MyPBX U100&U200 via web directly in this page.

Reset and Report	Cpoons
Robert System	
	Reboot System
	Warning: Polyanity the system of territory of active called
	Raboot
Heart to Factor	y Usilautha
	Reset to Factory Defaults
	Warning: A lactory result off strategion fails on the system. Phases do not term off the system and the WOM light begins lifeting, key passes determined using the line could cause derauge to the system.
	Reset to Factory Defaults

Figure 5-18



#### ·Reboot System

Warning: Rebooting the system will terminate all active calls!

#### **·Reset to Factory Defaults**

**Warning**: A factory reset will erase all configuration data on the system. Please do not turn off the system until the RUN light begins blinking. Any power interruption during this time could cause damage to the system.

### 5.3.6 Hot Standby

Redundancy is achieved by using duplicate hardware and software installations and synchronizing data and operating state. Redundancy assures smooth operation even if a system goes down. Essentially a duplicate backup system takes over with virtually no loss of service. This technique assures absolute reliability no matter what failure occurs. In mission critical installations, redundancy is a way to address possibility of any failure.

**Note 1:** Before enabling the Host Standby feature, please make sure that the two servers in the failover pair are the same model, own the same modules installed in the same slots, the same hardware configurations and firmware version.

**Note 2**: Please configure the primary server first and configure the secondary server only after the running status of primary server becomes "active".

**Note 3:** The virtual IP address inputted in this page will be the one used for registering in each IP phone.

**Note 4**: Before configuring the Email list in this page, please configure the "voicemail settings" in "PBX→Basic settings", and make sure the SMTP test successfully.

**Note 5:** Before configure the SMS list; please make sure the SIM and GSM/UMTS modules are installed well



Het Stantby	
Note 1. Before enabling the Host Standby leature, please make sure that the two servers in th hardware configurations and firmware version. Note 2. Please configure the primary server that and configure the secondary server only after	e failuver pair are the same model, have the same modules installed in the same slots, the sam the running status of primary server becomes "active".
Step 1: Verify the basic Information of the server	
Step 2: Configure the IP address and hostname of the primary and secondary servers	
Step 3: Configure Hot Standby Settings (Example)	
Bank (	
Running Status	Disabled
	Ym
Mode 😡	and a second s
Secondary HostName O	and the second s
Secondary P 0	
Access Code O	
Virtual IP Address 0	
Network Connection Detection	
	0
Down Notification	
Notification Methods Q	Name w
EmailUst	+
SMS LierO	
SHIS CHI W	
TOTAL SCIENCE	The second se
Advanced /	it Options
Kasp Alive O	
Dead Time U	
	ition Options
	Timing Synchronization
Synchronization Time	
Save.	Cancel

Figure 5-19

**Mode**: Primary means the main unit; Secondary means the standby unit; **Secondary/Primary Hostname**: If this unit mode is primary, then you need to input the hostname of standby unit; vice versa, if this unit is selected as secondary, then the hostname of primary unit is required. In brief, you need to input each other's host name on this field.

**IP**: You need to input each other's IP address on this field.

**Access code**: To make an identification number to verify each other. The number must be the same to both units.

**Virtual IP address**: To fill in a virtual IP address includes mask, which is always points to the currently activated unit. Customer can register IP phones through this virtual IP address. Please make sure the virtual IP add includes mask is the same on both units but different from their former IP address.

**Network Connection Detection**: Generally it requires the IP address of the router or gateway that connects both units. MyPBX will connect another unit through this IP address.

Down Notification: The way of informing customer that the system down.

**Keep Alive:** Every 2 seconds, a package will be sent from one unit to another, which can test whether they are working properly.

**Dead Time:** The default setting is 120 seconds. If there's no response within 120s after one receiving a package from the other, then the normal working unit will figure the other unit is dead and send an email or SMS to report the failure. **Disk Synchronization:** It works for synchronizing the data on hard disk only,



such as the call recording files and CDR files saved in disk. The configurations in MyPBX will not be influenced by this feature. Two options are available: timing synchronization and real-time synchronization.

### 5.3.7 AMI Settings

The Asterisk Manager Interface (AMI) is a system monitoring and management interface provided by Asterisk. It allows live monitoring of events that occur in the system, as well enabling you to request that Asterisk perform some action. The actions that are available are wide-ranging and include things such as returning status information and originating new calls. Many interesting applications have been developed on top of Asterisk that take advantage of the AMI as their primary interface to Asterisk.

There are two main types of messages on the Asterisk Manager Interface: manager events and manager actions.

The 3<sup>rd</sup> party software can work with MyPBX using AMI interface. It is disabled by default. If necessary, you can enable it.

Double AMI	
User Name ann	
Passwatt passwatt	
IP Rasticius	
Percelled IP attices/Solvet mask 🥥 👘 🕴 🕴	

Figure 5-20

**Username & password:** after enabling AMI, you can use this username and password to log in MyPBX AMI

IP Restriction: you can set which IP can log in MyPBX AMI interface

### **5.3.8 Alert Settings**

If the device is attacked, the system will notify users the alert via call or E-mail. The attack modes include IP attack and Web Login.

More details for the system security configuration, please refer to **APPENDIX I MyPBX Security Configuration Guide**.



ATTACK Type	Phone Bullification	E-mail Woldbooklow	
IPATTACK	Yas	Tes	1
WEBLOGIN	Ves	Yes	1

Figure 5-21

#### 1.IPATTACK

When the system is attacked by IP address, the firewall will add the IP to auto IP Blacklist and notify the user if it match the protection rule.

1) Phone Notification Settings

#### **•PHONE** Notification

Whether enable phone notification.

#### ·Number

The numbers could be set for alert notification, users can setup multiple extension and outbound phone numbers. Please separate them by ";". Example: "500;9911", if the extension has configured Follow Me Settings, the call would go to the forwarded number directly.

#### Attempts

The attempts to dial a phone number when there is no answer.

#### Interval

The interval between each attempt to dial the phone number. Must be greater than 3 seconds, the default value is 10 seconds.

#### Prompt

Users will hear the prompt while receiving the phone notification.

2) E-mail Notification Settings

**Note**: Please ensure that all voicemail settings are properly configured on the System Settings -> Voicemail Settings page before using this feature.

#### ·E-mail Notification

Whether enable E-mail Notification

#### **·Recipient's Name**

The recipients for the alert notification, and multiple email addresses are allowed, please separate them by ";".

Example: jerry@yeastar.com; jason@yeastar.com, 456@sina.com .



#### Subject

The subject of the alert email.

#### •Email Content

Text content support for predefined variables. Variable names and corresponding instructions are as follows:

\$(HOSTNAME)	Host name
\$(LOCALIP)	Local IP address
\$(SOURCEIP)	Attack source IP address
\$(DATETIME)	Occurred
\$(USERNAME)	User name (WEBLOGIN effective)
\$(DESTMAC)	Attacks destination MAC (IPATTACK effective)
\$(DESTPORT)	Attacks destination Port number (IPATTACK effective)
\$(PROTOCOL)	Protocol type (IPATTACK effective)
\$(INTERFACE)	Network interface name (IPATTACK effective)

IPATTACK	Х
Phone Notification Settings Phone Notification: Yes V Number 915812345678 Attempts 1 1 V Interval 1 60 s Prompt default V Custom Prompts E-mail Notification: Yes V To 1 jerry@yeastar.com Subject IP Attack 1 pbx hostname:\$(HOSTNAME) attack source ip address:\$(SOURCEIP) attack source port:\$(DESTPART) attack source port:\$(DESTMAC) attack source prot:\$(DESTMAC) attack source prot:\$(DEATPORT) attack source prot:\$(DATETIME)	X
Save Save	

Figure 5-22

#### 2.WEBLOGIN

Web Login Alert Notification: Enter the password incorrectly five times to login MyPBX Web interface will be as attack, the system will limit the IP login within



10 minutes and notify the user.

WEBLOGIN	X
Phone Notification Settings Phone Notification: Yes V Number i: 915812345678 Attempts : 1 V Interval : 60 s Prompt: default V <u>Custom Prompts</u>	
E-mail Notification Settings E-mail Notification: Yes V To : jerry@yeastar.com Subject: Web Login ipbx hostname:\$(HOSTNAME) login ip address:\$(SOURCEIP) login username:\$(USERNAME) login occurred:\$(DATETIME)	
Save 🔀 Cancel	

Figure 5-23

### 5.3.9 Database Grant

U100/U200 are using MySQL database from 15.18.0.21. The 3<sup>rd</sup> party software can access MySQL via internet. Before that, you need to grant the authority to the database user.

After entering "Database Grant" page, clicking "Add", you can add a database user, set user password and grant authority.

NOW:	and the second	
ADD.	User Name (ason Passwort	
	Save Cancel	



**Username/password:** The 3<sup>rd</sup> party can use this username and password to access the MySQL password.

**Database:** there are 2 options, CDR and Record. If you choose CDR, then this user has authority to check CDR database; if you choose Record, then the user



has authority to check which call has been recorded automatically.

### **5.3.10 Security Center**

You can check MyPBX security configuration in "Security Center" page. And also, you can enter the relevant security settings page rapidly. Firewall:

Firm	uti Service P	tert		
	Function	Status	Note	Setting
	Firewall Switch	Enabled	Tio naites	Setting
	Drep All	Disabled		Setting
	Blacklist Rules	Configured	The number of blackbut rules in 3	IP Blacktist
	Alert Settings	Configured	Allack Type (PATTACK) Phone Notification Yes (E-mail Notification Yes Allack Type WEELOOH) (Phone Notification Yes) (E-mail Notification Yes	Alert Settings

Figure 5-25

In the "Firewall" tab, you can check firewall configuration and alert settings. By clicking the relevant button, you can enter the configuration page directly.

Service:

irevali Se	rvice Fort			
1	Name	Status	Note	Setting
	AMI	Disabled	11/	Setting
	SSH	Enabled		Setting
	TPTP	Enabled	1 1	Disables



In "Service" tab, you can check AMI/SSH/TFTP status. For AMI/SSH, you can enter the according page by clicking the button in "Setting" column. For TFTP, you can directly disable or enable it.

Port:

Fireszall Service	Port		
	Name	Port	Setting
	SIP UDP Pert	5060	Setting
	SIP TOP Poil	5060	Setting
	SIP TLS Put	5961	Setting
	HTTP Bird Part	80	Setting



In "Port" tab, you can check SIP port and HTTP port. You can also enter the relevant page by clicking the button in "Setting" column.



# 5.4 Storage Management

# 5.4.1 USB Device

MyPBX U100/U200 supports USB hard disk. If you enable recording add-on, you can store the recording file in USB hard disk.

You can check the information of the hard disk, manage the disk and do some related configuration.

Model     V250v     Vender:     *pp       Type:     Direct Access     Revision:     1.00       To mount USB     Clear USB     Revision:     1.00       Direct Access     Revision:     1.00     1.00     1.00	USB Device information					
Dies Size         14.71 GB         Storage Ints         Th           USB Devices Management         Wanning: Provide not remove USD device when instituting a value of USD device of USD device when instituting a value of USD device of USD	SA .	stel v259w	Vendor	to:		
USB Devices Management Warring: Proceeds and remove USB device when instanting a call to also USB device within the magnet. To menore USB arrive call the bullot Thempore USB Safety Portnat USB Clear USB Clear USB Remove USB Safety		ype: Direct.Access	Revision	1.00		
Manning Process for all resource USE devices when membranes to the USE devices will be device and the devices of the devi	Desk	Size 14.71-G8	Storage Info	15		
Format USB Clear USB Remove USB Safely.  New MSA of the USB devices alonger space to another will automatically dente the old recordings to a characterized manner will the analypace to antialize than ESA. Every second of a cal recording same about 13/3 space. The following shows the starage capacity of USB device and its interact recording bours.	USB Desizes Masterieret					
No: Ware 15% of the USB devices alreage spate is used up, the pysice will automatically denic the od secondarys is a churulogical manner will the used space is estable than 15%. Every second of a call receiving same about 1 VB space. The following shows the storage capacity of USB device and its interact receiving bours.	Warning 7	berre die wat remaine 1258 de	tion often monthly a call, is also \$250 down	a will be detroyed.		
When 85% of the USB devices alonge space is used up, the system will automatically bleake the old successings is a chemistogical manner until the used space is estable than 35%. Every second of a call recording uses about 8 VII space. The following shows the storage capacity of USB device and its retenant recording hours.	Tel Warning: P	neres UIII mana can Her	ballos "Territors USD Selles" and Malson Rep i			
When 20% of the USB devery alongs space is used up, the system will automatically peerly the de secondage or a chronological menter will the and space is entailer than 25%. Every second of a call recenting uses along 3 VB space. The following shows the strange capacity of USB shows and its interaint recording bours.	Warning: P	neres UIII mana can Her	ballos "Territors USD Selles" and Malson Rep i			
	Names 7	Format USB	Clear USB Renove USB Safely	ana		
Thotage Capacity 200 408 008 1808 3208 8408 1208 2000	Manning 7 To 7 Man MAL of the USE devices alterage space is use	Format USB	Color USB Remove USB Safety	cal manner will the u	and space is emails	r than 15%.
	Manning 7 To No: Mar MA: of the USD devices alwage space is use	Format USB	Color USB Remove USB Safety	cal manner will the u	and space to grade	r Buar (15%)

Figure 5-27

# **·USB Device Information**

It's the information of the USB hard disk.

# **·USB Devices Management**

You can format, clean up or remove the USB device here. Note: Please check if you need to back up these files before formatting or clearing up the USB device. Don't power off the device during the period.

# 5.4.2 External Storage

The External Storage feature is used to extend storage space. Once configured, the files (voicemail, call recording files) created before the configured days will be moved to the Net-Disk.

**Note**: The shared folder must be based on Windows operation system.

Before external storage can be properly configured, an SMB share folder accessible from MyPBX must be set up on a Windows based machine. Once that has been set up, please follow the steps below.



Mental Shorapi Sattinge		
The External Storage feature is used to extend storage space. On	ce configured. the files (volcennal, call recording files) created before the configured days will be moved to	
Step 1 Step 2 Step 3		
	Create a Net-Disk on a chosen computer	
Step 1. Choose a window-based computer that is always in serv Step 2. Create a folder Step 3. Create a text file named "status tat" in the folder Step 4. Share this folder	share Properties	
then	General Sharing Customer	
	Local inhung and recary To share this lables with other users of this compates only, drag at to the Shared Decompt if tables To involve this lables and at subhidder provide so that only pay have access, reflect the following check box I have access.	
	Network sharing and receatly To share this lodder with both network uses and other uses of this complet, welloch the first check too below and type a share name.	
	Share this kilder on the testwork	
	State Faces	
	Learn ware about <u>sharing and security</u>	
	Wendow: Financed is configured to allow this tokin to be shared     with other computers on the network. <u>Very your Windows Theoral indificaci</u>	
	OK Cincel Arste	

Figure 5-28

- Step 1: Choose a window-based computer that is always in service
- Step 2: Create a folder
- Step 3: Create a text file named "status.txt" in the folder
- **Step 4**: Share this folder

Then we need to input the Net-Disk information in Step 2 page.

step 1 Step 2 Step 3		
	Step 2: Input the Net-Disk properties	
	Net-Disk Host/IP	
	Net-Disk Share Name	
	Net-Disk Access User Name	
	Net-Disk Access Password:	
	Move files created before: 5 💌 days ago	
	Save Second	

Figure 5-29

# Net-Disk Host/IP:

Change this to the IP address of the computer where backup files will be stored.

# **Net-Disk Share Name:**

Change this to the name of the shared folder where backups will be stored.



#### Net-Disk Share Username:

The user name used to log into the network share. Leave this blank if it is not required

#### Net-Disk Share Password:

The password used to log into the network share. Leave this blank if it is not required

If configuring is correctly, open your Windows share folder to see if the MyPBX backup files and folders has been created. If the contents of the backup folder look similar to step3 page, then you have successfully configured external storage on the MyPBX unit.

p 1 Step 2 Step 3	
	Make sure the settings are successfully completed
a selfings are successfully a	implated if the folder shows up as following figure
e secolar ne seccession c	
	The fill free freedom Table Velle
	Gass - C 3 Protect The

Figure 5-30



# 6 PBX

Click to access "PBX" tab.

In this page, we can configure the settings of extension, trunk, inbound call control, outbound call control, audio settings and the others. After configuring the MyPBX, we can make or receive calls as scheduled.

# **6.1 Extensions**

In this page, we can configure the extensions' details and provision the supported models automatically.

# **6.1.1 FXS/VoIP Extensions**

There are three types of extensions supported in MyPBX U100&U200: SIP, IAX and analog extension.

### Note:

# 1. The max number of SIP/IAX extension is 200

(S Extensions							
Port	Extension	Name	Caller ID				
1	601	601	601		S.	8	
2	602	602	602		K	16	
P Extensions	Add Bulk Extensions	Edit the Selected Extensions	Delete The Selected Estension	Caller ID		Total 6	Shpe: 1
10	300	SIP	300	300	2	X	
10	301	SIP	301	301	1 Contraction	X	
	302	SIP	302	302	1	×	
10	303	SIP	303	303	1	X	
25	304	SIP	304	304	1	X	
						×	

Figure 6-1



# **FXS Extensions**

FXS Extension	ns			
Port	Extension	Name	Caller ID	
1	601	601	601	2 X
2	602	602	602	×

Figure 6-2

There are two analog extensions in MyPBX U100&U200 if S2 module is installed, to modify the extension number, please delete it first, then recreate it again.

#### 1) General

Edi	t Extension - 601	х
ſ	General Other Settings	
	General	
	Extension : 601 Port: 13	
	Name : 601 Caller ID : 601	
	Voicemail	
	Enable Voicemail 🕕 Voicemail Access PIN # 🛈 : 601	
	Mail Setting	
	Enable Send Voicemail	
	Email Address 0:	
	Note: Please ensure that the section 'SMTP Settings for Voicemail'(in the 'Voicemail Settings') have been properly configured before using this feature.	
	Flash	
	Hook Flash Detection 🛈 : 1000 ms	
	Group	
	Pickup Group 🛈 : 🗸	
	Call Duration Setting	
	Max Call Duration (1): s	
	Save Save	1

Figure 6-3

#### Extension

The numbered extension, i.e. 1234, that will be associated with this particular User / Phone.

# •Port

The extension correspond port.

#### •Name



A character-based name for this user, i.e. "Bob Jones".

# ·Caller ID

The Caller ID (CID) string will be used when this user calls another internal user.

### 2) Voicemail

### •Enable Voicemail

Check this box if the user should have a voicemail account.

#### Voicemail Access PIN #

Voicemail Password for this extension, i.e. "1234".

#### 3) Mail Setting

# ·Enable Send Voicemail

Once enabled, the voicemail will be sent to the below email address as an attachment.

#### Send Voicemail to Email Address

This option defines whether or not voicemails/Fax is sent to the Email address as an attachment.

**Note**: Please ensure that all voicemail settings are properly configured on the System Settings -> Voicemail Settings page before using this feature.

#### 4) Flash

#### ·Hook Flash Detection

Sets the amount of time, in milliseconds, that must pass since the last hook-flash event received by MyPBX before it will recognize a second event. If a second event occurs in less time than defined by Hook Flash Detection, then MyPBX will ignore the event. The default value of Flash is 1000 ms, and it can be configured in 1ms increments.

#### 5) Group

#### •Pickup Group

If this extension belongs to a pickup group, any calls that ring this extension can be picked up by other extensions in the same pickup group by dialing the Call Pickup feature code (default \*4).

**Note**: \*4 is the default setting, it can be changed under Feature Codes -> General -> Call Pickup.

# 6) Call Duration Setting

Set the max call duration for this extension. This setting is effective when this extension makes calls. For example, if max call duration of extension 601 is 300s, when 601 makes calls, the call will be disconnected by MyPBX after 300s. If max call duration is set to 0 or empty, it will follow global max call duration



setting in "SIP Settings".

7) Other options

# ·Call Waiting

Check this option if the extension should have Call Waiting capability. If this option is checked, the "When busy" follow me options will not be available.

# ·DND

Don't Disturb.

# ·User Web Interface

Check this option to allow the user to login to the MyPBX User Web interface, which can be used to access voicemail and extension recordings. Users may login to the MyPBX User Web interface by using their extension number and voicemail PIN # as the login and password respectively.

# **·Ring Out**

Check this option if you want to custom the ring time. Tone will stop over the time defined

8) Follow me (Call Forwarding)

This function sets inbound call forwarding on an extension. An administrator can configure Follow Me for this extension

9) Volume Settings

Rxgain: The Volume sent to FXS extension. Txgain: The Volume sent out by the FXS extension

10) Mobility Extension

MyPBX allows you to use your mobile phone as extension. If you set your mobile phone as mobility extension and then you call MyPBX with this mobility phone, you will hear a dial tone. MyPBX will recognize your call as a call from an extension. You can dial the number of other extensions (Your caller ID will be the number of your extension) or dial out via outbound routes just like dialing from your extension.

# **Note**: If callback is enabled in the inbound route, the mobility extension function of this inbound route will be disabled.

# 11) Spy Settings

MyPBX allows extension to monitor/barge in other conversation. Once this feature is enabled, the extension has the ability to monitor/barge in other calls using the feature codes for each spy mode, refer to 'Feature Codes' page for



more information.

#### ·spy modes

There are 4 spy modes available for choice: Normal spy: you can only hear the call, but can't talk Whisper spy: you can hear the call, and can talk with the monitored extension Barge spy: you can hear the call and talk with them both General spy: you can choose to use one of the above 3 spy modes

**Note**: for example, if 500 want to monitor extension 501, we need to enable the "allow being spied" for 501, and choose the spy mode for extension 500. Then pick up 500 and dial "feature codes + 501" to start monitoring when 501 is in a call

Edit Extension - 601	х
General Other Settings	_
Other Options Call Waiting DND DU User Web Interface Ring Out : 30	
Follow me Always  Follow me: Voicemail  Follow me: When Busy	
Volume Settings Rxgain : 40% Txgain : 40%	
Mobility Extension         Enable Mobility Extension         Mobility Extension Number	
Spy Settings Allow Being Spied Spy Modes:	
Save X Cancel	

Figure 6-4

# **VoIP Extensions**

A VOIP extension is a SIP/IAX Account that allows an IP Phone or an IP Soft-Phone client to register on MyPBX



Add Extension	Add Bulk Extensions	Z Edit the Selected Extensions	Celete The Selected Extension			Total 6	Show 1-8
	Externion	Type	(New)	Caller ID			
10	300	SIP	300	300	1	X	
£5;	301	SIP	301	301	2	×	
0	302	SIP	302	302	1	×	
5	303	SIP	303	303	1	×	
10 -	304	SIP	304	304	1	×	
n.	305	SIP	305	305	1	8	



Add VoIP Extension	)
General Other Settings	
General	
Type: SIP V Extension : 306 Password : pincode306	
Name 1: 306 Caller ID 1: 306	
Voicemail	
Enable Voicemail 🛈 Voicemail Access PIN # 1: 306	
Mail Setting	
Enable Send Voicemail	
Note: Please ensure that the section 'SMTP Settings for Voicemail'(in the 'Voicemail Settings') have	
been properly configured before using this feature.	
Group Pickup Group	
Call Duration Setting	
Max Call Duration 0: s	
VoIP Settings	
NAT <sup>(1)</sup> : □ Qualify: ✓ Enable SRTP <sup>(1)</sup> : □	
Transport: UDP V DTMF Mode <sup>1</sup> : RFC2833 V Register Remotely <sup>1</sup> :	
Same Same	
Save X Cancel	

We can click "Add extension" to start.

Figure 6-6

# 1) General

# ·Type

Extension type: SIP, IAX or SIP/IAX.

SIP – The extension sends and receives calls using the VoIP protocol SIP.

IAX -The extension sends and receives calls using the VoIP protocol IAX.



### Extension

The numbered extension, i.e. 1234, that will be associated with this particular User / Phone.

#### Password

The password for this extension, Ex: "12t3f6"

#### •Name

A character-based name for this user, EX: "Bob Jones"

#### •Caller ID

The Caller ID will be used when this user calls another internal extension.

#### 2) Voicemail

#### ·Enable Voicemail

Check this box if the user should have a voicemail account.

#### •Voicemail Access PIN #

The voicemail Password for this extension, i.e. "1234".

#### 3) Mail Setting

This option defines whether or not voicemails or faxes are sent to an Email Address as attachment.

#### •Enable Send Voicemail

Once enabled, the voicemail will be sent to email as an attachment.

#### ·Email Address

Email address used to receive the voicemail or Fax.

**Note**: Please ensure that the section 'SMTP Settings For Voicemail'(in the 'Voicemail Settings') have been properly configured before using this feature.

# 4) Group

# ·Pickup Group

If this extension belongs to a pickup group, any calls that ring this extension can be picked up by other extensions in the same pickup group by dialing the Call Pickup feature code (default is \*4).

**Note**: \*4 is the default setting, it can be changed under Feature Codes -> General -> Call Pickup.

#### 5) Call Duration Settings

Set the max call duration for this extension. This setting is effective when this extension makes calls. For example, if max call duration of extension 306 is 300s, when 306 makes calls, the call will be disconnected by MyPBX after 300s.



If max call duration is set to 0 or empty, it will follow global max call duration setting in "SIP Settings".

6) VoIP Settings

# ·NAT

This setting should be used when the system is using a public IP address to communicate with devices hidden behind a NAT device (such as a broadband router). If you have one-way audio problems, you usually have problems with your NAT configuration or your firewall's support of SIP and/or RTP ports.

# ·Qualify

Send check alive packets to IP phones

# •Enable SRTP

Enable extension for SRTP (RTP Encryption).

# Transport

This will be the transport method used by the extension. The options are UDP (default) or TCP or TLS.

•DTMF Mode – RFC2833, Info, Inband, Auto.

# **·Register Remotely**

If you want to register remote extension, you should enable this option.

# 7) Other Options

# .Call Waiting

Check this option if the extension should have Call Waiting capability. If this option is checked, the "When busy" follow me options will not be available. The call waiting function of IP phone has higher priority than MyPBX's call waiting function.

# .DND

Don't Disturb. When DND is enabled for an extension, the extension will be not available.

# .User Web Interface

Check this option to allow the user to login to the MyPBX User Web interface, which can be used to check voicemail and extension recordings. Users may login to MyPBX User Web interface by using their extension number and voicemail PIN # as the login and password respectively.

# .Ring Out

Check this option if you want to customize the ring time. Ring tone will stop over



the time defined.

# 8) Follow me (Call Forwarding)

Call forwarding for an extension can be configured here. The administrator can configure Follow Me option for this extension. If you want to transfer the call to an outbound number, please follow the dial pattern of outbound route filled in the outbound number.

For example: transferring to your mobile phone number 123456789, the dial pattern of outbound route is "9.", you should fill in 9123456789 here.

#### 9) IP Restriction

# •Enable IP Restriction

Check this option to enhance the VoIP security for MyPBX. If this option is enabled, only the permitted IP/Subnet mask will be able to register this extension number. In this way, the VoIP security will be enhanced.

#### Permitted "IP address/Subnet mask"

The input format should be "IP address"+ "/"+ "Subnet mask". e.g."192.168.5.100/255.255.255" means only the device whose IP address is 192.168.5.100 is allowed to register this extension number. e.g."192.168.5.0/255.255.255.0" means only the device whose IP address is 192.168.5.XXX is allowed to register this extension number. 10) Mobility Extension

IU) MODILITY EXTENSION

MyPBX allows you to use your mobile phone as extension. If you set your mobile phone as mobility extension and then you call MyPBX with this mobility phone, you will hear a dial tone. MyPBX will recognize your call as a call from an extension. You can dial the number of other extensions (Your caller ID will be the number of your extension) or dial out via outbound routes just like dialing from your extension.

# **Note**: If callback is enabled in the inbound route, the mobility extension function of this inbound route will be disabled

#### 11) Spy Settings

MyPBX allows extension to monitor/barge in other conversation. Once this feature is enabled, the extension has the ability to monitor/barge in other calls using the feature codes for each spy mode, refer to 'Feature Codes' page for more information.

#### ·spy modes

There are 4 spy modes available for choice: Normal spy: you can only hear the call, but can't talk Whisper spy: you can hear the call, and can talk with the monitored extension



Barge spy: you can hear the call and talk with them both General spy: you can choose to use one of the above 3 spy modes

**Note**: for example, if 500 want to monitor extension 501, we need to enable the "allow being spied" for 501, and choose the spy mode for extension 500. Then pick up 500 and dial "feature codes + 501" to start monitoring when 501 is in a call

Add VoIP Extension X
General Other Settings Other Options
Call Waiting DND Vuser Web Interface Ring Out 30
Follow me
Always     O Voicemail     Follow me: Voicemail
Follow me:  No answer Transfer to: Number When Busy
IP Restriction
Permitted 'IP address/Subnet mask' 1 🛈 :
Permitted 'IP address/Subnet mask' 2 0:
Permitted 'IP address/Subnet mask' 3 🛈:
Permitted 'IP address/Subnet mask' 4 0:
Mobility Extension         Enable Mobility Extension         Mobility Extension Number
Spy Settings Allow Being Spied Spy Modes:
Save X Cancel

Figure 6-7

# 6.1.2 Phone Provisioning

The Auto Provision sub menu provides users a method to Auto Provision IP Phone after the Express Setup process.

**Note**: Auto Provision functions fully test with these models: Yealink (T12, T18, T20, T22, T26, T28, T32, T38, VP530, VP-2009)



Snom (300, 320, 360, 370) Snom (300, 320, 360, 370) Polycom (IP 6000, IP 7000, IP 32X, IP33X, IP430, IP450, IP550, IP560, VVX1500) Cisco (IP7940, IP7960) Aastra (9480i, 9480i-CT, 6730i, 6731i, 6753, 6755i, 6757i, 6757i CT, 6737i) GrandStream (GXP1450, GXP2100, GXP2110, GXP2120) Escene (ES220, ES320, ES330, ES410, ES610) Fanvil (C56, C58, C60, C62)

#### **News:**

When provisioning Yealink and Snom IP phone, MyPBX is not needed to be set as the only DHCP server any more.

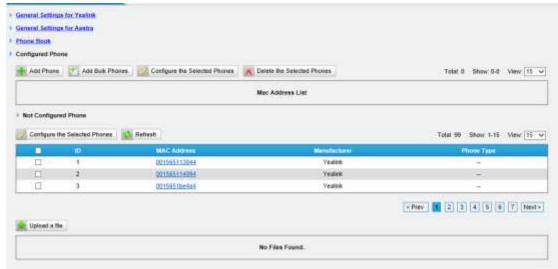


Figure 6-8

# 6.1.2.1 General Settings for Yealink

In this page, you can configure it before provisioning Yealink IP phones, including the items like general preferences, codecs, remote phone book and firmware upgrade.

**Note**: if firmware download server is enabled, IP phone will update the firmware automatically according the version and server you have configured during the provision process.



Go Back to Phone Provisionin			
		e Download Server	General Preferences Codecs Remote Phone Book Firmwar
	۲	English	Language 😉
	۲	HTTP&HTTPS	Web server Type
		· Fixed O Prefix	Admin Password
		admin	
		+8 Chine(Beijing)	Time Zone
		cn.pool.ntp.org	Primary NTP Server
		cn.pool.ntp.org	Secondary NTP Server.
		Disabled	Daylight Saving Time
	•	12 Hour	Time Format
		WWW MMM DD	Date Format
		Yes	Voicemail
		• Automatic Custom	PNP URL

Figure 6-9

# 6.1.2.2 Aastra General Settings

In this page, you can configure it before provisioning Aastra IP phones, including the items like general preferences, program keys configuration, soft keys configuration.

1	Softwys Configurat	Programikeys Configuration	General Preferences
#2xc[4.0]ccccccifier	Local Dial Plan		
Even	Kal Plan Terminator	Send D	
		Tirte and Date Se	
	Time Server1		
	Time Server2		
		Auto-Resync	
e 🗸	Respins Mode		
00 👻	Respic Time		

Figure 6-10

# 6.1.2.3 Phone book

You can add your contacts here and when you use phone provisioning, IP phone will download the phone book.



Phone Doors	
+ Add Contact	Go Back to Phone Provisioning
* Contacts	
Total 0 Show 0-0	
No Contact Defined	
+ Deny List	
Total 0 Show: 0 - 0	
No Deny List Defined	
Lipicad Phonobook	
Note: All the existing phonodicults of the IP phone would be defend automatically if the phonodicules are configured in this way	
No Phonebook Upleaded	

Figure 6-11

# 1) Add Contact

#### ·Туре

There are three types: None, VIP and Deny list (Blacklist).

#### ·Group

There are 5 groups: None, Friends, Family, Work, Colleagues list.

#### •Nick Name

You can set a nick name for this number.

# Favorite

Only works with snom phone.

# Organization

Input the organization of this contact. Only works with snom phone.

#### **·**Title

Input the title of this contact. Only works with snom phone.

#### ·Email

Input the email of this contact. Only works with snom phone.

#### ·Birthday

Input the birthday of this contact. Only works with snom phone.

#### •First Name

Input the first name of this contact. Only works with snom phone.

# **·Family Name**

Input the family of this contact. Only works with snom phone.



# **•Office Number**

Input the office number here

#### **·Mobile Number**

Input the mobile number here

### **·Home Number**

Input the home number here

#### ·Sub Number

Add sub number of this contact. Only works with snom phone.

#### •Note

Take some note of this contact. Only works with snom phone.

ontact				
Type:	None 💌	Group:	None 💌	
Nick Name 0:		Favorite 🛈 :	No	
Organization 🛈 :		Title 🛈 :		]
Email 🛈 :		Birthday 🛈 :		
First Name 🛈 :		Family Name		
Office Number:		Mobile Number:		
Home Number:		]		
Sub Number				
Sub Name:		Sub Number:	↑Add Sub	
Note				
				*
				Ŧ
	🖌 S	Save 🔀 Cancel		

#### Figure 6-12

# 2) Upload Phonebook

You can upload a phonebook before auto provision, which will be provisioned to the IP phone when using auto provision feature to configure your IP phones. The



format of phonebook should be \*.xml.

**Note**: All the existing phonebooks of the IP phone will be replaced automatically if the phonebooks are configured in this way.

### 6.1.2.4 Configure phone

Let's take provisioning Yealink as an example. Create New Phone have two modes, Create New phone in webpage and Upload the IP Phone's configure file.

#### Add new phone via webpage

Click "Add Phone" and fill in the corresponding information in the pop-up window.

Add Phone			x
General Codecs	Memory Key Settings	Line Keys Settings	
Enabled: MAC Address: Manufacturer: Call Waiting:	001565	NewConfig 1 : Yes Name: Phone Type: 128 Key As Send: #	
Auto Redial:	Disabled V	Auto Answer: Disabled	
Phone Book:	Enabled V		
Line			
Line1	Extension: V	Label:	Line Active:
Line2	Extension: V	Label:	Line Active:
Line3	Extension: V	Label:	Line Active:
Line4	Extension: V	Label:	Line Active:
Line5	Extension: V	Label:	Line Active:
Line6	Extension: 🗸	Label:	Line Active:
	🗸 Save	Cancel	

Figure 6-13

# 1) General

#### Enabled

Choose yes or no to enable or disable this extension

# New Config

If your IP phone's firmware version is above x.70.x.x, you should select "Yes".



Or else, it should be "No".

### MAC address

Input the MAC address of IP phone

# •Name

Put the name of this Phone here.

#### •Manufacturer

You can choose the Manufacturer of IP phone

#### •Phone Type

Choose the model of your phone. Only for snom phone

#### ·Call Waiting

This call feature allows your phone to accept other incoming calls to an extension already in an active call.

#### •Key as Send

Configure the key as send, you choose # ,\* or disable it

# •Auto redial Enable the auto redial for IP Phone

# •Auto answer

Configure if auto answer is allowed for IP phone

#### Phone book

Enable the feature of phone book of IP phone

#### ·Line

You can set each line of IP phone for the account you want, active or not. Extension: Selected the extension number for IP Phone. Label: It is shown on the LCD for users to identify the account. Line Active: You can choose on/off to enable/disable the account respectively.

# 2) Codecs

In this page, we can set the codecs for IP phone.



Add Phone					х
General	Codecs	Memory Key Settings	Line Keys Settings		
Audio Co	dec				
(	As General	○ Custom			
	Dis	able Codecs	E	nable Codecs	
	G723_53 G723_63 G726-16 G726-24 G726-22 G726-32 G726-40		»» PCMA PCMU G729 G722 ←		
		🖌 Save	🔀 Cancel		

Figure 6-14

# 3) Memory key settings

In this page, we can configure the DSS keys of IP phone one by one.

lemory Key					
	Key	Туре	Value	Line	Extension
	DSS Key1	N/A 🗸		line1 V	
	DSS Key2	N/A 🗸		line1 V	
	DSS Key3	N/A 🗸		line1 V	
	DSS Key4	N/A 🗸		line1 V	
	DSS Key5	N/A 🗸		line1 V	
	DSS Key6	N/A 🗸		line1 V	
	DSS Key7	N/A 🗸		line1 V	
	DSS Key8	N/A 🗸		line1 V	
	DSS Key9	N/A 🗸		line1 V	
	DSS Key10	N/A 🗸		line1 V	

Figure 6-15

# 4) Line keys settings

We can configure the line key settings for this IP phone



ine Keys Sett	inas					
Key		Туре	Value	Label	Line	Extension
Line Key	1 N/A	~			Line1 V	
Line Key	2 N/A	$\checkmark$			Line2 V	
Line Key	3 N/A	$\checkmark$			Line3 V	
Line Key	4 N/A	~			Line4 V	
Line Key	5 N/A	~			Line5 V	
Line Key	6 N/A	~			Line6 V	

Figure 6-16

# 6.1.2.4 Not configured phone

In this section, MyPBX will scan all the supported IP phones and display here, we can click the 'MAC address' of IP phone and input the corresponding information in the pop-up window, like figure 6-13.

		MAC Address	Manufactures	Phone Type
13	1	0035651200d5	Yealink	
	2	001565140165	Yealisk	27
21	3	00156511186d	Yealnk	
5	4	\$113652c2udf	Yeable	-
11	5	00156511189c	Yealink	÷
ÉÉ.	6	001566299162	Yealink	T28

Figure 6-17

# 6.1.2.5 Upload a file

Click "Upload a file" and choose the configure file of IP phone in the popup window.

Note: the file format must be .cfg

Please edit the configuration files in advance before uploading.

🚖 Upload a file	
	No Files Found.

# Figure 6-18



# 6.2 Trunks

# 6.2.1 Physical Trunk

Multiply physical trunks are supported in MyPBX U100&U200, like BRI, PSTN, and GSM/UMTS, please make sure you have installed the modules inside, BRI trunk requires B2 module, PSTN trunk requires the O2, while GSM/UMTS trunk, and please install the GSM/UMTS modules inside.

RI Trunk				
	Trunk Name	Port		
	BriTrunk3	3		1
	BriTrunk4	4		1
	BriTrunk7	7		1
	BriTrunk8	8		1
Analog Tru	ink			
D.L.C.	Trunk Name	Port		
	pstn13	13		×
	pstn14	14		1
GSM/UMT:	S Trunk			
	Trunk Name	Port	Туря	
-	GSM1	1	GSM	1

Figure 6-19

# **BRI Trunk**

Basic Rate Interface (BRI, 2B+D, 2B1D) is an Integrated Services Digital Network (ISDN) configuration intended primarily for use in subscriber lines similar to those that have long been used for plain old telephone service. The BRI configuration provides 2 bearer channels (B channels) at 64 k bit/s each and 1 data channel (D channel) at 16 k bit/s. The B channels are used for voice or user data, and the D channel is used for any combination of data, control/signalling, and X.25 packet networking

BRI Trun	ik		
	Trunk Name	Port	
	BriTrunk3	3	2
	BriTrunk4	4	
	BriTrunk7	7	2
	BriTrunk8	8	

Figure 6-20

Click edit to configure the details of BRI trunks



Edit BRI Trunk - BriTrunk3	Х
Trunk Name 🛈 : BriTrunk3	
Signaling: BRI-CPE 💌 Switch Type 🛈 : euroisdn 💌	
PRI Dialplan 🛈 : unknown 💌 Reset Interval 🛈 : never 💌 s	
PRI Local Dialplan 🛈 : unknown 💌 Overlap Dial 🛈 : no 💌	
PRI Indication 🛈: Inband 💌 Enable Facility 🛈: Enabled 💌	
Nsf : none Echo Cancellation : Off	
Hide Caller ID 🛈 : No 💌 Codec: alaw 💌	
Caller ID Prefix	
International Prefix: National Prefix:	
Local Prefix: Private Prefix:	
Unknown Prefix:	
DOD Settings Global DOD:	
DOD:   Associated Extension:   601 ▼   ↑Add DOD	
🖌 Save 🔀 Cancel	
Figure 6-21	

#### •Trunk Name

A unique label used to identify this trunk when listed in outbound rules, incoming rules, etc. Ex: 'BriTrunk1'

# Signaling

Signaling method BRI-CPE: ISDN BRI in TE mode and Point to Point. BRI-CPE-PTMP: ISDN BRI in TE mode and Point to multi Point. BRI-NET: ISDN BRI in NET mode and Point to Point. BRI-NET-PTMP: ISDN BRI in NET mode and Point to multi Point.

# •Switch Type

National: National ISDN type2 (common in the US) ni1: National ISDN type 1 dms100: Nortel DMS100 4ess: AT&T 4ESS 5ess: Lucent 5ESS euroisdn: EuroISDN qsig: D-channel signaling protocol at Q reference point for PBX networking.



# •PRI Dial Plan

Sets an option required for some (rare) switches that require a dial plan parameter to be passed. This option is ignored by most BRI switches. It may be necessary on a few pieces of hardware. This option can almost always be left unchanged from the default.

# ·Reset interval

Sets the time in seconds between restart of unused channels. Some PBXs don't like channel restarts. so set the interval to a very long interval e.g. 10000000 or 'never' to disable \*entirely\*. If you are in Israel, the following is important: As Bezeq in Israel doesn't like the B-Channel resets happening on the lines, it is best to set the reset interval to 'never' when installing a box in Israel. Our past experience also shows that this parameter may also cause issues on local switches in the UK and China.

# •PRI Local Dial Plan

Sets an option required for some (rare) switches that require a dial plan parameter to be passed. This option is ignored by most BRI switches. It may be necessary on a few pieces of hardware. This option can almost always be left unchanged from the default.

### •Over Lap Dial

Whether MyPBX can dial this switch using overlap digits. If you need Direct Dial-in (DDI; in German "Durchwahl") you should change this to yes, then MyPBX will wait after the last digit it receives.

# **•PRI Indication**

Tells how Device should indicate Busy() and Congestion() to the switch/user. Accepted values are:

inband: Device plays indication tones without answering; not available on all PRI/BRI subscription lines .

outofband: Device disconnects with busy/congestion information code so the switch will play the indication tones to the caller. Busy() will now do same as setting PRI\_CAUSE=17 and Hangup().

#### •Enable Facility

To enable transmission of facility-based ISDN supplementary services (such as caller name from CPE over facility) .

#### ·NSF

Used with AT&T PRIs. If outbound calls are being rejected due to "Mandatory information element missing" and the missing IE is 0x20, then you need this setting.



# Echo Cancellation

Echocancel Obviously this disables or enables echo cancellation, it is recommended not to turn this off.

# ·Hide CallerID

If you want others to see your CID, please disable this option.

#### ·Codec

You can choose alaw or ulaw codes.

#### 1) CallerID Prefix

#### **·International Prefix**

When there are international calls coming in via this BRI trunk, the International Prefix you have set here will be added before the CID. So you can know this is an international call before you answer it.

#### **·National Prefix**

When there are national calls coming in via this BRI trunk, the National Prefix you have set here will be added before the CID. So you can know this is a national call before you answer it.

#### ·Local Prefix

When there are Local calls coming in via this BRI trunk, the Local Prefix you have set here will be added before the CID. So you can know this is a local call before you answer it.

#### **·**Private Prefix

When there are Private calls coming in via this BRI trunk, the Private Prefix you have set here will be added before the CID. So you can know this is a Private call before you answer it.

#### **•Unknown Prefix**

When there are calls with unknown number coming via this BRI trunk, the Unknown Prefix you set here will be shown as the caller ID.

#### 2) DOD Setting

#### ·Global DOD

Global direct outward dialing number.

# ·DOD

Direct Outward Dialing Number.

#### ·Associated Extension

The extension make call out via BRI Trunk will display the associated DOD.



# **PSTN trunk**

The public switched telephone network (PSTN) is the network of the world's public circuit-switched telephone networks

Trunk Name	Port	
petn13	13	
pstn14	14	

Figure 6-22

Edit Analog Trunk - pstn13	X
Trunk Name🛈 :	pstn13
Volume Setting	40%
Busy	Detection
Busy Detection	Yes 💌
Busy Count	4
Busy Interval	1
Busy Pattern 🛈 :	
Frequency Detection	No
Busy Frequency	
Polarity Detection	No
Advanc	ed Options
Caller ID Start 🛈: Ring 💌	Caller ID Signaling 🛈 : Bell - USA 💌
Caller ID Detection 0: Yes	
💉 Save	X Cancel

Click edit to configure more details

Figure 6-23

#### **•Trunk Name**

A unique label used to identify this trunk when listed in outbound rules, incoming rules, etc. Ex: 'pstn5'

# **·Volume Setting**

Used to modify the volume level of this trunk. Normally, this setting does not need to be changed.



# 1) Busy Detection

# Busy Detection

Busy Detection is used to detect far end hang-up or for detecting a busy signal. Select "Yes" to turn this feature on.

# Busy Count

If Busy Detection is enabled, it is also possible to specify how many busy tones to wait for before disconnecting the call. The default is 4, but better results can be achieved if set to 6 or even 8. Remember, the higher the number, the more time will be required to release a channel. A higher setting lowers the probability that you will encounter random hang-ups.

# ·Busy Interval

The busy detection interval

# ·Busy Pattern

If Busy Detection is enabled, it is also possible to specify the cadence of your busy signal. In many Countries, it is 500 msec on, 500 msec off. Without Busy Pattern specified, MyPBX will accept any regular sound-silence pattern that repeats <Busy Count> times as a busy signal. If you specify Busy Pattern, then MyPBX will further check the length of the tone and silence, which will further reduce the chance of a false positive disconnect.

# **·Frequency Detection**

Used for Frequency Detection (Enable detecting the busy signal frequency or not).

# **·Busy Frequency**

If the Frequency Detection is enabled, you must specify the local frequency.

# Polarity Detection

Configure if the call needs to be hung up when a polarity signal arrived

# 2) Advanced Options

# ·Caller ID Start

This option allows you to define the start of a Caller ID signal: Ring: Start when a ring is received (Caller ID Signaling: Bell\_USA, DTMF). Polarity: Start when a polarity reversal is started (Caller ID Signaling: V23\_UK, V23\_JP, DTMF).

Before Ring: Start before a ring is received (Caller ID Signaling: DTMF).

# **·Caller ID Signaling**

This option defines the type of Caller ID signaling to use. It can be set to one of the following:



Bell: bell202 as used in the United States v23\_UK: suitable in the UK v23\_Japan: suitable in Japan v23-Japan pure: suitable in Japan DTMF: suitable in Denmark, Sweden, and Holland

### .Caller ID Detection

For FXO trunks, this option forces MyPBX to clarify Caller ID incoming calls

# **GSM/UMTS** Trunk

GSM/UMTS trunks are supported in MyPBX U100&U200 if you have got the GSM/UMTS module and SIM cards installed. One GSM/UMTS trunks support only one SIM card for one concurrent call.

GSMUMTS Trunk							
	Trunk Name	Port	Туре				
	GSM1	1	GSM	2			



Click edit to configure more details.

Edit GSM Trunk - GSM1	X
General	
Trunk Name 🛈 : GSM1	
Volume Setting 🛈 : 40% 💌	
PIN Code:	
Warning: Be careful. If you failed to enter your correct PIN code 3 times in succession, SIM card will be blocked.	
Save Save	
Figure 6-25	

# Trunk Name

A unique label used to identify this trunk when listed in outbound rules, incoming rules, etc. Ex: 'GSM/UMTS9'

#### **·Volume Setting**

Used to modify the volume level of this trunk. Normally, this setting does not need to be changed.

# ·Pin Code

Please enter your SIM card pin code here if your card has a pin code



# 6.2.2 VoIP Trunk

There are two types of VOIP trunk in MyPBX: SIP and IAX, in this page, we can also configure the "service provider" trunk, which doesn't need the use name and password for authorization, when you have bought a trunk from provide with IP address only, please choose "service provider" trunk .

dd Voll	Tuest					
í	Provider Name	Time	HormanalP	Unit Natio		
	Yeastar	SIP	192.168.4.142	504	100	X

Figure 6-26

# 6.2.2.1 VoIP Trunk

In this page, we can configure VoIP trunk (SIP/ IAX) you have got from provider with the authorization name and password.

# 1) Add VoIP Trunk

Input correct SIP information (provide by VoIP provider). Inaccurate information will prevent the trunk from registering.



Add VolP trunk	x
Type: SIF	PV
Provider Name:	
Hostname/IP:	: 5060
Domain:	
User Name:	
Authorization Name:	
Password:	
From User:	
Online Number 🛈 :	
Maximum Channels 🛈 : 0	
Caller ID 🛈 :	
Realm <sup>1</sup> :	
🗌 Ena	able Outbound Proxy Server
Transport: UD	DP ✓ Enable SRTP 🛈 : 🗌 Qualify: 🗹
DTMF Mode: rfc2	2833 🗸
DOD Settings	
DOD:	Associated Extension: 601 ♥ ↑Add DOD
	V Save 🔀 Cancel

Figure 6-27

# ·Type

SIP – Identifies whether the trunk sends and receives calls using the VoIP protocol SIP

# •Provider Name

A unique label to help you identify this trunk when listed in outbound rules, incoming rules etc. Ex: "yeastar".

#### ·Hostname/IP

Service provider's hostname or IP address.5060 is the standard port number used by SIP protocol. Don't change this part if it is not required.

# .Domain

VoIP provider's server domain name.



#### ·Username

Username of SIP account. Used for SIP trunk registration.

#### .Authorization name

Used for SIP authentication. Leave this blank if not required.

#### Password

Password of SIP account.

#### .From User

All outgoing calls from this SIP Trunk will use the From User (In this case the account name for SIP Registration) in From Header of the SIP Invite package. Keep this field blank if not needed

#### .Online number

Define the online number that expected by "Skype Connect" and some other SIP service providers. Leave this field blank if not needed.

#### •Maximum Channels

Controls the maximum number of outbound channels (simultaneous calls) that can be used on this trunk. Inbound calls are not counted against the maximum. Set as 0 to specify no maximum.

# ·Caller ID

Specify the caller ID to use when making outbound calls over this trunk. The caller ID set in the "extension" screen will override the caller ID set in the "VOIP trunk" screen. Please note that not all the service providers support this feature. Contact your service provider for more information.

#### **•Outbound Proxy Server**

A proxy that receives requests from a client, even though it may not be the server resolved by the Request-URI.

#### Codecs

Define the codec for this sip trunk and its priority **Note**: To change the codec type and priority of this trunk, please create it first, it will appear when you edit it again.

#### Transport

This will be the transport method used by the SIP Trunk. This method is given by the SIP trunk provider. The options are UDP (default) or TCP or TLS.

#### ·Enable SRTP



Define if SRTP is enabled for this trunk

# ·Qualify

Send check alive packets to the sip provider.

### ·DTMF mode

Set default mode for sending DTMF of this trunk. Default setting: rfc2833

### ·DOD

DOD (Direct Outward Dialing) means the caller ID displayed when dialing out, before configure this, please make sure the provider supports this feature.

#### ·Associated Extension

The extension make call out via SIP Trunk will display the associated DOD

#### 2) Add IAX trunk

Input correct IAX information (provided by VOIP provider). Inaccurate information will prevent the trunk from registering.

Add VoIP trunk	2	٢
Туре:		
Provider Name:		
Hostname/IP:	: 4569	
User Name:		
Password:		
Online Number 🛈 :		
Maximum Channels 🛈 :	0	
Caller ID 🛈 :		
DOD Settings		
DOD:	Associated Extension: 601 ▼ ↑Add DOD	
	Save X Cancel	
	Figure 6.20	

Figure 6-28

# ·Type

IAX – Identifies whether the trunk sends and receives calls by using the VoIP protocol IAX.



### ·Provider Name

A unique label to help you identify this trunk when listed in outbound rules, incoming rules etc. Ex: "yeastar2".

#### ·Hostname/IP

Service provider's hostname or IP address. 4569 is the standard port number used by IAX protocol. Don't change this part if it is not required.

#### ·Username

Username of IAX account; Used for IAX trunk registration.

#### Password

Password of IAX account

#### .Online number

Define the online number that expected by "Skype Connect" and some other SIP service providers. Leave this field blank if it's no required.

#### •Maximum Channels

Controls the maximum number of outbound channels (simultaneous calls) that can be used on this trunk. Inbound calls are not counted against the maximum. Set as 0 to specify no maximum.

#### ·Caller ID

Specify the caller ID to use when making outbound calls over this trunk. The caller ID set in the "extension" screen will override the caller ID setting in the "VOIP trunk" screen. Please note that not all the service providers support this feature. Contact your service provider for more information.

#### ·DOD

DOD (Direct Outward Dialing) means the caller ID displayed when dialing out, before configure this, please make sure the provider supports this feature.

#### ·Associated Extension

The extension make call out via IAX Trunk will display the associated DOD.

# **6.2.2.2 Service Provider**

This is service provider trunk (peer to peer mode), which authorized using IP address only. If you have got a trunk with IP address only, please choose this type.



Edit Service Provider Trunk-SPS-Su	pport.Tel	х
Туре:	SIP 💌	
Provider Name:	Support.Tel	
Hostname/IP:	192.168.4.141 : 5060	
Maximum Channels 🛈 :	0	
Codecs :	First: a-law 💌 Second: u-law 💌 Third: GSM 💌	
	Fourth: None 💌 Fifth: None 💌	
Transport:	UDP -	
Qualify:		
DTMF Mode:	rfc2833	
DOD Settings Global DOD:		
DOD:	Associated Extension: 601 ▼ ↑Add DOD	

Figure 6-29

# ·Type

SIP or IAX

SIP – Identifies whether the trunk sends and receives calls by using the VoIP protocol SIP.

IAX - Identifies whether the trunk sends and receives calls by using the VoIP protocol IAX.

# •Provider Name

A unique label would help to you identify this trunk. Ex: 'Provider2'.

# ·Hostname/IP

Service provider's hostname or IP address.

**Note**: 5060 is the standard port number used by SIP protocol, 4569 is the standard port number used by IAX protocol. Don't change this part if it is not required.

# ·Maximum Channels

Control the maximum number of outbound channels (simultaneous calls) that can be used on this trunk. Inbound calls are not counted against the maximum. Leave blank to specify no maximum.



#### Codecs

Define the codec for this sip trunk and its priority **Note**: codec can only display when edit it after creating the trunk.

#### Transport

This will be the transport method used by the SIP Trunk. This method is given by the SIP trunk provider. The options are UDP (default) or TCP or TLS.

#### ·Qualify

Send check alive packets to the sip provider.

#### **•DTMF** mode

Set default mode for sending DTMF of this trunk. Default setting: rfc2833

#### ·DOD

DOD (Direct Outward Dialing) means the caller ID displayed when dialing out, before configure this, please make sure the provider supports this feature

#### ·Associated Extension

The extension make call out via this Trunk will display the associated DOD.



# 6.3 Outbound Call Control

# 6.3.1 Outbound Routes

In this page, we can configure the outbound rules to control the outgoing calls. **Note:** 

- 1. The max number of outbound route is 64.
- 2. If the dial patterns are the same in several routes, MyPBX will choose the available routes from top to the last one.
- 3. When you have created a new extension, please edit the outbound route so that he can dial out too

C	Outbound Routes							
+ Add Outbound Route								
	Route Name	Dial Pattern						
	pstnout	9.	1	×				



We can create outbound route or use the default route "pstnout" (dial 9+numbers to dial out)



Edit Outbound Route - pstnout	X
Route Name	pstnout
Dial Pattern 🛈 :	9.
Strip 🛈 :	1 digits from front
Prepend these digits	before dialing
Password:	
T.38 Support 🛈 :	No
Rrmemory Hunt	
Office Hours :	default 🗸
Member Extensions	
Available Extensions	Selected
Member Trunks	>>>       301(SIP)         302(SIP)       303(SIP)         304(SIP)       305(SIP)         (««       601(FXS)
Available Trunks	Selected
	>>>     pstn1(FXO)       pstn2(FXO)       pstn14(FXO)
×	Save 🔀 Cancel

Figure 6-31

# **·Route Name**

Name of this Outbound Route. Ex: 'Local' or 'Long Distance' etc.

# ·Dial Pattern

Outbound calls that match this dial pattern will use this outbound route. There are a number of dial pattern characters that have special meanings:

- **X** : Any Digit from 0-9
- Z : Any Digit from 1-9
- **N** : Any Digit from 2-9

**[12345-9]** : Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The "." Character will match any remaining digits. For example, "9011." will match any phone number that starts with "9011", excluding "9011" itself. The "!" will match none remaining digits, and causes the matching process to



complete as soon as it can be determined that no other matches are possible.

Example 1: **NXXXXXX** will match any 7 digits phone number.

Example 2: **1NXXNXXXXX** will match a phone number starting with a 1, followed by a 3-digit area code, and then 6 digit number.

#### •Strip digits from front

Allows the user to specify the number of digits that will be stripped from the front of the phone number before the call is placed. For example, if users must press 0 before dialing a phone number, one digit should be stripped from the dial string before the call is placed.

#### ·Prepend these digits before dialing

These digits will be prepended to the phone number before the call is placed. For example, if a trunk requires 10 digit dialing, but users are more comfortable with 7 digit dialing, this field could be used to prepend a 3 digit area code to all 7 digit phone numbers before calls are placed.

#### Password

The route password can be used to protect this route from being accessed without a password.

#### •T.38 Support:

Enable T38 fax in this outbound route (Only for SIP Trunk).

#### **·**Rrmemory Hunt

Round robin with memory, remembers which trunk was used last time, and then use the next available trunk to call out.

#### **·Office Hours**

When an specific office hour is selected, this outbound route can only be used during this office hour, and can't be used in non-office hours.

#### Member Extensions

Defines the extensions that will be permitted to use this outbound route.

#### Member Trunks

Defines the trunks that can be used for this outbound route.



# 6.3.2 Speed Dial Settings

ptions		
	The prefix of speed dial 9 199	
Add Speed Dial		
	No Speed Dial Defined	



#### 1) Options

# •The prefix of speed dial

The prefix should be dialed before the speed dial number. Default is \*99

Add Speed Dial		х
<b>Note:</b> Don't forget to add the outbound dial prefix if y trunk.	ou would like to dial the speed dial number through	
Source Number:		
Destination Number:		
✓ Save	X Cancel	

Figure 6-33

2) Add new speed dial.

#### **·Source Number**

The speed dial number.

# **·Destination Number**

The number you want to call.

E.g. The source number is "123". The destination number is 5503305. The prefix number is \*99. You can use an extension with any type to dial \*99123, then it will call to number 5503305.

**Note:** Don't forget to add the outbound dial prefix if you would like to dial the speed dial number through trunk.



# 6.4 Inbound Call Control

In this page, we can configure the details of IVR, ring group, queue and inbound routes.

# 6.4.1 IVR

When there's an inbound call aims at Auto Attendant, MyPBX will play an IVR recording and route the caller to the requested destination (for example, "Welcome to XX company, for sales press 1, for technical support press 2, for operator press 0, etc"). The system will transfer the call to corresponding extension according to DTMF digits inputted by the user

Add IVR			
Name	Number	Enable Direct Dial	
welcome	660	Yes	2 X

Figure 6-34

There is a default IVR here, we can edit it directly or add IVR by yourself



dit IVR - welcome		
	Number 0: 660	
	Name <sup>(1)</sup> : welcome	
	Prompt <sup>(1)</sup> : default	Custom Prompts
	Repeat Count 🛈 : 🔳 💌	
	Key Timeout 🛈 : 3 💌	
	📝 🚺 Enable Direct Dial	
Keypress Events		
Key	Action	Destination
0	Connect to Extension	Extension 300 💌
1	No Action	<b>_</b>
2	No Action	▼
3	No Action	▼
4	No Action	▼
5	No Action	▼
6	No Action	<b>•</b>
7	No Action	
8	No Action	▼
9	No Action	▼
#	No Action	<b>v</b>
*	No Action	
Timeout	Connect to Extension	Extension 300
Invalid	Connect to Extension	Extension 300
	✓ Save X Cancel	

Figure 6-35

# ·Number

MyPBX treats IVR as an extension; you can dial this extension number to reach the IVR from internal extension.

#### •Name

A name for the IVR

#### Prompt

The prompt recording that will be played when this IVR is reached.

#### ·Repeat Count

The number of times that the selected IVR prompt will be played.

#### **·Key Timeout**

Wait for the user to enter a new extension for a specified number of seconds.



# •Enable Direct Dial

Allow the caller to dial other extensions number directly.

# **·Key Press Events**

A list of actions that can be performed depending on the digit dialed by the user .

#### Key

The Key pressed when the callers hear the IVR prompt.

#### Action

When the callers press the corresponding key, the action MyPBX executes.
No Action: Do nothing
Connect to Extension: Connect the call to an extension.
Connect to Voicemail: Connect the call to the voicemail of an extension
Connect to RingGroup: Connect the call to a ringgroup.
Connect to IVR: Connect the call to an IVR.
Connect to Conference Room: Connect the call to a conference room.
Connect to DISA: Connect the call to a DISA.
Connect to Faxes: Connect the call to Faxes of extensions.
Dial by Name: The callers can dial the name of an extension to connect to the corresponding extension.
Hung up: Hang up the call.

#### Destination

Where will MyPBX route the call when the action occurs.

#### •Time Out

Defines the timeout action. A timeout occurs after the IVR prompt has finished playing for the number of times specified by the 'Repeat Count' field.

# •Invalid

Defines the invalid action. The invalid action is triggered if the user enters a DTMF digit that is not defined for this IVR.

# 6.4.2 Ring Groups

Ring groups can be configured to balance the call traffic for multiple users and give callers a higher level of availability for incoming calls. Multiple ring methods and voicemail are supported.

**Note**: follow me feature in extension page will not take effect when it's ringing as an agent.

<b>%</b> Yea	star	MyPBX U100&U200 Administr	ator's Gu	iide
Ring Groups				_
+ Add Ring Gro	ater			_
Number	Name	Maniburs		
670	ringgroup_default	300(SIP)-301(SIP)-302(SIP)-303(SIP)-304(SIP)-305(S	1	X
		Figure 6-36		

There is a default ringgroup, you can edit it or create a new one

Edit Ring Group - ringgroup_default		x
	oup Name : ringgroup_default	
Ring Group	p Number : 620	
	Strategy : Ring all simultane	ously 👻
Seconds to ring each	n member 🔍 : 60	
Ring Group members 🕖 Available Extensions		Selected
601(FXS) 602(FXS)	>>       300(SIP)         301(SIP)       301(SIP)         →       302(SIP)         303(SIP)       303(SIP)         ←       304(SIP)         305(SIP)       305(SIP)	
Destination If No Answer:		
	C End Call	
	Extension	Extension 300 💌
	Voicemail	Voicemail 601 💌
Destination:	© IVR	IVR welcome
	C Ring Group	Ring Group ringgroup
	Conference Room	Conference Room 64
	C Queues	Queues 💌
	✓ Save 💥 Cancel	

Figure 6-37

# **·Ring Group Name**

This option defines a name for this group, i.e. "Sales". "Ring Group Name" is a label to help you identify this group in the group list.

# **•Ring Group Number**

This option defines the numbered extension that can be dialed to reach this group.

# Strategy

This option sets the Ringing Strategy for this Group. The options are as follows:

- 1. Ring All Simultaneously: Ring all available Extensions simultaneously.
- 2. Ring Sequentially: Ring each extension in the group one at a time.

# •Seconds to ring each member

1. If the strategy is "Ring All Simultaneously", it means set the number of



seconds to ring this group before routing the call according to the "Destination if No Answer" settings.

2. If the strategy is "Ring Sequentially", it means set the number of seconds to ring a single extension before moving onto the next one.

#### · Ring Group Members

An extension can be made a member of this ring group by moving it into the "Selected" box.

#### **·Destination If No Answer**

When all members on this group fail to answer the call, system will handle the call according to the selected destination.

# 6.4.3 Queues

Call Queues give users (i.e. call centers) an efficient means to have their calls answered in the order they were received to deliver top tier customer service.



Figure 6-38

Call queues allow calls to be sequenced to one or more agents. **Note**:

- Dial "Queue number + `\*'" to log in or "Queue number + `\*\*'" to log out the queue. For example, if the queue number is "680", then agent can dial "680\*" to log in or "680\*\*" to log out.
- 2. Follow me feature in extension page will not take effect when it's ringing as an agent of queue.



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dd Queue		
	Queue Name 🛈 :	680
	Queue Number0:	
	Queue Password	
	Queue Agent Timeout	
	Queue Max Wait Time	
	Queue Ring Strategy	
Agents	Queue rang onategy .	
	ailable Agents	Selected
300(SIP) 301(SIP) 302(SIP) 303(SIP) 304(SIP) 305(SIP) 601(FXS) 602(FXS)		»» → ← ≪≪
Caller Position Ann	ouncements	
	Announce Position	
	Announce Hold Time	
	Frequency	: 30 seconds 💌
Periodic Announce		
	Prompt	Custom Prompts   30 seconds
	Frequency	Su seconds V
Events		
		y: •
	Destination	n: End Call
Failover-Destinatio		
anover Destination		n: End Call
	Destination	
Others		
	Music On Hold	calmriver  Music on Hold Prompts
	Leave When Empty	Yes -
	Join Empty 🛈	
	Agent Announcement	
	Join Announcement	
	Retry	
	Wrap-up Time	: 30
	🗸 Save	e 🔀 Cancel

Figure 6-39

# ·Queue Name

A name for the Queue.



# •Queue Number

Use this number to dial into the queue, or transfer callers to this number to put them into the queue.

#### •Queue Password

You can require agents to enter a password before they can login to this queue.

#### **·Queue Agent Timeout**

The number of seconds an agent's phone can ring before we consider it a timeout.

#### •Queue Max Wait Time

The maximum number of seconds a caller can wait in a queue before being pulled out (0 for unlimited).

#### **·Queue Ring Strategy**

This option sets the Ringing Strategy for this Queue. The options are <u>RingAll</u>: Ring All available Agents simultaneously until one answers. <u>LeastRecent</u>: Ring the Agent which was least recently called. <u>FewestCalls</u>: Ring the Agent with the fewest completed calls. <u>Random</u>: Ring a Random Agent.

<u>RRmemory</u>: Round Robin with Memory, Remembers where it left off in the last ring pass".

#### 1) Agents

This selection shows all users. Selecting a user here makes them a agent of the current queue.

2) Caller Position Announcements

#### **·Announce Position**

Announce position of caller in the queue

#### **·Announce Hold Time**

Enabling this option causes MyPBX to announce the hold time to the caller periodically based on the frequency timer. Either yes or no; hold time will not be announced if <1 minute.

#### Frequency

How often to announce queue position and estimated hold time. **Note:** "0 seconds" means disable the announcement

3) Periodic Announcements

#### Prompt

Select a prompt file to play periodically.



#### Frequency

How often to announce a prompt to the caller.

#### 4) Events

If a caller presses the key while waiting in the queue, this setting selects which action should process the key press.

#### 5) Failover-Destination

Defines the failover action. A failover occurs after the user reach the Queue max wait time.

#### 6) Others

#### •Music On Hold

Select the 'Music on Hold' Class for this Queue.

#### ·Leave When Empty

This option controls whether callers already on hold are forced out of a queue that has no agents. There are two options.

Yes: Callers are forced out of a queue when no agents are logged in. No: Callers will remain in a queue with no agents.

#### ·Join Empty

This option controls whether callers can join a call queue that has no agents. There are two options,

Yes: Callers can join a call queue with no agents or only unavailable agents No: Callers cannot join a queue with no agents The default option is No.

#### Agent Announcement

Announcement played to the Agent prior to bridging in the caller.

#### ·Join Announcement

Announcement played to callers once prior to joining the queue.

#### Retry

The number of seconds we wait before trying all the phones again.

#### ·Wrap-up time

How many seconds after the completion of a call an Agent will have before the Queue can ring them with a new call. The default is 30.



# 6.4.4 Conferences

dd Conference Room				
Conference Room	Admin	PIN #		
640	(m)	No Passoord	10	X
641	200	No Password	1	×
642	(m)	No Pesneord	1	X
643		No Password	1	X
644	-	No Password	1	X

Figure 6-40

Conference Calls increase employee efficiency and productivity, and provide a more cost-effective way to hold meetings. Conference agents can dial \* to access to the settings options and the admin can kick the last user out and can lock the conference room.

#### Extension

This is the number dialed to reach this Conference Room.

#### •Admin

Admin can kick a user out and can lock the conference room.

#### •Pin #

Set a PIN # that must be entered in order to access this conference room (i.e. 1234).

Edit Conference Room 640	X
Extension (3): 640	
Admin 🛈 : 💶	
PIN # 🛈 :	
Save 🔀 Cancel	

Figure 6-41



# 6.4.5 Inbound Routes

Inbound routing processes incoming call traffic to destination extensions during office hours or outside office hours

Inbound Route			
Route Name	DID Number	Caller ID Number	
	100000000000000000000000000000000000000	and the second se	 



There is a default inbound route for all the trunks and set IVR as the destination, you can edit it or create a new one for your demands. When an incoming call arrives, the system will first check "fax detection", then "Holidays", at last "Business Days".



General	•	t-t-		
	Route Name 🛈 :			
	DID Number 🛈 :			
	Extension 🛈 :	:		
с	aller ID Number 🛈 :	:		
	inctive Ringtone 🛈 :			
	Enable Callback :		Callback Settings	
Member Trunks				
Available	Trunks		Selected	
		**	pstn1(FXO) pstn2(FXO)	
			pstn14(FXO)	
		-		
		- I		
		**		
Business Days				
Dusilicas Days				
Office Hours :	default	~		
Office Hours :	default	~		
Office Hours : Office Hours	default IVR	~	IVR welcome	~
Office Hours :			IVR welcome	~
Office Hours : Office Hours	IVR			<b>~</b>
Office Hours : Office Hours Destination :			IVR welcome	<b>&gt;</b>
Office Hours : Office Hours Destination : Non-office Hours Destination :	IVR			<b>&gt;</b>
Office Hours : Office Hours Destination : Non-office Hours	IVR			>
Office Hours : Office Hours Destination : Non-office Hours Destination : During Holidays Holiday :		<ul><li>✓</li><li>✓</li><li>✓</li></ul>		>
Office Hours : Office Hours Destination : Non-office Hours Destination : During Holidays	IVR	→ →		>
Office Hours : Office Hours Destination : Non-office Hours Destination : During Holidays Holiday :		<ul><li>✓</li><li>✓</li><li>✓</li></ul>		>
Office Hours : Office Hours Destination : Non-office Hours Destination : During Holidays Holiday : Destination :		<ul><li>✓</li><li>✓</li><li>✓</li></ul>		> >
Office Hours : Office Hours Destination : Non-office Hours Destination : During Holidays Holiday : Destination : Fax Detection	IVR IVR End Call	<ul><li>✓</li><li>✓</li><li>✓</li></ul>		> >

Figure 6-43

# 1) General

# **·Route Name**

A name for this inbound route. Ex: "pstnin" etc.

# **·DID Number**

Define the expected DID Number if this trunk passes DID on incoming calls. Leave this field blank to match calls with any or no DID info. You can also use pattern matching to match a range of numbers. The following patterns may be used:

- ${\bf X}$  : Any Digit from 0-9
- Z : Any Digit from 1-9



# **N** : Any Digit from 2-9

**[12345-9]** : Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The "." Character will match any remaining digits. For example, "9011." will match any phone number that starts with "9011", excluding "9011" itself. The "!" will match none remaining digits, and causes the matching process to complete as soon as it can be determined that no other matches are possible.

Example 1: **NXXXXXX** will match any 7 digits phone number.

Example 2: **1NXXNXXXXX** will match a phone number starting with a 1, followed by a 3-digit area code, and then 6 digit number.

For more information, please refer to Appendix G How to Use DID.

# Extension

Define the extension for DID number. This field is only valid when you use BRI, SIP, SPS or SPX trunk for this inbound router. You can only input number and "-" in this field, and the format can be xxx or xxx-xxx. The count of the number must be only one or equal the count of the DID number.

# ·Caller ID Number

Define the Caller ID Number to be matched on incoming calls. Leave this field blank to match any or no DID info.

You can also use a pattern match (e.g. 2[345]X) to match a range of numbers. The following patterns may be used:

- X : Any Digit from 0-9
- **Z** : Any Digit from 1-9
- **N** : Any Digit from 2-9

**[12345-9]** : Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The `." Character will match any remaining digits. For example, "9011." will match any phone number that starts with "9011", excluding "9011" itself. The "!" will match none remaining digits, and causes the matching process to complete as soon as it can be determined that no other matches are possible.

Example 1: **NXXXXXX** will match any 7 digits phone number.

Example 2: **1NXXNXXXXX** will match a phone number starting with a 1, followed by a 3-digit area code, and then 6 digit number.

# **·Distinctive Ringtone**

MyPBX support mapping to custom ring tone files. For example, if you configure the distinctive ringing for custom ring tone to "**Family**", the ring tone will be played if the phone receives the incoming call.

# •Enable Callback

You can enable the callback function of this inbound route. If you want to



configure the callback function, please refer to chapter 6.7.4

How do I configure distinctive ring tones? Please refer to <u>APPENDIX E</u>. Currently distinctive ringtone can be compatible with Yealink and Snom phone.

2) Member Trunks

This area allows you to select which trunks will be member trunks for this route. To make a trunk a member of this route, please move it to the 'Selected' box.

3) Business Days

Define where the calls will be routed during Business Days.

#### **•Office Hours**

Select one defined business days office hours.

#### **·Office Hours Destination**

Configure where to route the incoming calls during office hours.

•End Calls Route the incoming calls to end calls, System will auto hang-up the call.

•Extension Route the incoming calls to a specific extension.

•Voicemail Route the incoming calls to extension's voicemail.

·IVR

Route the incoming calls to a specific IVR.

•Ring Group Route the incoming calls to a specific Ring Group.

•Conference Room Route the incoming calls to a specific Conference Room.

•DISA Route the incoming calls to a specific DISA.

•Queues Route the incoming calls to a specific Queue.

•Faxes Route the incoming faxes to a specific extension's mail address.



Note: This function only supports T.38 faxes.

Outbound Routes

Route the incoming calls to a specific outbound route.

This function is mainly used for the connection of two branches. For example: Company A locates headquarters in the USA with a branch B in China. A and B both have MyPBX phone systems.

Now if staff of A would like to make a call to a telephone or mobile phone in China from the extension of A but via the FXS line of B, that can be done by this configuration.

# **·Non-office Hours Destination**

Configure where to route the incoming calls during non-office hours.

4) During Holidays

Define where the calls will be routed during Holidays.

# ·Holiday

Select which defined Holiday to use. When a time is defined in both Business Days and Holidays, it will be treated as Holidays.

# Destination

Configure where to route the incoming calls during holidays.

# 5) Fax Detection

Configure if detecting faxes in this inbound route.

# **Note:** Please choose IVR as the destination above before configure fax detection (recommend).

# Destination

Configure where the faxes will be routed when faxes are detected.

•No detect Do not detect faxes.

# ·Custom Email

Customize an E-mail address to receive the faxes. You should first configure the "Voicemail Settings->SMTP Settings for Voicemail" correctly before you use this option.

# Faxes

Send faxes to an extension. If choosing a FXS extension here, the fax will be sent to the FXS port selected, you should connect a fax machine to this FXS port.



If Choosing a VoIP extension, the fax will be sent to the extension's voicemail as an attachment.

**Note**: If you receive faxes with custom Email address, the "SMTP settings" of "Voicemail Settings" should be configured successfully in advance. If you receive faxes with E-mail address configured in VOIP extension voicemail, you should first make sure the tested email to your email address works fine.



# 6.5 Audio Settings

It's allowed to customize the prompts in MyPBX, including the Audio In and change the system prompts to your local country.

# 6.5.1 Custom Prompts

We can record or upload the prompts in this page, you can also play it directly to confirm if it's a valid one, you can also download it and save it as an backup

Record	I New Prompt 📃 👷 Upload a prompt	
	Renter	Options
	default	Record Again Play Download Delete
2	pinuser-entry	Record Again Play Download Delete
3	pinuser-empr	Record Again Play Download Delete

#### Figure 6-44

# 1. Record new Prompt

Record New Prompt X
File Name:
Dial extension: 601  to record a new voice prompt
✓ Record X Cancel
Figure 6-45

The administrator can use this screen to record custom prompts by doing the following:

1) Click "Record New Custom Prompt"

2) Input the desired file name on the popup window and choose an extension to call for recording (such as 500).

3) Click "Record". The selected extension will ring and you can pick up the phone to start recording.

# 2. Upload Prompt



Upload Prompt	х
The file size must not be larger than 1.8MB!	
WAV format: gsm 6.10 8kHz,Mono,1Kb/s, alaw/ulaw 8kHz,Mono,1Kb/s, pcm 8kHz,Mono,16Kb/s	
Choose a File to Upload : Browse	
Vpload 🔀 Cancel	

Figure 6-46

The administrator can also upload prompts by doing the following:

- 1) Click "Upload Prompt".
- 2) Click "Browse" to choose the desired prompt.
- 3) Click "Upload" to upload the selected prompt.

**Note**: The file size must not be larger than 1.8 MB, and the file must be WAV format:

GSM 6.10 8 kHz, Mono, 1 Kb/s; Alaw/Ulaw 8 kHz, Mono, 1 Kb/s; PCM 8 kHz, Mono, 16 Kb/s.

# **6.5.2 Music on Hold Prompts**

In this page, we can upload the music on hold prompts or adjust the volume from Audio In interface (available in MyPBX U100&U200)

Upload Music on Hold Pranet			
•	Туря	Name	Options
1	Internal	calmiver	E X
2	Internal	worldmite	E X
3	Internal	sunshine	E ×
4	External	external music	40 50%



The administrator can upload on hold music as follows:

- 1) Click "Upload Music on Prompt".
- 2) Click "Browse" to choose the desired audio file.
- 3) Click "Upload" to upload the selected file.



Upload Music on Hold Prompt	X
The file size must not be larger than 1.8MB!	
WAV format: gsm 6.10 8kHz,Mono,1Kb/s、alaw/ulaw 8kHz,Mono,1Kb/s、pcm 8kHz,Mono,16Kb/s	
Choose a file to upload : Browse	
Vpload 🔀 Cancel	

Figure 6-48

**Note**: The file size must not be larger than 1.8 MB, and the file must be WAV format:

GSM 6.10 8 kHz, Mono, 1 Kb/s; Alaw/Ulaw 8 kHz, Mono, 1 Kb/s; PCM 8 kHz, Mono, 16 Kb/s.

# **6.5.3 System Prompts Settings**

MyPBX have prompts of many languages. You can download the appropriate language you need. MyPBX can support American English, Australian English, Chinese, Dutch, French, Canadian French, German, Greek, Hungarian, Italian, Polish, Portuguese, Brazilian Portuguese, Russian, Spanish, Mexican Spanish, Turkish, Thai, and Korean currently.

# Note:

- 1. Auto-detection is highly recommended. But if you prefer to download via HTTP or TFTP server, please contact the local dealer for the prompts
- 2. When update successfully, just click "apply the changes" on web then it will take effect, there is no need to reboot.

Prompts Download Note: Auto-detection is highly recommended. But if you prefer to download via HTTP or TFTP ser please contact the local dealer for the prompts.
Local Prompts: English
Download Mode Auto Detection
Prompts: English
👮 Download

Figure 6-49



# 6.6 Basic Settings

There are some basic settings we need to configure MyPBX U100&U200, like the general preferences, business hours, feature codes, voicemail settings

# 6.6.1 General Preferences

In this page, there are some general settings of MyPBX

Hong Taxeout	3 30 4
MAX Call Deration	
Maximum Concurrent Calls	
Music On Inc.	
Tase Report	👂 United States Forth America 🔍
HTTP Beet Port	
FXO Made	
Vitual Ring Back Tone	D He w
Datactive Cate: 100	
Attended Transfer Caller K	D Transform V
Potierr Ma Prompt	0 Tes w
Music on hold far Follow Me	Default v
Invalid Phone Number Prompt-	
Basy Line Prompto	9 v
Dial Patian PromptO	0
er Pielenandes	
User Extensions	4 100 to 610
Ring Group Extensions	s 620 \$6.626
Paging Online Extensions	a 630 to 639
Conference Esternices	a (64) a (659
NR Extension	a   660   ta   679
Game Extension	a) 600 kg (600
Renal to Datach	

Figure 6-50

# 1) General

#### **•**Ring Timeout

Number of seconds to ring a device before handling the call as per the extension's Follow Me settings. Default value is 30s.

# .MAX call duration

The absolute maximum amount of time permitted for a call. A setting of 0 disables the timeout. Default value is 6000s.

# .Maximum concurrent calls

Maximum concurrent calls limits. Default value 0 means no limit

# •Music on hold

Used to set hold music for the system.



**Note:** if you need use the "live music" from "Audio In" interface, please choose "external music" here.

#### **•Tone Region**

Please select your country or nearest neighboring country to enable the default dial tone, busy tone, and ring tone for your region. **Note**: please reboot the system to take effect.

#### **•HTTP bind port/Web Access Port**

Port to use for HTTP sessions; Default: 80 **Note**: please reboot the system to take it effect.

#### ·FXO Mode

FXO port's operation mode .

#### ·Virtual Ring Back Tone

It's only for GSM/UMTS /UMTS trunk. Once enabled, when the caller call out with GSM/UMTS trunks, the caller will only hear the virtual ring back tone generated by the system before callee answers the call.

#### **·Distinctive Caller ID**

When incoming calls are routed from ring group/queue/IVR, the caller ID displays with the name of ring group/queue/IVR, for example 5503302(ringgroup\_default).

**Note**: To display IVR's name, please press the key instead of the extension number directly.

# ·Attended Transfer CallerID

When transferring an incoming call using the attended transfer feature code or the transfer key of IP phone, the Caller ID of transferee or transferer displayed on the screen of the callee. The default display is the Caller ID of the initiator. For example, if extension 500 makes a call to extension 501. After 501 picks up the call, 501 makes an attended transfer to extension 502. If selecting "Transferer", 502 will display the Caller ID as 500; if selecting "Transferee", 502 will display the Caller ID as 501.

#### **·Follow Me Prompt**

When set "Follow me" to "Transfer to number" on the extension page (e.g. when 500 is busy, transfer to 501), while 500 is busy, the call will be transferred to 501. If "Enable Follow Me Prompt" choosing yes, there will be prompt before transferring the call. Otherwise, the call will be transferred directly without any prompt. Default: Yes.



#### •Music on Hold for Follow Me Prompt

Configure whether to play a prompt "please hold while I try to locate the person you are calling" when transfer a call by follow me settings.

#### ·Invalid Phone Number Prompt

Configure the prompt when the dialed phone number is invalid.

#### Busy Line Prompt

Configure the prompt when the dialed phone number is busy.

#### ·Dial Failure Prompt

Configure the prompt when dial failed due to conjunction no-available channel.

2) Extension Preferences•User ExtensionsThe default value is 500 to 616

•**Ring Group Extensions** The default value is 620 to 629

•**Paging Group Extensions** The default value is 630 to 639

# **·Conference Extensions**

The default value is 640 to 659

# **·IVR Extensions**

The default value is 660 to 679

# **•Queue Extensions**

The default value is 680 to 689

# 6.6.2 Business Hours

Business hours including "holiday configuration" is used to control the incoming calls, we can configure it in this page.



	General	
Reference of the second se		
Eruble Business Hours	Citable Business Hours	
	Others	
Terra		
Eastle Office Closed Tursing	Office Clawel Teeng State Clysteline	
2 Exails Office Timing	Office Timing State Charter	
Disable Office (Closed) Timing		
	Business Days	
Add Office Hours		
efault Mun 00 33-12 93	14 09-16 09/16 00-22 09. Twe DE 30-12 09/14 00-18 09/14 00-22 00 . Set DE 30-12 09/06 00-20 09/06 00-20 00	1. 18
	Hendays	
Add Holdey	Address result for not as soll. These however would be traveled as not-office treat.	
	No Holidaya Definod	

Figure 6-51

# 1) General •Enable Business Hours •disable Business Hours

# 2) Others

# ·Enable Office Closed Timing

By dialing \*81 (\*81 is default) on an extension will force the office time closed for the device whatever the general setting is.

# •Enable Office Timing

By dialing \*82 (\*82 is default) on an extension will force the office time to take effect for the device whatever the general setting is.

# **·**Disable Office closed timing

By dialing \*081 (\*081 is default) on an extension will disable the Office Closed Timing.

3) Add office hours

You can setup the business hours here.

# 4) Add Holiday

You can setup the holidays here.

If a time period is configured as both Holidays and office hours, it will be treated as Holidays.



# 6.6.3 Feature Codes

There are many feature codes available in MyPBX, which allow users to dial from extension side to realize the exact feature.

	C One Touch Record D	1	
	Check Extension Volgenal	12	
	Usicerval for Extension O	3	
	Vocarral Man Menu	702	
	2 Atlanded Transfer	13	
	Attended Transfer Timenut	15	
	SC Blest Transfer	122	
	FI Call Petrop 0	14	
	El Extension Pathap	*84	
	Constant S	+5.	
	Si Norrial Spy	190	
	27 Whiteer tay 0	191	
	2 Barge Spy O	192	
of Parking Performance			
	Call Parking	18	Contraction of the Contraction o
	Extension range used to part softe	190-299	(Ex. 893-698)
	Number of seconds a call can be parted for O	60	
all Fernessberg Professores			
	Reset to Defaultr	170	
	C Erable Farvard All Calls	121	
	2 Datable Forward At Calls	1071	
	Contractive Promovent When Burry	- 12	
	Cinable Forward When Bury	1072	
	C Enable Forward No Armune	173	
	Chamble Forcant his Annover	+073	
	Toront in Number	*74	
	27 Forward to Vocential	1674	
	C Enable Do Hot Distants	+71	
	2 Deuter De Hel Datum	1975	

Figure 6-52

#### 1) General

# **•One Touch Record**

A user may initiate or stop call recording by dialing \*1during a call. (\*1 is default setting).

# •Extension for Checking Voicemail

Users can check their Voicemail by dialing \*2 on their phone (\*2 is default setting).

#### ·Voicemail for Extension

Users can leave a voicemail to other extensions by dialing # on their phone or the incoming call could be forwarded to an extension's voicemail directly. (# is default setting).

For example, extension 500 want to leave a message for extension 501, users can use 500 dial'#501' to enter the voicemail of 501.

#### ·Voicemail main menu

Users can go to the main menu by dialing \*02 (\*02 is default setting).

# ·Attended Transfer

Users may transfer an incoming call by dialing \*3 on their phone (\*3 is default



setting).

# **·Attended Transfer Timeout**

The time out of transferring a call

# ·Blind Transfer

Users may blind transfer an incoming call by dialing\*03 on their phone (\*03 is default setting).

# ·Call Pickup

Users may pick up an incoming call by dialing \*4 on their phone (\*4 is default setting)

# •Extension Pickup

Users may pick up a specific extension's incoming call by dialing \*04+extension number on their phone (\*04 is default setting)

#### Intercom

Define the feature code that is used to dial an extension in intercom mode. For instance, setting this value to \*5 would allow you to initiate an intercom call with extension 501 by dialing \*5501.

#### Normal Spy

In this mode, you can only listen to the extension being spied, for example you can dial \*90501 to monitor extension 501

# **·Whisper Spy**

In this mode you can listen/whisper to the extension being spied, for example, dialing \*91501 to listen to extension 501, you can also talk with 501 too.

#### **·Barge Spy**

In this mode, you can barge in both extensions involved in the call, for example dialing \*92501 to barge in and talk with extensions on both sides.

# 2) Call Park Preferences

#### ·Call Parking

User may park an incoming call on his own telephone by pressing "\*6'' (\*6 is default setting)

# ·Extension range used to park calls

User may park an incoming call on a designated extension at first and then pick up the call again on any other extension.

# Number of seconds a call can be parked before it is recalled.

Define the time (in seconds) that a call can be parked before it is recalled to the

station that parked it.

3) Call Forwarding Preferences

# Reset to Defaults

Users may reset all call forwarding defaults by calling \*70 on their phone (\*70 is default setting).

**Note**: When reset to defaults. The call forwarding settings will be configured as follows: Always forward: Disabled Busy forward to Voicemail: Enabled

No answer forward to Voicemail: Enabled Do not disturb: Disabled

# •Enable Forward All Calls

Users may enable always forward by calling \*71 on their phone (\*71 is default setting)

# •Disable Forward All Calls

Users may disable always forward by calling \*071 on their phone (\*071 is default setting)

# **•Enable Forward When Busy**

Users may enable busy forward by dialing \*72 on their phone (\*72 is default setting)

# **·Disable Forward When Busy**

Users may disable busy forward by calling \*072 on their phone (\*072 is default setting)

# •Enable Forward No Answer

Users may enable no answer forward by calling \*73 on their phone (\*73 is default setting)

# **·Disable Forward No Answer**

Users may disable no answer forward by calling \*073 on their phone (\*072 is default setting)

# •Forward to number

Users may activate call forwarding by dialing this feature code, followed by the extension or phone number to forward all calls to this number.

**Note**: Users may activate Forward to number by dialing \*74 + phone number. e.g.: by dialing \*74501, all calls will be forwarded to extension 501.



#### ·Forward to Voicemail

Users may forward the call to Voicemail by calling \*074 on their phone (\*074 is default setting)

#### •Enable Do Not Disturb

Users may enable do not disturb by calling \*75 on their phone (\*75 is default setting)

#### ·Disable Do Not Disturb

Users may disable do not disturb by calling \*075 on their phone (\*075 is default setting)

# 6.6.4 Voicemail Settings

In this page, we can configure some settings for voicemail feature, including general voicemail settings and SMTP settings, which is used for "voicemail to email"

Vokemail Settings	
General Volcemail Settings	
Messa	ige Options
Max Messages per Folder	100 -
Max Message Time 0:	5 Minutes 💌
Min Message Time 🕖	5 Seconds 💌
Ask Caller to Dial 50	0
Delete Voicemali	5
Operator Breakout from Voicemat	No -
Destination	woltame +
Greet	ng Settings
Busy Prompt Q	Play bury greeting
Unavailable Prompt	Play unavailable greetings
Leave a Message Prompt <sup>1</sup>	Skip greeting
Playb	ick Options
Announce Message Caller ID 🕘	0
Announce Message Duration	12
Announce Message Arrival Time	E
Allow Users to Review Messages	5

Figure 6-53

1) General Voicemail Settings

#### a) Message Options

#### ·Max Messages per Folder

Set the maximum number of messages that can be stored in a single voicemail box.

#### ·Max Message Time

Set the maximum length of a single voicemail message.



# ·Min Message Time

Set the minimum length of a single voicemail message. Messages below this threshold will be automatically deleted.

#### Ask Caller to Dial 5

If this option is set, the caller will be prompted to press 5 before leaving a message.

#### **·Operator Breakout from Voicemail**

If this option is set, the caller can jump out of the voicemail and go to the destination (IVR) you set by dialing  $0^{\circ}$ .

b) Greeting Settings

#### **·Busy Prompt**

Greeting played when the extension called is busy. Skip greeting: Do not play a greeting. Play busy greeting: play the extension busy greeting.

#### ·Unavailable Prompt

Greeting played when the extension called is Unavailable. Skip greeting: Do not play a greeting. Play Unavailable greeting: play the extension Unavailable greeting.

#### ·Leave a Message Prompt

Greeting played to ask the caller to dial 5 to leave a message. Skip greeting: Do not play a greeting. Play busy greeting: play the extension busy greeting. Play Unavailable greeting: play the extension Unavailable greeting.

c) Playback Options

# Announce Message Caller ID

If this option is enabled, the Caller ID of the party that left the message will be played back before the voicemail message begins playing.

#### •Announce Message Duration

If this option is set, the duration of the message in minutes will be played back before the voicemail message begins playing.

#### . Announce Message Arrival Time

If this option is set, the arrival time of the message will be played back before the voicemail message begins playing.

#### . Allow Users to Review Messages



Allow callers to review their recorded message before sending it to voicemail.

# 2) SMTP Settings for Voicemail

**Note**: If you want to send voicemail messages as email attachments, please configure this section.

SMTP Settings For Voicemail	
Note:If you would like to send voice	mail messages as small attachments, please configure this section.
	SMTP Settings
E-mail Address 👀	mypbx@sina.com
Password 0:	
SMTP Server 0:	smtp sina com
Port:	25
E1	Use SSL/TLS to send secure message to server
	Test SMTP Settings

Figure 6-54

#### ·E-mail Address

The E-mail Address that MyPBX will use to send voicemail.

#### Password

The password for the email address used above

#### ·SMTP Server

The IP address or hostname of an SMTP server that the MyPBX will connect to in order to send voicemail messages via email, i.e. mail.yourcompany.com.

#### •Port

SMTP Port: the default value is 25.

#### ·Use SSL/TLS to send secure message to server

If the server of sending email needs to authenticate the sender, you need to select the check box.

Note: Must be selected for Gmail or exchange server.

After filling out the above information, you can click on the "Test Account Settings" button to check whether the setup is OK.

1) If the test is successful, you can use the email safely.

2) If test failed, please check if the above information is correct or network is proper.



# **6.7 Advanced Settings**

# 6.7.1 SIP Settings

	2
UDP Part Q	
Enable TCP Purtu	1999
Enable TLS PortQ	
TLS Verify Server 😣	
TLS Verty Client	The v
TLS Ignore Common Name 😡	
TLS Client Method Q	
#TP Post Stat	( [48898 ] ]
RTP Pot End	15990
DTMF Mode 0	(4:383) v
Max Registration/Subscription Tiree	3600
Min Registration/Subscription Terre O	40
Default Incoming/Cutgoing Registration Time O	128
Register Attempts 0	
Register Timecul 🕖	20
Calling Charvel Codec Poorly 😡	Yes 😼
Video Sapport 😡	(Yes V)
Max St Age O	184 99.9
DNS SRV Low Up O	
User Agent O	

Figure 6-55

# 1) General

# ·UDP Port

Port use for sip registrations, Default is 5060.

# **•TCP Port**

Port use for sip registrations, Default is 5060.

# **•TLS Port**

Port use for sip registrations, Default is 5061.

# **•TLS Verify Server**

When using MyPBX as a TLS client, whether or not to verify server's certificate. It is "No" by default.

# **•TLS Verify Client**

When using MyPBX as a TLS server, whether or not to verify client's certificate. It is "No" by default.

# **•TLS Ignore Common Name**

Set this parameter as "No", then common name must be the same with IP or domain name.

# **•TLS Client Method**



When using MyPBX as TLS client, specify the protocol for outbound TLS connections. You can select it as tlsv1, sslv2 or sslv3.

•RTP Port Start Beginning of RTP port range

•RTP Port End End of RTP port range

# **·DTMF** Mode

Set default mode for sending DTMF. Default setting: rfc2833

# Max Registration/Subscription Time

Maximum duration (in seconds) of a SIP registration. Default is 3600 seconds.

# Min Registration/Subscription Time

Minimum duration (in seconds) of a SIP registration. Default is 60 seconds.

# ·Default Incoming/Outgoing Registration Time

Default Incoming/Outgoing Registration Time: Default duration (in seconds) of incoming/outgoing registration.

# **·Register Attempts**

The number of SIP REGISTER messages to send to a SIP Registrar before giving up. Default is 0 (no limit).

# ·Register Timeout

Number of seconds to wait for a response from a SIP Registrar before timed out. Default is 20 seconds.

# ·Calling Channel Codec Priority

Once enabled, when dialing out via SIP/SPS trunks, the codec of calling channel will be selected in preference. If not, MyPBX will follow the priority in your SIP/SPS trunks.

# ·Video Support

Support for SIP video or no. Default is yes.

# •Max Bit Rate

Configure the max bit rate for video stream. The default: 384kb/s

# ·DNS SRV Look Up

Please enable this option when your SIP trunk contains more than one IP address.



#### ·User Agent

To change the user agent parameter of asterisk, the default is "MyPBX", you should change it if needed.

Ge	neral	NAT	Codecs	QOS	Advance	ed Settings					
				Noter	Configurat	tion of this	section is only	required	f when you	use remote e	xtensions
							Enable STUN	10			
							STUN Address	¢.[			
							STUN Port	£			
						Externa	I IP Address				
						ŧ	xternal Host	1			
						External Rei	resh Interval	2			
					Lo	cal Network	Identification	1.			
							NAT Mode	yes	•		
						Allow R	TP Re-invite	yes			

Figure 6-56

#### 2) NAT

**Note**: Configuration of this section is only required when using remote extensions.

# •Enable STUN

STUN (Simple Traversal of UDP through NATs) is a protocol for assisting devices behind a NAT firewall or router with their packet routing.

#### **·STUN Address**

The STUN server allows clients to find out their public address, the type of NAT they are behind and the internet side port associated by the NAT with a particular local port. This information is used to set up UDP communication between the client and the VOIP provider and so establish a call.

#### •External IP Address

The IP address that will be associated with outbound SIP messages if the system is in a NAT environment.

#### ·External Host

Alternatively you can specify an external host, and the system will perform DNS queries periodically.

This setting is only required when your public IP address is not static. It is recommended that a static public IP address be used with this system. Please contact your ISP for more information.

#### ·External Refresh Interval



If an external host has been supplied, you may specify how often the system will perform a DNS query on this host. This value is specified in seconds.

# ·Local Network Identification

Used to identify the local network using a network number/subnet mask pair when the system is behind a NAT or firewall.

Some examples of this are as follows:

"192.168.0.0/255.255.0.0": All RFC 1918 addresses are local networks;

"10.0.0.0/255.0.0.0": Also RFC1918;

"172.16.0.0/12": Another RFC1918 with CIDR notation;

"169.254.0.0/255.255.0.0": Zero conf local network.

Please refer to RFC1918 for more information.

# **•NAT Mode**

Global NAT configuration for the system; the options for this setting are as follows:

Yes = Use NAT. Ignore address information in the SIP/SDP headers and reply to the sender's IP address/port.

No = Use NAT mode only according to RFC3581.

Never = Never attempt NAT mode or RFC3581 support.

Route = Use NAT but do not include rport in headers.

#### **·Allow RTP Reinvite**

By default, the system will route media steams from SIP endpoints through itself. Enabling this option causes the system to attempt to negotiate the endpoints to route packets to each other directly, bypassing the system. It is not always possible for the system to negotiate endpoint-to-endpoint media routing.

SIP Settings						
General NAT Code	CS QOS Advanced Settings					
	Available Codecs	Allowed Codecs				
	SPEEX G722 G726 ADPCM G729A MPEG4	w-law         a-law         GSM         →         H261         H263         H263P         H264				
	G.729 License Key :					
	Note: If you would like to use G.729, please enter your license key above.					
	Save X Cancel					

Figure 6-57

3) Codecs

A codec is a compression or decompression algorithm that used in the



transmission of voice packets over a network or the Internet.

**u-law:** A PSTN standard codec, used in North America, which provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.

**a-law:** A PSTN standard codec, used outside of North America, which provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.

**GSM/UMTS:** A wireless standard codec, used worldwide, that provides adequate voice quality and consumes 13.3kbit/s in each direction (receiving and transmitting) of a VoIP call. GSM/UMTS is supported by many VoIP phones.

**SPEEX:** Speex is an Open Source/Free Software patent-free audio compression format designed for speech. The Speex Project aims to lower the barrier of entry for voice applications by providing a free alternative to expensive proprietary speech codecs. Moreover, Speex is well-adapted to Internet applications and provides useful features that are not present in most other codecs.

**G.722:** G.722 is a wideband speech coding algorithms which supports the bit rate of 64, 56 and 48kbps wideband. It's a broadband voice encoding of G series.

**G.726:** A PSTN codec, used worldwide, that provides good voice quality and consumes 32kbit/s in each direction (receiving and transmitting) of a VoIP call. G.726 is supported by some VoIP phones.

# ADPCM, G.729A, H261, H263, H263p, H264, MPEG4.

**Note:** If you would like to use G.729, please enter your license.

SIP Settings	5						
	General NAT	Codecs QOS	Advanced	d Settings			
			Tos SIP:	CS3	•	Cos SIP:	3 💌
			Tos Audio:	EF	•	Cos Audio:	5 🔹
			Tos Video:	AF41	•	Cos Video:	4
					V Save	💢 Can	cel



# 4) QOS

QoS (Quality of Service) is a major issue in VoIP implementations. The issue is how to guarantee that packet traffic for a voice or other media connection will not be delayed or dropped due interference from other lower priority



traffic. When the network capacity is insufficient, QoS could provide priority to users by setting the value.

General NAT Codecs QOS Advanced Settings	
From Field	From V
To Field	INVITE V
180 Ringing	
Remote Party ID 0	□ send □ trust
Allow Guest	No w
Petantic	(No 💙
Alwaysauthreject	
Session-timers Q	Accept V
Session-expires 0	1000 8
Session-minue 0	90 a
Session-refrester	Uas V

Figure 6-59

5) Advanced Settings•From FieldWhere to get the caller ID in sip packet.

#### •To Field

Where to get the DID in sip packet.

#### ·180 Ringing

It is set when the telecom provider needs. Usually it is not needed.

#### •Remote Party ID

Whether send Remote-Party-ID on SIP header. Default no.

#### **·Allow Guest**

Whether allow anonymous registration extension. Default: no. This option is used to avoid some anonymous calls by hackers. For more details about the system security configuration, please refer to **APPENDIX I MyPBX Security Configuration Guide.** 

#### Pedantic

Enable pedantic parameter. Default: no.

#### Alwaysauthreject

If enabled, when MyPBX rejects "Register" or "Invite" packets, MyPBX always respond the packets using "SIP404 NOT FOUND".

#### Session -timers

Enable session-timer mode, default: yes



#### •Session-expires The max refresh interval

Session-minse

The min refresh interval, which mustn't be less than 90s

#### Session-refresher

Choose session-refresher, the default is Uas

## 6.7.2 IAX Settings

( Settings			
General			
	UDP Port	(4569	
	Bandwidth	Low .	
	Minimum Registration/Subscription Time	60	
	Maximum Registration/Subscription Time	1200	
Codecs			
Allowed Codecs	Eu-law Ea-law EGSM ESPEEX EG7	26 EADPCM	G729A CH261 CH263 CH263P CH264
	Sava	Cancel	

Figure 6-60

#### 1) General

#### **·Bind Port**

Port use for IAX2 registrations, Default is 4569.

#### Bandwidth

Low/medium/high with this option you can control which codec to be used.

#### •Min Registration Time

Minimum duration (in seconds) of a IAX2 registration. Default is 60 seconds.

#### •Max Registration Time

Maximum duration (in seconds) of a IAX2 registration. Default is 1200 seconds.

#### 2) Codecs

A codec is a compression or decompression algorithm that used in the transmission of voice packets over a network or the Internet.

**u-law:** A PSTN standard codec, used in North America, that provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.



**a-law:** A PSTN standard codec, used outside of North America, that provides very good voice quality and consumes 64kbit/s in each direction (receiving and transmitting) of a VoIP call.

**GSM:** A wireless standard codec, used worldwide, that provides adequate voice quality and consumes 13.3kbit/s in each direction (receiving and transmitting) of a VoIP call. GSM/UMTS is supported by many VoIP phones.

**SPEEX:** Speex is an Open Source/Free Software patent-free audio compression format designed for speech. The Speex Project aims to lower the barrier of entry for voice applications by providing a free alternative to expensive proprietary speech codecs. Moreover, Speex is well-adapted to Internet applications and provides useful features that are not present in most other codecs.

**G.726:** A PSTN codec, used worldwide, that provides good voice quality and consumes 32kbit/s in each direction (receiving and transmitting) of a VoIP call. G.726 is supported by some VoIP phones.

#### ADPCM, G.729A, H261, H263, H263p, H264.

**Note:** If you would like to use G.729, please enter your license.

### 6.7.3 Blacklist

Blacklist is used to block an incoming/outgoing call. If the number of incoming/outgoing call is registered in the number blacklist, the caller will hear the following prompt: "The number you have dialed is not in service. Please check the number and try again". The system will then disconnect the call.

Add Blackint		
Blacklist	Туре	
15260221327	Both	X

Figure 6-61

We can add a number with the type: inbound, outbound or both

Add Blac	klist X
	Number :
	Type : Inbound 💌
	Save X Cancel
	Figure 6-62



Note: Add an extension in blacklist, such as 300:

- 1) If the type is "inbound", then this extension can't dial other extension and external numbers, but it can dial IVR or ringgroup.
- 2) If the type is "outbound", then this extension can't be called.

### 6.7.4 Callback Settings

MyPBX allows caller A to dial an inbound route number, and after hearing the ring, A can hang up the call or wait for MyPBX to cut off the call, then MyPBX will call A with this number. When A picks up the call, A can dial the number he wants to call; MyPBX will call the number with its outbound route.

#### Note:

1. If you'd like to use callback feature, please make sure it's enabled on the inbound route setting panel.

2. No callback rules needed to be set if the trunk supports call back with the caller ID directly.

Callback Settings		
Note: 1. If you'd like to use caliback feature, please m 2. Na caliback rules need to be set if the trunk to El Allow All Numbers 🕑	Callback Number Settings ake see that it's enabled on the <u>Informal Routes</u> ontting panel able to call back with the caller IO thready	
Add Callback Number	No Callback Numbers Defined	
Add Callback Rules	Callback Rules Settings	
	No Callback Rules Defined	
	🖌 Save 🔀 Cancel	

Figure 6-63

#### ·Allow All Numbers

If you want to apply Callback function to all incoming numbers, please tick Allow All numbers.

Follow the step to use this function.

Step 1: Enable Callback.

Inbound Routes – Choose "Yes" on" Enable Callback" to enable this function.



Edi	t Inbound Route: pstnin
ſ	General
	Route Name 🛈 : pstnin
	DID Number 0 :
	Extension 🛈 :
	Caller ID Number 🛈 :
	Distinctive Ringtone 🛈 :
	Enable Callback : Yes  Callback Settings

Figure 6-64

#### Step 2: Create Callback number

Ad	ld Callback Number	x
	Callback Number:	
	Save Save Cancel	
	Figure 6-65	

## Step 3: Create Callback Rules

You will need to create callback rules when the system should strip or add digits.

Add Callback Rules	Х
Trunk Name : Yeastar(SPS)	
Strip <sup>1</sup> : digits before dialing	
Prepend : before dialing	
🗸 Save 🔀 Cancel	

Figure 6-66

#### **•Trunk Name**

Choose the trunk with callback rules

#### •Strip digits from front

Define how many digits will be stripped from the call in number before the callback is placed. For example, when you call from number 123456789 into MyPBX, the caller ID is 0123456789, but you can only call 123456789 successfully from MyPBX trunk. You should configure number 0123456789 as the call back number and strip 1 digit before the callback is placed

#### ·Prepend before dialing

Define digits added before a callback number before the callback is placed. For



example, the call in number (Caller ID) is 123456789, MyPBX need to send 9123456789 to its trunk when call to this number. You should configure 123456789 as the call back number and add 9 before the callback is placed. You can add "w" for analog trunks for some delay too.

### 6.7.5 DNIS Settings

DNIS (Dialed Number Identification Service) is a telephone service that identifies for the receiver of a call the number that the caller dialed

Add DNIS X		
Trunk Name : Yeastar(SPS)		
Enable DNIS		
DNIS Name :		
DID Number :		
Save Save		



**Note:** If DID is not configured here, all the calls via this trunk will show the DNIS instead of the original caller ID

### 6.7.6 DISA

DISA (Direct Inward System Access) allows someone calling in from outside the telephone switch (PBX) to obtain an "internal" system dial tone and make calls as if they were using one of the extensions attached to the telephone switch. To use DISA, a user calls a DISA number, which invokes the DISA application. The DISA application in turn requires the user to enter a PIN number, followed by the pound sign (#). If the PIN number is correct, the user will hear dial tone on which a call may be placed. Obviously, this type of access has serious security implications, and great care must be taken not to compromise your security.



A

+ Add DISA		
	Add DISA	х
	General Name : PIN # : Response Timeout : 10 Digit Timeout : 5 Member Outbound Routes	
	Available Outbound Routes       Available Outbound Routes     Selected Outbound Routes       pstnout     >>       +     +       +     +       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -       -     -	

Figure 6-68

#### 1) General

#### ·DISA Name

Give this DISA application a name to help you identify it.

#### •PIN #

The password for this DISA

#### ·Response Timeout

The maximum amount of time the system will wait before hanging up the call if the user has dialed an incomplete or invalid number. Default is 10 seconds.

#### ·Digit Timeout

The maximum amount of time permitted between each digit when the user is dialing an extension number. Default is 5 seconds.

#### 2) Member Outbound Routes

Used to set the outbound routes that can be accessed from this DISA

### 6.7.5 PIN User Settings

PIN User is used to manage lists of PINs that can be used to access restricted features such as Outbound Routes.



Add PIN User		
	No PIN Us	ers Defined
ptions	55 <b>6</b> 57	
Options	Access Code:	
2ptions	Access Code Prompt for Entry Prompt for Failed Entry	Interiore antes



#### 1) Options

#### •Access Code

.Dial this code to access PIN.

#### •Prompt for Entry

Prompt caller enter the PIN Number.

#### **·Prompt for Entry Failure**

Prompt the caller when an invalid PIN is entered.

Add PIN User X		
	Name: PIN List	
	PIN List:	
	Member Outbound Routes	Selected
	pstnout	>>       →       ←       ≪
	🖌 Sav	e Cancel

Figure 6-70

#### 2) PIN User

MyPBX can store a number of PIN Users. PIN Users may be used to keep track

of calls in relation to particular activities or clients. They can also be used to keep track of calls by particular users or sets of users.

• PIN entered are checked against those stored by the system. If an invalid PIN is entered, the PIN is requested again.

• The system administrator can configure certain numbers or types of numbers to require entry of a PIN before you can continue making a call to such a number.

• The system administrator can also configure you to have to enter a PIN before making any external call.

#### •Name

A character-based name for this PIN list, i.e. "YeastarPIN"

#### •PIN List

Enter a list of one or more PINs, One PIN per line.

#### **•Outbound Route**

PIN User can use those outbound route to make call out.

### 6.7.8 Paging Groups

Paging is used to make an announcement over the speakerphone to a phone or group of phones. Targeted phones will not ring, but instead answer immediately into speakerphone mode. Please note that this section is for configuring paging groups. If you would like to configure Intercom settings, please open the Other Settings -> Feature Codes screen.

This feature is supported by the following SIP phones:

Yealink's T28, T26, T22, T20, T10T, T9CM. Other SIP devices may also work with this feature but are not officially supported.

**Note**: A paging group can have a maximum of 20 members.

ing Groups						
lease note that his feature is so	this section is for configuring opported by the following SIP	e the speakerphere to a phone or group of phones. Targeted phones will not ring, but insta- paging groups, if you would like to configure biterions settings, please open the Internal Set phones. Yealink's 728 T26 T22 T20 T10T T9CM. Other SIP devices may also work with this	tlings -> Feature Codes screen s teature but are not officially supported.			
		List of PagingGroup				
List of PagingGroup						
Add Paging I	Course II					
Add Paging I	Number	Menders				
Add Paging ( Type Internal	Number 630	Members 300(SIP)-301(SIP)-302(SIP)-303(SIP)-304(SIP)-305(S	/ x			

#### Figure 6-71

There are two types of paging groups in MyPBX U100&U200.

1. Internal paging Group

In this mode, if you dial its number, MyPBX will help to pick up those chosen members and you can talk directly without any rings.



Edit Paging Group - 630		X
	Paging Group Number 🛈 : 630	
	Duplex 🔃 🔽	
Paging Group Members	• • · · ·	
Available Extensio		
	>>>     300(SIP)       301(SIP)       302(SIP)       303(SIP)       304(SIP)       ↔       305(SIP)	
	✓ Save X Cancel	

Figure 6-72

#### **·Paging Group Number**

Define the numbered extension that may be dialed to reach this group.

#### Duplex

Paging is typically one way for announcements only. Checking this will make paging duplex, allowing all users in the group to talk and be heard by all.

#### 2. External paging group

In this mode, the chosen extensions will have the rights to dial the group number; the voice will be broadcasted via the "Audio Out" interface of U200.

Edit ExternalPaging - 631	x
Extension: 631	
••••••••••••••••••••••••••••••••••••	45%
Permission Exten Available Extensions	Selected
	300(SIP) 301(SIP) 302(SIP) 303(SIP) 304(SIP) 305(SIP)
🖌 Save 🎽	Cancel
Figure	6-73



## 6.7.9 SMS Settings

When GSM/UMTS modules are installed, SMS feature is supported.

#### 1) Enable SMS to Email

Enable SMS To Email				
GSWUMT5 Trunk Name	GSMUMTS Port	Email List		
GSM1	1	-	1	X

Figure 6-74

If you enable this, as soon as the GSM/UMTS trunks receive small messages, MyPBX will send the text of this message to the email addresses listed on the Email List.

You can add email addresses to the Email List

Edit SMS To Email - GSM1				х
Email List				
harry@yeastar.com			8	
Email Address:		↑Add Email		
	Save X Cancel			
	<b>E</b> :			

Figure 6-75

#### 2) Enable Email to SMS

If you enable this, you can use MyPBX to send out message by sending an email to the specified address.

Enable Email To SMS			
Emul To SMS			
Enable Country Code:			
Country Code:			
Receive Emails Interval			
Access Code 0			

Figure 6-76

#### •Enable Country Code

If you want to add country code before the dialed numbers, please tick this.



#### Country Code

The country code to be added before the dialed numbers.

#### Receive mails every

The interval time of receiving mails from POP3 server.

#### •Access Code

This PIN code is used to verify the subject of the emails received. If the form of email passes the verification, it will be send out by SIM card. If not, this email will be deleted immediately.

#### 3) Email Settings

Teneil Settings Note: 1. (1) If you want to use ISMS to Email: pluase cooligure SMTP s 2. If you configure the POP3 setting, MyPIDX will download emails	from the mail server rem	larly. Once downloatted, the en	pan POP3 setting nails will be deleted from the mail server
	Email Address 0		
	Password		
	SMTP Server (SMTP):		
	SMTP Server Port	25	
	Receive Server (POP3)		
	Receive Server Port	110	
	D	Use SSL/TLS for security on thi	s server(SMTP)
	Test SMTP Settings	Test POP3 Settings	

Figure 6-77

Note:

1. If you want to use "SMS to Email", please configure POP3 setting.

2. If you configure the POP3 setting, MyPBX will download emails from the mail server regularly. Once downloaded, the emails will be deleted from the mail server.

#### ·Email Address

This email address will be used to:

1. Send email to the addresses listed on "SMS to Email" setting.

2. Receive email and send the text of the email to the target mobile number by SMS.

Note: If you use Gmail, just put your user name here. E.g. email address: test@gmail.com, you just put "test" here.

#### Password

Input the password of this email here.

•SMTP Server (SMTP) •SMTP Server Port •Receive Server (POP3)



#### **·Receive Server Port**

If you want to know more about Email to SMS, please refer to APPENDIX F

### 6.7.10 Certificates

MyPBX can support TLS extension. Before you register TLS extension on IP phone, you should upload certificates first.

Upload Certificate				Х
	Type: Choose a ceritificate to Upload:	Trusted Certificate PBX Certificate Cancel	Browse	

Figure 6-78

#### Trusted Certificate

This certificate is a CA certificate. When selecting "TLS Verify Client" as "Yes", you should upload a CA. The relevant IP phone should also have this certificate.

#### **PBX Certificate**

This certificate is server certificate. No matter selecting "TLS Verify Client" as "Yes" or "NO", you should upload this certificate to MyPBX. If IP phone enables "TLS Verify server", you should also upload this certificate on IP phone.



## 7 Reports



Click Reports to access

We can check the call detailed logs for accounting and system log for debugging

## 7.1 Call Logs

The call Log captures all call details, including call time, caller number, callee number, call type, call duration, etc. An administrator can search and filter call data by filter the call logs by call date, caller/callee, trunk, duration, billing duration, status, communication type and Pin User.

Search Condition Start Date: 15 Oct 201 Duration			15 Oct 2012	Caller/Callos Status Al		Tr Communication T	unk: [All ype: [All	• Start S	earching
		Delete the record	10 I						
Doenload the record							992	ow 1-4 Total: 4	View: 25
Download the record	Caller	Collos	Source Trunk	Destingtion Trank		Diffing Duration	Status	ow 1-4 Total: 4	
Dist				Descination Trave Support Tel	Duration 12	Billing Duration	992	aneton Wessern'	type K
Tees 2012-10-15 01 31 42	Caller	Colles					Status	Communication I	type T
	Caller 300	Colleg 999999		Support Tel	12	12	Status ANSWERED	Communication I Outbound	type

Figure 7-1

## 7.2 System Logs



alem Logi	and the second sec		
Download The	Selected Logs 🔣 Delete The Selected Logs		
- Ö	- Marrie	Type	
	wath log	Web	2 8
Ophone			
	Enable Hardware Log	Enable Normal Log	🗆 Enable Debug Log 🔍
	P Enable Web Log		
Packet Capture 1	981)		
	and 1.	Packet Capture Stopped	
		1P	
		Port	
		NIC [end v]	
		Start 2	
		🖌 Save 💥 Cancel	

Figure 7-2

You can download and delete the system logs of MyPBX.

#### Options

#### ·Enable Hardware Log

Save the information of hardware; (up to 4 log files)

#### •Enable Normal Log

Save the prompt information; (up to 16 log files)

#### •Enable Web Log

Save the history of web operations (up to 2 log files)

#### ·Enable Debug Log

Save debug information (up to 2 log files)

#### Packets Capture Tool

This feature always used to capture packets for technician. Integrate packet capture tool "Wireshark" in MyPBX.

Users also could specify the destination IP address and port to get the packets.

#### ·IP

Specify the destination IP address to get the packets.

#### •Port

Specify the destination Port to get the packets.

#### ·NIC

Choose the NIC (LAN or WAN) which you want to capture the packets.



## 8 Addons



Click Addons to enter "Addons" page.

MyPBX supports many addons to enhance the function of MyPBX.

In this page, you can install the according addons, including call recording, MyPBX Client, Bill System and Hotel Module.

Before you install an addon, you should have a license. You can buy the license from Yeastar.

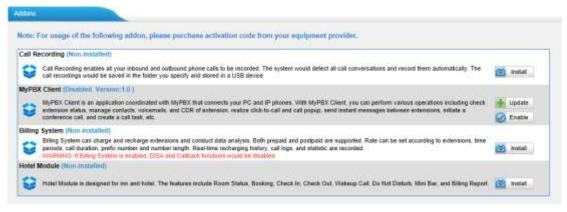


Figure 8-1

## 8.1 Call Recording

After you install "Call Recording" module, MyPBX U100/U200 can record all the calls automatically, and store the recording in USB device. For more details about call recording, please refer to **Appendix J**.

## 8.2 MyPBX Client

MyPBX Client is an application coordinated with MyPBX that connects your PC and IP phones. With MyPBX Client, you can perform various operations including check extension status, manage contacts, voicemails, and CDR of extension, realize click-to-call and call popup, send instant messages between extensions, initiate a conference call, and create a call task, etc.

For more details about MyPBX client, please refer to the link below: http://www.yeastar.com/Solutions/MyPBX\_Client\_Solution.asp



## 8.3 Billing System

Billing System caters for the growing need of billing solutions that can efficiently monitor the calls and maintain record of each call received/transferred by IP-PBX. Billing System can charge and recharge extensions and conduct analysis on the basis of statistics. Both prepaid and postpaid are supported. Flexible rate settings and detailed records make it extremely easy for enterprise to monitor charges, spot misuse, and enhance efficiency. With Billing System, call accounting are just clicks away.

Note: If Billing System is enabled, DISA and Callback functions would be disabled.

For more details about Bill System, please refer to the link below: http://www.yeastar.com/Solutions/Billing\_System\_Solution.asp

## 8.4 Hotel Module

MyPBX Hotel Module is designed for inns and hotels. The features include Room Status, Booking, Check In, Check Out, Wakeup Call, Do Not Disturb, Mini Bar, and Billing Report.

For more details about "Hotel Module", please refer to the link below: http://www.yeastar.com/Solutions/Hotel\_Module\_Solution.asp



## 9 Logout





## **10. Use MyPBX**

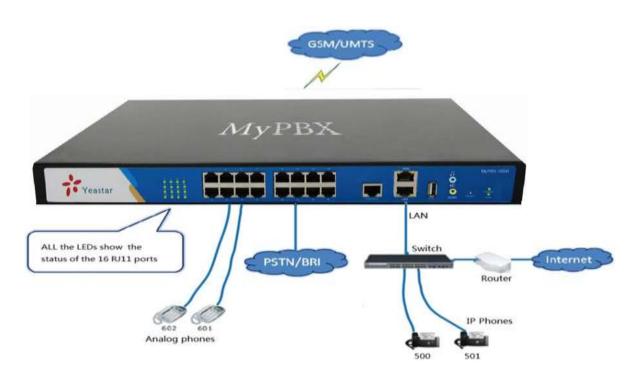


Figure 10-1

## 10.1 Make outbound calls

To make an outbound call, we need to add trunk first. There are 3 types of VoIP Trunk:

•VoIP Trunk: Connected to remote VOIP service server.

You should get an IP address with user name/ password from the provider.

•Service Provider: Connected to service provider server.

You will get only IP address for authorization.

•Analog Trunk: FXO ports of MyPBX, connected to a local PSTN.

•**GSM/UMTS Trunk:** GSM/UMTS ports of MyPBX, connected to GSM/UMTS Network.

•BRI Trunk: BRI ports of MyPBX, connected to ISDN provider

What are FXO and FXS?

**FXS** (Foreign exchange Station) is an interface which drives an analog telephone or FAX machine. FXS interfaces deliver power, provide ringing, and use FXO signaling. FXS interfaces are what allow you to hook telephones and other analog devices to your PBX

**FXO** (Foreign exchange Office) is an interface that connects to a phone line to



supply your PBX with access to a public telephone network. FXO interfaces use FXS signaling. FXO interfaces allow you to connect your PBX to real analog phone lines.

### Sample Routing via VoIP Trunk

Let's configure all inside extensions to dial "0" through the VoIP Trunk.

#### **1. Add VoIP service provider**

Before we do add this, please make sure you have a VoIP Trunk account. Trunks  $\rightarrow$  VoIP Trunk  $\rightarrow$  SIP Trunk

Enter your account information on this page, and click Save.

Edit VoIP Trunk - VOIP_Supplier	X
Provider Name:	VOIP_Supplier
Hostname/IP:	catnextgen.com ×
Domain:	catnextgen.com
User Name:	+6621070164
Authorization Name:	6621070164@catnextgen.com
Password:	•••••
From User:	
Online Number 🛈 :	
Maximum Channels 🛈 :	0
Caller ID 🛈 :	+6621070164
Realm <sup>()</sup> :	
$\checkmark$	Enable Outbound Proxy Server
Outbound Proxy Server:	202.129.61.102 Port: 5060
Codecs :	First: a-law V Second: u-law V Third: GSM V
	Fourth: None V Fifth: None V
Transport:	UDP V Enable SRTP 🛈 : 🗌 Qualify: 🗹
DTMF Mode:	rfc2833 V
DOD Settings	
DOD:	Associated Extension: 601 V Add DOD
	Save 🔀 Cancel

Figure 10-2



#### 2. Add Outbound Routes

As we can see from the Outbound Route of "VOIP\_OUT", all phone numbers starting with 0 will have their first digit stripped off (digit 0) and will be sent to the SIP Trunk.

Add Outbound Route	x
Route Name 🛈 :	VOIP_OUT
Dial Pattern 🛈 :	0.
Strip 🛈 :	digits from front
Prepend these digits 0 :	before dialing
Password:	
T.38 Support	No 🗸
Rrmemory Hunt	No 🗸
Office Hours :	✓
Member Extensions	
Available Extensions	Selected
	>>>     300(SIP)       301(SIP)     302(SIP)       →     303(SIP)       →     304(SIP)       ←     305(SIP)       ≪     601(FXS)       €     602(FXS)
Member Trunks Available Trunks	Palastad
	Selected
pstn11(FXO) pstn12(FXO) pstn13(FXO) pstn14(FXO) pstn15(FXO) pstn16(FXO) E1Trunk1(E1) E1Trunk2(E1)	>>>> VOIP_Supplier(SIP) ← ««
<ul> <li>✓</li> </ul>	Save 🔀 Cancel

Figure 10-3

Now that we have added two outbound dialing rules, any call starting with 9 will be routed to the PSTN, and any number starting with 0 will be routed to the SIP Trunk.



## 10.2 Incoming call

### Sample Routing to an IVR

Let's configure an incoming call to route to the IVR. In the IVR itself, let's configure digit 0 to route the call to extension 300, and digit 1 to route the call to ringgroup.

#### 1. Add IVR

To add a new IVR, go to IVR  $\rightarrow$  Create New IVR

Add IVR		x
	Number : 661	
	Name(): Sales	
	Prompt: default	Custom Prompts
	Repeat Count	
	Key Timeout 🛈 : 🛛 🗸	
	🗸 🕕 Ensble Direct 🛙	Dial
Keypress Events		
Key	Action	Destination
0	Connect to Extension V	Extension 300 🗸
1	Connect to RingGroup	Ring Group ringgroup 🗸
2	No Action 🗸	<b>~</b>
3	No Action 🗸	×
4	No Action 🗸	×
5	No Action 🗸	×
6	No Action 🗸	×
7	No Action 🗸	<b>~</b>
8	No Action 🗸	<b>~</b>
9	No Action 🗸	<b>~</b>
#	No Action 🗸	$\checkmark$
•	No Action 🗸	<b>~</b>
Timeout	Connect to Extension	Extension 300 🗸
Invalid	Connect to Extension	Extension 300 🗸
	🗸 Save 💥 Cance	al

Figure 10-4

#### 2. Add Inbound Routes

As we can see from the Inbound Route of "VOIP\_IN", all incoming calls from VOIP trunk will be sent to the IVR.



<b>a</b> 1				
General	~	<b></b>		
	Route Name		×	
	DID Number 🕕 :			
	Extension 🕕 :			
C-"	er ID Number 🛈 :			
Disting	tive Ringtone 🛈 :			
	Enable Callback	No 🗸 🧕	allback Settings	
Member Trunks				
Available 1	runks		Selected	
pstn9(FXO) pstn10(FXO) GSM15(GSM) BnTrunk7(BRI) BriTrunk8(BRI) 147(SPS) 192.168.5.142(SPS) sps599(SPS)		€ € → ≪ α	114.132.246.190(SIP)	
Business Days				
Office Hours :	default	~		
Office Hours Destination :	IVR	~	IVR welcome	~
Non-office Hours				
Destination :	End Call	~		~
During Holidays				
Holiday :		~		
Destination :	End Call	~		~
Fax Detection				
Destination :	No Detect	~		~

Figure 10-5

## **APPENDIX A FAQ**

#### **Q1.** How to Register SIP device?

#### A1:

1) Register SIP soft phone Download the x-lite softphone from counterpath website www.counterpath.com After install the x-lite, right click the panel and select the SIP Account setting and then configure it. **Display Name: 500 User Name: 500** Password: 500 Authorization Name: 500 Domain: 192.168.5.150 Register IP Phone (for example, Yealink's T28 IP Phone) a) Connect the T28's Internet port to the switch. And it can get the IP from your route. b) Press the "OK" key on T28 to get the IP of T28. c) Put the IP on web browser then you can enter the T28 configure page through this IP. d) Put the SIP extensions info on the T28 IP phones. **Display Name: 501** User Name: 501 Register Name: 501 Password: 501 **SIP Server**: 192.168.5.150 Use the same method register another T28 to other extension.

#### Q2. How do I reset MyPBX back to the factory default settings?

**A2:** To perform a reset, please follow steps below:

**Step 1:** Hold down the "Reset" button on the back of the unit for 5 seconds and watch the LEDs on the front of the MyPBX. When the status LED turns red, let go of the reset button.

**Step 2:** When the RUN status LED starts blinking, MyPBX will be set back to factory defaults.

**Step 3:** To access the configuration page, navigate to 192.168.5.150 using a web browser. Make sure that you are on the 192.168.5.0 subnet before doing this.

**Step 4:** Login to the device with the username "admin" and the password "password", in order to begin reconfiguring the device.



## APPENDIX B How to Configure external storage

Before External storage can be properly configured, an SMB share folder accessible from MyPBX must be set up on a Windows based machine. Once that has been set up, please follow the steps below.

**Step 1** Add a new folder, rename it, and set this new folder's share Properties according to Figure B-1

share 🤤	share Properties 🛛 💽 🔀						
	General Sharing Customize						
	Local sharing and security						
	To share this folder with other users of this computer only, drag it to the <u>Shared Documents</u> folder.						
	To make this folder and its subfolders private so that only you have access, select the following check box.						
	Make this folder private						
	Network sharing and security						
	To share this folder with both network users and other users of this computer, select the first check box below and type a share name.						
	Share this folder on the network						
	Share name: share						
	Allow network users to change my files						
	Learn more about <u>sharing and security</u> .						
	<ul> <li>Windows Firewall is configured to allow this folder to be shared with other computers on the network.</li> <li><u>View your Windows Firewall settings</u></li> </ul>						
	OK Cancel Apply						

Figure B-1 Set up share Properties

**Step 2** Enter the new folder and create a new text file, then rename this file to status.txt. This step is very important, DO NOT forget to create the status.txt file.

Step 3 Configure External storage settings on MyPBX to Figure B-2



External Storage Settings									
The External Storage feature is used to extend storage space. Once configured, the files(voicemail, call recording files, CDR files) created before the configured days will be moved to the Net-Disk.									
Step 1: Create a Net-Disk on a chosen computer									
Step 2: Input the Net-Disk properties									
Net-Disk Host/IP:	192.168.5.222								
Net-Disk Share Name:	share								
Net-Disk Access Username:									
Net-Disk Access Password:									
Move files created before:	1 💌 days ago								
💙 Sav	e 🔀 Cancel								
Step 3: Save Net-Disk settings									
Step 4: Make sure the settings are successfully complete	<u>ed</u>								

Figure B-2 External storage Setting

**Net-Disk Host/IP**: Change this to the IP address of the computer where backup files will be stored.

**Net-Disk Share Name**: Change this to the name of the shared folder where backups will be stored.

**Net-Disk Share Username**: The user name used to log into the network share. Leave this blank if it is not required

**Net-Disk Share Password**: The password used to log into the network share. Leave this blank if it is not required

If configuring is correctly, open your Windows share folder to see if the MyPBX backup files and folders has been created. If the contents of the backup folder look similar to Figure B-3, then you have successfully configured External storage on the MyPBX unit.

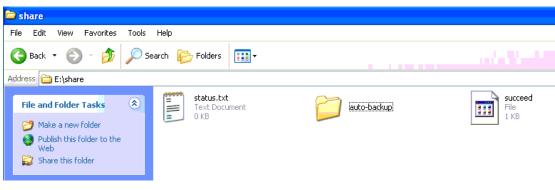


Figure B-3 External storage setting succeed



## APPENDIX C How to Configure NAT setting

## When MyPBX is behind a NAT(firewall), you need to configure NAT setting on MyPBX if you want to use a remote extension.

Please follow section **1** or **2** below depending on your network configuration. **1.** If MyPBX is connected to a local network, you must set up port forwarding on your router. Specifically, you must map port 5060 (default SIP port) and port 10001-10200(default RTP port range) as UDP ports.

Next, log in MyPBX WebGUI, go to 'PBX'->'Advanced Settings' ->'SIP Settings' -> 'NAT'

External IP Address: your router's public IP address External Host: your router's domain ExternalRefresh Interval: 20 seconds Local Network Identification:192.168.5.0/255.255.255.0 (change this according to your network configuration) NAT mode: Yes

Allow RTP Reinvite: Yes

General NA	T Codece	0.05	Advanced Settings		
		20	de: Coofiguration of th	nie section is only r	required when you use remote extensions.
				Enable STUN	
				STUN Address	
				STUN Port	
			Est	amat IP Address	
				External Host	yeastar 3322 org
			External	Refresh Interval	20
			Local Netw	ork Identification	182 168 5 0/255 255 255
				ILAT Mode	yes v
				w RTP Re-ente	
				0.0000000000000000000000000000000000000	

Figure C-1

Assuming that your router's host address is yeastar.3322.org, your local network is from 192.168.5.1-192.168.5.254, and the subnet Mask is 255.255.255.0, the MyPBX network settings should configured like Figure C-2



N Settinge	
DHCP.	No w
Enable SSH	Yes V Part \$622
Hostname	MyPBX
IP Address	162 168 5 149
Subret Mask	255.255.254.0
Gateway	152.168.5.1
Primary DNS	192 168 5.1
Secondary DNS	
IP Address2	
Satnet Mask2	

Figure C-2 MyPBX Network setting

**2**. If MyPBX has a public IP, (i.e. is connected directly to your internet service provider), the network settings should be configured according to Figure C-3:

LAN Ziethnys	
LAN Settings	0-3
DHCP	No v
Enable SSH	Yes V Port 0022
Hoshame	MyPEX
IP Address	110.00.36.162
Subret Mask	255 255 255 254
Gaterway	110.30.36.254
Primary DRIS	110.80.56.254
Secondary DRIS	a a a a
IP Address2	
Subret Mask2	
w Sare	X Cancel

Figure C-3

Now, MyPBX has been configured as a public IP, so there is no need to configure NAT again, just leave all settings in 'NAT' blank.



## APPENDIX D How to Use Auto Provision

**Step1.** Disable DHCP Server on your local network. E.g. Disable DHCP Server on Linksys Router.

LINKSYS <sup>®</sup> A Division of Cisco Systems, Inc.				Firmware Version: 1.04.08
			Etherfast® Ca	ble/DSL Router BEFSR41
Setup	Setup S	Applications Security & Gaming	Administration	Status
	Basic Setup		ress Clone Advar	nced Routing
				Desis Astro
Internet Setup				Basic Setup
Internet Connection Type	Obtain an IP aut	itomatically 💙		The Basic Setup screen is
Optional Settings (required by some ISPs)	Host Name:		]	where basic configuration is performed. Some ISPs (Internet Service Providers) will require
	Domain Name:			that you enter the DNS information. These settings can
	MTU:	🔘 Enable 💿 Disable Size:	1500	be obtained from your ISP. After you have configured these
Natural Catur				settings, you should set a router password from the
Network Setup				Administration->Management
Router IP	Local IP Address:	192 168 1 1		screen.
	Subnet Mask:	255.255.255.0		Completing the Internet Setup
Network Address Server Settings (DHCP)	Local DHCP Server:	Enable Olisable		section is all that is required to set up for your specific ISP. Please look at the table below to
	Start IP Address:	<b>192.168.1.</b> 100		configure the Router for your Internet connection.
	Number of Address:	50		
	DHCP Address Range:	192.168.1.100 to 192.168.1.149		More
	Client Lease Time:	0 minutes (0 means one o	dav)	
	Static DNS 1:			
	Static DNS 2:			
	Static DNS 3:			
	WINS:			
				CISCO SYSTEMS
		Save Settings	Cancel Changes	و مناليسيناليو

Figure D-1

**Step2.** Enable DHCP Server on MyPBX.

Login MyPBX web interface, 'System'  $\rightarrow$  'Network Preference' -> 'DHCP Server'  $\rightarrow$  'Enable DHCP Server'.



MyPB	2		-	Sec.	÷	Reports	<b>***</b>	
Betwork Preferences	D-CP Server			Concession of				
AN BARRAY	THEP Server							
WWN Termon		DHCP	is running.					
2127.2mm		2	Eratile .					
rCAN Betras		Roome	192,668 5 1					
vits bacings	-	Submet Mask						
ITVS Badrige		Primary DNS	182.168.5-1					
	-	Secondary 0109		_				
tada Walder		Alles: P Address From		-				
Firewall Selfings			192 198 5 264 Pp://102 566 5 145	-				
Freedor Pacies		NTP Server	tele concerces	-				
Preside			and the second se					_
System Posterers		a lan	Cantal					
Falsaurd Settings								
Date and Time								
Firmware Looker								
Entres and Entres								

Figure D-2

**Step3.** Configure phones on MyPBX auto-provision page.

1. Login MyPBX web interface, 'PBX' -> 'Extensions' -> 'Phone Provisioning' -> 'Add Phone'.

MyPR	X			2	Section 1	Pitt Reports	🚔 🙆
C Catalana	Phone Provide	-					
F33VoF Barware Data Sector Property Trans CoF Trans CoF Trans CoF Trans	General Jordin     General Jordin     General Jordin     Configured Ph     Act Proce	on for Assta	mm 🧱 Cécligars Pas Selected Please	n 🔀 Delete Be Selected Phones Mar: Anthrees Lint		Tana 8 S	nasi 8.0 Vane <u>(15 w</u> )
Datased Rooms	Bet Cortigu	red Phone					
Lorent Unit Settings	Configure	Re Selected Phones	3 Antest			Telat 100 Str	nr. 1-15
E Education Carl Contract		1	MAC Autom	Vente	teres -		(Inst
NH			001565110844	Yeak	4		
Pagitings	10	2	COLUMN TWO IS NOT	Year	*		÷
2.000		4	CEXISTS THE AND	Vedia Vedia			
Dimensioner	0		001568 Thr 404	Yeals			-
Marchard Rouses	0		W136325.2x8	Yesik	*		-
	10	. y	E0.1565.11128-	Yeste			-

Figure D-3

2. Fill in the phone detail message on the pop-up windows.

Input IP Phone's MAC address, configure Name, Call waiting, Line, Extension, Label, Line active for the phone. And also you can configure other features on the phone, like codecs, memory keys etc.



Add Phone			x
General Codecs	Memory Key Settings	Line Keys Settings	
Enabled MAC Address		NewConfig 0 : Yes	3
Manufacturer	Yealink V	Phone Type: T28	2
Call Waiting	Enabled	Key As Send: #	•
Auto Redial	Disabled V	Auto Answer: Disabled	•
Phone Book	Enabled		
Line			
Line1	Extension: V	Label:	Line Active:
Line2	Extension: V	Label:	Line Active:
Line3	Extension: V	Label:	Line Active:
Line4	Extension: V	Label:	Line Active:
Line5	Extension: V	Label:	Line Active:
Line6	Extension: V	Label:	Line Active:
	🗸 Save	X Cancel	

Figure D-4

**Step4.** Turn on the power and connect the network cable to IP Phone.

**Remark**: The factory default setting of DHCP for IP Phone is enable, so you can skip this step to step 5.

If the DHCP is disable, please follow below step to enable it. (e.g.: Yealink's IP Phone).

- 1. Login IP phone's web page.
- 2. Enable DHCP.



Yealink					_	
Status -	Account	Network	Phone	Contacts	Upgrade	Security
P Su De Pr Se Us Us	atic IP Address Address Ernet Mack fault Gateway mary DNS condary DNS	et (WAN) [	PC Part 1	Advarzed /	addres server Static Set th Nak, addres Secon manua PPPot	nvice will acquire its IP is from the DHOP automatically. IP Address e IP address, Subnet Default Router IP is, Primary OKS, dary DNS fields by.

Figure D-5

Step5. Finish.



## APPENDIX E How Do I Configure Distinctive Ring Tones

**Step1**: On your IP phone, navigate to the Phone settings web configuration page and find the Distinctive Ring Tone section.

For each custom ring tone, enter the Internal Ringer Text (can be digits or text) to trigger the ring tone. For example, you may enter "Family". e.g.: Yealink's IP phone.

Sta	tus Account	Network Phone	Contacts	Upgrade Securit
Pa-	henres   Pastane   DSE Ka	o   Est fair   Vitam   Ha	ng   Torias   D	ana 1 ses
1	Internal Ringer Text	Family	0	
	Internal Ringer File	Ring1.wav	×	Ser Morte
2	Internal Ringer Texit			
	Internal Ringer File	Ring2.wav	*	
з	Internal Ringer Text	and a second sec		
	Internal Ringer File	Ring3.wav	×	
4	Internal Ringer Text			
	Internal Ringer File	Ring4.wav	1	
5	Internal Ringer Text			
	Internal Ringer File	Ring5.wav	*	
6	Internal Singer Text			
	Internal Ringer File	Ring6.wav	*	
7	Internal Ringer Text			
	Internal Ringer File	Ring7.wav	*	
8	Internal Ringer Text			
	Internal Ringer File	Ring8.wav	*	
9	Internal Ringer Text			
	Internal Fänger Filo	Ring1.wav	*	
10	Internal Ringer Text			
	Internal Ringer File	Ring1.wav		
	Confirm	Cancel		

FigureE-1

**Step2.** Configure the 'Distinctive Ringtone' on MyPBX.

Login MyPBX web interface, 'PBX' -> 'Inbound Call Control' -> 'Inbound Routes'  $\rightarrow$ Edit Inbound Route, fill in the Internal Ringer Text on 'Distinctive Ringtone'.



dit Inbound Route: V	OIP IN			
General				
	Route Name 🛈	VOIP_IN		
	DID Number 🕕			
	Extension 🛈			
	Caller ID Number			
	Distinctive Ringtone 🛈	: family		
	Enable Callback	: No 🗸	Callback Settings	
Member Trunks	ilable Trunks		Selected	
Ava	liable trunks		Selected	
E1Trunk1(E1) 192.168.4.147(S	PS)	>> 	VOIP_Supplier(SIP)	
Business Days Office Hours :	default	««		
Office Hours Destination :	IVR	~	IVR welcome	~
Non-office Hours Destination :	End Call	~		~
During Holidays Holiday :		~		
Destination :	End Call	~		~
Fax Detection				
Destination :	No Detect	~		~
	🗸 Sa	ve 🔀	Cancel	

FigureE-2

Step3. Finish.



# APPENDIX F How to Use Email to SMS

#### How to use Email to SMS

You need to send an email to the specified email address (you set in Email Settings. In this case, it is lears@yeastar.com).The content of this email will be sent to the number you want as message. The subject (title) of the email will determine the number. Here are some examples of the formats to the subject of the email.

#### Example:

#### **1. Send message with no PIN code and default GSM/UMTS port. Format**: phonenumber

If the subject is "12345678", the text of this email("Welcome to Yeastar!") will be sent to number "12345678" through the first available GSM/UMTS trunk(No pin code should be set by administrator).

To:	lears@yeastar.com 🧪 🗙	
Subject:	12345678	
Insert: (	🖞 Attachments 🛛 🚼 Office docs 🛛 🔄 Photos 🔹 📴 From Bing 🔹 🤓 Emoticons	
Tahoma	• 10 • B / U 副 副 目 目 律 律 🚷 🚝 🗛	
elcome to '	Yeastar!	
elcome to `	Yeastar!	
elcome to `	Yeastar!	
elcome to `	Yeastar!	

Figure F-1

#### 2. Send message with no PIN code and specified GSM/UMTS port.

#### **Format**: port:portnumber-phonenumber

If the subject is "port:9-12345678", the text of this email ("Welcome to Yeastar!") will be sent to the number "12345678" through GSM/UMTS trunk 9 (No pin code should be set by administrator).



Subject:	port:9-12345678
Insert:	🖞 Attachments 🛛 🚼 Office docs 🛛 🖃 Photos 🔻 💽 From Bing 🔹 🤓 Emoticons
ahoma	• 10 • B / U = = = = = = = = A

Figure F-2

#### 3. Send message with PIN code and default GSM/UMTS port.

Format: 500:pincodenumber-phonenumber

If the subject is "500:987-12345678", the text of this email("Welcome to Yeastar!") will be sent to number "12345678" through the first available GSM/UMTS trunk ("987" is the pin code set by administrator).

To:	lears@ye	astar.con	n 🦉 🗙				
Subject:	500:987-1	12345678					
Insert:	🛿 Attachm	ents 🔡	Office docs	🔛 Pho	tos 🔹 🛅	From Bing •	🛛 🤭 Emoticons
Tahoma	• ] [	10 🔹	<b>В</b> I <u>U</u>	E	<b>≡ j</b> Ξ iΞ	i († († 🤮	≜ <mark>≜</mark>
elcome to	Yeastar!						

Figure F-3

#### 4. Send message with PIN code and specified GSM/UMTS port.

**Format**: 500:pincodenumber-port:portnumber-phonenumber If the subject is "500:987-port:9-12345678", the text of this email ("Welcome to Yeastar!") will be sent to number "12345678" through GSM/UMTS trunk 9 ("987" is the pin code set by administrator).

To:	lears@ye	eastar.cor	n 🥖 X	
Subject:	500:987-	port:9-12	345678	
Insert:	🛿 Attachm	ients 🔡	Office of	docs  📓 Photos 🔻 📴 From Bing 🔹 🤓 Emoticons
Tahoma		10 •	<b>B</b> 1	U 副 書 書 語 語 律 律 🚷 뜶 🗛

#### Figure F-4 Figure 3-53



# **APPENDIX G How to Use DID**

Direct inward dialing (DID), also called direct dial-in (DDI) in Europe and Oceania, is a feature offered by telephone companies for use with their customers' private branch exchange (PBX) systems. In DID service the telephone company provides one or more trunk lines to the customer for connection to the customer's PBX and allocates a range of telephone numbers to this line (or group of lines) and forwards all calls to such numbers via the trunk.

MyPBX support DID, you can configure DID in inbound route. Related settings: **DID Number, Extension, Destination.** 

Ed	Edit Inbound Route: VOIP_IN X				
	General				
		Route Name : VOIP_IN			
		DID Number 🛈 :			
		Extension 🛈 :			
	Ca	iller ID Number 🛈 :			
	Distin	nctive Ringtone 🛈 :			
		Enable Callback : No V Callback Settings			
	Member Trunks				
	Available	Trunks Selected			
	E1Trunk1(E1) 192.168.4.147(SPS)	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			

Figure G-1

#### **·DID Number**

Define the expected DID Number if this trunk passes DID on incoming calls. Leave this field blank to match calls with any or no DID info. Only service provider, E1 trunks, BRI trunks or SIP trunks need to be configured with this setting.

You can also use pattern matching to match a range of numbers. The following patterns may be used:

**X**: Any Digit from 0-9

### Z: Any Digit from 1-9

N: Any Digit from 2-9

**[12345-9]**: Any digit in the brackets (in this example, 1,2,3,4,5,6,7,8,9) The `.'Character will match any remaining digits. For example, 9011. will match any phone number that starts with 9011, excluding 9011 itself.

The '!' will match none remaining digits, and causes the matching process to complete as soon as it can be determined that no other matches are possible.

### Extension

Define the extension for DID number, this field only valid when use E1 trunk for this inbound router.You can only input number and '-' in this field, and the format can be xxx or xxx-xxx.The count of the number must be only one or equal the count of the DID number.

### Destination

If you don't set the extension, you can set the destination of the call here.

### Example 1:

Step1: You set the DID number (5503XXX in this example). Step2: You choose the destination(IVR in this example).

The configuration of this example means when the incoming call with DID number 5503XXX (7 digits number start with 5503) will go to the destination IVR.

If you choose the destination, please leave the Extension form blank.



Inbound Route: pstnin				
General				
	Route Name 🛈 :	pstnin		
	DID Number 🛈 :	5503XXX		
	Extension 🛈 :	:		
Ca	ller ID Number 🛈 :			
	ctive Ringtone 0 :			
	Enable Callback :		Callback Settings	
Member Trunks				
Available	Trunks		Selected	
VOIP_Supplier(SIP)			E1Trunk1(E1)	
192.168.4.147(SPS)		→ ← ≪≪		
Business Days	,		-	
Office Hours :	default	~		
Office Hours Destination :	IVR	~	IVR welcome	
Non-office Hours Destination :	IVR	~	IVR welcome	
During Holidays				
Holiday :		~		
Destination :	End Call	~	<b>~</b>	
Fax Detection				
Destination :	No Detect	~	×	

Figure G-2

### Example 2:

Step1: You set the DID number (6001-6099 in this example). Step2: You set the Extension (6001-6099 in this example).

The configuration of this example means when the incoming call with DID number 6001 to 6099 will go to the destination 6001 to 6099(number 6001 to extension 6001, number 6002 to extension 6002).

The destination you set below will be disabled if you set the Extension.



it Inbound Route: VOIP_I	N			
General	-			
	Route Name 🛈 :	VOIP_IN		
	DID Number 🛈 :	6001-609	9	
	Extension 🛈 :	6001-609	9	
	ller ID Number			
Distin	ctive Ringtone 🛈 :			
	Enable Callback :	No 🗸	Callback Settings	
Member Trunks				
Available	Trunks		Selected	
E1Trunk1(E1)			VOIP_Supplier(SIP)	1
192.168.4.147(SPS)		»»	Voir_Supplier(SIP)	
		←		
		**		
Business Days				
Office Hours :	default	~		
Office Hours				
Destination :	IVR	~	IVR welcome V	
Non-office Hours	End Call	~		
Destination :	End out	•	¥	
During Holidays				
Holiday :		~		
Destination :	End Call	~	<b>~</b>	
Fax Detection				
Destination :	No Detect	~	~	
	🧹 Sav	e 😪	Cancel	
		**		

Figure G-3



# **APPENDIX H How to Use BLF Key to Choose the PSTN line**

MyPBX allows you to choose the specific PSTN line to make outbound call by pressing the BLF key on the IP Phone.

Follow the steps to do the configuration with your Yealink phone

1. We want to choose pstn1 or pstn2 to call out.

MyPBX	Embedded Hybrid IP-PEX for Small	Businesses	Log	
Status Meniter A	🕨 Hanage Trunks 🔍			
Line Status	→ Analog Trunk	Trunk List	unk List	
lasie 🖄	Taunh Rans	Port/Hostnaws/IP		
Extensions	pstnl	1	Souther	
Trunks Outhound Routes	pstn2	2	Mandae	
Acto Trevision	petnl	3	N Editor	
	pstn4	4	NJ Edit	
Inbound Call Control				

Figure H-1

2. Configure the IP Phone:

Memory Key >> 🕜				
Кеу	Туре	Value	Line	Extension
DSS Key 1	BLF 👻	pstn1	Line 1	pstn1
DSS Key 2	BLF 👻	pstn2	Line 1 💌	pstn2

Figure H-2

Test

When you press DSS Key 1/2, the phone will connect to pstn1/pstn2 line. If pstn1/pstn2 is not busy, you will hear the dial tone. You can dial the number you want and use this line to call out then.



# APPENDIX I MyPBX Security Configuration Guide

VoIP attacks, although not an everyday occurrence does exist. While using VoIP, system security is undoubtedly one of the issues we care about most. But with the appropriate configuration, and some basic safety habits, we can improve the security of the telephone system. Moreover, the powerful built-in firewall function in MyPBX is adequate to enable the system to run safely and stably. This guide will introduce the highest defense level in MyPBX; and we strongly recommend that you configure firewall and other security options according to this guide, to prevent the attack fraud and the system failure or calls loss.

**Note**: In this guide, the configuration options marked with "\*" only exist in X.17.XX.XX and higher versions, namely, 3.2 guest calls option, 3.3 remote registration option, and 5 alert settings.

### **1. Security Configuration for Web GUI**

1.1 Change the default access port for HTTP on Options page

G	General Preferences					
	General Preferences					
	Ring Timeout <sup>()</sup> : 30	s				
	MAX Call Duration : 6000	s				
	Maximum Concurrent Calls 0					
	Music On Hold: calmriver	•				
	Tone Region 🛈 : United Sta	tes/North America 📃				
	HTTP Bind Port					
	FXO Mode <sup>()</sup> : FCC	•				
	Virtual Ring Back Tone 🛈 : No 💌					
	Distinctive Caller ID 🛈 : No 💌					
	Follow Me Prompt <sup>(1)</sup> : Yes 💌					
	Music on hold for Follow Me 🛈 : Default 💌	]				
	Invalid Phone Number Prompt <sup>()</sup> :	•				
	Busy Line Prompt <sup>()</sup> :	•				
	Dial Failure Prompt <sup>1</sup> :	•				

 $PBX \rightarrow Basic Settings \rightarrow General Preferences \rightarrow HTTP Bind Port$ 

Figure I-1

### 1.2 Change the default password for the web GUI System→ System Preferences→Change Password

C	Change Password		
	Change Password		
			User: admin 💌
		Enter Old Pas	sword:
		Enter New Pas	sword:
		Retype New Pas	sword:

Figure I-2

# 2. Disable SSH on LAN Settings Page

### 2.1 Disable SSH

Select LAN Settings  $\rightarrow$  Enable SSH. If external debugging isn't required, please select "No".

LAN Settings	
DHCP:	No 💌
Enable SSH:	No Port 8022
Hostname:	MyPBX
IP Address:	192.168.4.142
Subnet Mask :	255.255.254.0
Gateway :	192.168.5.1
Primary DNS :	192.168.5.1
Secondary DNS :	
IP Address2:	
Subnet Mask2:	

Figure I-3

### 2.2 Change the default password for SSH

We can use the Linux command passwd to change root password of MyPBX. 1. Login via putty.exe



RPuTTY Configuration						
Category:	Category:					
Session     Logging     Terminal     Keyboard     Bell     Features     Window     Appearance     Behaviour     Translation     Selection     Colours     Connection     Data     Proxy     Telnet     Rlogin     SSH     SsH     Serial	Basic options for your PuTTY session         Specify the destination you want to connect to         Host Name (or IP address)       Port         192.168.5.139       8022         Connection type:       Baw         Paw       Ielnet       Rlogin         Load, save or delete a stored session       Serial         Load, save or delete a stored session       Saved         Default Settings       Load         Close window on exit:       Delete         Always       Never					
About	<u>D</u> pen <u>C</u> ancel					

### Figure I-4

2. The default username is root and the default password is ys123456.



Figure I-5

3. Use command passwd to change the root's password

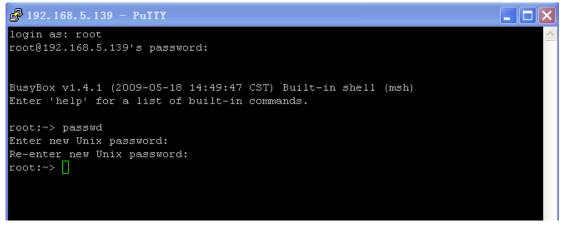


Figure I-6



# **3. Security Configuration for Extensions**

### 3.1 Change the default SIP Port

PBX $\rightarrow$ Basic settings $\rightarrow$ SIP Settings $\rightarrow$ General $\rightarrow$ UDP Port

SIP Set	SIP Settings				
	General NAT Codecs QOS Advanced S	Settings			
	UDP Port	5060			
	TCP Port Enable	5060			
	TLS Port Enable 0:	5061			
	RTP Port Start:	10000			
	RTP Port End:	12000			
	DTMF Mode 👀 :	rfc283( 💌			
	Max Registration/Subscription Time 🛈 :	3600			
	Min Registration/Subscription Time 0 :	60			
	Default Incoming/Outgoing Registration Time 0 :	120			
	Register Attempts	8			
	Register Timeout	20			
	Calling Channel Codec Priority	Yes 💌			
	Video Support 0:	Yes 💌			
	Max Bit Rate 0:	384 kb/s			
	DNS SRV Look Up 👀:	No 💌			
	User Agent®:				

Figure I-7

### 3.2\* Disable guest calls

 $\mathsf{PBX} \rightarrow \mathsf{Basic} \text{ settings} \rightarrow \mathsf{SIP} \text{ Settings} \rightarrow \mathsf{Advanced} \text{ Settings} \rightarrow \mathsf{Allow} \text{ Guest}$ 



SIP Sett	igs
	General NAT Codecs QOS Advanced Settings
	From Field: From
	To Field: INVITE
	180 Ringing: 🔲
	Remote Party ID 🔍 : 🔲 send 🔲 trust
	Allow Guest00: No
	Pedantic
	Session-timers 0 : Accept 💌
	Session-expires 0: 1800 s
	Session-minse(): 90 s
	Session-refresher: Uas

Figure I-8

3.3\* Security Configuration for remote extensions

If remote registration isn't required, please disable it.

PBX→Extensions→FXS/VoIP Extensions→ VoIP Extensions→General→VoIP Settings

VoIP Settings		
NAT 🛈 : 🗖	Qualify: 🔽	Enable SRTP 🛈 : 🔲
Transport: UDP 💌	DTMF Mode 0: RFC2833 💌	Register Remotely 🔍 📃



3.4 Set a robust password and enable IP restriction for extensions1) Set a new extension password at a higher security level, e.g. AjK5Up1G.

 $\mathsf{PBX} \rightarrow \mathsf{Extensions} \rightarrow \mathsf{FXS}/\mathsf{VoIP} \ \mathsf{Extensions} \rightarrow \mathsf{VoIP} \ \mathsf{Extensions} \rightarrow \mathsf{General} \rightarrow \mathsf{Password}$ 

Edit Extension - 6010	Х
General Other Settings	
Type: SIP  Extension : 6010 Password : AjK5Up1G	
Name 1: 6010 Caller ID 1: 6010	

Figure I-10

2) Enable IP restriction and enter the permitted "IP address/Subnet mask", e.g.



### 192.168.5.136.

Edit Extension - 6010 X
General Other Settings
Other Options
Call Waiting DND VUser Web Interface Ring Out : 30
Follow me
Always     Oicemail
Follow me: Volceman No answer Transfer to:
When Busy
IP Restriction
Enable IP Restriction
Permitted 'IP address/Subnet mask' 1 0: 192.168.5.0/255.255.255.255
Permitted 'IP address/Subnet mask' 2 0:
Permitted 'IP address/Subnet mask' 3 🛈:
Permitted 'IP address/Subnet mask' 4 🛈:
Mobility Extension
Enable Mobility Extension Mobility Extension Number 0:
Spy Settings
Allow Being Spied Spy Modes 🛈 : 🛶 💌

Figure I-11

## 4. Set up Proper Firewall Rules

**Note**: Please backup the configurations on backup and restore page before you go ahead. In the case that you lock the device, you can reset to factory default and restore the previous configurations. The example rules below work with MyPBX firmware version 2.15.xx.xx or higher versions.

**Step 1**. Enable firewall on firewall page of MyPBX. System  $\rightarrow$  Firewall Settings  $\rightarrow$  Firewall Rules  $\rightarrow$  General Settings



General Preferences	
General Settings	
Note:	
1.You must reboot the system after enabling or disabling firewall.	
2.It is strongly recommended to add local network address to a common rule with the 'action'	
is 'accept',	
or it may be dragged into the blacklist.	
Contraction Contraction Contraction	
Disable Ping	
	Electron II for and
Drop All	Firewall is not enabled
	enabled

Figure I-12

Step 2. Add a common rule to accept local network access.

Create a common rule to allow the all the IP addresses of the local phones to access MyPBX server. For example, if the IP addresses of the local network are 192.168.5.1-254, the configurations could be as below:

Name: LocalNetwork Protocol: BOTH Port: 1:65535 IP: 192.168.5.0/255.255.255.0 Action: Accept

Edit Firewall Rule	Х
Name <sup>(1)</sup> : LocalNetwork	
Description 1	
Protocol	
Port <sup>(1)</sup> : 1 : 65535	
IP: 192.168.5.0 / 255.255.255.0	
MAC Address 1:	
Action : Accept	
🗸 Save 🔀 Cancel	

Figure I-13

**Step 3**. Create common rules to accept remote extensions or remote administrators, if you use SIP trunk, please accept the provider's host as well.

**Note**: If there are no remote extensions, the rule is not required.

Set up the firewall rule to allow the public IP address of remote extensions to access MyPBX server. e.g.110.111.132.6, the configurations could be as below: **Name**: Remote Extension



Protocol: BOTH

**Port**: 1:65535

**IP**: 110.111.132.6/255.255.255.255

#### Action: Accept

Edit Firewall Rule		Х
Name0:	RemoteExtension	
Description 🛈 :		
Protocol0:	BOTH 💌	
Port <sup>©</sup> :	1 : 65535	
IP0:	110.111.132.6 / 255.255.255.255	
MAC Address 🛈 :		
Action 0:	Accept -	
	✓ Save 🔀 Cancel	

Figure I-14

### Step 4. Configure auto blacklist rules

Auto blacklist rules: the Server would add the IP address to the blacklist automatically if the number of the packets it sends exceeds the rule you configured.

Add two auto blacklist rules for port: 5060.

### Rule No.1:

**Port**: 5060

Protocol: UDP

IP Packets: 120

Time Interval: 60 seconds

Edit Auto Blacklist Rules X
Port <sup>1</sup> : 5060
Protocol <sup>1</sup> : UDP -
IP Packets 0: 120
Time Interval : 60 seconds
Save Save Cancel

Figure I-15

### Rule No.2

Port: 5060 Protocol: UDP IP Packets: 40



### Time Interval: 2 seconds

Edit Auto Blacklist Rules X
Port@: 5060
Protocol
IP Packets 0: 40
Time Interval 0: 2 seconds
Save X Cancel

Figure I-16

Add an auto blacklist rule for Port: 8022

Rule No.3 Port: 8022 Protocol: TCP IP Packets: 5 Time Interval: 60 seconds

Edit Auto Blacklist Rules	Х
Port <sup>(1)</sup> : 8022	
Protocol <sup>(1)</sup> : TCP	
IP Packets 0: 5	
Time Interval : 60 seconds	
Save Save Cancel	

Figure I-17

### Step 5. Add a Firewall Rule for VoIP trunk registration

**Note**: If there is no VoIP trunk, this rule is not required. And if the RTP IP address of VoIP trunk and Registration IP address of the VoIP trunk are different, we need to create a rule to accept the RTP IP address too.

Add a rule to accept the IP address of the VoIP trunk to access MyPBX server. For example: If the IP address of the VoIP trunk is 110.5.14.6, Protocol is UDP and Port is 5060, the configuration could be as below:

Name: VoIPTrunk Protocol: UDP Port: 5060: 5060 IP: 110.5.14.6/255.255.255 Action: Accept



Edit Firewall Rule	Х
Name <sup>()</sup> : VolPTrunk	
Description 1:	
Protocol <sup>1</sup> : UDP	
Port <sup>1</sup> : 5060 : 5060	
IP: 110.5.14.6 / 255.255.255	
MAC Address ():	
Action 10: Accept	
🖌 Save 🔀 Cancel	

Figure I-18

**Step 6**. Add a firewall rule to accept remote access of HTTP port. For example, if the remote access IP is 110.5.14.6, and the port is 80, the configuration could be as below.

Name: RemoteHTTP Protocol: TCP Port: 80:80 IP: 110.5.14.6/255.255.255 Action: Accept

Edit Firewall Rule	Х
Name: RemoteHTTP	
Description ():	
Protocol <sup>1</sup> : TCP	
Port: 80 : 80	
IP: 110.5.14.6 / 255.255.255	.255
MAC Address 0:	
Action 0 : Accept 💌	
Save 🔀 Cancel	

Figure I-19

**Step 7**. Add a firewall rule to accept remote access of SSH port. For example: if the remote access IP is 110.5.14.6 and the port is 8022.



**Note**: If the remote access of SSH port is not needed, this rule is not required.

Name: RemoteSSH Protocol: TCP Port: 8022:8022 IP: 110.5.14.6/255.255.255 Action: Accept

Edit Firewall Rule		Х
Name0:	RemoteSSH	
Description 0:		
Protocol0:	TCP 💌	
Port <sup>©</sup> :	8022 : 8022	
IP0:	110.5.14.6 / 255.255.255	
MAC Address 0:		
Action 🤨:	Accept 💌	
	✓ Save X Cancel	

Figure I-20

**Step 8**. Add other firewall rules by yourself. For example, if you are using features related to email, you should add the firewall rules for the SMTP server and POP3 server.

**Step 9**. Enable Drop all (If this feature is enabled, all the packets and connection that do not match the rules would be dropped.)

**Note**: Before enable this feature, please add a rule to accept the local network access, or the server might not be accessed.

General Preferences	Apply Changes
General Settings	
Note:	
1.You must reboot the system after enabling or disabling firewall.	
2.It is strongly recommended to add local network address to a common rule with the 'action'	
is 'accept',	
or it may be dragged into the blacklist.	
Contraction Contra	
Oisable Ping	
	Firewall is not
Cop All	enabled

Figure I-21



# **Step 10**. The Configuration of firewall settings is completed. See the figures below.

General Preferences Of General Settings Note: 1.You must reboot f 2.It is strongly recor 'accept', or it may be draqge Of Enable Firewa Of Disable Ping Of Drop All Common Rules Add Rule	mmended to add lo <u>d i</u> nto the blacklist.		isabling firewall. k address to a common rule with t	he 'action' is		Firewa	ill is not enabled
Action	Name	Protocol	IP	MAC Address			-
ACCEPT	LocalNetwork	UDP	192.168.5.0/255.255.255.0		1:65535		X
	RemoteExtension	BOTH	110.111.132.6/255.255.255.255	-	1:65535		×
🔻 🖈 🔹 ACCEPT	VolPTrunk	UDP	110.5.14.6/255.255.255.255		5060:5060		X
₹ ≄ ≈ ± ACCEPT	RemoteHTTP	TCP	110.5.14.6/255.255.255.255		80:80		×
🔹 🖈 ACCEPT	RemoteSSH	TCP	110.5.14.6/255.255.255.255		8022:8022	L	X
🛨 Add Rule			No Auto Defense Rules Defined				
			Figure I-22				
IP Blacklist						Apply C	hanges
Blacklist Rules							
Port	Protocol		Rate				
5060	UDP		120/60s				
5060	UDP		40/2s		$\times$		
8022	TCP		5/60s	J			
IP Blacklist			No Auto Black IP Address				

Figure I-23

**Step 11**. Define the authorized data transmitting rate and drop all other unauthorized hosts.



**Note**: If we setup IP blacklist rules here, those unauthorized hosts will still be able to send SIP packets into MyPBX if the packets transmitting rate is under the rate defined. But as soon as the transmitting beyond the define rate, the IP will be added into blacklist automatically.

This is useful for remote extension who is using dynamic IP address.

Remove all the IP blacklist rules if you don't allowed any other unauthorized hosts access MyPBX. See as below figure.

**Note**: If "drop all" is not enabled, please don't remove the IP blacklist rules in case the system security hole.

General Preferences						Apply C	hanges
General Settings Note: 1.You must reboot th 2.It is strongly recom "accept", or it may be dragged ©©Enable Firewall ©©Disable Ping ©©Drop All Common Rules Add Rule	into the blacklist.		isabling firewall. k address to a common rule with t	he 'action' is			II is not enabled
Action	Name	Protocol	IP	MAC Address	Port		
ACCEPT	LocalNetwork	UDP	192.168.5.0/255.255.255.0		1:65535		X
	RemoteExtension	вотн	110.111.132.6/255.255.255.255		1:65535		X
₹ ¢ ъ ± ACCEPT	VolPTrunk	UDP	110.5.14.6/255.255.255.255		5060:5060	1	X
	RemoteHTTP	TCP	110.5.14.6/255.255.255.255		80:80		X
ACCEPT	RemoteSSH	TCP	110.5.14.6/255.255.255.255		8022:8022	<i>P</i>	X
+ Add Rule			No Auto Defense Rules Defined				
			Figure I-24				
P Blacklist						Apply Ct	nanges
Blacklist Rules							
			No Auto Defense Rules Defined				
IP Blacklist							
			No Auto Black IP Address				

Figure I-25



## 5\*. Alert Settings

After enabling alert settings', if the device is attacked, the system will alert users via call or e-mail. The attack modes include IP attack and Web Login. 5.1 IPATTACK

When the system is attacked by some IP addresses, the firewall will add the IP to auto IP Blacklist and notify the user if it match the protection rule.

Example: Configure to notify extension 500, outbound number 5503301 and E-mail alert@yeastar.com.

configuration could be as below.

Phone Notification Settings:

Phone Notification: Yes

Number: 500;5503301

Attempts: 1

Interval: 60s

Prompt: default

**Note**: If there's an outbound number to notify, the number should fit with dial pattern of the outbound route.

E-mail Notification Settings: E-mail Notification: Yes To: alert@yeastar.com Subject: IPAttack



IPATTACK
Phone Notification Settings
Phone Notification: Yes 💌
Number(): 500;5503301
Attempts 0: 1 💌
Interval(): 60 s
Prompt: default  Custom Prompts
E-mail Notification Settings
E-mail Notification: Yes 💌
To (): alert@yeastar.com
Subject: IPAttack
pbx hostname:\$(HOSTNAME) attack source ip address:\$(SOURCEIP) attack dest mac:\$(DESTMAC) attack source port:\$(DESTPORT) attack source protocol:\$(PROTOCOL) attack occurred:\$(DATETIME)
Save X Cancel

Figure I-26

### 5.2 WEBLOGIN

Enter the password incorrectly five times when logging in MyPBX Web interface will be deemed as attack, the system will limit the IP login within 10 minutes and notify the user.

Example: Configure to notify extension 500, outbound number 5503301 and E-mail alert@yeastar.com.

configuration could be as below.

Phone Notification Settings:

Phone Notification: Yes Number: 500;5503301

Attempts: 1

Interval: 60s

Prompt: default

**Note**: If there's an outbound number to notify, the number should fit the dial pattern of the outbound route.

E-mail Notification Settings: E-mail Notification: Yes To: alert@yeastar.com Subject: WebLogin



WEBLOGIN	Х
Phone Notification Settings	
Phone Notification: Yes 💌	
Number(): 500;5503301	
Attempts 00: 1	
Interval (): 60 s	
Prompt: default  Custom Prompts	
E-mail Notification Settings	
E-mail Notification: Yes 💌	
To0: alert@yeastar.com	
Subject: WebLogin	
• pbx hostname:\$(HOSTNAME) login ip address:\$(SOURCEIP) login username:\$(USERNAME) login occurred:\$(DATETIME)	
Save 🔀 Cancel	

Figure I-27



# APPENDIX J How to Enable Call Recording on MyPBX U100/U200

MyPBX U100/U200 allows you to record the calls automatically. Here is the guide for you to use it.

### Note:

- 1. Before starting auto recording function, please make sure you have inserted an USB device with the correct format.
- 2. If you need auto recording function for MyPBX U100/U200, please activate the call recording function by entering a license key in WEB GUI.

## 1. Activate Call Recording

**Note**: For usage of call recording on U100/U200, please purchase activation code from your equipment provider.

Call Recording enables all your inbound and outbound phone calls to be recorded. The system would detect any call conversation and record them automatically. The call recordings would be saved in the folder you specify and stored in the USB.

And if users want to use the call recording feature, they need active this function firstly.



Click

to enter the "Addons" page.

1 Recording (Non-in	Artise Code:				
Call Recording e	nate control			 out them automatically. The	(Instal)
PBX Client (During	H M	V Active	Cancel		
	in appendix contributed with say-p				- Uptate
	interrage contacts, voluentails, and Cl and create a call task, sto				D Enate
ing System (No. 1)					
Jeriols, sal-data	en itwege and rectrunge echemicus an dian, profile number and number integr	t. Haal-line recharger	g fostory, call logs, and atabat	ranceeding to extensions, trees	M. Mart



After activation, the page will show as below:



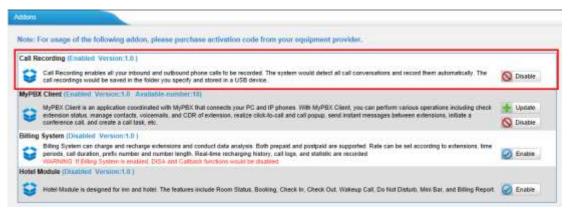


Figure J-2

# 2. Login

From your web browser, input the IP address of the MyPBX server. Login the system with the monitor account:

User Name: monitor Password: password

Hybrid IP PBX for Your Businesses

MyPBX	MyPBX Configurat User Name @moretor Password @ Language @-Englash	tion Panel

Figure J-3

## 3. USB Devices

### 1) USB Device information

In this page, we can check the USB Device information, such as USB Model, Type, Disk Size, Storage Info and so on.



### 2) USB Devices Management

#### ·Format USB

Formatting will erase all data on the USB, and initialize the USB Device.

### ·Clear USB

Clearing will erase all data on the USB.

#### •Remove USB Safely

When ticked, the USB Device will be removed safely.

Warning: Please do not remove USB device when recording a call, or else USB device will be damaged.

To remove USB device, click the button "Remove USB Safely" and follow the instructions.

### Note:

- 1. When 95% of the USB device's storage space is used up, the system will automatically delete the old recordings in a chronological manner until the used space is smaller than 85%.
- 2. Every second of a call recording uses about 8 KB space. The following shows the storage capacity of USB device and its relevant recording hours.

Storage Capacity	2GB	4GB	8GB	16GB	32GB	64GB	128GB	256GB
Call Recording (Hours)	64	128	256	512	1024	2048	4096	8192

Figure J-4

### 4. Recording Settings

1) General Preferences

**Note:** Before enabling call recording, please make sure that the USB have been inserted and the format is correct.

### ·Enable Call Recording

Enable this function here. You can tick:

- a. Record Inbound calls
- b. Record Outbound calls
- c. Record Internal calls
- d. Record Callback calls.

2) Apply To

### Trunks Recording



When ticked, all calls through the selected trunks will be recorded.

### **•Extensions Recording**

When ticked, all calls made by the selected extensions will be recorded.

Front Selling		
Series Numerical Professioner et sign Champaner Things	Sector Cardina Concerning Port and a concerning Port and a concerning Port and a concerning Port and a concerning Port Analysis Research Conce	
Appa Tr.	22 Nexes Tank 0 R of Tank 1 Salestie Tank 1 Salestie	
	Vill Assent Strangen U Will All Dependent C Datational Strangen	

Figure J-5

## 5. Record Logs

#### **·Start Search**

You are able to search the record by Start Date to End Date, Extension, Trunk, Duration and Communication Type.

### •The Record List

You can choose the record to download or delete.

You can check the ID, Time, Callee, Caller, Trunk, Duration (second), and Communication Type of each record

You can play, download or delete the recording files.

	Fintoni Loga			
/SE Devices	Search Condition			
lecords Settings	Start Date: 13 Mar 2013	End Date 11 Mar 2013	Caller/Callee	
Hered Ligg	Datation O	Trunk: All	Cammunication Type: Alt	Start Searching
nav Sittlegs	Overload the selected records	A Delete the selected recerts		Total D Show D View 25
Paswenddellega	Download the salacted records	A Delete the selected records		Total 0 Show 0 Year

Figure J-6



## 6. Share Settings

Use these settings to share the recording file on the network.

### ·User Name

The user name to check the file

#### Password

The password to the user name

### ·Share Name

The name of the folder showed on the network.

	Sizes Sullings	
US9 Devices		
Respire Detroys	Halls The same as of sectors for Car Percently from to the TTP For early process in the TTP process of the TTP process of the terms of the sectors for the terms of the sectors for the sector	
Assettings	Dres faire	
Institution 1	Unite Tables   Later	
Research Settings	Petranti: +++++ G/ Africe responses to thange my Nam	
100		
	W Area 🕺 Cruz	

Figure J-7

For WIN 7/Vista user, please modify the registry before checking the shared file:

```
Step1: Start->Run->regedit
Step2: Modify the value of
"HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Lsa\
LmCompatibilityLevel "
to "1".
If" LmCompatibilityLevel" doesn't exit, create a Dword value
"LmCompatibilityLevel " = 1
```

You can check the recording file on the network by Explorer/Resource Manager Run: \\ IP of MyPBX In the picture below, the IP is 192.168.5.101



3 192.168.5.101				
File Edit View Pavorites	Tools	Help		
🕝 Back 🔹 🕥 🔹 🏂	Sear	th 😥 Folders 🛛 🎹 🗸		
Address  \\192.168.5.101				💌 🄁 Go
Network Tasks	*	test	Printers and Faxes	
🕎 Add a network place		35		
🔹 View network connectio	ons			
Set up a home or small office network				
Set up a wireless network for a home or small offi	ork ice			
ompu 🖓 View workgroup compu	ters			
Discrete Show icons for network UPnP devices	ked			
Other Places	*			
🛃 Unknown				
🧕 My Computer				
📋 My Documents				
🛅 Shared Documents				
San Printers and Faxes				
Details	*			
2 objects				
				16

Figure J-8

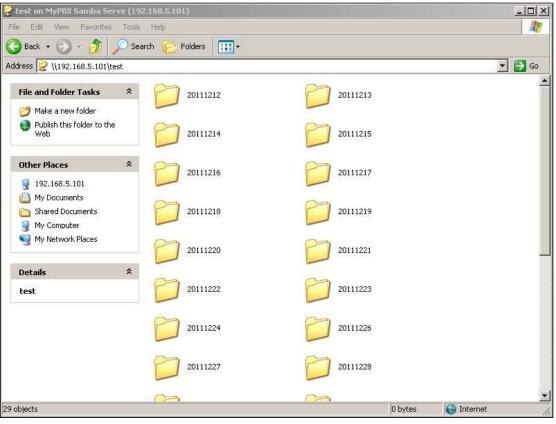


Figure J-9



If you change the password of the share folder, the network users may not be able to check the shared files then.

Please ask the network user to try: step1: Start-> Run -> cmd step2: net use \* /del (the is a space behind \*) step3: Visit the device again with new password

## 7. Password Settings

You can change the password of the account "monitor" here.

MyPB	X		
	Chunge Pansalori		
USB Davioro			
Records Settings	Charge Parented	Enter Old Password	
MecordLoga		Enter New Passwort:	
Share Sellings		Ratype New Passwerd	
Concern letter		wi Been	

Figure J-10

<Finish>