



CASE STUDY

MEET CALLS IN A PC THROUGH A LAN

Descripción

This document describes how to configure s MEET panel for receiving calls in a PC installed in the same LAN than the panel

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INTRODUCCIÓN

Sometimes we are required for the possibility of receiving calls from a MEET panel in a PC, instead of a MEET monitor specially in offices and/or commercial spaces.

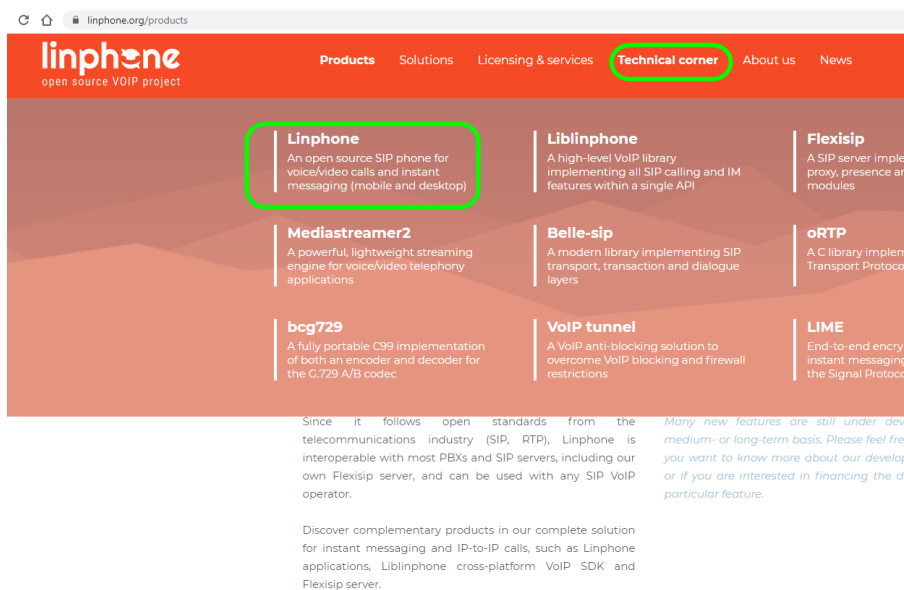
In this Case Study we are going to explain how to implement this function by means of a SIP VoIP client application installed in a PC connected to the same LAN than the panel.

There exist several client SIP VoIP applications, many of them are free. For this Case Study we are going to use the LINPHONE client APPLICATION, that can be downloaded from the developer web for free under a GNU GPL licence.

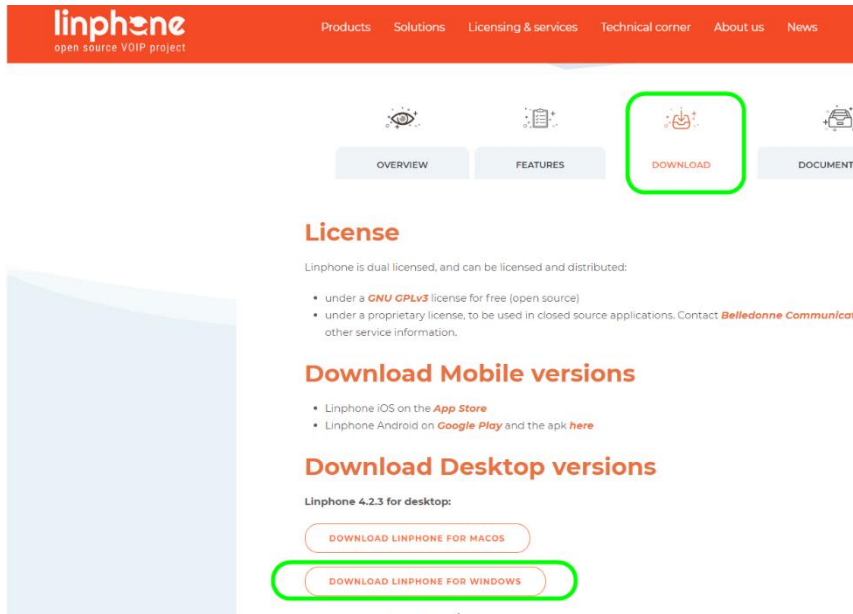
Basically this operation consists in the installation of the LINPHONE client in a PC and register it in the FERMAX MEET ME server in the cloud, so the PC receives the calls through this server, in a similar way than a smartphone with the MEET ME APP installed does.

HOW TO INSTALL THE LINPHONE CLIENT

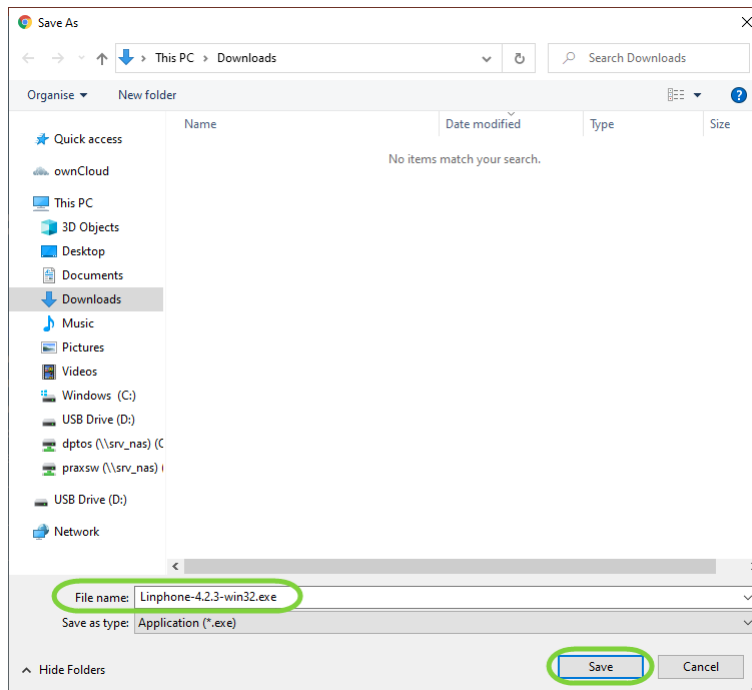
Go to www.linphone.org and download the **Linphone-latest-win32.exe** application.



I. Access to the download section for downloading the application.



II. Select a folder in the PC to save it



III. Once downloaded the **Linphone-latest-win32.exe** file, click on it for installing LINPHONE in your PC.

LINPHONE SETTINGS

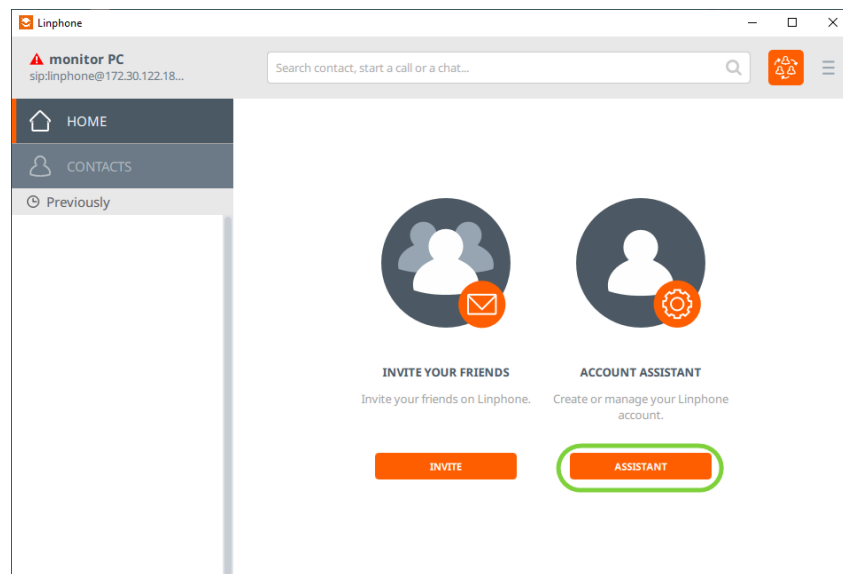
REGISTER LINPHONE IN THE MEET ME SERVER

A Ref. 1496 MEET ME LICENCE is required to allow the simultaneous reception of a call in a maximum of 8 different devices (PC's and/or smartphones).

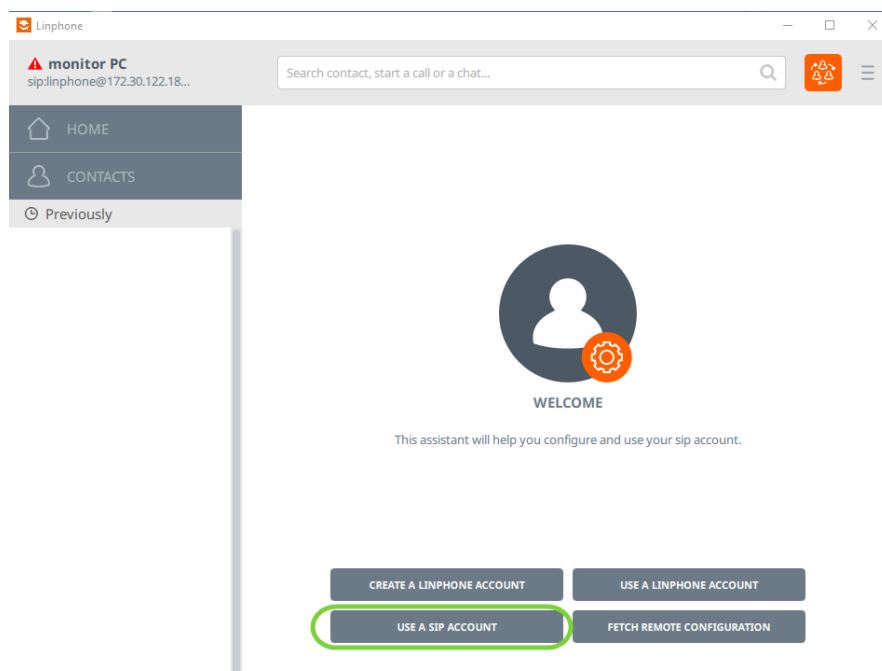
The PC has to be configured and connected to the internet, and the corresponding router will not have any restriction for streaming or SIP protocols.

The steps are as follow:

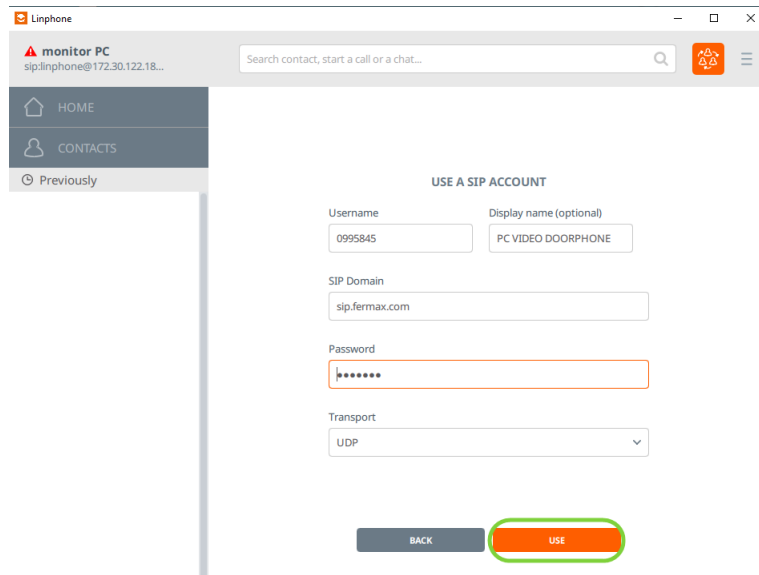
I. Arrange the LINPHONE application and use the assistant:



II. select USE A SIP ACCOUNT:



- III. Enter the MEET ME domain name (sip.fermax.com) and the Ref. 1496 MEET ME licence credentials (username y password).
Select UDP TRANSPORT PROTOCOL and design a name for it (optional), to identify the account.
Finally, select USE to register this account in the MEET ME server.

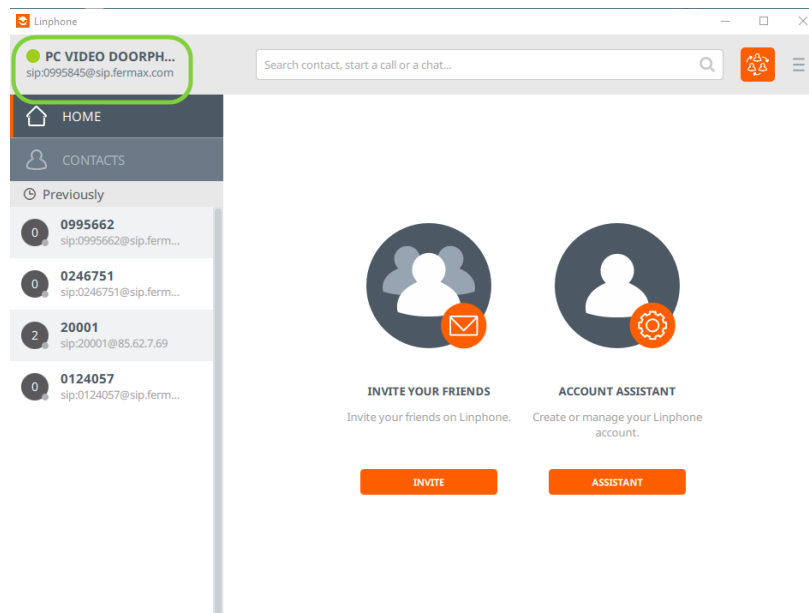


The screenshot shows the Linphone application interface. On the left is a sidebar with 'HOME', 'CONTACTS', and 'Previously' options. The main area is titled 'USE A SIP ACCOUNT' and contains the following fields:

- Username:** 0995845
- Display name (optional):** PC VIDEO DOORPHONE
- SIP Domain:** sip.fermax.com
- Password:** [Redacted with dots]
- Transport:** UDP (selected in a dropdown menu)

At the bottom, there are two buttons: 'BACK' and 'USE' (highlighted with a green border).

- IV. Select the new SIP account and check that it is registered. A green dot will appear, otherwise check the entered data in PREFERENCES -> SIP accounts or delete it and create again.

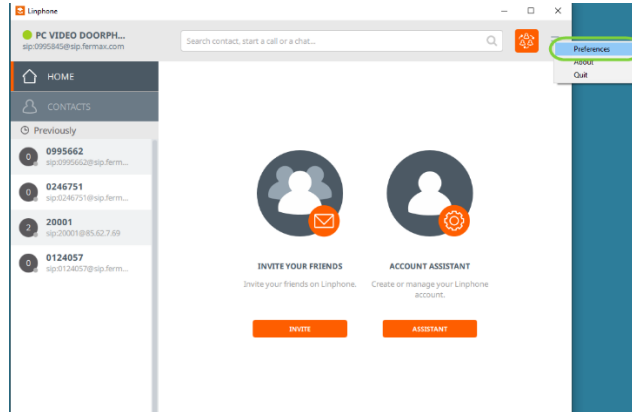


ENABLE H.264 CODEC

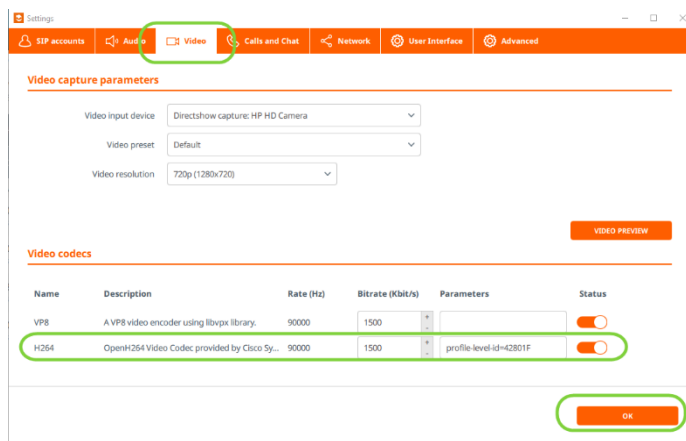
Enabling H.264 CODEC in PC is required for a correct performance of the application.

There are the steps to follow:

I. Select “preferences”



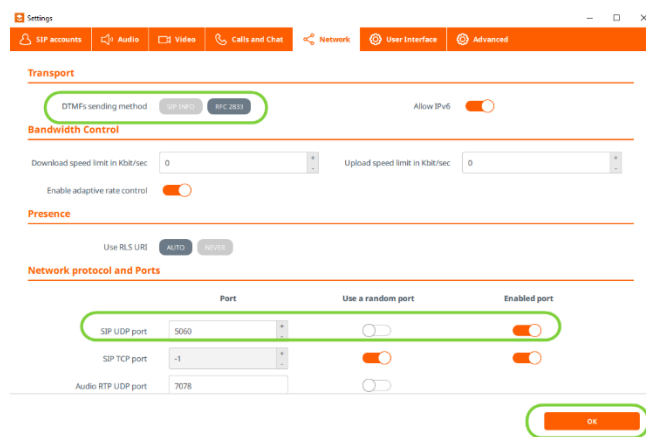
II. Select Video → H264 → OK



*If it is not possible to enable H.264 codec it is because driver is not included during installation process. You must download from <http://ciscobinary.openh264.org/openh264-2.1.0-win32.dll.bz2>, unzip and move to folder C:\Program Files (x86)\Linphone\plugins\mediastreamer, and rename as openh264.dll.

OTHER CONFIGURATIONS

Door opening in MEET panels requires a “#” DTMF (Dual Tone Multifrequency) digit. Be aware that LINPHONE has this parameter correctly configured and also check that SIP UDP port 5060 is enabled.



MEET DIGITAL OR 1L PANEL SETTINGS

The MEET panel has to be connected to the same LAN than the PC or PC'S that are going to receive calls.

This procedure is valid for MILO DIGITAL, MILO 1W, MARINE and KIN panels. It is not valid for KIN panel in 1W PANEL mode.

Follow instruction of INSTALLER MANUAL (or QUICK GUIDE that comes with the panel), for GENERAL and NETWORK configuration.

CREATE A SIP CALL ENTRY (EN A MEET DIGITAL PANEL)

If the panel is a MEET DIGITAL a MEET DIGITAL (MILO Ref. 9531, MILO DIGITAL Ref. 9532, KIN REF. 1445 o MARINE MEET Ref. 1455), follow instructions of INSTALLER MANUAL to generate the necessary SIP CALL entries to link the number to dial in the panel with the IP address of the PC or PC'S where the LINPHONE client application is installed.

In this example we have been created the entry 222 for calling to LINPHONE client installed in a PC with IP address 192.168.1.200 by means of dialling 222 in the panel.



The screenshot shows the FERMAX SISTEMA DE VIDEOPORTERO MEET web interface. The main header is blue with the FERMAX logo and the text 'SISTEMA DE VIDEOPORTERO MEET'. Below the header is a navigation menu on the left with options: DISPOSITIVO, GENERAL, CONFIG.RED, ACCESO, RECON. FACIAL, CÁMARA IP, SIP, SIP TRUNK, SIP CALL, AVANZADO, CÓDIGO PIN, ACCESO QR, RESTAURAR, and CERRAR SESIÓN. The main content area is titled 'CONFIGURACIÓN LLAMADA SIP' and contains a table with columns: ADAPTAMENTO, NÚMERO, APARTAMENTO, NÚMERO, APARTAMENTO, NÚMERO. The first row of the table has the values: 222, sip@192.168.1.200, and is highlighted with a green border. Above the table are buttons for 'Seleccionar archivo', 'Nin...ado', 'IMPORTAR', and 'EXPORTAR'.

ADAPTAMENTO	NÚMERO	APARTAMENTO	NÚMERO	APARTAMENTO	NÚMERO
222	sip@192.168.1.200				

CREATE A SIP CALL ENTRY (IN MEET 1L PANEL)

In the case of f1L PANELS (Ref. 9533 y Ref. 8534) it is necessary to configure it as BLOCK PANEL. Then, when we press the push button in the panel, a call to apartment 10001 will be automatically generated.

Create a SIP CALL entry to relate APARTMENT 10001 with the LINPHONE client installed in the PC with IP: 192.168.1.200.



APARTAMENTO	NÚMERO	APARTAMENTO	NÚMERO	APARTAMENTO	NÚMERO
10001	sip.@192.168.1.200				

OPERATION

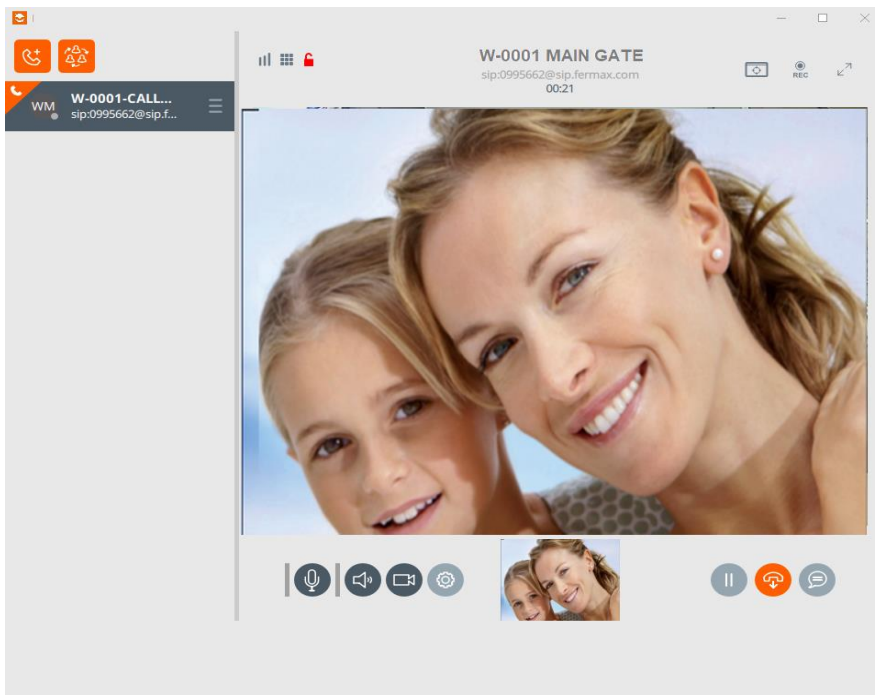
For receiving calls, the PC has to be ON and with the LINPHONE client application running. It is possible for this application to run in the background, while the PC is busy with other applications or programs. When someone calls from the MEET panel, a ringtone will sound in the PC and a pop-up window will appear in the screen.

There are three options:

- Answer with video
- Answer without video (audio only)
- Finish/reject the call



Once a call is answered (with or without audio) a new pop-up will appear with the image from the panel's camera and a panel with several function to use during the conversation (mute, hide image, speaker off, etc.).



- There is possible to hold the conversation by means of the PAUSE icon. The panel will play a “music on hold”.
- There is possible to deactivate the outgoing audio (mute) or the incoming audio (speaker).
- The maximum length is defined in the panel configuration: 30” if no audio has been established, and 120” if the call has been answered.
- There is possible to open the door selecting the KEYPAD and then dialling #.

