MHVISUAL

Installation manual


MHVisual
MHVisual
Remote control
Alarms
Options
Project: MYHOME home
OPEN DOOR
General
ON
OFF
Rolling shutters
Day area
UP
DOWN
Entrance light
bticino
Copyright BTicino S.p.A.
MHVisual
Monitoring and Control Software
Scenarios
Loads
Bedrooms
living room
garden
bathroom
Kitchen
corridor
study

Contents

1. MHVISUAL

1.1 Fundamental concepts

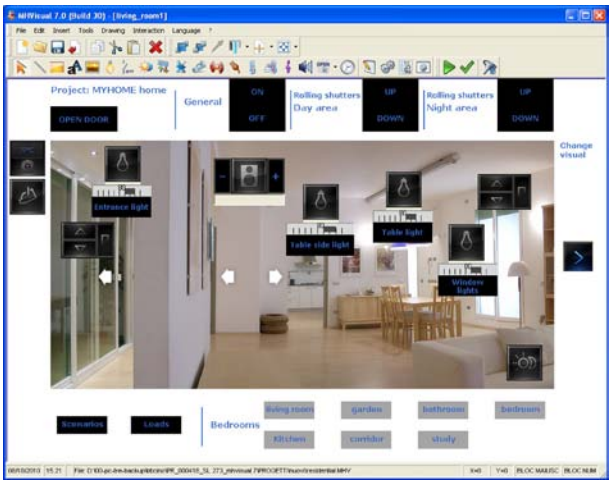
The MHVISUAL software can create a synoptic page, i.e. a clear and ordered representation of the SCS system installation, to give a tool which can simulate and then command the system itself. Using a simple and intuitive interface various objects can be positioned in the design to recreate the reality of the system installed. You can:

- Check the configuration correctness.
- Send a comfort command (lighting, automation and scenarios), also to systems with logical extention.
- Manage the cameras.
- Display the alarms from the burglar-alarm system: burglar-alarm and auxiliaries Manage the electrical appliances (Load control unit).
- Manage the electrical appliances (Load control unit).
- Display the Web Server parameters.
- Send Open commands
- Manage the Temperature control and Sound systems

The MHVISUAL work area is divided into two parts:

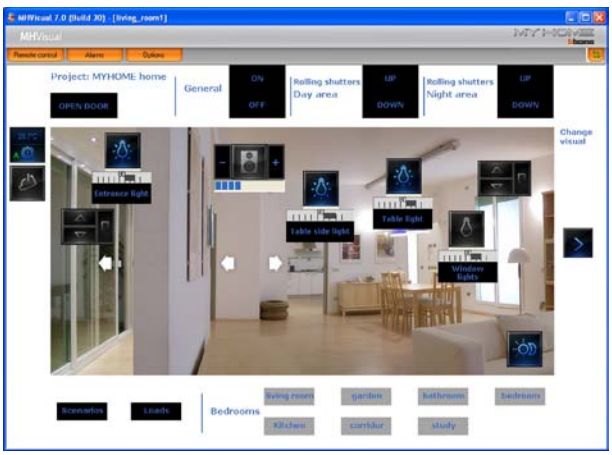
Design Area

This is the MHVISUAL area where a design can be created, configured and managed.



Monitoring Area

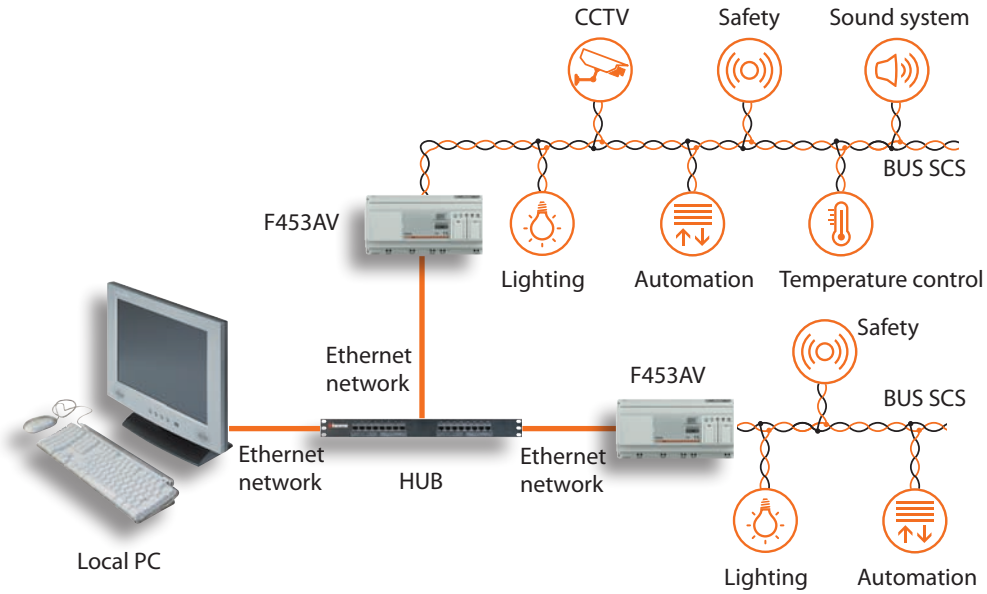
This is the MHVISUAL area where you can interact with the components installed in the system, by means of the objects already inserted in the Design area. In this area the appearance or configuration of the design and objects inserted cannot be edited.



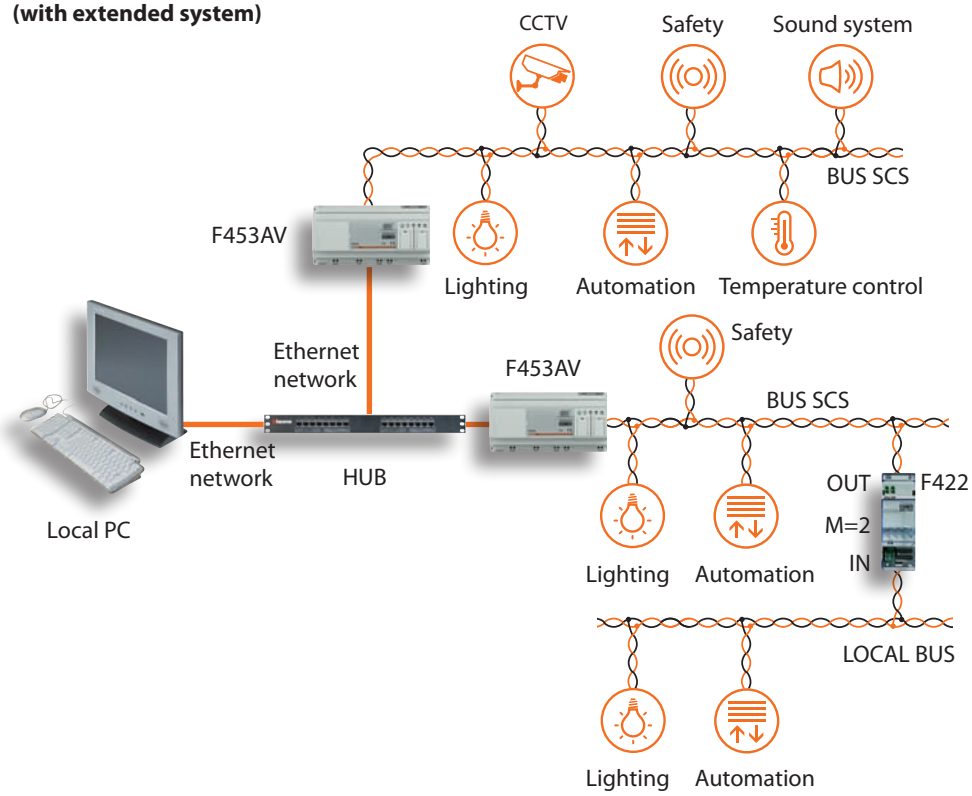
1.2 Connection mode

One or more systems can be controlled (a HUB device or switch must be used if there are several systems) via an Ethernet network card suitably configured for access to one or more installed BTicino Web Servers (F452, F453AV).
In this mode the command, safety and load control functions can be managed and, with item F453AV, the CCTV function as well.

LAN connection mode



LAN connection mode (with extended system)



2. Hardware and software requirements

Caution: The hardware features are adapted depending on the complexity of the design to be made.
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2.1 Hardware requirements

- PC with Pentium processor, 1 GHz
- 512 Mb for Windows XP; 1 GB di RAM (32 bit) or 2 GB di RAM (64 bit) for Windows Vista and Windows 7
- SVGA graphical card with 800x600 resolution 65,000 colours

2.2 Software requirements

- Windows XP (32 bit), Windows Vista (32 bit o 64 bit) or Windows 7 (32 bit o 64 bit)
- Internet Explorer 6.0 or higher.
- You need Microsoft™ framework.NET 2 for the application to work correctly

The updated requirements can be found on the www.bticino.com website

2.3 Space occupied on the hard-disk

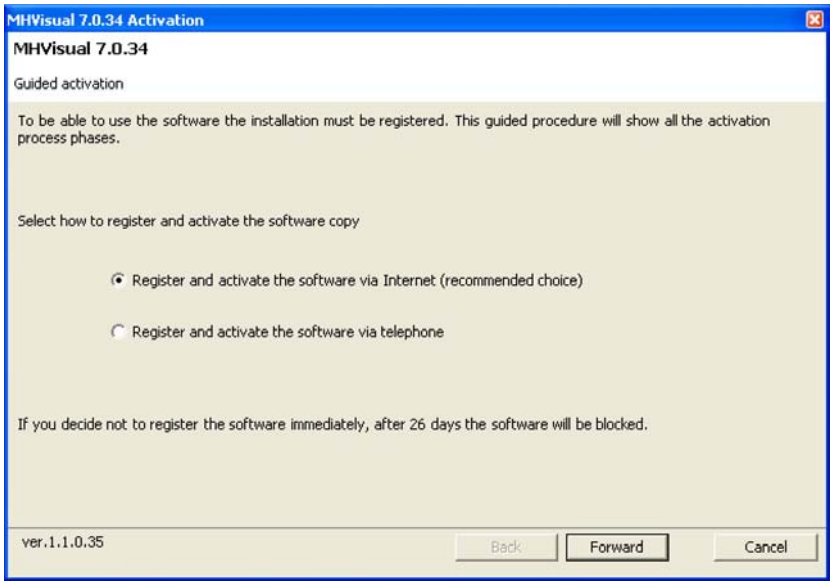
- 100 Mbyte

3. Installation and activation

To install the MHVISUAL program proceed as follows:

1. Put the CD-Rom into its drive;
2. When the main page is displayed in the web format, select "Install MHVISUAL";
3. At this point the installation program will copy the system files needed to run the MHVISUAL program.

On starting MHVISUAL a window appears where you must activate and register the software to end the installation.



Follow the procedure step by step (by Internet or telephone) to activate and register MHVISUAL.
If you cannot carry out the procedure immediately but want to do it later, click on the **Cancel** push button and MHVISUAL is opened. If the activation and registration procedure has not been performed by 30 days after the installation, MHVISUAL will be blocked.

4. Area Design

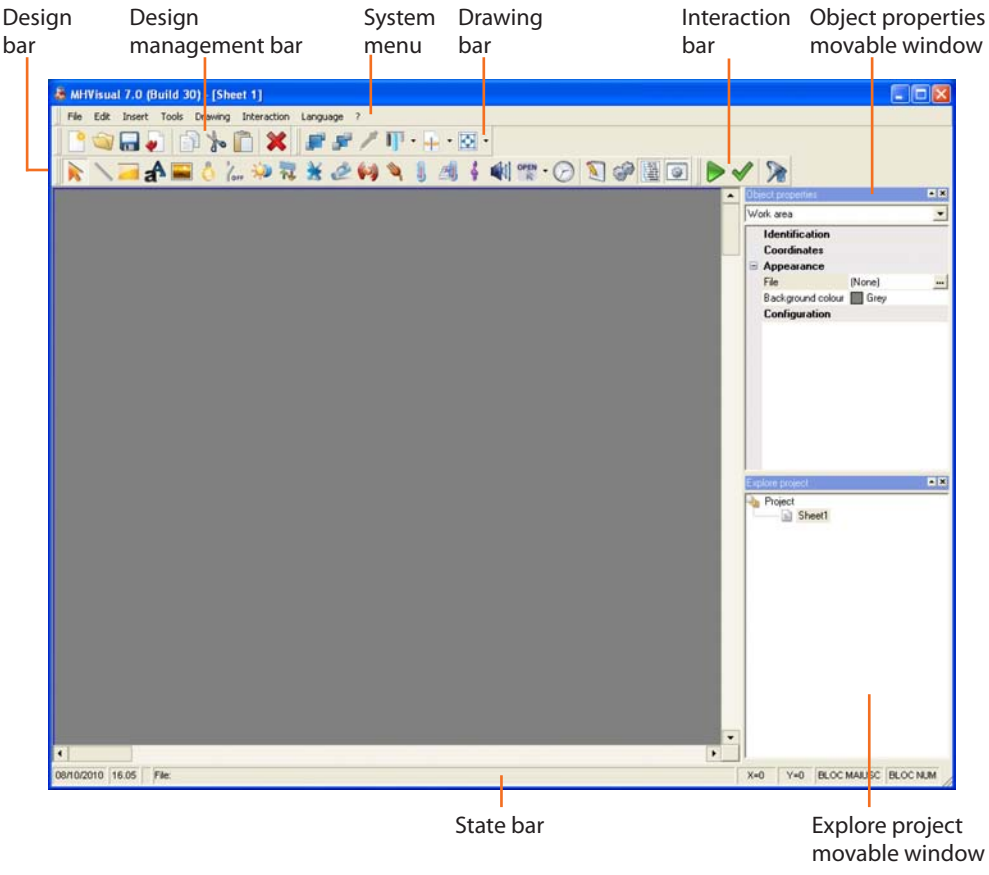
Limiti di progetto

Max device limits
100 sheets
60 Web Servers
60 cameras

Max objects per sheet limits
60 cameras
200 Web Servers
32 Burglar-alarm units
200 lines
200 rectangles
200 pictures
200 actuators
200 movers
200 commands
100 controlled loads
200 labels
200 temperature control sensors
200 temperature control central units
200 amplifiers
200 sound sources
200 contact objects
60 clocks
60 load control objects

Working environment

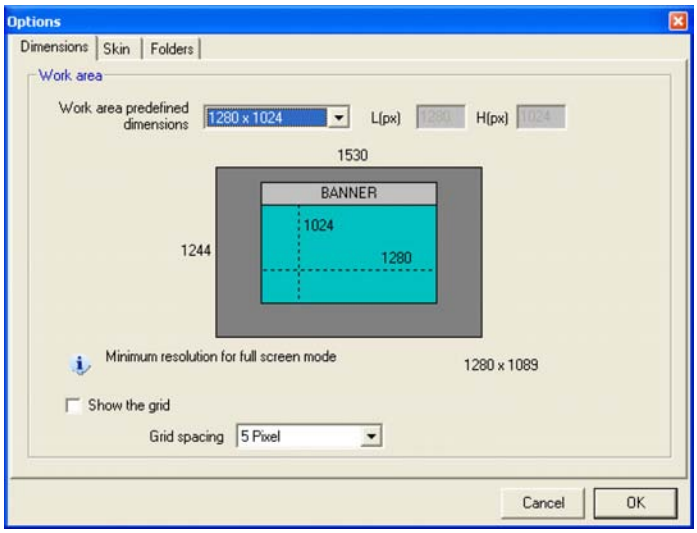
The set up of the MHVISUAL work area makes designing a synoptic page easier and more efficient. You can move the bars and windows which make up the work area as you wish using "Drag and Drop". The area can thus be customised as you wish.



The area shown above displays the **Object properties** and **Explore project** windows which, using Drag and Drop, have been moved to the right part of the area itself.

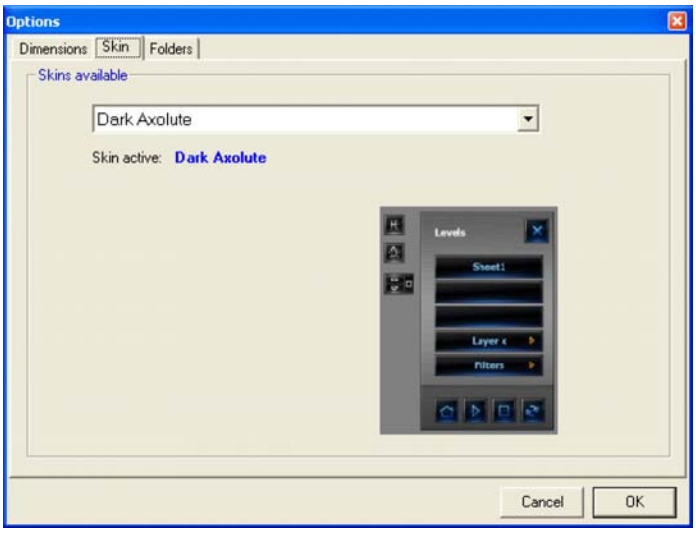
Selecting **Options** in the **Edit** menu a window appears where various options can be set for the work area:

Program options – Dimensions



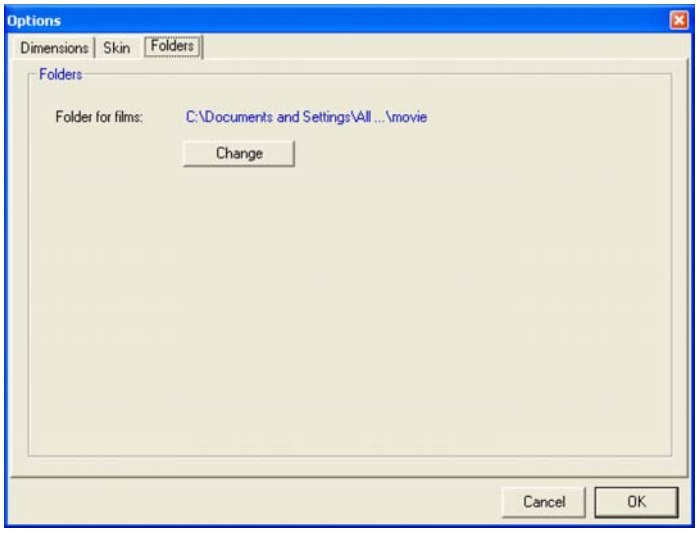
- Work area predefined dimensions — Sets the predefined dimensions of the work area
- Show the grid — Displays/hides the grid in the work sheet
- Grid spacing — Sets the grid spacing in pixels

Project options - Skin



In the **Skin** label it's possible to select different skins for the command windows of the Monitoring area (for example Remote Control).

Project options – Folders



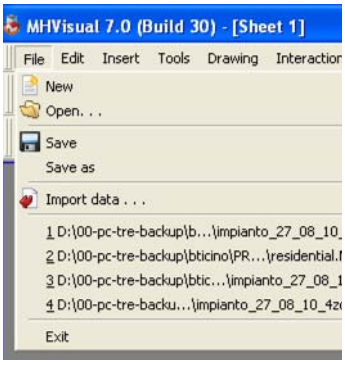
The directory where the films recorded by the camera object can be set in **Folders**

4.1 Function selection menu

The functions which can be run with MHVISUAL can be selected by means of the icons in the bars, or by opening the pull-down menu and selecting the items. A quick selection key can also be assigned for each function (see "Tool bar" section).

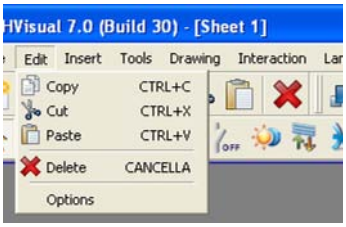
The pull-down menus have the following functions:

"File" menu

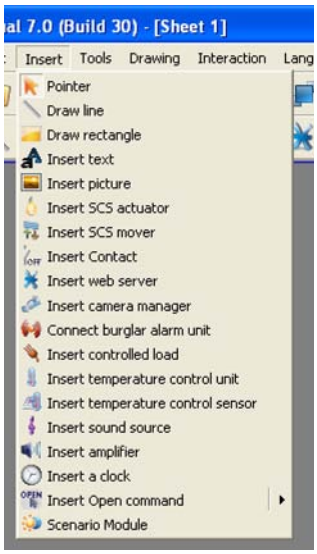


- **New**
  create a new project
- **Open**
  open an existing project
- **Save**
  save the current project
- **Save as**
  save the project asking for the file name
- **Import data**
  import a project created with YouProject
- **Exit**
  exit the program

"Edit" menu



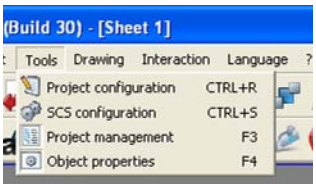
- **Copy**
  copies the object selected
- **Cut**
  cuts the object selected
- **Paste**
  pastes the object selected
- **Delete**
  erases the object selected
- **Options**
  opens the options window



"Enter" menu

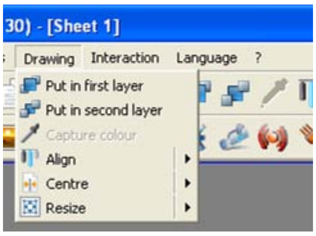
- **Pointer**
  activates the pointer to select the objects
- **Draw line**
  enters a line
- **Draw rectangle**
  enters a rectangle
- **Insert text**
  enters a text label
- **Insert picture**
  enters a picture
- **Insert SCS actuator**
  enters an "SCS actuator" object
- **Insert SCS mover**
  enters an "SCS mover" object
- **Insert Contact**
  enters a "Contact" object
- **Insert web server**
  enters a "web server" object
- **Insert camera manager**
  enters a "camera manager" object
- **Connect burglar alarm unit**
  connect a "burglar alarm unit" object
- **Insert controlled load**
  enters a "controlled load" object
- **Insert temperature control unit**
  enter a "temperature control unit" object
- **Insert temperature control sensor**
  enter a "temperature control sensor" object
- **Insert sound source**
  enter a "sound source" object
- **Insert amplifier**
  enter an "amplifier" object
- **Insert a clock**
  enter a "clock" object
- **Insert Open command**
  enter an "Open command" object
- **Scenario Module**
  Insert a "Scenario Module" object

"Tools" menu



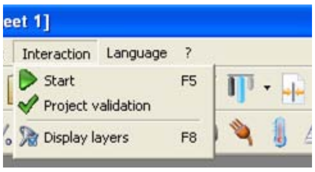
- **Project configuration**
  opens the "Project configuration" window
- **SCS configuration**
  opens the "SCS configuration" window
- **Project management**
  opens the "Project management" window
- **Object properties**
  opens the "Object properties" window

"Drawing" menu



- **Put in first layer**
  puts the object selected in the first layer
- **Put in second layer**
  puts the object selected in the second layer
- **Capture colour**
  captures the colour of the object selected
- **Align**
  opens the "Align objects" menu
- **Centre**
  opens the "Centre objects" menu
- **Resize**
  resizes the objects selected

"Interaction" menu



- **Start**
  starts the monitoring and then enters the Monitoring area
- **Project validation**
  checks the correct system configuration
- **Display layers**
  opens the "Layer manager" window

"Language" menu

- selects the MHVISUAL interface language

Menù "?"

- **About**
  displays some information on MHVISUAL
- **Bticino**
  connects to the BTicino web site

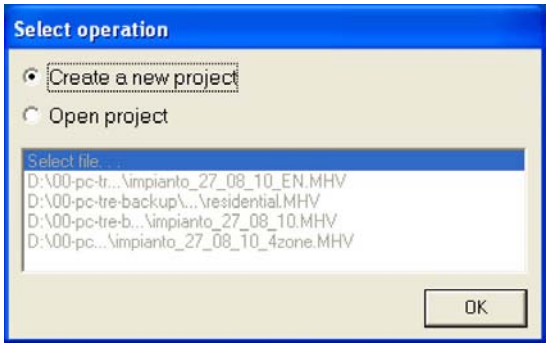
The state bar gives the following information:

4.2 Project

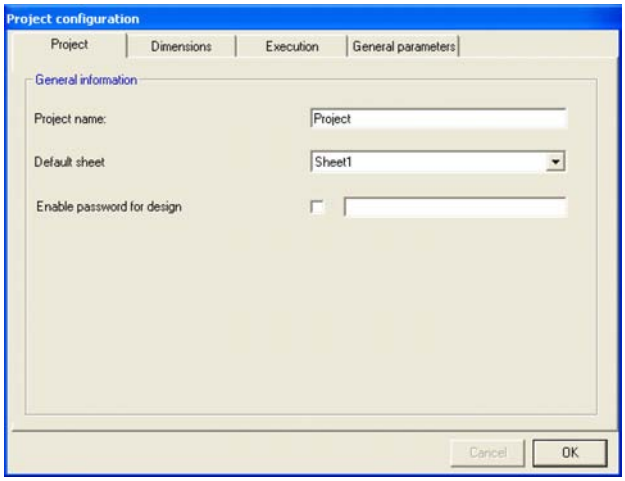
In order to manage the objects making up the synoptic of our system, a project must be created.

4.2.1 Creating a project

On entering MHVISUAL the following window appears:



In this window an existing project can be opened or a new one created. On selecting **Create a new project** and clicking on **OK** the following window appears:

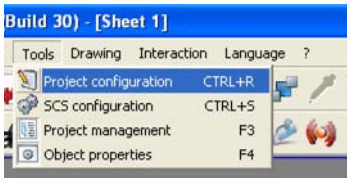


Enter the basic data to create a project:

- Type a name for the project
- Define the size of the work sheet
- Select if the management of the alarms is of the "Basic" or the "Advanced" type

If "Basic" is selected some information in the Alarm window will not be available

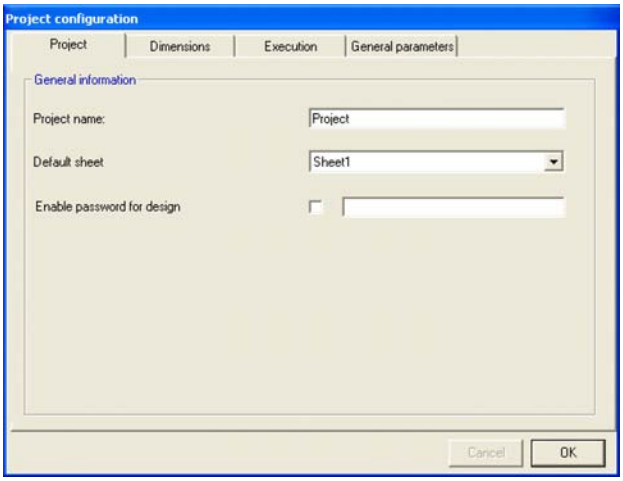
At this point, either using the drawing tools or setting a picture (e.g. an apartment plan) as background, the room where the system we want to manage with MHVISUAL is situated can be recreated graphically.



4.2.2 Configuring a project

On selecting **Project configuration** from the **Tool** menu, a window appears where the project parameters and the mode of connection with the system can be entered.

Project configuration – Project

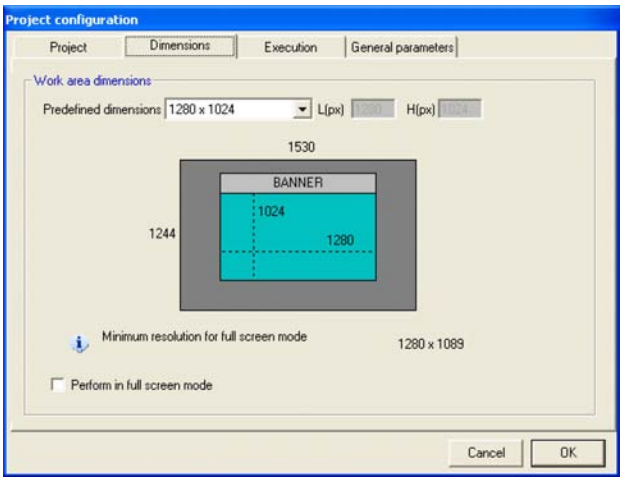


- Project name — enters a name for the project
- Default sheet — selects the basic project sheet
- Enable password for design — enables/enters the project password

If a password is set for the project, when MHVISUAL starts the Monitoring area is displayed directly. To enter the Design area type the password. This is to prevent an inexpert customer editing the project by mistake.

The project dimensions can be chosen from standard or customised dimensions. The dimensions set are valid for all the project sheets.

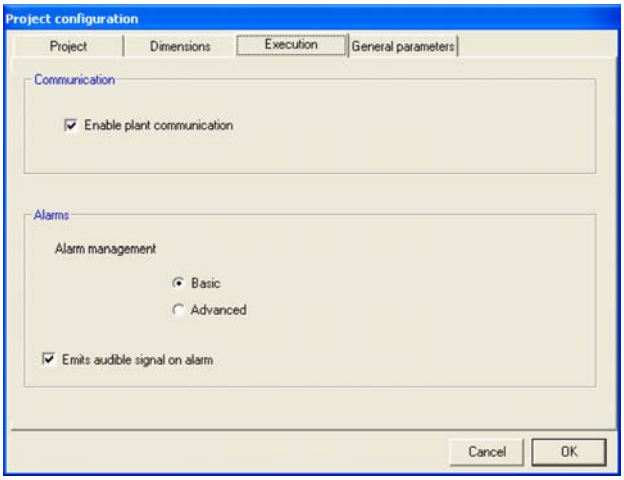
Project configuration – Dimensions



- Work area dimensions — defines the size of the work sheet
- Perform in full screen mode — display the project in the Monitoring Area in full screen

Project configuration – Execution

The plant communication can be enabled in this window.

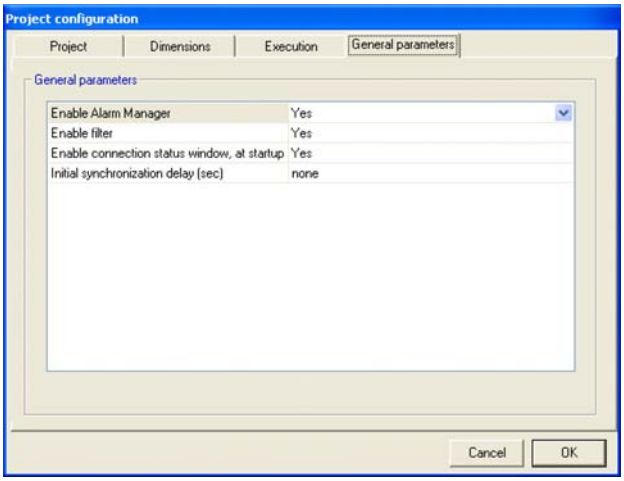


- Enable plant communication — Enable/disable plant communication
- Alarm management — Select the alarm management mode (see par. Alarms)
- Emit audible signal on alarm — Enable/disable the audible signal on alarm

By disabling the plant communication, it is possible to display the graphic result of the project in monitoring mode, without being connected to the system.

Project configuration – General parameters

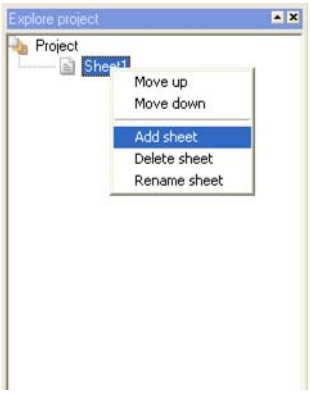
This screen is used to enable/disable some functions of the Monitoring Area..



- Enable Alarm Manager — Enables/disables the management of the alarms in the Monitoring Area
- Enable filter — Enables/disables the display of levels in the Monitoring Area remote control
- Enable connection status window, at startup — Enables/disables the display of the screen showing the progress statuses of the connections with the system in the Monitoring Area
- Initial synchronisation delay (sec) — Sets the waiting time before activating the connection to the system in the Monitoring Area.

4.2.3 Project management

On selecting **Project management** from the **Tool** menu, the **Explore project** window is displayed. This allows a more ordered management of a project creating several work sheets (e.g. for apartments over several floors, create a "first floor" sheet and a "second floor" sheet).

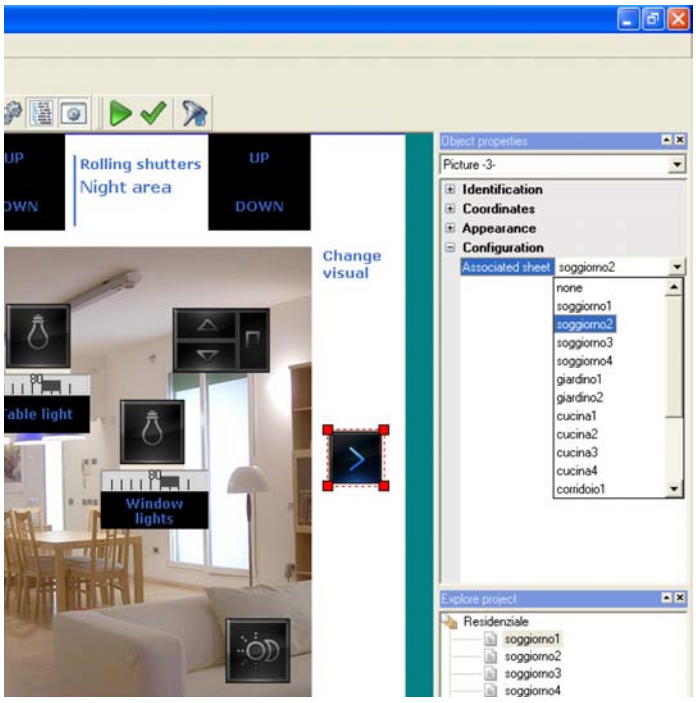


On clicking on the sheet with the right mouse key, a menu appears where various operations can be performed on the project sheets.

- Connect several work sheets

Inside a work sheet connections can be created to other sheets (link) by means of the objects: rectangle, text and picture.

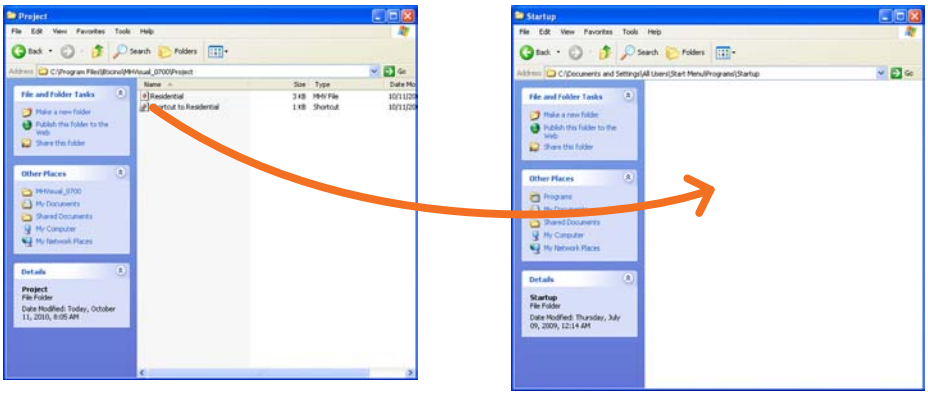
> Enter one of these objects in the first sheet
> Set the sheet to be connected in the **Associated sheet** properties



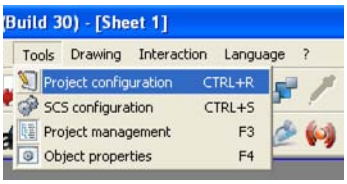
In the Monitoring area double click on the entered object to display its sheet.

4.2.4 Automatic project startup

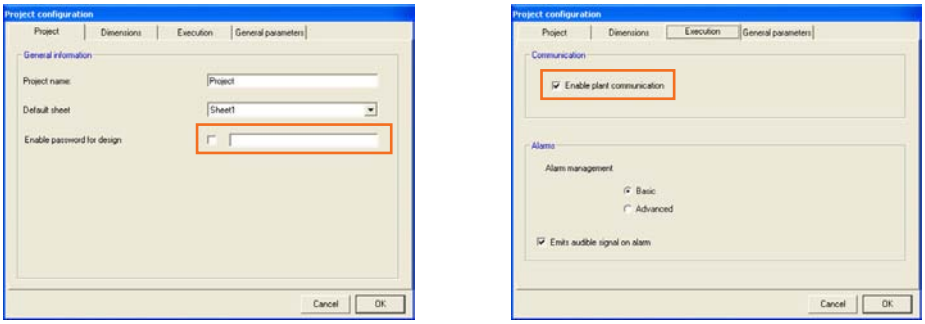
A connection can be created to the project file and it can be positioned in Windows Start-up. In this way the file opens automatically when the operating system is started.



Create a connection to the project file (.mhv) to be opened when Windows starts, then drag it into the Start-up subfolder of the Window Programs folder.



If you want the customer to see the MHVISUAL Monitoring area directly when the project file is opened, set and enable a project password and enable the plant communication.



4.3 Objects

An MHVISUAL project is made up of a set of objects: some have a purely graphical function while others, correctly configured, have the function of generating commands and replicating command components really installed in the system.

4.3.1 Object management and formatting

The properties of the objects entered in the project (**identification**, **coordinates**, **appearance** and **configuration**) can be set and the objects themselves can then be managed by windows (**Layer management**, **SCS configuration**).

Also, the objects can be ordered and positioned as needed by means of the commands in the **Drawing** menu.

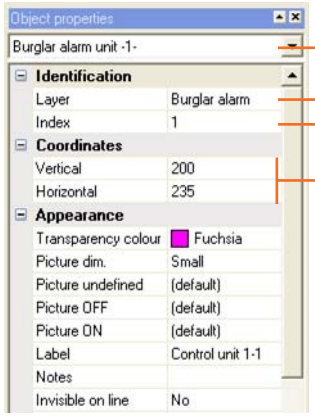
In particular the objects can be selected by means of the **Select** tool in the **Drawing** menu. To select a group of objects, click on the objects keeping the **Ctrl** key pressed or keep the left mouse key pressed and drag the pointer until all the objects are included in the selection window.

- Object properties

The objects which can be used to make the project are shown below. The object's characteristic properties can be set in the **Object properties** window.
The **Identification** and **Coordinates** properties are similar for all the objects, while the **Appearance** and **Configuration** properties are specific for each type of object and will be dealt with in the **Objects** chapter.

Identification - Coordinates

The object is identified and positioned in this window.



Displays the type of object

Displays and sets the layer to which the object belongs

Sequential number which identifies the objects of the same type

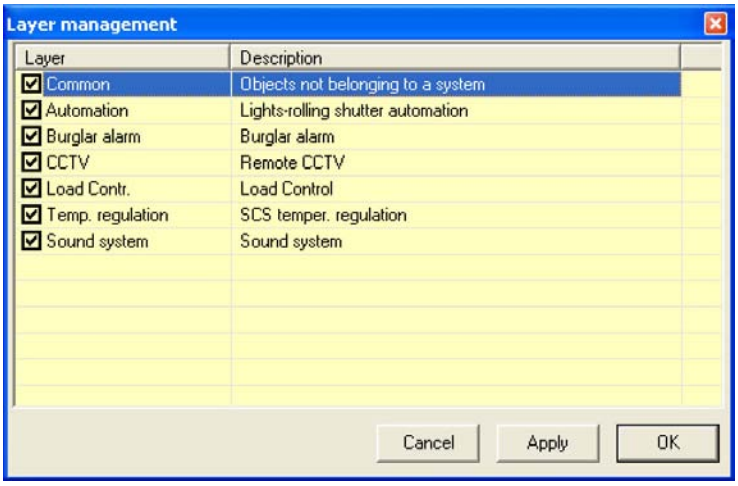
Sets the positioning of the object in the work area

- Layer

When an object is positioned in the project it is automatically assigned to a layer on the basis of the system it belongs to.
As default the objects with purely graphical function (line, rectangle, etc.) are not assigned to any system. They can later be assigned to a specific system.

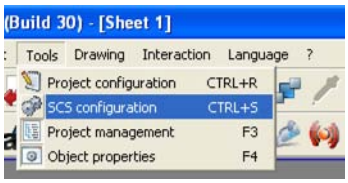
On selecting **Display** layers in the **Interaction** menu, a window is opened where the layers which make up the project can be displayed/hidden.

Select the layers which you want to display in the project

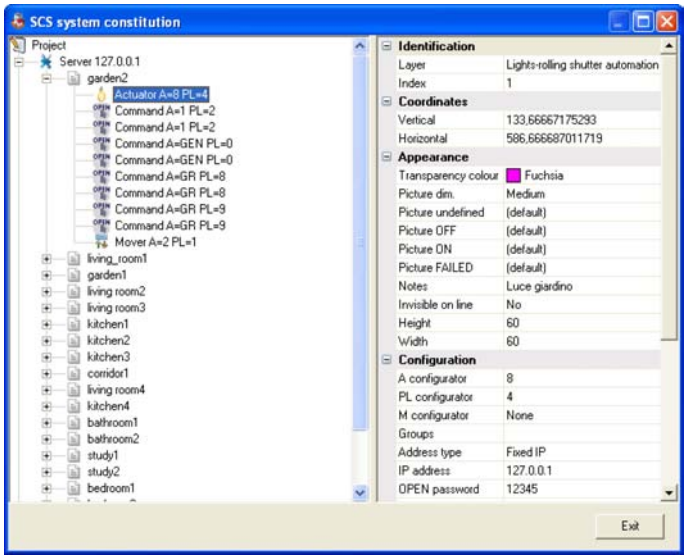


- SCS configuration

An object must be suitably configured for it to interact with the system.



On selecting **SCS configuration** in the **Tools** menu, the following window is opened:



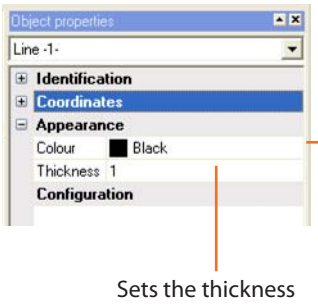
In this window, using a tree structure, the properties of all the objects entered in the project can be displayed and edited.
The objects are grouped on the basis of the server they belong to (IP Address property). If the server IP address is edited all the IP addresses of the objects which are part of it are edited.

4.3.2 Graphical objects

These objects have a purely graphical function and can be used to reproduce the place where the system is installed graphically.

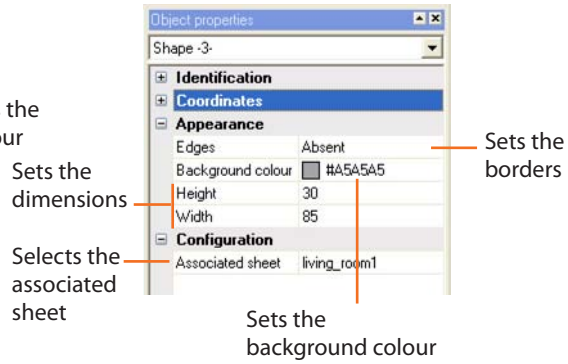
- Line object

Enters a line in the project.



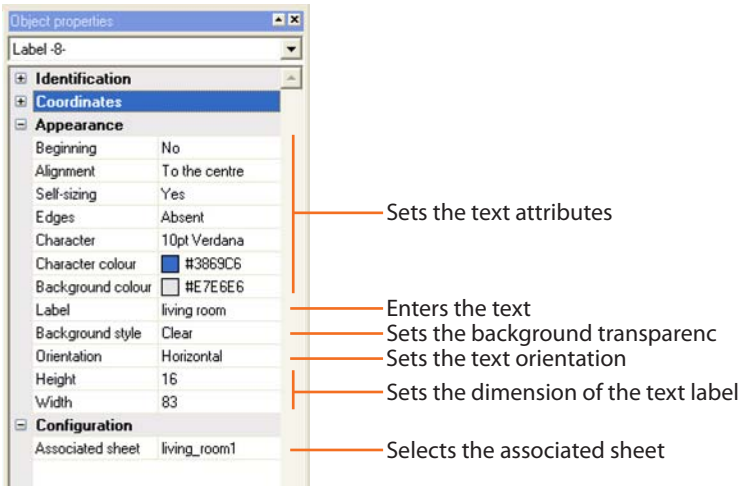
- Rectangle object

Enters a rectangle in the project.



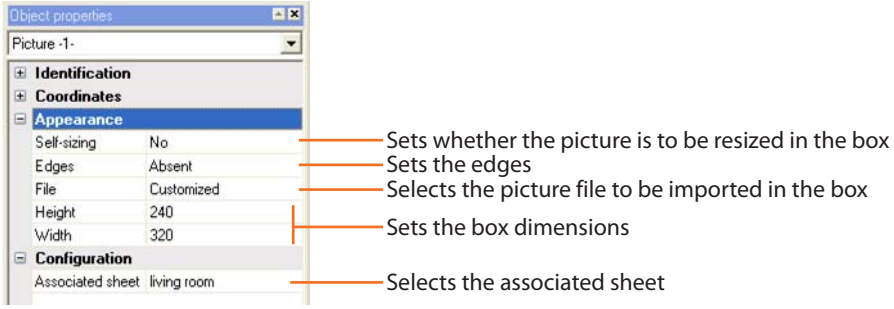
- Text label object

Enters a text in the project



- Oggetto immagine

Inserisce un'immagine nel progetto



4.3.3 SCS actuator object

This object configured as an actuator really present in the system gives a synchronised view of the state of the actuator itself.
Then acting on the object in the project changes the state of the corresponding actuator in the system.

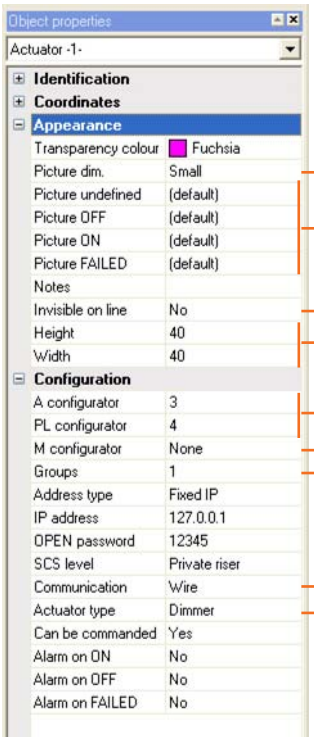
Actuator state


OFF-LINE/INDEFINITE STATE


OFF


ON


BULB BURNT OUT (dimmer only)



Set a standard or customised dimension

Changes the default pictures

Set if the object can be seen in the monitoring area

Set the dimensions (only with picture dim. = Customised)

Enters the actuator address

Sets the mode (entering pul, the actuator is excluded from the general and room commands).

Sets the group the actuator belongs to.

When the data entry field is clicked, the ... pushbutton appears. Click on it to display the configuration screen.

Sets whether it is a wire or radio actuator

Sets the type of actuator (ON/OFF, dimmer)

4.3.4 Contact object

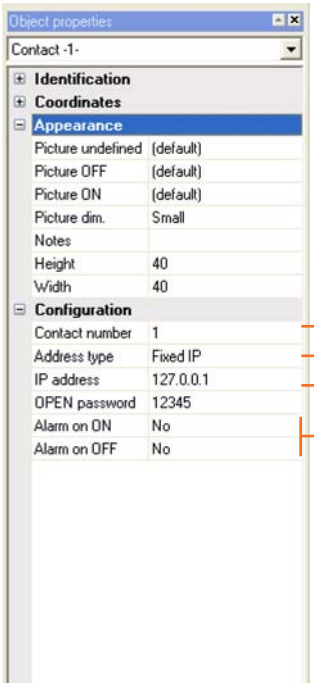
This object provides a synchronised view of the status of a contact connected to the system.

Contact status


OFF-LINE


OFF


ON



Enter the address of the contact interface (from 1 to 201)

Set the type of address

Set the server IP address

Set if an alarm connected to the status must be activated

Module Status

 OFF-LINE

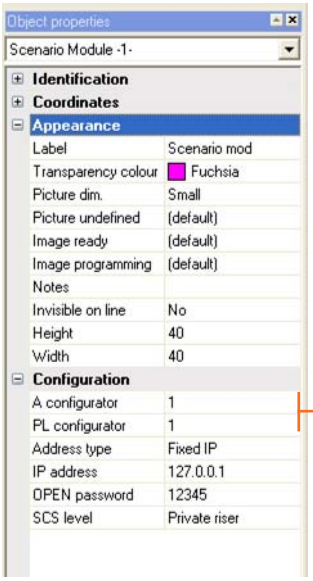
 OFF

 ON

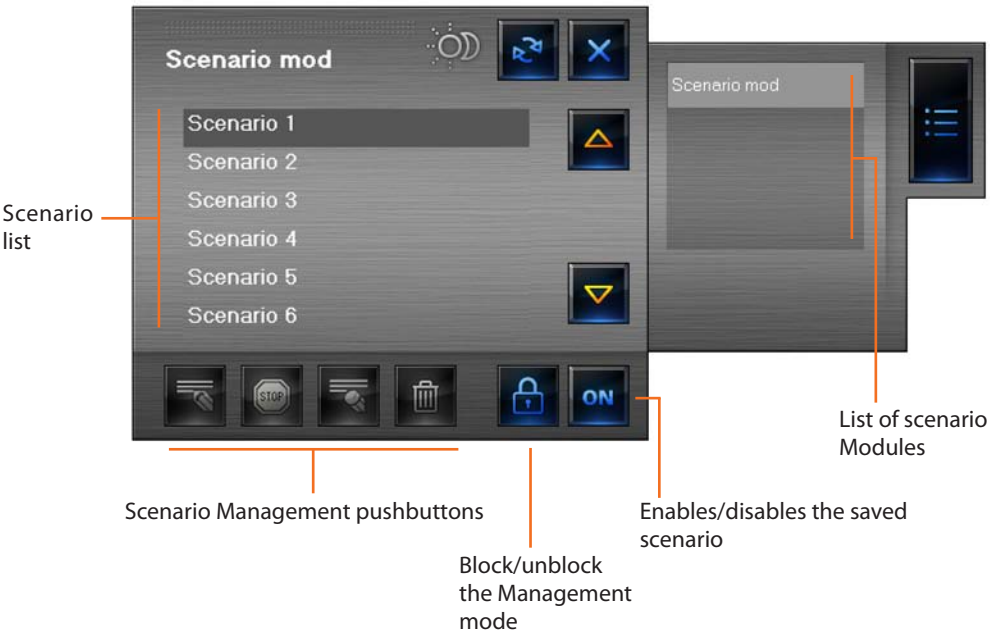
 BEING AMENDED/CREATED

4.3.5 Scenario module Object

When configured as Module of scenarios actually existing in the system, this object can be used to activate the scenarios saved in the module itself. New scenarios may also be created, or the existing ones amended.



In the monitoring area, click the scenario Module object to display the following screen, where it will be possible to enable the saved scenarios:



Click to enable the pushbuttons for the creation/amendment of scenarios.

After 20 sec. of inactivity the Management mode is blocked.

Starts the recording of a new scenario or adds actions to an existing scenario

Stops recording

Deletes the actions of the selected scenario

Deletes all scenarios (including the ones already in the Scenario Module).

Warning: press the key to delete all scenarios (including the ones already in the Scenario Module).

4.3.6 SCS mover object

This object configured as an actuator really present in the system gives a synchronised view of the state of the mover itself.
Then acting on the object in the project changes the state of the corresponding mover in the system.

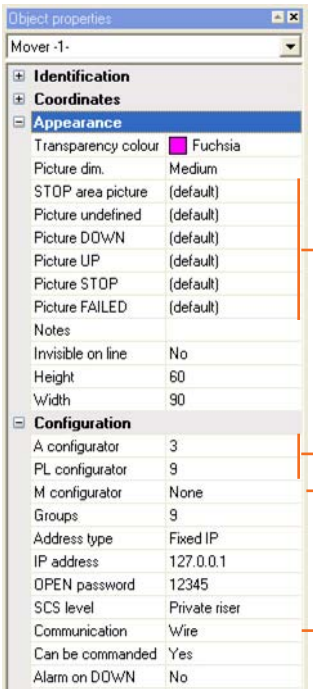
Mover state

OFF-LINE/INDEFINITE STATE

UP

DOWN

STOP



Changes the default pictures

Enters the actuator address

Sets the mode (entering pul, the actuator is excluded from the general and room commands)

Sets whether it is a wire or radio actuator

This object has three push buttons. Push the two left push buttons to perform the UP/DOWN commands and the right push button to perform the STOP command.

4.3.7 Web Server object

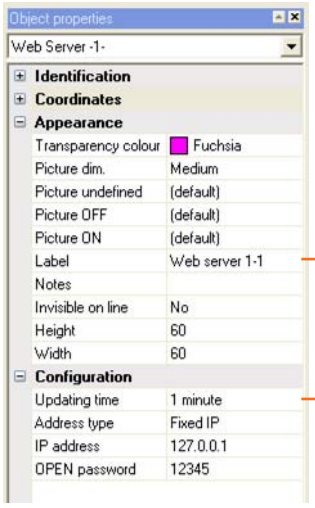
This object monitors the SCS system.

Web Server state


OFF-LINE/WEB SERVER CANNOT BE REACHED


OFF
(Design only)


ON/ON-LINE



Enters A Name For The Object

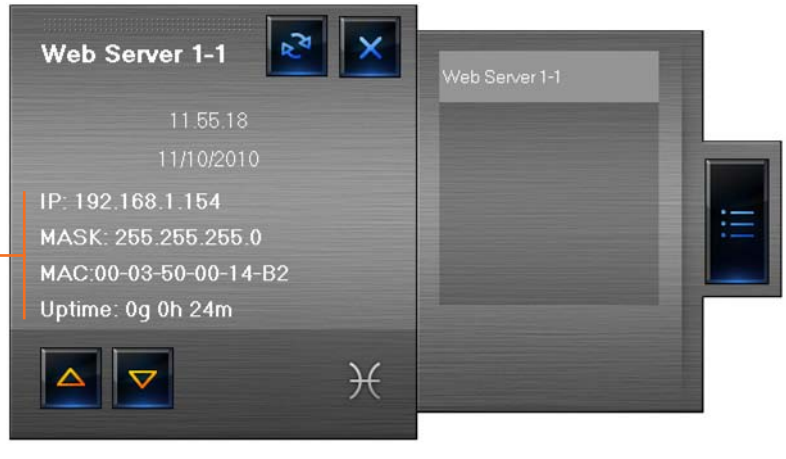
Set The Updating Time

On clicking on the Web Server object in the Monitoring area the web-server parameter visual display appears, showing some parameters of the Web Server installed in the system.

Connected Web Server data

List of connected Web Servers

Scrolling with the arrow keys other parameters can be displayed.



Other connected Web Server data

Camera state

OFF-LINE

OFF
(Design only)

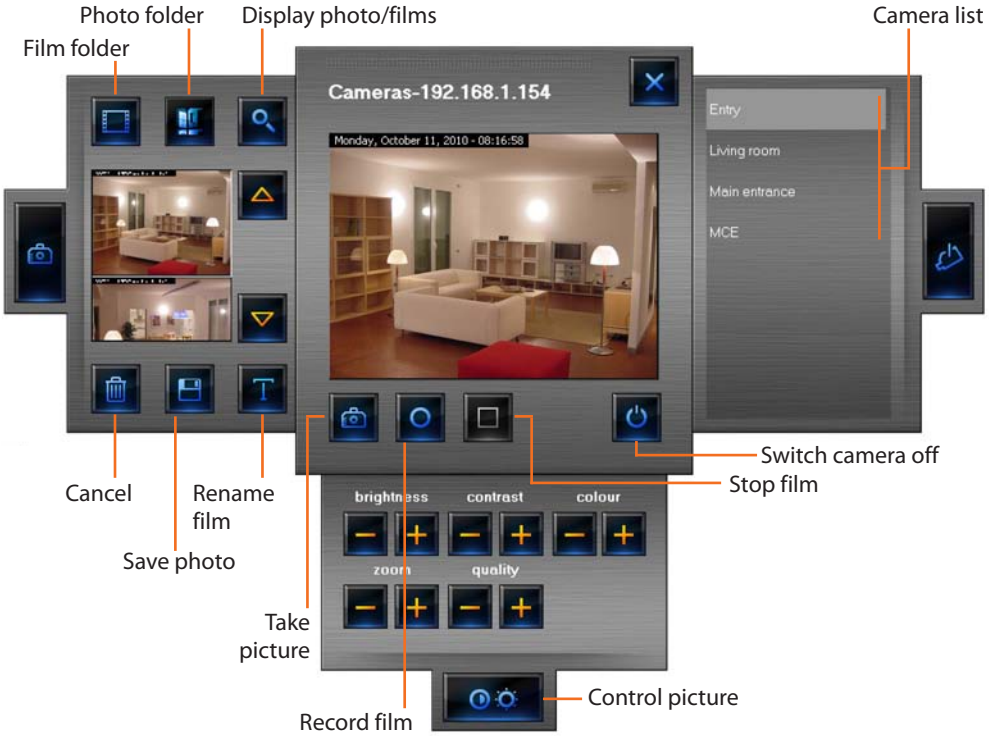
ON-LINE

4.3.8 Camera object

This object can control a camera in the system.

Enters an identification number for the camera

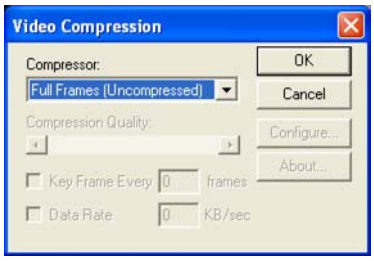
On clicking on the camera object in the Monitoring area the camera visual display appears, where photos can be taken, film clips recorded and the cameras switched ON/OFF.



The film clips are saved in the directory set in the **Options/Folders** window (see "Project options – folders" in the "Design Area" chapter).

Press the push button to take a film and the push button to stop it.

At the end of the filming the following window appears:



> Select a compression for the film clip
> Click **OK**

4.3.9 Burglar-alarm unit object

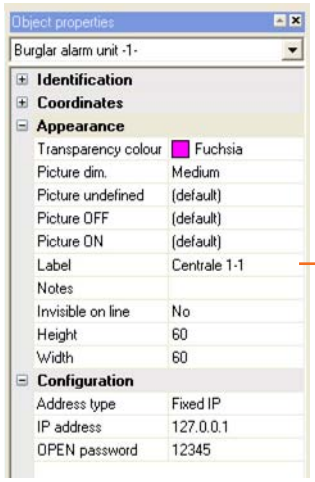
This object can manage the alarms in a system which uses a burglar-alarm control unit.

Unit state


OFF-LINE/INDEFINITE STATE


NOT INSERTED


INSERTED



Enters a name for the object

In the Monitoring area on clicking on the burglar-alarm unit object a visual display appears, showing some data of the burglar-alarm system installed.


If an alarm is given a red indicator appears in the burglar-alarm object.

- State — displays whether the burglar-alarm system is switched ON
- Battery — displays whether the battery is working
- Zones controlled — displays the active zones (white background) and if there is an alarm the zone involved (zone number in red)
- Other zones — displays the other zones (connectors, auxiliaries and the control unit)
- Technical — displays the technical alarms
- System — system IP address

Click on "**ALARM**" to display the **Alarm** window, where the alarm in progress can be displayed and dealt with (see "Alarms" section).

Load state

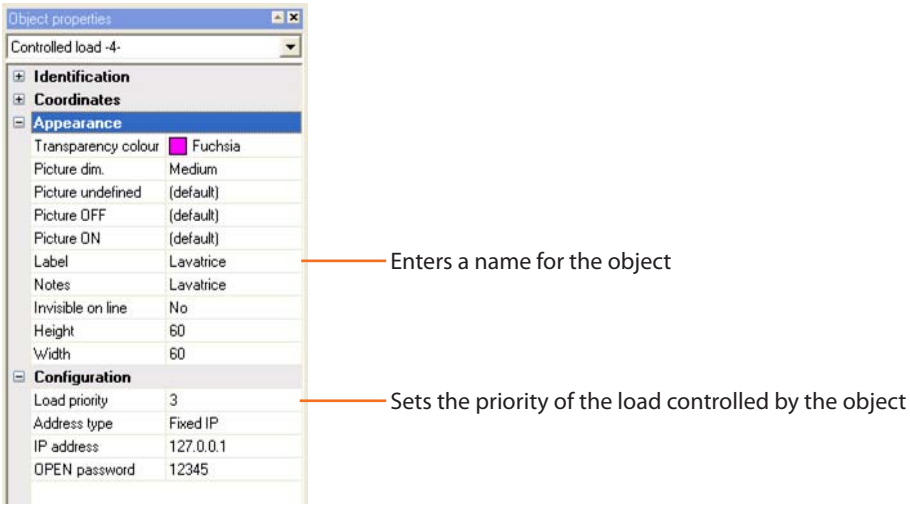
OFF-LINE/INDEFINITE STATE

OFF

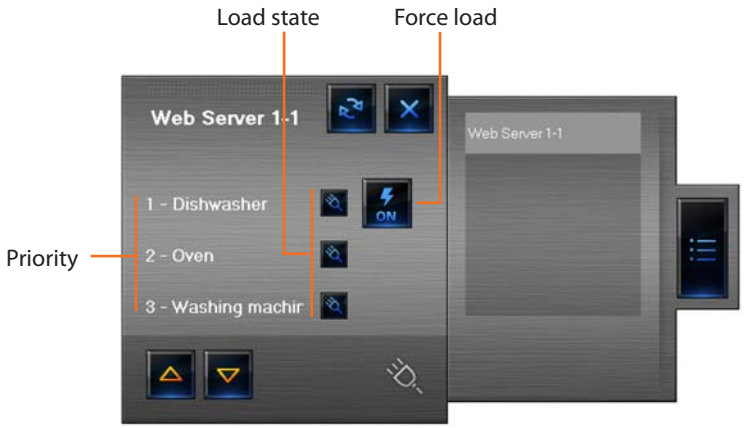
ON

4.3.10 Controlled load object

This object displays the state of a load. The load priority can be set, e.g. if the electricity supply is overloaded the load indicated with priority 1 is deactivated before a load identified with priority 2.



In the Monitoring area the state of the devices connected to a load control unit can be checked, avoiding problems of overloading the electricity supply.
On clicking on a controlled load object the visual display appears:



If there is an overload, one of these devices may be disabled. Click on the push button at the right of the deactivated load to force the state to reactivate it.

4.3.11 99-zone temperature control central unit object

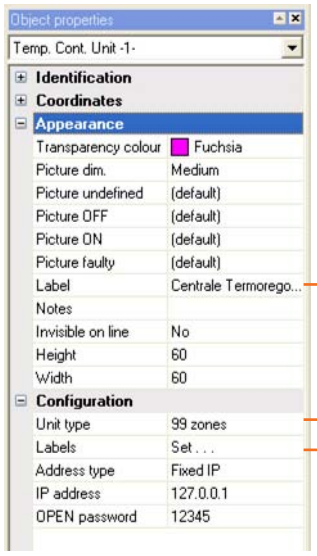
Control unit state


OFF-LINE/UNDEFINED STATE


OFF
(Design only)


ON-LINE

This object can be used to control a temperature control central unit installed on the system.

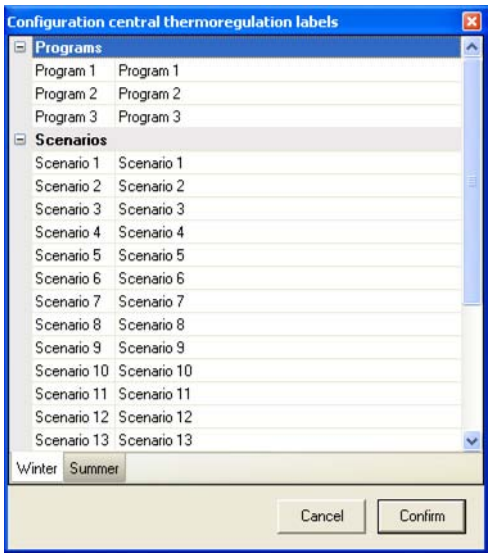


Enter an object name

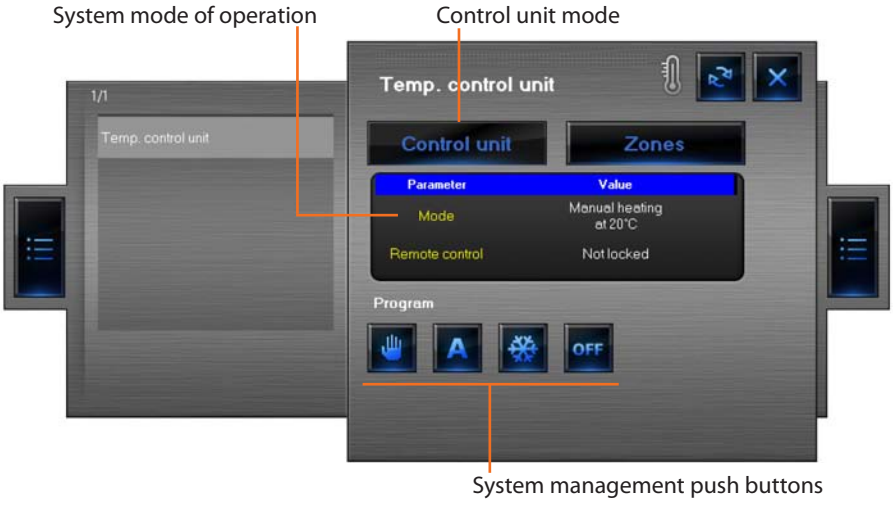
Set the type of central unit

Open the label configuration windows

In this window the user can customise the description of the central unit Scenarios and programs



In the Monitoring area, on clicking on the control unit object the following window appears in Control unit mode:



In this mode the temperature can be set and the antifreeze/thermal protection mode switched OFF and set for the whole temperature control system.

- Set the temperature

To set a temperature for the whole system:

> Click on the push button, the following window appears:

> Click on the -/+ push buttons to increase or decrease the temperature

> Click on **OK** to confirm

- Temperature control programs

The system temperature can be managed in this section using the programs saved in the temperature control unit.

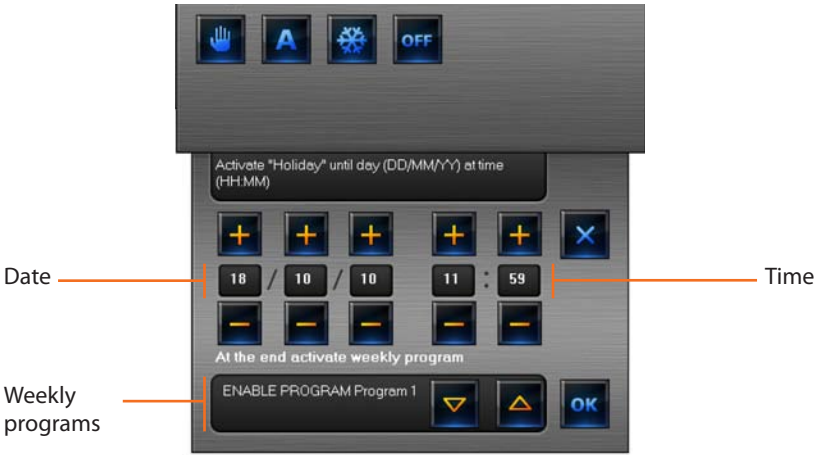
> Click on the push button, the following window appears:

Activate holiday

This function can select a particular daily profile for a set period.

> Select **ACTIVATE HOLIDAY**

> Click on the  push button to continue, the following window appears:



> Select a weekly program (3 heating + 3 air conditioning)

> Select date and time

> Confirm by pressing **OK**

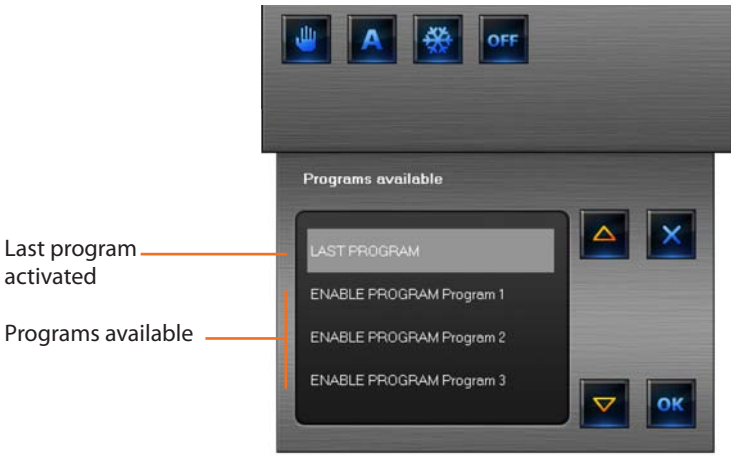
The holiday program will be run until the date and time set, after which the weekly program chosen will be activated.

Activate weekly program

This function can select a weekly program saved in the control unit.

> Select **ACTIVATE WEEKLY PROGRAM**

> Click on the  push button to continue, the following window appears:



> Select a weekly program (3 heating + 3 air conditioning)

> Confirm by pressing **OK**

With this option the system works in automatic mode, following the programming set in the activated weekly program.

Activate scenario

This function can select a scenario from those saved in the control unit.

> Select **ACTIVATE SCENARIO**

> Click on the  push button to continue, the following window appears:

> Select a scenario (16 heating + 16 air conditioning)

> Confirm by pressing **OK**

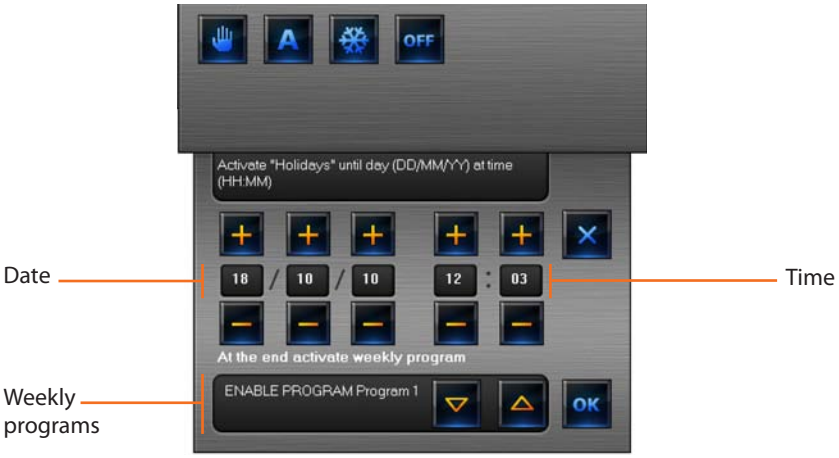
In this mode different temperatures can be set in the various system zones with a single command.

Activate holidays

This function can set the holiday mode.

> Select **ACTIVATE HOLIDAYS**

> Click on the  push button to continue, the following window appears:



> Select a weekly program (3 heating + 3 air conditioning)

> Select time and date

> Confirm by pressing **OK**

In this mode the system will be kept in antifreeze or thermal protection mode until the date and time set, after which the selected weekly program will be activated.

4.3.12 4-zone temperature control central unit object

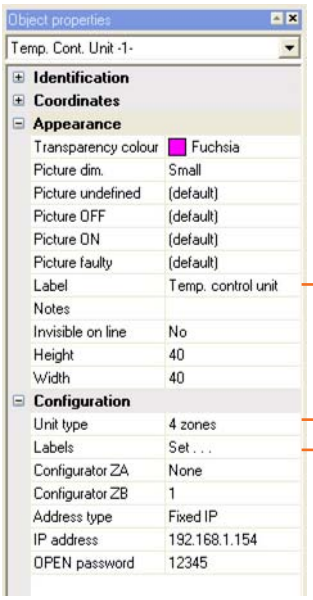
This object can be used to control a temperature control central unit installed on the system.

Control unit state


OFF-LINE/UNDEFINED STATE


OFF
(Design only)

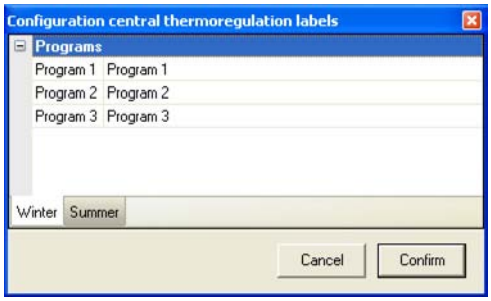

ON-LINE



Enter an object name

Set the type of central unit

Open the label configuration window

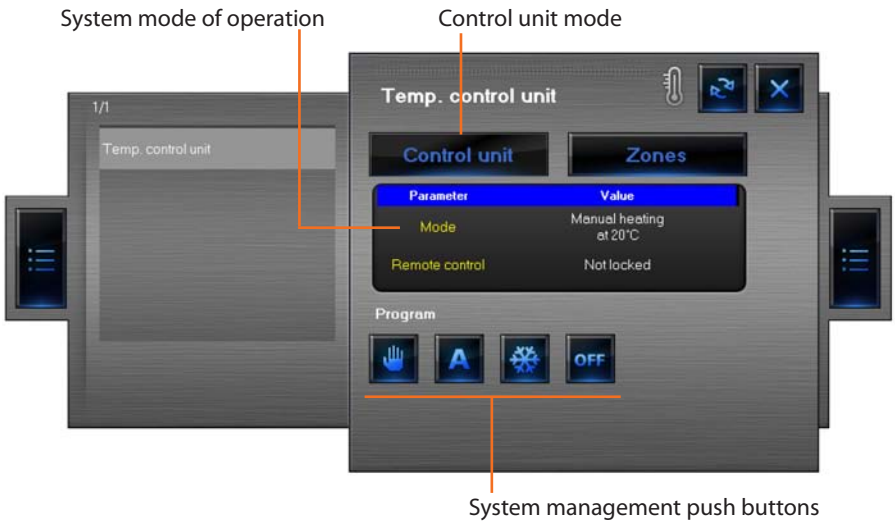


In this window the user can customise the description of the Central unit programs

Because the 4-zone central unit also operates as temperature control sensor, it is recommended that a sensor object is entered near the central unit object, for displaying the temperature detected in the zone where the central unit is installed.

Temperature detected in the central unit zone

In the Monitoring area, on clicking on the control unit object the following window appears in Control unit mode:



In this mode the temperature can be set and the antifreeze/thermal protection mode switched OFF and set for the whole temperature control system.

- Set the temperature

To set a temperature for the whole system:

> Click on the  push button, the following window appears:

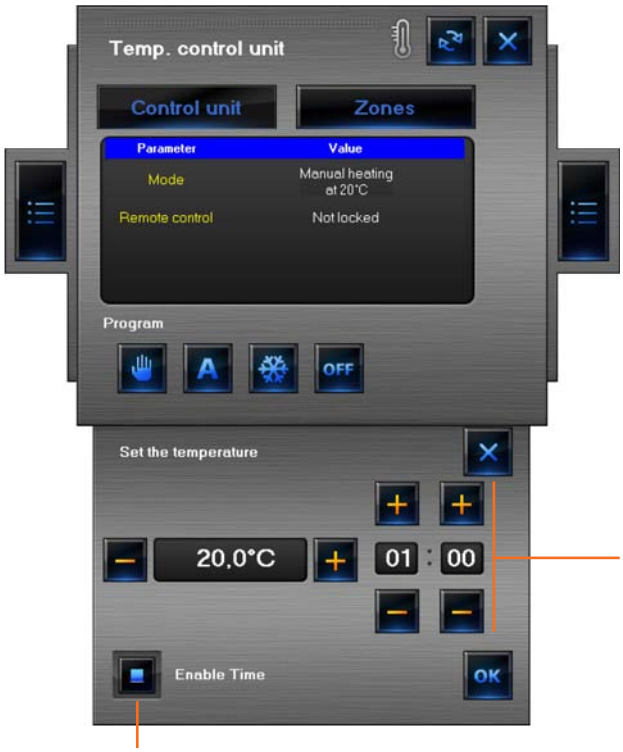
Set the temperature

> Click on the -/+ push buttons to increase or decrease the temperature

> Click on **OK** to confirm

- Timed operation mode

It is possible to program the time during which the system maintains the set temperature; after this time, the system returns to the previously active mode.

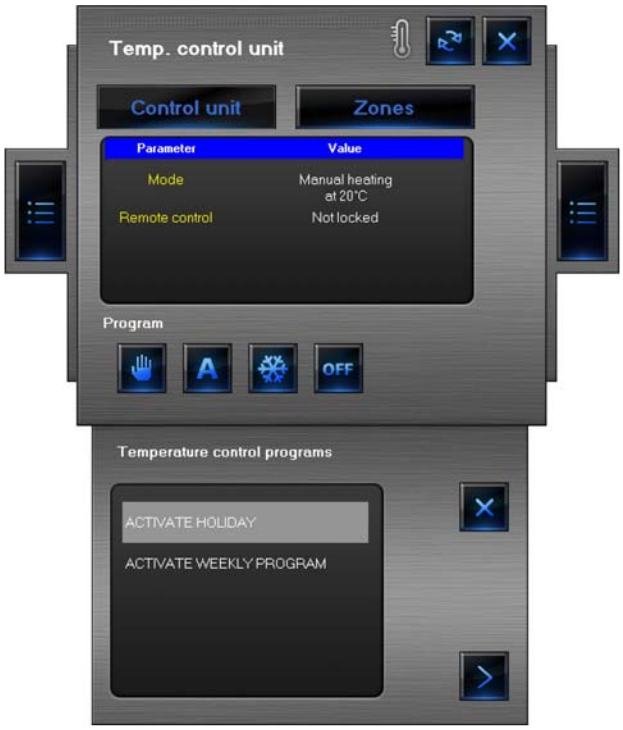


Set the Timed operation mode period (hours/minutes, maximum 24hours and 59 min.)

Enable/disable timed operation

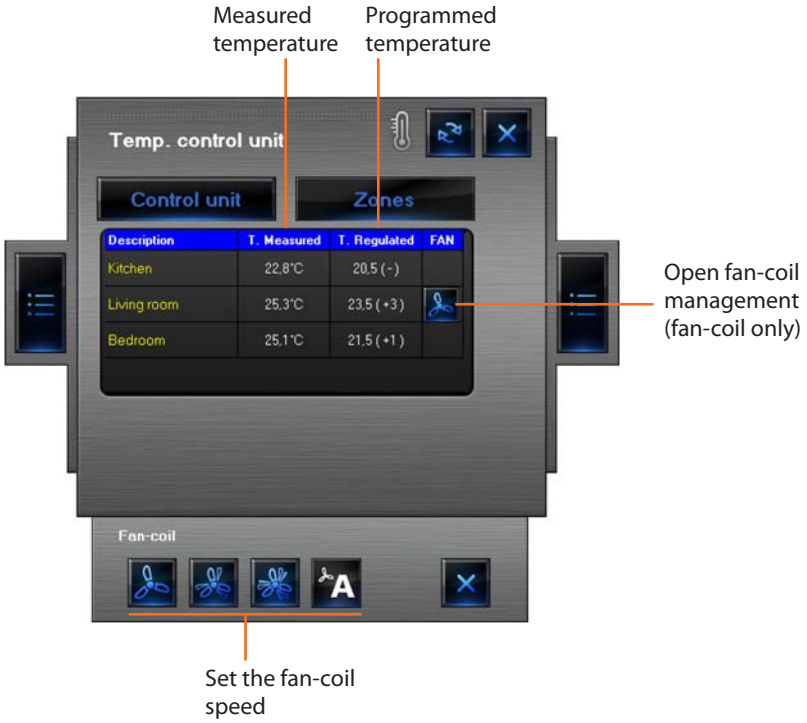
- Temperature control programs

In this section it is possible to manage the system temperature using programs saved inside the temperature control central unit. In this type of central unit it is not possible to manage the scenarios. For the holiday and weekly programs see paragraph "99-zone central unit".



Zones

This section is used to display the temperatures measured and set, detected by the system sensors. For the "Fan-coil" sensors, the fan-coil speed can also be set.



Master sensor state

OFF-LINE/UNDEFINED STATE

OFF
(Design only)

ON

Slave sensor state

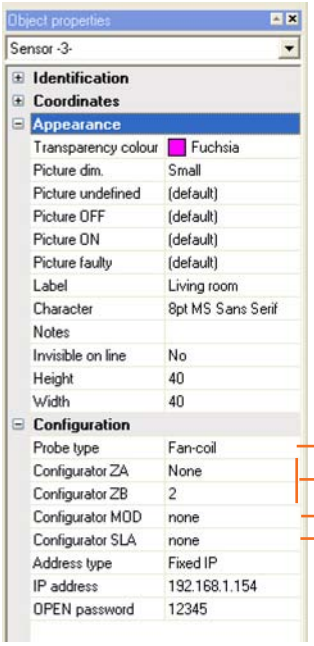
OFF-LINE/UNDEFINED STATE

OFF
(Design only)

ON

4.3.13 Temperature control sensor object

This object can control a temperature control sensor in the system.



The operating modes shown below are only valid for sensors managed by a 99-zone central unit.
For the 4-zone central unit functions see paragraph "4-zone temperature control Central unit"/"Zones".

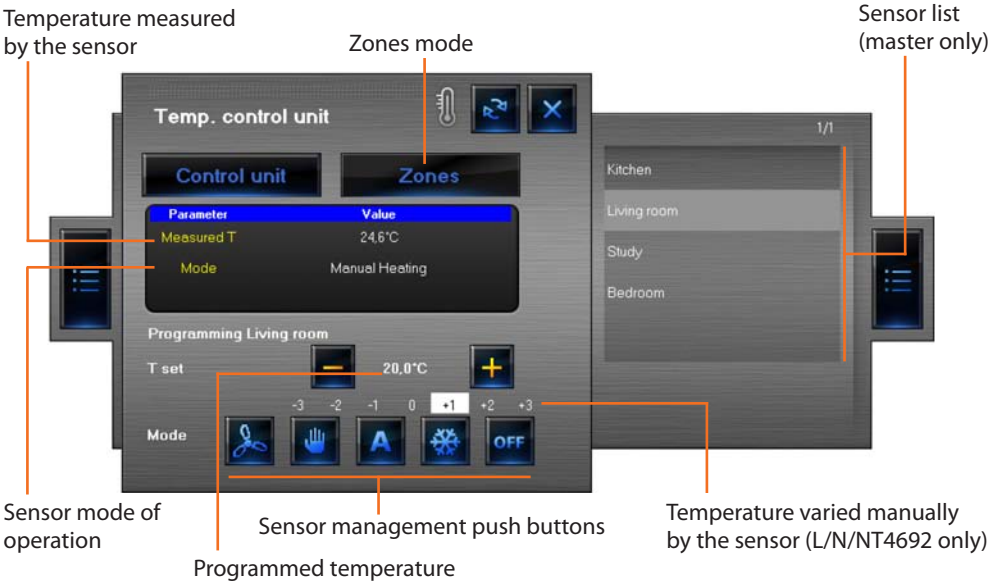
Set the type of sensor: Normal/External/Fan-coil

Set the number of the zone controlled by the sensor

Set the sensor mode of operation (none = master, sla = slave)

If the sensor is master set the number of the controlled sensors, if the sensor is slave, set the progressive number of the zone slave sensors

In the Monitoring area, on clicking on the sensor object the following window appears in Zones mode:



Caution: The OFF mode has the maximum priority. To exit this mode work from the same device from which it was set. If the OFF mode was set by the sensor object, to change mode, work from the object itself or from the temperature control unit (device).

This window can display the data on the sensors in the system and the mode of operation can be set, using the push buttons.

Sensor management push buttons

Set the temperature manually

Return to the previously selected mode

Set the antifreeze/thermal protection mode

Set the zone forced switching OFF

Set the Fan-coil sensor speed, if applicable

4.3.14 Sound source object

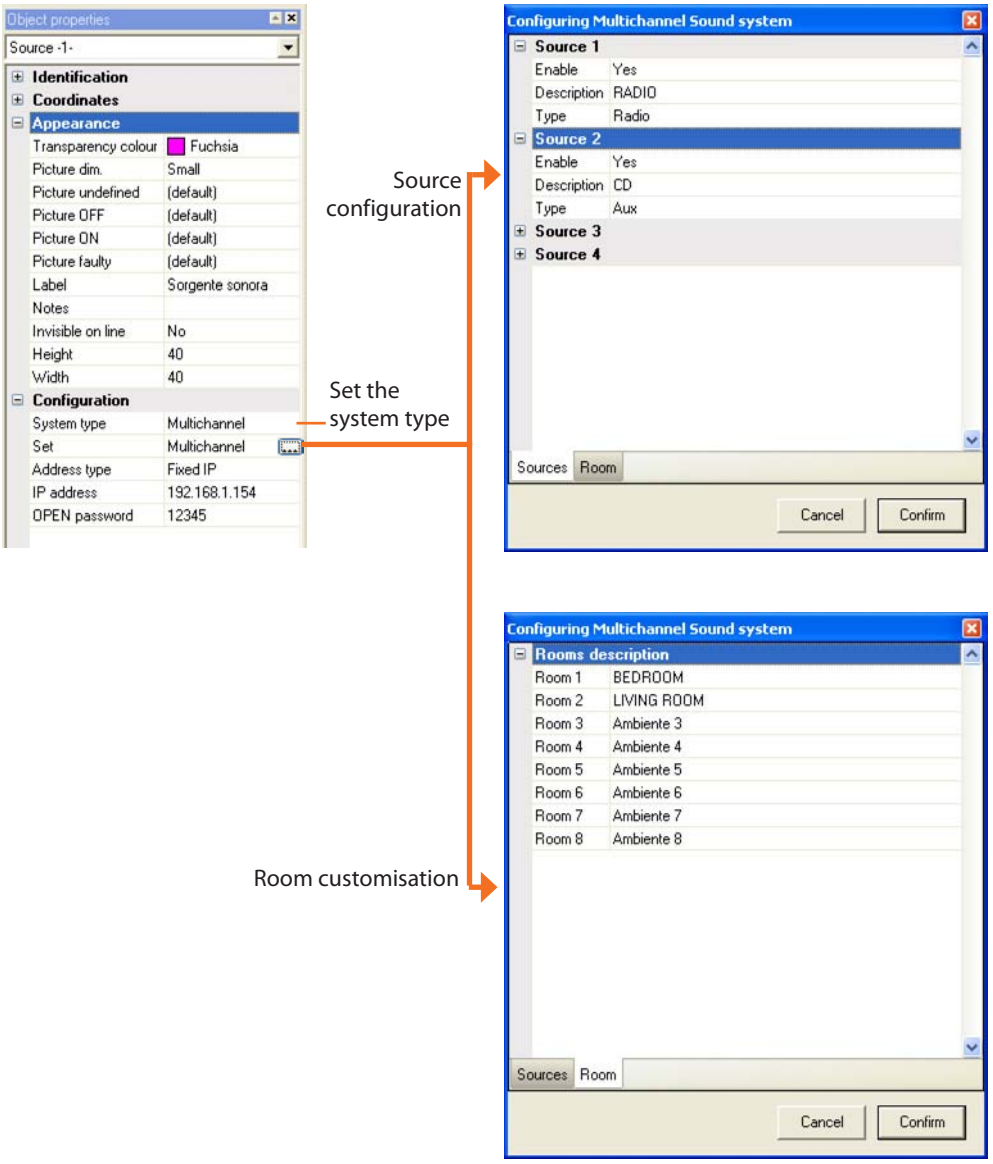
This object can control a sound source in the system (single-channel, or multichannel). The example shown is for a multichannel system.

Source state

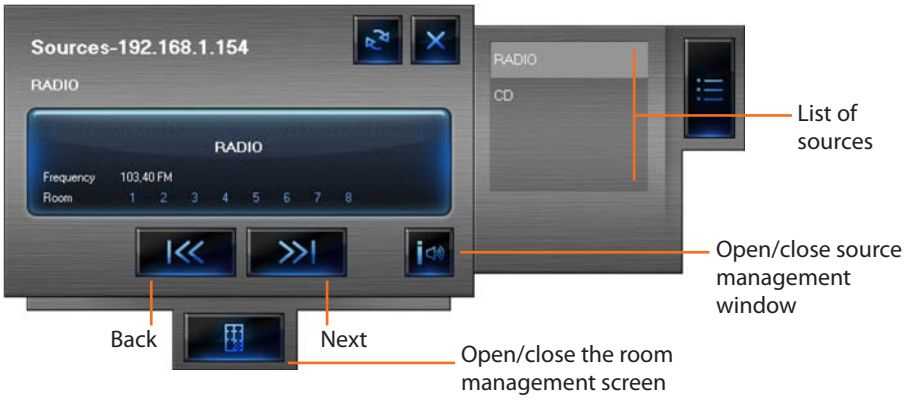

OFF-LINE/UNDEFINED STATE


OFF

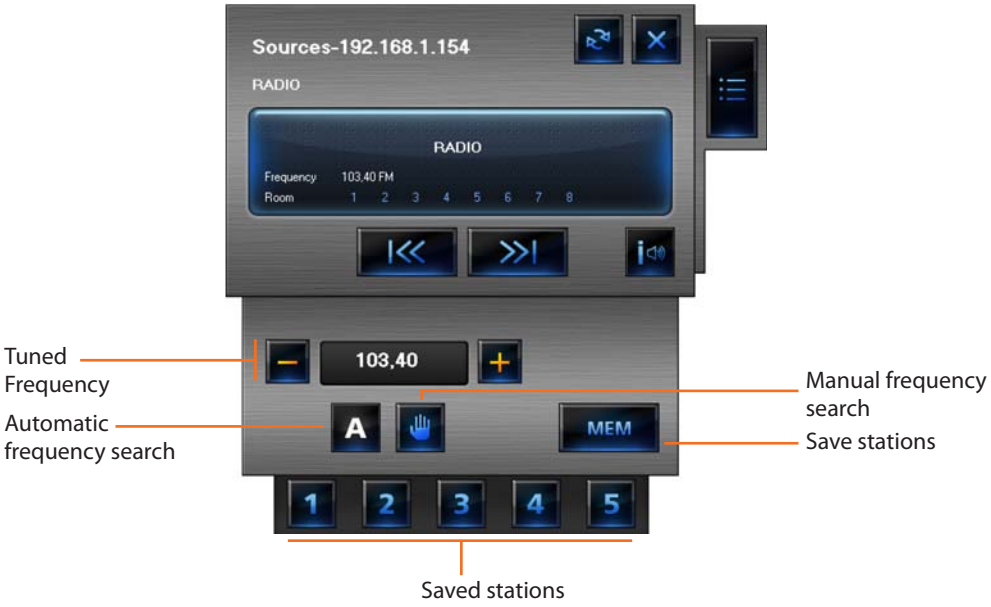

ON



In the Monitoring Area on clicking on the sound source object the following window appears:



The various functions of the set source (in this case the source is a Radio Tuner) can be managed in this window.



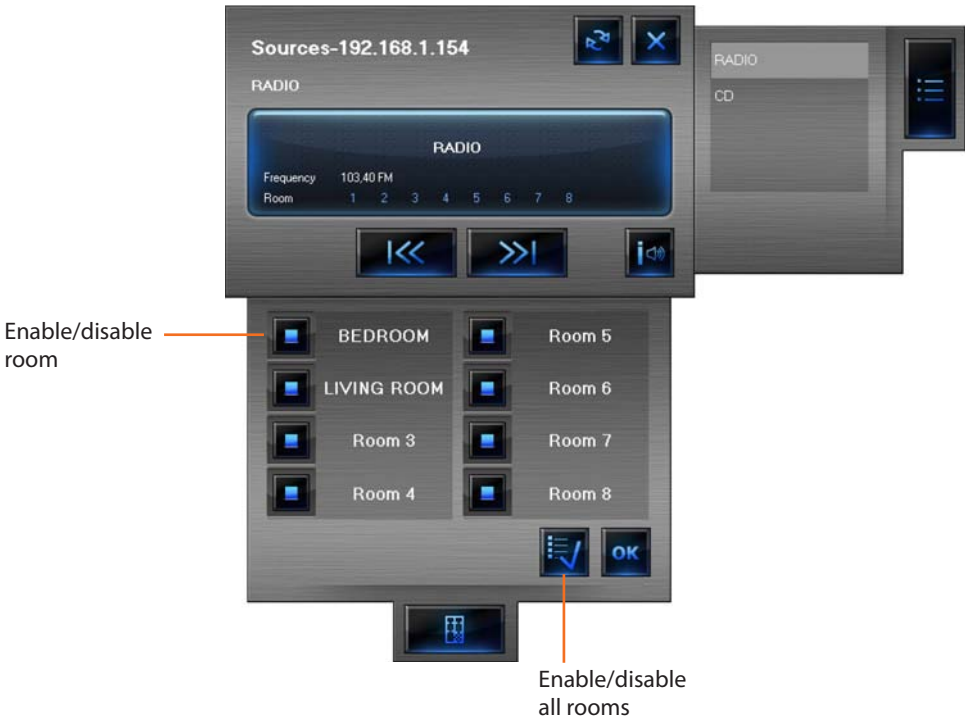
To save a station:

> Tune the frequency required

> Click on the **MEM** push button

> Click on the numerical push button where the station will be saved

The room management screen can be used to set in which rooms a sound source can be listened to.



Amplifier state

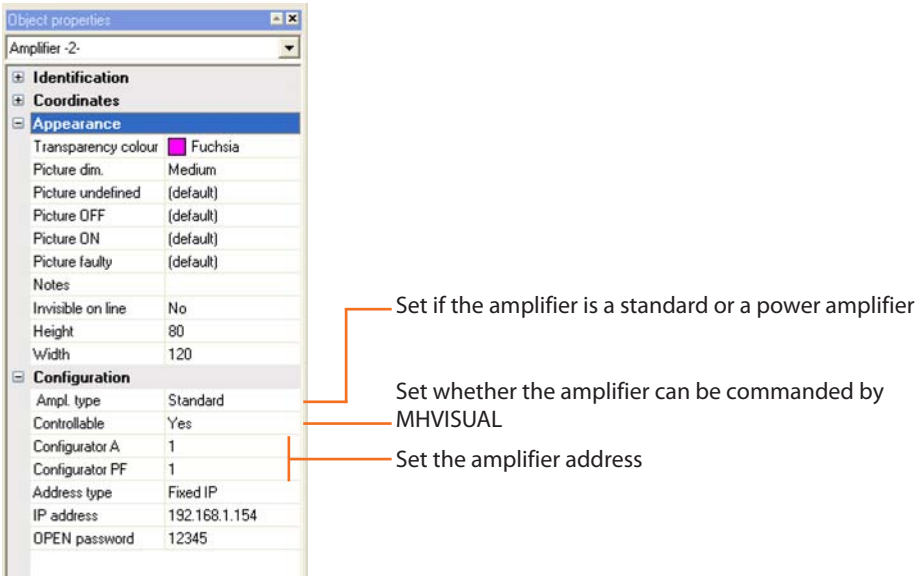
OFF-LINE/UNDEFINED STATE

OFF

ON

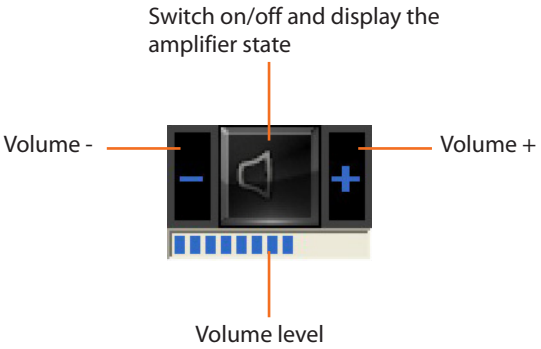
4.3.15 Standard amplifier object

This object configured like an amplifier really present in the system (only point-point mode) can control and display the state of the amplifier itself.



Amplifier address

- A = room – set of amplifiers belonging to a logic zone (1 – 9)
- PF = sound point – numerical identification (1 – 9) of the individual amplifier inside the room



This object is divided into 4 parts. The central part displays the state and switches the amplifier ON/OFF. The left and right push buttons adjust the volume, while the volume level appears in the lower visual display.

Amplifier status

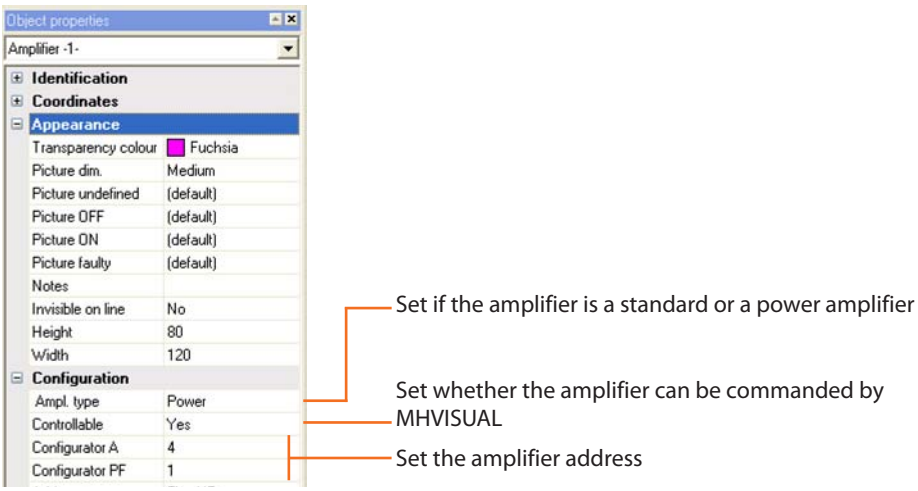
OFF-LINE/UNDEFINED STATE

OFF

ON

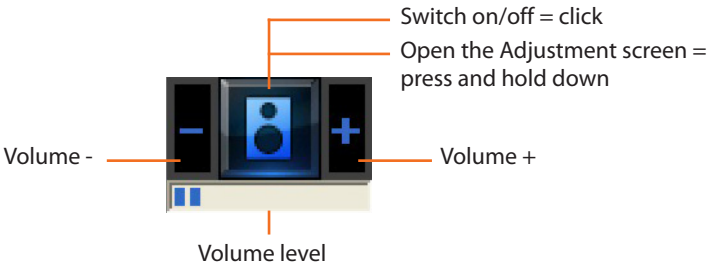
4.3.16 Power amplifier object

This object, configured as power amplifier really present in the system, provides the user with the possibility of controlling and displaying the amplifier status. Differently from the standard amplifier, it is possible (using the appropriate screens) to perform advanced sound adjustments.



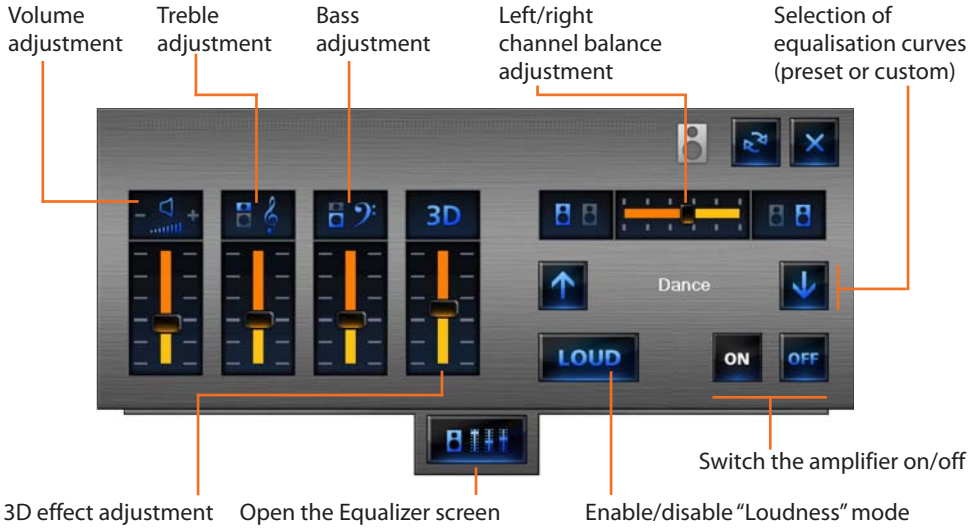
Amplifier address

- A = room – set of amplifiers belonging to a logic zone (1 – 9)
- PF = sound point – numerical identification (1 – 9) of the individual amplifier inside the room



Advanced sound adjustments

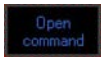
While in the Monitoring area, click and hold down the central section of the amplifier for more than 5 seconds to display the following screen to perform several sound adjustments:



Click  to display the following screen:

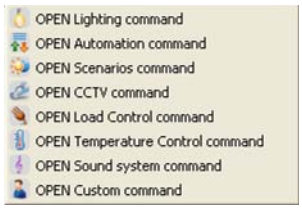
This screen can be used to save a customised curve: select a name, perform the appropriate adjustments, and click  . The customised curve is now active.

4.3.17 Open command object

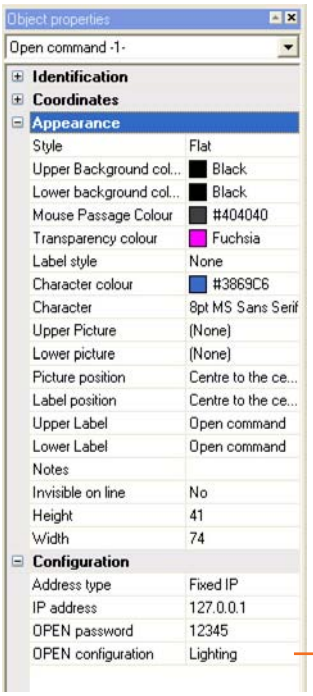


This object can replicate a command really present in the system or open a new one, sending the system itself an Open command, based on the **Open Web Net code***.

Open command type



Open Web Net code
Protocol with which data can be exchanged and commands sent between a remote unit and the BTicino SCS system. The protocol is thought out to be independent of the means of communication used, considering being able to use DTMF tones on the normal telephone line as the minimum requirement.
The code features a structure with fields of variable length separated by special characters (*) and closed with (##).

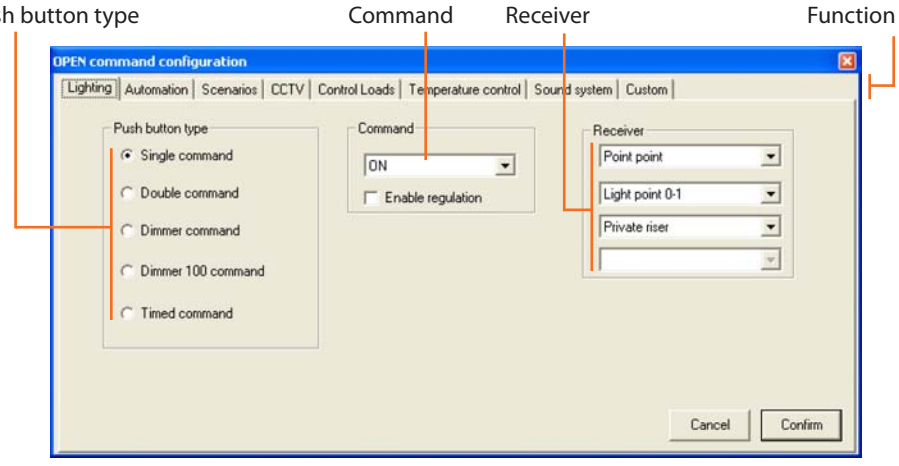


Set the command appearance

Set the function of the Open command.
On clicking in the data entry zone the ... push button appears. Clicking on it the configuration window appears.

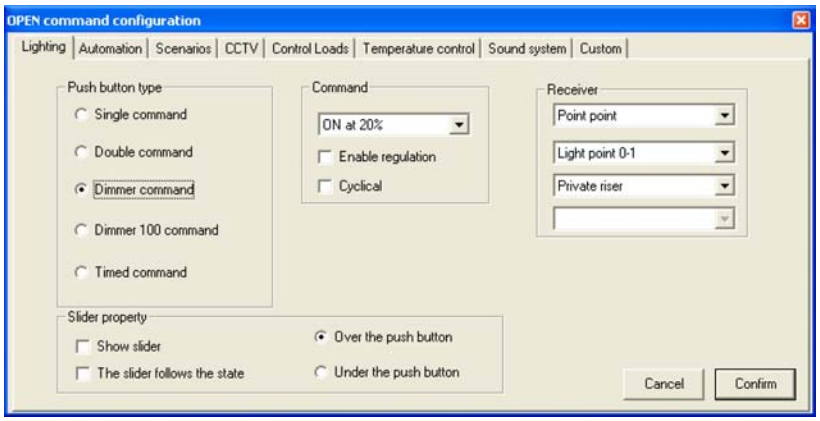
Open command configuration

In the "Open command configuration" window you can (by guided or manual entry) define the Open command to send to the system.
Guided entry occurs by selecting the various options in the window, thus defining the push button type, the command and the receiver. Manual entry ("custom" entry) occurs instead by entering the Open Web Net code directly.



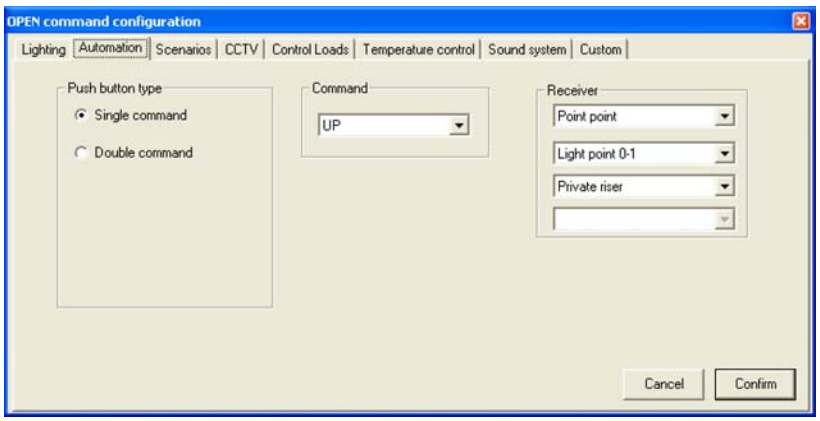
In the guided entry mode, the options available vary depending on the command function (e.g. lighting, automation, etc.) and on the basis of the selections made to define the command (e.g. single, double command etc.).

- Open lighting command



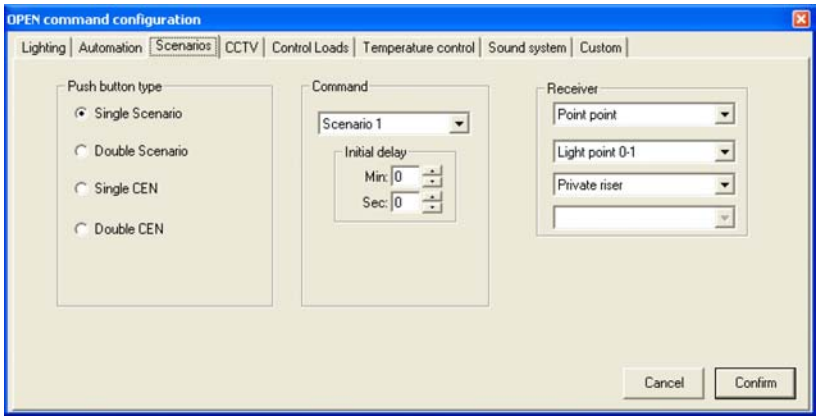
- Push button type — select the push button type; the fields containing the various parameters are displayed depending on this selection
- Command — select the command to be given
- Receiver — select the address of the device which performs the command

- Open automation command



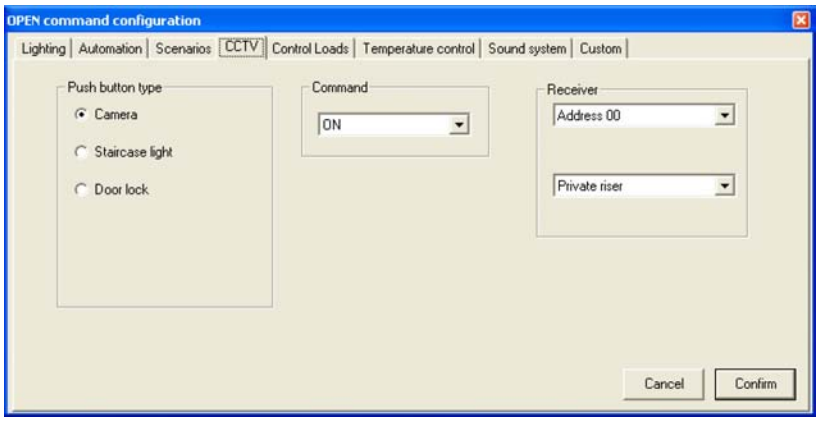
- Push button type — select the push button type. This selection influences the functions available in the "command" field
- Command — select the command to be given
- Receiver — select the address of the device which performs the command

- Open scenarios command



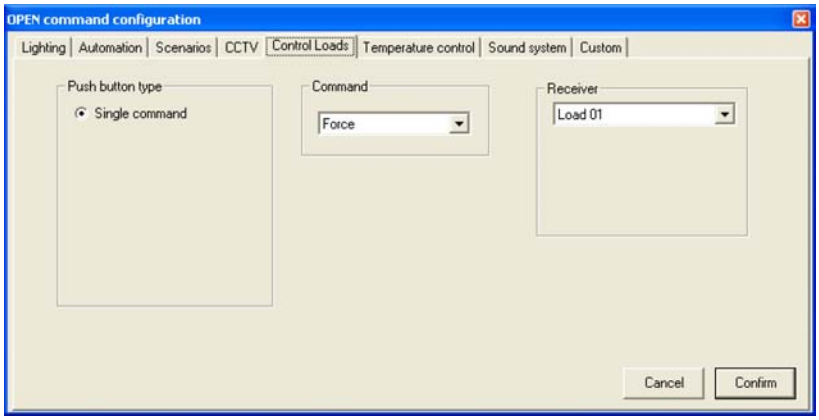
- Push button type — select the push button type; the fields containing the various parameters are displayed depending on this selection
- Command — select the scenario to be performed, saved in a scenario module
- Receiver — select the address of the scenario module

- Open CCTV command



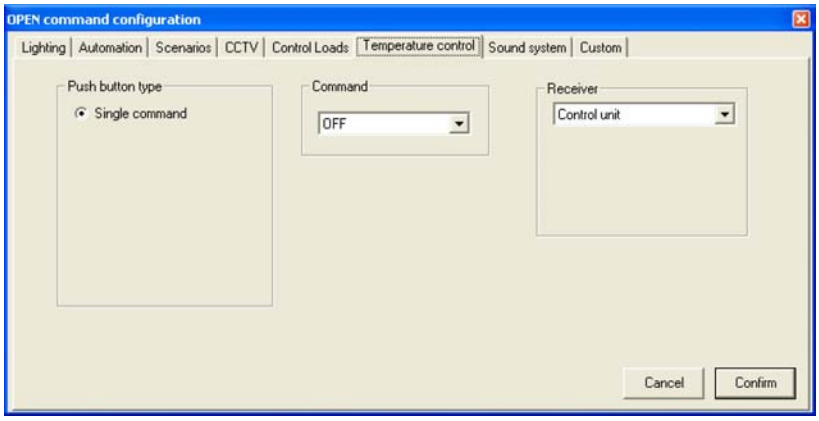
- Push button type — select whether the open command must activate a camera, a staircase light or door lock actuator, identified in the "receiver" field

- Open control loads command



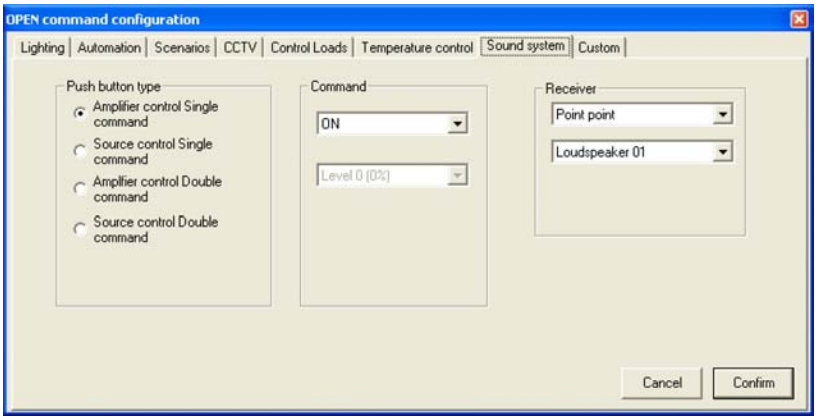
- Receiver — select the load to reactivate (FORCE), disabled following an electrical mains overload

- Open temperature control command



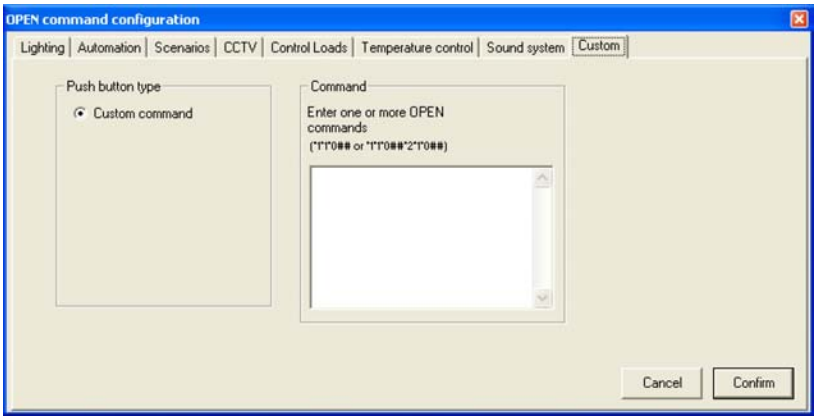
- Command — select the type of command (OFF, ANTIFREEZE, THERMAL PROTECTION) to send.
- Receiver — select whether the command previously set is addressed to a control unit or to a temperature control sensor (zone xx)

- Open sound system command



- Push button type — select the push button type. This selection influences the functions available in the "command" field
- Command — select the command to be given
- Receiver — select the address of the device which performs the command

- Open customised label command (custom label)

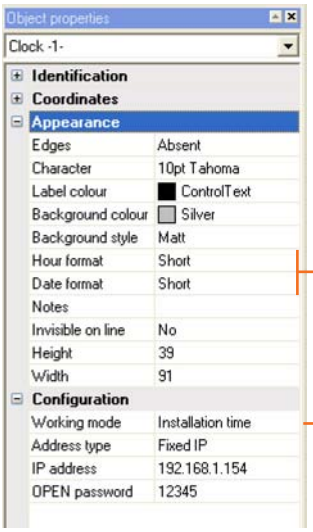


- Command — enter the Open Web Net code (more than one command can be entered by writing the code consecutively, e.g. *1*1*0##*2*1*0##)

4.3.18 Clock object

12.10
11/10/2010

This object displays/sets the system time.



Set the date/time format

Set whether the pc time or the system time (Web Server time) should be displayed

If the object is set to display the system time, on clicking on it (Monitoring area) a window appears where the system time and date can be set.

Update all the system connected to the time and date set

Synchronise the Web Server time to the pc time

> Set the date and time using the arrows

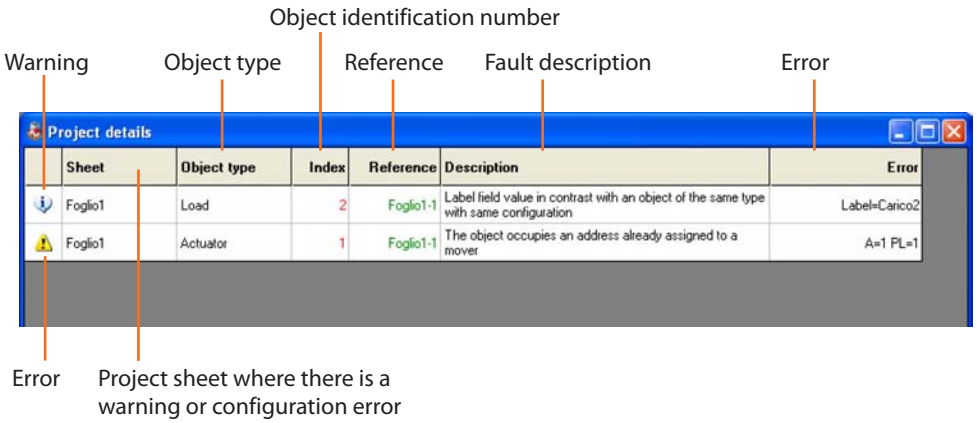
> Confirm by pressing **OK**

5. Check configuration

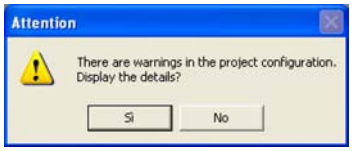
Select **Project validation** from the **Interaction** menu to check whether the objects entered in the project have been correctly configured.

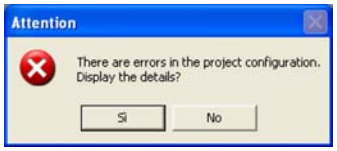
> Select **Project validation** from the **Interaction** menu

after a few seconds, if the project is confirmed correctly, a message appears which confirms it. If not a window appears giving the configuration warnings or errors.



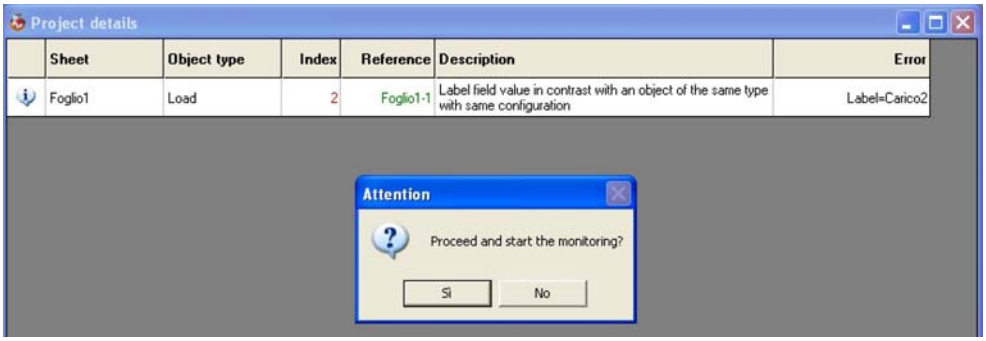
The configuration check procedure is performed automatically on accessing the Monitoring area. If there are errors or messages in the project the following warning messages appear:





> Click **Yes** to display the warnings or errors

The window shown above then appears and, if there is a warning, a message which asks if you want to continue with the monitoring



> Click **Yes** to continue with the monitoring anyway

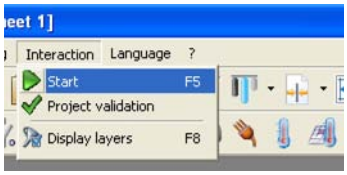
> Click **No** to return to the design mode and solve the problem

NOTE: If there is a configuration error access to the monitoring area will not be possible.

6. Monitoring Area

"Monitoring" is the interactive part of MHVISUAL.
The need to enter a design password stops an inexpert customer from quitting this area and returning to the Design area; then on entering MHVISUAL the design password will be requested for entry to the Design area, otherwise entry is directly to the Monitoring area..

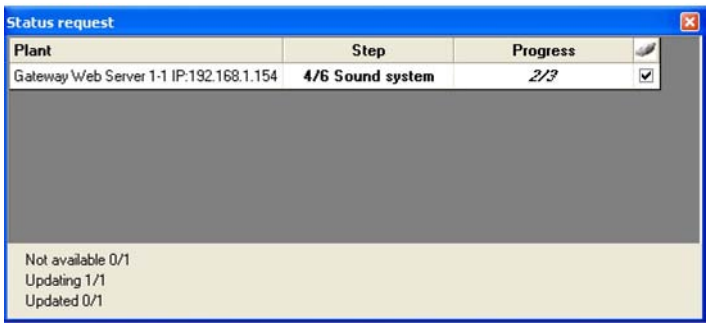
Work area



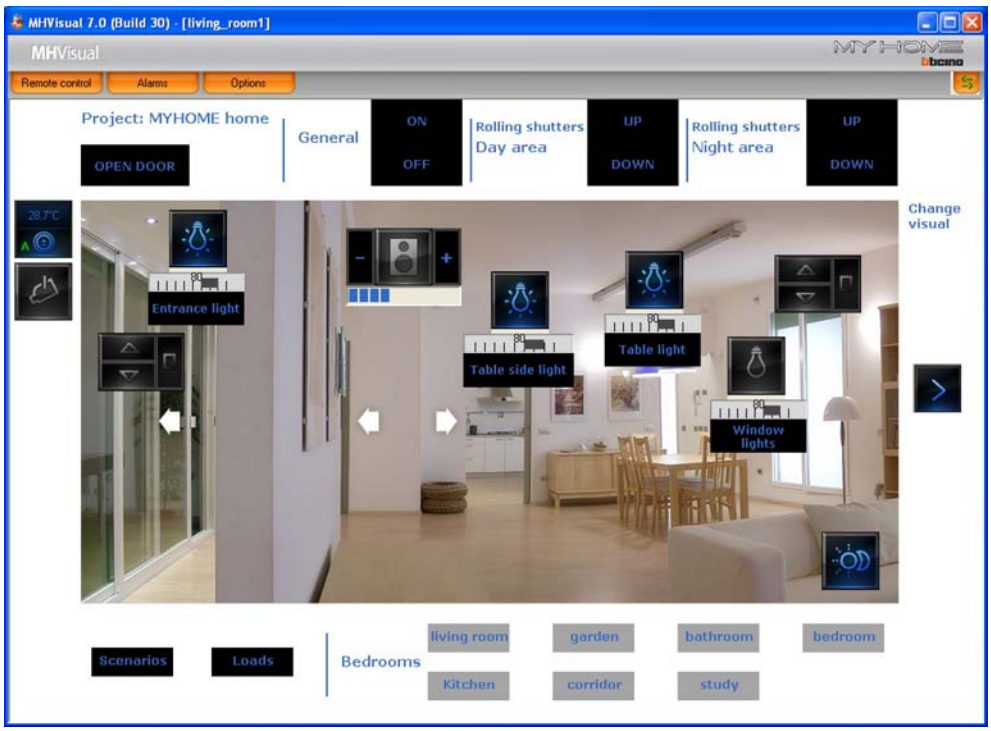
After connecting with the system you must enter the Monitoring area to interact with the components in the system. The MHVISUAL work area changes and specific tools appear.

In the Design area select **Start** from the **Interaction** menu to start monitoring the connected system.

The Monitoring area shows a screen displaying the various connection steps.



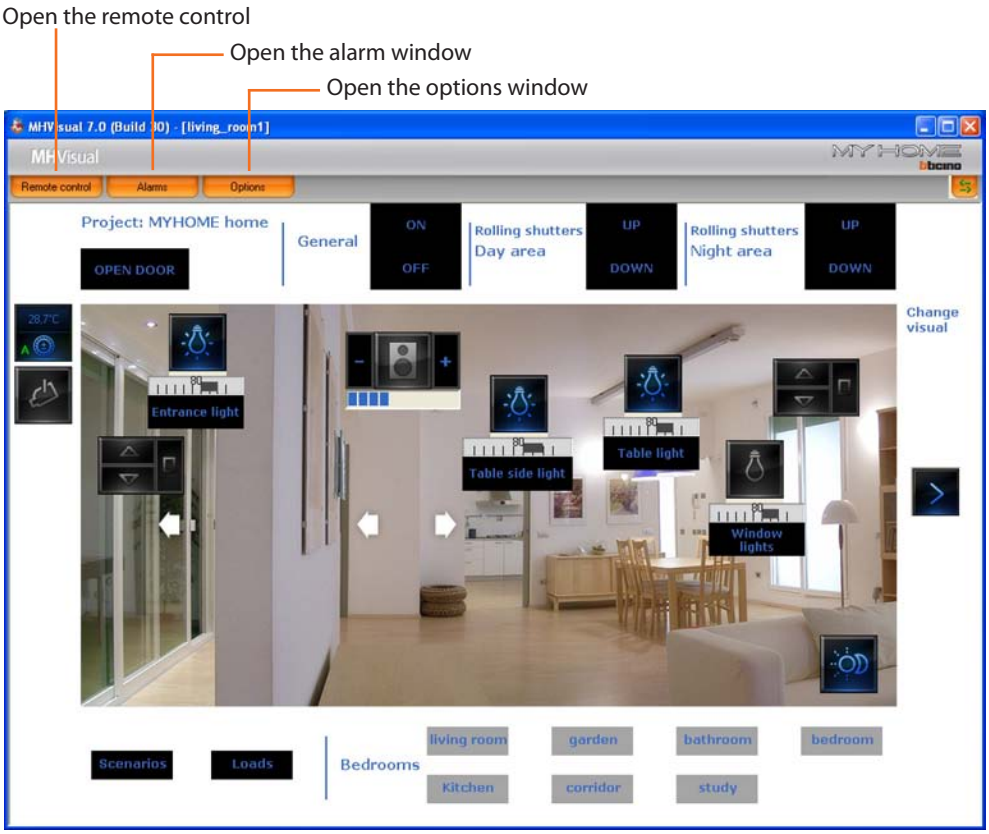
Once the procedure is completed, using the objects previously introduced and configured in the Design area, it will be possible to interact with the corresponding system components and check their status.



The state of the system components can be deduced from the type of icon displayed by the object entered in the project.

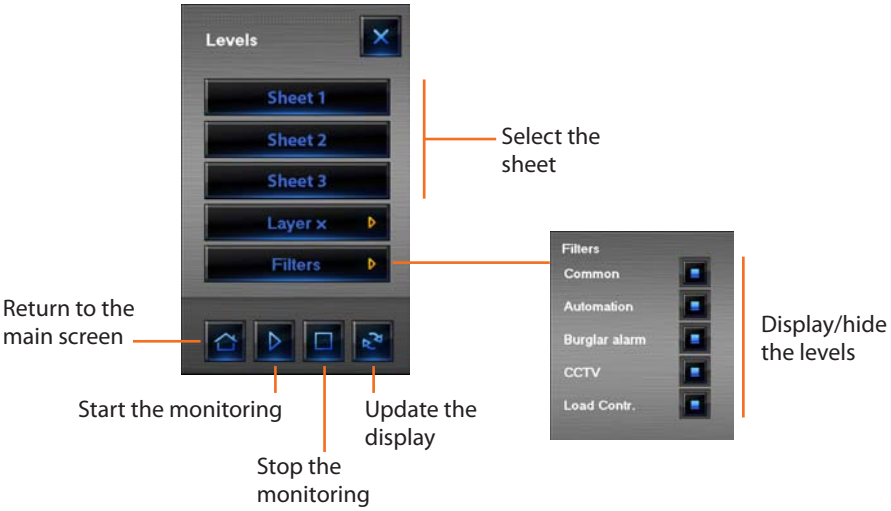
The tools available in the Monitoring area are:

- Remote control
- Alarms
- Options



6.1 Remote control

In this window you can start, stop and monitor the project.
You can also move from one sheet to another and display/hide the levels.



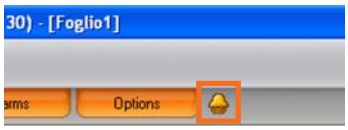
6.2 Alarms

Alarm indication

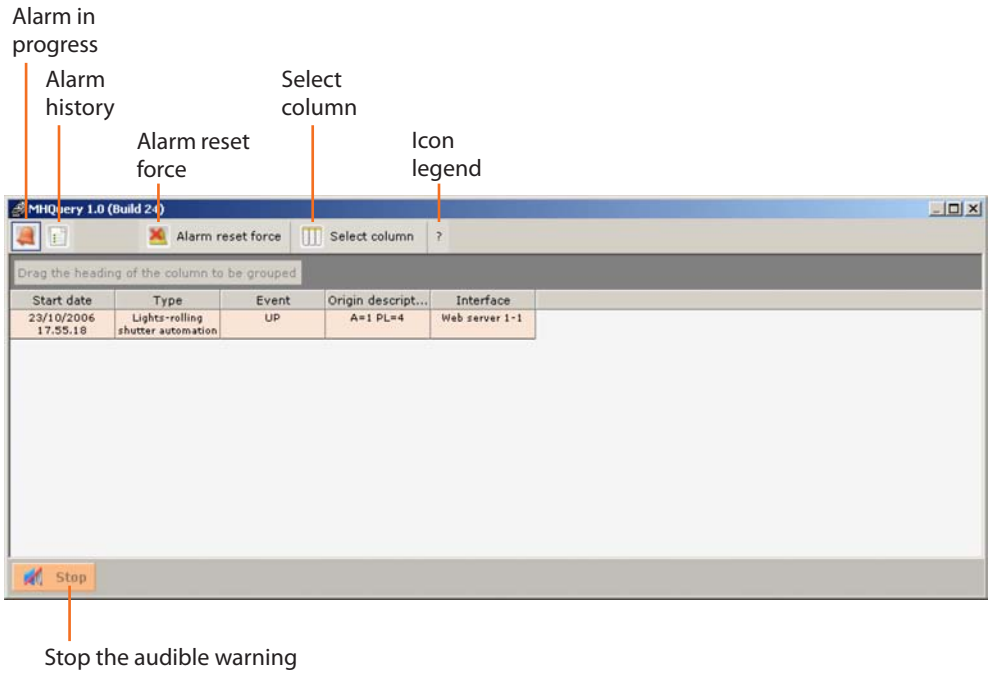
Flashing: in progress
Steady: alarm to be dealt with/ closed

When the system generates an alarm, a visual indication appears and a sound signal is played (if set in Options).
The alarms can be generated by an object (SCS actuator or SCS mover, see relevant sections), or by the burglar-alarm system (see "Burglar-alarm unit object" section).
The **Alarm** screen shows different functions based on the initial selection of the alarm management mode: "Basic" or "Advanced".

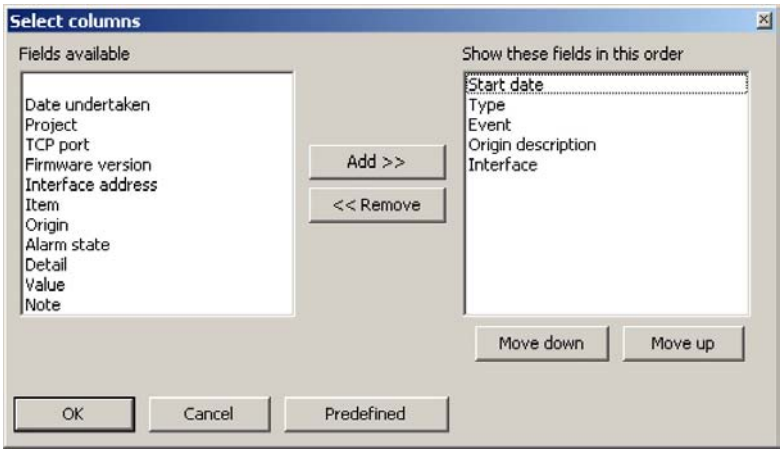
Alarms – "Basic"



When the system has generated an alarm indication click on the **Alarm** icon. The **Alarm being given** window appears.

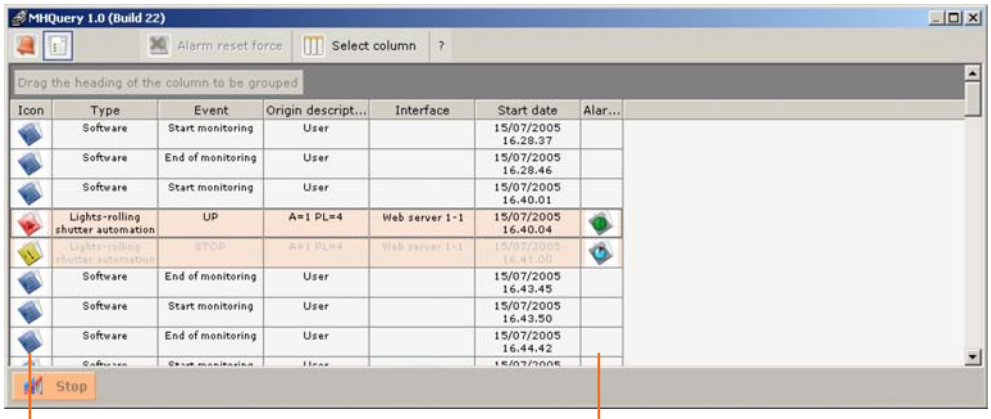


This window displays some data on the alarm. Decide which data must appear by clicking on the **Select column** pushbutton.



The **Select column** window selects which fields should be displayed in the columns, in both the **Alarm in progress** and **Event history** windows. Various types of information on the event will be displayed depending on the fields selected.

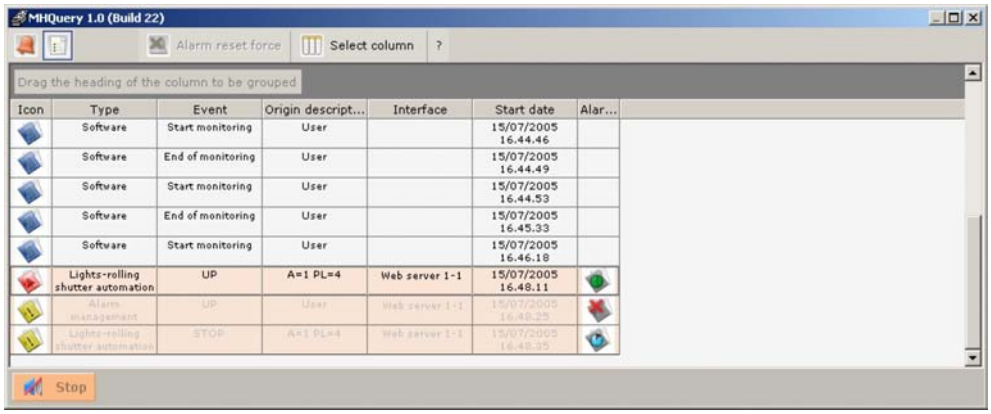
The events recorded by the system (alarms and messages) are listed in the **Event history** window.



"Icon" column

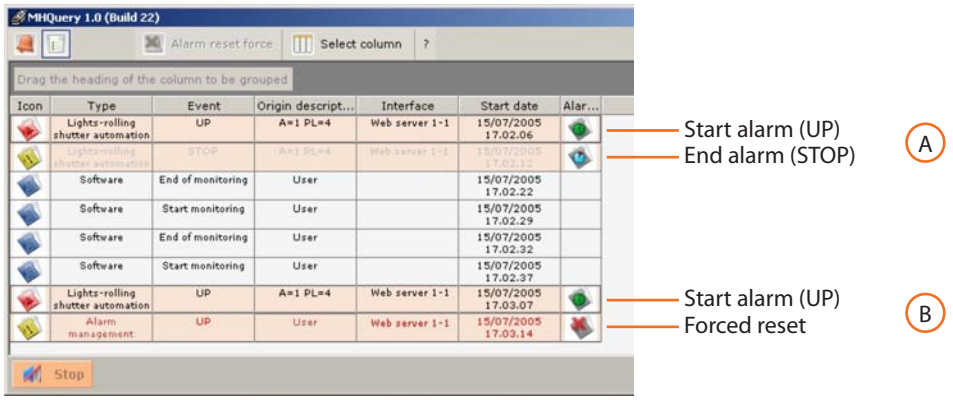
"State" column

Further information may be obtained on the alarm state by means of the colouring of the data in the lines - red for the alarms which have not been dealt with and grey for the closed alarms.
On selecting an alarm all the events linked to the alarm itself are displayed (pink background). In this way its "history" can be reconstructed.



After displaying the alarm in the **Alarms in progress** window its reset can be forced by pressing the **Alarm reset force** pushbutton or on the field checking its cause.
In the first case the alarm is no longer present in the **Alarms in progress** window but remains active on the field, until it is reset physically.

Example:
An SCS mover object has been configured to generate an alarm when it receives an UP command (rolling shutter raised); to end the alarm, send a STOP command or reset the alarm by pressing the **Alarm reset force** key.
If the alarm comes from a burglar alarm unit the unit must be switched off and on again.

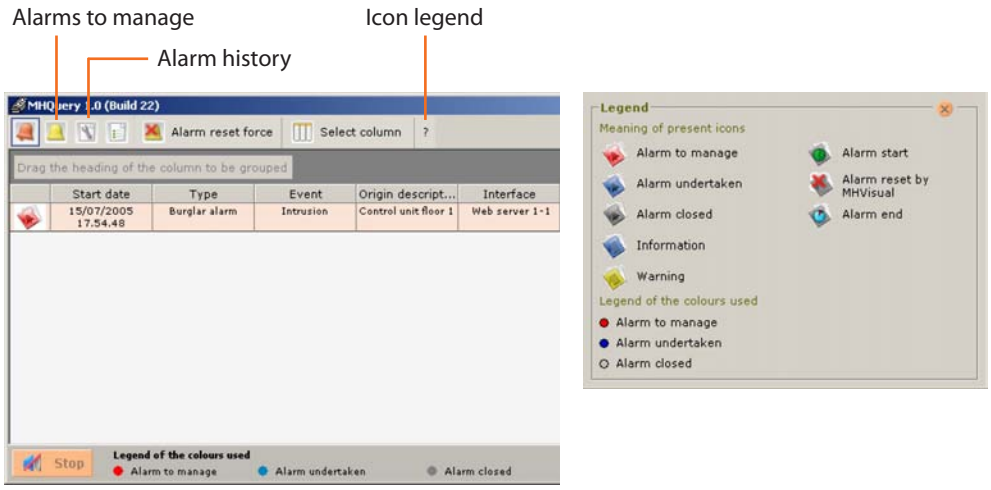


In the first case (Alarm A) the alarm has been dealt with in the field (sending a STOP rolling shutter command) and thus the cause of the alarm has been dealt with. In fact the colouring is grey, which indicates that the alarm is closed.

In the second case (Alarm B) it has not been dealt with in the field, but a forced reset has been performed, so that the alarm has not been dealt with (red) and thus even if it is no longer present in the alarm window it is still open.

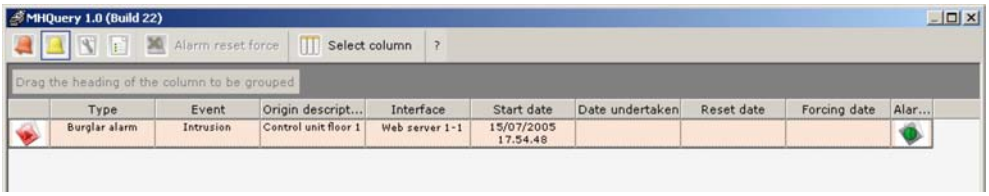
Alarm – "Advanced" sector

If the type of project has been set as "Advanced", the alarms are managed differently. In fact the project also has the **Alarms to manage** and **Alarm history** sections. There are new icons as well, as can be seen in the **Legend** window.

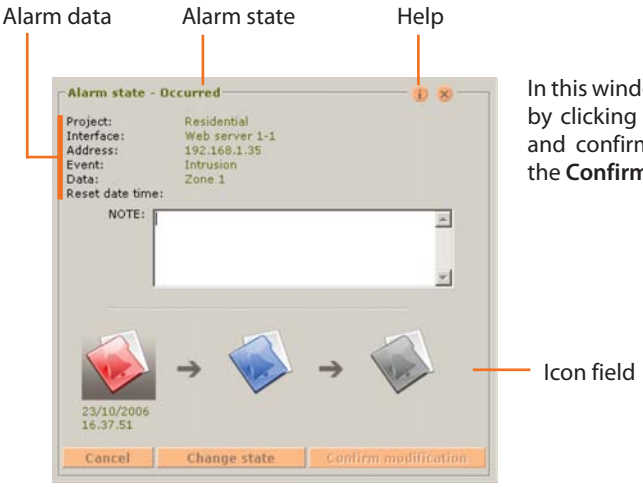


In this mode the alarm can be undertaken and then dealt with. The undertaken alarm becomes blue.

Following an alarm warning click on the pushbutton to enter the **Alarms to manage** window.



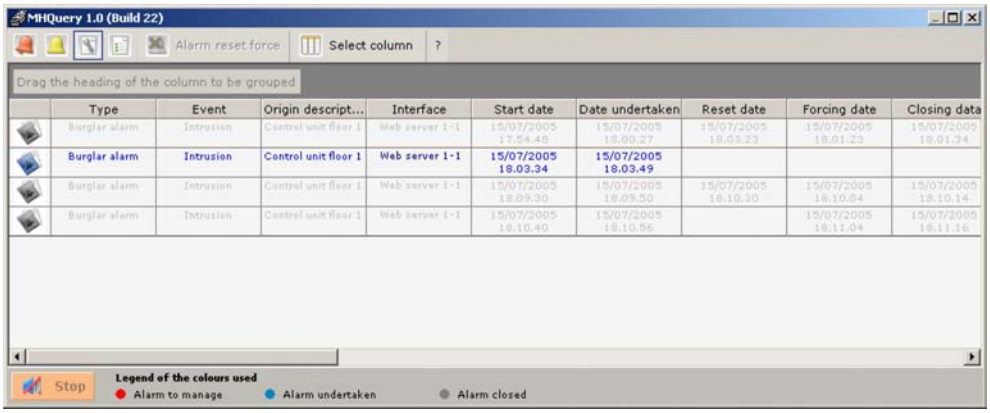
Double clicking on the line of the alarm to be managed the following window appears:

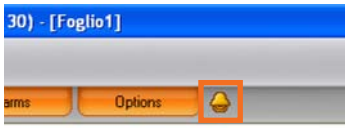


In this window the alarm state can be changed by clicking on the **Change state** pushbutton and confirming the selection by clicking on the **Confirm modification** pushbutton

- Cancel — cancels the operation
- Change state — changes the alarm state
- Confirm modification — confirms the change of state

The alarms are displayed in the **Alarm history** window where the alarm state can be checked on the basis of the icon in the **State** column and the text colour.

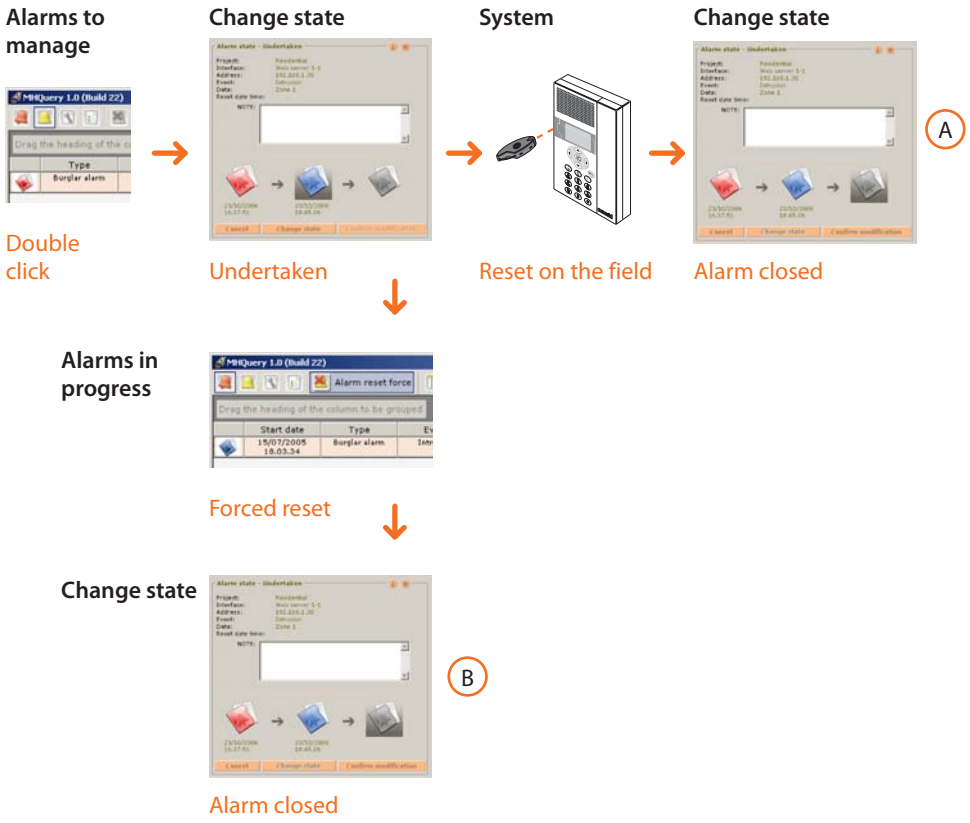




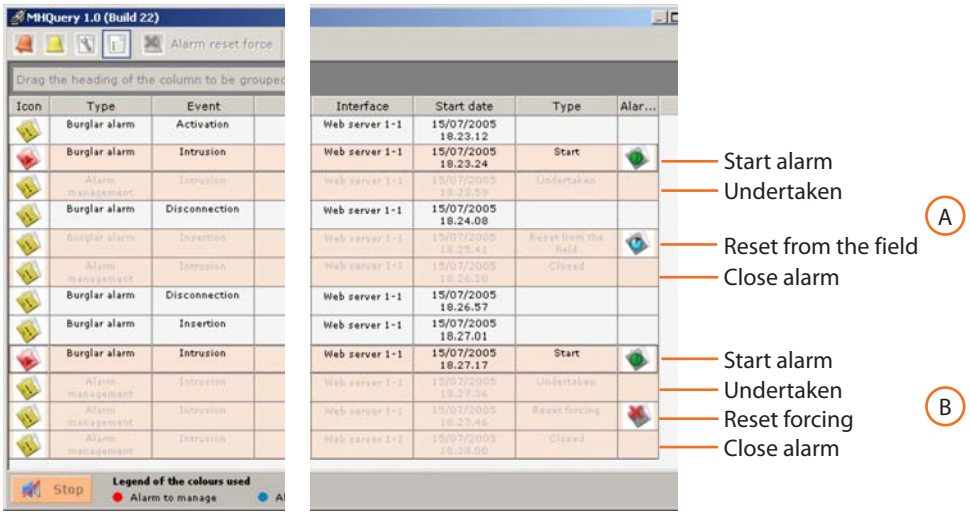
Example: the burglar-alarm unit has given a burglar-alarm alarm in zone 1.

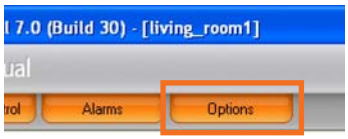
The "Alarms" window shows a visual indication and a warning sounds.

Click on the **Alarm** icon. The **Alarm being given** window appears showing the cause of the alarm and where it is coming from.
Then enter the **Alarms to manage** by clicking its key. Now follow the diagram below:



The **Event history** window displays how the alarms have been managed.

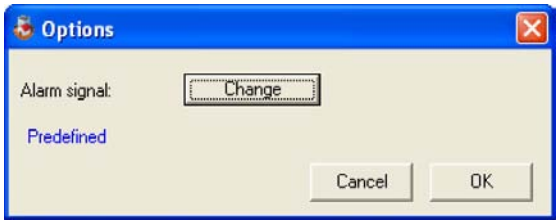




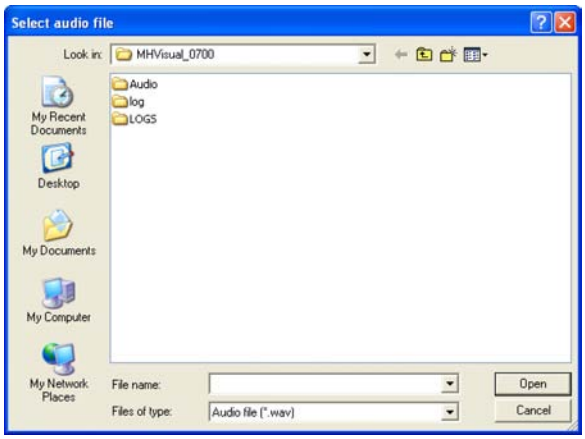
6.3 Options

The audible warning which is given following an alarm can be customised in the **Options** window.

Clicking on the **Options** pushbutton opens the following window:



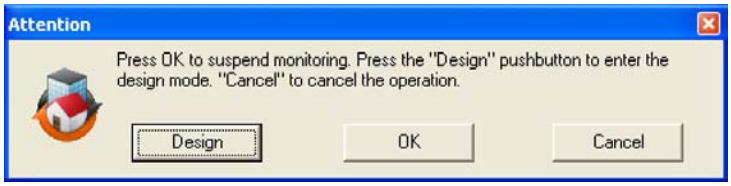
Press the **Change** pushbutton to customise the audible warning. If not a predefined sound will be played.



> Select a .wav file
> Click on the **Open** pushbutton and then **Ok**

Quitting the Monitoring area

The following window appears:



> Press the **Design** pushbutton to return to the design mode
> Press the **Ok** pushbutton to suspend monitoring without quitting.

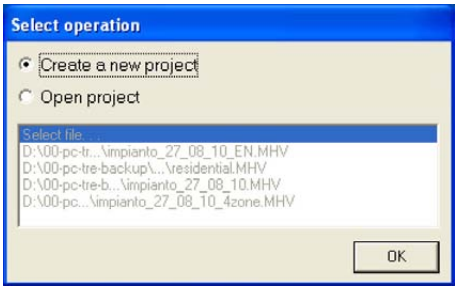
7. Project example

Considering the variety of types of project which MHVISUAL can produce, this chapter gives a project example as an indication.

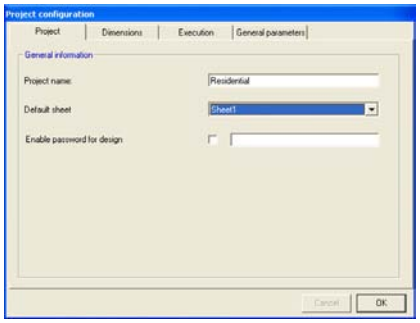
Project features:

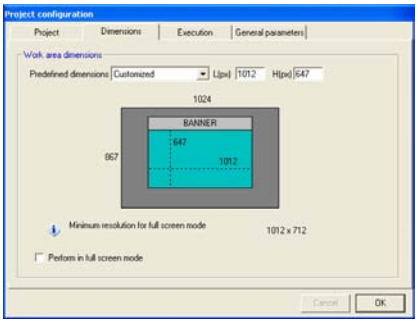
- "Basic" alarm management
- Control lighting, automation, controlled loads, burglar alarm, temperature control and sound systems
- • general, room, group and scenario commands

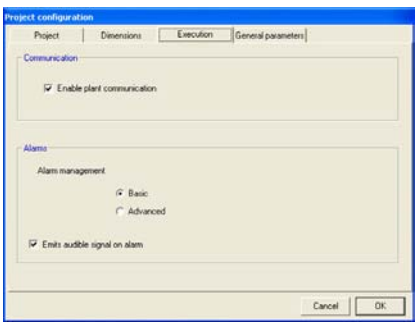
Start MHVISUAL and create a new project



the **Project configuration** window appears



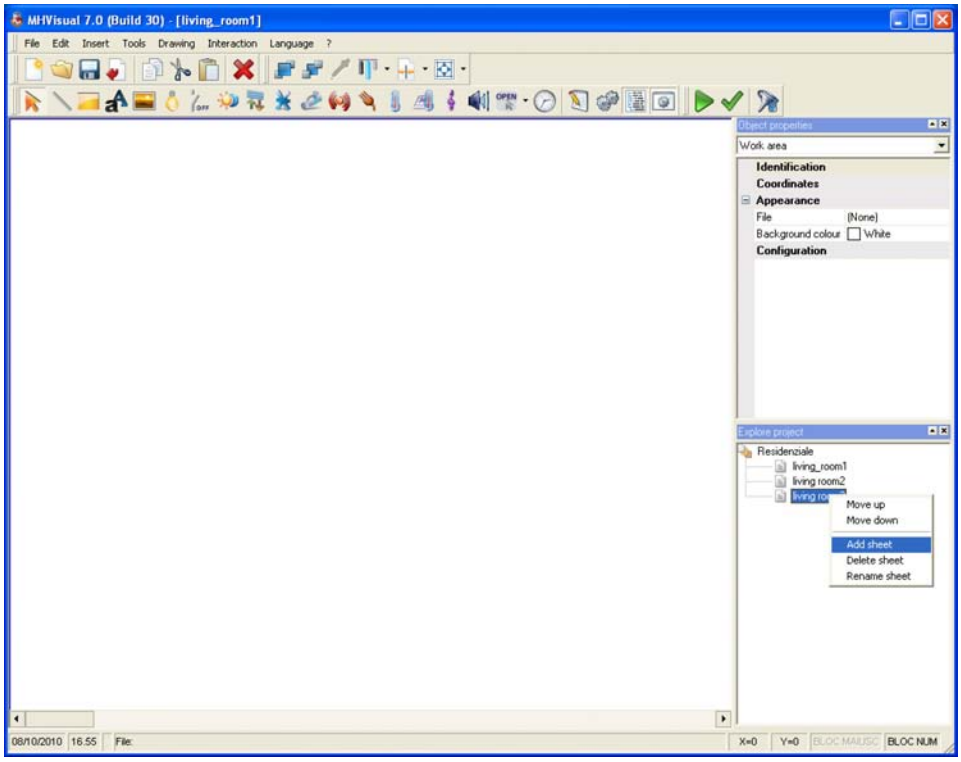




For project name enter "Residential", for work area enter the size 1012 x 647 pixels, and select "Basic" alarm management.

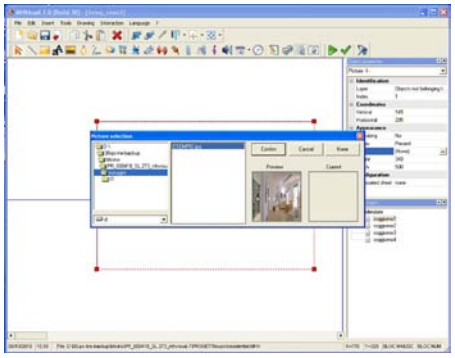
Enable communication with the field.

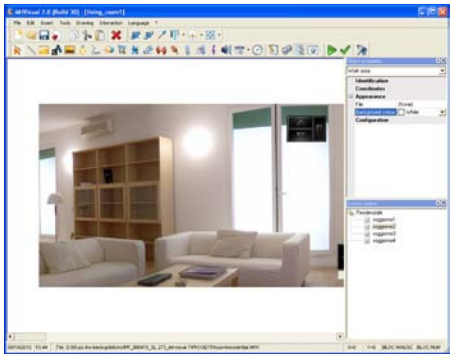
Create one or more sheets for each apartment room. For example 4 sheets for the living room in which later we will enter 4 different views.

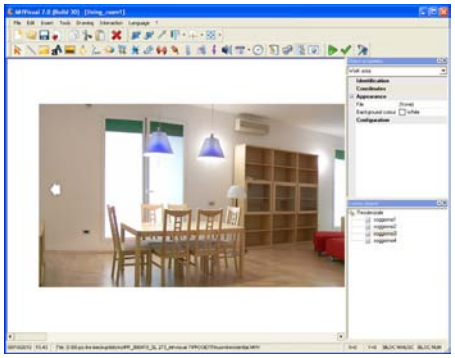


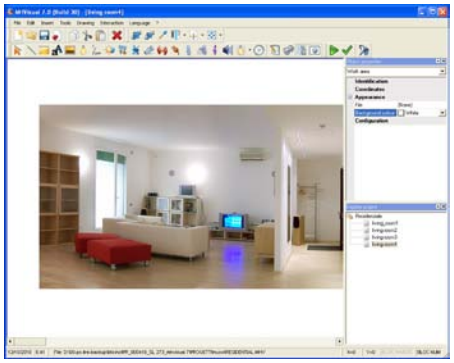
In each sheet enter a picture* (drawing, photo etc.) which represents the room.

**Do not insert larges images in the working area: if necessary, reduce using graphic editors.*

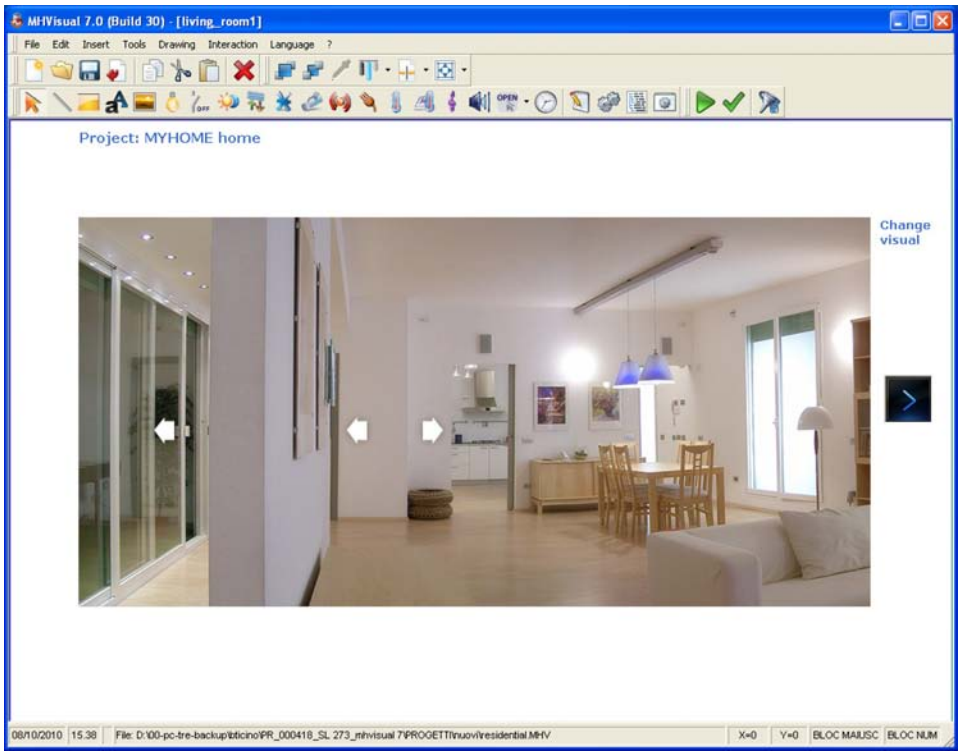




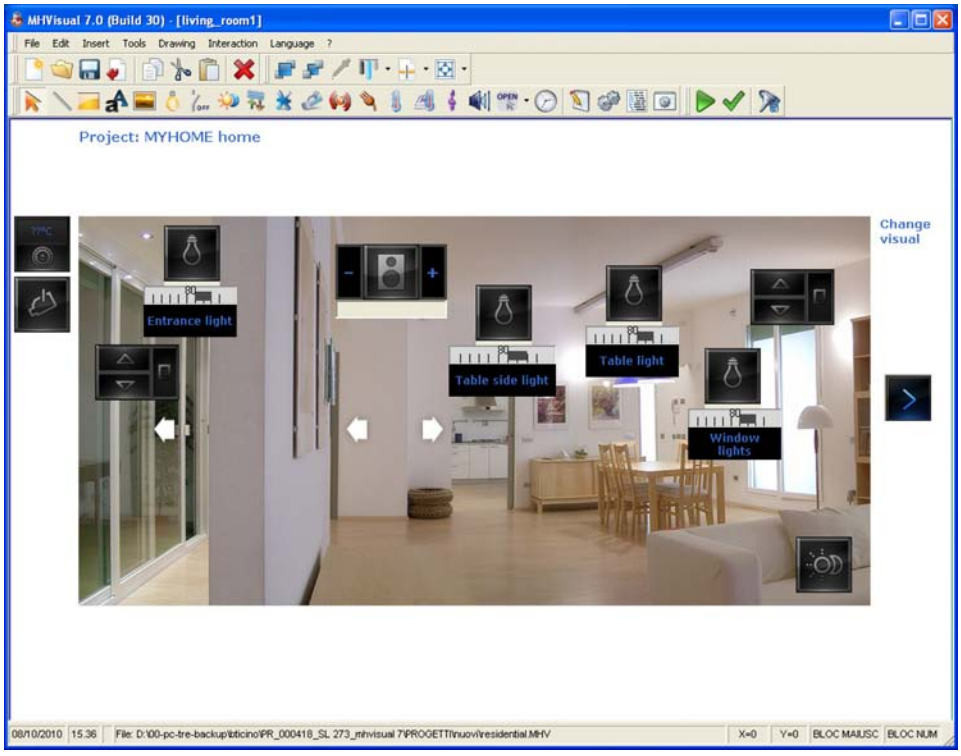




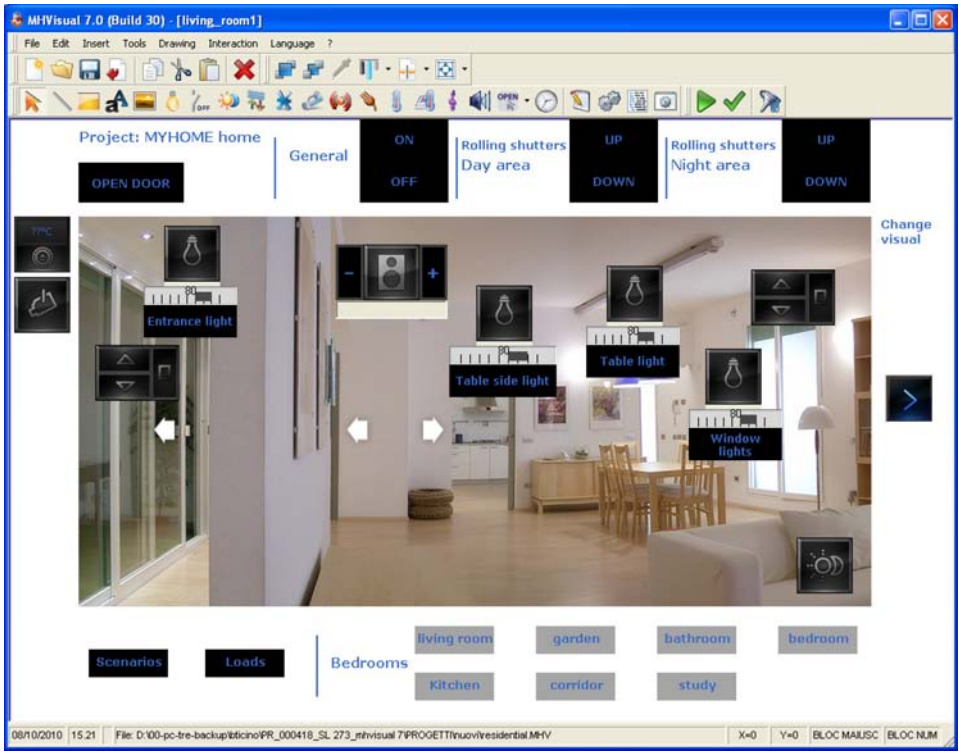
By means of the rectangle, text label and picture objects, enter connections to move from one view to another.



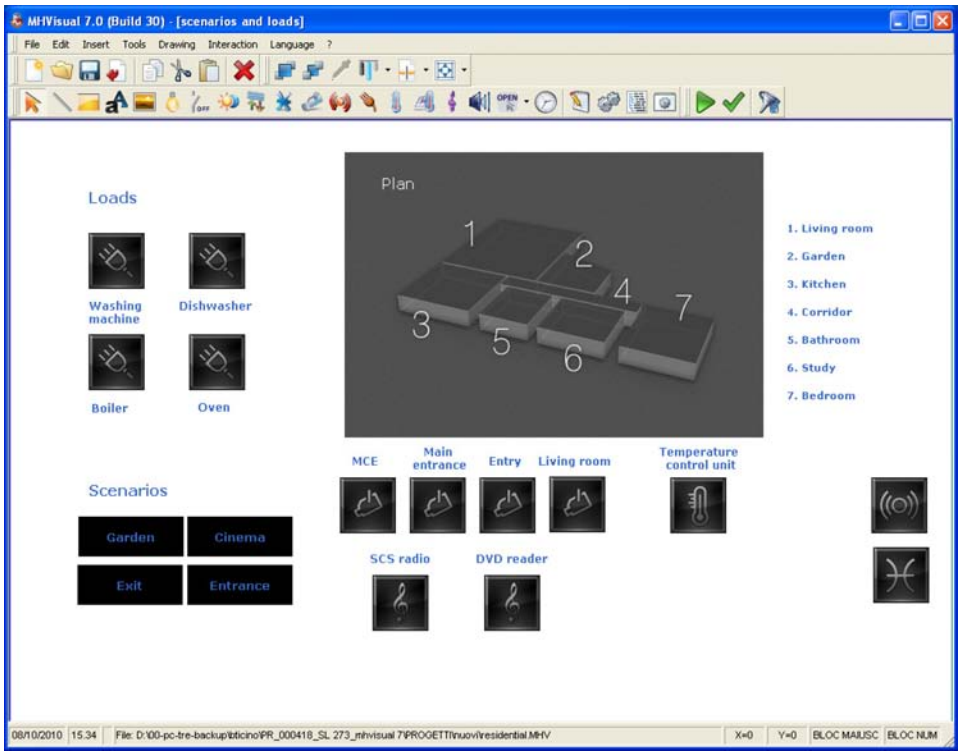
Enter objects and configure them like the devices in the system.



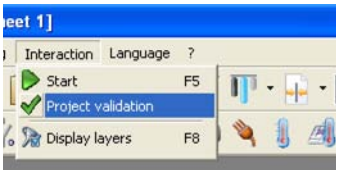
Create general, room, and group Open commands and configure them following the indications of the corresponding paragraphs and then copy them for the other rooms.
Using the text label objects, create links to move from one room to another.

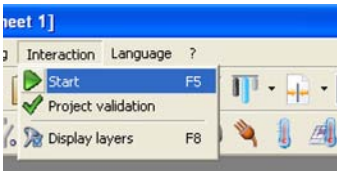


Create a sheet where you can enter objects and commands (e.g. load control, Web Server, sound source, etc.) so that the whole apartment is kept under control in a single window.

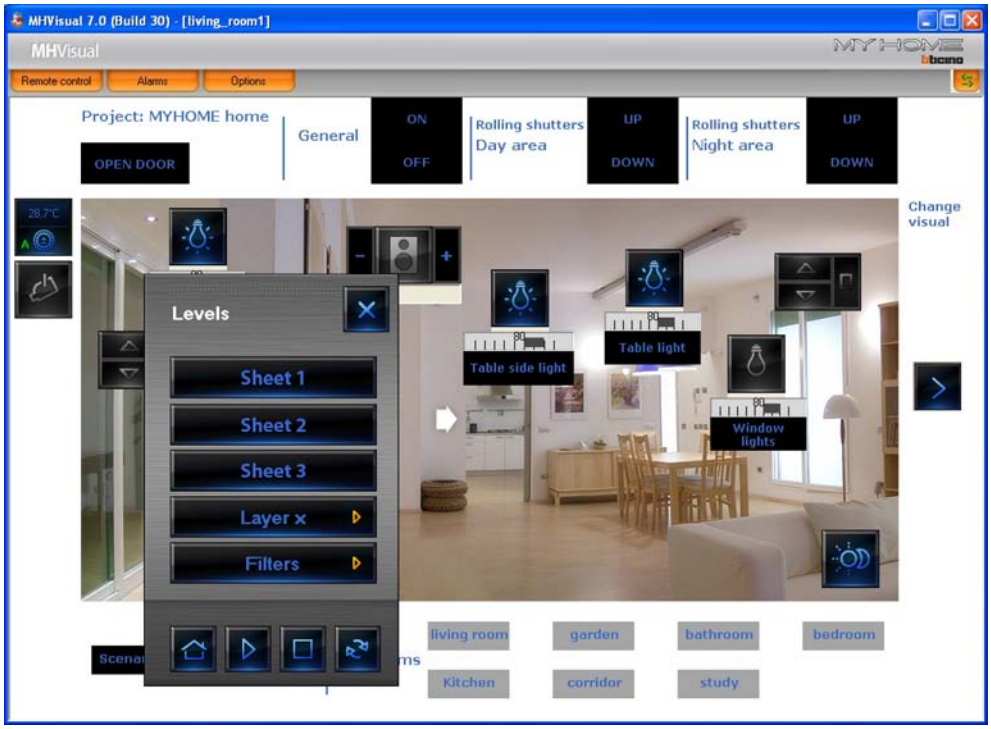


From the **Interaction** menu select **Project validation** to check that there are no configuration errors in the objects entered. Then, selecting **Start**, start monitoring the system.





At the end of the operation you can interact with the system in the Monitoring area.



1. **Once the monitoring has started, without receiving configuration warnings or errors, why can I not activate a light point?**

   You may have made one of the following errors:

   a) entered an incorrect IP address,

   b) set a configuration which does not correspond to the real one,

   c) entered a mover instead of an actuator or vice versa,

   d) configured the actuator as dimmer while the actuator on the field is not.

2. **Why can I not close the application by clicking on the close window key ?**

   You must display the remote control and stop the monitoring by clicking on the "stop" key . Press **OK** and finally click on the close key .

3. **I cannot start the monitoring and it tells me to check the configuration. Why?**

   You may have some problems with the connection to the ethernet network.

4. **How can I make a multiple selection in the Design area?**

   Keeping the "shift" key pressed click with the left mouse key on all the objects to be selected or click with the left mouse key on one point and move the mouse to enclose the objects of interest in the outlined rectangle you are drawing.

5. **As soon as I start the monitoring some objects are not on line. Why?**

   They are not effectively on line or it is an actuator which has been configured as PUL both on the field and in the MHVISUAL project but not in the Web Server system configuration file.

6. **What happens if I create 2 SCS objects (SCS actuator or SCS mover) which are not totally identical in the SCS configuration?**

   MHVISUAL checks automatically when it starts the monitoring. If the configuration is correct the project enters the monitoring mode and the two objects can be commanded. If not, depending on the type of fault found it may display warnings, which do not affect correct projection operation, or alarms. In the latter case you must correct the errors found before continuing the monitoring.

7. **In a project I have configured everything correctly but I do not find everything on line. Why?**

   Web Server isn't reachable or it has an OPEN password different from the project.

8. **I have 2 actuators in the "Design" area which I cannot put on the same horizontal line by means of the up-down keys in the coordinates area of the "Object properties". Why?**

   Just manually edit the coordinates of one of them in relation to the other. The up-down command in fact only moves the object by 5 pixels. Probably one of the two objects was configured manually, with the coordinates being entered directly.

9. **After a general or room ON command why does the program show a light as switched on even if it is not?**

   Check whether the actuator is configured as PUL both on the field and in the Web Server system configuration file and the MHVISUAL project.

10. **I have set an SCS dimmer command object for a room but when I vary the percentage one of the dimmers does not respond. Why?**

    The actuator is not a dimmer or it has been configured as PUL and not entered in the Web Server system configuration file.

11. **Can I make a project start automatically when Windows starts?**

    Yes, the project must be password protected (see paragraph " Automatic project startup").

12. **How do I change the IP or the OPEN password for several objects at the same time?**

    Make a multiple selection of similar objects and edit the data in the object properties window. If, for example you do not find the IP the objects selected may contain an object which does not have an IP in its configuration.

13. What is the difference between "Basic" and "Advanced" alarm management?

The difference is that in "Basic" alarm management, the "Current alarm" (list of alarms which have occurred and are not yet re-entered and where the alarm can be reset) and the "Event log" (list of the alarm and system events). The "Advanced" type management also includes the "Alarm log" and "Alarms to manage" lists, to enable to management of the alarm (reset, undertaken and closure).

14. Can I interact with the MHVISUAL program with a touch screen or tablet PC as well?

Yes, compatible with the hardware requirements.

15. When monitoring do I have to use the remote control to change from one sheet to the other?

No, you can also use the links between the various sheets if they have been created in the Design phase.

BTicino SpA
Via Messina, 38
20154 Milano - Italy
www.bticino.com