CASE STUDY

Meet Intercom Panel Integration with C4 HA system

Description

It is described how to configure the Meet entrance panel and the C4 controller to enable call reception from the entrance panel on the C4 screens and App.

Ver 1.2

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INTRODUCTION

The entrance panels of the Meet system can operate in standard SIP mode, which gives them compatibility with systems from many manufacturers. In this case, we are going to see how the call from the MEET entrance panel can be sent to a C4 home automation system.

The C4 controller of a home automation installation incorporates a SIP server that allows this type of integration, so it will be necessary for the MEET entrance panel to register with this server and assign it a valid extension. There are two ways to do it: manually, by configuring the entrance panel through your web server, or through the auto configuration provided by the Meet driver designed specifically for C4, but this method is **only valid for a MILO one-way panel, it is not compatible with Building panels**.

This driver must be installed in the C4 controller, and it is mandatory to be able to access all the functionalities of the entrance panel. The driver is free to download, but it is necessary to pay a user license to activate it.

Once the driver has been installed, its license is activated and the entrance panel must be configured, it will now be possible to make calls from the entrance panel to the installation's C4 screens and to the C4 App, which allows call forwarding to the mobile. You can also install one or more Meet monitors to receive the call in parallel on them and take advantage of the call forwarding to the MeetMe application.

REQUIRED DEVICES

Any Fermax MEET entrance panel can be used to carry out this integration since they all support SIP protocol. In the case of a single-family home, the one-way MILO panel (a single button) will be used. In the case of a building or condominium, the MILO panel can be used or, if an electronic directory is required, the KIN or MARINE panel.

The entrance panel may require a power supply or PoE splitter if it does not support PoE, in addition to requiring the electric lock release.

SCHEME

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 it concurs with the C4 controller.

INSTALATION

No special requirements, following the installation protocol of a Meet system entrance panel.

COMMISSIONING

<u>C4 CONTROLLER</u>
First of all, you must download the driver from this link and it should be left in the *'Drivers'* folder of the *Composer* application (C4 programming software).

The MAC of the C4 controller must be checked in order to request the license. Visit the following link to purchase the licence https://shop.fermaxaus.com.au/control4-driver/ Once purchased you will receive two emails. First email will be the confirmation of your purchase. The second email will request your MAC address of the C4 controller. Upon reply, a valid licence will be sent to you.

Once the license is obtained, the configuration can begin:
- Open the C4 'Composer' application and search for 'FERMAX'.
- Add the driver '*Fermax Placa Milo Door Station Driver'*.
- Update the following parameters:

dvanced Properties

| Properties | Actions | Documentation | Lua |

Licence Key	2XQnOMn37qtTOCPK
Driver Version	20210610
Control4 MAC Address	000FFF902F82
Debug Mode	Off

Driver Information

IP Address	192.168.1.214
HTTP Port	80
Username	admin
Password	6666
Last Communication from Dev	2021/08/02 – 12:22:41 OK - DEVICE

SIP Information

SIP SERVER	192.168.1.78
SIP USER	MEET
SIP PASS	1234
Intercom Group to Call	All
Apartment Number to Dial	1

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  o Enter the license code received.
  o In *Driver Information* indicate:
    ▪ IP address of the entrance panel.
    ▪ Port 80 (leave the one that comes by default).
    ▪ Username: admin
    ▪ Password: 123456. This is the default password for the Meet outdoor panel, if it had been changed for security reasons (recommended), enter the new one.
  o In *SIP Information* indicate:
    ▪ SIP SERVER: do not modify. This data is important to configure the entrance panel manually.
    ▪ SIP USER: You can leave the one shown or change it. This value must be configured on the entrance panel.
    ▪ SIP PASS: You can leave the one shown or change. This value must be configured on the entrance panel.
    ▪ Intercom Group: select which groups should receive the call from the entrance panel.

<u>ENTRANCE PANEL</u>

As mentioned before, the one-way entrance panels allow automatic configuration from the C4 controller, while the building panels (MILO, KIN, MARINE) can only be configured manually. However, the manual configuration process is very simple, and it is recommended to increase the security of the entrance panel and avoid leaving the default IP.

<u>Manual configuration.</u>

To configure the entrance panel, you must use a browser and access the IP address assigned to the entrance panel, by default 10.1.0.1 (building entrance panel) or 10.1.1.2 (one-way panel) and enter the username *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 entrance panel and the rest of the network parameters will be indicated: *Mask*, *Gateway*, or router to have internet access. The *software IP* does not need to be changed if there is no building manager with the management software.

When saving this information, it will be necessary to connect again to the web server of the entrance panel through the new assigned IP address to continue the configuration.

2) <u>SIP service configuration</u>

In the SIP Configuration section, the IP of the C4 SIP server will be indicated (192.168.1.78 by default), as shown in the screen below. Enter the username and password assigned to the entrance panel in the previous step. Next, it will be checked if the panel is correctly configured in the control unit 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.

3) Receiver configuration
   a. One-way panel.

   In the SIP CALL section, the receiver associated with the call of the individual push-button of this panel must be indicated. The apartment '1' is indicated and as the assigned number the value: sip: All@192.168.1.78 (or the IP assigned to the C4 SIP server) and click on Save. The table will be filled automatically.

   b. Building panel.

An Excel table must be configured with the assignment of the calling code of the house that has the C4 controller installed. The Excel format can be downloaded from the SIP CALL section of the board's web server, EXPORT option.
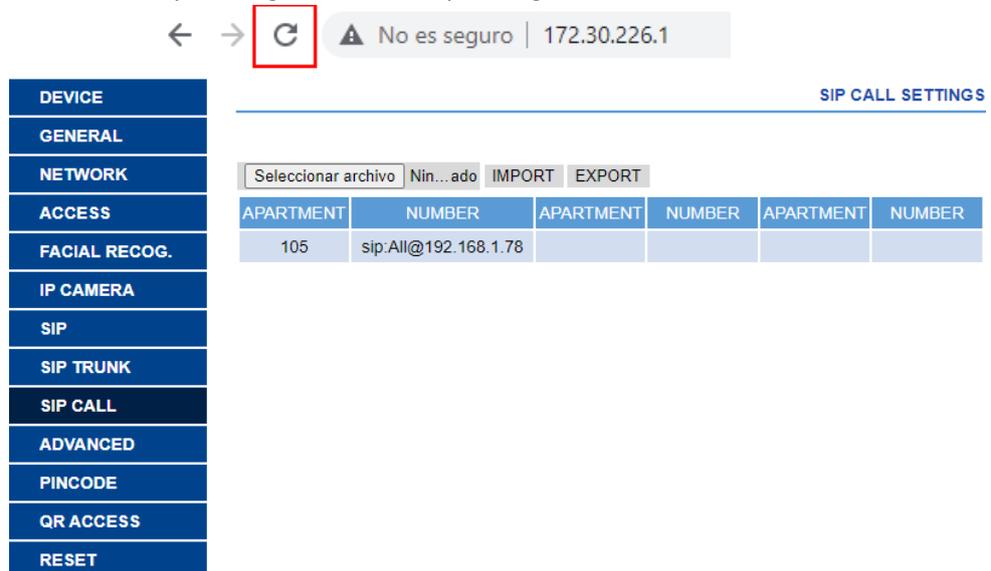
An example is the following:

The home's calling code is indicated first and, separated by a comma, the text 'sip:' and the group receiving the call followed by @ and the IP of the SIP server.

In the example, calling apartment 105 will call the Meet monitor installed in it (if any) and also the screens and C4 Apps associated with that group. If there are several dwellings with a C4 controller in the building, one line per dwelling will be included in the Excel and a different IP address will be assigned to each one. It will be necessary to install a router in
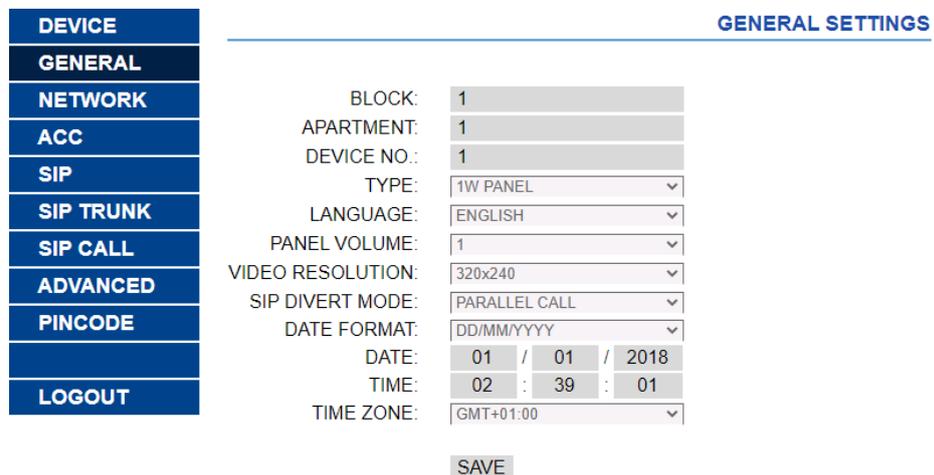
each home that isolates and redirects the communications from port 5060 to the IP of the C4 controller in each home.

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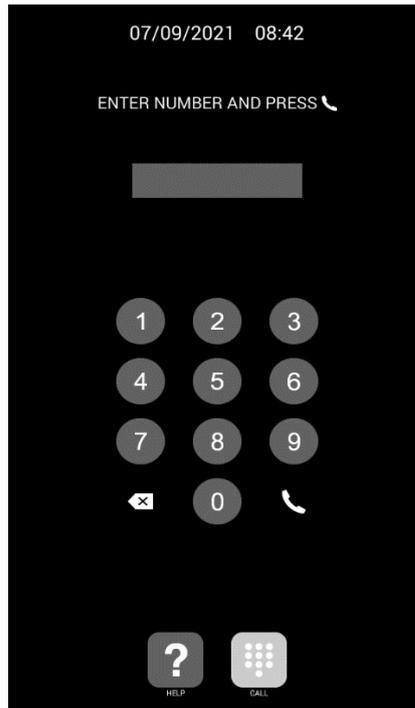

4) Camera resolution settings

In the GENERAL section of the entrance panel, you must choose a suitable camera resolution. The resolution of 320x240 does not give any problem with the screens and the C4 App. You can try a higher resolution (640x480) and see that it does not suffer from image stops.

WORKING MODE

To call the specific home, you must press the individual button (one-way panel) or enter the associated call code and confirm with the bell button or hang-up icon on KIN panel.

Direct call through code

The panel will generate the call both to the Meet monitor of the home (if it exists) and to the screens and the C4 App associated with the chosen group, which will announce the call from the panel. You can choose to have the call to go first to the Meet monitor (sequential call) or in parallel.

Pressing the answer button will display the video from the camera and open the bi-directional audio channel. The timing is limited to 120". You have the option of opening the door at any time.

Note: the video display before going off-hook is not available because C4 does not allow this functionality via SIP protocol (video preview).

It is also possible to watch at the image captured by panel camera as a security camera. The driver configures this as a generic camera with RTSP stream access:

OTHER CONSIDERATIONS

- The driver is compatible with C4 OS 3.0 or higher.
- Do not use auto-configuration on building panels because it blocks them.