

iCallDroid spot User Manual



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Getting Started

Thank you for purchasing iCallDroid spot (WiFi Router+ IP PBX). It is one cost-efficient yet easy-to-configure IP PBX in the market today. Administrating a VoIP system can be a daunting task for administrators unfamiliar with VoIP. This guide is designed to help you plan and configure iCallDroid spot Voice over IP (VoIP)

deployments.

Introduction



The iCallDroid spot (300M WiFi Router+ IP PBX) is the ideal system for small businesses and home offices requiring a pint-sized yet powerful on-premise wifi router IP PBX. It supports up to 4 concurrent calls with G.729 codec, but it might be less under high loading network transmission because of more CPU consumption. The compact solid-state device supports 16 extensions and offers a wide range of IP PBX telephony features.

Keeping up with the demands of sustainability, the iCallDroid spot is based on a low-power, high performance MIPS processor, providing the complicated communication features including the hardest HD communication protocol, complete router features and QoS (Ensure the voice quality in a case the bandwidth is not enough).Meanwhile, the feature of one touch to deploy the phones makes the configuration of phones easy and enjoyable thing.

Packing list

- 1 unit iCallDroid spot
- 1 Piece Power Supply (12V,1A)
- 1 piece of 2-meter Network cables
- 1 Piece 8G MLC USB

Specification

MIPS Processor

64MB RAM/16MB FLASH

1xRJ45 10/100MB Ethernet port WAN

1xRJ45 Debug port

Button: Reset Button, One Touch to auto deploy

Power adapter: AC 100~240V input and DC 12V/1A output

Power consumption: 1.2-2.0W

Operating humidity: 10~95%

Operating temperature: 0~45°C

Hardware Setup



You may check the above picture to configurate.

Step 1: Connect the LAN port of iCallDroid spot with your corporate IP network. Before you

connect the iCallDroid spot to the network, please check if your network can work normally.

Step 2: Plug in and open your browser to visit the web address: <u>Http://192.168.1.1</u>.

Make sure your PC IP address is 192.168.1.XXX.

(If you use IE6 and above, the prefix address <u>http://</u> can't be left out)

Now we access to the Wizard page.

Username: admin (By default)

Password: admin (By default)

Or you can find the WiFi SSID : WiFi Router and log in. The visit the web : <u>Http://192.168.1.1</u>

You can also choose the web language.

Login		
Username	admin	
Password		
, abonora		
	■ Language: English ▼	
	Sign In	

First Login to Wizard

This is your first time to log in, it will show Wizard Processing. It is simple and brief to deploy.

In most cases, the default settings can be used for the rest of the configuration.



If you want to quit the Wizard, just Abort it. And if you want to access Wizard, just click the

Wizad.

anel Dashboard	Logout	Logged in as ad
★ Wizard ↑ Dashboard	Welcome To The Unified Commun	nications System
A Logout		
Networks >		
Utilities >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	WAN MAC 00.86:30:4A:01:89 Protocol static IP Arter 172 16.0.210	SYS Firmware 5.5.4796.0 Model 0110 Serial ID 00010418000013
PBX General Advanced	Netmask 255.255.0.0 Gateway 172.16.0.254	Memory 70% used
PBX More	UNS 172.16.0.294	Timezone UTC
	LAN MAC 00.86:30:4A:01:88 IP Addr 192.168.1.1 Netmask 255.255.0	PBX Devices Q View Real Status SIP Port (TCP/UDP) 0.0.0.6620
	WIFI MAC 00.86:30:4A:01:8A SSID WifiRouterPBX_4A018A Channel auto Encryption No Encryption	Concurrent 4 calls Settings 16 sip extensions 8 feature extensions 8 trunks 16 call routes 4 conferences 10 queues
	VPN	10 simpleivrs

You can click Prev to return and Next to do the following steps.

On the Wizard page, you can set the WAN IP and Time Zone, Wireless, Extension, line

provider and PBX.

You can select which part need to set then do the Next.

(You can also follow all the default settings and confirm)

Set how to connect to	the net, To set timezone to your local.	
	Abort Frev Next >	
Protocol	 STATIC IP DHCP PPPOE 	
IP Address	172.16.0.210	
Netmask	255.255.0.0	
Gateway	172.16.0.254	
DNS 1	172.16.0.254	
DNS 2	Exp: 8.8.8.8	
Time Zone	UTC UTC	~

Next is the WAN and Time Zone :

You can choose the Protocol Static IP, DHCP, PPPoE.

Static IP

Using a static IP address is the most reliable way to ensure your server IP address does not

change. To find an IP address that is not in use on your network and will not be used for

another client by the DHCP server or used by some other devices.

DHCP (Dynamic Host Configuration Protocol, DHCP)

PPPoE (Point to Point Protocol over Ethernet)

Fill out the account information from your telecom operator and Next.

Set how to connect to	the net, To set timezone to your local.
Protocol	Abort ← Prev Next → STATIC IP DHCP DPRO5
Username	not null.
Password	not null.
Service	optional
Dns Mode	assigned Dns IP: 172.16.0.254
Connect Mode	always 🔽
Time Zone	
	Abort ← Prev Next →

Time Zone

You can set the local time here and it is important for generating accurate call reports for the

system. And Time Frame will also analysis the system time to switch to the proper IVR.

If you select the incorrect time zone, or you move to a different time zone later, you can

change it in the Wizard or in the Network-WAN/LAN/Time Zone.

Time Zone	UTC	~	UTC	~
	Abort ← Prev	Next 🏞		

Now we came to the Wireless page:

Set to eanble wireless.	
	😂 Abort 🔶 Prev Next A
Enable Wifi	●Yes ○No
SSID	feng
	Hide SSID
Encryption	(WPA+WPA2)-PSK
Crypto	TKIP+AES
Key	55229560
	O Abort ← Prev Next →

Here you can set the wireless option.

Enable Wifi and set the SSID (Service Set Identifier)

According to the tip in the black, choose your encryption, crypto and key.

Now we come to the Extension page.

The system has already auto generated 16 SIP extension by default.

(iCallDroid spot supports max 16 SIP extensions.)

You can set the extension number, password and the caller name.

If want to set the extensions quantity as you like, just amend this in **Extension** table.

Wizard Processing Extensions

1234567

Create the extension, you can go directly to the next step or modify the extension number or password.

O Abort	+ Prev	Next 🔶			
Number:	800	Password:	66876233	Caller Name:	default: 800
Number:	801	Password:	94391230	Caller Name:	default: 801
Number:	802	Password:	75369629	Caller Name:	default: 802
Number:	803	Password:	42917292	Caller Name:	default: 803
Number:	804	Password:	19885287	Caller Name:	default: 804
Number:	805	Password:	10632983	Caller Name:	default: 805
Number:	806	Password:	29721975	Caller Name:	default: 806
Number:	807	Password:	47024526	Caller Name:	default: 807
Number:	808	Password:	14680209	Caller Name:	default: 808
Number:	809	Password:	40814707	Caller Name:	default: 809

Next we come to Trunk Setting.

Wizard Processing Trunk			
Set to connect to ITSP	(Internet Telephony Service Provider), you can go directly to the next step to skip this area. ● Abort ← Prev Next →		
Name	default		
Provider Host	sip.xxxx.com		
Provider Port	5060		
Account	accountname		
Password			
	🖸 Abort 🖌 🕂 Prev Next 🖈		

Set a SIP Trunk here. Fill out the Provider Host, account and password from your Internet Telephony Service Provider then one SIP Trunk will be built.

iCallDroid spot supports maximum 8 SIP trunks. If you want to build more, just do it in the Line Provider.

Next is PBX setting :

Wizard Processing PBX		
Set PBX routes and se	attings.	
	Abort + Prev Next >	
Outbound Calls	Default outbound will auto choose ther Trunk which you set the default outbound line.	
Incoming Calls	 When the call comes in, the system will ring simultaneously all the numbers, unless there is a number picked up the phone. Playback a voice menu, and wait user input number, or press 0 to number 800. 	
Conference Number	300	
	O Abort ► Prev Next →	

Here you can set how the system will deal with when make outbound calls or receive the inbound calls.

Outbound calls: Auto-select the Trunk which you set it as the default outbound line.

Incoming calls: Ring all the numbers when the call comes in or just into an IVR.

If want to set other routes, you can do it in Outbound Routes and Inbound Routes after the

Wizard.

You can also set the conference number here. By default is 300.

Next well done! Just confirm to process.



Then the iCallDroid spot begin to configure. Now enjoy the HTML5 interface.

It will auto-restart the PBX and if you can't see the page you can refresh it. If you amended

the static IP address, re-visit the changed IP. Re-log in, you will see the dashboard of PBX

iCallDroid spot.

Wizard Processin	g Working, Please be patient and do not power off
the device!	
10% Complete	
Q STATUS create extension 805	

OK. This is the first time to access the iCallDroid spot.

One touch to deploy*

Dashboard

You can see the status of WAN, LAN, VPN, Wifi, System and PBX in the dashboard.

Usually you will find the information you need here.

Panel Dashboard	Logout	Logged in as admin
 ★ Wizard ↑ Dashboard ▲ Logout 	Welcome To The Unified Communications	System
Networks Utilities System PBX General Advanced	WAN MAC 00.86.30.4A.01.89 Protocol static IP Addr 172.16.0210 Netmask 255.255.0.0 Gateway 172.16.0254 DIS 172.16.0254 172.16.0254 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256 182.0256	SYS Firmware 5.5.4796.0 Model 010 Serial ID 00010418000013 Memory 68% used
PBX More >	LAN MAC 00.86.30.4A.01.88 IP Addr 192.168.1.1 Netmask 255.255.255.0	PBX Devices Q Vew Real Status SIP Part (TCP/UPP) 0.0.0.06620
	WIFI MAC 00.86:30:4A:01:8A SSID WifiRouter/BX_4A018A Channel auto Encryption No Encryption	Concurrent 4 calls Settings 16 sip extensions 8 feature extensions 8 trunks 16 call routes 4 conferences 10 gueues 10 simpleivrs

Wifi Router

Networks

•	WAN / LAN / TimeZo	one
Þ	Wireless	C BC: AE: C5: C8:07:6
•	Dynamic DNS	ol dhcp
	VPN	dr
		veunask
	(Gateway
Þ		DNS
		WAN / LAN / TimeZ Wireless Dynamic DNS VPN

Here as the same as the setting in the Wizard.

You can change the WAN Port here and also Time Zone.

WAN/LAN/TimeZone



Here you can set the WAN port.

WAN / LAN / TimeZone

Dashboard / WAN / LAN / TimeZone					
WAN LAN Time Zone					
	IP Address	192.168.1.1			
Netmask		255.255.255.0			
		Save			

Here you can set the LAN port.

WAN / LAN / TimeZone						
Dashboard / WAN / I	AN / TimeZone					
WAN LAN Time Zone						
Time Zone	UTC	V UTC		~		
	Save					

Here you can set the time Zone.

Wireless

Here is the wireless setting. Just as it in the Wizard.

A Logoul		Dashboard / W	irele
Networks	•	WAN / LAN / TimeZone	
Utilities	Þ	Wireless	rt
System	•	Dynamic DNS	Vi#i
Extensions		VPN	VIII

The general setting is the same as it in the Wizard.

Wireless

Dashboard / Wireles	S	
General Expert		
Enable Wifi	● Yes ○ No	
SSID	WifiRouterPBX_4A018A	
Encryption	No Encryption	~
	Save	

You will have this option as in Expert below:

Channel, HT Bandwidth, Wireless Mode, Tx Power, WMM (Wi-Fi Multimedia) WMM(Wi-Fi Multimedia): is a Wi-Fi Alliance interoperability certification, based on the IEEE 802.11e standard. It provides basic Quality of service (QoS) features to IEEE 802.11 networks. WMM prioritizes traffic according to four Access Categories (AC) - voice, video, best effort, and background. However, it does not provide guaranteed throughput. It is suitable for simple applications that require QoS, such as Voice over IP (VoIP) on Wi-Fi phones.

Wireless

Dashboard / Wireless				
General Expert				
Channel	auto 🔽			
HT Bandwidth	20Mhz Only 20Mhz/40Mhz Auto 40Mhz Only			
Wireless Mode	802.11b/g/n			
Tx Power	100 %			
WMM	Disable Denable			
	Save			

Dynamic DNS

Here you can set the Dynamic DNS.

Dynamic DNS or DDNS is a method of updating, in real time, a Domain Name System (DNS) to point to a changing IP address on the Internet. This is used to provide a persistent domain name for a resource that may change location on the network.



Dynamic DNS

Dashboard / Dynamic DNS					
General					
	Provider	Disabled	~		
		Save			

Here you can choose two free dynamic domain web to apply the account.

Dynamic DNS

Dashboard / Dynamic DNS				
General				
Provider	dnsdynamic.org(F			
Username myusername				
Password mypassword				
Domain	mypersonaldomain.dync			
Check Time	10 (min)			
	Save			

VPN

Virtual Private Network



VPN

Dashboard / VPN	
General	
VPN Mode	Disable Permission LAN PBX Only
Protocol	PPTP
Server	
Username	admin
Password	•••••
	Save

If you choose Disable that means the VPN doesn't work.

Permission LAN means all the data from the LAN will go via VPN.

PBX Only means only the PBX data (VoIP) will go via VPN.

Utilities

DHCP Server

You can check the devices in the network here and also set the server.

You can enable DHCP server or not.

You can set where Client IP Start from and Max clients.

	A Logout		Dashboard / D	HCP Ser	Ve
	Networks				
24	Utilities	•	DHCP Server		
	System	F	Wireless Mac Filter	:06	
	PBX General	Þ	Port Forward Firewall / UPNP / DMZ	:53	
DHCP Serv	ver				
Dashboard / DHCP	Server				
Lease Expiry		MAC	IP Address		Device Name
Enable DHCP	●Yes ○No				
Client IP Start	172.16.0.210. 100				
Max Clients	150 Save				
DHCP Serve	er				
Dashboard / DHCP Se	erver				
Lease Expiry	MAC		IP Address		Device Name
1970-01-01 23:04:06	00:37:60	1:2a:bf:bb	172.16.0.123		ź
1970-01-01 22:37:53	c4:6a:b7	':ef:d8:8d	172.16.0.129		android-ee14438474b638c7
1970-01-01 20:12:41	bc:77:37	':66:ab:02	172.16.0.164		Apple-PC
Enable DHCP	●Yes ○No				
Client IP Start	172.16.0.188. 100				
Max Clients	150				
l	Save				

Wireless Mac Filter

You can set the white list and black list to manage the devices which want to visit the network.

All the devices in white list are permitted to visit the network.

	Networks	•		_	
	Utilities	•	DHCP Server		
	System	•	Wireless Mac	Filter	
	Evtoncione		Port Forward		
W	Vireless N	lac I	Filter		
1	Dashboard / Wireles	s Mac Fi	lter		
	Control	Disa	abled OWhite list) Black lis	it
	MAC Address	1			
		2			
		3			
		4			
		5			
		6			
		7			

While if in the black list, no device can visit the network.

Port Forward

Set the IP address, Mac, port from the source and destination, choose the protocol and enable.



Port For	ward		
Dashboard / P	Port Forward		
Port Forward			
	Save		
	Source	Destination	Protocol
Enable	Zone All V IP MAC PORT	Zone All 🔽 IP PORT	TCP+UDP
Enable	Zone All V	Zone All	TCP+UDP

Firewall/UPNP/DMZ

UPN (Universal Plug and Play)

DMZ (Demilitarized zone)

Here you can set the DMZ PC IP, if enable the UPNP&NAT-PMP and WAN Ping response,

WAN web access, WAN Ftp and WAN PBX.

Dashboard / Firewall	
General Access Rul	es
DMZ PC IP	
UPNP & NAT-PMP	O Disabled
WAN Ping Response	● Yes ○ No
WAN Web Access	⊖Yes
WAN Ftp Access	⊖Yes
WAN Pbx Access	● Yes, port is 6620 ○ No

Firewall	Firewall					
Dashboard / Fit	rewall					
General Acce	ess Rules					
	Save					
	Source	Destination	Protocol	Action		
Enable			TCP+UDP	Accept		
Enable			TCP+UDP	Accept 🔽		

Here you can set the Access Rules.

QoS

Quality of service. The system enables QoS by default.

It ensures the voice quality in a case the bandwidth is not enough.

You can also set the WAN download/upload bandwidth.

Qos

Dashboard / Qos		
General		
Enable WAN Qos 💿	YES ONO	
WAN Download Bandwidth	15000	kBit/s
WAN Upload Bandwidth	15000	kBit/s
	Save	

Disk and Sharing

Here you can insert a USB device to record the calls and voicemail.

And also set the file sharing.

It supports FAT32, EXT4 or based the MLC USB disk.

We recommend using the USB device with power adaptor alone.

Insert one USB. Please remember to click the button "Enbale" to record in the Disk.

★ Wizard ♠ Dashboard		Disk & Sharing			
A Logout		Dashboard / Disk & Sharing			
Networks Utilities) 	DHCP Server	File Sharing		
System PBX General	•	Wireless Mac Filter Port Forward Firewall / UPNP / DMZ	 No mount disk Not Found 0B (total 0B used 0B) 		
PBX More		Qos Disk & Sharing	Click to Enable Disk Records - Safety remove disk		
			display (1 - 256)		
		Path	Size		

Disk & Sharing

Dashboard / Disk & Sharing				
External Disk	File Sharing			
Disk Status: Vendor: Free: Usage:	Not Found OB (total 0B used 0B)			
004301	Click to Enable Disk Re	cords 🔻 📕 Safety remove disk		
	Enable	display (1 - 256)		
Path		Size		
		display (1 - 256)		

Click here to Process
Disk & Sharing
Dashboard / Disk & Sharing
External Disk File Sharing
Disk Status: A Mounted, Records mode External disk Vendor: Vendor: Generic Model: Flash Disk Rev: 8.07
Free: 7.95 GB (total 8.41 GB used 464.90 MB)
Usage: used
✓ Records in DISK ▼ A Safety remove disk Over the set of th
display (1 - 256)

Now you can find the call recording option in the Extensions-Extension-Expert. Recording

Networks	s 🕨	Dashboard / Ex	tensions
Utilities	•	Create SIP Extension	Features Extension ▼
System	•		
PBX Ger	neral 🕨	Extensions	
Advance	d →	Line Provider	Password
PBX Mor	re 🕨	Humber	1 4350014
		814	46038549
Dashboard / Extensio	ons / Edit SIP Ext	ension	eues Answering
Expert	Video Support	● Yes 🔾 No	
	IP Address	Dynamic IP Static IP	
	CallerID	set as v number: 862	
	Directmedia	⊖ Yes ● No	
	NAT	● Yes 🔾 No	
	Keep Alive	100000 (ms)	

file will be saving on USB external disk memory only.

You can also check the PBX data-Extensions to find the record file.

You can download and delete the files.

Or you can check them in FTP as below.

Disk Status: Vendor: Free: Usage:	Mounted, Record Vendor: PNY Mode 6.91 GB (total 8.14 used 15.21% Records mode exte	s mode External disk el: USB 2.0 FD Rev: 11 4 GB used 1.24 GB) ernal disk 🕶 💽 Pbxdata	00 FTP Manage safety	remove dis	ĸ		
			display (1 - 256)				+
Path pbxdata/extension/	863/20130416				Size	Modify	
Back to/							
20130416054005_863	8_862.WAV		Ŧ	×	0.00 B	2013-04-16 05:40	0:04
20130416054044_863	_862.WAV		Ŧ	×	0.00 B	2013-04-16 05:40	0:44
20130416054235_863	8_862.WAV		Ŧ	×	0.00 B	2013-04-16 05:42	2:34
20130416054330_862	2_863.WAV		1	×	0.00 B	2013-04-16 05:43	3:30
VM_20130416054343	_862_863.WAV		Ŧ	×	1.43 K	2013-04-16 05:43	3:44
20130416055023_862	2_863.WAV		Ŧ	×	0.00 B	2013-04-16 05:50	0:22
	Disk & S	haring					
	Dashboard / Dis	k & Sharing					
	External Disk	File Sharing					
	Disk Status: Vendor: Free: Usage:	Mounted, Records mo Vendor: Generic Model 7.95 GB (total 8.41 GB used Records in DISK *	de External disk : Flash Disk Rev: 8.0 used 464.90 MB)	7	w files via Browser		
			(display (1 ⋅	- 256)		
	Path					Size	1
	pbxdata/				🗙 remo	we	,

When you want to extract the USB, close all the files related to USB before click the safety

remove disk and wait around 1-3 seconds. Then it will be ok as below.

External Disk					
Dashboard / Externa	l Disk				
Disk Status: Vendor: Free: Usage:	Error: Records mode External Disk, But no mount disk! Not Found OB (total OB used OB)				
	Records mode external disk safety remove disk display (1 - 256)				

File Sharing

You can treat the iCallDroid spot as	s a file sharing server now.
--------------------------------------	------------------------------

isk & Sna	ring
Dashboard / Disk & S	Sharing
External Disk File	Sharing
	9 FTP File Remote Sharing
IP	172.16.0.188
Port	6321
Username	anonymous
Password	5522956
View via Browser	ftp://anonymous:5522956@172.16.0.188:6321

Use the FTP software to connect the Server and you can enjoy the file sharing.

The password is empty by default. You can log in the FTP anonymously.

IP, Port and the username can't be amended.

System



Real Status

Real Status

Dashboard / Real Sta	tus						
PBX Local Number				PBX Line Provider			
Extensions	Number	Туре	Address	Trunk Register Refresh	Туре	Host	Account
UNKNOWN	801	sip		Trunk Connect			
UNKNOWN	802	sip		Trunk	Туре	Host	Account
Unmonitored	803	sip					
Other Resource							
Number	Section	ı	Туре				

Here you can see the PBX extension status, SIP Trunk status and other Resource in the

later.

Call Details Report

Here you will find the call detail report.

Call Deta	ail Report				
Dashboard / Ca	all Detail Report				
			(1-60)		
Account	Source	Destination	Calldate	Duration/Answer	Status
			(1-60)		

Logs View

You can find the system logs here. It is very convenient to check any problem.

Click to Refresh, it will show the latest log.

Logs View	
Dashboard / Logs View	
Click to Refresh	
Jan 1 00:00:32 localhost user.notice ifup: Enabling Router Solicitations on loopback (Io)	~
Jan 1 00:00:33 localhost user.info firewall: adding wan (eth2.2) to zone wan	
Jan 1 00:00:33 localhost user.notice miniupnpd: adding firewall rules for eth2.2 to zone wan	
Jan 1 00:00:38 localhost user.notice dnsmasq: DNS rebinding protection is active, will discard upstream RFC1918 responses!	
Jan 1 00:00:38 localhost user.notice dnsmasq: Allowing 127.0.0.0/8 responses	
Jan 1 00:00:39 localhost user.notice dnsmasq: found already running DHCP-server on interface 'br-lan' refusing to start, use 'option force 1' to override	
Jan 1 00:00:39 localhost daemon.info dnsmasq[2372]: started, version 2.62 cachesize 150	
Jan 1 00:00:39 localhost daemon.info dnsmasq[2372]: compile time options: IPv6 GNU-getopt no-DBus no-i18n no-IDN DHCP no-DHCPv6 no-Lua TFTP	
no-conntrack	
Jan 1 00:00:39 localhost daemon.info dnsmasq[2372]: using local addresses only for domain lan	
Ian 1.00:00:30 localhoet daamon info dhemaeo(0370): reading /tmn/recolu.conf auto	

Admin User

You can amend the sign-in password here.

Admin User						
Dashboard / Admin User						
Current Password	current password					
New Password	new password					
Retry New	retry password					
	Save					

Reboot

You can reboot the system here.

Also you can reload Networks, Wifi, Firewall, PBX.

Dashboard Logout		Reboot	
tworks	þ	Dashboard / Reboot	
ilities stem))	Reboot System	Reboot System
3X General Ivanced	•	Reload Networks	Reload Networks
3X More	•	Reload Wifi	Reload Wifi
		Reload Firewall	Reload Firewall
		Reload PBX	Reload PBX

Reset Factory

Factory Mode: Input your password to reset your device.(Admin by default)

Reset Factory					
Dashboard / Reset Fa	Dashboard / Reset Factory				
Warning! Reset Factory will Password	be delete all configuration data.				
	Reset Factory Now!				

VolP

PBX General

Here you can set the extensions and line provider.

System			
PBX General	•	Extensions	
Advanced	•	Line Provider	
PBX More		814	ť
	22222222		

Extensions

SIP (Session Initiation Protocol) [RFC 3261, 3262, 3263, 3264, and 3265]

Extensions

Dashboard / Ex	tensions		
Create SIP Extension	Features Extension	View Extension Status	
			(1-60) of 3

Create the SIP extensions: Set the number (not less than 3 digits), password (not less than 8

digits) and caller name if need.

No-Answer Option: When nobody answers after ringing. It will auto hang up, go to Voice Mail

or Forward.(use Voice Mail need to insert the USB disk)

Extensions Edit SIP Extension						
Dashboard /	Extensions / Edit SIP Exte	ension				
Basic	Number	831				
Expert	Password	83271886				
	CallerID Name	831				
	No-Answer Option	⊖ Hangup	⊖ Voicemail	Forward		
	Forward Number					
	Edit					

You can also set the ring time as below, after the ring time, it will execute the option.

★ Wizard A Dashboard		Option	
A Logout		Dashboard / Option	
Networks Utilities))	PBX General Hot Keys SIP	Protocol Voicer
System	*	OutBound RingTime 40	(sec)
Advanced		Internal RingTime 40	(sec)
PBX More	•	Outbound B	outes

Extension Expert part:

Basic	Video Support	💿 Yes 🔘 No	
Expert	IP Address	💿 Dynamic IP 🔵 Static IP	
	CallerID	default 🔽	
	Directmedia	🔿 Yes 💿 No	
	NAT	💿 Yes 🔘 No	
	Keep Alive	10000 (ms)	
	DTMF Mode	rfc2833	*
	Codec Priority	1. GSM	*
		2. ALAW	~
		3. ULAW	~
		4. G729	*
		5. H264	*
		6 6722	~

For the Expert use, you can set the Video Support, IP address and so on

Video Support: Choose Yes or No.

IP address: Dynamic IP or Static IP. If you choose the Static IP, just fill your IP address and

make sure it is the same with this device.

Call ID: You can use the extension number (Default) or use this number you set yourself.

CallerID	other	~			
	number:	801	name:	jenny	

Direct Media: The default is No.

If you choose yes, it will not transfer the voice data.

Nat: Please see the glossary

Keep Alive: Keep in touch with the contacted device.

DTMF Mode refers to the types of tones a phone can send and receive. Refer to your

phone's user manual to find the type of DTMF tones used by your particular phone. Unless

you are certain this setting needs to be changed, leave it at the default value, rfc2833.

DTMF Mode

rfc2833 💌

Codec Priority: You can choose the codec priority here.

DTMF Mode	r	ic2833	¥
Codec Priority	1.	GSM	~
	2.	ALAW	~
	3.	ULAW	~
	4.	G729	~
	5.	H264	~
	6.	G722	~
Create			

[©] Important: Configur	ation changed, please reload de	evice to activate. C	Click here to Reload
Extensions			
Dashboard / Extensi	ons		
Create SIP extension	Features Extension -		
			display (1 - 60) of

Press Create and Click the Reload in the Red Bar. One extension is well done. It will need the SIP account and password when you set SIP phone. So please remember the SIP account and password here.

If need to modify the setting or have a view, just click the edit button. To remove an

extension from your system permanently, click the Delete button.

Click the Record, you can go to check the call record directly.

Extensions

Dashboard / E	tensions				
Create SIP Extension	Features Extension	View Extension Status (1-60) of	3		(+)(ħ)(+)
Number	Password	CallerID Name	Protocol		
803	803	803	sip	records edit delete	
803	803 802	803 802	sip sip	 records edit delete delete 	

Follow Me

One of the feature extensions is Follow Me.

Extensio	ons			
Dashboard / E	xtensions			
Create SIP extension	n Features Extension ▼ Follow Me Ring Group	If you have more than one when a call comes in whe system will be one by one your numbers until you an	number n the to try ring of 33 swer.	
Number	Password	E-Mail	Protocol	
831	10622155		sip	records edit delete
830	52715081		sip	records edit delete

If you have more than one number, when a call comes in, the system will ring your numbers

one by one until someone answered.

You can set the detail in basic and expert. The expert is not available now.

You can set the order of the extensions number to ring.

Extens	ions Create Follov	vMe Extension			
Dashboard /	Extensions / Create Follo	wMe Extension			
Basic	Number	8001			
Expert	Password	mypassword8001			
	Info_email	yourname@yourdomain.com			
	Numbers	✿ Up ₽ Down ₽ Remove 801 803 806 804 804 804	↑ Select	800 805 807 808 808 809 810 811 811 812 813	Available numbers window.
	Create				

You can also set to forward to the external number as below.

Extens	ions Create Follov	vMe Extension			
Dashboard /	Extensions / Create Follow	wMe Extension			
Basic	Number	8001			
	Password	mypassword8001			
	Internal Extensions	් Up Ģ Down ஞ Remove	ඩු Select	800 801 802 803 804	~
	External Number	your mobile number]		

Ring Group

When the call comes in, all the extensions will ring simultaneously until someone to pick it up.

The setting is similar to Follow me.

Extension	S Create Ring@	Group Extension		
Dashboard / Extens	ions / Create Ring	Group Extension		
Basic	Number	exp: 8001		
	Password	exp: 856157489		
	Numbers	산 Up 🛱 Down 🔥 Remove		
			-€] Select 801 802 803	
			003	
	Create			

And here you can also view the extension status.

Extensio	ons		
Dashboard / Ex	tensions		
Create SIP Extension	Features Extension -	View Extension Status	
			(1-60) of 3

Click it and the page will turn to the real status page.

And click the back to previous page.

Real Status

shboard / Real Sta	tus					
ack to previous page						
X Local Number				PBX Line Provider		
Extensions				Trunk Register		
	Number	Туре	Address	Refresh	Туре	Host
JNKNOWN	801	sip		Trunk Connect		
JNKNOWN	802	sip		Trunk	Туре	Host
Unmonitored	803	sip				
Other Resource						
Number	Section	on	Туре			

Line Provider

You can set the line provider here. Sip Register and Sip Direct.



After you finished the register information, remember to tick the Outbound Calls-Default outbound calls

SIP Register

SIP Register: Use a SIP account and password and Provider IP address to register to the ITSP.

You can also choose the system process rule when there is incoming call.

Default to answer: You can set the default configuration in the PBX More Option.

★ Wizard	Option
Dashboard	
A Logout	Dashboard / Option
Networks	
Utilities	PBX General Hot Keys SIP Protocol Voicemail
System	OutBound RingTime 40 (sec)
PBX General	
Advanced	Internal RingTime 40 (sec)
PBX More	
	Outbound Routes
	Default Mode [smart] Automic try localnumb
	Default Outbound No Select
	Trunk Inbound Routes
	Auto Find Extension [disable] Do nothing.

Set DID number: you can set the DID number here. When you create the Queue or Conference and you can set the number here for the caller to go into.

Specific who to answer: Specific the certain extension to answer.

Finally you can tick the default outbound line or the outbound routes.

Call with prefix number: Set this number when you make a call with this prefix outbound,

It will auto go via this line. In a word, it is convenient for you to change the line when make calls between default line and another outbound line.

You can also view this setting in the Wizard.

Line Pi	rovider Add New	SIP Register
Dashboard /	Line Provider / Add New S	SIP Register
Basic	Name	mytrunk1
Expert	Provider Host	sip.xxxx.com
	Provider Port	5060
	Account	accountname
	Decount	
	Password	
	Incoming Calls	Default To Answer Set DID Number Specify who answer
	Outbound Calls	Default Outbound Line Outbound Routes
		○ Call with prefix number
	Add New	
Basic	Outbound force calleri	d
Expert	Default reg expiry	60 (sec)
	Allow callin	⊙ Yes 🔿 No
	Progress	
	Keep alive	10000 (ms)
	NAT	🔿 Yes 💿 No
	Video support	⊙ Yes 🔘 No
	DTMF mode	rfc2833
	Codec priority	1. GSM 💌
		2. ALAW
		3. ULAW
		4. G729 💌
		5. H264 💌
		6. G722 💌

SIP Direct

Line Provider



You can create the SIP direct.

Here we use the 2 iCallDroid spot as example:

First check the SIP port : it is 6620.

	-				1				
L	ine	Pr	٥V	I d	er	Add	New	SIP	Direct

	Dashboard /	Line Provider / Add New	SIP Direct	
	Basic	Name	mytrunk1	
	Expert	Provider IP Address	sip.xxxx.com	
		Provider IP Port	5060	
		Outbound Calls	Default Outbound Line Outbound Routes Call with prefix number	
• Wizard • Dashboard • Logout	Welcome	Add New TO The Unified Comm	nunications System	
Ietworks > thitties > system > :xtensions > ine Provider > dvanced > PX More >	WAN MAC 00 Protocol st IP Addr 17 Netmask 22 Gateway 17 DNS 8.	186-30-4A-02-3B alic 22.16-0.166 55 255 0.0 72.16-0.254 8.8.8 172-16-0.254	SYS Firmware Serial IL Memory Timezone	 \$ 5,5,3546,0 0101 00010418000020 58% used Asia/Shanghai
			PBX SIP Por Concurren Settings	t (TCP/UDP) 0.0.0.6620 8 Calls 23 sip extensions 8 feature extensions 8 frunks 16 call routes 4 conferences

Then input another IP address to create SIP direct. Make sure the port is the same and there

is no two extensions with the same number. OK, done.

★ Wizard		Line P	r ovider Add New	/ SIP Direct	
A Logout		Dashboard	Line Provider / Add New	SIP Direct	
Networks Utilities) }	Basic	Name	PBX220 SIP Directly	
System	•	Expert	Provider IP Address	172.16.0.188	
PBX General	•	Extensions	Dervider ID Ded	5000	
Advanced	÷.	Line Provider	Provider IP Port	000	
PBX More	*		Outbound Calls	Default Outbound Line Outbound Routes Call with prefix number	

Advanced

Outbound Routes

 A Mizard A Dashboard 		Outbound Routes	
A Logout		Dashboard / Outbound Routes	
Networks Utilities	> >	Create New Rule Default Rule: smart	ound: Save Rules New order
System PBX General		Outbound Routes for extensions dialing local / outside nu When dialing, the top-down one by one checking rules, if When dialing, not matched or no rule will try to execute 'l	umber. f matched will be execute and end route. Default Rule' settings.
Advanced	•	Outbound Routes the order of rules by dragging and click	Save Rules New order' to confirm.
PBX More	*	Inbound Routes Conference Queues Simple IVP	Ile Name
		Time Frames	

Outbound Routes for extensions dialing local / outside number.

When dialing, the top-down one by one checking rules, if matched will be execute and end route.

When dialing, not matched or no rule will try to execute 'Default Rule' settings.

You can choose the default rule. In most cases, the default settings can be used for the rest

of the configuration.

Default Rules:

[Smart]Automatically try local number, if not matched then try to select [efault Outbound] and

call out.

[Local] Automatically try local number

[Disable]End the call

Outbound Routes



Default Outbound: You can choose the default outbound line here.



You can modify the order of rules by dragging and click 'Save Rules New order' to confirm.

Create New Rule first:

Now you can set the outbound routes.

You can refer the tips. Set the rules to match caller ID or match the called party ID (Callee),

then set the relevant executive rules: we can format caller Id/ callee ID .If don't need, leave

Ν	U	L	L.

	Rule match Sets.
Match Caller	Caller ID prefix is, and/or length is digits.
Match Called Party	Callee ID prefix is, and/or length is digits.
Format Caller	If matched current rule, we can format callerid/callee within followed sets, if don't need, leave NULL. Trim digits from Caller ID, and/or add number in prefix, and/or append number
Format Callee	Trim digits from Callee ID, and/or add number in prefix, and/or append number with end.
Rule Name	Myrule1
Handling	Call Denied
	Create New

Rules are different as many as you think.

Examples are in the routes manual.

After you create them, you can modify the order of rules by dragging and click 'Save Rules

New order' to confirm. And you can also edit and delete the rules.

Outbound Routes

Dashboa	rd / Outbound Routes		
Create New	Prule Default Rule: disable Default Outboo	und:	
Rule Note			
Outbound F	Routes for extensions dialing local / outside numbe	er.	
when dialir	ng, the top-down one by one checking rules, if mate	ched will be execute and end route.	
when dialir	ng, not matched or no rule will try to execute 'Defau	it Rule' settings.	
Val. and mark	a difference and an and an all and an and an and all all the second	Dulas Navy and data and inc	
You can mo	odify the order of rules by dragging and click 'Save I	Rules New order' to confirm.	
You can mo Priority	odify the order of rules by dragging and click 'Save I Rule Name	Rules New order to confirm. Handling	
You can mo Priority 1	odify the order of rules by dragging and click 'Save I Rule Name 👁 89798	Rules New order' to confirm. Handling Call Denied	edit delete
You can mo Priority 1 2	odify the order of rules by dragging and click 'Save I Rule Name	Rules New order' to confirm. Handling Call Denied Call Denied	edit delete edit delete

Inbound Routes

Inbound Routes for Line provider dialing local number / transfer to other line provider.

Inbound Routes

Dashboard / I	nbound Routes			
Create New Rule	Auto Find Extension: autoivr 🕶	Default Rule: disable 🕶	Save Rules New order	
Rule Note Inbound Routes fo When a call comes You can modify the	r Line provider dialing local numbe s in, the system will prior process ' order of rules by dragging and cliv	er / transfer to other line pro Auto Find Extension', next o ck 'Save Rules New order' f	vider. theck the rules one by one from top to dow to confirm.	n, finally perform 'Default Rule'.
Priority	Rule Name		From Line	Handling

Create a new rule as below, you can create the new rules for the incoming calls.

Dashboard / Inbour	nd Routes / Create New Rule	
	Rule match Sets.	
Match From Line		
Match Caller	Caller ID prefix is, and/or length is digits.	
Match Called Party	Callee ID prefix is, and/or length is digits.	
Format Caller	If matched current rule, we can format callerid/callee within followed sets, if don't need, leave NULL. Trim digits from Caller ID, and/or add number in prefix, and/or append number with	enc
Format Callee	Trim digits from Callee ID, and/or add number in prefix, and/or append number with	1 en
Rule Name	Myrule1	

The rule setting is similar to outbound routes. You can refer the tips. Below is the diagram.

After you set several rules, you can edit or delete them.

You can also modify the order of rules by dragging and click 'Save Rules New order' to confirm.

Inbound Routes

Dashboard /	Inbound Routes								
Create New Rule Rule Note	Create New Rule Auto Find Extension: autoivr Default Rule: disable Save Rules New order Rule Note								
Inbound Routes for When a call come	or Line provider dialing local n is in, the system will prior proc a order of rules, by dragging as	umber / transfer to other line provid cess 'Auto Find Extension', next che ad click 'Save Pulse New order to	der. eck the rules one by one from top to down, finally perform 'Default Rule'.						
Fou can modily th	e order or rules by dragging a								
Priority	Rule Name	From Line	Handling						
1	() feng	From: feng4	Using Outbound Line: feng	edit delete					
2	() feng4	Call Local Number	Using Outbound Line: feng4	edit delete					

You can modify the order of rules by dragging and click 'Save Rules New order' to confirm.

When a call comes in, the system will prior process 'Auto Find Extension', next check the

rules one by one from top to down, finally perform 'Default Rule'.

nbound	Roules				
Dashboard / In	bound Routes				
Create New Rule	Auto Find Extension: autoivr 🗸	Default Rule: disable 🔻	Save Rules New order		
le Note nbound Routes for Vhen a call comes 'ou can modify the	[disable] Ignore. [auto] Automatically find whois 【autoivr] Automatically find	s last answered and imm I whois last answered and	ediately transfer the call to that extension. d prompt IVR for the caller to choose to trans	fer the call to that extension or not.	
riority	Rule Name		From Line	Handling	
Inbour Dashboard	/ Inbound Routes				
Create New Ru	le Auto Find Extension: auto	oivr ▾ Default Rule: d	isable ▼ Save Rules New order		
Rule Note Inbound Route: When a call cor You can modify	s for Line provider dialing local mes in, the system will prior pro the order of rules by dragging a	Ismart] Auto numbe pcess '/ and clic	omic try localnumber, if no match try to c mic try localnumber.] End the call.	all 310 as extension. form 'Def	ault Rule'.
Priority	Rule Name	From Line	Handling		

Conference

Set the conference number as you like and choose if you want to enable to announce the

Join/leave by system or enable to playback the music when only one person in it.

Conference	ce		
Dashboard / Confi	erence		
Create Conference Roo	n		
	display (1	- 60)	(
Room Number	Announce Join/Leave	Music When Only Person	
300	Enabled	Enabled	edit delete
	display(1·	- 60)	(

Conference Create Conference room

Dashboard / Conference / Create Conference room					
Room Number	Exp: 301				
Announce Join/Leave	 ○ Disable ③ Enable 				
One Person Playback Music	 Disable Enable 				
	Create Conference room				

After you set, you can make a call to the conference number via the extension.

Queues

Select this type if the extension will queue callers to speak with a representative. Call queues are often used to dial into a particular department or group; for example, the extension for the accounting department might be a call queue. You can customize your call queues in the extension setup process.

Queues			
Dashboard / Queues			
Create New Queue			
How does this work?			
	display (1 - 60)		(+)
Queue Number	Remark	Timeout	
	display(1 - 60)		← ♠ →

Now for example, we create a Queue, we add 802 and 800 into our queue.

Queu	es Create New Q	ueue
Dashboard	d / Queues / Create N	lew Queue
Basic	Queue Nur	nber Exp: 302
Expert	Rer	mark
	Num	bers 🕲 Up 🖗 Down 🛷 Remove
Queues	Create New Queue	IGUE
Basic Expert	Background Music	Playback music to the caller Drawback is to the caller
	Call Progress	Every 20 (sec) announce busy voice, and if the caller waits for more than 180 (sec it will transfer the call to the number exp: 8001
	Service Strategy	[ringall]: All extensions are rir
	Member rings time	16 (sec)
	When Pickup	Direct Answer Announce Member's Number to the Caller
	Create New Qu	eue

You can also set the service strategy: Ring all, Radom, Memory.

You can also set the member rings time and when pick up, how you want to deal with.

Simple IVR

Simple IVR			
Dashboard / Simple IVR			
Create New IVR			
• How does this work?			
	display(1-60)		← ↑
IVR Number	Remark	Playback	
	display(1 - 60)		← ♠ →

Simple IVR Create New IVR									
Dashboard / S	Dashboard / Simple IVR / Create New IVR								
Basic	IVR Number	Exp: (302						
Time Frames	Remark	Exp: I	mytestivr						
Expert	Playback File				•				
	Input Detected	Press	Exp: 0	Transfer to	Exp: 302				
		Press	Exp: 1	Transfer to	Exp: 302				
		Press	Exp: 2	Transfer to	Exp: 302				
		Press	Exp: 3	Transfer to	Exp: 302				
		Press	Exp: 4	Transfer to	Exp: 302				
		Press	Exp: 5	Transfer to	Exp: 302				
		Droce	Ever C	Transfor to	Eve: 000				

Here we can set the IVR (Voice menu)

For example, we set one IVR number 333, choose the playback file-Welcome, and choose

that press 0 to transfer to 800 and press 1 to transfer to 801. Create the new IVR.

Basic	Level	Check Frame	Transfer to
Time Frames	1	\checkmark	exp: 801
Expert	2		exp: 801
	3		exp: 801
	4		exp: 801
	5	~	exp: 801
	6	~	exp: 801
	7	~	exp: 801
	8	\checkmark	exp: 801

Time Frame: You need to set Time Frame area then come back to choose.

Expert: You can set the mode when user input the invalid number.

Input Max Digit Len: For example, if you input 3 means if you press only one number when you access to the IVR, you need to press that number and # to call directly. Otherwise need to wait the Max Time.

Max Time: the waiting time to connect someone.

Input Retry: For example, if you input continuous two time wrong number, the system will

automatically transfer to another number you input.

Simple I	VR Create New IV	/R
Dashboard / S	Simple IVR / Create New I	VR
Basic	Warning! Expert settings i	is only for professionals, if you do not know the meaning of the parameters do not modify.
Time Frames	Input Invalid Mode	 ○ Invalid Playback ● Try Localnumber and Invalid Playback
Expert	Input Max Digit Len	12
	Input MaxTime	10 (sec)
	Input Retry	Max 6 , Outride to transfer to Exp: 302
	Create New IVR	

After fill out the information you need, just to click create new IVR and reboot.

Time Frames

Time Fr	ames					
Dashboard /	Time Frames					
• How does this	work?					
Frame Name	Start Date	End Date	Start Day	End Day	Start Time	End Time
newframe	i			•	O	O Add

In most cases, it is useful to create an IVR to run in the time of working days, holidays, nights and so on for the companies to handle with the business calls. This we called Time Frames. As the above, we create one set working time and click "add". Now we can come back to the simple IVR- time frame – to set it.

The IVR format is GSM file. You can upload the sounds file in Sounds File.

If all the parameters are zero, it means to ignore this time frame.

(Advanced-Simple IVR)

OK. When during the working time you set, all the incoming calls will transfer to 801.

Simple IVR Edit

Dashboard / Simple IVR / Edit							
Basic	Level	Check Frame		Transfer to			
Time Frames	1	newframe	*	exp: 801			
Expert	2		~	exp: 801			
	3		~	exp: 801			
	4		~	exp: 801			
	5		~	exp: 801			
	6		~	exp: 801			
	7		~	exp: 801			
	8		~	exp: 801			

PBX More



Sound Files

Sound Files Add New				
Dashboard / Sound Files / Add New				
File Name	USER1362650813304			
File Extname				
File Size	КВ			
Upload File	 Not upload Web upload Recording through extension 			
	Add New			

By default, the file name is unmodified when you add a new sound.

It can be used as the Simple IVR's file.

File Ext name/ file size: Unmodified.

Upload file: you can choose the way to upload the file.

Web upload: Only support GSM file.

Upload File	 Not upload Web upload Recording through extens 	ion	
Web load file	Only support GSM format files.		浏览
	Add New		

When you input one extension number, it will record automatically.

Upload File	 Not upload Web upload Recording through extension
Recording extension	800
	Add New

When you upload a sound file, you can listen, edit and delete.

Sound Files

Dashboard / Sound	Files		
New File			
Filename	Format	Size	
welcome	gsm	14.28KB	listen edit delete

Option

PBX General:

Outbound and internal ring time: you can input the time of ring you like.

Extension dialing route: you can set the dialing route here as well as the Extension-Dialing

Route

	Outbound Routes
Default Mode	[smart] Automic try localnumb
Default Outbound	

Trunk Dialing route: you can also find the setting in Line provider-Dial-in Route

	Trunk Inbound Routes
Auto Find Extension	[disable] Do nothing.
Default Mode	[smart] Automic try localnumb
Default Extension	310
IVR Max Retry	20
	Save

IVR MAX TRY: For example, if we input 2 means the system will automatically quit when the

IVR playback for twice.

IVR MAX RETRY	2	Max Retry for all IVR menus.
	Save	

Call Notification: When Make call to Extensions (SIP Ring Group Follow Me) or to Queues

(Extensions Answered) or to IVR(Extensions Answered), PBX will send notification to url.

IVR Max Retry	20
[Call Notification
Http Url	Exp: http://your.server/abc.asp?caller=%callee=%callee
	Save

Hot Keys

Option

Dashboard /	Option		
PBX General	Hot Keys	SIP Protocol	Voicemail / FTP
Call F	Pickup *	+ Callee e	xtension number
Voicemail Pla	yback 20		
	Sav	ve	

You can set the call pick up prefix number to pick the extension.

You can't set "#" as the prefix as it is used by the system.

Set the voice mail playback number to get your voice mail and listen.

Dial the number directly on your phone to listen.

SIP Protocol

PBX General Hot K	eys SIP F	Protocol	Voicemail / FTP
Anonymous Call In	Yes		V
TCP/UDP Bind Port	6620		
Max Register Expiry	3600	(sec)	
Min Register Expiry	20	(sec)	
Default Register Expiry	60	(sec)	
Progress Mode	NEVER		~
T.38 UDPTL	YES		•
	Ə Jitter Bul	fer	
Enable	● Yes 0 I	No	

Anonymous Call In

UDP Bind Port: by default is 6020

Please note you should modify this port when you set the extension port is 5060.

Max Register Expiry

Min Register Expiry

Default Register Expiry

Progress Mode

You can also set the Jitter Buffer option. Default is enabling Jitter Buffer.

It will help to protect and keep the voice with good quality.

	9 Jitter Buffer to enable or disable jitter buffer in sip protocol.
Enable	● Yes ○ No
Force Receive	⊖Yes ◉ No
Max Length	200 (ms)
Resync Threshold	1000
Implementation	• Fixed O Adaptive
Target Extra	40 (ms)

SIP Behind NAT

This experimental feature is that when a PBX as a SIP server behind Nat, SIP Nats allows your SIP phone and IADs to register into PBX. And it needs the firewall and router's support.

1.00 001 12					
		This feature is experimental: When			
		PBX as a SIP Server behind nat, SIP			
	SIP NAT in Experimental?	NAT allows remote sip phone or iad			
		to regsiter into P	BX, it needs the		
SIP Behind NAT	O Disabled firewall or router support.				
	 External IP 				
	External DOMAIN(Dynamic Dns)				
			_		
External Domain	R	efresh 10	(sec)		
Local Net Area					
	Save				

Voicemail

Say Date time if choose yes, it will read the call record date.

Say caller ID: if choose yes, it will read the caller ID.

Option				
Dashboard / Option				
PBX General Hot	Keys	SIP Protocol	Voicemail	
	Voicer	nail		
Say Datetime	⊖Yes	s 💿 No		
Say Callerid	Yes	s 🔿 No		
	Sav	e		

Glossary

ATA (Analog Telephony Adapter)

A device used to connect one or more standard analog telephones to a digital and/or

non-standard telephone system such as a Voice Over IP based network.

DID (Direct Inward Dial)

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. As calls are presented to the PBX, the dialed destination number (DNIS) is transmitted, usually partially (e.g., last four digits), so that the PBX can route the call directly to the desired telephone extension within the organization without the need for an operator or attendant.

DID numbers are assigned to a communications gateway connected by a trunk to the public switched telephone network (PSTN) and the VoIP network. The gateway routes and translates calls between the two networks for the VoIP user. Calls originating in the VoIP network will appear to users on the PSTN as originating from one of the assigned DID numbers.

DNS (domain name system)

The Internet's name/address resolution service that translates alphabetic domain names into numeric IP addresses. For example, the domain name www.pbx.com might translate to 198.105.232.4. If a computer cannot access DNS, the user's web browser will not be able to find web sites and the user will not be able to receive or send email. The DNS system consists of three components: DNS data,name servers, and Internet protocols for getting the

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data from the servers.

Domain name server

A computer that runs a program that converts a fully qualified domain name (FQDN) into its numeric

IP address and vice versa.

DTMF (Dual-Tone Multi-Frequency)

The signal that is generated when a user presses the touch keys of an ordinary telephone. Also known as "Touchtone," DTMF has essentially replaced pulse dialling. When a user presses touch keys, two tones of specific frequencies are generated (one from a high-frequency group and the other from a lowfrequency

group), so it's impossible for the voice to imitate the tones.

FTP (File Transfer Protocol)

A standard Internet protocol used to upload and download files between computers that are connected to the Internet. FTP uses the Internet's TCP/IP protocols as does HTTP, which transfers displayable Web pages and related files, and SMTP, which transfers e-mail.

GSM (Global System for Mobile communication)

A wireless telephone standard in Europe and other parts of the world.GSM uses a variation of time division multiple access (TDMA), which is the most widely used of the three digital

wireless telephony technologies (TDMA, GSM, and CDMA). GSM digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot. It operates at either the 900 MHz or 1800 MHz frequency band.

IP-PBX (Internet Protocol Private Branch Exchange)

A telephone switch (see "PBX") located on a customer's premises that utilize VoIP to manage and deliver calls.

ITSP (Internet Telephone Service Provider)

A company that offers an Internet data service for making telephone calls using VoIP. Most ITSPs use SIP, H.323, or IAX for transmitting telephone calls as IP data packets. Customers may use VoIP phones or traditional telephones with an analog telephony adapter (ATA).

ITU (International Telecommunication Union)

A telecommunications standards body that is guided by the United Nations. It was founded as the International Telegraph Union in Paris on May 17, 1865. The ITU acts as the global focal point for governments and the private sector in developing networks and services and is comprised of more than 185 countries and produces over 200 standards recommendations annually in the areas of information technology, consumer electronics, broadcasting, and multimedia communications.

IVR (Interactive Voice Response)

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A telephone technology that allows a caller to respond to configured voice menus through voice and

touch tone. The IVR system responds with pre-recorded audio to further direct callers on how to proceed.

LAN (Local Area Network)

A computer network covering a small physical area, like a home, office, or small group of buildings, such as a school, or an office park. LANs are connected primarily through Ethernet and can be connected to other LANs over any distance via telephone lines and radio waves. LANs have a high data transfer rate and are not very expensive to set up. See also "WAN."

MAC (Media Access Control) address

A hardware address that uniquely identifies most network adapters or network interface cards (NICs) by the manufacturer for identification. The manufacturer's registered identification number is usually part of the MAC address if it was assigned by the manufacturer. The MAC address is used by the Media Access Control protocol sub-layer of the Data-Link Layer (DLC) of telecommunication protocols.

MIPS (million instructions per second)

An old method for measuring a computer's speed and power and, by implication, for determining the amount of work a computer can do. It measures the approximate number of

machine instructions the computer can execute in 1 second (i.e., it measures CPU speed). Because there are so many variables with computer performance (e.g., varying amounts of time for different instructions, importance of I/O speed, etc.), MIPS ratings are not used that often anymore. However, a MIPS rating can give you a general idea of a computer's speed.

NAT (Network Address Translation or Network Address Translator)

The method for translating an IP address used within one network to a different IP address known within another network (one network is designated the *inside* network and the other is the *outside* network). NAT allows as a router, for example, to act as an agent between the public network (e.g., the Internet) and a private network (i.e., a local network), which means that a single, unique IP address can represent an entire group of computers.

PBX (Private Branch exchange)

A telephone exchange that serves a particular business or office, as opposed to one that is owned by a common carrier or telephone company and is used by many businesses or the general public. Users of the PBX share a certain number of outside lines for making telephone calls external to the PBX.PBXs have evolved over time, beginning as a manual switchboard or attendant console that was operated by a telephone operator (circuit switching) to the modern IP PBX. See also "IP PBX."

PSTN (Public Switched Telephone Network)

The network of the world's public circuit-switched telephone networks. Originally a network

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of fixed line analog telephone systems, the PSTN is now almost entirely digital in its core and includes mobile as well as fixed (plain old telephone service, POTS) telephones. The PSTN is largely governed by technical standards created by the ITU-T, and uses E.163/E.164 telephone numbers for addressing.

Proxy Server

A server (a computer system or an application program) that acts as an intermediary for requests from clients seeking resources from other servers. The VoIP proxy server is used in a DMZ of a company's secure internal communication network and receives VoIP control messages and VoIP media streams.

Using the MAC address and source IP address contained in the control message, the proxy server pushes a policy change to the internal network's external firewall to open call control protocol ports and Real Time Protocol (RTP) ports only for packets from the source IP address. The VoIP proxy server hides the company's internal network address and directs incoming VoIP packets to an IP-PBX connected to the company's internal network.

RAM (Random Access Memory)

A form of computer data storage that allows stored data to be accessed in any order (i.e., "random access").

RAM is used by a computer's operating system, application programs, and currently used data, so that they can quickly be reached by the computer's processor. RAM is quickly readable and writeable compared to other kinds of computer storage (e.g., the hard disk,

floppy disk, and CD-ROM);However, data in RAM remains only as long as the computer is running. Once the computer has been turned off, RAM loses its data. When the computer is turned on again, the operating system and other files are once again loaded into RAM.

Router

A device for connecting one or more computers to other computers, networked devices, or to other networks. Compared to hubs and switches (which are also connecting types of devices), a router is the smartest and most complicated of the three. Routers can be programmed to understand and route the data its being asked to handle. Configuration is done through a user interface. Larger routers are capable of being programmed to communicate with other routers to determine the best method of getting network traffic from point A to point B. Hubs work at the data link and network layers (layers 2 and 3) of the OSI model.

SIP (Session Initiation Protocol) [RFC 3261, 3262, 3263, 3264, and 3265]

A signalling protocol for initiating and terminating an interactive user session that involves multimedia elements such as video, voice, chat, gaming, and virtual reality (it is used mainly for voice and video calls over the Internet or data networks).

SIP Trunk

A service offered by an ITSP that allows businesses that have a PBX for their internal calls to use VoIP to go outside the enterprise network by using the same connection as the

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Internet connection. Before SIP trunks can be deployed, a business must have a PBX with a SIP-enabled trunk side, an enterprise edge device that understands SIP, and an ITSP. See "ITSP."

Soft-switch (software switch)

A term used to describe the software that is used to bridge a public switched telephone network (PSTN) and VoIP. This is done by separating the call control functions of a phone call from the media gateway (transport layer). The soft-switch is typically used to control connections at the junction point between circuit and packet networks.

UDP (User Datagram Protocol) [RFC 768]

A communications protocol that offers a limited amount of service when messages are exchanged between computers in a network that is using the Internet Protocol (IP). UDP merely performs IP traffic demultiplexing based on UDP port numbers, after which it provides a checksum that can be used by end systems to determine whether the datagrams received were corrupted by the network.

WAN (Wide Area Network)

A computer network that covers a broad area (e.g., any network that links across metropolitan, regional, or national boundaries). WANs are similar to the Internet in that they are not owned by a single organization. They exist under collective or distributed ownership and management. For WAN connectivity over the longer distances, ATM, frame relay, and X.25 are used. Computers connected to

a WAN can be connected via the telephone system, leased lines, or satellites. WANs have a

lower data transfer rate when compared to LANs. See also "LAN."