

User's Manual



Internet Telephony PBX System

▶ **IPX-2500**



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4. Consult the dealer or an experienced radio technician for help.

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This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity (R&TTE) The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

WEEE Caution



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

Customer Service

For information on customer service and support for the Gigabit SSL VPN Security Router, please refer to the following Website URL: <http://www.planet.com.tw>

Before contacting customer service, please take a moment to gather the following information:

- Internet Telephony PBX System serial number and MAC address
- Any error messages that displayed when the problem occurred
- Any software running when the problem occurred
- Steps you took to resolve the problem on your own

Revision

User's Manual for PLANET Internet Telephony PBX System

Model: IPX-2500

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Chapter 1 Introduction

Intuitive, Ease-of-Use IP PBX Machine Management

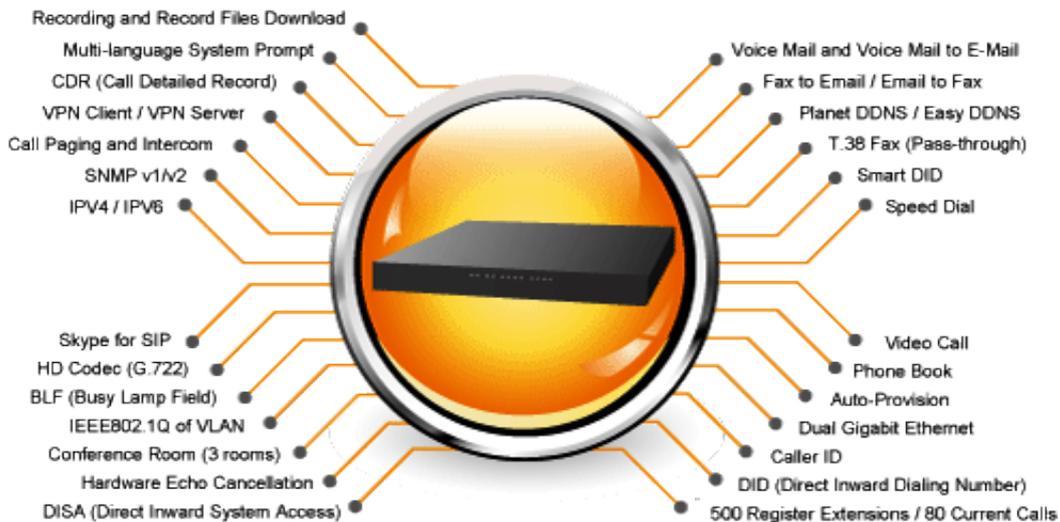
PLANET IPX-2500 IP PBX telephony system is SIP based and optimized for the small and medium business in daily communications. The IPX-2500 is able to accept **500 user registrations**, and easy to manage a full voice over IP system with the convenience and cost advantages.

Leading Enterprises and Workgroup users to High-Speed Networking Generation

With the increasing popularity of desktops and laptops built with Gigabit network Interface, and wide application of shared Database Device and Multi-Media Center day by day, IPX-2500 equipped with **Dual Gigabit** RJ-45 ports (10/100/1000Mbps) (**WAN / LAN**) provides advanced voice and data communications features businesses need to stay productive and responsive.

Off-net Calling Capability, Call Restriction, Call Access Control

The IPX-2500 integrates up to 8 calls via the IPX-21FO (4 FXO) , IPX-21SL (2 FXO + 2 FXS) and IPX-21GS (4 GSM) module to become a feature-rich PBX system that supports seamless communications between existing PSTN calls, analog, IP phones and SIP-based endpoints.



Replaces old PBX directly without requiring any new wiring to be put in

Cost-effective, easy-to-install and simple-to-use, the IPX-2500 converts standard telephones to IP-based networks. It enables the service providers and enterprises to offer users traditional and enhanced telephony communication services via the existing broadband connection to the Internet or corporation network.

With the IPX-2500, home users and companies are able to save the installation cost and extend their past investments in telephones, conferences and speakerphones. The IPX-2500 can be the bridge between traditional analog systems and IP network with an extremely affordable investment.

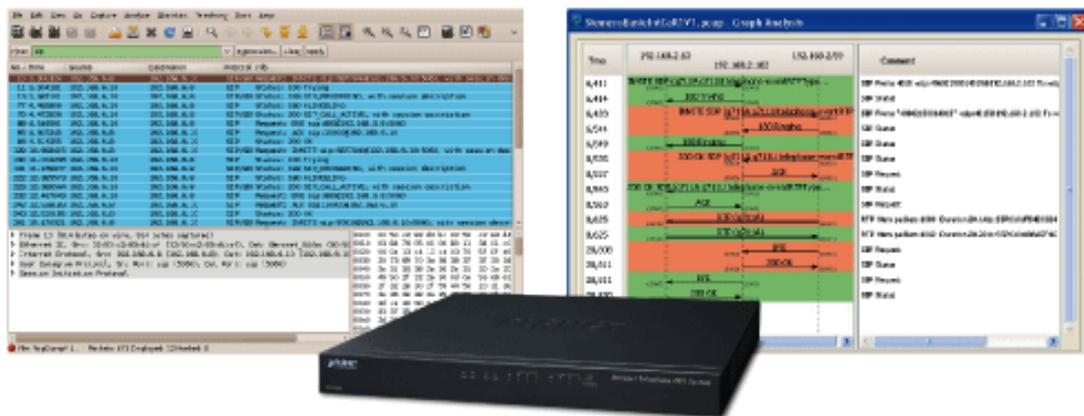
Distributed VoIP Network Infrastructure

For the new generation communication age, the IPX-2500 supports IPv6 and VPN (client / server) connection to provide users with more flexible and advantage communication products. With PLANET DDNS function, the IPX-2500 also helps users to apply and remember the login information easier. Moreover, its multiple language features helps user to quickly and friendly manage the system.

Standard Compliance

Compliant with the Session Initiation Protocol 2.0 (RFC 3261), the IPX-2500 is able to broadly interoperate with equipment provided by VoIP infrastructure providers, thus enabling them to provide their customers with better multi-media exchange services.

Compliant with standard SIP RFC 3261



Green IP Office

The Fax to Email / Email to Fax service by the IPX-2500 allows users to transfer / receive faxes directly to / from your email inbox as file attachments. It's an easy and confidential way of receiving, storing and forwarding important Fax documents, thus creating a paperless or green office.



Green Office (Fax to Email / Email to Fax)

Full Security with VPN Support

The IPX-2500 VPN securely and cost-effectively connects geographically disparate offices of an organization, creating one cohesive virtual network. The IPX-2500 VPN technology is also used by ordinary Internet users to connect to proxy servers for the purpose of protecting one's identity. It includes VPN server and client function that can support users full security login.

1.1 Features

➤ **System Highlights**

- 80 concurrent calls and up to 500 registers
- Dual Gigabit Ethernet (WAN / LAN)
- HD voice codec G.722 for perfect voice quality
- Fax to Email / Email to Fax for Green Office
- Voicemail to Email for not missing any important message
- Paging and intercom function strengthens work efficiency
- Built-in SIP Proxy Server following RFC 3261
- Multiple Language of GUI for international business
- Web based Control Panel for easy configuration and management of the system
- Hardware Echo Cancellation module for great and smooth communication
- Support VPN Client / Server function.
- Supports maximum 8 ports FXO / FXS / GSM (on 2 slots)

➤ **Codec and Protocol**

- SIP 2.0 (RFC3261) / IAX2 compliant
- Audio Codec: G.722 / G.711-Ulaw / G.711-Alaw / G.726 / G.729 / GSM / SPEEX
- Video Codec: H.261 / H.263 / H.263+ / H.264
- DTMF: RFC2833, SIP INFO, In-band

➤ **Network and Security Features**

- DDNS Client (PLANET DDNS, Easy DDNS, DynDNS, Zone Edit, No IP)
- DHCP Server / SNMP v1 / v2
- IEEE 802.1Q of VLAN
- Supports IPv6 in addition to IPv4
- Manual Configuration of Static Route Table
- Trouble Shooting (Ping, Traceroute)
- VPN Client (Supports N2N / L2TP / PPTP / OpenVPN)
- VPN Server (Supports PPTP / L2TP / OpenVPN Server)
- Refuse SIP Register DoS
- Refuse Abort Invite Dos
- Refuse SSH Login DoS
- Firewall / SRTP

➤ **PBX Features**

- Black List
- BLF (Busy Lamp Field)
- CDR (Call Detailed Record)
- Conference Room (3 rooms)
- DID (Direct Inward Dialing Number)
- DISA (Direct Inward System Access)
- DND / Feature Codes / Flash Operation Panel
- Follow Me / Auto-Provision
- IVR (Interactive Voice Responses)
- Multi-language System Prompt
- Multiple Language of GUI
- Phone Book / PIN Set
- Record Files Download
- Ring Group / SIP Trunk
- Skype for SIP / Smart DID / System Log
- T.38 Fax (Pass-through) / Time based rule
- Virtual Fax / Voicemail & Voice Mail to E-Mail

➤ **Call Features**

- Call Back / Call Forward / Call Group
- Call Hold / Call Paging and Intercom
- Call Park / Call Pickup / Call Queue
- Call Record / Call Route / Blind Transfer
- Attend Transfer / Call Waiting
- Caller ID / Dial by Name
- Customized IVR / on hold music / Transfer
- Three-way Conference / Video Call

1.2 Package Contents

Thank you for purchasing PLANET Internet Telephony PBX system, IPX-2500. This Quick Installation Guide will introduce how to finish the basic setting of connecting the web management interface and the Internet. Open the box of the Internet Telephony PBX system and carefully unpack it. The box should contain the following items:

- Internet Telephony PBX System Unit x 1
- Quick Installation Guide x 1
- User's Manual CD x 1
- Power Cord x 1
- RJ-45 x 1
- Bracket x 2

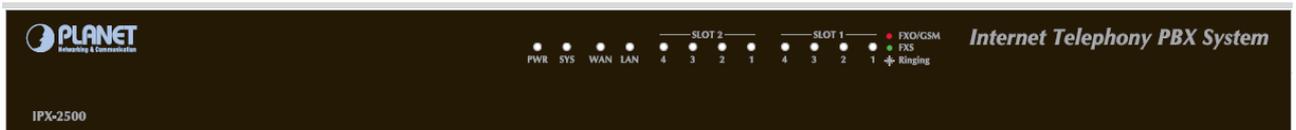
If any of the above items are damaged or missing, please contact your dealer immediately.

1.3 Physical Specifications

➤ Dimensions

Dimensions:	310 (L) x 500 (W) x 90 (H)mm
Net Weight:	3.3kg (without package)

➤ Front Panel



➤ Rear Panel



➤ **LED definitions**

Front Panel LED	State	Descriptions
PWR	On	PBX Power ON
	Off	PBX Power OFF
SYS	On	Enabling system.
	Flashing	System is working
	Off	System is off
WAN/LAN	Flashing	PBX network connection established
	Off	Waiting for network connection
FXO / GSM	On	Red
	Flashing	Ringling
	Off	Waiting for connection
FXS	On	Green
	Flashing	Ringling
	Off	Waiting for connection

➤ **Physical interfaces description**

1	Reset	The reset button, when pressed, resets the IP PBX without the need to unplug the power cord.
2	Power	AC 100~240V, 50 / 60Hz, 1.5A max
3	WAN / LAN	The WAN / LAN port supports auto negotiating Gigabit Ethernet 10/100/1000 Base-TX networks. This port allows your IP PBX to be connected to an Internet Access device, e.g. router, cable modem, ADSL modem, through a CAT.5 twisted pair Ethernet cable.
4	Audio	The Audio / USB are reserved for the factory / production line usage; it is not applicable for regular application.
5	USB	
6	Slots 1 / Slots 2	<p>2 external slots with compliance FXO / FXS / GSM module.</p> <p>FXO module is connects to PBX or CO line with RJ-11 (Write) analog line. FXO port was connected to the extension port of a PBX or directly connected to a PSTN line of carrier.</p> <p>FXS module is connects to Phone with RJ-11 (Write) analog line. FXS port was connected to your telephone sets, FAX, or Trunk Line of PBX.</p> <p>GSM module is connects to Global System for Mobile</p>

		Communications (GSM) with SIM Card.
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 Note	Supporting 2 slots, user can buy expansion module like IPX-21FO (4 FXO), IPX-21SL (2 FXO + 2 FXS) or IPX-21GS (4 GSM) for extending port service.
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1.4 Specifications

Product	IPX-2500 Internet Telephony PBX system (500 SIP Users registrations)
Hardware	
WAN	1 x 10 / 100 / 1000 Mbps RJ-45 port
LAN	1 x 10 / 100 / 1000 Mbps RJ-45 port
2 Slot	Supports maximum 8 ports (FXS / FXO / GSM)
USB	Future Feature
Audio	Future Feature
VGA	VGA Interface
Protocols and Standard	
Standard	SIP 2.0 (RFC3261), IAX2
Protocols	RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 1631 NAT RFC 2068 HTTP RFC 2131 DHCP RFC 2516 PPPoE RFC 3261, RFC 3311, RFC 3515 RFC 3265, RFC 3892, RFC 3361 RFC 3842, RFC 3389, RFC 3489 RFC 3428, RFC 2327, RFC 2833 RFC 2976, RFC 3263
Voice Codec	G.722 / G.711-Ulaw / G.711-Alaw / G.726 / G.729 / GSM / SPEEX
Video Codec	H.261 / H.263 / H.263+ / H.264
Fax over IP	T.38 Fax (Pass-through) Note: T.38 support is dependent on fax machine, SIP provider and network / transport resilience
Voice Processing	DTMF detection and generation In-Band and RFC 2833, SIP INFO
Protocols	SIP 2.0 (RFC-3261), TCP/IP, UDP / RTP / RTCP, HTTP, ICMP, ARP, DNS, DHCP, NTP/SNTP, PPP, PPPoE
Internet Sharing	
Network Features	DDNS Client (Planet DDNS and Easy DDNS), DHCP Server / SNMP v1/v2 IEEE802.1Q of VLAN IP Assignment (PPPoE / DHCP / Static) IPv4 / IPv6 Manual Configuration of Static Route Table

	Trouble Shooting (Ping, Traceroute) VPN Client (Support N2N / L2TP/PPTP/OpenVPN) VPN Server (PPTP/L2TP/OpenVPN Server)
Security Features	Refuse SIP Register DoS Refuse Abort Invite Dos Refuse SSH Login DoS Firewall / SRTP
Features	
PBX Features	Black List BLF (Busy Lamp Field) CDR (Call Detailed Record) Conference Room (3 rooms) DID (Direct Inward Dialing Number) DISA (Direct Inward System Access) DND / Feature Codes / Flash Operation Panel Follow Me / Auto-Provision IVR (Interactive Voice Responses) Multi-language System Prompt Multiple Language of GUI Phone Book / PIN Set Record Files Download Ring Group / SIP Trunk Skype for SIP / Smart DID / System Log T.38 Fax (Pass-through) / Time based Rule Virtual Fax / Voicemail & Voice Mail to E-mail
Call Features	Call Back / Call Forward / Call Group Call Hold / Call Paging and Intercom Call Park / Call Pickup / Call Queue Call Record / Call Route / Blind Transfer Attend Transfer / Call Waiting / Caller ID / Dial by Name Customized IVR / on hold music / Transfer Three-way Conference / Video Call
System Capacity	
System Capacity	80 Concurrent Call Legs Up to 500 IP Phone Registers/Extensions Recording (GSM / default): 2,500,000 mins minutes; Wav: 210,000 mins Voicemail (GSM / default): 2,500,000 mins minutes; Wav: 210,000 mins
Network and Configuration	
Access Mode	Static IP, PPPoE, DHCP
LED Indications	SYS: 1, LNK / Off WAN: 1, LNK / Off LAN: 1, LNK / Off PWR: 1, LNK / Off FXO / GSM: Red FXS: Green
Dimensions (W x D x H)	310 x 500 x 90 mm
Operating Environment	-10~45 degrees C, 10~80% humidity
Power Requirements	AC 100~240V, 50 / 60Hz, 1.5A max.
EMC/EMI	CE, FCC Class B, RoHS

Chapter 2 Installation Procedure

2.1 Web Login

Step 1. Connect a computer to an LAN port on the IPX-2500. Your PC must set up to the same domain of 192.168.0.X as that of the IPX-2500.

Step 2. Start a web browser. To use the user interface, you need a PC with Internet Explorer (version 6 and higher), Firefox, or Safari (for Mac).

Step 3. Enter the default IP address of the IPX-2500: 192.168.0.1 in the URL address box.

Step 4. Enter the default user name **admin** and the default password **admin**, and then click Login to enter Web-based user interface.

(Default IP)

Default WAN IP: **172.16.0.1**

Default LAN IP: **192.168.0.1**

Default User Name: **admin**

Default Password: **admin**

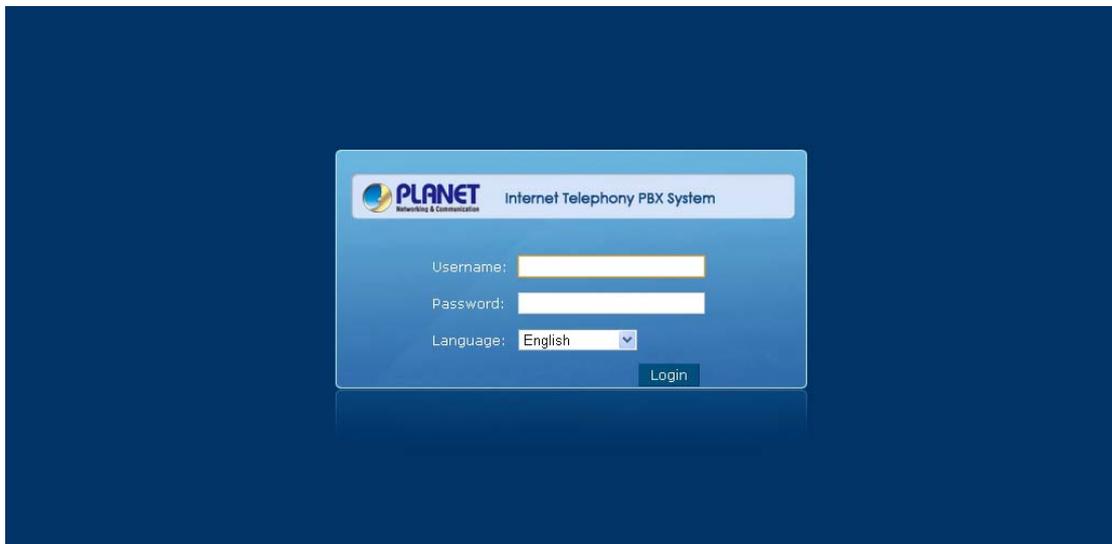


Figure 2-1. Login page of the IPX-2500



For security reason, please change and memorize the new password after this first setup.

Step 2. Edit your WAN port IP information.

There are three types of Ethernet port connection. They are **Static IP**, **PPPoE** (Point-to-Point Protocol over Ethernet), **DHCP**. You can find detailed setting process in the user manual.

WAN Port Setup	
IP Assign:	<div style="border: 1px solid #ccc; padding: 2px;"> Static ▼ <ul style="list-style-type: none"> <li style="background-color: #e0e0e0; padding: 2px;">Static <li style="padding: 2px;">DHCP <li style="padding: 2px;">PPPoE </div>
IP Address:	192.168.10.8
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.254
Primary DNS:	192.168.1.254
Alternate DNS:	_____
LAN Port Setup	
IP Address:	192.168.10.100
Subnet Mask:	255.255.255.0
<input type="checkbox"/> IP AddressV1:	_____
<input type="checkbox"/> IP AddressV2:	_____
	Subnet MaskV1: _____
	Subnet MaskV2: _____

Selection of IP Connection Type

Chapter 3 Basic Configuration

3.1 Preparation before Operation

What kind of IP phone can be used with the IPX-2500 IP PBX?

- Our IPX-2500 is based on SIP 2.0 (RFC 3261); any IP phone model based on the same protocol can work with the IPX-2500.

3.2 Before Making a Call

3.2.1 System Information

(Default IP)

Default WAN IP: **172.16.0.1**

Default LAN IP: **192.168.0.1**

Default User Name: **admin**

Default Password: **admin**

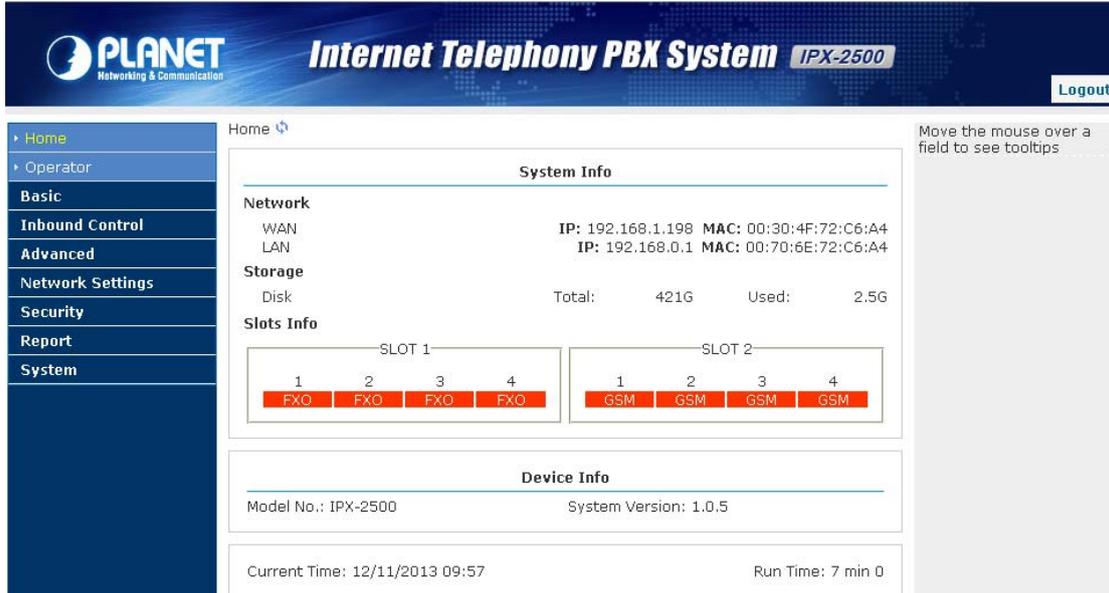


Note

1. To login to the IPX-2500, your PC must use the same domain as the eth0 IP address of the IPX-2500.
2. For security reason, please modify the user name and password after you login. You can modify it on this page: "System"---"Management"
3. **Every Time after saving the change, please press the "Activate Changes" to**

make modification effective.

If user name and password are right, this following page will be displayed:



The screenshot shows the web interface for the IPX-2500 system. It includes a navigation menu on the left with options like Home, Operator, Basic, Inbound Control, Advanced, Network Settings, Security, Report, and System. The main content area displays 'System Info' with network details (WAN/LAN IP and MAC), storage usage (Total: 421G, Used: 2.5G), and slot configurations (SLOT 1 with 4 FXO ports, SLOT 2 with 4 GSM ports). Below this is 'Device Info' showing Model No.: IPX-2500 and System Version: 1.0.5. At the bottom, it shows Current Time: 12/11/2013 09:57 and Run Time: 7 min 0. A 'Logout' button is visible in the top right corner.

1	Network	ETH0 IP and MAC will be displayed
2	Storage	Total storage and used storage will be displayed
3	Slots Info	Channel information will be based on the product model
4	Device Info	Product Model and System Version will be displayed



1. If FXO is connected, the slot color and the front panel LED will be red and steady red, respectively.

2. If FXS is connected, the slot color and the front panel LED will be green and steady green, respectively.

Commonly Used Button

On the home page, besides the system info, there are other function buttons as shown below:

1	Logout	Logout the Web panel
2	Activate Change	Activate the changes for your current configuration

System Menu

System Menu includes the following sub menu:

1	Home	Display device information
2	Operator	Extension / Trunk / Channel Status
3	Basic	Basic configuration on extension, trunks, etc
4	Inbound Control	Configuration of Inbound Route, IVR and Black List, etc
5	Advanced	Configuration of extension's default information, Conference Call, Call Transfer, Function Key, etc.
6	Network Settings	Configuration of Routing, Network, VPN, DHCP and other related network parameters
7	Security	Configuration of Firewall, SSH, FTP.
8	Report	Record List, Call Logs and System Logs.
9	System	Time Settings, Management, Back Up and Upgrade, etc.

3.2.2 Operator

- Home
- Operator
- Basic
- Inbound Control
- Advanced
- Network Settings
- Security
- Report
- System

Operator Operator

Current Active: 0

Extensions

● Idle
 ● Ringing
 ● InUse
 ⏸ Hold
 ● UnAvailable

● 800	● 801	● 802	● 803	● 804
800(SIP)	801(SIP)	802(SIP)	803(SIP)	804(SIP)
● 805	● 806	● 807	● 808	● 809
805(SIP)	806(SIP)	807(SIP)	808(SIP)	809(SIP)

VoIP Trunks

Status	Trunk Name	Type	Username	Hostname/IP/Port	Reachability
No VoIP Trunk defined. You can click here to create Trunk.					

FXO/GSM Ports

Status	Signal Strength	Type	Port	BLF Label
Disconnected		FXO	1	Channel1
Disconnected		FXO	2	Channel2
OK		FXS	3	
OK		FXS	4	
Disconnected		FXO	5	Channel5
Disconnected		FXO	6	Channel6
Disconnected		FXO	7	Channel7
Disconnected		FXO	8	Channel8

Display all the Extension, VoIP Trunk and Slot information.

About extension:

1		Idle
2		Ringing
3		In use
4		Hold
5		Unavailable

3.2.3 Basic Configuration

Configure Extensions

Planet IP PBX supports SIP / IAX2 and analog extension; configure extension on this page:

【Basic】 ---- **【Extensions】**

- Home
- Operator
- Basic
 - Extensions
 - Trunks
 - Outbound Routes
- Inbound Control
- Advanced
- Network Settings
- Security
- Report
- System

Extensions

Extensions
Upload/Download Extensions

Extension: Search Show All

New User
Batch Add Users
Delete Selected Users

	Name	Extension	Port	Protocol	DialPlan	Outbound CID	Options
<input type="checkbox"/>	1	800	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	2	801	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	3	802	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	4	803	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	5	804	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	6	805	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	7	806	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	8	807	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	9	808	--	SIP	DialPlan1		Edit
<input type="checkbox"/>	10	809	--	SIP	DialPlan1		Edit

Click **【New User】** to see the extension configuration interface as shown below:

New
X

General

SIP: IAX2:

Name: Extension:

Password: Outbound CID:

DialPlan: Analog Phone:

Voicemail

Voicemail: VM Password:

Delete VMail: Email(Fax/Voicemail):

Other Options

Web Manager: Agent: Call Waiting:

Allow Being Spied: Pickup Group:

Mobility Extension: Mobility Extension Number:

VoIP Settings

NAT: Transport: SRTP:

DTMF Mode: Permit IP:

Video Options

Video Call:

H.261 H.263 H.263+ H.264

Audio Codecs

alaw ulaw G.722 G.729 G.726 GSM Speex

Save
Cancel

Extension Settings

Item	Explanation
SIP / IAX2	Choose extension protocol.
Name	Extension Name (English Character Only), e.g. Tom.
Extension	Extension Number connected to the phone, e.g. 888.
Password	Same password as voicemail. (4-16 digits, e.g.123456)
Outbound CID	Override the caller ID when dialing out with a trunk.
Dial Plan	Please choose the Dial Plan which is defined in the menu "Outbound Routes".
Analog Phone	Please select the related FXS port for your analog phone.
Voicemail	Select this option to open the voicemail account
VM Password	Set password for Voicemail, e.g. "1234"
Delete VMail	Check this option to delete voicemail from system after it's sent to mail box.
Email (Fax / Voicemail)	Extension user's mail box, which is used for receiving fax or voicemail (you need to open the function to fax to email / voicemail), e.g. Tom@gmail.com
Web Manager	It's allowed to login Extension Management Panel to manage extension like voicemail, call recording, call transfer, etc when you select this option.
Agent	Check this option to set this extension user as agent.
Call Waiting	Enable call waiting
Allowing Being Spied	Check this option to allow being spied.
NAT	Check this option if extension user or the phone is located after the NAT (Network Address Translation) available gateway.
Pickup Group	Select the Pickup Group which the extension user belongs to.
Mobility Extension	After checking this option, you must set mobility extension number. User can make calls to the IP PBX server with this mobility number, and have all rights of this extension, e.g. Outbound Call, Internal Call, Listen to the voicemail.
Transport	Select the Transport Protocol: UDP, TCP, TLS
SRTP	Enable SRTP
DTMF Mode	Default DTMF is rfc2833. It can be changed if necessary.
Video Call	Check to enable video call for this extension. And select the audio codecs you need to use.
Permit IP	Set computer permitted IP to visit this IP PBX, e.g.192.168.1.77or

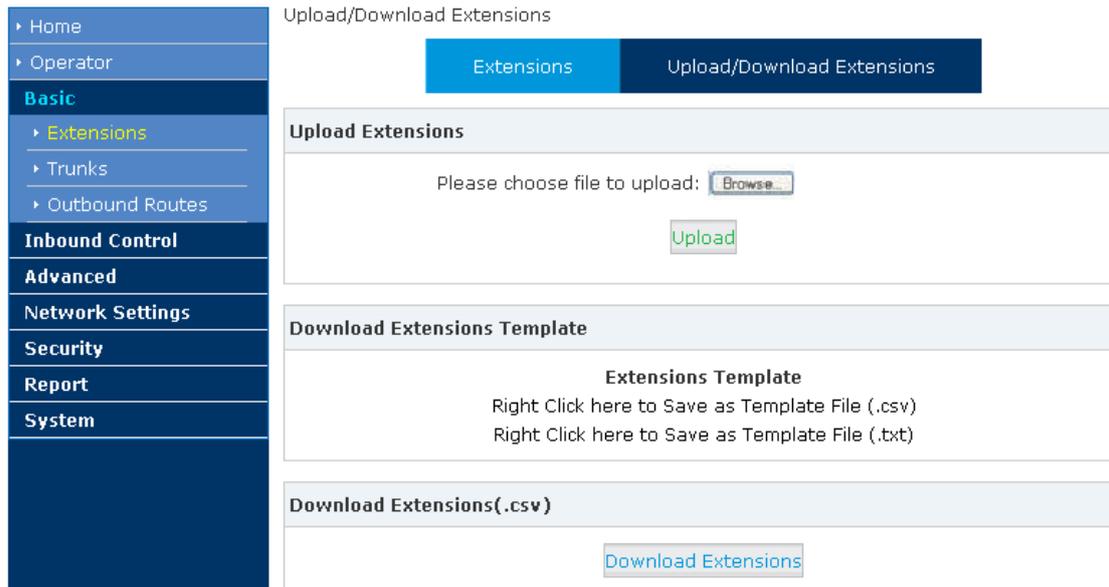
	192.168.10.0/255.255.255.0. Computer with other IPs is not allowed to visit this IP PBX.
Audio Codec	Select what audio codec you need to use.


Note

1. There are few default extensions which number started with "8XX", you can add or delete extension by your requirement
2. Maximum extensions: 100.
3. For security reason the default password is random character or number e.g. BB%ChH64rl, and every time when you reset to default system, it will randomly have a new password again

Upload / Download Extensions

Click **【Upload/Download Extensions】** to add extensions as shown below:



Download the extension template from the **【Download Extensions Templet】** , add extension information based on the template format and save.

Select the extension file to upload from **【Upload Extensions】**

Download current extension information from **【Download Extensions (.csv)】**

3.2.4 Time-based Rules

Please set time rule for working time and after-working time, and deal with inbound calls based on this time rule.

Please set from this page: **【Time-based Rule】** --- **【New Time Rule】** :

Edit X

Rule Name:

Time & Date Conditions

Start Time: : End Time: :

Start Day: End Day:

Start Date: End Date:

Start Month: End Month:

Destination

if time matches:

if time unmatches:

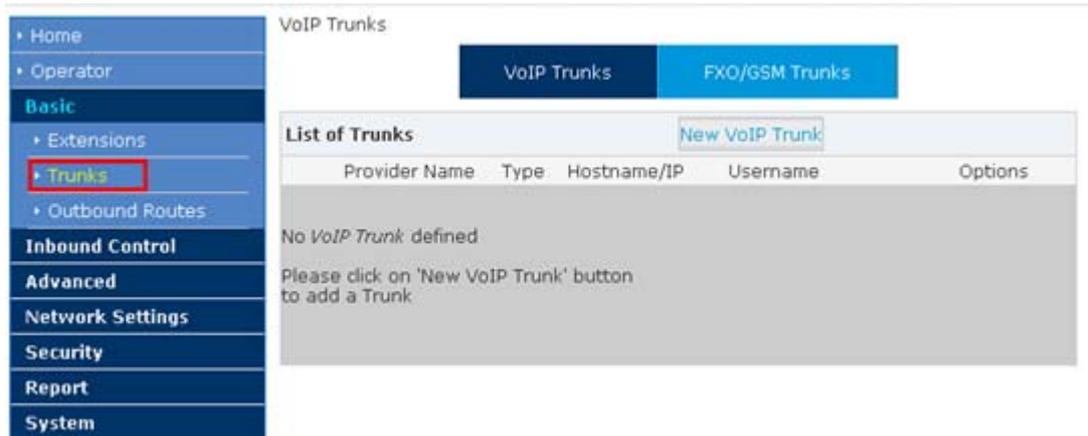
New Time Rule:

Item	Explanation
Rule Name	Define the name for this Time Rule.
Time & Date Conditions	Set time segment for Day/ Date/ Month.
Destination	How to deal with the inbound call in different time segments. For example, inbound call can be directed to operator in working time.

3.3 Outbound Call

3.3.1 Trunks

If you want to set up outbound call to connect to PSTN (Public Switch Telephone Network) or VoIP provider, please configure on this page: **【Basic】** -> **【Trunks】**



Planet IP PBX supports 2 kinds of trunks: VoIP Trunks and FXO/ FXS Trunks.

VoIP Trunks

1. Click **【VoIP Trunk】** -> **【New VoIP Trunk】** :

X
New VoIP Trunk

Description: _____

Protocol: SIP

Host: _____:5060

Maximum Channels*: 0

Prefix: _____

Caller ID: _____

Without Authentication

Username: _____

Authuser: _____

Password: _____

Advanced Options

Domain: _____ Insecure: port,invite

From User: _____ Qualify(sec): 2

DID Number: _____ Transport: UDP

DTMF Mode: RFC2833 NAT: SRTP:

Auto Fax Detection:

Context: Default Language: Default

Audio Codecs

alaw ulaw G.722 G.729 G.726 GSM Speex

Video Codes

H.261 H.263 H.263+ H.264

Save
Cancel

Item	Explanation
Description	Define the VoIP (figure or character).
Protocol	Select protocol for outbound route, SIP or IAX2.
Host	Set host address (provided by VoIP Provider).
Maximum Channels	Set maximum channels for simultaneous call. (Only for outbound call; "0" = no limitation).
Prefix	The prefix will be added in front of your dialed number automatically when the trunk is in use.
Caller ID	This Caller ID will be displayed when user make outbound call. Note: This function must be supported by local provider.
Without Authentication	If you don't need the Authentication when connecting the IP PBX, please check this option.
User Name	User Name provided by VoIP Provider.
Password	Password provided by VoIP Provider.
Advanced Options	Advanced options for this trunk, e.g. codec, dial plan, etc.

You can configure the Analog / GSM line through PLANET IP PBX. The same analog line can't be used in multiple trunks. If you don't have available analog / GSM trunk, you can't set up trunk.

2) FXO / GSM Trunk

Click **【FXO / GSM Trunk】** -> **【New FXO / GSM Trunk】** :

New FXO/GSM Trunk
X

Description: _____

Lines: **FXO:** 3 4
GSM: _____

Prefix: _____

Advanced Options

Call Method: ▼

Busy Detection: ▼ Busy Count:

Input Volume: ▼ Output Volume: ▼

Call Progress: ▼ Progress Zone: ▼

Busy Pattern: _____ Language: ▼

Answer on Polarity Switch: ▼

Hangup on Polarity Switch: ▼

Auto Fax Detection:

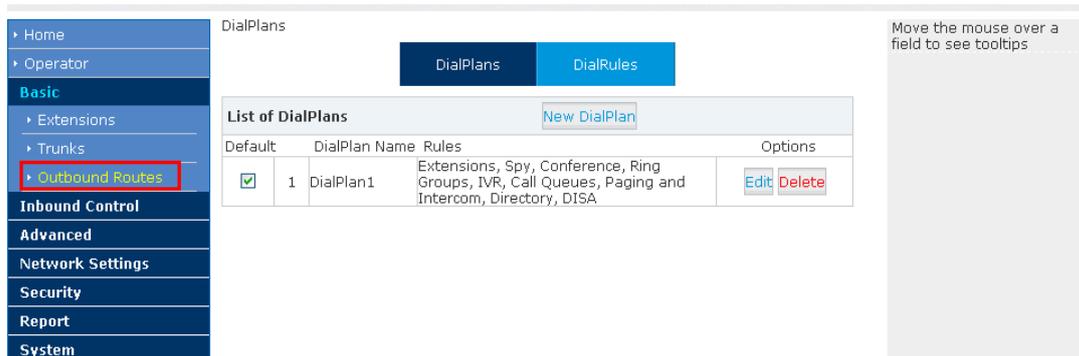
Item	Explanation
Description	Define the description for this trunk (figure or character).
Lines	Available line
Prefix	The prefix will be added to the dialed number automatically when this trunk is in use.
Advanced Options	Advanced Options for this trunk, e.g. Call Method, Busy Detection, etc.

Set the available analog line for this device. The same analog line can't be used in several FXO / GSM trunks. If you don't have available analog line, you can't set up FXO / GSM trunk.

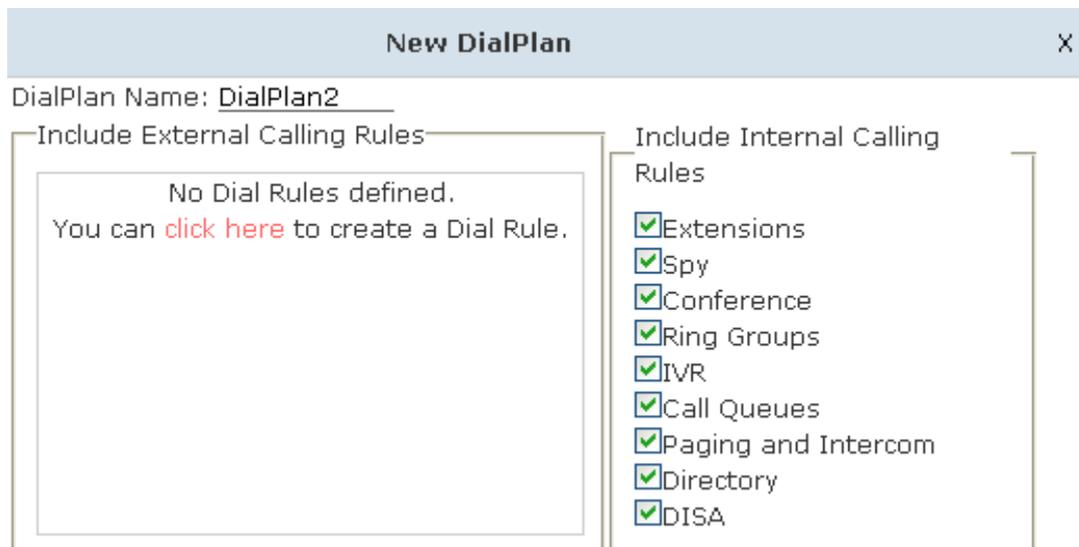
3.3.2 Outbound Routes

Outbound Routes is to define what trunk is used for outbound call by extension user. If user don't allow extension user to call out, please ignore this part.

Please configure on this page: **【Basic】 -> 【Outbound Routes】**



On this page, user can configure the basic match pattern of the outbound routes and create different dial plans. Please configure by clicking **【Add a Dial Rule】**



User can create dial rule for dial plan on this page:

New DialRule
✕

Rule Name: _____

PIN Set:

Place this call through:

>>>
↓
↑
<<<

Available Trunks
Selected Trunks

Custom Pattern: _____

- Z** Any digit from 1 to 9
- N** Any digit from 2 to 9
- X** Any digit from 0 to 9
- .** Any number of additional digits

Delete [] digits prefix from the front and auto-add digit [] before dialing

Item	Explanation
Rule Name	Define the name for the dial rule.
Pin Set	Input this Pin when you use this dial rule.
Place this call through	Select a trunk for this dial rule
Custom Pattern	N any figure from 2 to 9 Z any figure from 1 to 9 X any figure from 0 to 9 . One figure or multi-digit figures
Delete[]digits prefix	If one digit prefix be deleted, when dial 12345, 2345 will be sent.
Auto-add digit[]	If figure "1" is added,123451 will be sent when dialing 12345

3.4 Inbound Call

3.4.1 Inbound Routes

When a call is made from outside, you want to forward this call to an extension or IVR. This Chapter will introduce you how to deal with the inbound calls.

Please configure it on this page: **【Inbound Routes】**

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control
- ▶ Inbound Routes
- ▶ IVR
- ▶ IVR Prompts
- ▶ Call Queues
- ▶ Ring Groups
- ▶ Black List
- ▶ Time Based Rules
- Advanced**
- Network Settings
- Security
- Report
- System

General

General

Port DIDs

Number DIDs

DOD Settings

From Analog Channels

Distinctive Ring Tone: _____

Destination: Goto IVR working time

From VoIP Channels

Distinctive Ring Tone: _____

Destination: Goto IVR working time

Save
Cancel

General

Distinctive Ring Tone: mapping the custom ring tone file, e.g. set distinctive ring tone as “External”, the phone will play this ring tone when receiving the call. Note: The phone must support such feature as well.

When incoming calls come from outbound line (FXO / GSM, VoIP), the calls can be accessed to Extension User, Call Queue, Conference, IVR, etc. You can choose freely based on your condition.

Port DIDs

If user wants to make the incoming call from the outbound line (FXO / GSM trunk) access to the specified extension user, call queue, conference or IVR, please configure it here:

Click **【Port DIDs】** -> **【New Port DIDs】** :

New Port DID X

Port: Label: _____

Destination:

Item	Explanation
Port	Select the port for outbound line.
Label	Set a label for this port. When incoming calls are from this port, the label will be displayed.
Destination	Incoming calls will access directly to this destination (extension user, call queue, conference, or IVR).

Number DIDs

If user wants to make an outbound line (VoIP Trunk) access to the specified extension / queue / conference / IVR, please use this feature:

Click **【Number DID】** -> **【New Number DID】** :

New Number DID X

DID Number:

Destination:

Item	Explanation
DID Number	DID number calling into VoIP (This number is configured in the advance option of VoIP trunk).
Destination	Choose a specified extension, call queue, conference or IVR to be directed to call.

DOD Settings

If user wants to make the outbound call directly to the specified extension user, call queue, conference, IVR, please configure it here. Click **【DOD Settings】** -> **【New DOD】**

New DOD
X

DOD Number:

Destination: Goto Extension 800(800)

Save
Cancel

Item	Explanation
DOD Number	Set the DOD number, and use it to match the Caller ID. If matched, the call will access to the defined destination.
Destination	Outbound calls will access directly to this destination (extension user, call queue, conference, or IVR).

3.4.2 IVR

IVR will improve office efficiency based on your requirement.

Please configure on this page **【Inbound Control】** -> **【IVR】** :

Changes Cancelled!

Internet Telephony PBX System
IPX-2500

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control
- ▶ Inbound Routes
- ▶ IVR
- ▶ IVR Prompts
- ▶ Call Queues
- ▶ Ring Groups
- ▶ Black List
- ▶ Time Based Rules

IVR

New IVR

	Extension	Name	Dial other Extensions	Options
1	610	working time	Yes	Edit Delete
2	611	closed time	No	Edit Delete

Click **【New IVR】** to creates a new IVR:

New IVR X

IVR Settings

Name: _____ Extension: 612

Welcome Message

Please Select: Test ▼ [Custom Prompts](#)

Repeat Loops: None ▼

Dial other Extensions

Keypress Events

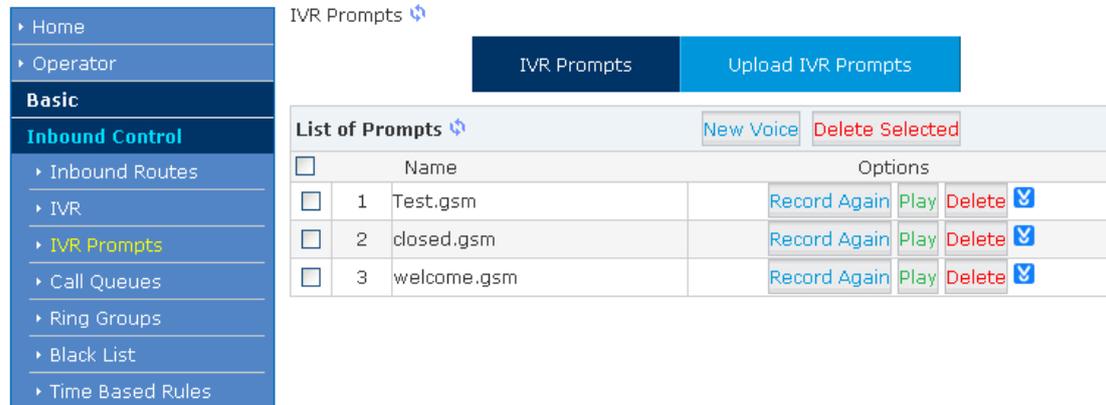
Key	Action
0	Disabled ▼
1	Disabled ▼
2	Disabled ▼
3	Disabled ▼
4	Disabled ▼
5	Disabled ▼
6	Disabled ▼
7	Disabled ▼
8	Disabled ▼
9	Disabled ▼
*	Disabled ▼
#	Disabled ▼
t	Disabled ▼

Save
Cancel

Item	Explanation
Name	Set a name for the IVR
Extension	If you want to listen to the IVR by dialing extension, please input an extension Number.
Please Select	Select IVR audio file, please configure in this page: 【IVR Prompts】
Repeat Loops	Loop times to repeat playing the IVR prompt.
Dial Other Extensions	Allow caller to dial other extensions besides the ones listed below.
Key Press Events	Each digit will be related to the actions defined in the blank.

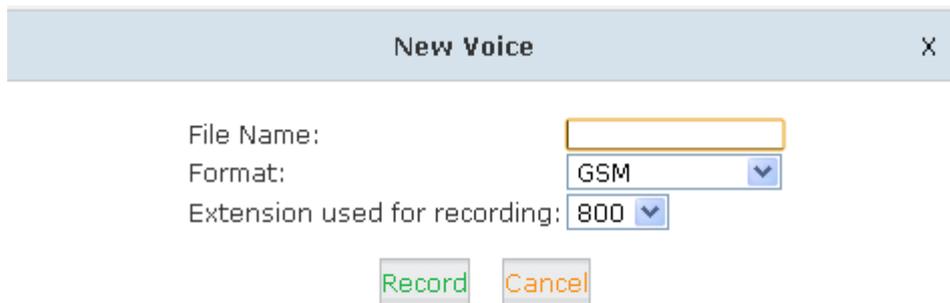
3.4.3 IVR Prompts

Record or play IVR music from extension. Please configure on this page: **【IVR Prompts】**



List of Prompts		New Voice	Delete Selected
<input type="checkbox"/>	Name	Options	
<input type="checkbox"/>	1 Test.gsm	Record Again	Play Delete
<input type="checkbox"/>	2 closed.gsm	Record Again	Play Delete
<input type="checkbox"/>	3 welcome.gsm	Record Again	Play Delete

Click **【IVR Prompts】** ---- **【New Voice】** to create new IVR prompt:



File Name:

Format: GSM

Extension used for recording: 800

Record
Cancel

Item	Explanation
File Name	Define a name for this voice file.
Format	Select the voice format, GSM / WAV (16bit) supported only.
Extension used for recording:	Select the extension which is used for recording the IVR prompt. Click 【Record】 , this extension will ring, and then you can pick up the phone and record.

If you want to hear the prompt, please click **【Play】** :

Play record voice X

Extension used for playing:

Select the extension, click **【Play】** , the selected extension will ring, and you will hear the recorded prompt after picking up the phone.

Upload IVR prompt

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control**
- ▶ Inbound Routes
- ▶ IVR
- ▶ **IVR Prompts**
- ▶ Call Queues
- ▶ Ring Groups
- ▶ Black List
- ▶ Time Based Rules
- Advanced**
- Network Settings**

Upload IVR Prompts

IVR PromptsUpload IVR Prompts

Upload IVR Prompts

Note: The sound file must be wav(16bit/8000Hz/Single), gsm, ulaw or alaw!
The size is limited in 15MB!

Please choose file to upload:


Note

Uploading customized audio file must be in the wav, gsm, ulaw, alaw format, and size must be less than 15MB.

3.4.4 Ring Groups

Ring Group is a collection of extensions. When a call to a ring group is made, all extensions in this ring group will ring in different ways based on their different configurations. If ring time exceeds a defined time, the call will be directed to IVR or others based on your configuration.

There isn't any data in the factory default **【Ring Groups】** , please configure it here.

Click **【Inbound Control】** -> **【Ring Groups】** -> **【New Ring Group】** :

X
New Ring Group

Name: _____ Strategy: RingAll

Ring Group Members

<<<
←
→
>>>

800(SIP) 800

801(SIP) 801

802(SIP) 802

803(SIP) 803

804(SIP) 804

805(SIP) 805

806(SIP) 806

807(SIP) 807

Available Channels

Label: _____

Extension for this ring group: 640

Ring (each/all) for lasting time(sec): 20

If not answered

Goto Extension

Goto Voicemail

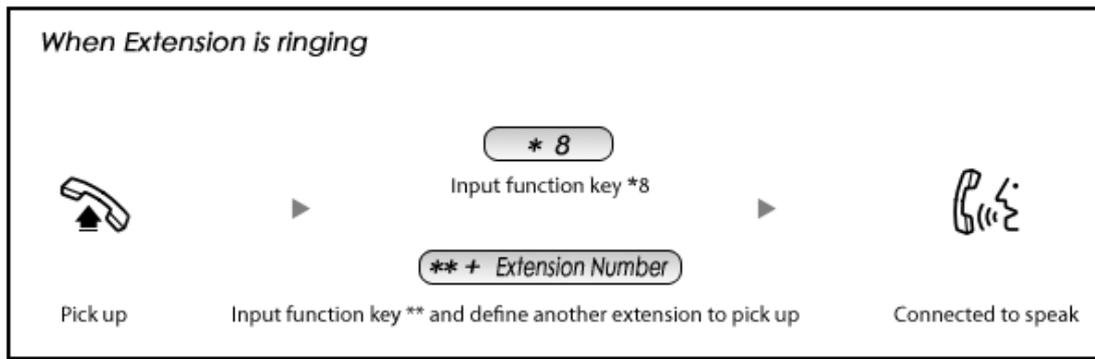
Goto Ring Group

Goto IVR

Hangup

Save
Cancel

Item	Explanation
Name	Define a name for the Ring Group.
Strategy	Select "Ring All" or "Ring in order".
Ring Group Members	Select the Ring Group Member from "the Available Channels", click to add.
If not answered	You can choose to forward the call to extension, voicemail, ring group, IVR or hang up if not answered.



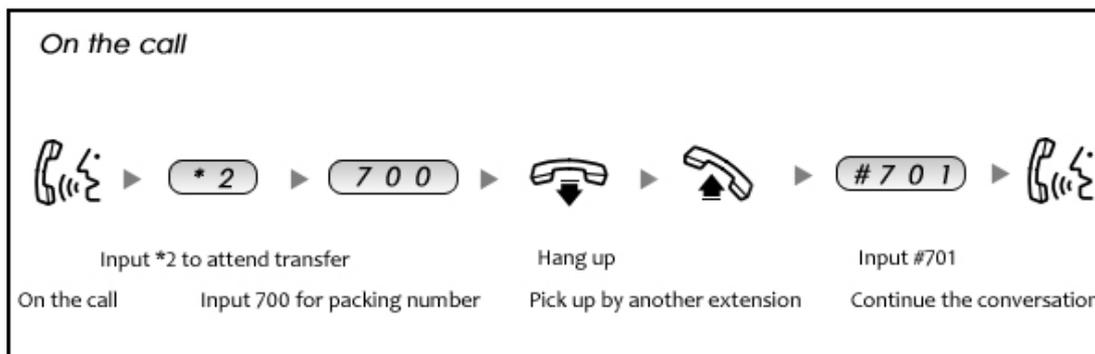
Reference Parameters and Explanation of Pickup Calls

Item	Explanation
*8	Input function key *8 to pick up the registered extension which is in the ring at random. This can be defined in 【Feature Codes】
**	Input function key ** and define another extension to pick up. This can be defined in 【Feature Codes】 .

3.6 On The Call

3.6.1 Call Parking

If you pick up a call at your seat, but it's not convenient to talk in public, you need go to the conference room to talk secretly. At this time, you can input 700 to park this call. The system will tell you a parking number 701 which you can input for continuing conversation when you go to the conference room. Please check the following diagram to learn more:

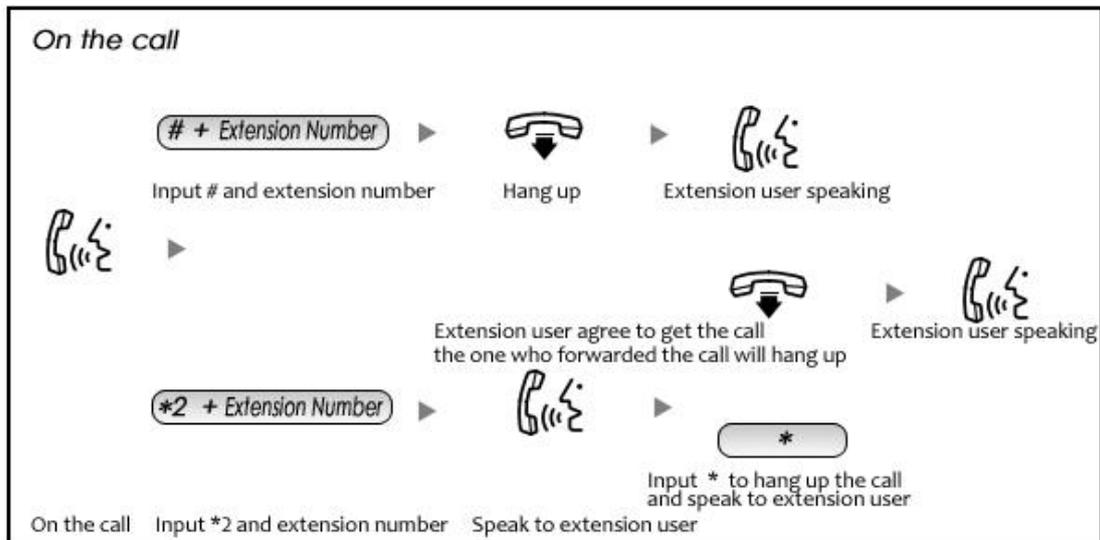


Reference Parameters and Explanation of Call Park:

Item	Explanation
Extension to Dial for Parking Calls	Default Number: 700, Define in 【 Feature Codes 】
What Extension to park calls on	Default Number: 701 - 720. Define in 【 Feature Codes 】
How many seconds a call can be parked for	Default is 45 seconds. Define in 【 Feature Codes 】 .

3.6.2 Call Transfer

If an incoming call is for your colleague, you can transfer the call directly to your colleague or transfer the call after agreeing by your colleague. Please check the diagram below to learn more:

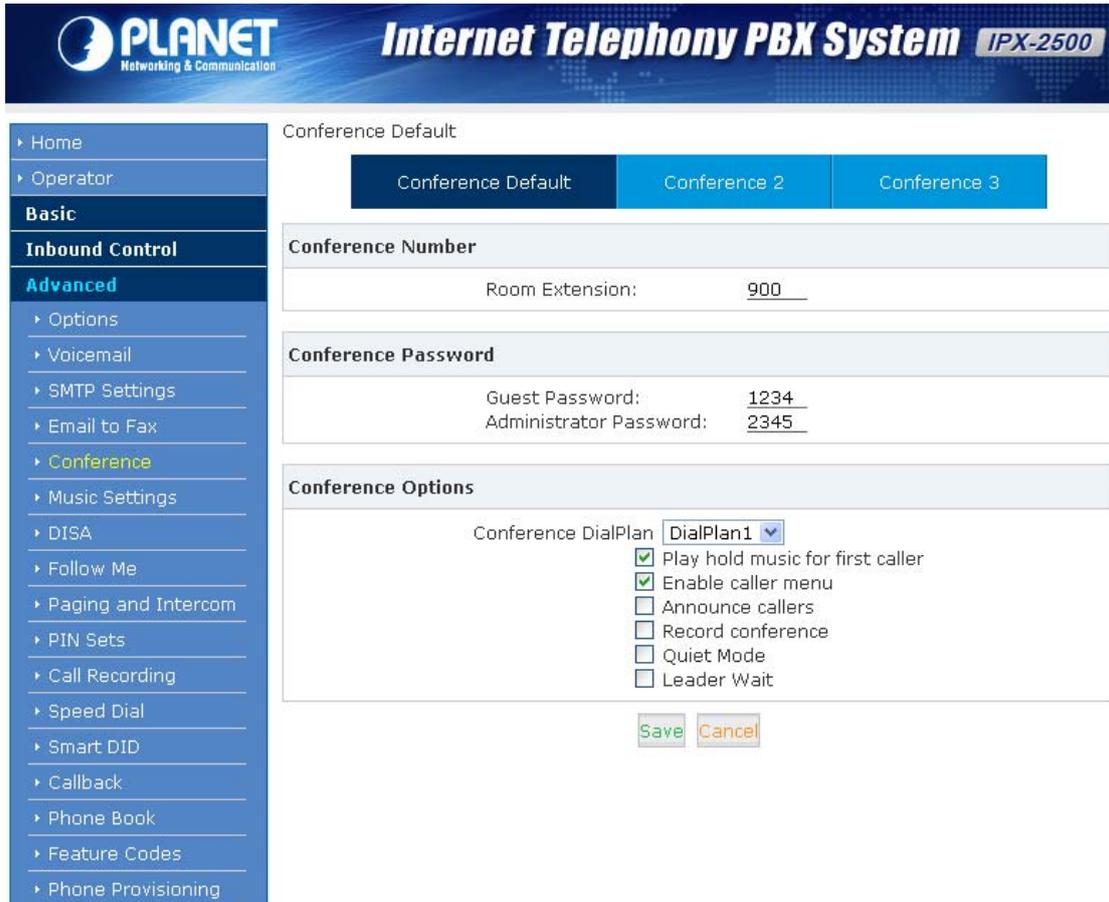


Reference Parameters and Explanation of Transfer:

Item	Explanation
Blind Transfer	Default is #t. Define in 【 Feature Codes 】
Attended Transfer	Default is *2. Define in 【 Feature Codes 】
Disconnect Call	Default is *, it can be used when you use *2. Define in 【 Feature Code 】
Timeout for answer on attended transfer	Default is 15 seconds. Define in 【 Feature Codes 】

3.6.3 Conference

If you want to create a conference room for some extension users or with external lines, you can input conference room number 900, input conference room password 1234 (Admin's password is 2345), then enter the conference room. This IPX-2500 supports 3 conference rooms. Please configure it on this page **【Conference】** :

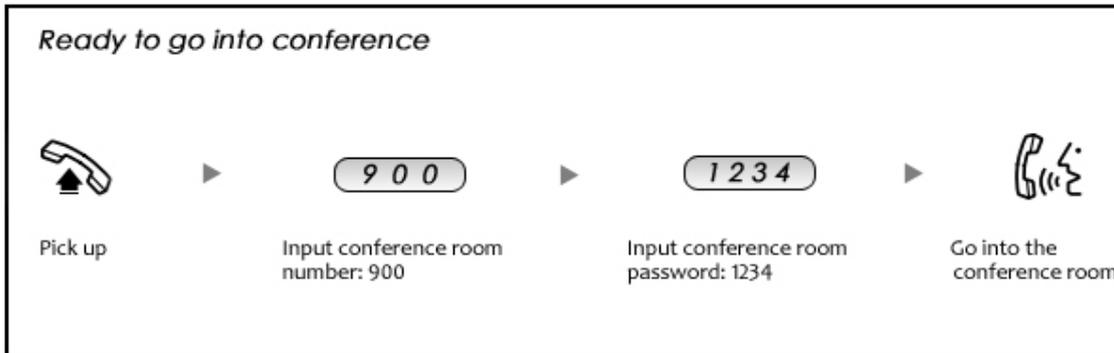


Item	Explanation
Conference Number	The number that users call in order to access the conference room; the default number is "900".
Conference Password	Password for users to access the conference, e.g."1234".
Administrator Password	Password for administrator to access the conference.
Conference DialPlan	Use this dial plan to invite other participants.
Play hold music for the first participant	Check this option to play the hold music for the first participant in the conference until another participant enters this conference.
Enable caller menu	Check this option to allow the participant to access the Conference Bridge menu by pressing "*" on the dial pad.
Announce callers	Check this option to announce to all Bridge participants that a

	new participant is joining the conference.
Record conference	Recorded conference format is WAV.
Quiet Mode	If this option is checked, all the participants in the conference can hear only, but it is not allowed to speak.
Leader Wait	Wait until the conference leader (administrator) enters the conference before starting the conference.

Please check the following diagram to learn:

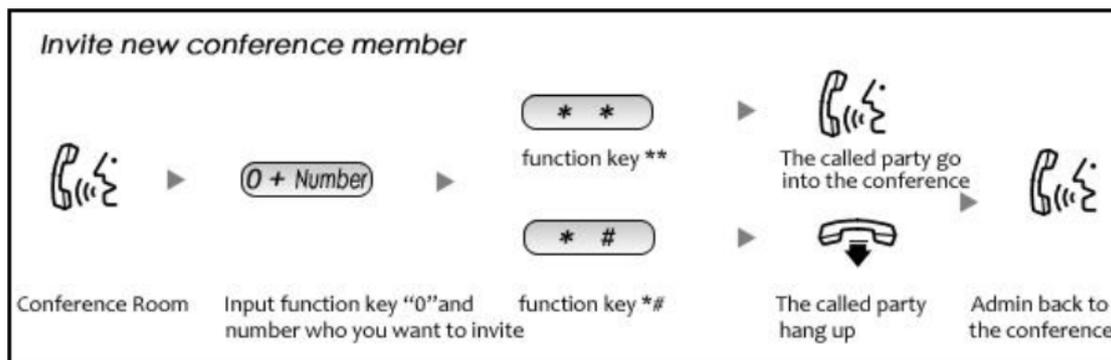
Go to conference:



In the conference, admin can add new participant (extension user or external number) to the conference.

In the conference, the administrator can invite new guest (extension user or external number) to the conference. (Default password for admin is 2345)

Learn how to invite new guest to the conference as the diagram is shown below:



3.7 Settings before leaving office

3.7.1 Follow me

If you don't want to miss any call, please configure this function as shown below:

Click **Basic** -> **Extension** -> **Edit** the extension you want to configure.

X
Edit

General

SIP:	<input checked="" type="checkbox"/>	IAX2:	<input type="checkbox"/>
Name:	<input type="text" value="800"/>	Extension:	<input type="text" value="800"/>
Password:	<input type="text" value="123456"/>	Outbound CID:	<input type="text"/>
Dial Plan:	<input type="text" value="DialPlan1"/> ▼	Analog Phone:	<input type="text" value="None"/> ▼

Voicemail

Voicemail:	<input checked="" type="checkbox"/>	VM Password:	<input type="text" value="1234"/>
Delete VMail:	<input type="checkbox"/>	Email(Fax/Voicemail):	<input type="text"/>

Other Options

Web Manager:	<input checked="" type="checkbox"/>	Agent:	<input checked="" type="checkbox"/>	Call Waiting:	<input type="checkbox"/>
Allow Being Spied:	<input type="checkbox"/>	Pickup Group:	<input type="text" value="1"/> ▼		
Mobility Extension:	<input type="checkbox"/>	Mobility Extension Number:	<input type="text"/>		

VoIP Settings

NAT:	<input checked="" type="checkbox"/>	Transport:	<input type="text" value="UDP"/> ▼	SRTP:	<input type="checkbox"/>
DTMF Mode:	<input type="text" value="RFC2833"/> ▼	Permit IP:	<input type="text"/>		

Video Options

Video Call:

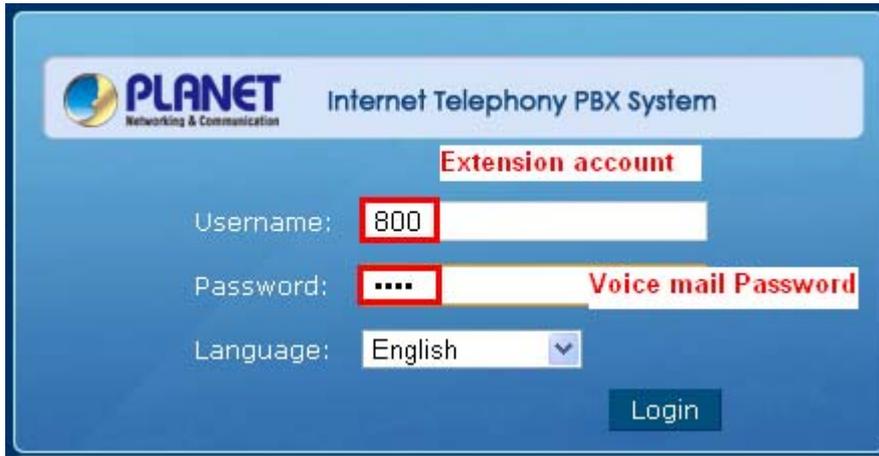
H.261 H.263 H.263+ H.264

Audio Codecs

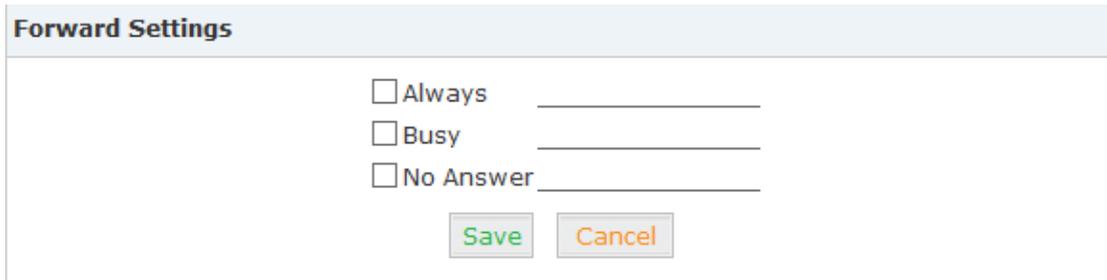
alaw ulaw G.722 G.729 G.726 GSM Speex

Check **Web Manager** and **Save**

Then login to the Extension Web Panel:



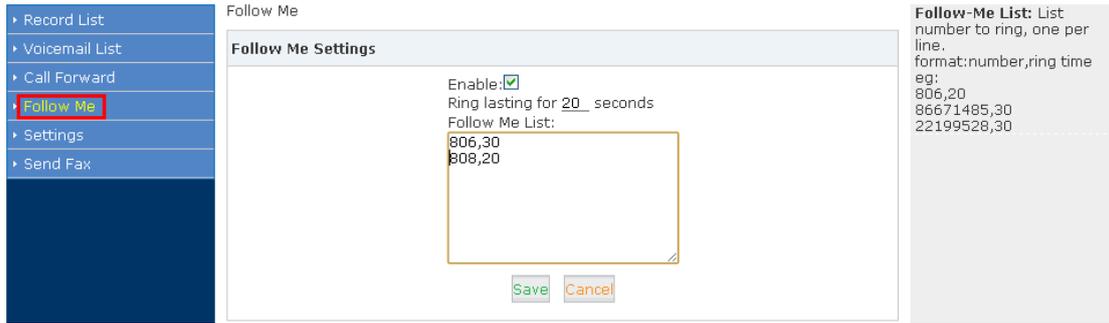

Click **【Call Forward】** :



Reference

Item	Explanation
Always	All incoming calls will be forwarded.
Busy	Forward when extension is busy.
No Answer	Forward when no answer from extension.

Or used the Follow me feature.



Select an extension, set the ring duration, and add the numbers in the Follow Me List; **【Save】** and **【Activate】** .

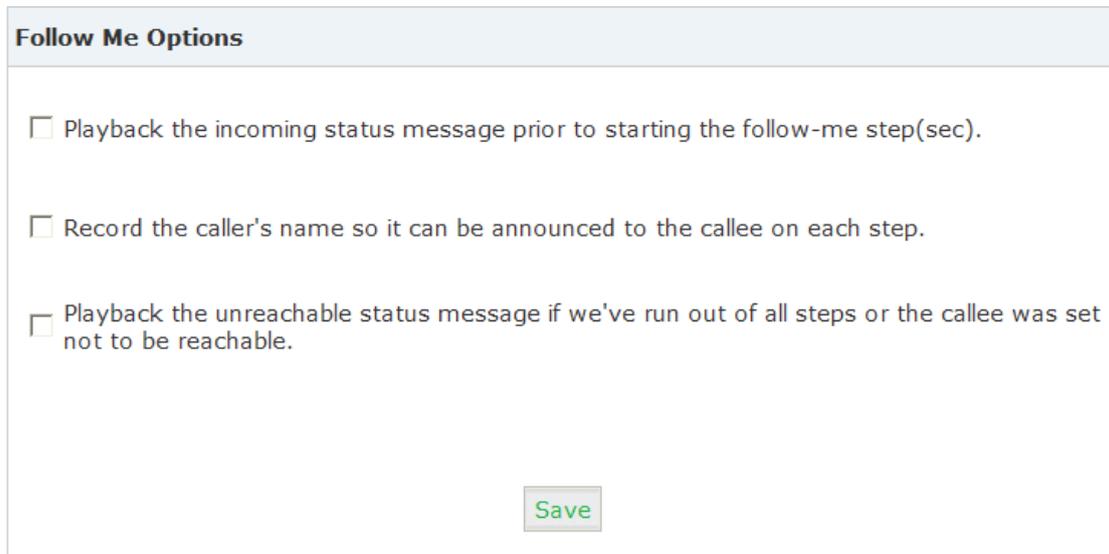
List Format: Extension Number, Ring Duration

E.g.: 806,30

808,20

806 rings, after 30 seconds, the call is going to 808

【Follow Me Option】



3.7.2 Voice Mail

If you don't want to configure "Follow Me", you can record the message of incoming call, and email the message to your defined mailbox.

Click **【Extension】** --- **【Extension Settings】**

Edit
X

Name:	<input type="text"/>	Extension:	<input type="text" value="804"/>
Password:	<input type="text" value="804"/>	Outbound CID:	<input type="text"/>
VM Password	<input type="text" value="804"/>	E-mail:	<input type="text"/>
Dial Plan:	<input type="text" value="DialPlan1"/> ▼		
Analog Phone:	<i>No Analog lines detected.</i>		
VoiceMail	<input checked="" type="checkbox"/>	Can Reinvite	<input type="checkbox"/>
SIP:	<input checked="" type="checkbox"/>	IAX2:	<input type="checkbox"/>
T.38 Fax	<input type="checkbox"/>	Agent	<input type="checkbox"/>
NAT	<input checked="" type="checkbox"/>	Pickup Group	<input type="text" value="0"/> ▼
Delete VMail	<input type="checkbox"/>	DTMF Mode:	<input type="text" value="RFC2833"/> ▼
Video Call:	<input type="checkbox"/>	Permit IP	<input type="text"/>

Auto Provision

Manufacturer: ▼ Mac

Audio Codecs Configure

alaw ulaw G.729 G.726 GSM Speex

Video Codecs Configure

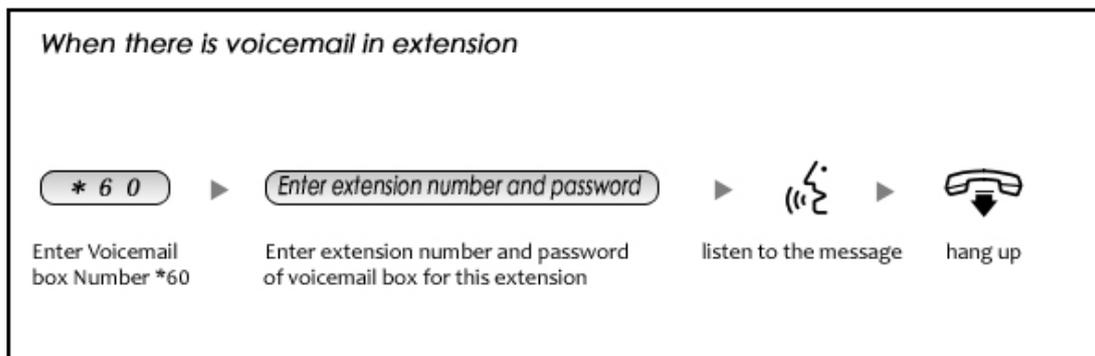
H.261 H.263 H.263+ H.264

Please enable **【Voice mail】** before configuration, and configure **【VM Password】** and **【Email】**. If there is no answer for the incoming call and when the default ring time is over, the system will play: "Please leave your message and press the "#" key. Then voicemail will be sent to the specified mailbox by email.

Leave a message:



Listen to the message



1. If you would like to use this function, you must write the correct email address in "extension settings".
2. You need to configure SMTP and Email model in **【Voice Mail】** . Please check the details in the following chapter **【Voice Mail】**

3.8 Call Center (Call Queues)

3.8.1 Create Agent

Click **Basic** -> **Extension** -> **Edit** the extension you want to configure:

Edit X

General

SIP: IAX2:
 Name: Extension:
 Password: Outbound CID:
 Dial Plan: Analog Phone:

Voicemail

Voicemail: VM Password:
 Delete VMail: Email(Fax/Voicemail):

Other Options

Web Manager: Agent: Call Waiting:
 Allow Being Spied: Pickup Group:
 Mobility Extension: Mobility Extension Number:

VoIP Settings

NAT: Transport: SRTP:
 DTMF Mode: Permit IP:

Video Options

Video Call:
 H.261 H.263 H.263+ H.264

Audio Codecs

alaw ulaw G.722 G.729 G.726 GSM Speex

Step1: Check **Agent** and **Save**

Step2: Click **Inbound Control** -> **Call Queues**

- Home
- Operator
- Basic**
- Inbound Control**
- Inbound Routes
- IVR
- IVR Prompts
- Call Queues**
- Ring Groups
- Black List
- Time Based Rules
- Advanced**
- Network Settings
- Security
- Report
- System

Call Queues 1

Call Queues 1
Call Queues 2
Call Queues 3

Call Queue Reference:

Queue Number: Label:

Ring Strategy:

Agents:

You do not have any users defined as agents!
[click here](#) to manage users.

Queue Options:

Agent TimeOut(sec):
 Auto Pause
 Wrap-Up-Time(sec):
 Max Wait Time(sec):
 Max Callers:
 Join Empty
 Leave When Empty
 Auto Fill
 Report Hold Time

Announcements:

Caller Position Announcements
 Frequency(sec):
 Announce Hold Time:

Periodic Announcements
 Repeat Frequency(sec):
 Announcements Prompt:

If not answered
 Destination:

Item	Explanation
Queue Number	Define an extension number for the queue.
Label	Define the label for the queue.
Ring Strategy	RingAll -- Ring all available agents until one answers (default) RoundRobin -- Every available agent will take turns to ring. LeastRecent -- Agent with the least calls rings FewestCalls -- Agent with the fewest completed calls rings. Random -- Agent rings randomly. RRmemory -- RoundRobin with Memory, and remember where it's left off in the last ring.
Agent	Every extension defined as Agent will be listed here. Selected agent will be a member of the current Queue.

Queue Options:	Announcements:
Agent TimeOut(sec): <u>15</u> <input type="checkbox"/> Auto Pause Wrap-Up-Time(sec): <u>10</u> Max Wait Time(sec): <input style="border: 1px solid red;" type="text"/> Max Callers: <u>8</u> <input type="checkbox"/> Join Empty <input type="checkbox"/> Leave When Empty <input type="checkbox"/> Auto Fill <input type="checkbox"/> Report Hold Time	Caller Position Announcements Frequency(sec): <u>30</u> Announce Hold Time: <u>yes</u> ▼ Periodic Announcements Repeat Frequency(sec): <u>0</u> Announcements: <input type="text" value=""/> Prompt: <input type="text" value=""/> If not answered Destination: <u>Hangup</u> ▼

Item	Explanation
Agent TimeOut (sec)	The next Agent will ring after this time.
Auto Pause	Pause the Agent when it fails to answer the first call.
Wrap-Up-Time (sec)	Wrap-up time between the first answer and second answer. (Default is 0, which means no wrap-up time.)
Max Wait Time (sec)	Maximum wait time for callers in the queue.
Max Callers	Maximum number of callers who are allowed to wait in the queue. (Default is 0, which means no limitation.)
Join Empty	Allow callers to enter the Queue when no Agents are available. If this option is not defined, callers will not be able to enter Queues with no available agents.
Leave When Empty	All callers in the Queue will be moved out when new caller cannot enter the Queue. This option cannot be used with Join Empty simultaneously.

Auto Fill	Callers will be distributed to Agent automatically.
Report Hold Time	Report the hold time of the next caller for Agent when the Agent is answering the call.
Frequency(sec)	Repeat frequency to announce the hold time for callers in the Queue. ("0" means no announcement).
Announce Hold Time	Announce the hold time. Announce (yes), not announce(no) or announce once(once), it will not be announced when the hold time is less than 1 minute.
Repeat Frequency(sec)	Interval time to play the voice menu for callers. ("0" mean not to play).
Announcement Prompt	Select a prompt as the Announcements Prompt from the IVR Prompts.

Chapter 4 Advanced

4.1 Options

Options include local extension settings and new extension default settings【General】, caller ID setting 【Global Analog Setting】 , and NAT FAX setting 【Global SIP Setting】 .

4.1.1 General

Click 【General】 to display the dialog as shown below:

General	Global Analog Settings	Global SIP Settings
---------	------------------------	---------------------

Local Extension Settings

Operator Extension: v

Global RingTime Set(sec):

Enable Transfer:

Enable Music On Ringback:

Record Format: v

Default Settings for New User

SIP: <input checked="" type="checkbox"/>	IAX2: <input type="checkbox"/>	Web Manager: <input checked="" type="checkbox"/>	Call Waiting: <input checked="" type="checkbox"/>
Agent: <input type="checkbox"/>	Voicemail: <input checked="" type="checkbox"/>	Delete VMail: <input type="checkbox"/>	VM Password: <input type="text" value="1234"/>
NAT: <input checked="" type="checkbox"/>	Transport: <input type="text" value="UDP"/> v	SRTP: <input type="checkbox"/>	

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Extension Preferences

User Extensions	<input type="text" value="800"/>	to	<input type="text" value="899"/>
Conference Extensions	<input type="text" value="900"/>	to	<input type="text" value="909"/>
IVR Extensions	<input type="text" value="610"/>	to	<input type="text" value="629"/>
Queue Extensions	<input type="text" value="630"/>	to	<input type="text" value="639"/>
RingGroup Extensions	<input type="text" value="640"/>	to	<input type="text" value="659"/>
PagingGroup Extensions	<input type="text" value="660"/>	to	<input type="text" value="679"/>

Reset

Item	Explanation
Operator Extension	Set extension number for Operator.
Global Ring Time Set	Set Ring time for every extension.
Enable Transfer	Check to enable Transfer.
Enable Music On Ring back	Check to enable Music On Ring back.

Record Format	Set the format for recording files. (GSM / WAV only)
Default Settings for New User	Check to enable the default settings.
Extension Preferences	Set the rule for extensions.

4.1.2 Global Analog Settings

Click **【Advance】** -> **【Options】** -> **【Global Analog Settings】**:

General
Global Analog Settings
Global SIP Settings

Caller ID Detect

Caller ID Detection:

Caller ID Signalling:

Caller ID Start:

CID Buffer Length:

General

Opermode:

ToneZone:

Relax DTMF:

Send Caller ID After:

Echo Cancel:

Echo Training: (yes/no/number)

Busy Detection:

Busy Count:

Item	Explanation
Caller ID Detection	Enable/Disable Caller ID Detection
Caller ID Signaling	Select the mode of Caller ID Signaling.
Caller ID Start	Ring--Caller ID start before ring. Polarity--Caller ID start when polarity reversal starts.
CID Buffer Length	Default CID Buffer Length
Opermode	Set the Opermode for FXO/GSM Ports.
ToneZone	Select the ToneZone in your country.
Relax DTMF	Enable/Disable Relax DTMF inspection.
Echo Cancel	Enable/Disable Echo Cancel
Echo Training	Set Echo Training (default unit: ms)
Busy Detection	Enable/Disable Busy Detection.
Busy Count	Count the Busy Detection. It will be active when enabling

	Busy Detection.
--	-----------------

4.1.3 Global SIP Settings

【Global SIP Settings】 is appropriate for professionals. If anything needs to be modified, please contact our tech-support people.

General
Global Analog Settings
Global SIP Settings

General

Enable

UDP Port: 5060

Enable

TCP Port: 5060

Enable

TLS Port: 5061 [Download CA](#)

Start RTP Port: 10000

End RTP Port: 20000

DTMF Mode: Auto ▼

Max Registration/Subscription Time(sec): 3600

Min Registration/Subscription Time(sec): 60

Default Incoming/Outgoing Registration Time(sec): 60

Item	Explanation
UDP Port to bind to	SIP standard port is 5060
TCP Port	Default TCP port is 5060
TLS Port	Default TLS port is 5061
Start RTP Port	RTP port range
End RTP Port	RTP port range
DTMF Mode	Set default DTMF mode for sending DTMF, support auto, RFC2833, inband, info. Default: RFC 2833
Max Registration/Subscription Time	Maximum duration (in seconds) of incoming registrations/subscriptions is 3600 seconds by default
Min Registration/Subscription Time	Minimum duration (in seconds) of registrations/subscriptions is 60 seconds by default
Default Incoming/Outgoing Registration Time	Default duration (in seconds) of incoming/outgoing registration

NAT Support
External IP: _____ External Host: _____ External Refresh(sec): _____ Local Network Address: _____

Item	Explanation
External IP	Address that we're going to put in outbound SIP messages if we're behind a NAT
External Host	Alternatively, you can specify an external host, and Asterisk will perform DNS queries periodically. Not recommended for production environments! Use external IP instead
External Refresh	How often to refresh external host if used. You may specify a local network in the field below
Local Network Address	192.168.0.0/255.255.0.0' : All RFC 1918 addresses are local networks, '10.0.0.0/255.0.0.0' : Also RFC1918, '172.16.0.0/12' : Another RFC1918 with CIDR notation, '169.254.0.0/255.255.0.0' : Zero conf local network

T.38 Fax Passthrough Support
T.38 Fax (UDPTL) Passthrough: <input type="checkbox"/>

Item	Explanation
T.38 fax (UDPTL) Pass through	Enables T.38 fax (UDPTL) pass through on SIP to SIP calls

Type of Service	
TOS for Signalling packets:	<input type="text" value=""/> ▾
TOS for RTP audio packets:	ef ▾
TOS for RTP video packets:	<input type="text" value=""/> ▾
Enable Relaxed DTMF:	<input checked="" type="checkbox"/>
RTP TimeOut:	<input type="text" value=""/>
RTP HoldTimeOut:	<input type="text" value=""/>
Trust Remote Party ID:	<input type="checkbox"/>
Send Remote Party ID:	<input type="checkbox"/>
Generate In-Band Ringing:	<input type="text" value=""/> ▾
Add 'user=phone' to URI:	<input type="checkbox"/>
Send Compact SIP Headers:	<input type="checkbox"/>

Item	Explanation
TOS for Signaling packets	Sets Type of Service for SIP packets
TOS for RTP audio packets	Sets Type of Service for RTP audio packets
TOS for RTP video packets	Sets Type of Service for RTP video packets
Enable Relaxed DTMF	Relax DTMF handling
RTP Time Out	Terminate call if 60 seconds of no RTP activity when we're not on hold
RTP Hold Time Out	Terminate call if 300 seconds of no RTP activity when we're on hold (must be > RTP time out)
Trust Remote Party ID	If Remote-Party-ID should be trusted
Send Remote Party ID	If Remote-Party-ID should be sent
Generate In-Band Ringing	If we should generate in-band ringing always, use 'never' to never use in-band signaling, even in cases where some buggy devices might not render it. Default: never
Add 'user=phone' to URI	If checked, 'user=phone' is added to URI that contains a valid phone number
Send Compact SIP Headers	Send compact sip headers

Inbound SIP Registrations
SIP Register Failed times: <u>10</u> Block time(min): <u>30</u>

Outbound SIP Registrations
Register TimeOut(sec): _____ Register Attempts: _____

Item	Explanation
SIP Register Failed Times	Allowed failure time for register attempts.
Block times	How long will be limited, when you Beyond the number of register failure.
Register Time Out	Retry registration calls at every 'x' seconds (default 20)
Register Attempts	Number of registration attempts before we give up; 0 = continue forever

4.2 VoiceMail

Details configuration on Voice Mail: Voice Mail Reference/ Voice Message Options/ Playback Options. If you need to send message by mail to your defined mailbox, you must configure SMTP and Email model. Click **【Voicemail】** to display the dialog as shown below:

General

General
Email Settings

VoiceMail Reference

Max Greeting Time(sec):

Dial "0" for Operator:

Voice Message Options

Message Format: ▼

Maximum Messages: ▼

Max Message Time(min): ▼

Min Message Time(sec): ▼

Playback Options

Say Message CallerID

Say Message Duration

Play Envelope

Allow Users to Review

Item	Explanation
Max Greeting Time(sec)	Maximum Greeting Time
Dial "0" for Operator	Dial "0" to cancel the voicemail and forward to Operator.
Message Format	Save the voice message as this format, WAV (16-bit) or Raw GSM.
Maximum Messages	Maximum messages to be allowed to leave.
Max Message Time(min)	Maximum Time for each message to be allowed to leave.

Min Message Time(sec)	Minimum Time for each message. The message will be deleted automatically if the time is less than the minimum message time.
Say Message Caller ID	Checking this option, Caller ID will be played when user login email to receive the voice message.
Say Message Duration	Checking this option, the message duration will be played before playing the voice message.
Play Envelop	Envelop includes date, time and caller ID.
Allow Users to Review	Check this option to allow users to review the voice message.

Email Settings

Email Settings

General
Email Settings

Template for Voicemail Emails

Attach voicemail to email

Sender Name test

From _____

Subject New Voicemail from \${VM_CALLERID}

Message

Hello \${VM_NAME}, you received a message lasting
 \${VM_DUR} at \${VM_DATE} from,
 (\${VM_CALLERID}).

Save
Cancel

Template Variables:

- `${VM_NAME}` : Recipient's first name and last name
- `${VM_DUR}` : The duration of the voicemail message
- `${VM_MAILBOX}` : The recipient's extension
- `${VM_CALLERID}` : The Caller ID of the person who left the message
- `${VM_MSGNUM}` : The message number in your mailbox
- `${VM_DATE}` : The date and time the message was left

Item	Explanation
Attach voicemail to Email	The voicemail will be sent as attachment to the user's Email.
Sender Name	The sender's name will be displayed when you receive the Email.
From	Mailbox to send email
Subject	Subject of the Email.
Message	Input the Email template.

4.3 SMTP Setting

SMTP Settings

SMTP Settings:

SMTP Server: _____
 Port: 25
 SSL/TLS:
 Enable SMTP Authentication
 Username: _____
 Password: _____

Item	Explanation
SMTP server	In order to send e-mail notifications of your voicemail, set the IP address or domain name of a SMTP server that your IP PBX may connect to. e.g. mail.yourcompany.com
Port	The port number the SMTP server runs is generally port 25. If SSL is encrypted, please use port 465 instead.
SSL/TSL	Enable SSL/TLS to send secure messages to server.
Enable SMTP Authentication	If your SMTP server needs Authentication, please enable SMTP Authentication, and configure the following information.
User Name	Input user name of your email box.
Password	Input password of your email box.

Click【Send Test】after configuration, the following diagram will be displayed to ask you to input the Email for receiving.

Send Test X

Email Address: _____

Input the Email and click 【Send】 to send the test email. Login your Email to check; configuration is successful if you receive the test email; otherwise, it fails. Please check your email settings.

4.4 Email to Fax

Users can send fax by Email. Please configure as shown below.

Click **【Advanced】** -> **【Email to Fax】**

Email to Fax

Enable:

Username: _____

Password: _____

IMAP Server: _____

SSL/TLS:

Access Code: _____

Dial Plan: ▼

Check “Enable”, input user name, password and IMAP Server(server format: imap.XX.com), select the Dial Plan and then “Save” and “Activate”.

Practical Case:

Send a fax to telephone number 86671485: In Dial Plan 1, there is prefix “9” before the telephone number; you need to input the **【Access Code】** : 986671485 and take it as the subject when sending Email. Then the fax will be sent by Email as attachment.

If you need to dial the extension when sending fax, e.g. fax number: 86671485 ext.515, you need to use the **【Access Code】** : 986671485-515 as subject.

4.5 Music Settings

Management for music on hold, music on ring back, music on call queue...

Click **【Music Settings】** to display the dialog as below:

Music Settings:

Music Settings

Music Settings	Music Management
Music On Hold Reference	
Music: <input type="text" value="Music 1"/> <input type="button" value="v"/>	
Music On Ringback Reference	
Music: <input type="text" value="Music 2"/> <input type="button" value="v"/>	
Music On Queue Reference	
Music: <input type="text" value=""/> <input type="button" value="v"/>	

Please define different music files for different music folders.

Music Management:

Music Management

Music Settings	Music Management
Music Management	
Select Music Directory: <input type="text" value="Music 1"/> <input type="button" value="v"/> <input type="button" value="Load"/>	
Files: <input type="text" value=""/> <input type="button" value="v"/> <input type="button" value="Delete"/>	
Upload Music File	
Select Music Directory: <input type="text" value="Music 1"/> <input type="button" value="v"/>	
Note: The sound file must be wav(16bit/8000Hz/Single), gsm, ulaw or alaw! The size is limited in 15MB!.	
Please choose file to upload: <input type="button" value="Browse..."/>	
<input type="button" value="Upload"/>	

Item	Explanation
Select Music Directory	Load music in the music file.
File	Display music name under the music file. You can delete it.
Select Music Directory	Select the file where you want to save your uploaded music.

Please choose file to upload	Select the music you want to upload. Note: music file must be WAV (16bit/8000Hz / Single), GSM, ulaw or alaw, and less than 15MB.
------------------------------	---

 <p>Note</p>	The sound file must be wav (16bit/8000Hz/Single), gsm, ulaw or alaw !! The size is limited in 15MB
--	---

4.6 DISA

A trunk call is made to the PBX, and call is made to another trunk through outbound route of the PBX. This trunk can make international calls. You are out of the office and want to contact your customer in a foreign country. Now you can dial DISA number after PIN authentication. You are now connected to your customer, and you can speak to your customer now.

Click **【DISA】** --- **【New DISA】** to display the dialog as shown below:

New DISA
✕

Name:

PIN Set: Without PIN

Record in CDR:

Response Timeout(sec):

Digit Timeout(sec):

Extension for this DISA(Optional):

Allow Outbound Route

Select DialPlan

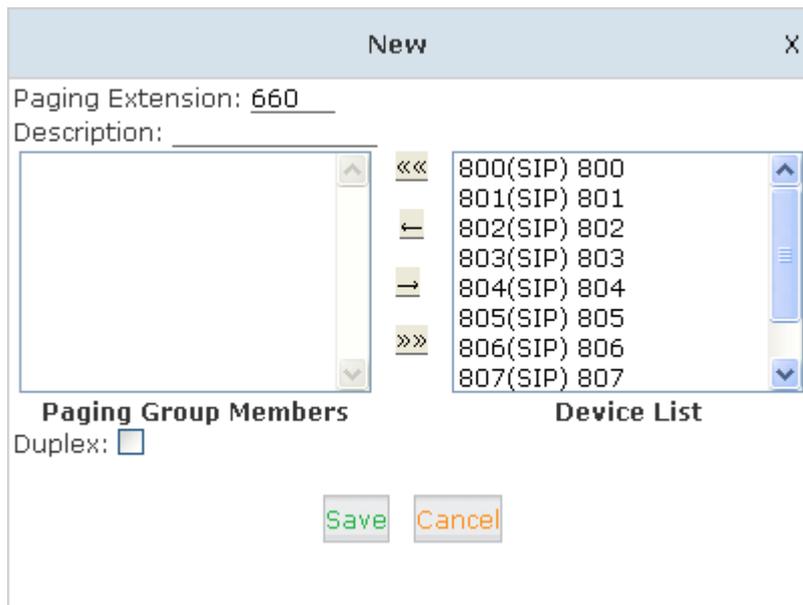
Item	Explanation
Name	Define a name for DISA.
PIN Set	User will be prompted to input this number when PIN Authentication is needed.
Record in CDR	Check to record.
Response Timeout(sec)	The maximum time for waiting before hanging up if the dialed number is incomplete or invalid. Default is 10 seconds
Digit Timeout(sec)	The maximum interval time between digits when typing extension number is 5 seconds by default.
Extension for this	If you want to access DISA by dialing an extension, you can

DISA(Optional)	define an extension number for this DISA.
Select Dial Plan	Select the Dial Plan for this DISA.

4.7 Paging and Intercom

Paging and Intercom is used for calling a paging extension; all terminals which support this function will be picked up automatically and listen;, meanwhile, it support duplex.

Click **【Advanced】** -> **【Paging and Intercom】** -> **【New Paging Group】** :



Item	Explanation
Paging Extension	The number users will dial to page this group.
Description	Provide a descriptive title for this Page Group.
Paging Group Members	Selected device(s) on this page
Device List	Select Device(s) to page.
Duplex	Paging is typically one way for announcements only. Checking this will make the paging duplex, allowing all phones in the paging group to be able to talk and be heard by all. This makes it like an "instant conference".

 Note	For Paging/Intercom function extension(IP phone), enable Auto Answer
---	---

4.8 PIN Set

Monitor is used for recording the defined extensions.

Click **【Monitor】** --- **【New Monitor】** to display the dialog below:

New Monitor ✕

Extension:

Monitoring Time

Always Monitor:

Start Time: : End Time: :

Start Day: End Day:

Monitor Settings

Inbound Record: Outbound Record:

Item	Explanation
PIN Set Name	Define the name for this PIN Set.
PIN List	Define PIN codes in this list.

4.9 Call Recording

Call Recording is used for recording extension. Please configure it as shown below:

Click **【Advanced】** -> **【Call Recording】** -> **【New Call Recording】** :

New Call Recording ✕

Extension:

Call Recording Time

Always Recording:

Start Time: : End Time: :

Start Day: End Day:

Call Recording Settings

Inbound Record: Outbound Record:

Reference:

Item	Explanation
Extension	Define an extension for recording.
Call Recording Time	Set the time to record.
Inbound Record	Check to record inbound calls.
Outbound Record	Check to record outbound calls.

4.10 Speed Dial

Please configure as shown below:

Click **【Advanced】** -> **【Speed Dial】** -> **【New Speed Dial】** :

Speed Dial

Speed Dial

The prefix of speed dial:

Speed Dial List			New Speed Dial
Source Number	Destination Number	Options	
No Speed Dial defined!			

New Speed Dial X

Notice: Don't forget to add the outbound dial prefix if you would like to dial an outside number

Source Number:

Destination Number:

E.g. prefix is *99, speed number is 00, destination telephone number is 86671485.

When dialing *9900, the call is going to 86671485 automatically.

4.11 Smart DID

Smart DID: After extension user makes an outbound call, the call is ringing back to Planet IP PBX, and directed to the one who made the last call. Please configure it as shown below:

Click **【Advanced】** -> **【Smart DID】** :

Smart DID

Smart DID

Enable:

Smart DID Rules List		New Smart DID Rule		
Pattern	Strip	Prepend	Options	
1	X.			<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Check “Enable” and “Save” to make this function activates.

Click **【New Smart DID Rule】** to display the following diagram:

New Smart DID Rule X

Pattern: _____

Strip: ___ digits before dialing

Prepend: ___ before dialing

Input the pattern and define how many digits need to be striped or prepend, and then click “Save”--“Activate”.

4.12 Call Back

When user makes calls by the callback number to Planet IP PBX, the call will be hung up automatically. Then the PBX will call back this number and forwarded to define destination after the call is connected. Please configure it as shown below:

Click **【Advanced】** -> **【Callback】** :

Callback Number Settings

Callback Number Settings

Enable:

Strip: ___ digits before dialing

Prepend: ___ before dialing

DialPlan: ▼

List of Callback Number	New Callback Number						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Callback Number</th> <th style="width: 20%;">Destination</th> <th style="width: 20%;">Options</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">No Callback Number defined!</td> </tr> </tbody> </table>	Callback Number	Destination	Options	No Callback Number defined!			
Callback Number	Destination	Options					
No Callback Number defined!							

At first, enable this function. Select Dial Plan, and define the callback rule (strip digits or prepend prefix). Click **【New Callback Number】** to add callback number.

New Callback Number X

Callback Number:

Destination: ▼ ▼

Input callback number and define the destination.

4.13 Phone Book

When incoming call matches the number in the phone book, the name of the matched number will be displayed. Please configure it as shown below:

Click **【Advanced】** -> **【Phone Book】** :

Phone Book

Phone Book [Create Contact](#)

Name:

	Name	Phone Number	Options
<input type="checkbox"/>	1 David	86671485	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

Item	Explanation
Search	Search by name
Show All	All contacts will be displayed in the following list.

Click **【Create Contact】** to see the following diagram:



Create Contact X

Name: David

Phone Number: 22199518

Save Cancel

Item	Explanation
Name	Input contact's name. (Letter or figure only).
Phone Number	Input Phone Number of contact. (IDD Number is available).

Phone book is for the incoming call to use; if the incoming caller ID matches the number in Phone book, it will display the name defined in Phone book.

For example, Name: David Number: 22199518.

When system receives the call 22199518, the extension answers this call with "David" being displayed.

4.14 Feature Codes

Click **【Feature Codes】** to display the dialog as shown below. You can define relevant parameter.

Feature Codes Management	
Call Parking	Extension to Dial for Parking Calls: <u>700</u> Extension Range to Park Calls: <u>701-720</u> Call Parking Time(sec): <u>45</u> Parking Hints: <input type="checkbox"/>
Pickup Call	Pickup Extension: <u>*8</u> Pickup Specified Extension: <u>**</u>
Transfer	Blind Transfer: <u>#</u> Attended Transfer: <u>*2</u> Disconnect Call: <u>*</u> Timeout for answer on attended transfer(sec): <u>15</u>
One Touch Recording	One Touch Recording: <u>*1</u>
Call Forward	Enable Forward All Calls: <u>*71</u> Disable Forward All Calls: <u>*071</u> Enable Forward on Busy: <u>*72</u> Disable Forward on Busy: <u>*072</u> Enable Forward on No Answer: <u>*73</u> Disable Forward on No Answer: <u>*073</u>

Item	Explanation
Extension to Dial for Parking Calls	Define an extension for parking calls.
Extension Range to Park Calls	Define the extension range for parking calls. (e.g. 701-720)
Call Parking Time(sec)	Define the time for parking calls. Planet IP PBX will call the extension again if parking is over time.
Pickup Extension	Define an extension for pickup.
Pickup Specified Extension	Pick up the specified extension. Default: Dial**+extension number to pick up the specified extension
Blind Transfer	Allow unattended or blind transfers. It works like this: While on a conversation with A, you dial the blind transfer key sequence. The system says "Transfer" then gives you a dial tone, while A is on hold. You dial the transferee number (B's number) and A is put through to B immediately. Your line is off. The caller ID displayed to B is exactly the same as the caller ID presented to you.
Attended Transfer	Allow attended transfer or supervised transfer. It works like this: While on conversation with A, you dial the Attended Transfer key

	sequence. The system says "Transfer" then gives you a dial tone, while A is on hold. You dial the transferee number (B's number) and talk with B to introduce the call, then you can hang up and A will be connected with B. In case B does not want to answer the call, he/she simply hangs up and you will be back to your original conversation.
Disconnect Call	Disconnect the current transfer call (for Attended transfer).
Timeout for answer on attended transfer (sec)	Set the timeout value
One Touch Recording	Configure the function key for One Touch Recording
Call Forward	Enable / Disable Call Forward and the settings of function keys for different forward modes.
Do Not Disturb	Enable / Disable "Do Not Disturb"
Spy	Configure the function keys for spy modes.
Blacklist	Add / Delete blacklisted number.
Voicemail	Configure the function keys for entering voicemail and check extension voicemail.
Invite Participant	In conference, the administrator can invite people into the conference by dialing "0". After pressing "0", you will get dial tone, and you can dial to invite people. After the call is connected, please press ** to direct the people into the conference, or *# to hang up the current call and return to the conference.
Create Conference	During the call, you can dial *0 to forward to the conference with the callee.
Return to conference with participant	In conference, the administrator can dial "0" to invite people into the conference. After pressing "0", you will get dial tone, and you can dial to invite the participant; when the call is connected, dial "***" to return to the conference with invited participant.
Return to conference without participant	In conference, the administrator can dial "0" to invite people into the conference. After pressing "0", you will get dial tone, and you can dial to invite the participant. When the call is connected, you can dial "*#" to hang up and return the conference yourself.
Pause Queue Member Extension	Pause the agent, and the agent cannot receive the call.
Unpause Queue Member Extension	Unpause the agent, and the agent can receive the call.
Others	Function key for Intercom / Paging / Directory

4.15 IP Phone Provision

When you need many IP Phones, please record the MAC, extension number, and user name of each phone according to the format (please take reference of the auto provision script file model for details). Then import the format file. Once the phone is connected to the local network, it will get the extension number and password automatically.

There are two operation methods to fulfill this function. Please see details as shown below:

Enable DHCP service

Click **【Network Settings】** -> **【DHCP Server】** , enable DHCP Server in the dialog as shown below:

DHCP Server Settings

Enable:	<input checked="" type="checkbox"/>
Start IP:	<input type="text" value="192.168.1.101"/>
End IP:	<input type="text" value="192.168.1.200"/>
Subnet Mask:	<input type="text" value="255.255.255.0"/>
Gateway:	<input type="text" value="192.168.1.1"/>
Primary DNS:	<input type="text" value="61.139.2.69"/>
Lease Time(min):	<input type="text" value="1440"/>
TFTP Server:	<input type="text"/>

Then Click **【Advanced】** -> **【Phone Provisioning】** -> **【New Phone】** :

New Phone X

General

Enable:

Manufacturer: Type:

MAC:

Line

Line1 Extension: Label:

Enable Phone Provisioning in **【Basic】** , select the IP Phone manufacture, input MAC of the phone, and select the extension for provisioning.

4.16 PnP Settings

Plug and Play function (PnP) is used as Auto-Provisioning for IP Phones. Once it's enabled, the system will make configuration on the specified phone (as long the phone supports PnP) according to the settings in Phone Provisioning page

Plug and Play(PnP) Settings

Phones Settings
PnP Settings

Plug and Play(PnP) Settings

Enable:	<input checked="" type="checkbox"/>
Interface:	WAN ▾
<input checked="" type="checkbox"/> Custom URL:	<input style="width: 100%;" type="text"/>
Multicasting Address:	<input style="width: 100%;" type="text" value="224.0.1.7"/>
Port:	<input style="width: 100%;" type="text" value="5060"/>

Save
Cancel

Item	Explanation
Enable	Enable / Disable PnP function
Interface	Choose a port that PnP works on
Custom URL :	Specify a URL if you need one. Default is download from local PC
Multicasting Address:	Multicasting address that PnP uses, default is 224.0.1.75
Port	Port that PnP uses, default is 5060

Chapter 5 Network Settings

5.1 Network

You can configure the WAN Port, and define the Virtual Interface.

Click **【Network Settings】** -> **【Network】** -> **【IPv4 Settings】**

Network

IPv4 Settings
IPv6 Settings
VLAN Settings

WAN Port Setup

IP Assign: Static ▼

IP Address: 192.168.1.198

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.254

Primary DNS: 192.168.1.254

Alternate DNS: _____

LAN Port Setup

IP Address: 192.168.0.1 Subnet Mask: 255.255.255.0

IP AddressV1: _____ Subnet MaskV1: _____

IP AddressV2: _____ Subnet MaskV2: _____

Save
Cancel

Reference

Item	Explanation
IP Assign	Static / DHCP/PPOE supported.
LAN Port Setup	Define the virtual interface for WAN Port.

Click **【Network Settings】** -> **【Network】** -> **【IPv6 Settings】**

IPv4 Settings
IPv6 Settings
VLAN Settings

Enable:

IPv6 Address: _____

Prefix Length: _____

Gateway: _____

Primary DNS: _____

Alternate DNS: _____

IPv6 Reference:

Item	Explanation
Enable	Enable IPv6, define the IPv6 address, gateway, and DNS.

Click **【Network Settings】** -> **【Network】** -> **【VLAN Settings】** :

Network

IPv4 Settings
IPv6 Settings
VLAN Settings

WAN VLAN 1

Enable:

VLAN ID:

VLAN IP Address:

Subnet Mask:

WAN VLAN 2

Enable:

VLAN ID:

VLAN IP Address:

Subnet Mask:

LAN VLAN 1

Enable:

VLAN ID:

VLAN IP Address:

Subnet Mask:

LAN VLAN 2

Enable:

VLAN ID:

VLAN IP Address:

Subnet Mask:

Save
Cancel

VLAN Reference:

Item	Explanation
Enable	Enable VLAN to define the VLAN address and VLAN ID.

5.2 Static Routing

Click **【Network Settings】** -> **【Static Routing】** :

Static Routing

Static Routing Routing Table

List of Static Routing [New Static Routing](#)

Destination Network	Subnet Mask	Gateway	Interface	Options
No Static Routing				
Please click on "New Static Routing" to add a Static Routing.				

New Static Routing X

Interface:

Destination Network:

Subnet Mask:

Gateway:

Item	Explanation
Interface	Choice WAN / LAN
Destination	Set destination network for static routing.
Subnet Mask	Set subnet mask of the destination network.
Gateway	Define the gateway accessing the destination network.

Click **【Network Settings】** -> **【Static Routing】** -> **【Routing Table】** , and the current routing information will be displayed below:

Routing Table

Static Routing **Routing Table**

Routing Table:
Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
0.0.0.0	192.168.1.254	0.0.0.0	UG	0	0	0	ETH
192.168.1.0	0.0.0.0	255.255.255.0	U	0	0	0	ETH

5.3 VPN Server

Planet IP PBX supports three kinds of VPN servers: L2TP, PPTP and OpenVPN.

Click **【Network Settings】** -> **【VPN Server】**:

VPN Server
VPN Users Management

VPN Server

L2TP
 PPTP
 OpenVPN

Enable:

Remote Start IP: _____

Remote End IP: _____

Local IP: _____

Primary DNS: _____

Alternate DNS: _____

Authentication Method: chap pap

Debug:

Save
Cancel

Reference:

Item	Explanation
VPN Server Mode	Three kinds of VPN servers -- L2TP, PPTP and OpenVPN -- supported (Only one mode can be enabled simultaneously).
Enable	Enable / Disable VPN Server

When the mode is L2TP or PPTP VPN server, click **【Network Settings】** -> **【VPN Server】** -> **【VPN Users Management】**:

VPN Users Management

VPN Server
VPN Users Management

List of VPN Users New VPN User

#	Username	Availability	Options
1	test	yes	Edit Delete

This page is used for management of VPN user name and password.

When the mode is OpenVPN server, click **【Network Settings】** -> **【VPN Server】** -> **【OpenVPN Certificate Download】**:

VPN Server
VPN Users Management

VPN Server

L2TP
 PPTP
 OpenVPN

Enable:

Certificate: None

Port:

Protocol:

TLS-Server:

Remote Network: /

Route: /

Client-to-Client:

Status: L2TP (Disabled)

This page is used for management of OpenVPN certificate file.

5.4 VPN Client

Planet IP PBX supports four kinds of VPN Clients: L2TP, PPTP, OpenVPN and N2N.

Click **【Network Settings】** -> **【VPN Client】**:

VPN Client

L2TP
 PPTP
 OpenVPN
 N2N

Enable:

Enable 40/128-bit encryption for MPPE:

Server Address:

Username:

Password:

```
Status:pptp client Connect: ppp1 <--> /dev/pts/2
pptp client sh: can't execute '/sbin/ip': No such file or directory
pptp client sh: can't execute '/sbin/ip': No such file or directory
```

Reference:

Item	Explanation
VPN Client	Four kinds of VPN Clients supported: L2TP, PPTP, OpenVPN and N2N (Only one mode can be enabled simultaneously)
Enable	Enable / Disable VPN Client

5.5 DHCP server

Click **【Network Settings】** -> **【DHCP Server】**:

DHCP Server

DHCP Server
DHCP Client List
Static MAC

DHCP Server Settings

Enable:	<input checked="" type="checkbox"/>
Interface:	WAN ▾
Start IP:	<input style="width: 100%;" type="text" value="192.168.1.101"/>
End IP:	<input style="width: 100%;" type="text" value="192.168.1.200"/>
Subnet Mask:	<input style="width: 100%;" type="text" value="255.255.255.0"/>
Gateway:	<input style="width: 100%;" type="text" value="192.168.1.1"/>
Primary DNS:	<input style="width: 100%;" type="text" value="61.139.2.69"/>
Lease Time(min):	<input style="width: 100%;" type="text" value="1440"/>
TFTP Server:	<input style="width: 100%;" type="text"/>

Click **【Network Settings】** -> **【DHCP Server】** -> **【DHCP Client List】** :

DHCP Server
DHCP Client List
Static MAC

DHCP Client List:

Mac Address	IP Address	Host Name	Expires in
6c:3e:6d:e0:f2:00	192.168.1.101	iPhone	expired
00:03:58:45:87:9a	192.168.1.102		expired
0c:74:c2:47:71:6d	192.168.1.103	hnteki-iPhone	expired
20:c9:d0:85:3b:fb	192.168.1.104		expired
08:ed:b9:e7:c5:7f	192.168.1.105	DPVYE1J0WCAAC7I	expired
78:e4:00:8e:c3:99	192.168.1.106	LBSZLACHCIC	22:10:25
68:a3:c4:ef:5d:8b	192.168.1.107	HBWang	1 days 00:00:00
0c:72:2c:5a:39:41	192.168.1.108	MW150R	00:00:57

This page is used to display DHCP Client address and related information.

When DHCP Server distributes address, the Client's MAC address is associated with the IP address, and then the device will get the same IP address every time.

Click **【Network Settings】** -> **【DHCP Server】** -> **【Static MAC】** -> **【New Static MAC】** :

New Static MAC X

MAC Address: _____

IP Address: _____

5.6 DDNS Settings

After setting DDNS (Dynamic Domain Network Server), Planet IP PBX settings will be visited remotely. Click **【Network Settings】** -> **【DDNS Settings】**:

DDNS Settings

DDNS Settings

Enable:	<input type="checkbox"/>
Enable Easy DDNS:	<input type="checkbox"/>
Easy Domain:	pl72c6a4.planetddns.com
DDNS Server:	<input type="text" value=""/> ▼
Username:	PlanetDDNS.com
Password:	Dyndns.org
Domain:	No-ip.com
	Zoneedit.com

Status:Disabled

Planet supports DDNS provided by Planet DDNS / Dyndns.org / No-ip.com / zoneedit.com.

5.7 SNMPv2 Settings

SNMP (Simple Network Management Protocol) is used for remote management.

Click **【Network Settings】** -> **【SNMPv2 Settings】**:

SNMPv2 Settings

Read Only

Enable:

RO Community: public _____

RO Network: _____ / _____

Read and Write

Enable:

RW Community: private _____

RW Network: _____ / _____

Reference

Item	Explanation
Enable	Enable "Read Only" of SNMP
RO Community	Define the name of RO Community of SNMP
RO Network	Define network of RO

5.8 Troubleshooting

You can ping other network devices through Planet IP PBX and track network routing by command "Traceroute" . Click **【Network Settings】** -> **【Troubleshooting】** :

Troubleshooting



Ping 192.168.1.254 _____ Packets: 4 Run Stop

```

PING 192.168.1.254 (192.168.1.254): 56 data bytes
64 bytes from 192.168.1.254: seq=0 ttl=64 time=5.773 ms
64 bytes from 192.168.1.254: seq=1 ttl=64 time=12.411 ms
64 bytes from 192.168.1.254: seq=2 ttl=64 time=3.637 ms
64 bytes from 192.168.1.254: seq=3 ttl=64 time=2.461 ms

--- 192.168.1.254 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 2.461/6.070/12.411 ms
    
```

Chapter 6 Security

This chapter will introduce you how to configure the Security of PLANET IP PBX.

6.1 Network and Country

Click **【Security】** -> **【Firewall】**

Firewall

Command: iptables Run

Result:

IP Tables List:

```
Chain INPUT (policy ACCEPT)
target      prot opt source      destination

Chain FORWARD (policy ACCEPT)
target      prot opt source      destination

Chain OUTPUT (policy ACCEPT)
target      prot opt source      destination
```

Iptables Command	Explanation
Check iptables list	iptables -L -n
Clear iptables list	iptables -F
Deny an IP (192.168.0.3)	iptables -A INPUT -s 192.168.0.3 -j DROP
Deny every IP to access 80 port	iptables -A INPUT -p tcp --dport 80 -j DROP
Deny IP (192.168.0.3) to access port 80	iptables -A INPUT -s 192.168.0.3 -p tcp --dport 80-j DROP

6.2 Service

【Service】 : Settings of SSH / FTP and HTTP Port.

Click 【Security】 -> 【Service】 :

Service Settings

Service Settings

Enable SSH: Port:

Enable FTP: Port:

HTTP Port:

Enable SSH to login background management system through SSH.

Enable FTP to allow uploading files to system through FTP.

Chapter 7 Report

7.1 Record List

Check recordings of specified extension or conference here, or delete the recording file.

【Record List】 :

Call Recording	Conference	One Touch Recording
Extension: <input type="text" value=""/> <input type="button" value="Delete"/>		
Start Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> End Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> <input type="button" value="Filter"/>		
List of Recording Files		<input type="button" value="Delete Selected"/>
<input type="checkbox"/>	Caller ID	Destination ID
		Date
		Options

【Conference】 :

Call Recording	Conference	One Touch Recording
Start Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> End Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> <input type="button" value="Filter"/>		
List of Conference Record Files		<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>
<input type="checkbox"/>	Conference Room	Date
		Options

【One Touch Recording】

Call Recording	Conference	One Touch Recording
Extension: <input type="text" value=""/> <input type="button" value="Delete"/>		
Start Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> End Date: <input type="text" value="Aug"/> <input type="text" value="20"/> <input type="text" value="2013"/> <input type="button" value="Filter"/>		
List of Recording Files		<input type="button" value="Delete Selected"/>
<input type="checkbox"/>	Caller ID	Destination ID
		Date
		Options

7.2 Call logs

Check call logs by caller ID or callee ID.

Click 【Report】 -> 【Call Logs】 :

Call Logs

Start Date:	<input type="text" value="Apr"/> <input type="text" value="23"/> <input type="text" value="2013"/>	Field: <input type="text" value="Caller ID"/>	<input type="button" value="Filter"/>
End Date:	<input type="text" value="Apr"/> <input type="text" value="23"/> <input type="text" value="2013"/>	<input type="button" value="Download"/>	<input type="button" value="Delete"/>
Call Start	Caller ID	Destination ID	Account Code
		Duration(sec)	Disposition

 Note	Duration in the call logs is not really charged duration. If you need billing, PSTN must support polarity reversal function, and meanwhile, you must configure relevance parameters of polarity reversal in trunk configuration for Planet IP PBX.
---	--

7.3 System logs

Click **【Report】** -> **【System Logs】** , and you can download/ delete the system logs.

System Logs

Enable System Log: Enable PBX Log:
 Enable PBX Debug Log: Enable Access Log:

List of Logs		Download Selected		Delete Selected	
	Name	Type	Options		
<input type="checkbox"/>	1 login201303.log	Login Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	2 login201304.log	Login Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	3 pbx20130311.log	PBX Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	4 pbx20130313.log	PBX Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	5 pbx20130315.log	PBX Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	6 pbx20130319.log	PBX Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	
<input type="checkbox"/>	7 pbx20130320.log	PBX Log	<input type="button" value="Delete"/>	<input type="button" value="Download"/>	

7.4 Data Storage

When you need mass storage of recording files, voicemails, call logs, etc, you can upload these files to FTP server through FTP Data Storage based on the specified time frequency

Click **【System】** -> **【Data Storage】** :

Data Storage
Data Storage Log

FTP Data Storage

Enable:

Server Address: _____

Username: _____

Password: _____

Directory: _____

Automatically upload frequency(day):

Time of automatically upload: :

Forcibly upload when the flash storage is over:

Status: Disabled

Reference

Item	Explanation
Enable	Enable FTP Data Storage.
Server Address	Set FTP server address (IP address or domain).
User Name	User name for login FTP.
Password	Password for login FTP.
Directory	Define a directory used for storage on FTP server.
Automatically upload frequency (by the day)	Define frequency (by the day) to upload the data.
Time of automatically upload	Define the time to upload the data.
Forcibly upload when the flash storage is over	Forcibly upload data when flash storage is over the percentage value.

Check from **【Data Storage Log】** :

Data Storage
Data Storage Log

Data Storage Log

Click **【Refresh】** to refresh data storage log.

Click **【clear】** to clear data storage log.

7.5 Management

【Management】 is used to modify password of Planet system, and the settings of system voice.

Click 【System】 -> 【Management】 :

Management

Change Password

Password: _____

New Password: _____

Retype New Password: _____

Set Language

Set Voice Language: English ▼

【Set Language】 Choose the voice language you want

Set Language

Set Voice Language: English ▼

English

中文

Français

Español

Português

Italiano

7.6 Backup

Click **【System】** -> **【Backup】**

Backup
Upload Backup File

List of Backups		Take a Backup		
Name	Date	Options		
1	backup_2013jan09_135847	Jan 09, 2013	Restore	Delete
2	backup_2013jan09_135854	Jan 09, 2013	Restore	Delete
3	backup_2013may16_160601	May 16, 2013	Restore	Delete

Reference:

Item	Explanation
Take a Backup	Take a backup of the current system configuration.
Restore	Restore system to the specified backup configuration.
Delete	Delete specified backup file.

Click the download button "" to download the specified backup file and manage locally.

Click **【Upload Backup File】** to upload the backup file here.

Backup
Upload Backup File

Upload Backup File

Note: Don't change the backup file name.

Please choose file to upload:

Click **【browse】** to select the local backup file, and click **【Upload】** to upload the backup file to system.

7.7 Reset & Reboot

If you need to reset the system to factory default or reboot, please click **【System】** -> **【Reset & Reboot】** :

Factory Defaults

Warning: Restore factory settings,will lost all configuration data on the system!

Factory Defaults

Reboot

Warning: Rebooting the system will terminate all active calls!

Reboot

Click **【Factory Default】** to reset the system to factory default.

Click **【Reboot】** to reboot the system.

7.8 Upgrade

7.8.1 WEB Upgrade

Click **【System】** -> **【Upgrade】** -> **【WEB Upgrade】** :

Upgrade System Package

WEB Upgrade TFTP Upgrade

Restore Default Set:

Please choose file to upload: Browse...

Upload

Click **【Browse】** to select the firmware file, and then click **【Upload】** to upload the selected firmware to system and finish the upgrading automatically.

If check **【Restore Default Set】** , the system will clear all the configuration and reset to factory default.

7.8.2 TFTP Upgrade

Click **【System】** -> **【Upgrade】** -> **【TFTP Upgrade】** :

Upgrade System Package

WEB Upgrade TFTP Upgrade

Restore Default Set:

Enter The Package Name:

TFTP Server IP address:

Reference:

Item	Explanation
Restore Default Set	System will restore to factory defaults after checking this option.
Enter The Package Name	Enter the package name for upgrading.
TFTP Server IP address	Enter your TFTP server IP address.

7.9 Hot Standby

Hot Standby —this function is used to backup and share configuration file and regular data on two IPX-2500 units (Master & Slave) each other in local network. In case the system the Master Unit crashes, Slave Unit will automatically start to work in order instead Settings:

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control**
- Advanced**
- Network Settings**
- Security**
- Report**
- System**
 - ▶ **Hot Standby**
 - ▶ Time Settings
 - ▶ Module Settings
 - ▶ Data Storage
 - ▶ Management
 - ▶ Backup
 - ▶ Reset & Reboot
 - ▶ Upgrade

Hot Standby

Hot Standby
Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	▼
Local Hostname:	Master
Remote Hostname:	Slave
Local IP:	<input type="text"/>
Local Heart Line Port:	<input type="text" value="7790"/>
Local Port:	<input type="text" value="7788"/>
Remote IP:	<input type="text"/>
Remote Heart Line Port:	<input type="text" value="7789"/>
Remote Port:	<input type="text" value="7788"/>
Virtual IP:	<input type="text"/>
SYNC Network Rate:	100Mbps ▼
Status Fresh Time(sec):	<input type="text" value="5"/>
Remote Link Timeout(sec):	<input type="text" value="15"/>
Administrator Email:	<input type="text"/>

Save
Cancel

Status: Disabled

Item	Explanation
Hot Standby Mode:	Set the unit to be Master or Slave (Make sure one unit is Master and the other is Slave)
Local Hostname	Hostname of local unit (Make sure it's different on two units)
Remote Hostname	Hostname of remote unit
Local IP	IP address of local unit
Local Heart Line Port:	Heart line port of local unit (Make sure local heart line port of local unit is the same as remote heart line port of remote unit)
Local Port:	Port of local unit (Default is suggested, and make sure port on both units are the same)
Remote IP:	IP address of remote unit
Remote Heart Line Port	Heart line port of remote unit
Remote Port	Port of remote unit
Virtual IP	Virtual IP address (on which IP extensions will be registered)
SYNC Network Rate	Rate of Sync Network (Retain default)
Status Fresh Time(sec):	Fresh rate of status (Retain default)
Remote Link Timeout(sec):	Timeout for remote link (retain default)
Administrator Email:	Email address of administrator (In case the device is working improperly, notification will be sent to this email address)



User must configure properly on Master Unit and reboot first, then configure and reboot Slave Unit

Status:

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control**
- Advanced**
- Network Settings**
- Security**
- Report**
- System**
- ▶ Hot Standby
- ▶ Time Settings
- ▶ Module Settings
- ▶ Data Storage
- ▶ Management
- ▶ Backup
- ▶ Reset & Reboot
- ▶ Upgrade

Hot Standby

Hot Standby
Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	Slave ▾
Local Hostname:	ippbxA
Remote Hostname:	ippbxB
Local IP:	192.168.1.121
Local Heart Line Port:	7790
Local Port:	7788
Remote IP:	192.168.1.122
Remote Heart Line Port:	7789
Remote Port:	7788
Virtual IP:	192.168.1.252
SYNC Network Rate:	100Mbps ▾
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	davidy@planet.cc

Save
Cancel

Status: Connected

Status: Connected indicates two units are connected successfully

- ▶ Home
- ▶ Operator
- Basic**
- Inbound Control**
- Advanced**
- Network Settings**
- Security**
- Report**
- System**
- ▶ Hot Standby
- ▶ Time Settings
- ▶ Module Settings
- ▶ Data Storage
- ▶ Management
- ▶ Backup
- ▶ Reset & Reboot
- ▶ Upgrade

Hot Standby

Hot Standby
Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	Slave ▾
Local Hostname:	ippbxA
Remote Hostname:	ippbxB
Local IP:	192.168.1.121
Local Heart Line Port:	7790
Local Port:	7788
Remote IP:	192.168.1.122
Remote Heart Line Port:	7789
Remote Port:	7788
Virtual IP:	192.168.1.252
SYNC Network Rate:	100Mbps ▾
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	davidy@planet.cc

Save
Cancel

Status: WFCnection

Status: WFCnection indicates waiting for connection from the other unit

- Home
- Operator
- Basic
- Inbound Control
- Advanced
- Network Settings
- Security
- Report
- System
- Hot Standby
- Time Settings
- Module Settings
- Data Storage
- Management
- Backup
- Reset & Reboot
- Upgrade

Hot Standby

Hot Standby
Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	Slave
Local Hostname:	ippbxA
Remote Hostname:	ippbxB
Local IP:	192.168.1.121
Local Heart Line Port:	7790
Local Port:	7788
Remote IP:	192.168.1.122
Remote Heart Line Port:	7789
Remote Port:	7788
Virtual IP:	192.168.1.252
SYNC Network Rate:	100Mbps
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	davidy@planet.cc

Save
Cancel

Status: StandAlone

Status: StandAlone indicates offline (which means you need to configure properly and reboot to reconnect

7.10 Time Settings

Time settings for Planet system, the system supports NTP and Manual Time Set.

【NTP】 :

Time Settings

NTP Manual Time Set

NTP Server:

Time Zone:

Reference:

Item	Explanation
NTP Server	Define the NTP Server. You can input the IP address or domain of this server, whatever it's local or remote. Default server is pool.ntp.org. Be aware that the Planet IP PBX needs to be able to connect to a NTP server to perfect functions.
Time Zone	Select your time zone so that the system will set time based on the time zone.

【Manual Time Set】 :

Time Settings

NTP Manual Time Set

Year: _____ (YYYY, eg: 2010)

Month: _____ (MM, eg: 05)

Day: _____ (DD, eg: 08)

Hour: _____ (HH, eg: 09)

Minute: _____ (MM, eg: 30)

Synchronize with current PC time

After entering Year/ Month/ Day/ Hour/ Minute, then save and activate.
Or, you can click **【Sync】** to synchronize with current PC time.

7.11 Module Settings

Choose module type and make configuration on this page

Module Settings

SLOT 1

Module Type:
 Hardware Echo Cancellation:

SLOT 2

Module Type:
 Hardware Echo Cancellation:

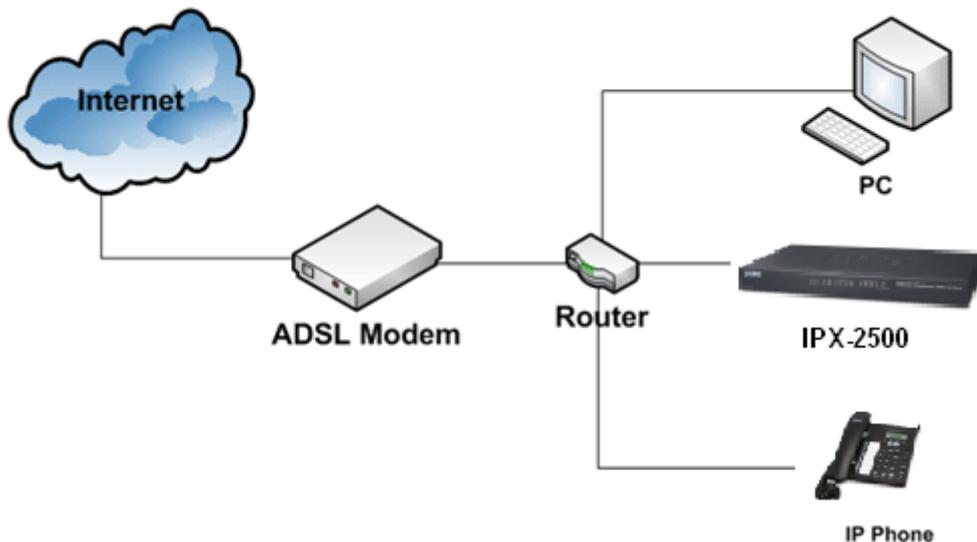
Item	Explanation
Module Type	Choose module type
Hardware Echo Cancellation	Enable/Disable hardware Echo Cancellation (Make sure the Echo Cancellation module is properly installed before enabling this function)

Chapter 8 Operating Instructions

This chapter will introduce you how to use PLANET IP PBX by example.

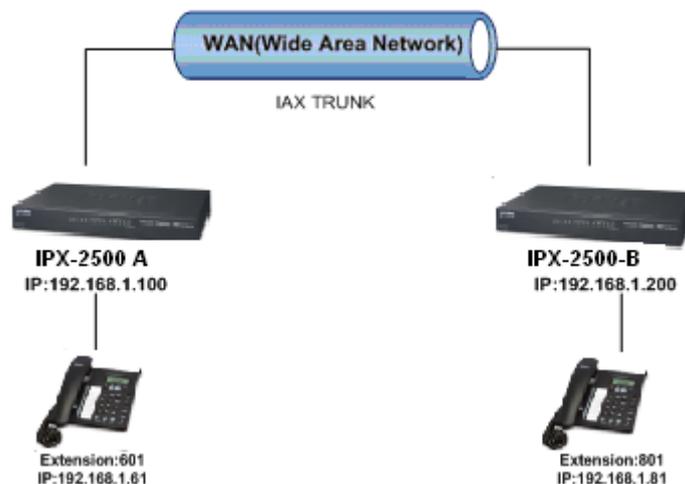
8.1 How to connect the IPX-2500 IP PBX to the Internet

If your office accesses the public network through router, you can put Planet IP PBX behind the router. You should connect the WAN port of the IP PBX to the LAN port of the router.



8.2 How to combine two IPX-2500 IP PBX in a different network

Normally, two sets of the IPX-2500 are located in different places with different IP addresses for Internet access.



For external line configuration, you must use public IP address.

Take the following instructions as an example:

Register IPX-2500-B IP to a trunk of IPX-2500-A with authentication.

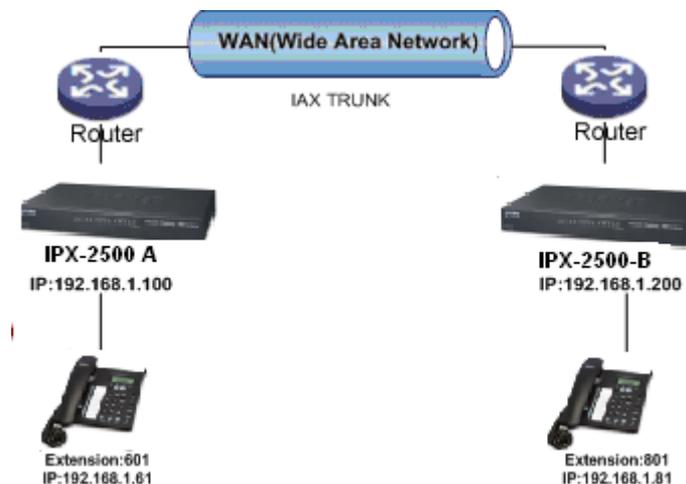
Configuration Rule:

1. IP Phone registers on IPX-2500-A as extension 601.
1. Another IP Phone registers on U50-B as extension 801.
2. IPX-2500-A IP:192.168.1.100.
3. IPX-2500-B IP:192.168.1.200.
4. Extension format of IPX-2500-A: 6XX.
5. Extension format of IPX-2500-B: 8XX
6. Create an extension 888 with password 123456 on IPX-2500-B.
7. All extensions on IPX-2500-A can call extensions on IPX-2500-B with format 8XX.
8. All extensions on IPX-2500-B can call extensions on IPX-2500-A with format 6XX.

For detailed steps, please take chapter 8.2 as reference.

Two sets of IPX-2500 behind router

Sometimes the IPX-2500 doesn't have a public IP address, and you have to configure port mapping for your router.



Step1: Configure the mapping rule of IPX-2500-A on the router.

The IPX-2500-B is connected behind the router, and registers on IPX-2500-A through internet.

You need to configure the port mapping of IAX2 port(4569) on the router. Then, all data received from eth0 port of router (192.168.1.100:4569) will be sent to IPX-2500-A

Now, take the web management panel of AND-4100 router as an example.

In here both UTP and TCP must open for IP PBX.

Advanced

Advanced Wireless

Port Forwarding

DMZ

Parental Control

Filtering Options

QoS Configuration

Firewall Settings

DNS

Dynamic DNS

Network Tools

Routing

PORT FORWARDING

Port Forwarding allows you to direct incoming traffic from the WAN side (identified by protocol and external port) to the internal server with a private IP address on the LAN side. The internal port is required only if the external port needs to be converted to a different port number used by the server on the LAN side. A maximum of 80 entries can be configured.

Select the service name, and enter the server IP address and click "Apply" to forward IP packets for this service to the specified server. Note: Modifying the **Internal Port Start** or **Internal Port End** is not recommended. If the **External Port Start** or the **External Port End** changes, the **Internal Port Start** or **Internal Port End** automatically changes accordingly.

PORT FORWARDING SETUP

	Server Name	Wan Connection	External Port Start/End	Protocol	Internal Port Start/End	Server IP Address	Schedule Rule	Remote IP
<input type="checkbox"/>	IAX	mer_0_35...	4569/4569	both	4569/4569	192.168.1.100	Always	

Step2: IPX-2500 Configuration

Configure the trunk and dial plan on IPX-2500-B, and register IPX-2500-B IP to IPX-2500-A. The configuration is the same as the above, but you have to replace the public IP address with the internal IP:192.168.1.21.

Step3: Configure port mapping rule of IPX-2500-B on the router

Configure port mapping of IPX-2500-B on the router according to Step1.

Step4: Connect two sets of the IPX-2500 and make the call

Create extension 601 on IPX-2500-A, extension 801 on IPX-2500-B, and create the correct outbound rule.



Note

Public IP must be provided by network provider. It could be dynamic IP address, and easy to change; you can resolve this problem by using DDNS.

8.3 How to resolve the problem about hearing one side only

If the IPX-2500 is behind router, to resolve the problem, please set up IP address as shown below:

Click **【Advanced】** -> **【Option】** -> **【Global SIP Settings】** :

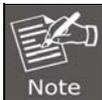
NAT Support

External IP: _____
 External Host: _____
 External Refresh(sec): _____
 Local Network Address: _____

Item	Explanation
External IP	External IP or domain to replace the device IP
External Host	External domain to replace the device IP.
External Refresh(sec)	Refresh time, default is 10 seconds
Local Network Address	IP address and subnet mask needed to be converted. e.g. 192.168.1.100/255.255.255.0

8.4 How to use Skype account in IPX-2500

[Answer]:



The fee of your business account is much more than €50 when you use the account for the first time.

1. <https://login.skype.com>

Sign in with the business account.

Create an account or sign in

It only takes a minute or two - then you're ready to call your friends free over Skype, and even talk face-to-face on video.

Sign in

Create an account

Skype Name

[Forgotten your Skype Name?](#)

Password

[Forgotten your password?](#)



- Safe & Secure
- Quick & Easy
- Manage your account
- Change your settings

Sign me in

1) When you have signed in, at the end of this page, you will find the **Skype Manager**, Please click it.

Settings and extras

	Payment settings	Stored payment details and Auto-recharge settings. View details
	Skype Manager	You are the administrator of Planet . Skype Manager · Member page
	Redeem voucher	Redeem your voucher or prepaid card. Redeem
	Skype WiFi	Learn about Skype WiFi

1 secret
 word



David Yao
 Your Skype Name
 Planet.com
[Profile details](#)
 Your email
[Email settings](#)
 Your password 
 Keep your password secret.
[Change your password](#)

Settings and extras

	Payment settings	Stored payment details and Auto-recharge settings. View details
	Currency	Your currency is set to EUR (Euros). Change
	Skype Manager	You are the administrator of Planet . Skype Manager · Member page
	Redeem voucher	Redeem your voucher or prepaid card. Redeem

3. Please click the **Skype connect**



Your features

Some features have been suspended

-  Allocate **Skype Credit** to your members
-  Set up **Subscriptions** for your members
-  Set up **Group video calling** for your members
-  Set up **Online Numbers** for your members
-  Set up **Call forwarding** for your members
-  Set up **Voicemail** for your members
-  7 profiles set up for **Skype Connect** 



Your members

Your Skype Manager has **2 members**

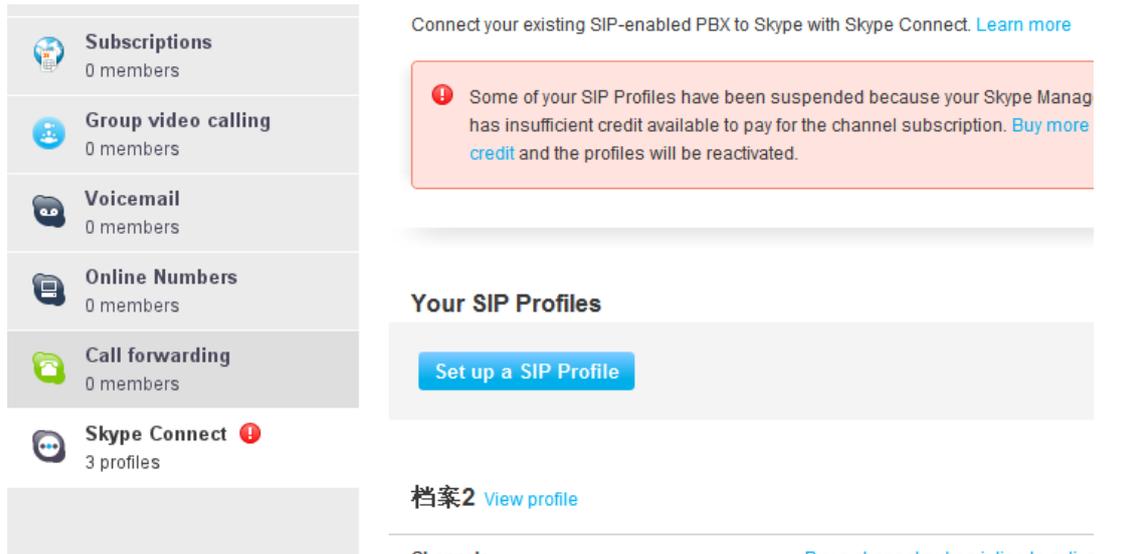
[Add members](#)

Since you last signed in

No changes since you last logged in.

Still unresolved

[One unresolved invite](#)



The screenshot shows a sidebar menu on the left with the following items: Subscriptions (0 members), Group video calling (0 members), Voicemail (0 members), Online Numbers (0 members), Call forwarding (0 members), and Skype Connect (3 profiles). The main content area has a header: "Connect your existing SIP-enabled PBX to Skype with Skype Connect. [Learn more](#)". Below this is a red warning box: "Some of your SIP Profiles have been suspended because your Skype Manager has insufficient credit available to pay for the channel subscription. [Buy more credit](#) and the profiles will be reactivated." Underneath is a section titled "Your SIP Profiles" with a blue button "Set up a SIP Profile". At the bottom, there is a profile entry "档案2" with a "View profile" link.

4. Create a SIP profile

Create a SIP profile

- 1 Choose name 2 Set up subscription 3 Authentication

Creating a SIP profile is as easy as three steps. Simply choose a name for your profile, purchase a channel subscription, and get your authentication details.

Choose a profile name



For example, "New York office". You can edit this name later.

[Next](#) [Cancel](#)

Then you can create one sip account, you need to pay **€4.95** for one channel as monthly rent and you need to input the registration information in our VoIP trunk blank. Then you can register with Skype server. And then you need to assign money for **outgoing calls**, and then you can call out.



aaa

Profile settings

Authentication details

Reports

[← Back to SIP Profile list](#)

Profile settings

Profile name: aaa

Calling channels: [Buy a channel subscription to activate this profile](#)

Outgoing calls: [Set up outgoing calls](#)

To make outgoing calls from this SIP Profile you need to add Skype credit. You can also set up Auto-recharge so you never run out of credit. Outbound calls to landlines and mobiles in the US* are charged at 15 cents/min. For all other destinations see [Skype's standard per minute rates](#).



Then you can see the sip account information, and please click the **Authentications details**.



aaa

Profile settings

Authentication details

Reports

[← Back to SIP Profile list](#)

Authentication details

Please choose the method of authentication needed for your PBX.

Registration
(Username/password)

or, IP Authentication

SIP User	Skype user name
Password	Skype password
Skype Connect address	sip.skype.com
UDP Port	5060

⚠ SIP user is not yet registered at sip.skype.com

5.Settings on IPPBX

3. build one sip trunk with Skype for sip account

Provider Type: Custom Trunk

Host: sip.skybe.com

User name: the user name you defined in Authentication detail

Password: the password you defined in Authentication detail

New VoIP Trunk X

Description: Skype

Protocol: SIP ▼

Host: sip.skype.com :5060

Maximum Channels*: 0

Prefix: _____

Caller ID: _____

Without Authentication

Username: Skype user name

Authuser: Skype password

Password:

Advanced Options

Save
Cancel

B. Set one outbound rule

New DialRule X

Rule Name: skype

PIN Set:

Place this call through:

>>>
↑
↓
<<<

Skype(SIP)

Available Trunks
Selected Trunks

Custom Pattern: 0.

Z Any digit from 1 to 9
N Any digit from 2 to 9
X Any digit from 0 to 9
. Any number of additional digits

Delete 1 digits prefix from the front and auto-add digit _____ before dialing

Save
Cancel

Edit X

DialPlan Name: DialPlan1

<p>Include External Calling Rules</p> <p><input checked="" type="checkbox"/> Skype</p>	<p>Include Internal Calling Rules</p> <p><input checked="" type="checkbox"/> Extensions</p> <p><input checked="" type="checkbox"/> Spy</p> <p><input checked="" type="checkbox"/> Conference</p> <p><input checked="" type="checkbox"/> Ring Groups</p> <p><input checked="" type="checkbox"/> IVR</p> <p><input checked="" type="checkbox"/> Call Queues</p> <p><input checked="" type="checkbox"/> Paging and Intercom</p> <p><input checked="" type="checkbox"/> Directory</p> <p><input checked="" type="checkbox"/> DISA</p>
--	---

C. Make an outbound call

After we have done the above, in the extension we can dial 00 + Country Code + City Area code + local number to dial out via Skype line

For example, dialing number 00(outbound prefix number)+ 001(International Code)+ 886(Country code) + 2(city Area code without 0)+ 22199518(local phone number) will enable you to contact Taiwan Planet Company

D. Set inbound rule

New Number DID X

DID Number: Skype number

Destination: