



For Firmware Version: V3.0

2013-12-11

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Introduction

Overview of the IPPBX

ATCOM IPPBX is a SIP-based IP voice switch with a small embedded OS and rich GUI (Graphical User Interface), providing a powerful networking and corporate communication function. With it, users can quickly deploy an internal communication system for enterprise, as well as configure conveniently applications and value-added services on IP PBX via its GUI, to fit enterprise's own various demands.

Targeting for SOHO user and SMB market with an easy to use graphical interface, IP4G provides a cost-saving solution on their telecommunication/data needs. With IP4G, company with branch offices in different countries can be easily combined together to work like a virtual single office through internet.

Hardware Specifications

СРИ	400MHz Blackfin 533 Chip		
NAND Flash	256 M		
SDRAM	128 M		
GSM Port	4		
Network Interface	WAN,LAN		

Measurement and Weight

Inner box	225 * 120 * 30mm			
G.W./unit	0.79KG			
Carton MEAS	456 * 442 * 362 mm			
Units per Carton	21 units/ CTN			
G.W./CTN	18 KG/CTN			

Function Features

Voicemail	Authentication before call outbound
Voicemail to Email	User WEB portal
Blind/Attended Transfer	Blacklist
Call Forward	Call Detail Records(CDR)
Call Parking	Conference
Do not Disturb (DND)	Ring Group
Group / Directed Pickup	Call Queue
Call Recording	Call Back
Call Waiting	IVR
Call Routing	Intercom/Paging
Caller ID	IP Restriction
BLF Support	Firewalls
Music on Hold	DDNS
Video Call	DHCP Server
PPPoE	VLAN



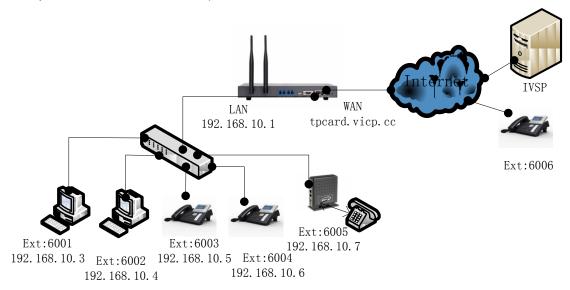
Port Forward	VPN client		
External Storage	Auto Provisioning		
Storage Quota Privilege	IAX2		
Fax to Email	Custom Dialplan		
Auto call recording	Integrated built-in packet capture tools		

1. Connection and Change IP Address of IPPBX

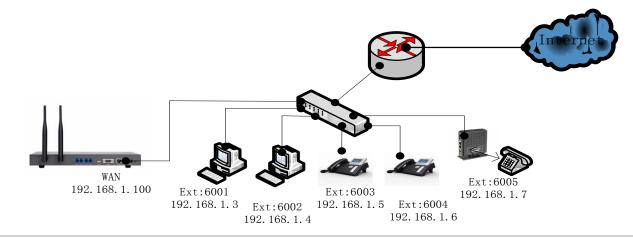
2.1 Connection

The default IP address of IPPBX is: WAN: 192.168.1.100/255.255.255.0 LAN: 192.168.10.1/255.255.255.0

There are two network interfaces (WAM and LAN) in IP4G, it can be used as a router (WAN port connects Internet and LAN port connects local network):



If you do not want IPPBX to act as a router and put it behind a router, please connect WAN port to your local network:



NOTE: It's recommended to re-set IP address of IPPBX via WAN at the first time, Since DHCP server on LAN port is enabled by default, Other DHCP client enabled devices in the network may obtain IP from IPPBX rather than real DHCP server. And then access IPPBX via LAN after configuring LAN settings.

1) Connect IPPBX to your PC directly or through switch.

Make sure IP address of your PC is in network 192.168.1.0/255.255.255.0, if not, you need to appoint an IP address for your PC, for example, 192.168.1.3

2) Login IPPBX as administrator via WEB GUI

User: admin

Password: atcom

NOTE: Language option will be accomplished in future versions, currently, only English is supported. So it's not selectable now.

3) Go to Network Settings ->WAN.

Re-set IP of WAN port.

4) Go to **Network Settings** -> LAN.

Re-set IP of LAN port.	⊖ ☆ ⊽ C 🛛 🔀 - Google Ct	r1+K> 🔎 🕄 🗸 🖬 🖌 🎓 🥐 🗸
	ATCOM PBX Login	
	L UserName	
	Password	
	🛣 Language 🗸 🗸	
	Login	
	★ Website ♥ Products ≈ Support ≅ Contact us ©2013 ATCOM All Rights Reserved	

2.2 WAN Settings

There are three ways to set an IP address to WAN port: DHCP, Static IP, PPPoE.

DHCP

IPPBX will obtain an IP address automatically from DHCP server when rebooting. It's not recommended to choose this option unless there is a reserved IP for IPPBX in DHCP server so that IPPBX can keep the same IP all the time.



Static IP

Set an IP address manually according to the real network environment. If IPPBX is behind a router, the gateway is usually set to the IP of the router.

PPPoE

IPPBX will obtain an IP address automatically after establishing a connection to PPPoE server with username and password.

atcom	System Status	PBX Settings	Network Settings	System Settings	F Reports	X Logout
Web Access	WAN Setting					
	Use WAN 🗹					
> WAN	Орнср					
LAN	● Static IP					
DHCP Server	IP Address :	192.168.1.100				
	Subnet Mask:	255.255.255.0				
Firewall	Default Gateway :	192.168.1.1				
Port Forward	Primary DNS :	8.8.8.8				
DDNS	Secondary DNS :	8.8.4.4				
	O PPPoE					
VLAN	User Name :					
VPN	Password :		Show password			
	WAN side HTTP(S) access :	⊙ Yes	ONO			
	🔛 Save					

2.3 LAN Settings

DHCP

Yes: IPPBX will get an IP address from DHCP server, Not recommended.

No: Configure IP address manually for LAN. Default is NO.

NAT

Yes: IPPBX will act as a router, all the devices connected to LAN can access the network connected to WAN. Default is Yes.

No: Networks connected to LAN and WAN are independent.

NOTE: IP addresses of LAN and WAN can't be in the same network.

For example: IP of WAN is 192.168.1.100/255.255.255.0, IP of LAN can't be 192.168.1.xx/255.255.255.0

Hostname



Set the host name for IPPBX.

IP Address / Subnet Mask

Set the IP address / subnet mask for LAN network interface.

Gateway

Set the Gateway for LAN network interface.

Primary DNS / Secondary DNS

Set the DNS server for LAN network interface.

IP Address 2 / Subnet Mask 2

Set the failover IP address for LAN network interface.

alcom	System Status	L+ PBX Settings	Network Settings	System Settings	Reports	X Logout
Web Access	LAN Setting					
	DHCP: No	~	NAT :	Yes	~	
WAN	Host Name : APBX		IP Addre	ss: 192.168.10.1		
> LAN	Subnet Mask : 255.255.255.	0	Default (eteway: 192.168.10.1		
	Primary DNS : 8.8.8.8		Seconda	ry DNS : 8.8.4.4		
DHCP Server	IP Address 2 :		Subnet N	fask 2 :		
Firowall	Save					

2.4 DHCP Server

The Dynamic Host Configuration Protocol (DHCP) is a network protocol used to configure devices that are connected to a network (known as hosts) so they can communicate on that network using the Internet Protocol (IP). It involves clients and a server operating in a client-server model.

Enable DHCP server

Check to enable DHCP server.

Default Gateway

Gateway information that will be used in DHCP client.

Subnet Mask

Subnet Mask that will be used in DHCP client.

Primary DNS / Secondary DNS

DNS information that will be used in DHCP client.

Start IP / End IP



IP address pool, IP in which will be assigned to DHCP client.

Lease Time

The amount of time the address is leased for DHCP client, When the lease is up, it either renews or gets a new address.

alcom	System Status	PBX Settings	Network Settings		System Settings	Reports	X Logout
Web Access	DHCP Server Setting						
	Enable DHCP Server :	V					
WAN	Default Gateway :	192.168.10.1		Subnet Mask	: 255.255.255.0		
LAN	Primary DNS :	8.8.8.8		Secondary DI	NS: 8.8.4.4		
	Start IP :	192.168.10.100		End IP :	192.168.10.254		
> DHCP Server	Lease Time :	86400	I				
Firewall	💾 Save 🛛 🥕 Re	set					

NOTE: All the network settings will take effect immediately when you save the change.

2.5 System Status

atcom	System Status	PBX Settings	() Network Settings	System Settings	Reports	X Logout
> General	General					
Trunk Status	Product Model :	IP4G	Application	Version : V3.0		
	Kernel Version :	V3.0	System Up	Time : 0 days 3 ho	ours 34 minutes 23 se	conds
Extension Status	System Current Time :	Tue Dec 10 18:07:17 2	013			
	Network					
	WAN Connection Type :	STATIC	PPPoE Stat	us : DISABLED		
	WAN Mac Address :	80:82:87:00:08:A4	LAN Mac Ad	dress: 80:82:87:0	80:82:87:00:08:A5	
	WAN IP Address :	192.168.1.128	LAN IP Addr	ress: 192.168.10).1	
	WAN Subnet Mask :	255.255.255.0	LAN Subnet	Mask: 255.255.25	55.0	
	WAN Gateway :	192.168.1.254	LAN NAT :	yes		
	WAN Primary DNS :	8.8.8.8	LAN Primar	y DNS : 8.8.8.8		
	WAN Secondary DNS :	8.8.4.4	LAN Second	dary DNS : 8.8.4.4		
	Peripheral					
	Port 1 :	GSM	Port 3 :	GSM		
	Port 5 :	GSM	Port 7 :	GSM		

1) General

Product Model



Show the model of this IPPBX **Firmware Version** Show the firmware version **System Uptime** Show the time how long the system has been running **System Current Time** Show the current time

2) Network

Show the network setting of IPPBX

3) Peripheral

Show what kinds of / how many modules are detected.

2. Create local extensions and make interior calls

There are two kinds of extensions in IPPBX: SIP extensions and IAX extensions.

3.1 VOIP extensions

A VOIP extension is a SIP/IAX Account that allows an IP Phone or an IP SoftPhone client to register on IPPBX. It can be created / modified / deleted one by one or in batch.

3.2.1 Add new extensions

a. Add single extension

Click Create New Extension to add an extension

NOTE: VOIP extension number range is defined in **PBX Settings** -> **Options** -> **Extension Preference**, changing it can create extensions in others number range.

1) General

Туре

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.

Name

A character-based name for this extension, i.e. 'Bob Jones'

Extension

Extension number, i.e. 6000, it is associated with this particular user / phone.

Password

Authentication for VOIP phone to register and make calls.

Caller ID

CID showed in the other's phone during a call, default is Extension.

2) SIP Setting(Only for SIP extension)

NAT

Try this setting when IPPBX is on a public IP, communicating with devices hidden behind a NAT device (broadband router). If you have one-way audio problems, you usually have problems with your NAT configuration or your firewall's support of SIP+RTP ports.

Can Reinvite

By default, IPPBX will route the media streams from SIP endpoints through itself. Enabling this option causes IPPBX to attempt to negotiate the endpoints to route the media stream directly, bypassing IPPBX. It is not always possible for IPPBX to negotiate endpoint-to-endpoint media routing.

DTMF Mode

Select DTMF sending mode, there are three modes: **rfc2833**, **inband**, **info**. The DTMF setting in here should be as same as that in SIP phone, otherwise IPPBX will not detect the users' input correctly during a call.

Auto means IPPBX will match anyone of them according to the setting of SIP phone.

Transport

The transplant protocol type for VoIP data package, default is UDP. Please make sure TCP is enabled in PBX Settings -> SIP Settings before using TCP.

SIP Quality

Check this option to force keep alive.

3) Voice Mail

Enable Voice Mail

Check this option to enable voice mail account for the extension. Enabled by default.

Voice Mail Access PIN Code

Password for accessing this voice mail account, default is the extension number. It's also the password for extension to login his administration web page.

4) Mail Setting

Enable Sending Voice Mail

Check this option to enable PBX send new voicemail to Email address below as an attachment.

Email Address

The Email address that new voicemail will be send to when Enable Sending Voice Mail is enabled and PBX settings -> SMTP settings is right set.

5) Follow Me

Follow me is a feature to let an incoming call to a called party to be redirected to a third party, the third party can be a voicemail box, ring group, mobile telephone and so on.



When callee is No Answer / Busy / Unreachable, incoming calls will go to voicemail by default, if voicemail is disabled, call will be hung up.

Edit Voip Extension : 6000
General
Type : SIP Name : 6000 Caller ID : 6000 O
Extension : 6000 Password : pw6000
Sip Settings
NAT : DTMF Mode : rfc2833 V
Transport : UDP V I SIP Qualify
Voice Mail
C Enable Voice Mail Voice Mail Access PIN Code : 6000
Mail Setting
Enable Sending Voice Mail () Email Address :
Follow Me
Call Forward : ① Always When no answer When busy Forward To : O Voice Mail O Number :
Other Options
Pickup Group : 0 Call Waiting Ring Out : 30 Use Web Interface
Storage Quota Privilege : Basic V I DND I Call Recording I

6) Other Options

Pickup Group

Allows extension to answer someone else's telephone call by dialing the group call pickup code (defined in **PBX Settings**->**Feature Codes**->**General**), the two extensions must be in a same pickup group.

IPPBX supports 10 pickup groups: 0-10, **None** means the extension belongs to none pickup group, extensions in group None can't pick up others' ring call and also can't be picked up by others.

Call Waiting

Check this option to enable the Call Waiting capability for this extension. Then the extension can answer a new call when it is already on the line. It also needs the call waiting support of IP phone. If this Option is checked, the follow me option "When busy" will be unavailable.

Ring Out



Set the ring timeout for this extension. IPPBX will stop ringing the extension if the time is up and there is still no answer.

Use Web Interface

When checked, user can login the administration web page of this extension with extension number and voice mail pin code as username and password.

Storage Quota Privilege

Set capacity of disk space for this extension to store voicemail.

Restricted: 1 M

Basic: 2 M

Regular: 3 M

Privileged: 4 M

Super: 5 M

NOTE: If you have set **System Settings** -> **External Storage** and set Move Files Created Before 0 days ago. This storage limitation will be of no use.

DND

Do not disturb, once checked, the extension will be unavailable.

Call Recording

Check this option to record all interior calls made by this extension, user can check the recordings on the personal web portal and with record account(password is the same with admin) too.

Advanced Configuration

Advance Configuration		▲					
Preferred Codec							
First : a-law	Second : u-law	Third : GSM 🗸					
Fourth : None	Fifth : None 🗸	Sixth : None 🗸					
IP Restriction							
Enable IP Restriction 9							
Permitted Rule 1 : (ip	address/subnet mask) 🌗						
Permitted Rule 2 : (ip	address/subnet mask)						
Permitted Rule 3 : [[] (ip	Permitted Rule 3 : (ip address/subnet mask)						
Permitted Rule 4 : (ip address/subnet mask)							
Save Acancel							

Preferred Codec

Set the allowed codec and priority for SIP phone. The options are below:

Audio: A-law, U-law, GSM, SPEEX, G726, G722, ADPCM, G729

Video: H261, H263, H263P, H264

NOTE: There must be at least one same audio/video codec chose in IPPBX extension settings and SIP phone codec settings, otherwise, It's impossible to make audio/video calls between IPPBX and SIP phone.

IP Restriction

Enable it to permit trusted IP/network register to this extension number. This is an useful way to improve the security of IPPBX.

Set trusted IP: xx.xx.xx/255.255.255.255, for example: 192.168.1.160/255.255.255.255 Set trusted network: xx.xx.xx/subnet mask, for example: 192.168.1.0/255.255.255.0

b. Click Add Multiple Extensions to add multiple extensions.								
Add Multiple	e Extensio	ns	8					
Create 10	*	Type SIP/IAX Y Extension	is starting from					
		✓ Create A Cancel						

3.2.2 Modify extensions

- a. Click Edit behind an extension to edit the extension.
- b. Choose one or more extensions, click Modify Selected Extensions to modify them simultaneously.

3.2 Register onto IPPBX with your IP phone

Login the web administration page of IP phone and set the account information.

After successfully register with 6000, 6001 and 6002, you can make interior calls among 6000, 6001, 6002 now.

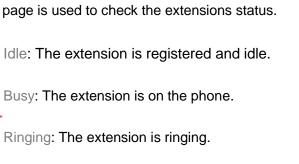
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	e Configuration		ozilla Firefox					
File Edit View	Hi <u>s</u> tory <u>B</u> ookmarks		hone Configuration Sys… ×	-				
AICOM FDX CONFIGURATION (\$ 192, 168, 1, 20)		C AICOM II-II	none Configuration Sys ×	т		- Google (Ctrl+K)	P Sk + M	
192.100.1.20	zyuser.asp					2 + GOOGLE (CLIIK)		
	ato	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			АТ	сомпрена	INE	
	all					Device Configu	ration	
	System Status	*	Account / Account 3				admin	
	Network	*						
	Account	*	SIP					
	Account 1						1	
	Account 2 Account 3		Enable :	Yes 💌	Extension created in APBX			
	Account 4		Display Name :	6000	User ID :	6000		
	Phone Settings	*	Authenticate ID :	6000 🔺	Password:	••••••	Password set in APBX for this extension	
	Update	*	SIP Server :	192.168.1.100	SIP Port :	5060		
	Phone Book	*	Use Outbound Proxy :	No 🔽 The I	IP of APBX		1	
	Call Log	*	Outbound Proxy Server :		Outbound Proxy Port :	5060	٦ ا	
			Register Expires :	30	Subscribe Expires :	3600		
			Transport Type :	UDP V	SIP 100Rel Require :	No 💙		
			transport type .					
			Codec Configuration	Must be the	same as that in APBX for this	extension		
			Prefer Codec :	G726 🗸	User Prefer Codec Only :	No 💙		
			DTMF Tx Method :	RFC2833 V				
			erin renotiour	12 02000				
			Call Feature Setting					
			Message Waiting	No	Default Ring -	1		*

3.3 Extensions Status

╔

This page is used to check the extensions status.



Hold: The extension is on hold

Unavailable: The extension is not registered and unreachable.

NOTE: If this page response slowly, please be patient to wait the output before check other pages. Otherwise, other pages cannot be displayed correctly since IPPBX is accessing database while status checking, and database is locked for other pages' request.

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atcom	System Status	PBX Settings	(S) Network Settings	System Settings	Reports Logout
General		Busy	Ringing	Hold	Unavailable
Trunk Status	Status 1 Unavailable	Extension 6000	Type SIP	New Messages 0	Old Messages 0
Extension Status	2 Idle	6001	IAX	0	0
	3 Unavailable	6002	SIP/IAX	0	0
	4 Idle	6003	SIP	0	0
	5 Finging	6006	SIP	0	0
	6 📴 Idle	6007	SIP	0	0
	7 🔲 Unavailable	6008	IAX	0	0
	8 🔲 Unavailable	6009	SIP/IAX	0	0
	9 Pringing	6101	FXS	0	0
	10 📴 Idle	6102	FXS	0	0
	10 💌 🚺 🖣 Page	1 of 1 🕨 🔰 📢			Displaying 1 to 10 of 10 ite
					Refresh

3.4 Feature Codes

1) General

Call Recording

Record a call while in the call.

Dial Call Recording Code to begin recording and dial it again to stop recording during a call.

Checking Voicemail

Users can check their Voicemail by dialing this code on their phone.

Attended Transfer

Routed a call to a third party only if the third party answers the call. The call flow should be like below:

- 1. Phone A call B, B answers the call.
- 2. B presses feature code(*3) and C's number to transfer the call to C
- 3. If C answers B's call, B can talk to C and A is on hold
- 4. If Phone B hangs up, A will talk to C, transfer is successful.
- 4' If Phone C hangs up, B connects back to A, transfer is failed

Blind Transfer

Blind transfer is when a call is routed to a third party, the original call is ended, and no check is made to determine

whether the transferred call is answered or if the number is busy.

The call flow should be like below:

- 1. Phone A call B, B answers the call.
- 2. B presses feature code(*03) and C's number to transfer the call to C



Group Call Pickup

Pick up a ring call for other extensions in the same pickup group.

The call flow should be like below:

- 1. C calls A, phone A is ring, but A is not at his/her seat.
- 2. Extension A and B are in the same pick up group, B can dial Group Call Pickup code to pick up the ring call, and talk to C.

Direct Call Pickup

Pick up a ring call for an appointed extension. The call flow should be like below:

- 1. C calls A, phone A is ring, but A is not at his/her seat.
- 2. B can dial Direct Call Pickup code + A's extension number to pick up the ring call, and talk to C.

Intercom

Connect directly to a specified phone.

The call flow should be like below:

- 1. A dial Intercom code + B's extension nubmer.
- 2. If Phone B supports page/intercom, it will answer the call automatically.

2) Call Park

It allows a person to park a call on IPPBX and continue the conversation from any other telephone set. The call flow should be like below:

- 1. A and B are on the conversation.
- 2. A dial call park code (e.g. *6), PBX will tell A a park extension (e.g. 701) and then hang up the call. B is parked on PBX.
- 3. C dial park extension: 701, PBX will bridge C and B.

3) Call Forward

Users can configure their follow me settings via their phones.

Reset to Defaults

Reset follow me settings by dialing *70 (default code, can be changed). After dialing in, PBX will prompt a "beep", then the setting is completed and the call will be hung up.

NOTE: Default Follow Me settings are as below: Always: Disabled □ When no answer: Enabled ☑ When busy: Enabled ☑ Forward to: Voice Mail

atcom	System Status	PBX Settings	() Network Setting	igs System Setti	ngs	Reports	Cogout
Extensions	General						
Trunks	Call Recording			Checking Voicemail	*2	0	
Inbound Routes	Attended Transfer *3			Blind Transfer	*03		
Outbound Routes							
> Feature Codes	Group Call Pickup			Direct Call Pickup	*04	0	
IVR	Intercom *5						
Hunt/Ring Group	Call Park						
Conference							
Callback	Call Park	*6					
Paging/Intercom	Extension Range to Park Ca	alls : 701-720					
Time Intervals	Park Time Before Recalled(Second): 60					
Queue	Call Forward						
DISA	Reset to Default	*70	0				
Blacklist							
Options	Enable Unconditional Call F	orward *71		Cancel Unconditional	Call Forward	*071	
SIP Settings	Enable Call Forward On Bu	*72		Cancel Call Forward O	n Busy	*072	
IAX Settings	Enable Call Forward On No	-Answer *73		Cancel Call Forward O	n No-Answer	*073	
SMTP Settings	Call Forward to Number	*74		Call Forward to Voice N	fail	*074	
Music On Hold							
Custom Prompts	Enable Do Not Disturb	*75		Cancel Do Not Disturb		*075	
Custom Dialplan			Save	e			

Enable/Cancel Unconditional Call Forward

Enable/Disable call forward Always function.

Enable/Cancel Call Forward On Busy

Enable/Disable call forward When Busy function.

Enable/Cancel Call Forward On No-Answer

Enable/Disable call forward When No Answer function.

Call Forward to Number

Set the destination for call forward to number by dialing *74 (default code, can be changed), if the number is not set yet, dial *74+number to set it.

Call Forward to Voice Mail

Set the destination for call forward to voicemail.

Enable/Cancel Do Not Disturb

Enable/Disable Do Not Disturb function

3.5 SMTP Settings

1) Voice Mail to Email Setting

Email Address

The Sender Email Address IPPBX used to send voicemail.

Password

atcom

The password for above Email Address/Account.

SMTP Server

SMTP server that above email address/account is located in.

Port

Port for SMTP server, for example: Gmail server use port 465 to send / receive email.

Use SSL/TLS to send secure message to server

Some servers need to authenticate sender before sending email, then the box should be checked.

Test SMTP Settings

Check whether the SMTP setup is OK. PBX will send an email to the test email address using above SMTP setting information. If the test failed, please check that information and network connection.

atcom	System Status	PBX Settings	Network S	Settings	System Settings	R	Leports	X Logout
Extensions	SMTP Settings							
Trunks	Email Address :	bty@atcomemail.com		Password :		•••••	0	
Inbound Routes	SMTP Server :	smtp@gmail.com		Port :		465		
Outbound Routes	Min Messages Time :	5		Max Messa	ges Time :	120		
Feature Codes	Max Messages :	100		Say CID :		No	v 🔒	
IVR				-				
Hunt/Ring Group	Say Duration :	No 🗸 🎝		Envelope :		No	~ U	
Conference	Review :	Yes 🗸 🚺		Delete Mes	sage After Notification:	No	~ 0	
Callback	Ask Caller to Dial 5	D						
Paging/Intercom	Use SSL/TLS to send	d secure message to server 🌗						
Time Intervals		SMTP Settings						

NOTE: After SMTP setting, please set Email address for each extension to achieve Voicemail to Email function.

2) Voice Mail Setting

Max Messages

Queue

This limits the number of messages in a voicemail folder. The maximum value is 9999 (hard coded) and the default 100. When a mailbox has more than this number of messages in it, new messages can not be recorded and "voice mail box is full" is played to the caller.

Max Messages Time

This defines the maximum amount of time in seconds of an incoming message. Use this when there are many users and disk space is limited. The default value is 120 (2 minutes), 0 means there will be no maximum time limit enforced.

Min Messages Time

This setting can be used to eliminate messages which are shorter than a given amount of time in seconds. The default value for this setting is 5.

Say CID/Duration

Read back caller's telephone number / message duration prior to playing the incoming message when checking it.



Envelope

Envelope controls whether or not IPPBX will play the message envelope (date/time) before playing the voicemail message.

Review

Let a caller review their message before committing it to a mailbox.

Delete Messages After Notification

When voicemail to email is set, after voicemail is sent out via email successfully, the voicemail will be deleted from IPPBX. This is intended for use with users who wish to receive their voicemail ONLY by email.

Ask Caller to Dial 5

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

3.6 Conference

Allows participants dial into a virtual meeting room from their own phone, support up to 20 participants.

atcom		em Status	PBX Settings		Network Setti	ngs System Se	ettings	Rep		X Logout
Extensions	Conference	:								
Trunks	+ Add									
Inbound Routes	Conferen	ice Room		PIN #				Opera	ation	
0.0.0	1 68 Ed	it Conference	6800				×	Edit	Delete	
Outbound Routes	2 68	it conterence						Edit	Delete	
Feature Codes	3 68				A			Edit	Delete	
IVR	4 68	Extension :	6800		• PIN :	123	9	Edit	Delete	
Hunt/Ring Group	5 68			Save	A Cancel			Edit	Delete	
	6 68						~	Edit	Delete	
> Conference	7 6806							Edit	Delete	
Callback	8 6807							Edit	Delete	

Conference Room

Extension number of conference room, participant dial it to get into the room.

PIN#

Used for authentication before participants dial into the room, IPPBX will playback MoH for the first participant.

3.7 Paging / Intercom

Dial a code and connect directly to a built-in two-way announcement and talkback function on one or more phones, support up to 20 participants.

Paging Group Number

Extension number of paging group, dial it to reach this group.

Duplex

If checked, caller and callees all can speak and hear. Otherwise, only caller can speak, and callees can hear.



elicom	System Status	PBX Settings	() Network Settings	System Settings	Reports	X Logout
Extensions	Paging/Intercom :					
Trunks	+ Add					
Inbound Routes	Add Paging Group	1				
Outbound Routes						_
Feature Codes	Paging Group Num	ber: 6700	Du Du	plex : 🔲 🌗		
IVR		6002(SIP/IAX)		>> 6001(IAX)	~	1
Hunt/Ring Group	Paging Group Mem	6003(SIP) 6006(SIP) 6007(SIP)	=	→ 6000(SIP)		
Conference		6008(IAX) 6009(SIP/IAX)	~	→ ××		
Callback						<u> </u>
> Paging/Intercom			Save 🥕 Canc	el		
Time Intervals						

3.8 Options

1) General Preference

Ring Timeout

Default Ring Timeout for an extension if Ring Out for it is not set.

Max Call Duration

This defines the maximum amount of time in seconds for a interior call, 0 means no limit, default is 6000s.

Music On Hold

This define which Music on hold is used when transfer/call park/on hold/Conference etc.

Tone Region

This defines how the default dial tone, busy tone, and ring tone look like, please select your country or nearest neighboring country here.

etcom	System Status	PBX Settings	Network S) ettings Syster	O m Settings	Reports	X Logout
Extensions	General Preference						
Trunks	Ring Timeout : 30			Max Call Duration :	6000		
Inbound Routes	Music On Hold : default	· · •		Tone Region :	United States/North An	~ ()	
Outbound Routes	Follow Me Prompt no	~			L		
Feature Codes							
IVR	Extension Preference						
Hunt/Ring Group	VOIP Extensions :	6000	to 6099				
Conference	FXS Extensions :	6101	to 6108				
Callback	Ring Group Extensions :	6600	to 6609				
Paging/Intercom	IVR :	6680	to 6699				
Time Intervals	Paging Group Extensions :	6700	to 6709				
Queue	Conference Extensions :						
DISA	Conterence Extensions .	6800	to 6809				
Blacklist	Queue Extensions :	6900	to 6909				
> Options				Save			

2) Extension Preference.

Defines the range for VOIP / Ring Group / Voice Menu / Paging Group / Conference / Queue Extensions. The extension length must be between 3 and 9 digits. The maximum quantity can be supported for each are as below:

VOIP extension	100
Ring Group	9
Voice menu/IVR	16
Paging Group	9
Conference	9
Queue	9

4. Create VoIP trunk to communicate with VoIP provider

There are two types of VOIP trunk in IPPBX: 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 .

4.1 Create VoIP trunks

Go to PBX Settings -> Trunks . Click	+	New VolP Trunk	to add a new VOIP trunk

Туре

Trunk type: SIP,IAX

Trunk Name

A unique label to help you identify the trunk.

Provider Hostname/IP

Hostname or IP of your VoIP provider, SIP default port is 5060 and IAX default port is 4569.

Account Name

The username that your service provider configured

Authuser

The username that your service provider configured for authentication, generally, it's same as Account Name.

Password

The password configured for the user in your service provider side.

Enable Outbound Proxy(Only for SIP Trunk)

Outbound Proxy is a SIP proxy server, it acts, like any proxy server, as a middleman between two communicating agents, serving as a transit point for all SIP traffic. It can be used to solve the SIP one-way-audio issue.

Outbound Caller ID(Only for SIP Trunk)

The Caller ID used when using outbound proxy.

SIP Transport(Only for SIP Trunk)

The transplant protocol type for VoIP data package, default is UDP. Please make sure TCP is enabled in PBX Settings -> SIP Settings before using TCP.

Maximum Outbound Calls

Define the maximum quantity of outbound connections (simultaneous calls) that can be used on this trunk. Inbound calls are not counted in. 0 means no connection limit.

Preferred Code

Set the allowed codec and priority for this trunk.

Call Recording

Check this option to record all exterior calls made by this trunk. User can check the recordings with record account(password is the same with admin).

Ne	w VolP Trunk										
	Туре:	SIP	~]							7
	Trunk Name :	elastix		0	Provider Hos	stname/IP	192.16	8.1.173	: 5060		
	Account Name :	200		0	Authuser :		200				
	Password :	200		0	Call Recording 9						
	Domain :				From User :						
	Enable Outbound Proxy	9									
	Outbound Proxy :		Outbound Caller ID :						≣		
	SIP Transport :	UDP	~	0							
	Maximum Outbound Calls :	100		0							
	Preferred Code :										
	First : a-law 🗸 🗸		Second :	u-law	~		Third :	GSM	~		
	Fourth : G729 🗸 🗸		Fifth :	None	~		Sixth :	None	~		
4	Advance Configuration									•	
						_					_
			🛛 💾 Sav	/e	🛛 A Cancel						~

Advance Configuration

DOD(Direct Outward Dialing Number) Setting

Set the Outbound number for different extensions. For example:



Advance Configuration			_
DOD Setting			
DOD :123456 Associated Exten	sion : 6000		8
DOD Number : 123456	Associated Extension : 6000	~	H Add DOD
	🛛 🎴 Save 🖉 🥕 Cancel		· · · · · · · · · · · · · · · · · · ·



< === Do not set DOD,

The other end of the trunk will show original (interior) extension number.

DOD is set ==== >

The other end of the trunk will show DOD number.



4.2 Check VoIP Trunk Status

After creating trunk, go to **System Status** -> **Trunk Status** to check the SIP trunk Status, make sure it's registered.

elecin		System Status	PB	X Settings	Network Setti	ngs	System Settings	Reports	X Logout
		Туре		Trunk Name		Status		Port/HostName/IP	
General	1	SIP		Elastix		Registere	d	192.168.1.158	
	2	SIP-SIP		IP08		Registered		192.168.1.157	
 Trunk Status 	3	FXO		FXO2		Disconne	oted	PORT2	
Extension Status									Refresh



4.3 Make outbound calls

Go to **PBX Settings** -> **Outbound Routes**, click **I** dd an outbound route.



Outbound Route Name

A unique label to help you identify the outbound route.

Dial Pattern

A filter for marching numbers you dial, the call will be forwarded out via Selected Trunks only when it matches the dial pattern here. In patterns, some characters have special meanings.

X means Any Digits from 0-9

Z means Any Digits from 1-9

N means Any Digits from 2-9

[1234-9] means Any Digits in the brackets (in this example, 1, 2, 3, 4, 5, 6, 7, 8, 9)

. means one or more digits

! 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.

General					
Outbound Route Name :			Elaste	×9	
This place will be replace	d				
Dial Pattern :	2XX		Strip	digits from from	t
Prepend these digits :		before	dialing 🕕		
Password :					
6002(SIP/IAX) 6003(SIP) 6006(SIP) 6007(SIP) 6008(IAX) 6009(SIP/IAX)		 <th>-</th><th>6000(SIP) 6001(IAX) 6102(fxs2)</th><th></th>	-	6000(SIP) 6001(IAX) 6102(fxs2)	
Outbound Trunk Selection					
Available Trunks				Selected Trunks	
FXO3 FXO4 GSM5 GSM7 sv4			-	elastix	1



For example: Once set Dial Pattern: 2XX Strip: 0, that means any calls to 200-299 will be forwarded out. Please do not simply set it to X., otherwise all telephone numbers with 2 or 2+ digits will be matched, this outbound route probably affect your interior calls, unless your local extensions is just a single figure.

Strip: The number of digits that will be stripped from the front of the dialing string before the call is placed via Selected Trunks. See example in Chapter 6.

Prepend these digits: Allows the user to specify digits that are prepended before the call is placed via the trunk. **Password:** Authentication for Selected Extensions before dialing out.

Outbound Extension Selection: Select extensions which can dial out with this outbound route. In my case, only 6000 and 6001 can dial out with this trunk.

Outbound Trunk Selection: Select trunks which calls are forwarded out through.

4.4 Make inbound calls

Go to **PBX Settings** -> **Inbound Routes**, click **I** dd an inbound route.

1) General

Caller ID

Define the Caller ID number to be matched on incoming calls. Leave this field blank to match any or no CID info. Special characters described in chapter 4.3 can be used here as same.

DID number

Define the expected DID number if your trunk passes DID on incoming calls. Leave this blank to match calls with any no DID info. The DID for SIP trunk is usually as same as the account (others can only dial the account number to dial into PBX), then just leave it blank is OK.

Extension

Define the extension for DID number. This field is usually unavailable for most VoIP trunk, if you VoIP provider support DID, you can set it. 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. Up to 100 DID numbers can be set.

For example: Set DID number: 6000-6010, Extension: 6000, All inbound calls to 6000-6010 will be forwarded to extension 6000. Set DID number: 6000-6010, Extension: 6000-6010, inbound calls to 6000-6010 will be forwarded to corresponding extension.



Ac	ld Inbound Route					8
	General					
	Inbound Route Name :	fromElastix		Caller ID :	2XX	9
	DID Number :	200		Extension :		
	Inbound Trunk Selection					
	Available Trunks			Selecte	d Trunks	
	FXO3 FXO4 GSM5 GSM7 sv4 u520		< 1 <	elastix		<
[Time					
	Time Interval :			~		
	Path					
	Destination Type :	Extension	~	Destination :	6000(SIP)	~
	Fax Detection					
	Destination : Faxes	~		6001(IA	X) 🗸	
			Save 🖌	✦ Cancel		

2) Inbound Trunk Selection

Select the trunks for which this inbound route apply.

3) Time

Select appropriate time intervals for when this inbound route apply.

4) Path

Set the destination for incoming calls. If Extension is set, this option will not take effect.

5) Fax Detection

Configure if detecting faxes in this inbound route.

NOTE: Please choose IVR as the destination above before configure fax detection (recommended)

Destination

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

No detect

Do not detect faxs

Faxs

Send faxes to an extension. 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" 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.

5. Create Service Provider to connect two IP PBXes

Service Provider is used to interconnect two IP PBXes, it must be created in both IP PBXes, after setting service provider and outbound route, extensions of each IP PBX can call the other's directly according to the outbound route.

5.1 Create Service Provider

Go to **PBX Settings** -> **Trunks**, Click **I I New Service Provider** to add a new service provider.

Туре

Trunk type: SIP,IAX

Provider Hostname/IP

Hostname or IP of your VoIP provider, SIP Trunk default port is 5060 and IAX Trunk default is 4569.

Provider Name

A unique label to help you identify the service provider.

Call Recording

Check this option to record all calls made by this trunk. User can check the recordings with record

account(password is the same with admin) .

Maximum Outbound Calls

Define the maximum quantity of outbound connections (simultaneous calls) that can be used on this trunk. Inbound calls are not counted in. 0 means no connection limit.

Transport

The transplant protocol type for VoIP data package, default is UDP. Please make sure TCP is enabled in PBX Settings -> SIP Settings before using TCP.

Preferred Code

Set the allowed codec and priority for this trunk.

Advance Configuration

DOD(Direct Outward Dialing Number) Setting

Set the Outbound number for different extensions. Detailed example can be found in Chapter 4.1.

atcom

Type :	SIP 🗸	Provider Hostname/IP :	192.168.1.78	: 5060	
Provider Name :	elastix	Call Recording 🕕			
Maximum Channels :	100	Transport :	UDP	~ 9	
Preferred Code :	First :	a-law 🗸	Second : u-law	✓ Third : GSM	~
	Fourth :	G729 🗸	Fifth : None	✓ Sixth : None	~
lvance Configuration					

5.2 Check Service Provider Status

After setting service provider in the other PBX, the status will become to Registered.

alcom		System Status	PB	X Settings	() Network Setti	ngs	System Settings	Ç Reports	S Logout
		Туре		Trunk Name		Status		Port/HostName/IP	
General		SIP		Elastix		Registere	d	192.168.1.158	
	2	SIP-SIP		IP08		Registere	d	192.168.1.157	
> Trunk Status	3	FXO		FXO2		Disconnected		PORT2	

5.3 Make outbound calls

Go to **PBX Settings** -> **Outbound Routes**, click **to** add an outbound route.

The setting here is as same as that for SIP trunk, please refer to Chapter 4.3 to set it.



ld Outbound Route			3					
General								
Outbound Route Name :		toIP08						
This place will be replaced.								
Dial Pattern :	9XX	Strip digits fro	m front					
Prepend these digits : before dialing								
Password :								
Available Extensions 6002(SIP/IAX) 6003(SIP) 6006(SIP) 6007(SIP) 6008(IAX) 6009(SIP/IAX)		6001(IAX) → 6101(fxs1)						
Outbound Trunk Selection								
Available Trunks		Selected Trunks						
FXO3 FXO4 GSM5 GSM7 elastix sv4		•	~					

Then 6000/6001 can dial 900-999 to corresponding extension (900-999) in other end directly.

5.4 Make inbound calls

Go to **PBX Settings** -> **Inbound Routes**, click **I** to add an inbound route.

Even there is no inbound route set, two IPPBXes can communicate with each other, however we can make it more functional with setting DID to those differ from local extensions.

Example 1: DID + Extension--Make calls more easier.

DID: 00-03 Extension: 6000-60003

Extensions from other end can dial 6000-6003 extension directly to reach these extensions, besides, they can dial 00-03 to reach them if their outbound route allow. In this case, Path is of no use.



Add Inbound Route					8
General					
Inbound Route Name :	IP08	9	Caller ID :		9
DID Number :	00-03	9	Extension :	6000-6003	9
Inbound Trunk Selection					
Available Trunks			Sel	lected Trunks	
FXO4 GSM5 GSM7 elastix sv4 u520			IP08		2
Time					
Time Interval :			~]	
Path					
Destination Type :	End Call	~	Destinatio	n :	~
Fax Detection					
Destination : Custom E	mail 🗸		60	002(SIP/IAX)	
		Save	✦ Cancel		

Example 2: DID + Path--Forward calls to other applications.

DID: 6600 Path: Ring Group

Extensions from other end can dial local extensions directly, besides, they can dial 6600 to reach the destination set in Path. In this case, they can dial 6600 to reach the ring group.



Add Inbound Route			8
General			
Inbound Route Name :	IP08	Caller ID :	
DID Number :	6600	Extension :	
Inbound Trunk Selection			
Available Trunks		Selected Trunks	
FXO4 GSM5 GSM7 elastix sv4 u520		IP08	2
Time		Ľ	
Time Interval :		~	
Path			
Destination Type :	Ring Group 🗸	Destination : 6600	~
Fax Detection			
Destination : Faxes	~	6001(IAX)	
	Save Save	A Cancel	

6. Make outbound/inbound calls to/from GSM network

6.1 Make sure GSM modules are installed

If there are GSM modules installed in your IPPBX, IPPBX configures GSM Trunk automatically when they are detected.



alcom	System Status	2+ PBX Settings	Network Settings	Ö System Settings	Reports	X Logout				
Extensions	Analog Trunk :									
> Trunks	C Refresh									
Inbound Routes	Trunk Name		Port		0	peration				
Outbound Routes			Sorry, no data ex	ist!						
Feature Codes	GSM Trunk :									
IVR	() Refresh									
	Trunk Name		Port		0	peration				
Hunt/Ring Group	1 GSM5		5			Edit				
Conference	2 GSM7		7			Edit				

NOTE: Before using them, please make sure GSM SIM card has been inserted (success) and registered. The connection can be checked in **System Status** -> **Trunk Status**

alcom		System Status	PB	X Settings	() Network Setti	ngs	System Settings	Reports	X Logout
		Туре		Trunk Name		Status		Port/HostName/IP	
General	1	SIP-SIP		u520		Register	ed	192.168.1.160	
	2	GSM		GSM5		Success		PORT5	
> Trunk Status	3	GSM		GSM7		Failed(Unplugged Simcard)		PORT7	
Extension Status									Refresh

6.2 Make outbound calls

Go to **PBX Settings -> Outbound Routes**, click **Add** to add an Outbound route.

Outbound Route Name

A unique label to help you identify the outbound route.

Dial Pattern

A filter for marching numbers you dial, the call will be forwarded out via Selected Trunks only when it matches the dial pattern here. In patterns, some characters have special meanings.

X means Any Digits from 0-9

Z means Any Digits from 1-9

N means Any Digits from 2-9

[1234-9] means Any Digits in the brackets (in this example, 1, 2, 3, 4, 5, 6, 7, 8, 9)

. means one or more digits

Strip: The number of digits that will be stripped from the front of the dialing string before the call is placed via Selected Trunks.

For example: If set Dial Pattern: 9, Strip: 1, Prepend 123, user need to dial 94567 to dial PSTN number 1234567

Prepend these digits

Allows the user to specify digits that are prepended before the call is placed via the trunk.

Password

Authentication for Selected Extensions before dialing out.

Outbound Extension Selection

Select extensions which can dial out with this outbound route. In my case, only 6000,6001 can prefix 9 to dial out.

Outbound Trunk Selection

Select trunks which calls are forwarded out through. If there are more than one GSM trunk chose, PBX will try to dial out through next trunk if the previous one failed.

dd Outbound Route					
General					
Outbound Route Name : toGSM					
This place will be replaced	I				
Dial Pattern :	9.	Strip	1	digits from front	
Prepend these digits :	be	fore dialing 🕛			
Password :	123)			
Available Extensions 6003(SIP) 6006(SIP) 6007(SIP) 6008(IAX) 6009(SIP/IAX) 6102(fxs2)		>> 1 L <	Selected Extension 6001(IAX) 6002(SIP/IAX) 6101(fxs1)	15	
Outbound Trunk Selection					
Available Trunks			Selected Trunks		
FXO3 FXO4 GSM7 IP08 elastix sv4		>> 1 + ~	GSM5	2	
	Save	A Cance	ł		

6.3 Make inbound calls

Go to PBX Settings -> Inbound Routes, click Add to add an inbound route. Just setting Selected Trunks

and Path is OK.

1) General

Caller ID



Define the Caller ID number to be matched on incoming calls. Leave this field blank to match any or no CID info. Special characters described in chapter 5.2 can be used here as same.

DID number

Just leave it blank.

Extension

It's unavailable for Analog / GSM trunk, leave it blank.

2) Inbound Trunk Selection

Select the trunks for which this inbound route apply.

3) Time

Select appropriate time intervals for when this inbound route apply.

4) Path

Set the destination for incoming calls.

5) Fax Detection

Configure if detecting faxes in this inbound route.

NOTE: Please choose IVR as the destination above before configure fax detection (recommended)

Destination

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

No detect

Do not detect faxs

Faxs

Send faxes to an extension. 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" 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.



Add Inbound Route					8
General					
Inbound Route Name :	fromGSM	9	Caller ID :		
DID Number :	Lea	📌 them bla	ar <mark>ak</mark> tension :		9
Inbound Trunk Selection	1				
Available Trunks			Selected	Trunks	
FXO4 GSM7 IP08 elastix sv4 u520	 × 	>> 1 ×	FX03 GSM5		
Time					
Time Interval :			~		
Path					
Destination Type :	IVR	~	Destination :	6680	~
Fax Detection					
Destination : No Detect	t v			~	
		Save	Cancel		

7. Inbound Call Control

7.1 Time Interval

Set the Time Interval for inbound route.



Ac	ld Time Intervals			8
	Time Interval Name :		lunchbreak	
		۲	By day of week	
			Mon 💌 to Fri 💌	
		0	By Days of a Month	
			Date: 1 🗸 to 1 🗸 Month: January 🗸	
	Time:		Entire Day	
			Start Time: 11:45 AM End Time: 01:30 PM	
			Save 🖊 Close	

7.2 Hunt / Ring Group

This defines a 'virtual' extension that rings a group of phones simultaneously / one by one, stopping until any one of them is picked up.

Edit Hunt/Ring Group : 6600)		8
Ring Group Name :	6600	Ring Group Number :	6600
Ignore Call Forward 🏮	Enable MOH 🌗	Music On Hold :	×
Ring Mode :	🔿 Parallel 🚺 💿 Serial 🊺		
Ring interval :	20		
Ring group members : 🌗	Available Extensions : 6002(SIP/IAX) 6003(SIP) 6006(SIP) 6007(SIP) 6008(IAX)	>> 	Selected Extensions : 6000(SIP) 6001(IAX)
No answer forward to :	End Call	✓ ①	

Ignore Call Forward

By default, if there is call forward enabled in IP phone, IPPBX will call that forwarding number. when this option is checked, IPPBX will ignore that call forward setting.

Enable MoH



When MoH is choose, caller will hear MoH other than ring tone.

Parallel

Ring all the members at the same time.

Serial

Ring all the members one by one.

No answer forward to

Set the failover destination if there is no answer.

7.3 Queue

Usually used in Call Centre to queue customers for the next available operator.

1) General

Queue Name

Name of the queue

Queue Number

Extension number of the queue, dial it to get into the queue

Queue Password

Used as authentication for users before being dynamic agent.

Queue Agent Timeout

Ring timeout in seconds when calling an agent

Queue Max Wait Time

The maximum time in seconds for a caller can wait in the queue before being pulled out. (0 means unlimited)

Queue Ringing Strategy

Strategy for IPPBX ring the agents.

RingAll: Ring all available agents simultaneously until one answers.

LeastRecent: Ring agents which was least recently called.

FewestCalls: Ring agents with the fewest completed calls.

Random: Ring agents in a random way.

RRmemory: Round robin with memory, remembers where it left off in the last ring pass.

2) Agents

Select Static Agent here. there are two kinds of agents:

Static Agent: chose here

Dynamic Agent: users can dial 'Queue number + *' to log in as dynamic agent, and 'Queue number + **' to log out.

In this case, users can dial 6900* to being a dynamic agent (need to enter password 123), and 6900** to log out.

3) Caller Position Announcement

Announce queue position and / or estimated hold time to caller

4) Period Announcement

This allows a message like "Thank you for holding, your call is important to us." to be played at regular intervals while a caller is in the queue

NOTE: The key point with announcements is that they are only played within the timeout/retry period set on the queue. For the most part this works OK as when all queue members are busy/unavailable, the timeout/retry period is effectively ignored (i.e. you can consider the queue to always be in this state) and announcements will be played as per your setting of the announce-frequency and periodic-announce-frequency parameters. When a handset is available and the queue is ringing it, the timeout/retry timeouts become critical. For example, if you want announcements every 20 seconds, but the timeout is set to 60 seconds, when a queue member is ringing, you will only ever get announcements every 60 seconds.

5) Event

This allows callers waiting in the queue to dial a key to go to other destination.

6) Failover Destination

This define the failover destination for callers when the max wait time is up.

7) Others

Music On Hold

Select Music On Hold Class for this Queue

Leave When Empty

This option controls whether calls 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 logged in, or if all logged in agents are unavailable.

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 three options:

Yes: Callers can join a call queue with no agents or only unavailable agents.

No: Callers cannot join a queue with no agents or if all agents are unavailable.

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

How long does IPPBX wait before trying all the members again.

Wrap Up Time

After a successful call, how long to wait before sending a potentially free member another call.



Edit Call Queue : 6900					8
General					
Queue Name :	6900		Queue Number :	6900	
Queue Password :	1234	0	Queue Agent Timeout :	45	
		•			
Queue Max Wait Time :	1800	•	Queue Ringing Strategy :	Ring All	<u>~</u>
Agents					
Available Agents :			Selected Agents :		
6002(SIP/IAX) 6003(SIP)	^	>	600 T(IAX)		<u>~</u>
6006(SIP) 6007(SIP)		-	0101(001)		
6008(IAX)	<u>~</u>	<	<		~
Caller Position Announceme	nt				
Announce Position :	Yes	~	Announce Holdtime :	Yes	~
Frequency :	15s	~			
Period Announcement					
Prompt : hello-	world 🗸		Frequency :	40s 🗸]
Event					
Key: * ~	Action :	End Call	✓ Destinatio	n :	~
Failover Destination					
Action : End C	all 🗸		Destination :	0 ~]
Others					
Music On Hold : de	fault	~ 0	Leave When Empty :	No	~ 9
Join Empty :	18	~ \rm 🕘	Agent Announcement :	hello-world	~ (
Join Announcement : he	ello-world	~ 0	Retry :	30	
Wrap Up Time : 30)				
		Save	A Cancel		

7.4 IVR

Callers are presented with a recorded menu and respond by selecting a digit or, in some cases, by entering an extension number. The automated attendant eliminates the need for a live operator to handle the call.

atcom

IVR : 6680				
VR Name :	6680		IVR Number :	6680
Key Timeout :	3		Repeat Count :	3 🗸 times 🌗
Prompt :	hello-world	~	Custom Prompt	
Allow Dialing of Other	r Extensions 🌗			
Press 0 to trigger :	Extension	~	6001(IAX)	~
Press 1 to trigger :	Voice Mail	~	6000(SIP)	~
Press 2 to trigger :		~		~
Press 3 to trigger :		~		~
Press 4 to trigger :		~		~
Press 5 to trigger :		~		~
Press 6 to trigger :		~		~
Press 7 to trigger :		~		~
Press 8 to trigger :		~		~
Press 9 to trigger :		~		~
Press * to trigger :		~		~
Press # to trigger :		~		~
No Entry Forward to :	No Action	~		~ 9
Invalid Forward to :	No Action	~		v 9

Voice Menu Name

Name of the Voice Menu

Voice Menu Number

Extension number of the voice menu, dial it to get into the voice menu

Key Timeout

How long for IPPBX to wait user's input

Repeat Count

How many times to play prompt

Allow Dialing of Other Extensions

Allow dialing local extensions



Key Press Event

Dial digit to trigger corresponding event

No Entry Forward to

The destination for incoming call if there is none input

Invalid Forward to

The destination for incoming call if there is invalid input

7.5 DISA

DISA (Direct Inward System Access) allows someone calling in from outside to obtain an "internal" system dialtone and dial out as if a local extension.

General	
DISA Name : toPSTN PIN # :	
Response Timeout : 10 Digit Timeout : 10	
Outbound Routes	
Outbound : Add	
Outbound : Add	
Save Cancel	

1) General

DISA Name

A name for the DISA

PIN

When caller get into the DISA, this password is needed to put before making calls.

Response Timeout

The maximum time in seconds IPPBX will wait for input from a user.

Digit Timeout

The maximum time allowed between entry of digits. If exceeded, user input is deemed to have finished.

2) Outbound Trunks

Choose the outbound route that callers can use to dial out.



For example: Both City A and B have a IPPBX, IPPBX-A and IPPBX-B, they are connected with SIP trunk, and IPPBX-A has GSM trunk to connect GSM network and outbound route for that, DISA can be used as below:

- 1. Create a DISA in IPPBX-A including the GSM trunk.
- 2. Set it as the destination of inbound route for SIP trunk.

After users of IPPBX-B dial into DISA application in IPPBX-A, The DISA application in turn requires the user to enter his passcode, followed by the pound sign (#). If the passcode is correct, the user will hear dialtone on which a outbound call may be placed, so there is no long distance call fees.

7.6 Call Back

A callback will hang up on the caller and then call them back, directing them to the selected destination. This is useful for reducing mobile phone charges as well as other applications. Outbound calls will proceed according to the dial patterns in Outbound Routes

Add Callback			(
General			
Callback Name :		Callback Number :	
Delay Before Callback :	0	Call Recording	
Path			
Destination Type :	~	Destination :	×
	Save /	🕈 Cancel	

Callback Name

A name for the Callback

Callback Number

Enter the number to dial for the callback. Leave this blank to just dial the incoming Caller ID Number.

Delay before Callback

Enter the number of seconds the system should wait before calling back.

Call Recording

Check this option to record all calls made by this Call back. User can check the recording with record account(password is the same with admin).

PATH

Choose the destination which IPPBX will bridge to caller.

For Example:

1. Set Callback:

Edit Callback : GSM				
General				
Callback Name :	GSM	Callback Number :		
Delay Before Callback :	6	Call Recording		
Path				
Destination Type :	Extension 🗸	Destination :	6003(SIP/IAX)	
Save Acancel				

2. Set inbound route for GSM trunk:

Edit Inbound Route : fGSM			8
General			
Inbound Route Name : fGSM		Caller ID :	
DID Number :		Extension :	
Inbound Trunk Selection			
Available Trunks		Selected Trunks	
GSM3 GSM5 GSM7 sv4	× 1 ×	GSM1	
Time			
Time Interval :		~	
Path			
Destination Type : Callbac	ck 🗸	Destination : GSM	~
Fax Detection			
Destination : No Detect V		~	
	Save 🖌	→ Cancel	

atcom

3. Dial into IPPBX from mobile number, and hang up immediately once the call is connected. Then IPPBX dial extension 6003, after 6003 answer the call, IPPBX dial caller and bridge them.

7.7 Inbound to Outbound

Outbound Routes can act as destination in Inbound route settings, it let two ends connecting to IPPBX with trunk communicate directly.

7.7.1 GSM trunk to SIP trunk

1. Set outbound route for SIP trunk.

Edit Inbound Route : fgsm	8
General	
Inbound Route Name : fgsm	Caller ID :
DID Number :	Extension :
Inbound Trunk Selection	
Available Trunks	Selected Trunks
FX01 FX02 u520 sv4 GSM5	GSM7
Time	
Time Interval :	~
Path	
Destination Type : Outbound Routes V Destination :	tosv4 Vumber : 202
Fax Detection	
Destination : No Detect	~
Save	A Cancel

2. Set Inbound route for GSM trunk.

Destination

Choose the p	roper SIP trunk
--------------	-----------------

Number

Set a number on the other end of SIP trunk. it must be set.

3. Dial into IPPBX from GSM, then IPPBX will dial 202 through SIP trunk.

7.7.2 SIP trunk to GSM trunk

1. Set outbound route for GSM trunk.

Edit Inbound Route : fsv4	8
General	
Inbound Route Name : fsv4	Caller ID :
DID Number :	Extension :
Inbound Trunk Selection	
Available Trunks	Selected Trunks
FX01 FX02 GSM7 u520 GSM5	sv4
Time	
Time Interval :	~
Path	
Destination Type : Outbound Routes V Destination :	tgsm 🗸 Number :
Fax Detection	
Destination : Custom Email	300(SIP/IAX)
Save	A Cancel

2. Set Inbound route for SIP trunk/Service Provider. Since service provider is more flexible, here we use Service Provider as an example

Destination

Choose the proper GSM trunk

Number

Set a number on the other end of GSM trunk. it can be blank, then it means the number caller dialed.



3. Dial into IPPBX from SIP trunk, e.g. 83018618, then IPPBX will dial that number through GSM trunk selected in GSM outbound route.

7.8 Custom Dialplan

Click Click

user

This file aimed at defining a "user". It can define a user with an optional SIP phone, IAX2 phone, Dahdi phone and/or just about any other type of phone.

dialplan

This file contains the "dial plan" of Asterisk, the master plan of control or execution flow for all of its operations. It controls how incoming and outgoing calls are handled and routed. This is where you configure the behavior of all connections through IPPBX.

dahdi

Asterisk cmd DAHDILookup configuration.

NOTE: You must prefix custom_ to your custom file and context to avoid conflict with the system file,users.conf,extensions.conf and chan_dahdi.conf.

CI	noose a file		8
	Custom Dialplan type :	×]
	Choose a file :	Browse_ No file selected.	
	🔔 Upload	A Cancel	

7.9 Blacklist

Block incoming calls from specified numbers

If a number in blacklist dial into IPPBX, caller will hear following prompt: "Then number you have dialed is not in service. Please check the number and try again." Then system will then disconnect the call.

7.10 SIP Settings

1) General

UDP Port

Set the SIP port (UDP) which IPPBX is listening to.

Enable TCP

Enable TCP protocol for SIP.

TCP Port

Set the SIP port (TCP) which IPPBX is listening to.

Registration / Subscription Time Max

Maximum duration in seconds of a SIP registration / subscription.

Registration / Subscription Time Min

Minimum duration in seconds of a SIP registration / subscription.

RTP Port Min / Max

Set the RTP port range.

DTMF Mode

Set the default DTMF mode

General						
UDP Port :	5060	Enable TCP 🚺 TCP Port :	5060			
Registration/Subscription Time Max :	3600	Registration/Subscription Time Min :	60			
RTP Port Max :	20000	RTP Port Min :	10000			
DTMF Mode :	rfc2833 🗸 🗸	Video Support :	yes 🗸 🎝			

2) NAT

Here provide other two solutions for SIP one-way-audio issue besides outbound proxy. Using any one is OK. a. STUN

Just setting STUN server / port is OK.

There are many public STUN server on Internet: http://www.voip-info.org/wiki/view/STUN

NAT					
Enable STUN : 🗹 🏮					
STUN Server :	stun.sipgate.net	STUN Port :	10000		
External IP Address :		External Host :	9		
External Refresh Interval :		NAT Mode :	v 9		
Local Network Identification :		Allow RTP Reinvite :	no 🗸 🌒		

b. NAT

NAT			
Enable STUN : 🗖 🏮			
STUN Server :		STUN Port :	
External IP Address :		External Host :	atcomtest.f3322.org
External Refresh Interval :	10	NAT Mode :	yes 🗸 🗸
Local Network Identification :	92.168.1.0/255.255.255.0	Allow RTP Reinvite :	nonat 🗸 🕽

The External IP, External Host and Local Network Identification settings are used if you use IPPBX behind a NAT device to communicate with services on the outside.

External IP address

Address that we're going to put in outbound SIP messages if we're behind a NAT. The externip and localnet is used when registering and communicating with other proxies that we're registered with.

External Host

Alternatively you can specify an external host, and IPPBX will perform DNS queries periodically. Not recommended for production environments! Use External IP instead.

External Refresh Interval

How often to refresh External Host if used.

NAT Mode

Global NAT settings (Affects all peers and users), is used when Asterisk is on a public IP, communicating with devices hidden behind a NAT device (broadband router). If you have one-way audio problems, you usually have problems with your NAT configuration or your firewall's support of SIP+RTP ports.

Local Network identification

You may add multiple local networks. A reasonable set of defaults are set here.

Allow RTP Reinvite

By default, Asterisk tries to re-invite the audio to an optimal path. If there's no reason for IPPBX to stay in the media path, the media will be redirected. This does not really work with in the case where IPPBX is outside and have clients on the inside of a NAT. In that case, you want to set this option to no nat.



7.11 IAX Settings

UDP 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.

elicom	System Status	2+ PBX Settings	() Network Sett	Dings System Settings	Reports	S Logout
Extensions	General					
Trunks	UDP Port : 🕕	4569		Bandwidth : 💶	low	~
Inbound Routes	Minimum Registration/Subs	cription Time : 🚺 🛛 60		Maximum Registration/Subscription	1200	
Outbound Routes						
Feature Codes				ve		

8. Audios

8.1 Music On Hold

Manage audio files for Music On Hold, the format should be .WAV (16 bit, mono 8000 Hz) and .GSM, the size should less than 4 MB.

Mu	Music On Hold List						
4	🕹 Upload MOH						
	Name	Operation					
1	default	Play Delete					

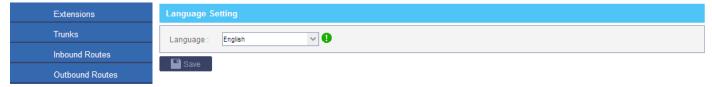
8.2 Custom Prompts

Manage prompts used for Voice Menu. It can be recorded by extensions or uploaded from local PC, the format should be .WAV (16 bit, mono 8000 Hz) and .GSM, the size should less than 4 MB

Cu	Custom Prompts :					
÷	🕂 Record New Prompt 🕹 Upload a Prompt					
	Name	Operation				
1	hello-world	Record Again Play Download Delete				
2	intro	Record Again Play Download Delete				

8.3 Language Setting

Set the language of default system prompt audio, English is supported by default. French, Italian, Russian and Spanish need to be download from Internet when chose at the first time. Make sure gateway is right set so that IPPBX can access Internet.



9. Network Settings

Description of LAN, WAN and DHCP server settings can be found in Chapter 2. All network settings will take effect immediately when you save the change.

9.1 Web Access

Choose the web access protocol and port for web server here. HTTP and HTTPs are both supported, default port is 80 and 443 respective.

elicom	System Status	L+ PBX Settings	Network Settings	System Settings	Reports	X Logout
Web Access	Web Access Setting					
	Web Access Mode :	⊙http Ohttp	PS			
WAN	HTTP Port :	80]0			
LAN	HTTPS Port :		9			
	Save 📌 Reset					

9.2 Firewall

Firewall is used to prevent unauthorized connections.

1) Enable Firewall

Check it to enable firewall.

2) Common Rule

Accept/Drop the connections from remote hosts.

Name

A name for the rule.

Description

Simple description for the rule.

Protocol

Set the protocol type for connection.

Port



Set the destination port range for connection. The main protocols and default ports IPPBX uses for each application are list below:

НТТР	TCP:80
HTTPS	TCP:443
SIP	UDP:5060
SIP	TCP:5060
RTP	UDP:10000-20000

IP

Set source IP of connection.Format of IP: IP/mask

For example:

192.168.1.156/255.255.255.255 for IP 192.168.1.156

216.207.245.47/255.255.255.255 for IP 216.207.245.47

192.168.1.156/255.255.255.0 for network 192.168.1.0/24

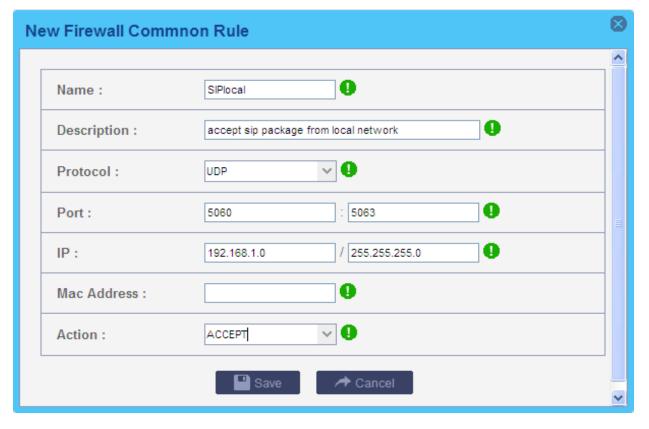
Mac Address

Set source Mac of connection. Either IP or Mac Address must be set.

Action

Accept: Accept the access from remote hosts.

Drop: Drop the access from remote hosts.



3) Auto Defense

Limit connections from remote hosts.

Port



Set the destination port range for connection.

Protocol

Set the protocol type for connection.

Rate

The maximum packets or connections can be handled per second

Ne	ew Auto Defei	nse Rule	
			^
	Port :	80	
	Protocol :	TCP 🗸 📭	=
	Rate :	50 / Second V	
		Save Acancel	~

4) SIP Defense:

Limit connections to SIP port from remote hosts.

Port

Set the destination port range for connection.

Protocol

Set the protocol type for connection.

SIP Packets

The maximum packets can be handled per time interval.

Time Interval

Time unit which IPPBX uses to manage IP packets received.

Ne	New SIP Defense Rule						
	Port :	5060	Protocol :	UDP	~		
	SIP Packets :	200	Time Interval :	1	seconds		
Submit 🖉 Cancel							

5) Other Options

Disable Ping

Check this to drop ping packets from remote hosts.

Drop All



Check this to drop all packets or connection from other hosts if there are no other rules defined.

6) Firewall Setting Example :

Fi	Firewall setting									
V E	Enable Firewall									
Co	Common Rule									
+	+ New Rule									
	Action	Name	Protocol	IP		Mac Address	Pe	ort	Ope	ration
1	ACCEPT	SIPlocal	UDP	192.168	.1.0/255.255.255.0		50)60:5063	Edit	Delete
2	ACCEPT	SIPprovider	UDP	216.207	.245.47/255.255.25	5.255	50	060:5063	Edit	Delete
3	DROP	dropothers	UDP				50	060:5063	Edit	Delete
Αι	ıto Defense									
+	New Rule									
	Port			Protocol		Rate			Operatio	1
1	80			ТСР		50		Edit Delete		lete
SI	P Defense									
Ŧ	+ New Rule									
	SIP Packets Time in Seconds Operation									
1	1 200 1 Edit Delete									
Ot	Other Options									
[Disable Pin	g				Drop All				

9.3 Port Forwarding

When IPPBX works as a router, it can forward connections to WAN to a device connected to LAN network.

Ne	ew Port Forwa	ard			8
	WAN Port :	8088	LAN IP :	192.168.10.2	
	LAN Port :	80	Protocol :	TCP	
		📃 💾 Subi	mit 📃 🏕 C	ancel	

For example: user can access 192.168.10.2:80 (connected to LAN) by accessing xx.xx.xx.8080 (xx.xx.xx.xx is the IP of WAN)

9.4 DDNS



Dynamic Domain Name Service (DDNS) is a service used to map a domain name to the dynamic IP address of a network device. IPPBX support 4 DDNS servers below, please go to the website of below servers and apply a domain name then fill related information here.

dyndns.org

dyndns.org

qdns

www.zoneedit.com

Enable DDNS : Yes DDNS Server : dyndns.org Password : ••••••• Hostname : atcomtest.f3322.org	DDNS Setting		
	Enable DDNS :	Yes	
Password : Hostname : atcomtest.f3322.org	DDNS Server :	dyndns.org	User Name : voipadmin
	Password :	•••••	Hostname : atcomtest.f3322.org

9.5 VLAN

A VLAN (Virtual LAN) is a logical local area network (LAN) that extends beyond a single traditional LAN to a group of LAN segments, given specific configurations. Both WAN and LAN support 2 VLANs.

elecon	System Status	2 + PBX Settings	() Network S		System Settings	Reports	X Logout
Web Access	VLAN over WAN						
	No. 1 :			No. 2 :	V		
WAN	VLAN ID : 100)		VLAN ID :	200		
LAN	VLAN IP : 192	2.168.100.100		VLAN IP :	192.168.200.100		
	VLAN Subnet Mask : 255	5.255.255.0		VLAN Sub	net Mask : 255.255.255.0		
DHCP Server	Default Gateway : 192	2.168.100.1		Default Ga	iteway : 192.168.200.1		
Firewall	VLAN over LAN						
	No. 1 :			No. 2 :			
Port Forward	VLAN ID :			VLAN ID :			
DDNS	VLAN IP :			VLAN IP :			
	VLAN Subnet Mask :			VLAN Sub	net Mask:		
> VLAN	Default Gateway :			Default Ga	iteway :		
VPN	Submit						

9.6 VPN

A virtual private network (VPN) extends a private network across a public network, such as the Internet. It enables a computer to send and receive data across shared or public networks as if it were directly connected to the private network, while benefitting from the functionality, security and management policies of the private network.

This is done by establishing a virtual point-to-point connection through the use of dedicated connections, encryption, or a combination of the two. Currently, only PPTP is supported.

VPN Setting	
Enable VPN	
VPN Type :	PPTP V
VPN Server :	bijou.tenacy-free.com
User Name :	tenacy
Password :	91706
Save	

10. System Settings

10.1 Change Password

Change the password for admin login, it will take effect immediately.

elteoni	System Status	PBX Settings	Network Settings	System Settings	پے Reports	S Logout
Change Password	Change Password					
	New Password :					
Auto Provisioning	Retype New Password :					
Data 0.0 Terra	Save					

10.2 Auto Provisioning

IPPBX can only configure ATCOM AT8XX serials IP phone via DHCP + TFTP way and SIP Subscribe + Notify way. Make sure your AT8XX IP phone is using the latest firmware.

NOTE: DHCP + TFTP way can only be used when IPPBX is act as router and DHCP. User should reboot the phone manually after the configuration on web page.

10.2.1 Auto Provisioning

1) Phonebook

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

Add

Name: Input the name of this contact.

Type: These are two types: Directory and Blacklist.

Number: Input the number here.

A	ld Phone Book Rule		
	Name :		
	Туре :	~	
	Number :		
		Save Acancel	

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.

2) Ring Tone

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

NOTE: Ring tone must be wav file, 8k sampling rate, 8 Bit u-law compression. File size should < 200Kbytes.

3) Firmware

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

NOTE: the file format must be .fw

10.2.2 Configured Phones Create New Phone

Enable Enable auto provisioning for this phone Phone Type Choose the Phone Type



MAC Address

Input the MAC address for the phone

New Version

Make sure your phone is with the newest version. If yes, IPPBX will generate the configuration file for IP phone.

Manufacturer

Choose the manufacturer.

DND

Enable or Disable DND.

Call Waiting

Enable or Disable Call Waiting.

Auto Answer

Enable or Disable Auto Answer.

Phone book

Enable or Disable Phone book update .If this option is checked, you must add or upload phone book first.

New Configured Phone							
General							
Enable :	Yes 🗸		Phone Type :	AT820 V			
MAC Address :	80:82:87:01:04:D2		New Version :	Yes 🗸			
Manufacturer :	ATCOM V		DND :	Disabled V			
Call Waiting :	Enabled V		Auto Answer :	Disabled V			
Phone Book :	Enabled V		Ring Tone :	Enabled V			
Firmware :	Disabled V		Firmware Version :				
Line							
line1 Extension :	¥	Display	Name :	Line Active :			
✓ line2 Extension :	6007 🗸	Display	Name : Robin	Line Active :	<		
	🛛 🔛 Sa	ave	A Cancel				

Ring Tone

Enable or Disable Ring Tone. If this option is checked, you must upload phone book first.

Firmware

Enable or Disable Firmware update. If this option is checked, you must upload firmware first.

Firmware version

If Firmware option is enable, you must input the correct firmware version here.

NOTE: If the firmware version is different from the one you're going to load in IP phone, it will cause problems in IP phone.

Line

You can configure the line key settings for this IP phone.

10.2.3 Unconfigured Phones

In this section, IPPBX will scan all the supported IP phones and display here, you can click the 'Edit' button of IP phone and input the corresponding information in the pop-up window.

0	Scan 🥒 Modify Selected P	hones			
	MAC Address	Manufacturer	Opera	ation	
1	80:82:87:00:C4:48	ATCOM	Edi		
2	80:82:87:01:04:D6	ATCOM	Edi	t	
3	80'82'87'01'09'A8	ATCOM	Edi		
e١	w Configured Phone				
	General				
	General				
	Enable :	Yes 🗸	Phone Type :	AT840 V	
		Yes ✔ 80:82:87:00:C4:48	Phone Type : New Version :	AT840 V	
	Enable :				
	Enable : MAC Address :	80:82:87:00:C4:48	New Version :	No V	
	Enable : MAC Address : Manufacturer :	80:82:87:00:C4:48	New Version : DND :	No V Disabled V	

10.2.4 Upload Phone Configure

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

NOTE: the file format must be .xml.

10.3 Date && Time

Set the date and time for IPPBX. The settings will take effect immediately.

1) General

There are two ways to set Date/Time for IPPBX:

a. NTP server

Make sure the connection between IPPBX and NTP server is OK, if the NTP server is located on Internet, the gateway of WAN should be right set so that IPPBX can access Internet.

GMT TimeZone is also an important arguments for time setting in this way. Please choose the right Time Zone.

b. Manually



General				
GMT TimeZone :	+8 China(Beijing)			
NTP Server :	pool.ntp.org			
O Set Date&Time Manually :				
Daylight Saving Time				
Daylight Saving Time :	Disabled 🗸			
Daylight Saving Time Rule :				
🗖 Qaya 🛛 🌧 Cancel				

2) Daylight Saving Time

There are two ways to set DST:

a. Automatic

Just making sure GMT Time Zone is right set is OK. There have already DST setting in each Time Zone.

b. Manually

However, the DST in some countries is changing every year. If the DST setting in Time Zone is not exact.

Please set it manually, the format should be: start=start_time;end=end_time;save=offset

The rule for start / end time is: month/mday/wday/hour:min:second

1<= month <=12 , 0< mday <=31 , 0<= wday <7

month/mday/wday means the first wday coming after month/mday

for example:

start=4/1/7/0:0:0;end=10/31/7/0:0:0;save=1 means IPPBX time from the first Sunday coming after April 1th to the first Sunday coming after October 31th will be one hour early.

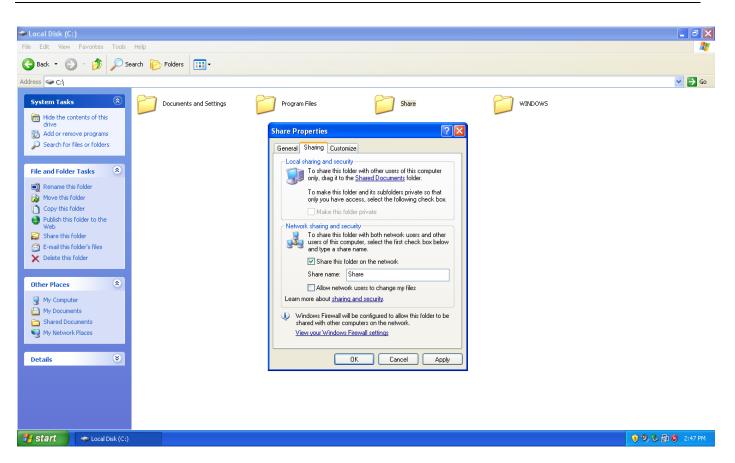
10.4 External Storage

The External Storage feature is used to extend storage space. Once configured, the files (voicemail/Call recording (>60M) / CDR(>5M)) created before the configured days will be moved to the Net-Disk.

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

- 1. Choose a window-based computer that is always in service
- 2. Create a folder
- 3. Share this folder

atcom



4. Set External Storage

Net-Disk Host/IP

IP of the PC

Net-Disk Share Name

The name of the share folder

Net-Disk Access User Name

Account in that PC

Net-Disk Access Password

Password for the account, if there is no password required, leave it blank.

Backup Period

How often PBX move its voicemail/call recording/CDR data to PC

Move Files Created Before days ago

Choose what files should be move to PC according to their creation time. 0 means immediately. Note that even 0 is set, the size of call recording must be more than 60 M, that of CDR must be 10M. Then IPPBX will move them to PC.



Change Password	Net Disk Settings			
Ŭ.	Net-Disk Host/lp :	192.168.1.156		
Auto Provisioning	Net-Disk Share Name :	Share		
Date && Time	Net-Disk Access User Name :	user		
	Net-Disk Access Password :	•••••		
 External Storage 	Backup Period :	30 v minutes		
Firmware Upgrade	Move Files Created Before :	30 v days ago		
	Save			

10.5 Firmware Upgrade

Firmware for IPPBX There are two ways to upload Kernel / Application for IPPBX:

1) HTTP

Upload them from local PC. It will reset IPPBX to factory default settings by default.

2) TFTP

Upload them from TFTP server, the Kernel / Application must be located in base directory of TFTP server.

Firmware Upgrade							
Note: If you select the http mode when upgrading kernel, the config will be erased automatically!							
Image Type :	 Application 	O Kernel					
Upgrade Method :	Онттр	● TFTP	Reset Config :				
Server :			File :				

Upgrade

Choose Reset Config will reset the configuration.

10.6 Backup and Restore

1) Backup

Create Backup for configuration / System audio prompt / Voice Mail. The backup can be downloaded to local PC.

New Backup	
🗖 Backup Config 🗖 Backup Voice 🗖 Backup Voice Mail	
File : backup_20130816_371	
🔛 Backup 🦳 🥕 Cancel	



2) Restore

Click Restore to restore corresponding backup, backup file can be uploaded from local PC. Backup will be used after IPPBX reboot. It can't be used for different product models.

Ba	ckup and Resotre		
+	Create a Backup 🛛 🕹	Upload a Backup	
	Name	Date	Operation
1	backup_20130816_3	2013-08-16 17:32:38	Download From System Restore Delete

10.7 Reboot && Reset

Reboot or Reset IPPBX.

Reboot System
Warning : Rebooting system will terminate all active calls!
Reboot
Reset to Factory Default
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!
Reset to Factory Default

You need to choose the product model and extension length/prefix the first time to login IPPBX after it is reset to factory default settings.

(192.168.1.100/admin/express_setup.html	⊽ C'	8 - Google ⟨Ctrl+K⟩	🔎 🖾 - 🐱 - 🎓 🦗
Extension Format			
Product Model	IP02		
1 Todat Moder	IP01		
	IP02		
	IP04		
	IP08		
	IP2G4A IP4G		



192.168.1.100/admin/express_setup.html		⊽ C' 🚷	√ Google ≪Ctrl+K>	No. 100 (100 (100 (100 (100 (100 (100 (100	• 🏫	-
	Extension Format					
	Extension Length Extension Prefix :					
192.168.1.100/admin/express_setup.html						
		▼ C 8	• Google ⟨Ctrl+K⟩	<u></u>		
	Extension Assignment	- 6099	· Google (Ctrl+K>			. 2
	Extension Assignment Extension For SIP User : 6000 Extension For FXS Port : 6101		· Google (Ctrl+K>			
	Extension For SIP User : 6000 Extension For FXS Port : 6101 Extension For Ring Group : 6600	- 6099 - 6108 - 6609	· Google (Ctrl+K)			
	Extension For SIP User : 6000 Extension For FXS Port : 6101 Extension For Ring Group : 6600 Extension For Paging Group : 6700	- 6099 - 6108 - 6609 - 6609 - 6709	· Google (Ctrl+K)			
	Extension For SIP User : 6000 Extension For FXS Port : 6101 Extension For Ring Group : 6600 Extension For Paging Group : 6700 Extension For Conference : 6800	- 6099 - 6108 - 6609 - 6709 - 6809	· Google (Ctrl+K)			
	Extension For SIP User : 6000 Extension For FXS Port : 6101 Extension For Ring Group : 6600 Extension For Paging Group : 6700 Extension For Conference : 6800 Extension For Queue : 6800	- 6099 - 6108 - 6609 - 6609 - 6709 - 6809 - 6809	· Google (Ctrl+K)			
	Extension For SIP User : 6000 Extension For FXS Port : 6101 Extension For Ring Group : 6600 Extension For Paging Group : 6700 Extension For Conference : 6800 Extension For Conference : 6800 Extension For Queue : 6900	- 6099 - 6108 - 6609 - 6709 - 6809 - 6809 - 6809 - 6899	· Google (Ctrl+K)			

11. Reports

11.1 Call Detail Records

Display the Call Detail Records, the operation for it can be search, delete and download.

1) Search

Users can search the records they needs according to Source, Destination, and / or Time.

2) Delete

IPPBX supports two delete operations: delete selected CDR and delete all CDR.

3) Download

It can be downloaded to local PC



Syslog	From	:	📆 То :	🛗 Source :	Destina	tion :	🔍 🔍 Sear	ch
	2	Download All CD	R 🛛 慞 Delete Selecte	ed CDR 🛛 🎁 Delete All Ci	DR			
		Source	Destination	Start Time	End Time	Duration	Billable Duration	Disposition
	11		s	2013-08-21 08:18:41	2013-08-21 08:18:47	6	0	ANSWERE
	12	021968020	00 s	2013-08-21 08:18:36	2013-08-21 08:18:38	2	0	ANSWERE
	13		s	2013-08-20 19:25:15	2013-08-20 19:25:21	6	0	ANSWERE
	14		s	2013-08-20 19:25:06	2013-08-20 19:25:12	6	0	ANSWERE
	15		s	2013-08-20 19:24:56	2013-08-20 19:25:02	6	0	ANSWERE
	16		s	2013-08-20 19:24:51	2013-08-20 19:24:52	1	0	ANSWERE
	17	900	6003	2013-08-20 18:48:14	2013-08-20 19:00:25	731	729	ANSWERE
	18	900	6003	2013-08-20 18:48:11	2013-08-20 18:48:12	1	1	ANSWERE
	19	900	6003	2013-08-20 18:48:03	2013-08-20 18:48:09	6	6	ANSWERE
	20	900	6003	2013-08-20 18:47:10	2013-08-20 18:47:17	7	5	ANSWERE

11.2 Syslog

1) Syslog

Set the Syslog level and download it.

Call Detail Records	Syslog
	The Log Level : warning
> Syslog	Save 🗠 Downlaod Log
	🔚 Save 🔄 🖆 Downlaod Log

2) Packet Capture Tool

This feature always used to capture packets for technician. Users 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.

Packet	Capture Tool
IP :	
Port :	
Start	Stop Download

12. Web Interface for extension

PBX allows users to check their voicemail /Call Recording/CDR, and set personal settings.



🗲 🚳 192. 168. 1. 159/login. html		⊖ ☆ マ C 🛛 😽 Google ⟨Ctrl+K⟩	🔎 🖾 💌 🚾 🛩 👘
	ATCOM PBX Login		^
	£ 6003		
	≙		
	★ Language	~	
	Login		
	♠ Website ♥ Products ≋ Support ©2013 ATCOM All Rights Reserved	Contact us	

- Check Use Web Interface option in PBX Settings -> Extensions management settings to allow this extension to login its own web interface.
- 2. Enter the IP of PBX in the browser.
- 3. Login with extension number / Voice Mail Access PIN Code as username / password

1) Voice Mail Checking

Users can listen / download / delete / move voice mail here.

Voice Mail	Voice Mail				Logout
voice ividii	New Voice Mail				
Call Recordings	Caller ID	Time	Duration	Ot	peration
	1 '900' <900>	2013-08-20 18:45:57	18	Download	Play Delete
Call Detail Records	2 '900' <900>	2007-01-01 02:53:23	16	Download	Play Delete
Personal Settings	5 💌 🚺 🖣 Page 1	of1 🕨 🕅 💭		Dis	playing 1 to 2 of 2 items
	Old Voice Mail				
	Caller ID	Time	Duration	Oţ	peration
	5 💌 🚺 🖣 Page 1	of 1 🕨 🔰 📢		Dis	playing 1 to 0 of 0 items
		Sorr	y, no data exist!		
	Urgent Voice Mail				
	Caller ID	Time	Duration	Ot	peration
	5 💌 🚺 🖣 Page 1	of 1 🕨 🔰 📢		Dis	playing 1 to 0 of 0 items
		Som	y, no data exist!		

2) Call Recording Checking



Voice Mail	Call Recordings			Logout
	Caller ID	Time	Duration	Operation
Call Recordings	1 900	2013-08-20 18:48:18	738	Download Play Delete
Call Detail Records	10 V 14 4 Pag	ge 1 of 1 🕨 🔰 💭		Displaying 1 to 1 of 1 items
Personal Settings				

3) CDR Checking

Users can check their CDR here.

Voice Mail								
		Source	Destination	Start Time	End Time	Duration	Billable Duration	Disposition
Call Recordings	1	900	6003	2013-08-20 18:48:14	2013-08-20 19:00:25	731	729	ANSWERED
	2	900	6003	2013-08-20 18:48:11	2013-08-20 18:48:12	1	1	ANSWERED
Call Detail Records	3	900	6003	2013-08-20 18:48:03	2013-08-20 18:48:09	6	6	ANSWERED
	4	900	6003	2013-08-20 18:47:10	2013-08-20 18:47:17	7	5	ANSWERED
	5	900	6003	2013-08-20 18:45:43	2013-08-20 18:46:24	41	39	ANSWERED
Personal Settings	6	900	6003	2013-08-20 18:44:26	2013-08-20 18:45:40	74	67	ANSWERED
	7	900	6003	2007-01-01 02:53:11	2007-01-01 02:53:57	46	46	ANSWERED
	8		6003	2007-01-01 01:54:13	2007-01-01 01:54:22	9	3	ANSWERED
	9		6003	2007-01-01 01:52:20	2007-01-01 01:52:48	28	15	ANSWERED
	10		6003	2007-01-01 01:50:58	2007-01-01 01:51:45	47	44	ANSWERED

4) Personal Settings

Users can set voice mail / voice mail to email / follow me / ring timeout here.

	Personal Settings	Logout
Voice Mail		
Call Recordings	General	
	Name: 6003	
Call Detail Records	Nome. 0003	
	Voice Mail	
Personal Settings	Voice Mail Enable : Yes Voice Mail Access PIN Code : 6003	
	Mail Setting	
	Enable Sending Voice Mail to Email Address :	
	Follow Me	
	Call Forward : Always 🗹 When no answer 🗹 When busy Forward To : O Voice Mail O Number :	
	Other Options	
	Ring Out : 30 DND Save Reset	

--Finish--