CASE STUDY

Meet system integration with Astrum Home Automation

Description
It is described how to configure the Meet outdoor panel and the Astrum Inspinia device to be able to receive the call from the outdoor panel on the Inspinia display.

V1.0

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INTRODUCTION

The door stations of the Meet system can operate in standard SIP mode, which makes them compatible with systems from many manufacturers. In this case we are going to see how the call can be routed from the MEET door station to an Inspinia display (8" or 10") from Astrum. Both the MEET outdoor panel and the Inspinia display can operate in SIP P2P (point-to-point) mode, i.e. without the need for a SIP server, which simplifies installation and configuration, especially in building installations (MDUs).

The WIT monitor also allows you to load Android applications previously validated by Fermax and can be used both to receive calls from the street panel and to manage Astrum home automation, as if it were done from your mobile, but with a larger and more comfortable screen. This option is especially interesting when using an Astrum mini server and there is no Inspinia screen in the installation.

MATERIAL REQUIRED

Any Fermax MEET outdoor panel can be used for this integration as they all support SIP protocol. In the case of a single-family home, the MILO one line panel (a single pushbutton) will be used. In the case of a building or housing estate, the MILO digital panel can be used or, if an electronic directory is required, the KIN or MARINE panel.

The outdoor panel may require a power supply or PoE splitter if it does not support PoE, as well as the electric strike.

To load the Inspinia-Mobile application on the Wit monitor, the reference must be 14721 (7") or 14831 (10").

BASIC SCHEME

   A) Single-family installation.

The usual installation scheme of the MEET system is used, with the only additional requirement of connecting the panel to the local network of the home installation, where the Inspinia screen is installed.
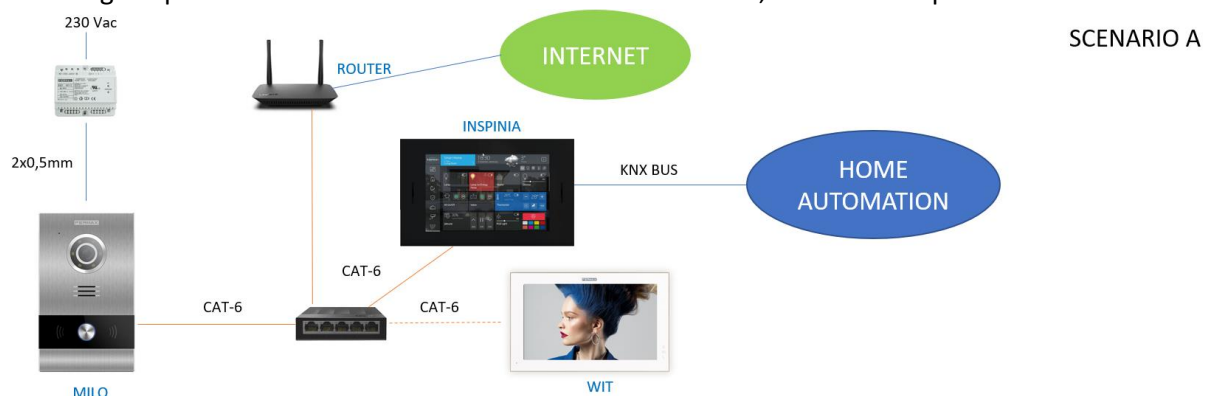

Single-family installation

The WIT monitor in the installation is optional in case additional monitors capable of receiving the outdoor panel call are desired, or necessary when instead of an Inspinia screen there is an Astrum mini server.

   B) Building installation

The installation is like the single-family installation, but adding as many screens and monitors as there are dwellings.
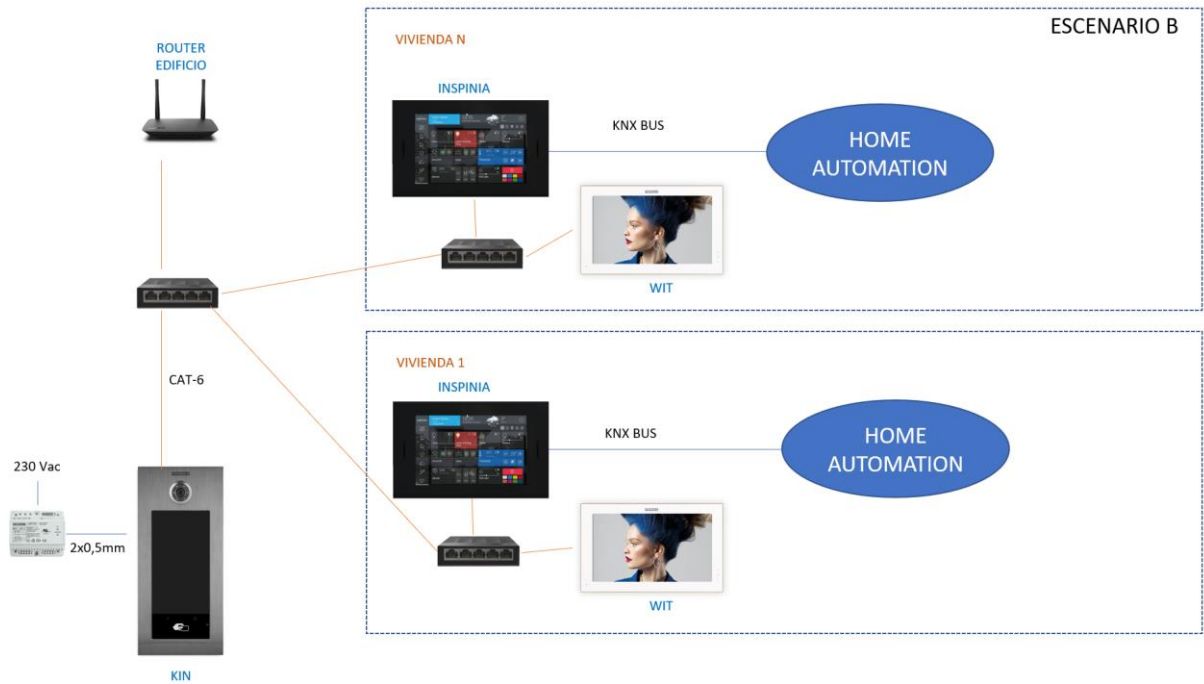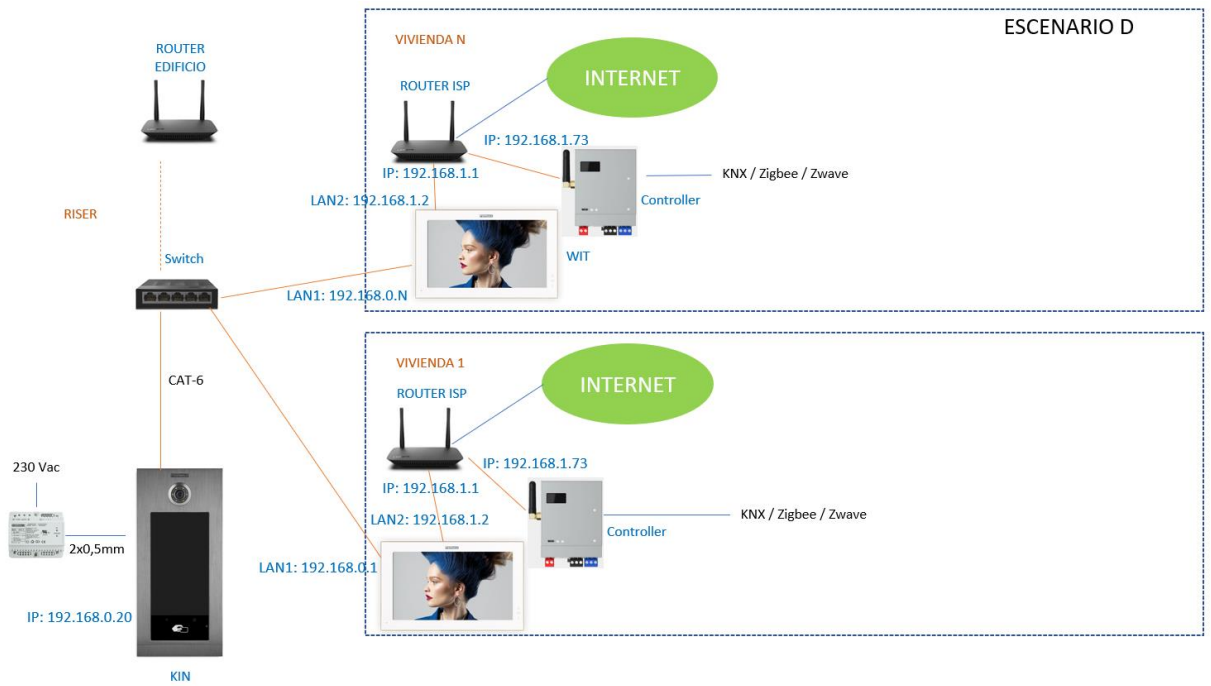
Building installation

A community internet connection is required to access the screens remotely from the Inspinia-Sky App. This connection is also used for call forwarding to the MeetMe App.

If no community internet connection is available, then each apartment will need to provide such connectivity in order to access Astrum home automation from outside of the apartment. Then a double wan router is required to isolate the internal lan of each apartment from the community intercom network.
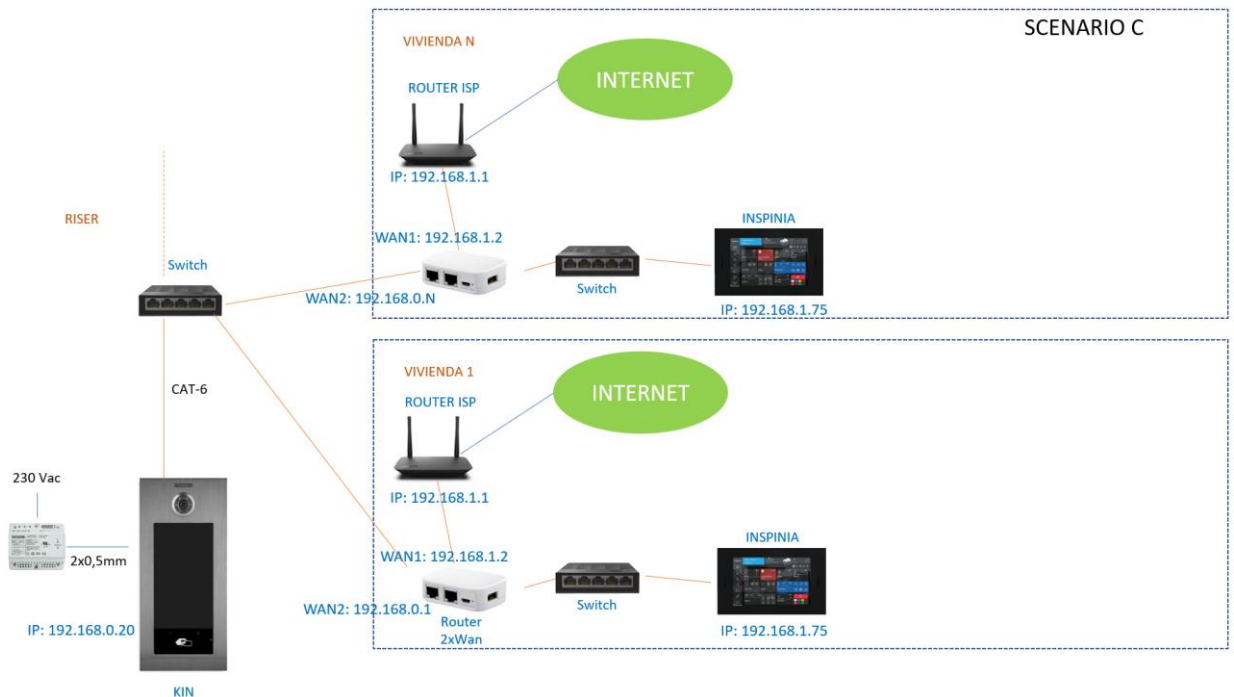
A simpler alternative is to use 10" WIT monitors ref. 14831, which have dual ethernet ports that provide isolation between the building network and the home network:

If you want call forwarding to the MeetMe app, you must have an internet connection in the building.

INSTALLATION

No special requirements, following the installation protocol of a Meet outdoor panel and the corresponding part of the Astrum system.

CONFIGURATION

<u>OUTDOOR PANEL</u>
To configure the outdoor panel, use a browser and access the IP address assigned to the panel, by default 10.1.0.1 (building entrance panel) or 10.1.1.2 (one line panel) and enter the user *admin* and default password *123456*.

The following steps will be followed:

1) <u>Network settings</u>

The IP address within the local network assigned to the outdoor panel and the rest of the network parameters: mask, Gateway or router for internet access will be indicated. The software IP does not need to be changed if there is no building administrator using the Meet management software (MMS).

In a single-family installation (type A), an IP address will be assigned to the outdoor panel within the range of the rest of the elements in the home. In a building installation (type B or C), one IP address will be assigned to the entrance panel and another to each of the screens, within the same range.

After saving this information, it will be necessary to connect again to the web server of the outdoor panel via the newly assigned IP address in order to continue the configuration.

2) General configuration

Parameters such as language, sound volume and resolution are specified. It is important to set the maximum resolution 1280x720 to get the best video quality on the Inspinia display.

For the one line panel the configuration page is as follows:

For the building panel is this one:

3) Call forwarding service configuration

This step is required if call forwarding to the MeetMe app is to be performed to receive the call from the outdoor panel. If it is not used, the option ACTIVATE SIP will be left disabled.

In the **SIP** Configuration section, indicate the Fermax SIP server and the user and password assigned to the outdoor panel, which is indicated on the label attached to it. Next, check if the panel is correctly configured in the server by clicking on the VIEW SIP STATUS link. If REGISTERED does not appear, check the information entered.

Note: The SIP TRUNK option should not be used in this type of application.

Now you have to indicate the licence for the MeetMe App.

3.1 WIT monitor is installed.

The Wit monitor includes a licence for call forwarding. The monitor must be configured with this licence. In the ADVANCED section of the monitor's web server, the extension and server are configured with the text: 'sip:user@sip.fermax.com', where user is the licence.

3.2 No WIT monitor installed.

It will be necessary to purchase a call forwarding licence ref. 1496. In the call configuration step in the outdoor panel, the call to the Inspinia screen and also to this licence will be included (see next section).

4) Receiver configuration

a. One-line panel.

In the SIP CALL section, the receiver associated with the call of the individual pushbutton of this panel must be described. Indicate the flat '1' (or the one configured in the GENERAL tab) and as the assigned number the value: sip:IP_Inspinia and click on Save. The table will be automatically filled in.

The WIT monitor in the house (if any) must be assigned this address '1' to receive the call at the same time as the Inspinia display.

If call forwarding to the MeetMe app is also desired, and there is no Meet monitor in the home, the app account purchased with licence ref. 1496 will be added to the line, separated by a ';':

sip:192.168.1.228; sip:08981263@sip.fermax.com

b. Building panel.

An Excel table must be configured with the assignment of the call code of each home that has the Inspinia display installed (scenarios B or C). The Excel format can be downloaded from the **SIP CALL** section of the panel's web server, EXPORT option.
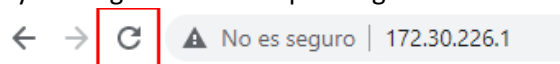
An example is the following:

APARTMENT,NUMBER,		
1,sip:192.168.1.228		
2,sip:192.168.1.229		
3,sip:192.168.1.230;sip:08769876@sip.fermax.com		

The call code of the home is displayed first, followed by the text 'sip:' and the IP of the Inspinia display (or home router in case of scenario C), separated by a comma. In the case of scenario D it is not necessary to configure this table.

In order to forward to the MeetMe app when there is no MEET monitor in the home, the app licence purchased will be included in the same line, as we have seen in the case of the single-family home. In the example of the third line, two receivers have been configured: the Inspinia display IP and the Meet call forwarding licence, to simultaneously receive the call on the display and on the smartphone.

To load the Excel file on the panel, select the file created and click on the IMPORT button. The list of Excel calls will appear on the screen. Sometimes it is necessary to refresh the browser screen by clicking on the corresponding icon:

| DEVICE |
| GENERAL |
| NETWORK |
| ACCESS |
| FACIAL RECOG. |
| LIFT |
| IP CAMERA |
| SIP |
| SIP TRUNK |
| SIP CALL |
| ADVANCED |
| PINCODE |
| WECHAT QR |
| RESET |

SIP CALL SETTINGS

Seleccionar archivo   Nin...lec.   IMPORT   EXPORT

APARTMENT	NUMBER	APARTMENT	NUMBER	APARTMENT	NUMBER
1	sip:192.168.1.228				

5) Inspinia display configuration

The configuration of the Inspinia display shall be done partly from the Inspinia user interface and partly using the web-server or the Skyplatform. If the Inspinia display is to be connected to the internet, it is preferable to do it from the platform (c).

a) User interface Inspinia display:
   1. Go to Settings>Network Settings.
   2. Enter the IP Address associated with that display, mask, Gateway and DNS.
   3. A static IP address should be chosen to avoid desynchronisation of the outdoor panel information.
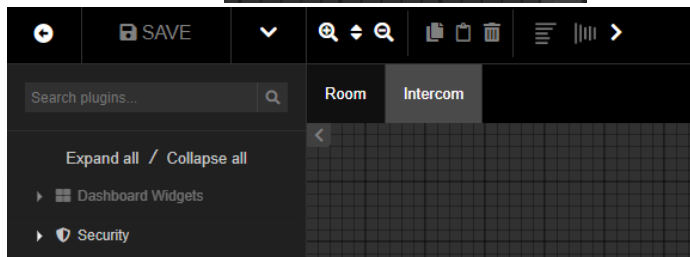
b) Web server Inspinia screen:
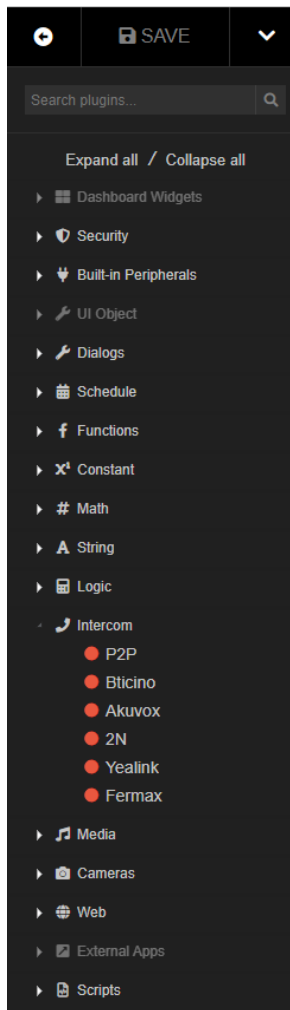   1. Access via a browser to the IP assigned in the previous step.

   2. Enter your username and password. By default they are admin/aEuXW6gn.
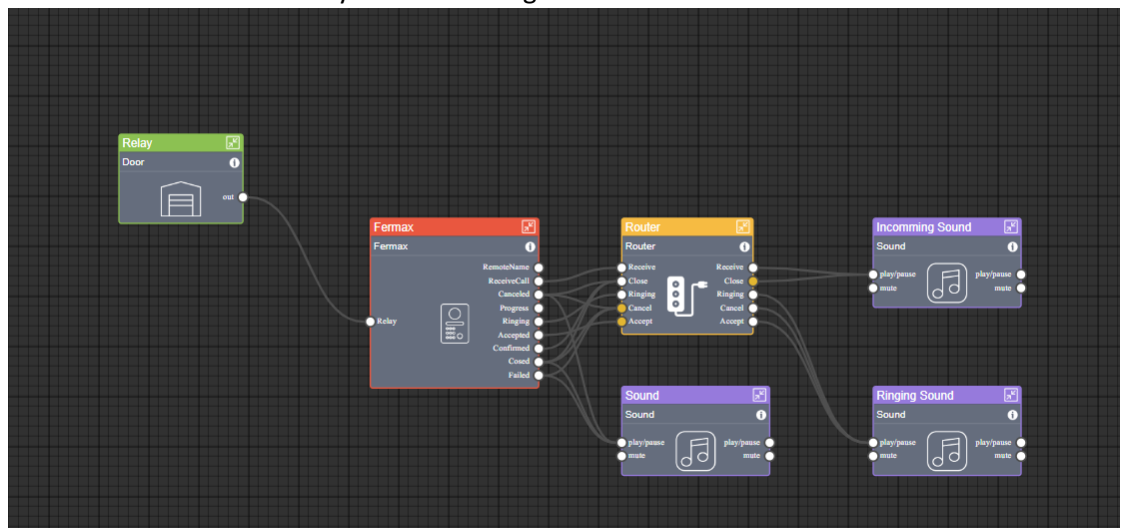   3. Select the Configure Device>Design option from the tree on the left:
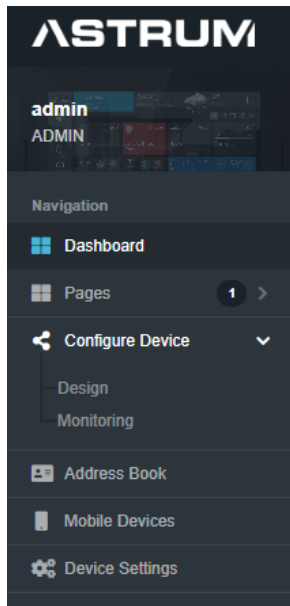
4. Add new tab Intercom selecting the + option:

5. Click and drag the Intercom>Fermax onto the canvas:

6. Edit the Fermax block by double-clicking on it:

7. Enter a name for this access, the IP of the outdoor panel and the username and password to access the RTSP video stream (default admin/123456). Enter the URL for the RTSP stream to allow video reception on the Inspinia screen on call reception before accepting the call (going off-hook). SAVE.

8. Edit the Relay block, by double clicking on it, to change the name to be displayed during the call. SAVE.

9. Click on the SAVE icon at the top left, which will be green color:
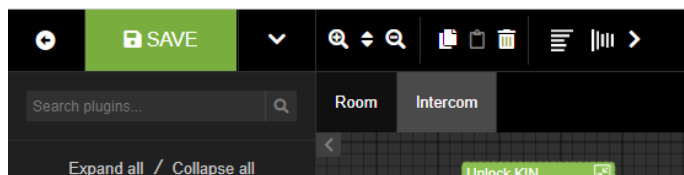
10. Select the PUBLISH option to synchronise the information with the cloud (in case there is an internet connection and a project has been created with this screen).
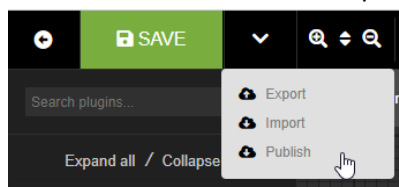
11. Check that the outdoor panel has been correctly configured on the Inspinia screen.
    a. It should display the name we have assigned to RELAY in the Intercom>Doors section.
    b. Make a call from the outdoor panel and check that it is received on the Inspinia display.
12. To register another outdoor panel, follow steps 5-11 above.

c) Skyplatform. This is the preferred option to the previous one in case of connecting the Inspinia display to the internet and allows to manage and monitor the installation remotely.

1. Access the skyplatform.io website via browser.
2. Register as a new member.
3. Confirm receipt of the received e-mail.
4. Enter the user in the login.
5. The dashboard will be displayed.
6. Go to projects and create a new one, giving it a name and location.

New project   ✕

Name *

[   ]

This field is not optional.

Search map

[Search on Google Maps   ]

                                          Cancel   SAVE

7. Select the project and Create a Device, assigning name, serial number (indicated on the Inspinia screen, Settings option) and product type:

New Device   ✕

Name *

[   ]

This field is not optional.

Template

[--- Empty ---   ▼]

Serial number *

[   ]

This field is not optional.

Scan QR Code

Product *

[Inspinia Mini Server   ▼]

Languages *

English ▼

Auto Update

(No)

                              Cancel   SAVE

8. The new device will then be displayed:

9. Follow the same steps as in b.3 to b.7.
10. Publish the configuration from the Devices list (aeroplane icon):
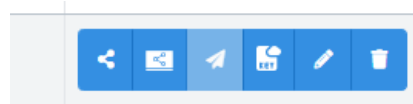
11. Exit.

CALL OPERATION

To call a specific dwelling, press the individual button (single line panel) or enter the associated call code and confirm with the bell button or the off-hook icon on the KIN panel.

Direct code call

The panel will generate the call to both the home's Meet monitor (if available), the Inspinia display and MeetMe App (if configured), which will announce the call from the panel along with the image captured by the camera.

Pressing the off-hook button will establish two-way audio communication. The conversation time is limited to 120". You have the option of unlock the door at any time by pressing the icon with the name we have assigned to the RELAY. If the call is received on several devices (monitor, screen, app), the first one to answer will stop the call melody on the rest of the devices and it will no longer be possible to answer from them.

It is also possible to start a conversation from the Inspinia screen with the outdoor panel (auto on) by choosing the panel from the call event list or from phonebook creating previously one entry in the phonebook for the outdoor panel.

Likewise, door opening can be performed offline from the Intercom>Doors section of the Inspinia screen.

UPLOADING THE INSPINIA-MOBILE APP ON THE WIT MONITOR

Download the file from the following link and connect to the IP video intercom network where the MEET Monitors are located.

Open the MEET System Upgrade Tool software, select the Astrum_Mobile_Install file as IMG1 and set the IP address range of the monitor(s), in the example 192.168.1.83-83 (single monitor).
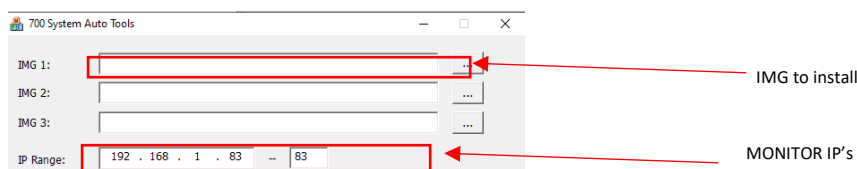
Press "Start" to begin downloading the application to the monitor(s).

Once the monitor is installed it will restart.

In the monitor, go to the Installer menu (password 6666) and open the APPs menu.

Select the "Astrum-Mobile" APP, assign an icon to it and select. save changes.

The application will be displayed on the home screen of the monitor.

Once we open it, we must give permission to the three options it requests (calls, photos and videos, and record audio), although these functionalities are not available, otherwise the application will not start.
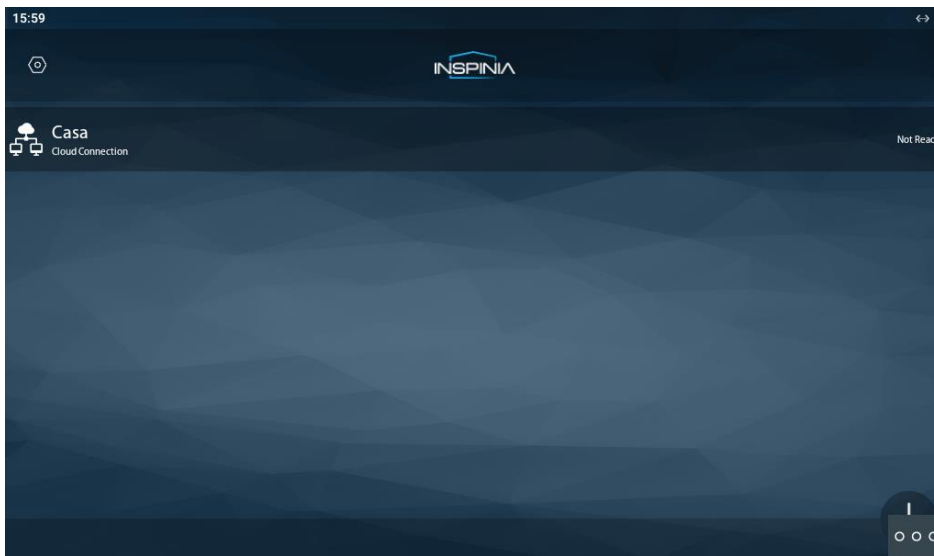
Press the + icon in the lower right corner to register the installation (it appears somewhat covered by the 3 dots, but it is accessible).

Enter a name for the connection (Home for example), and the number of the device that is shown in the Settings menu of Inspinia or the controller:
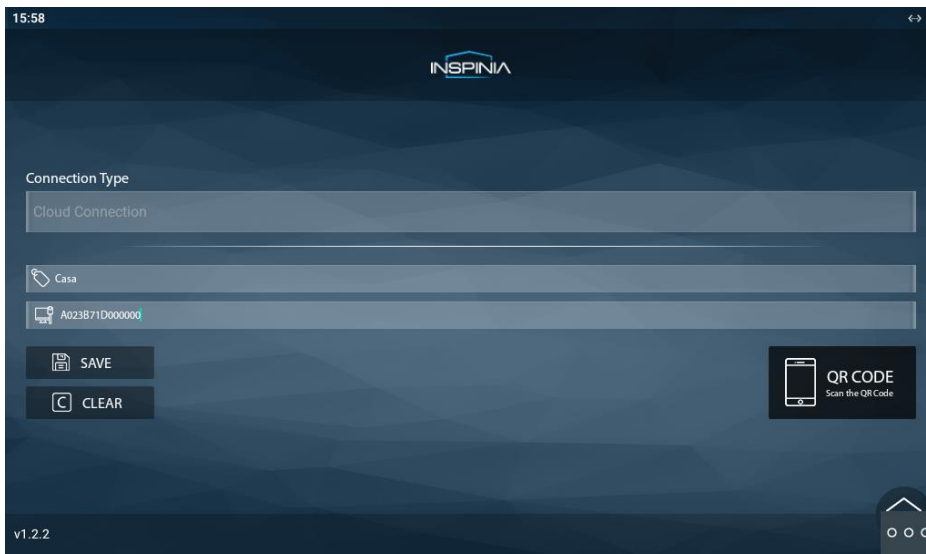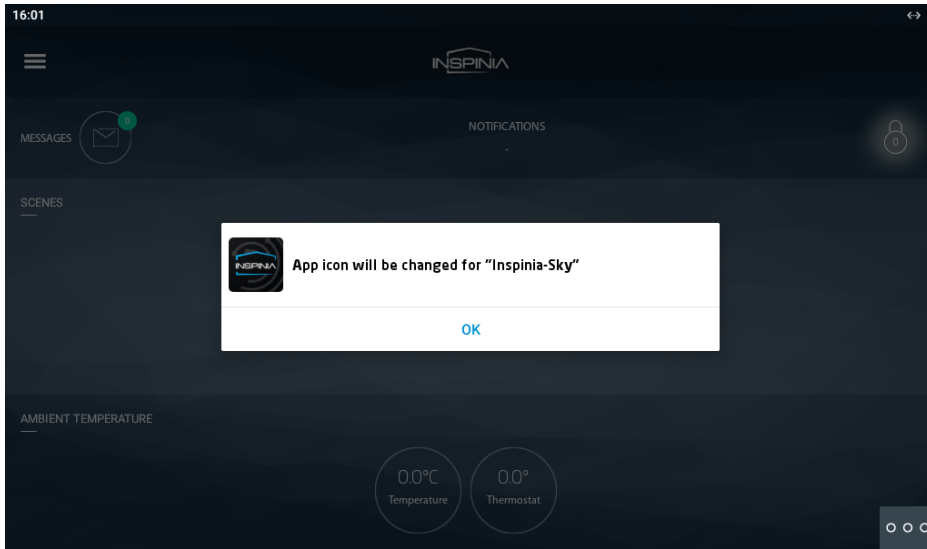

Click on Save.

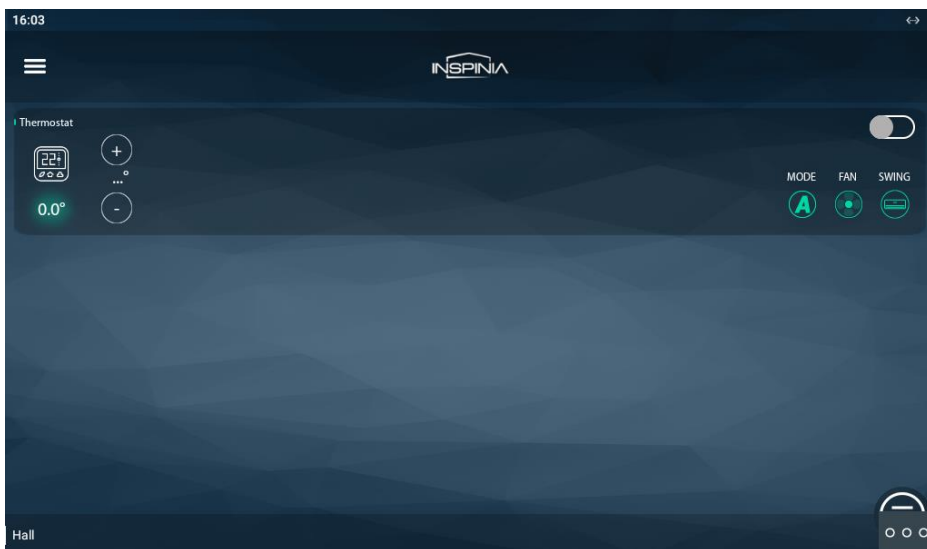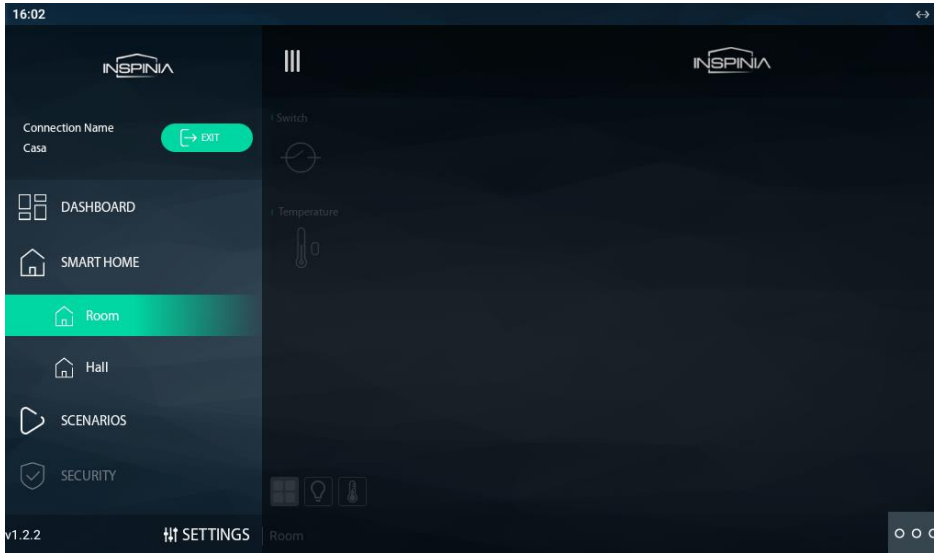Click on the installation to pair the app (now it appears as unavailable):

On the Inspinia screen / web server it will ask for permission. Select where you can access from monitor and save.

The app indicates that it is going to change the icon, but it does not.

Press OK.

The main screen appears with the devices that have been created:

The application can remain always active. When a call is received, it will be temporarily interrupted to answer it and, when the call is finished, it will be displayed again at the point of the menu where it was interrupted. The monitor has a 60 second return to sleep time in which the screen turns off, if not acted on, to maintain the durability of the TFT and reduce consumption. Touching the screen again will redisplay the application at the same point it was displayed before rest.