Communicate anywhere and anyway you want!

VitXi

VitalPBX

vitalpbx.com

CONTENT

Introduction

VitXi WebRTC is a platform that integrates with VitalPBX in a transparent manner, and allows to have the following services:

- Audio Calls
- Video Calls
  - Screen Sharing
- SIP Chat (Chat between VitXi and SIP Users)
- SMS Chat
- Chat between VitXi Users
  - Voice Notes
  - Emojis
  - File Sharing
  - Image Sharing
- Graphic Voice Mail Interaction
- Call Recordings Viewer
- Prescence
- Call History
- Contact List
- And Much More!

VitalPBX Preparations

1.- VitalPBX Server Preparations

For VitXi WebRTC to work perfectly, it is necessary to have a valid FQDN to assign it security certificates. Coming up, we will show you the steps to follow once we have VitalPBX installed on our server with a valid domain.
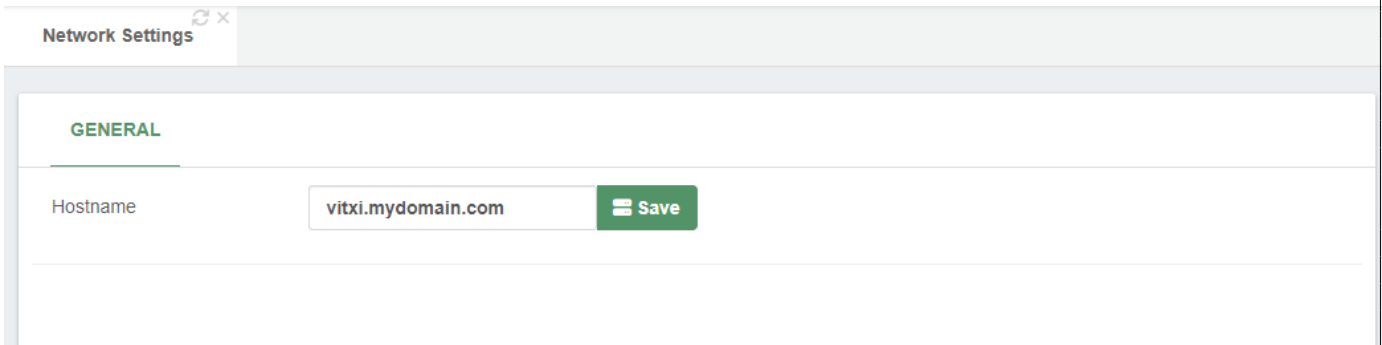
1.1.1.- Install VitXi

Go to Admin > Add-Ons > Add-Ons and select VitXi and install it. With this we guarantee ourselves at least two free licenses with the Community Version of VitalPBX to try out VitXi WebRTC.

VitXi	4.0.3-2	-	🔑	📄 🔁 🗑

1.1.2.- Create a certificate and enable HTTP

Remember that it is necessary to have a valid FQDN and that our VitalPBX server must have a valid certificate.

It is also very important that the host name of the server matches the FQDN that we are using to generate the Let's Encrypt certificate, so first you must go to Admin/Network/Network Settings and configure the Hostname as shown below.

Now we are going to configure the certificate for which we are going to Admin/System Settings/Certificates.

Certificates

GENERAL

Type	Let's Encrypt	Owners Email *	myemail@mydomain.com
Description *	VitXi	Country	United States
Hostname *	mydomain.com	State	Alabama
Sub-Domains	× vitxi.mydomain.com		

Afterwards, go to Admin > System Settings > HTTP Server, and force HTTPS connection and select the certificate created previously.

HTTP Server

GENERAL

HTTP Port	80	HTTPS Enable	Yes
HTTPS Port	443	Force HTTPS	Yes
Certificate	VitXi		

Now go to Settings > PBX Settings > Mini HTTP Server and configure it as shown below. You must select the certificate we have created. Remember to save and Apply Changes. We do this so that VitXi WebRTC PJSIP WebSocket can communicate with VitalPBX.

Mini HTTP Server

GENERAL

HTTP Bind Address	0.0.0.0	8088	Sessions Limit	1000
TLS Bind Address	0.0.0.0	8089	Enable HTTP	Yes
Certificate	VitXi		TLS Enable	Yes

1.1.3.- WebRTC Profile Settings

Go to SETTINGS > Technology Settings> Device Profiles: click on the icon ☰ the list of profiles will be displayed:

Select the **default WebRTC Profile** and verify that the settings are as follows:

Save and Apply Changes.

1.1.4.- RTP Settings

Go to CONFIGURATION > PBX Configuration > RTP Configuration and make the following settings:

- **ICE Support**: Yes

- **ICE Host Settings**: This section will allow you to define which IP addresses will be exposed during ICE negotiations. This is commonly used when your **PBX server is behind a one-to-one NAT**.

Save and Apply Changes.

1.1.5.- Firewall Settings

Now, let's verify that ports 8088, 8089 "**Asterisk HTTP Daemon**" and 6001 "**VitXi WebRTC**" are enabled in the firewall services and rules, for them we enter the following path: *"Admin/Firewall/Services"*

And *"Admin/Firewall/Rules"*

Note: in case you have another firewall, you must enable the ports mentioned above.

1.1.6.- Create a VitXi Extension

Go to PBX > Extensions > Extensions and create an extension with the following parameters:

- **Technology**, PJSIP
- **Profile**, Default WebRTC Profile
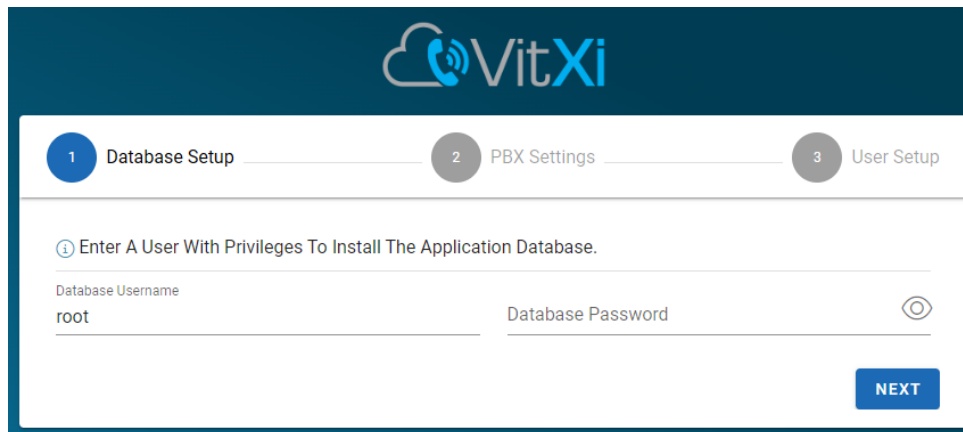- **WebRTC Client**, Yes

Save and Apply Changes

VitXi WebRTC

VitXi WebRTC is a full web application that integrates with VitalPBX and communicates through the PJSIP protocol over WebRTC.

1.- Installation

VitXi 4.x works with VitalPBX 4 and onwards. To install VitXi WebRTC it is necessary to go to the Add-On module (Admin > Add-Ons > Add-Ons) and press the green install button next to it. After a couple of minutes, the installation would be done, and you can proceed to its URL (http://IP-ADDRESS/VitXi) and proceed with the installation wizard. You can press VitXi's name on the Add-Ons module to quickly go to this URL.

Now, we will see the installation wizard that will guide us through the final steps for configuration.

a.- Database Settings:

- **Database User**, MySQL user, if we are installing on the same server as VitalPBX, you can leave the username 'root' and blank password. Else, you will need to create a new MariaDB user to access remotely.
- **Database Password**, if we are installing on the same server as VitalPBX, the root user does not have a password. When accessing remotely, you must create a new username and password in MariaDB.

b.- PBX Settings:

- **Host**, if we are installing on the same server as VitalPBX, it is recommended to leave this field as **localhost**. Else, we must input the host or remote IP Address.
- **Port**, if our server has a valid certificate and all the requests are redirected to HTTPS, we must configure port 443. If we are not using HTTPS, we configure port 80. If we are accessing the PBX remotely, remember to open these ports on the firewall.
- **Application key**, if the VitXi is located on the same server as VitalPBX, it is not necessary to generate an API key since it will be generated automatically. If VitXi is installed on a different server to VitalPBX you will need to generate an API key under Admin > Admin > Application Keys. You then copy it and paste it here.

c.- User Setup:
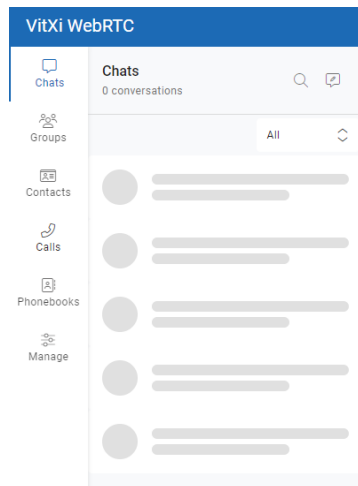
- **Name**, full name for the administrator user in VitXi.
- **Username**, is the administrator username to use in VitXi, usually 'admin.'
- **User Password y Password Confirmation**, admin user password.
- **Time zone,** here you choose a default time zone.

d.- Enter the Username and Password previously created.

2.- Menu

On the menu we got the following options:
- **Chats**, list of people with which the user has had some type of chat.
- **Groups,** List of available groups with their respective members.
- **Contacts**, the contact list added by the user manually. To enable/disable BLF for a number, you should remove the number and then add it again.
- **Calls**, The user's Dialpad and call history.
- **Phonebooks**, phone directories that are extracted from the VitalPBX Phonebook.
- **Manage,** main menu to configure the system.

- o **Users,** Create and edit VitXi Users.
- o **Role Manager,** Create and edit privilege profiles for users.
- o **Groups,** Create and edit groups to which users belong.
- o **Agent Profile,** Create and edit profiles for call center agents.
- o **BLF Settings,** Manage the number of BLF contacts allowed per user to prevent server overload and optimize performance. Set a value between 1 and 100.
- o **Presence Status,** Create and edit the possible states of user presences.
- o **Social Networks,** Configure the URL of each Tenant's social networks.
- o **Mail Settings,** Configure the email account to send emails.
- o **ICE Server,** Configure the ICE Server. We recommend leaving the default ones.
- o **PBX Settings,** Configure VitalPBX location. It is only necessary to configure when you have a connection problem or want to use a VitalPBX that is on another server.

- QO Voicemail Messages indicator.

- 𝖱𝖱𝖱 Start an audio conference.
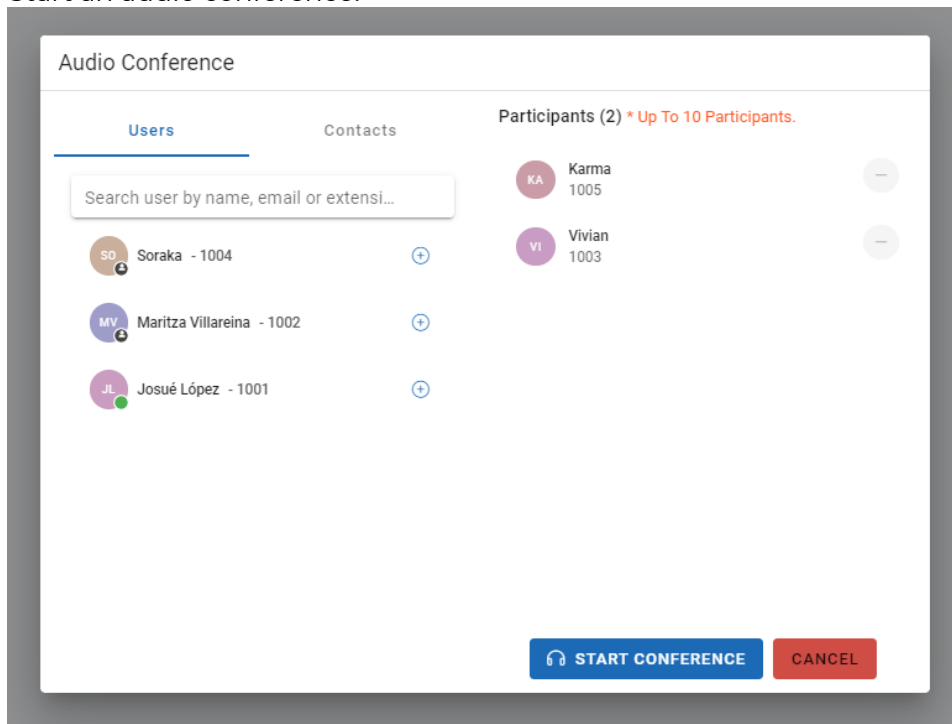
- o Allows you to initiate an audio conference with several contacts you have added.

- 🎧 Login/Logout and Pause/UnPause Agent in the Queues.
  - o By clicking on the icon, the agent will automatically log in to all the queues to which it belongs. Once logged in, just click on the icon again to log out of all the queues.
  - o If you want one or more agents to be able to choose which queue to log in to manually, you will have to modify or create a specific role with the corresponding permissions.
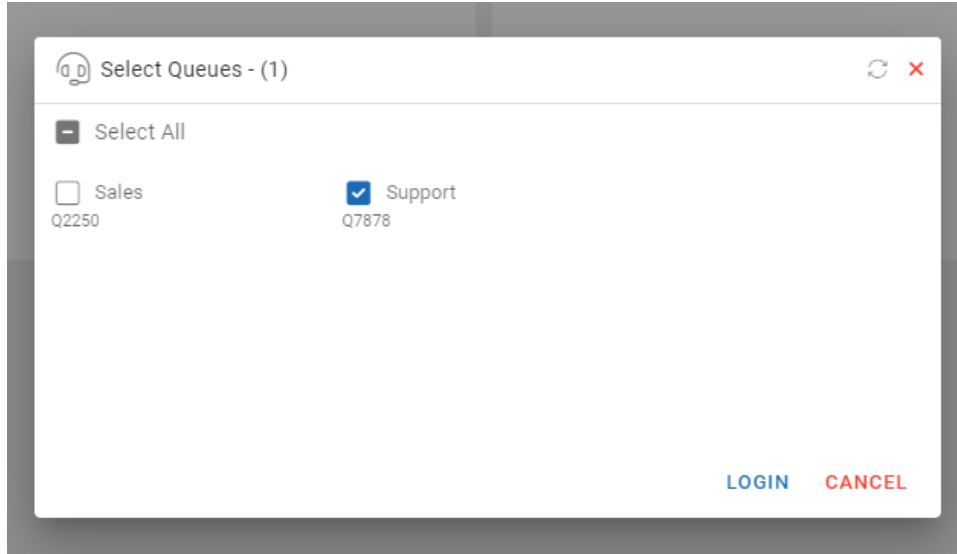
- ⋮ Preferences
  - o **Settings,** Configure and view user-related settings.
    - ▪ **Profile,** Show Name, Username and Extension.
    - ▪ **Account,** Change user password.
    - ▪ **General,** Desktop Notifications and Dark Mode.
    - ▪ **Audio,** Configure audio settings.
    - ▪ **Headset Integration,**
    - ▪ **Video,** Configure video settings.
    - ▪ **Calls,** Configure Ringtone, Auto Answer and Call History Settings.
    - ▪ **Call Center,** Configure Login on Startup, Logout when closing VitXi and CRM Settings.
  - o **Language,** Change Language.
  - o **Shortcuts,** Listo of Shortcuts.
  - o **About,** Show VitXi version.
  - o **Troubleshooting**, clear local app data and cache.
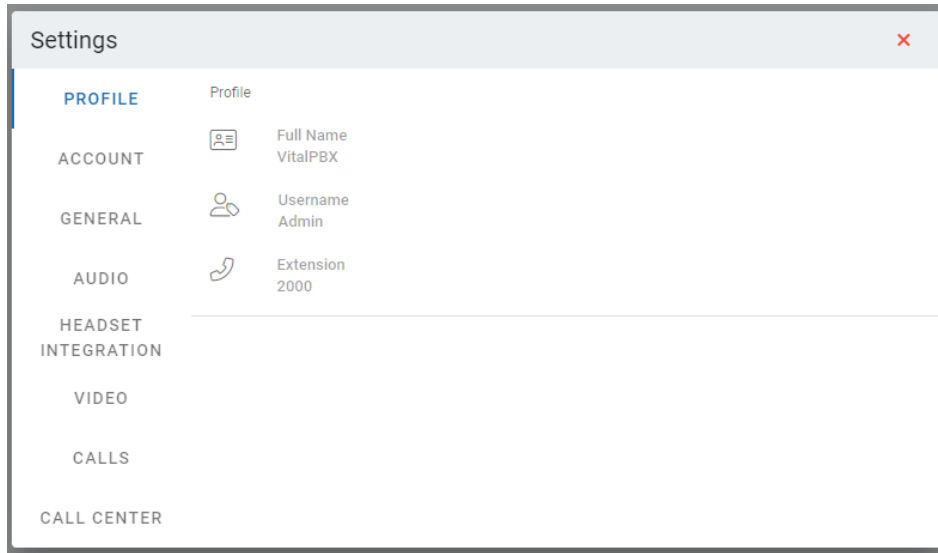- ✓ VitXi client registration status.

3.- Settings

3.1.- Settings

The first thing that we are going to configure is the System Settings, for which we will go to the main menu and select settings. This will be displayed in the following screen.
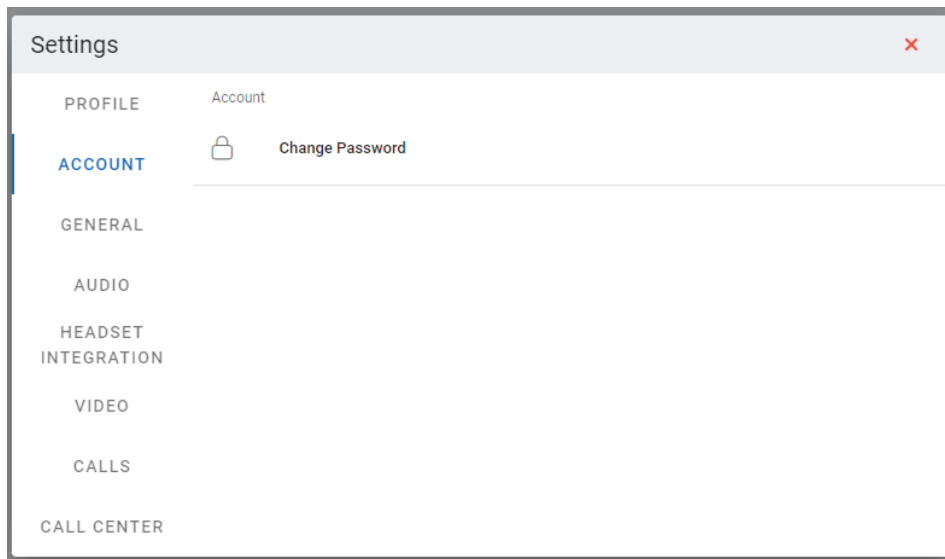
Profile

Shows the name, Username and extension number of the user.

Account
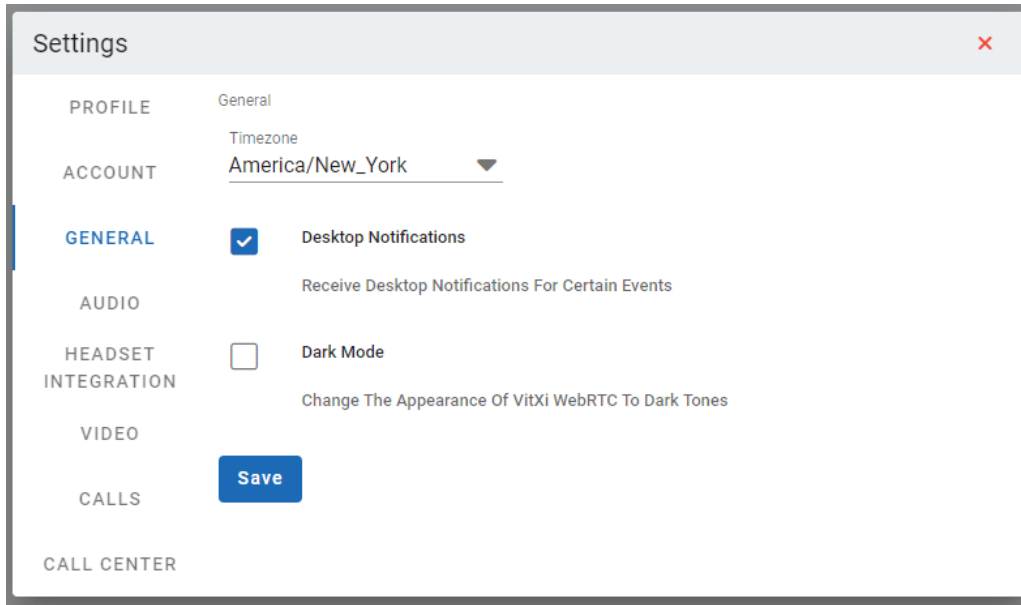
Change the user's password.

General

Timezone, the time zone for the user. This way, the user will see their own time zone, regardless of their location.
Desktop Notifications, the user can receive a notification for certain events, for example, receiving a call, a message, and more.
Dark Mode, here you can select the dark mode view of the interface.

Audio

**Microphone,** Select the microphone to use.
Audio, Select the audio output to listen to.
Ringing Device, Select the audio output to hear the ring when a call comes in.
Echo Cancellation, this is used to prevent the echo effect during a call.
**Noise Suppression** automatically filters and eliminates background noise.
Media Volume, Adjust the volume to hear the ringtone when a call or notification comes in.
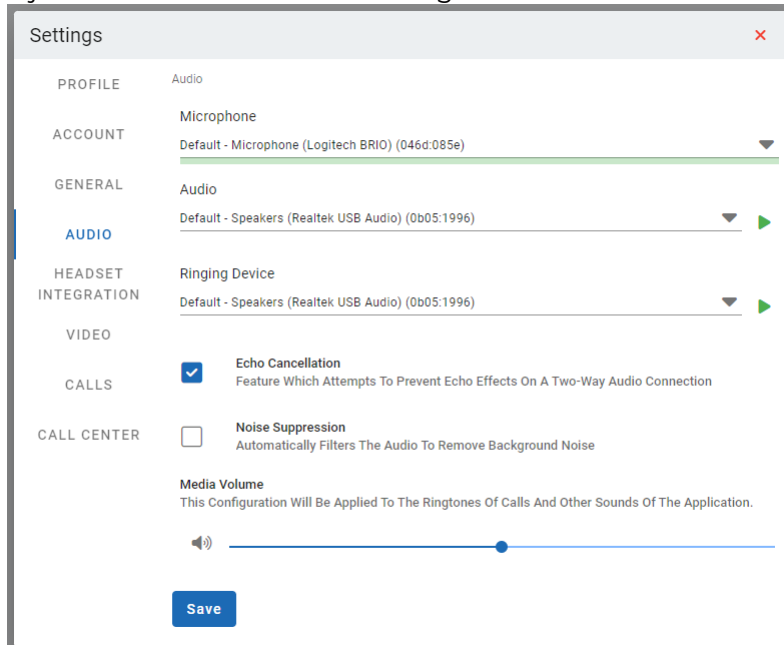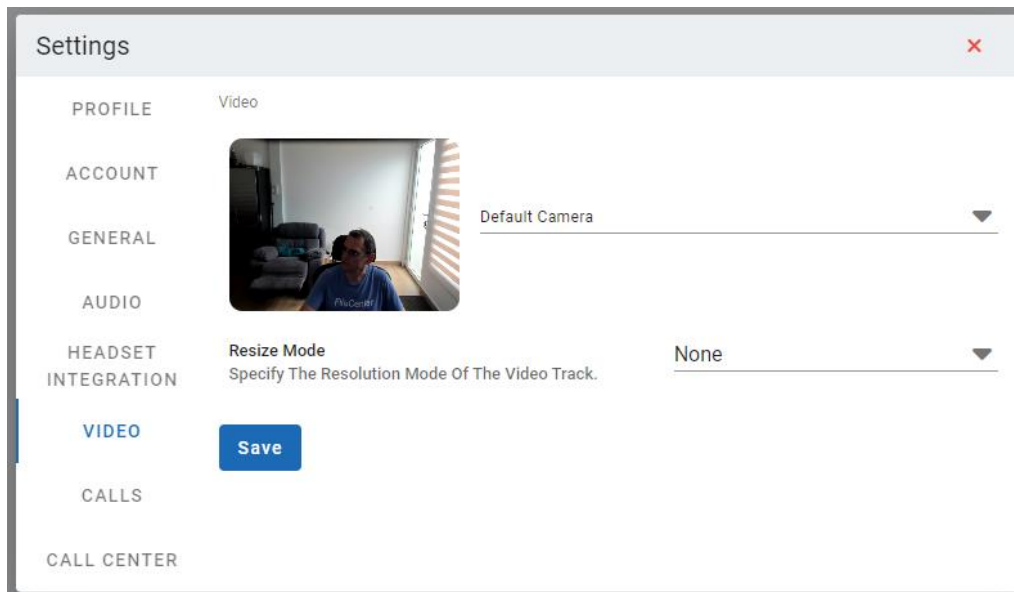
Headset Integration

HID enablement module for streamlined call actions using headsets. Enhance the calling experience with one-touch controls, including call answering and volume adjustments.
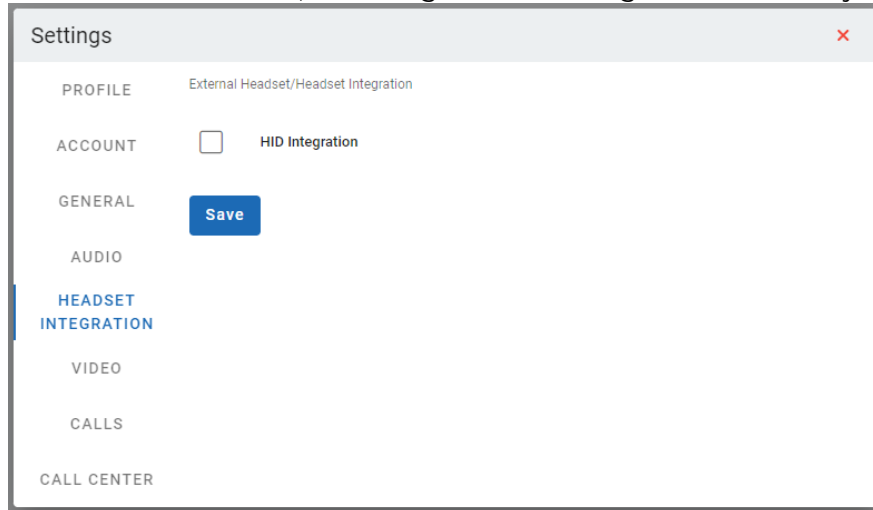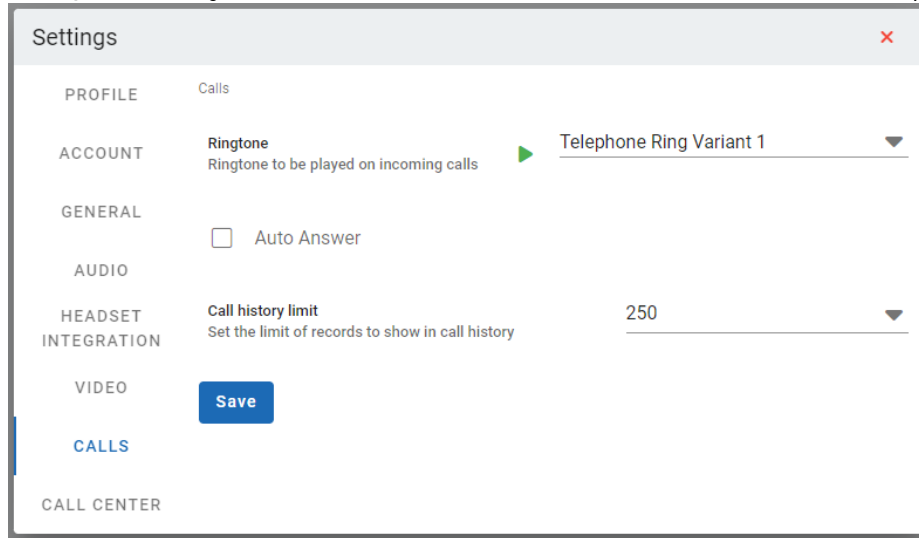

Video

Camera, Select the camera to use.
Resize Mode, Specify the resolution mode of the video track.

Calls

Ringtone, here you can select the ring tone to listen to when the user is receiving a call.
Auto Answer, this will answer the call automatically.

Call history limit, with this you can establish the call limit to show on the Calls option 📞 Calls .

Call Center

Automate Agent Login and Logout when starting and closing VitXi. CRM integration options are also configured to display pop-up windows.
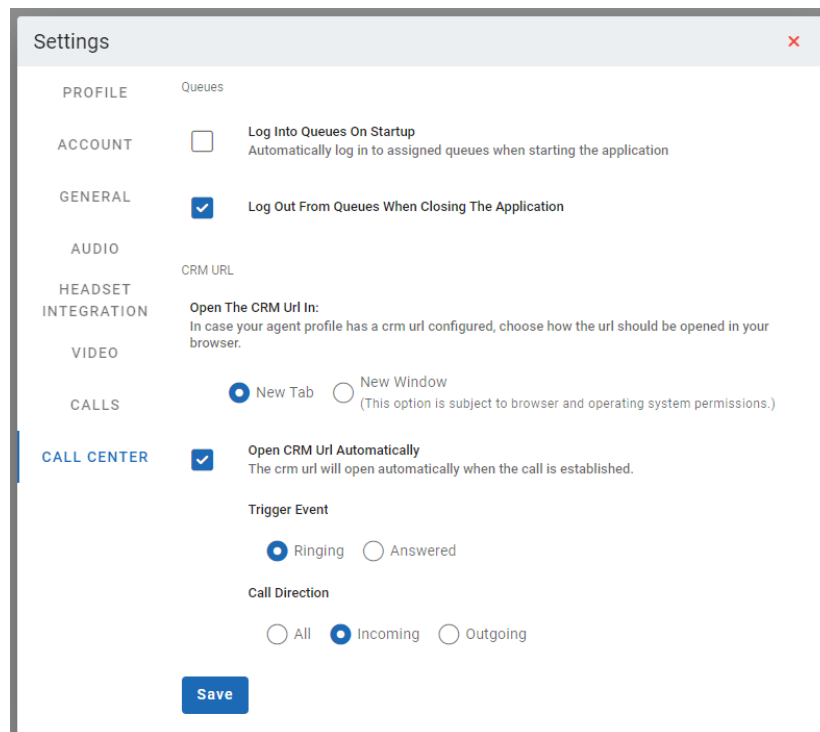
Presence

Presence Status, select the presence status with which we desire to have when login in.
Additional Information, if the user wants to show some additional message that other users that are connected will see.
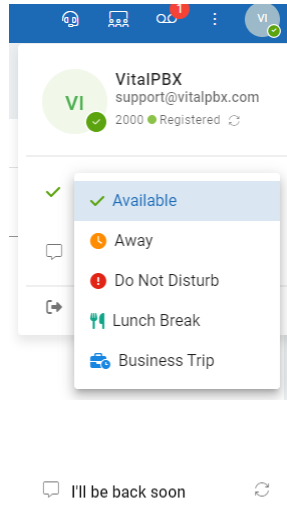
Here, the system administrator can create the different presence status that users can use. By default, there are five (5) statuses which are, Available, Do Not Disturb, Lunch Break, and Business Trip, however, you can add more.

3.2.- Users

Now, we will create the users and assign them to the groups we want to. A user can belong to one or more groups.

Name, user's full name.
Username, username with which the user will log into VitXi WebRTC.
Email, the email address associated with the user, is very useful to recover the password.
Password, password with which the user will log into VitXi WebRTC.
Role, the type of user. There are three types of users.

- **Super Administrator,** capable of managing all the users and tenants.
- **Administrator,** capable of managing users within its tenant.
- **User,** VitXi WebRTC end-users.
- **Agent,** When it is a Call Center Agent, we recommend this profile already activates an icon in the interface to facilitate the Login/Logout, Pause/Unpause of the Agent in queues.

Tenant, tenant to which the user belongs to.
Groups, groups to which the user belongs to.
Extension, extension associated to the user. For this, the user needs to have a VitXi Device created on VitalPBX.
Agent Profile, Assing an agent profile to be used in case the assigned role has call center permission.
Phonebooks, phonebooks to which the user will have access to.

3.3.- Roles

To facilitate the creation of users with their respective permissions, roles are created that are assigned to different types of users.

3.4.- Groups

With the purpose that the VitXi users become visible between each other, it is necessary that each user has a group assigned to them, and afterwards, we give access to other users to see this group. This way, you can create multiple groups of users limiting them to which groups they can see. For this, we first create the group name.

3.5.- Agent Profiles

When we are using Call Center Agents in VitXi and we want each agent group to have a different profile in terms of types of breaks or integration with CRM, we must create profiles with this information.

Below we show the interface where these profiles are created.

Name, Name of the profile to create.

Is Global, If it is going to be shared to be used by all Tenants.

CRM URL, you can set the URL/endpoint of your CRM. You can configure dynamic or static variables. The CRM URL will open when the agents click the CRM button in the call layout.

Custom Website Tab, configure a URL/website to be inserted as a "custom tab." This way, agents will be able to visit the site without leaving Vitxi.

Reason for Pauses, We define all possible reasons for pauses.

3.6.- BFL Settings

Manage the number of BLF contacts allowed per user to prevent server overload and optimize performance. Set a value between 1 and 100.

BLF Contact Control

Manage the number of BLF contacts allowed per user to prevent server overload and optimize performance. Set a value between 1 and 100.

Limit

50

Save

3.7.- Social Networks

Here the URLs of the social networks are configured. This can be configured by Tenants. When they are configured, some icons will appear at the bottom right.

Tenant

VitalPBX LLC

https://facebook.com/ vitalpbx

Set the username of your facebook page

https://twitter.com/ vitalpbx

Set the username for your twitter account

https://youtube.com/ vitalpbx

Set the username of your youtube channel

https://instagram.com/ vitalpbx

Set the username for your Instagram account

Update

2000 ● Registered

3.8.- Mail Settings

Configuration of the email account to be able to send email in case some users need to reset their password.

smtp ▼

host
🔗 smtp.mailtrap.io

port
⇄ 2525

👤 username

🔑 password

🔒 encryption ▼

required

required

required

✉ from address

📇 from name

Send email test

💾 **Save**

3.9.- ICE Servers

🖧 Servers

Server - 1

STUN or TURN URI (1)
stun:stun1.l.google.com:19302

STUN or TURN URI (2)
stun:stun2.l.google.com:19305

+ −

☐ Authentication

+ ADD SECONDARY SERVER

↻ Reset   💾 **Save**

3.10.- PBX Settings

Even though this information is asked at the moment of installation, it is also possible to perform some modifications afterwards.

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4.- Chats

In Chat we can see the history, as well as start a conversation or continue a previous conversation.

5.- Groups

It is possible for group users so that they can be accessed only by the members of their group, thus the identity of the different sectors of a Company can be preserved.

With this option it is possible to see the members of the groups to which the user has access.
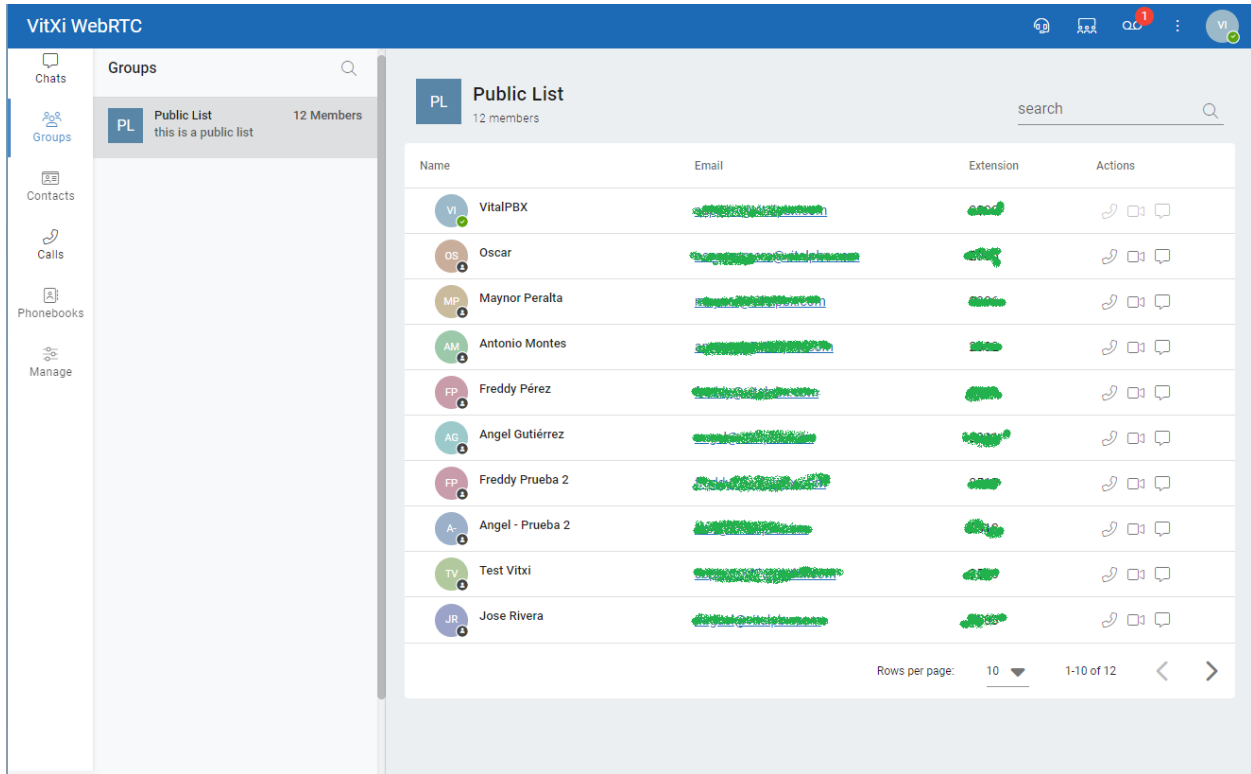
6.- Contacts

To add a new contact, it is necessary to go to 'Contacts' [image], and press the 'Add Contact' option [ADD CONTACT] and then it will show us the following form.

First Name, the contact's First Name.
Last Name, the contact's Last Name.
Company, name of the Company where the Contact works at.
Job Title, the job they perform at the company they work at.
Contact Type, the type of contact, Internal or External.
Email, contact's email address.
Avatar, image to remember the contact with.
**Mark as favorite,** if you mark it as favorites, it will be grouped in the favorite's menu.
Phones, contact phone numbers, they can be SIP, cellphone, or any other type.
BLF, If the BLF option is selected (Only valid for extensions SIP on the same PBX), we will see the status of the extension in real time.
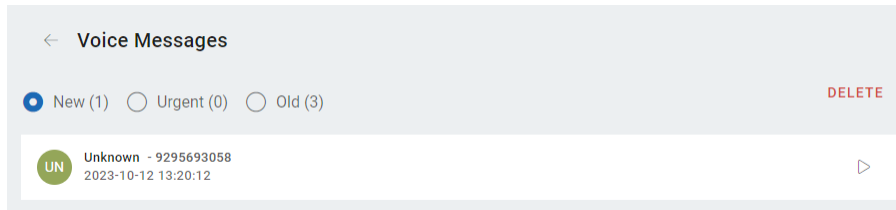
7.- Calls

7.1.- Call History

To see the call history, we must go to the Calls icon and press Call History. There we can see the last calls, for performance this history is limited by default to 250, however you can modify it.
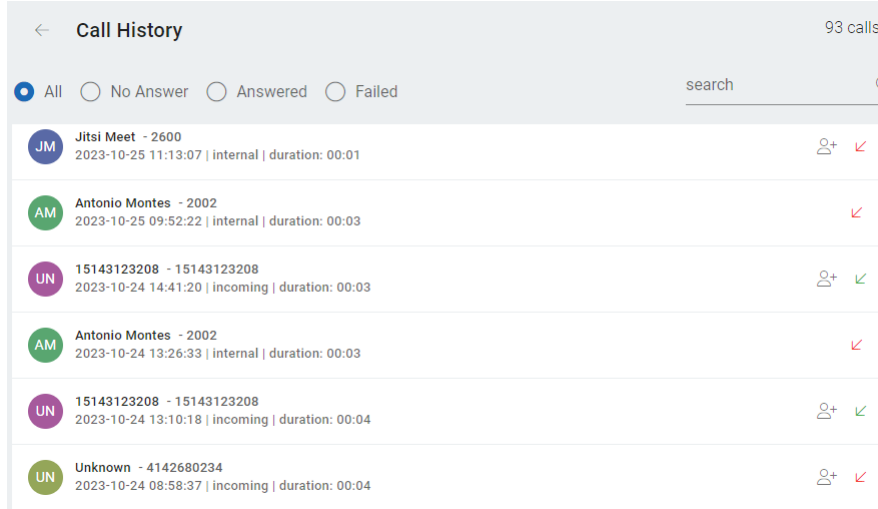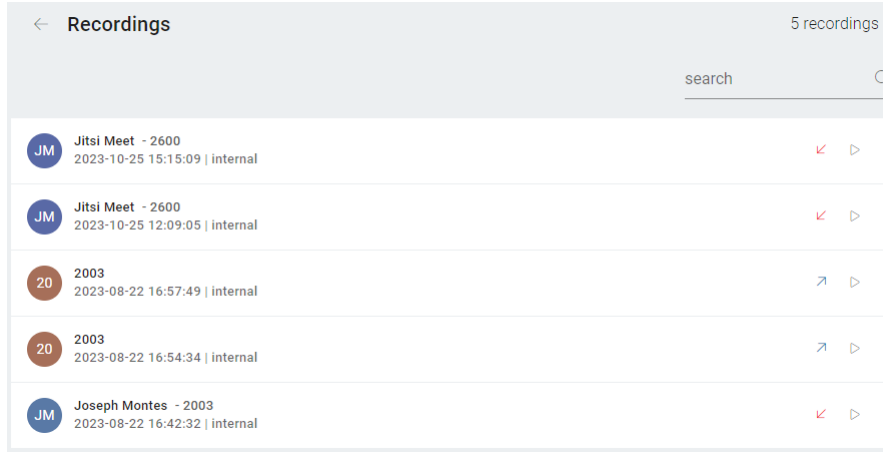
7.2.- Voice Mail Messages

It is possible to view all your Voicemail messages from VitXi WebRTC, which allows us to perform the following actions:
- Listen
- Delete

7.3.- Recordings

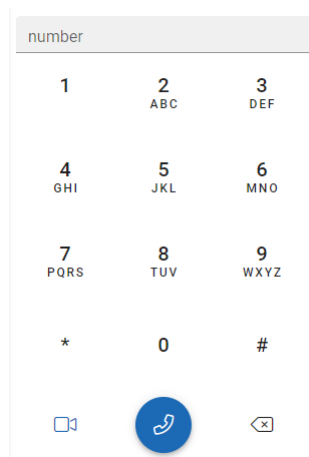It is possible to listen to the user's call recordings from the extension they have associated to them.

7.4.- Placing Calls

There are many ways to perform calls through VitXi WebRTC. The easiest way is by selecting the user and then pressing one of the three options available:
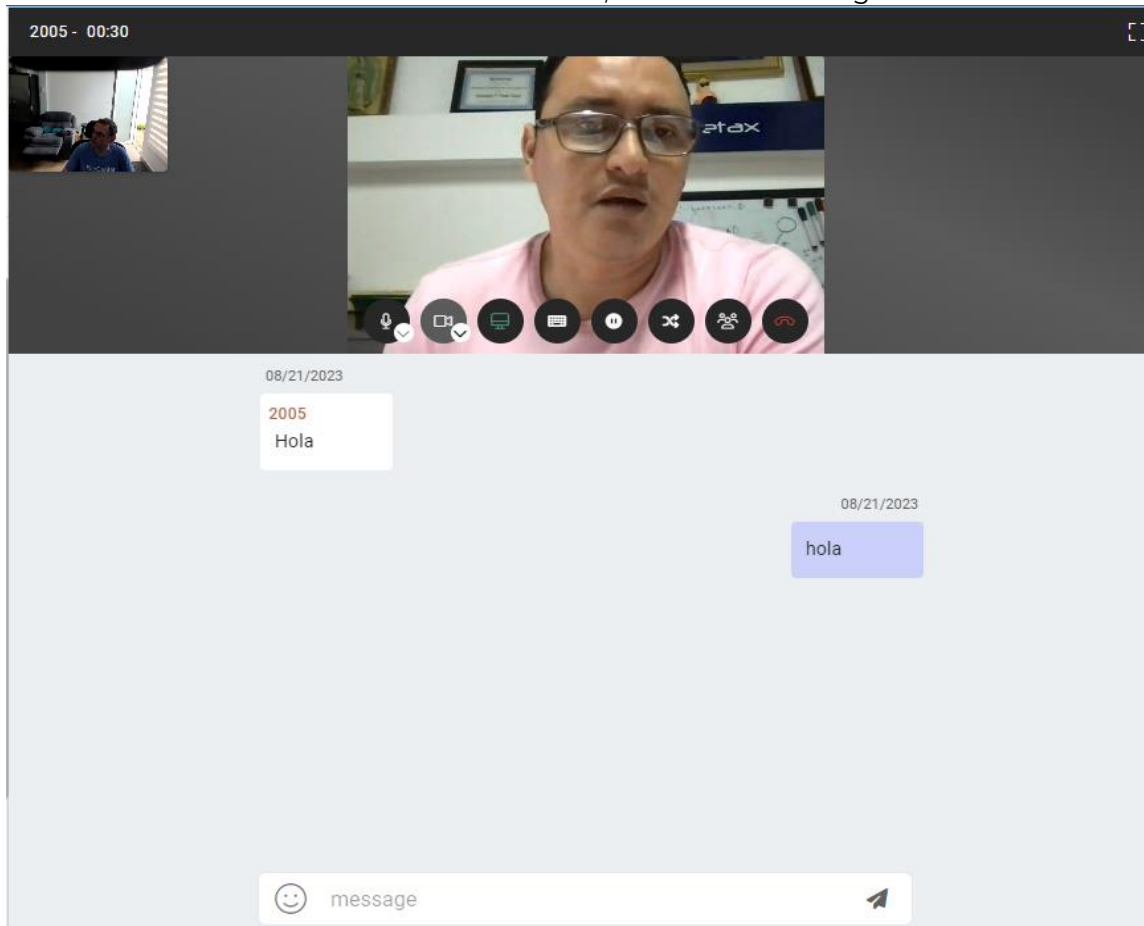
- 📞, Audio/Video Call
- 💬, Chat message

We can also use the Number Pad by pressing the 🔗 Calls button.

When a call is established, the following screen is displayed.

When there is an established call, the following options are displayed, which we will describe below.

🎤 Mute the microphone by selecting a new one from a list.

📹 Enable/disable video casting or select a video source from a list.

🖥 Share screen.

⌨ Keyboard for sending DTMF tones

⏸ Put the call on hold.

🔀 Call transfer.

👥 Add a new call to the call to put it in conference.

📞 Hang up on the current call.