



IPChitChat VoIP Service User Manual

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Introduction

Why VoIP?

Voice over Internet Protocol (VoIP) has been in existence for several years now but it is only recently that its benefits to the masses have become apparent. Why is this? Well primarily because businesses are looking to achieve savings due to the difficult economic environment and the phone bill for many organisations is one of their major expenses. In addition to this, major advances in technology including the gradual roll out of BT's 21st century network are making VoIP a viable alternative to traditional telephony services.

By implementing VoIP as a replacement for traditional telephony services, businesses will quickly benefit from a reduction in their overall operational costs. Potential savings will vary from business to business but an estimate can be derived through consideration of the following points:

- VoIP Calls are billed by the second and have no connection charges like traditional phone calls. Think about how many times you call a customer and receive an answering service and it is easy to see how these costs can be so excessive.
- VoIP calls between company phone extensions are free. Any worker with a connection to the internet can have a company phone extension e.g. mobile worker and remote offices
- VoIP call charges are generally cheaper than traditional phone charges (please see our rates)
- Multiple inbound virtual numbers can be configured over a single internet connection, therefore allowing a business to reduce the number of traditional phone lines required to operate the telephone service and therefore reducing their monthly rental charges
- IP Phones operate over ethernet networks and therefore new phones can be added to the existing corporate lan without the need to add specialised telephony points reducing installation charges

Additional Advantages of VoIP

VoIP systems have many advantages over legacy systems, including:

- VoIP systems are scalable unlike legacy systems and can grow along with your business without significant cost
- VoIP is a virtual telephone system and therefore you are able to present a customer facing number for one location whilst being based in another. E.g. present a London based number to your customers while you are physically based elsewhere.

Why IPChitChat VoIP?

IPChitChat Voice services are delivered on a robust and scalable infrastructure to deliver business class VoIP services to our customers and we offer superb rates on outbound calls. Being an IPChitChat customer also offers the same high standards of customer service and support that our hardware customers are accustomed to.

Setting up your service

This guide is designed as an introduction to our IPChitChat voice service and its purpose is to quickly get you up and running. It will provide you with a detailed view of all the features of your IPChitChat account and guide you through some configuration examples.

Once you have registered for an IPChitChat account you can start making calls with your VoIP Phone! An IPChitChat account also enables you to call users on other networks, you have the option of obtaining your own incoming number and tariffs and packages to suit your needs. To make calls to (ordinary) PSTN phones, you will need to purchase credit.

You can connect to IPChitChat's voice service in a number of ways. All of our services are prepaid and can be viewed through your online account, enabling you to keep a close eye on your call expenditure.

How do I set up my IPChitChat VoIP Service?

You will of course require an internet connection to access the IPChitChat service but in addition to this you will need to:

First create an IPChitChat VoIP Service Account

First of all you will need to sign up for an IPChitChat Voice service account. The following screenshots take you through the process.

Our service can be accessed through our website

<http://www.ipchitchat.co.uk/index.php/VoIP-Services/intro>

Alternatively, from the home page click the Services tab



Click on the sign up for a VoIP account image.



Are Your Business Phone Bills Too High?

Save Money and Move to VoIP.

[Why Choose VoIP?](#)

IPChitChat VoIP Services




Here at IPChitChat we offer a range of commercial strength, Voice Over IP (VoIP) Services designed specifically for business communications.

Subscribe to our business VoIP service for only £2.99 per month* including a geographic telephone number.

This will navigate you through to the main sign up screen. Here you must choose your preference of either Geographic or Non – Geographic phone number that you wish your customers to call you on. You can also top up your account at this point if required for use with outbound pstn calls.

[PRINT](#) [EMAIL](#)

IPChitChat VoIP Account (Unpublished)





[View Full-Size Image](#)

£2.99

Do you prefer a Geographic Number?:

Do you prefer a Non-Geographic Number?:

Add VoIP Call time?:

  [add to cart](#)

[Ask a question about this product](#)

When you have selected your number and optional talk time you can now simply add to cart and follow the simple checkout process. Once complete we will quickly configure your account and email you the details.

As the VoIP service is a monthly fee we will be in touch to arrange the most suitable method of receiving your monthly payment.

Incoming Numbers

With an incoming number, callers can reach you by calling a UK number wherever you are connected! Simply connect your VoIP Phone configured with your VoIP Service details to your Internet connection and anyone can reach you by dialling your incoming number. The Incoming Number packages are cheap and flexible:

- There are no call charges (only the caller is billed)
- You can have as many numbers as you wish assigned to your IPChitChat account
- You can have multiple concurrent calls through the same number if required (see sip trunks)
- When making outgoing calls with your IPChitChat account, your Incoming number will show up as the Caller ID so the destination can call you back.
- "Having an incoming number is ideal for those who travel or live overseas. Your friends and relatives can reach you no matter where you are and without having to pay international call charges!"

How do I get an Incoming VoIP Number?


You can choose your incoming number when you create your IPChitChat VoIP account.

If you require an additional number then please follow the process below:

First decide which type of number you require from the choices available. The cost of purchasing each type of number is different so please view the required number's page for further details. If you require a geographic number then you can select one here <http://www.ipchitchat.co.uk/index.php/VoIP-Services/UK-Geographic-Number> just select the area code you require and press add to cart link and follow the checkout process. All you pay is the monthly number rental.

[PRINT](#) [EMAIL](#)

UK Geographic Number (Unpublished)



View Full-Size Image

£2.99

Please Select Your Number Below:

Aberdeen - 01224 ▼

For non-geographic numbers, simply add the number to your shopping cart and make payment! This is the link that you require <http://www.ipchitchat.co.uk/index.php/VoIP-Services/Non-Geographic-Numbers>


Once you have made your selection, a random geographic or non-geographic will be allocated to your account and we'll send you confirmation of your details.

Once your number has been allocated, people can call you from anywhere by dialling it as usual. You will need credit to make outgoing calls. Your allocated Incoming Number will also be your Caller ID. You can change this number if required.

Please note that it may not be possible to dial non-geographic numbers from outside of the UK. So if you are intending to receive calls from non-UK destinations, a geographic number would be advisable.

[PRINT] [EMAIL]

Non-Geographic Number (Unpublished)



View Full-Size Image

£2.99

Select Your Non Geographic Number:

0845 (Local Rate)

Will I be charged when people call me?

No. You will only be charged for the initial setup fee or monthly payment depending on the type of number you have chosen. Your incoming VoIP number functions as any other phone number, thus you are not charged for incoming calls, unless you have chosen to divert your number to a non-VoIP destination where additional charges apply.

What if I don't have a IPChitChat account and proceed to purchase a number?

If you do not have a IPChitChat account then we will create one for you.

What if I want a specific number?

Unfortunately, the numbers are allocated randomly. We can select a specific number for you on request. This process takes longer to be effective and may be subject to a greater cost. We also provide number porting services for selected UK dialling prefixes.

Purchase and configure an endpoint to make and receive calls

Now your account is created you will need a device to make and receive calls. There are several options available to you dependant upon your requirements.

IP Hard-phone

For small setups then a single hard-phone can be used to connect directly to our service. Hard-phones are superior to soft-phones and vary in quality, performance and price. We offer an extensive range of hard-phones to suit all requirements and budgets. Please have a look at our website <http://www.ipchitchat.co.uk/index.php/VoIP-Phones> or give us a call to discuss your needs. **(All hard-phones can be pre-configured on request with your account details.)** Hard-phones have their own intelligence and work without the need to connect them to a computer and can be wired, wireless or cordless.



Aastra 57i IP Hardphone

Soft-Phone

Soft-phones are software applications that need to be installed onto your computer. You can use headsets or USB phones to enhance your experience with a soft-phone if required.



Zoiper Soft-phone

Analogue Telephony Adapter (ATA)

If you decide that you wish to carry on utilising your legacy phones to access our VoIP service then you will need to connect them to an ATA, which itself will connect to our service. We offer a wide range of ATA's through our webstore <http://www.ipchitchat.co.uk/index.php/Analogue-Adaptors> **(All ATA's can be pre-configured on request with your account details.)**



Grandstream Handy-tone 503 ATA

IP-PBX

If you have multiple extensions that need to share the same VoIP account or have advanced routing or configuration requirements, then an IP-PBX can be used to access our service. For small businesses of 50 users or less then we can offer the fantastic IP0x appliance from Atcom <http://www.ipchitchat.co.uk/index.php/Atcom-Asterisk-Appliances> which incorporates built in support for our service.



Atcom PBX Appliance

SIP or IAX?

IPChitChat's VoIP service can deliver connectivity using either SIP or IAX protocols. For those not familiar with protocols, then think of them as a language that devices use to communicate with each other. If you are using our SIP service then your endpoint needs to talk the same language e.g. SIP, the same is true of IAX.

SIP is the most popular standard in use today and is supported by 99% of VoIP hardware products. IAX was developed on the Asterisk PBX platform and is extremely useful for remote worker type scenarios as IAX is extremely efficient at traversing firewalls and needs very little assistance to achieve this. If you have a central PBX server with remote and home workers then you should consider IAX.

Configuring your end-point device

Now that you have created your IPChitChat VoIP account, decided on your chosen endpoint, you now need to plug the endpoint onto your network and configure it to access our service. Hardware specific configuration examples are included at the end of this document and can be found on our website <http://www.ipchitchat.co.uk/?????> If your device is not included then please email support@ipchitchat.co.uk and we'll look to add it.

General information that you should consider:

SIP Service

Common information that you will require or may prove useful is included in the table below

Feature	Setting
Account Number	Required to register to our service
Password	Required to register to our service
Server Address	sip.ipchitchat.co.uk
Outbound Proxy Server	nat.ipchitchat.co.uk:5065 Required when multiple devices are registered to the service from behind a firewall
SIP Network Port	5060
Our Server Address range (allow through firewall)	217.14.138.0/24 77.240.48.0/24 77.240.60.0/24 77.240.54.0/24 77.240.55.0/24
Useful Numbers	901 - Check your IPChitChat credit balance 902 - Welcome message 903 - Check your User ID 904 - Echo Test (for latency checking) 905 - Audio Test. After the beep record your voice and receive it back to ensure two-way audio communication works properly 906 - Turns balance announcement when making calls on / off* 907 - Turns low credit announcement when making calls on / off* 908 - Check your current Caller ID display 9123 - UK Date & Time

IAX Service

We can route inbound calls and you can make outbound calls through our service using IAX protocol. Please note though that registration isn't supported and your pbx will show as being unregistered. For this service your firewall will need to forward port 4569 to your PBX.

Feature	Setting
Account Number	Required to create trunk to our service
Password	Required to create trunk to our service
Server Address	iax.ipchitchat.co.uk
Network Port	4569
SIP Network Port	Firewall should have port 4569 open and forwarding to your PBX
Our Server Address range (allow through firewall)	217.14.138.0/24 77.240.48.0/24 77.240.60.0/24 77.240.54.0/24 77.240.55.0/24
Useful Numbers	901 - Check your IPChitChat credit balance 902 - Welcome message 903 - Check your User ID 904 - Echo Test (for latency checking) 905 - Audio Test. After the beep record your voice and receive it back to ensure two-way audio communication works properly 906 - Turns balance announcement when making calls on / off* 907 - Turns low credit announcement when making calls on / off* 908 - Check your current Caller ID display 9123 - UK Date & Time

How to make Calls

Now you are connected to our service you can start to make calls.

To test that the service is working then dial 902 and you should receive a confirmation message. The table below details other methods of dialing using our service:

Requirement	Solution
Calling another IPChitChat User	Dial their userid
Calling IPChitChat	844230739

Calling PSTN Geographical Numbers	Our service requires you to dial the full code including area code e.g. 01302537509.*
Calling PSTN Special Numbers e.g. 0800	Simply dial the number e.g. 08450940645*
Calling other VoIP users	<p>Subject to support from the other VoIP provider you can call another VoIP user on another network using their sip address e.g. 54662@sip.ipchitchat.co.uk</p> <p>We also offer the following direct numbers to connect yo other networks free of charge:</p> <p>71 to dial a user on the FWD network 72 to dial a user on the iptel network 73 to dial a user on the DrayTEL network *467 to dial a user on the Gossiptel network *472 to dial a user on the Gradwell network **747 to dial a user on the Internet Phone Company network</p>
Calling Emergency Services	You can call almost all numbers as you would from a regular phone. To be able to make emergency calls you must register your address against your incoming numbers. You can do this by logging into your IPChitChat account. The number must be assigned as your caller id so that emergency services can best deal with your call. Access to selected directory service 118 numbers are provided. For a list of 118 numbers available on IPChitChat please see table in appendix.

* This applies to SIP service. IAX requires the full country code e.g. +441302537509. You can configure outbound rules on your pbx to automatically add the 0044 before the number if required.

Additional Services

SIP Trunks

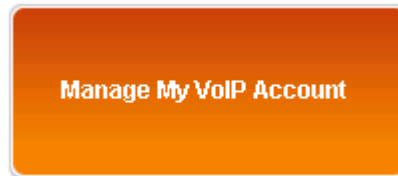
Our SIP Trunk service is designed for the business community and aimed as a cost effective alternative to ISDN services. First select the number of concurrent calls that you require and then purchase the appropriate number of SIP Trunks. One concurrent call equates to one SIP trunk so if you need five concurrent calls then select our 5 SIP Trunk service.

Logging into your account

You can log into your VoIP account to check your balance and view your call statistics. To achieve this you can go directly to the following URL

<http://portal.ipchitchat.co.uk/myaccount/login>

Alternatively you can navigate to the services page and click on the 'manage my account' button located towards the left side of the page.



You can now log into your account with your username and password.

Username is your IPChitChat account number

We will assign you a temporary password when you create your account, this should be changed to something only known to you.

My Account

Username:

Password:

Login

How to top up your account

When you require additional talk time, simply purchase this through our website at the following URL.

<http://www.ipchitchat.co.uk/index.php/VoIP-Services/VoIP-Credit-Top-Up>

Select the amount of credit required, add to cart and follow our simple checkout process. Once complete, we will add the credit to your account within 15 minutes.

Contacting Support

We believe the level of support that we provide at IPChitChat is second to none and as a specialist hardware VoIP provider we are able to offer our customers a complete end to end service.

Our business customers will be allocated an account manager who will be responsible for all aspects of their service. Business Customers can call their account manager directly or follow the standard processes as detailed below.

Our web form is the preferred method of initial contact as this gives everyone an auditable trail of communications. The contact form is available at the following URL:

<http://www.ipchitchat.co.uk/index.php/General/support>

Other contact methods include:

Email contact - Support@ipchitchat.co.uk
Landline - 01302638679

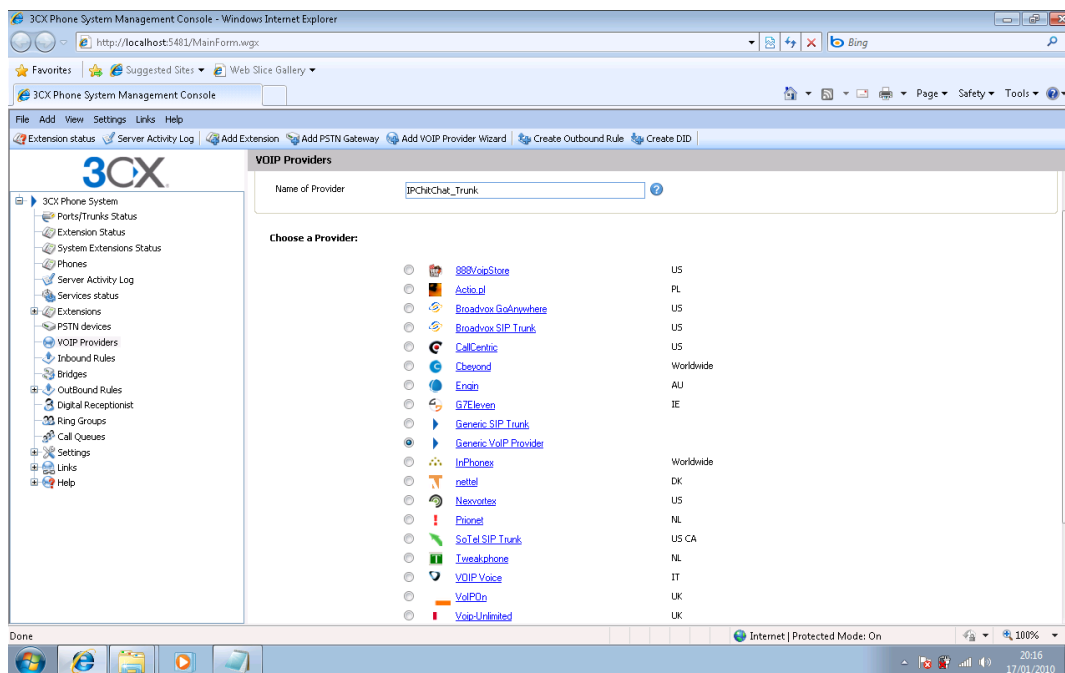
Advanced Configuration

How to configure IPChitChat on 3CX Phone Server

3CX is a popular Windows based PBX platform. Our service is test to function with the 3CX and can be configured as follows:

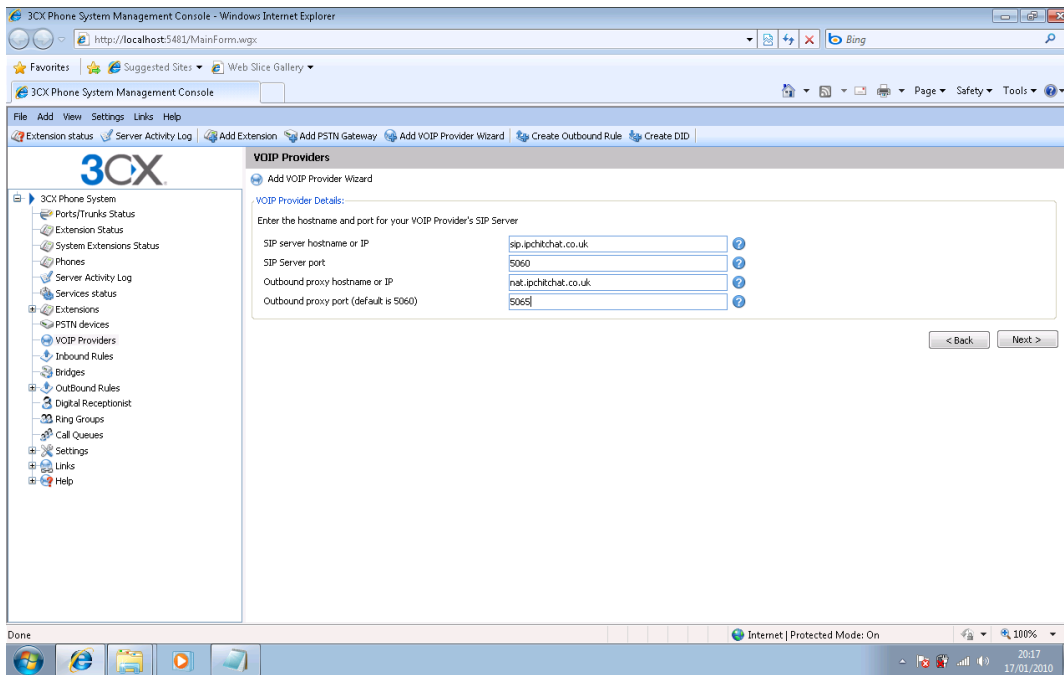
Select the VoIP provider's wizard

Give your Trunk a name select generic Voip provider and click next



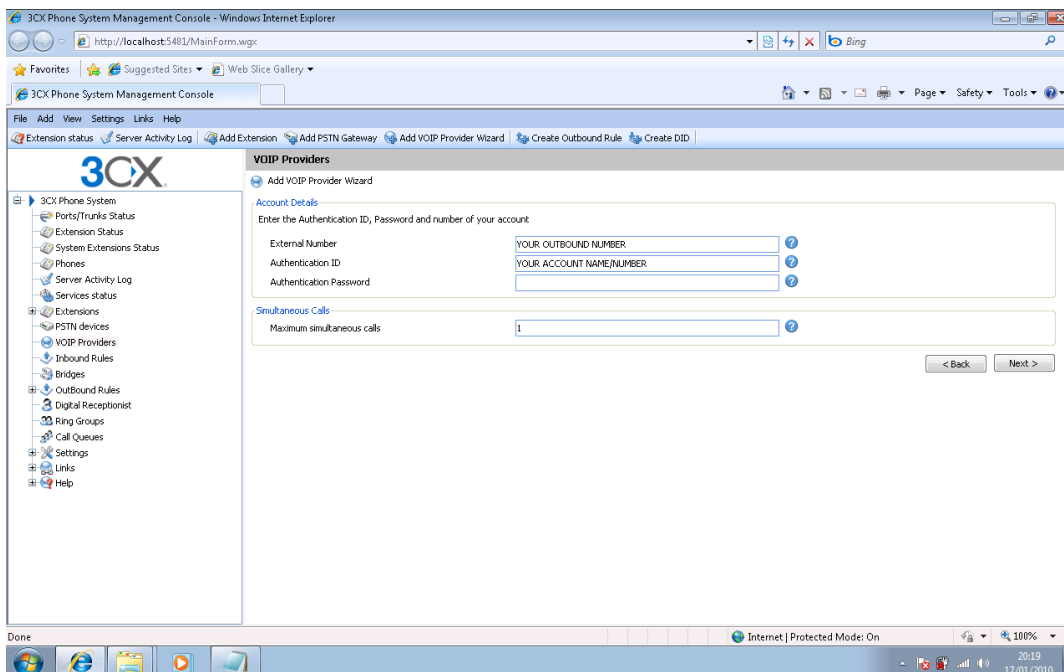
Complete Sip registrations details as follows:

- Sip Server – sip@ipchitchat.co.uk
- Sip Server Port – 5060
- Outbound Proxy – nat.ipchitchat.co.uk
- Outbound Proxy Port - 5065

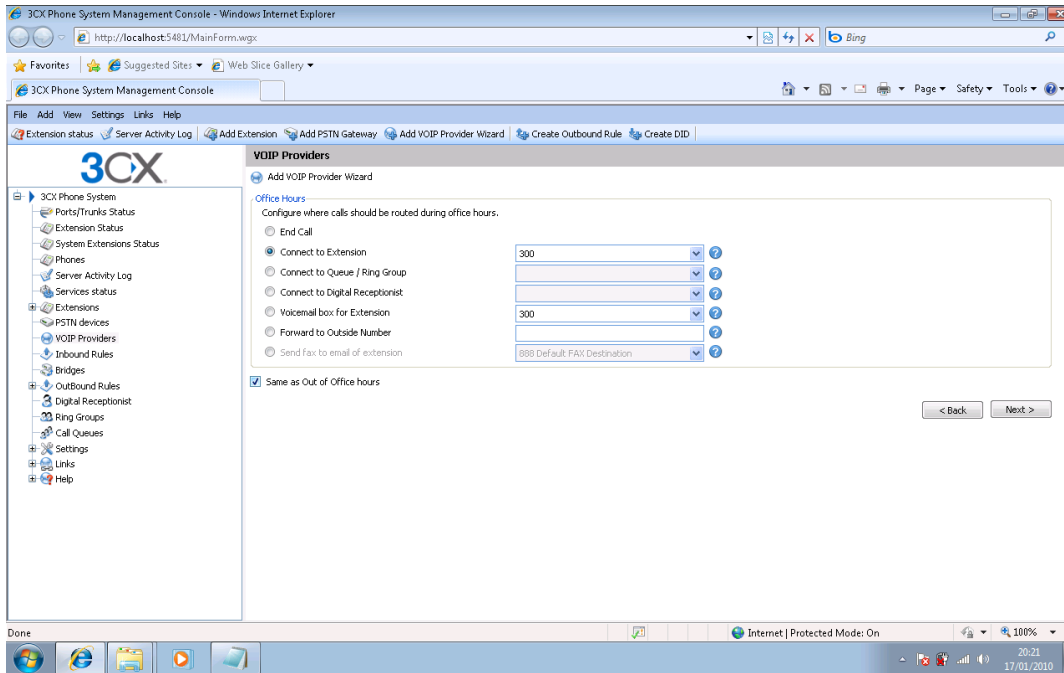


Input the following

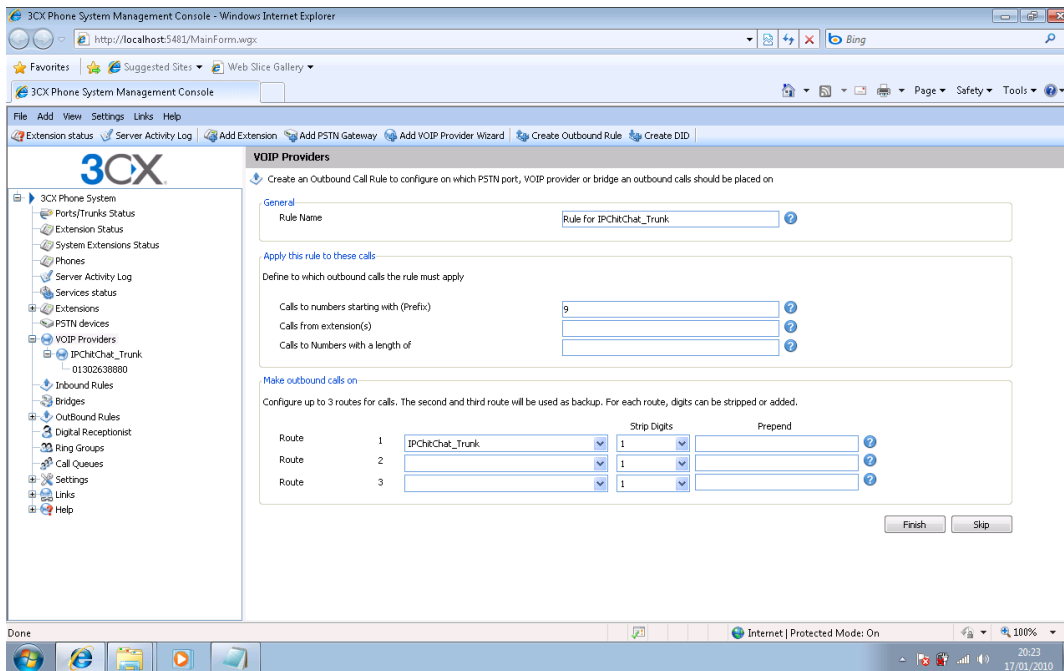
- External Number – Your Geo / Non Geo telephone number
- Authentication ID – Your IPChitChat ID
- Authentication Password – Your IPChitChat password
- Maximum Simultaneous Call – Number of trunks you have



Next input where you require inbound calls routing to.



Finally configure what how the rule will be applied and if the trunk requires number to be appended or stripped before routing.



How to configure IPChitChat on your Asterisk Server

Configuration example for SIP

Creating an Outbound SIP Trunk

The preferred method of configuring Asterisk is by using a combination of the sip.conf and extensions.conf files. The sip.conf file enables you to have much more configuration control over your SIP connection, allowing you to control things such as codec priorities, trunking, etc. For connection to IPChitChat, a basic sip.conf entry would be:

```
[general]
register => USERID:PW@sip.ipchitchat.co.uk/USERID
```

```
[ipchitchat]
type=friend
username=USERID
secret=PW
fromuser=USERID
host=sip.ipchitchat.co.uk
dtmfmode=rfc2833
fromdomain=sip.ipchitchat.co.uk
context=default
insecure=very
```

The extension.conf file would look something like this:

```
exten => USERID,1,Dial(SIP/extension)
exten => _0[1-9].,1,Dial(SIP/ipchitchat/${EXTEN})
exten => _00[1-9].,1,Dial(SIP/ipchitchat/${EXTEN})
```

Where USERID is your IPChitChat ID, PW is your IPChitChat password and IPChitChat is the name of the SIP entity created in sip.conf for your IPChitChat account

Configuring an Inbound Trunk

Create an entry in sip.conf as follows:

```
[Your IPChitChat Incoming Number]
type=friend
username=Your IPChitChat Incoming Number
context=[XXXXXXXXXX]
```

Create an entry in extensions.conf as follows:

```
[XXXXXXXXXX]
exten => Your IPChitChat Incoming Number,1,Dial(SIP/XXX)
```

Example Configuration

If your incoming number is: 01302537509:

sip.conf entry would look like this:

```
[01302537509]
```

```
type=friend
username=01302537509
context=ipchitchat
```

extensions.conf entry would look like this:

```
[ipchitchat]
exten => 01302537509,1,Dial(SIP/1001)
```

As a result, all calls on that number would be routed to a SIP Phone with extension 1001.

Configuration example for IAX

Please email support@ipchitchat.co.uk with the details of your external IP address and we'll configure your account to route to your PBX.

The IPChitChat IAX service requires numbers to be sent with the full country code. For example, if you wish to call our office you would send the number in the following format (e164) to our call server: 441302537509.

Configuring an IAX Outbound Trunk

There are two possible ways to configure our IAX service with Asterisk

1 - Configuration using only extensions.conf file:

This involves adding the following entries into extensions.conf:

```
exten => _0[1-9].,1,Dial(IAX2/USERID:PW@iax.ipchitchat.co.uk/44${EXTEN:1})
exten => _00.,1,Dial(IAX2/USERID:PW@iax.ipchitchat.co.uk/${EXTEN:2})
```

Where USER is the user ID, and PW is the password for your account.

The first line of the dial sequence allows UK-based customers to dial without a country code as it substitutes the prefixed 0 with a 44. This method is the least secure, as the dial sequence including the password will appear on the console display when an outgoing call is made.

2 - Configuration using iax.conf:

The preferred method of configuring Asterisk is by using a combination of the iax.conf and extensions.conf files. The iax.conf file enables you to have much more configuration control over your iax connection, allowing you to control things such as codec priorities, trunking etc.

For connection to ipchitchat, a basic iax.conf entry would be:

```
[ipchitchat]
type=peer
username=USERID
secret=PW
host=iax.ipchitchat.co.uk
```

The corresponding extensions.conf would be:

```
exten => _0[1-9].,1,Dial(IAX2/USERID@ipchitchat/44${EXTEN:1})
```

```
exten => _00.,1,Dial(IAX2/USERID@ipchitchat/${EXTEN:2})
```

Configuring an inbound IAX trunk

1 - Create an entry in `iax.conf` as follows:

```
[Your IPChitChat Incoming Number]
type=friend
username=Your IPChitChat Incoming Number
context=[XXXXXXXXXX]
```

2 - Create an entry in `extensions.conf` as follows:

```
[XXXXXXXXXX]
exten => Your IPChitChat Incoming Number,1,Dial(IAX/XXX)
```

3 - Configuration Example

If your incoming number is: 01302537509:

`iax.conf` entry would look like this:

```
[01302537509]
type=friend
username=01302537509
context=default
```

`extensions.conf` entry would look like this:

```
[default]
exten => 01302537509,1,Dial(IAX/1001)
```

As a result, all calls on that number would be routed to a IAX Phone with extension 1001.

How to configure IPChitChat on your Trixbox Server

How to configure IPChitChat on your AsteriskNow2 GUI

Configuration for IAX Service

Please email support@ipchitchat.co.uk with the details of your external IP address and we'll configure your account to route to your PBX.

Then you need to configure two trunks on through the AsteriskNOW 2 GUI.

Configure Outbound Trunk

First on the trunks tab – create a VoIP trunk as detailed below

Edit IAX trunk 844230739

Provider Name ⓘ: IPChitChat_Outbound

Hostname: iax.ipchitchat.co.uk

Username: **YOUR USERNAME**

Fromuser: **YOUR USERNAME**

Fromdomain:

Password: **YOUR PASSWORD**

Insecure Type: very ⓘ

Codecs: First: u-law ⓘ Second: a-law ⓘ Third: GSM ⓘ
Fourth: None ⓘ Fifth: None ⓘ

CallerID ⓘ:

Configure Inbound Trunk

Next, create another trunk, this time for the inbound connection as detailed below:

Edit IAX trunk 01302638679

Provider Name ⓘ: IPChitChat_inbound

Hostname: iax.ipchitchat.co.uk

Username: **YOUR GEOGRAPHIC TELEPHONE NUMBER**

Fromuser:

Fromdomain:

Password:

Insecure Type: no ⓘ

Codecs: First: u-law ⓘ Second: a-law ⓘ Third: GSM ⓘ
Fourth: None ⓘ Fifth: None ⓘ

CallerID ⓘ:

Create an Incoming Rule

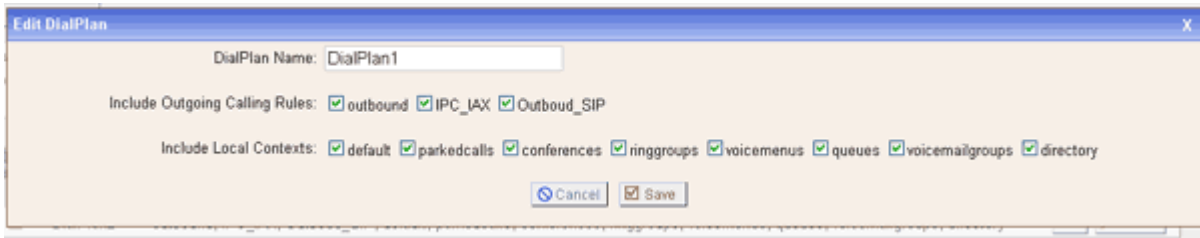
Next on the incoming rule tab, create a rule as detailed below:

Create an Outbound Rule

Finally create an outbound rule of your choice. An example of this is detailed below:

Update Dial Plan

Select the newly created outbound rule in your Dial Plan



Configuration of SIP Trunk

SIP trunks can be configured in AsteriskNOW, although the outbound proxy server settings do not appear to work. This means that you are required to open some ports on your router in addition to configuring NAT on the AsteriskNOW Server.

First Configure the Trunk

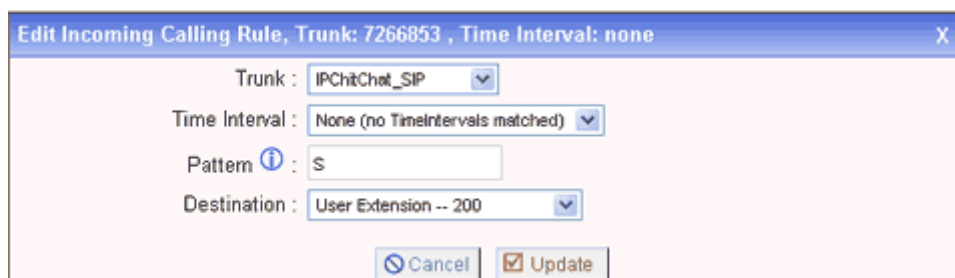
On the Trunk settings tab, click ---- Voip Trunks

Configure as per below.



Configure Incoming Rule

Next configure an incoming route as detailed below.



Configure Outbound Rule

Configure an outbound calling rule.

Update Dial Plan

Update Dial plan with new outbound rule.

NAT Issues

SIP unlike IAX does have certain problems when used from behind a firewall. To overcome this with AsteriskNOW there are certain amendments required.

Through the File Editor located in the GUI edit the file sip.conf as detailed below

```
context=default
allowoverlap=no
bindport=5060
bindaddr=0.0.0.0
svlookup=no
useragent=IP0x
allowexternaldomains=yes
allowguest=yes
```

```
allowssubscribe=yes
allowtransfer=yes
alwaysauthreject=no
autodomain=no
callevts=no
canreinvite=yes
checkmwi=10
compactheaders=no
defaultexpiry=120
domain=
dtmfmode=
dumphistory=no
externip=YOUREXTERNAL IP ADDRESS
externrefresh=10
fromdomain=
g726nonstandard=no
jbenable=no
jbforce=no
jbimpl=
jblog=no
jbmaxsize=
jbresyncthreshold=
language=
localnet=YOUR LOCAL NETWORK ADDRESS E.G 192.168.1.0/255.255.255.0
maxcallbitrate=384
maxexpiry=3600
minexpiry=60
mohinterpret=default
mohsuggest=
nat=yes
notifyringing=yes
pedantic=no
progressinband=never
promiscredir=no
realm=asterisk
recordhistory=no
registerattempts=0
registertimeout=20
relaxdtmf=no
rtpholdtimeout=
rtptimeout=
sendrpid=no
sipdebug=no
subscribecontext=
t1min=100
t38pt_udptl=no
tos_audio=none
tos_sip=none
tos_video=none
trustrpid=no
usereqphone=no
videosupport=no
disallow=all
allow=undefined,ulaw,alaw,gsm
```

Port Forwarding

Port forwarding to your Asterisk Server is also required

Ports to Forward

5060 – Default SIP Port

10000 – 20000 – Default Asterisk ports for audio (reduce this range in rtp.conf)

How to configure IPChitChat on your Atcom asterisk appliance

Atcom asterisk appliances utilise AsteriskNOW so the above instructions work well with them. Additionally we will soon be adding a Service Providers set configuration for our Service...Details available shortly

Troubleshooting Guide

End Point Configuration Guide

The following configuration screenshots detail common IP Phones.

Configuring Yealink SIP T22, T26, T28

The screenshot displays the Yealink SIP configuration interface. The top navigation bar includes tabs for Status, Account, Network, Phone, Contacts, Upgrade, and Security. Below the navigation bar, there are three account selection buttons: Account 1, Account 2, and Account 3. The main configuration area is divided into two sections: 'Basic >>' and 'Codecs >>'. The 'Basic >>' section contains the following fields:

Register Status	Registered	
Line Active	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	
Label	IPC Test Account	
Display Name	IPC Test Account	
Register Name	7262069	
User Name	7262069	
Password	*****	
SIP Server	sp.ipchitchat.co.uk	Port:5060
Enable Outbound Proxy Server	Enabled	
Outbound Proxy Server	nat.ipchitchat.co.uk	Port:5065
Backup Outbound Proxy Server		Port:5060
NAT Traversal	Disabled	
STUN Server		Port:10000
Voice Mail		
Proxy Require		

On the right side of the 'Basic >>' section, there is a 'NOTE' section with the following information:

- Display Name**: SIP service subscribers name which will be used for Caller ID display.
- Register Name**: SIP service subscribers Authenticate ID used for authentication.
- User Name**: User account information, provided by VoIP service provider.
- NAT Traversal**: Defines the STUN server will be active or not.
- Proxy Require**: A Special parameter just for Nortel server. If you login to Nortel server, the value should be: com.nortelnetworks.firewall
- Codecs**: Choose the codecs you

Security

The number of attacks on sip based voip systems appears to be increasing at an alarming rate over the past few months and therefore it is essential that the your pbx environment is secured.

Some essentials actions that you must take include:

- Ensure a firewall is in place to protect your internal Network from the internet
- Only open ports on your firewall that are absolutely essential
- When opening ports on your firewall, only open to trusted sources and not the world
- For external connections to your PBX, use a VPN tunnel where possible e.g. for remote workers
- Where VPN tunnels aren't practical, for instance with a SIP service provider, then seek advice from your service provider and understand what ports require opening as a requirement and which ip address range their service utilises
- Our Service uses the following ip ranges
 - 217.14.138.0/24
 - 77.240.48.0/24
 - 77.240.60.0/24
 - 77.240.54.0/24
 - 77.240.55.0/24

Additionally, ensure that all of your PBX extensions are secured with strong alphanumeric passwords. Most scan based attack take a three stage approach to attacking your system. First they identify that a sip based pbx is installed at your ip address, next they attempt to determine what extension numbers are configured on your system, and finally they either exploit extensions with no passwords, or attempt dictionary based attacks to crack any passwords. The net result is that once this has been achieved, you will likely be faced with a hefty bill from your service provider for calls to premium rate numbers.

Frequently Asked Questions

What IP Addresses does your service utilise?

Traffic will originate from the following ip address ranges, so please ensure these are allowed access through your firewall

217.14.138.0/24

77.240.48.0/24

77.240.60.0/24

77.240.54.0/24

77.240.55.0/24