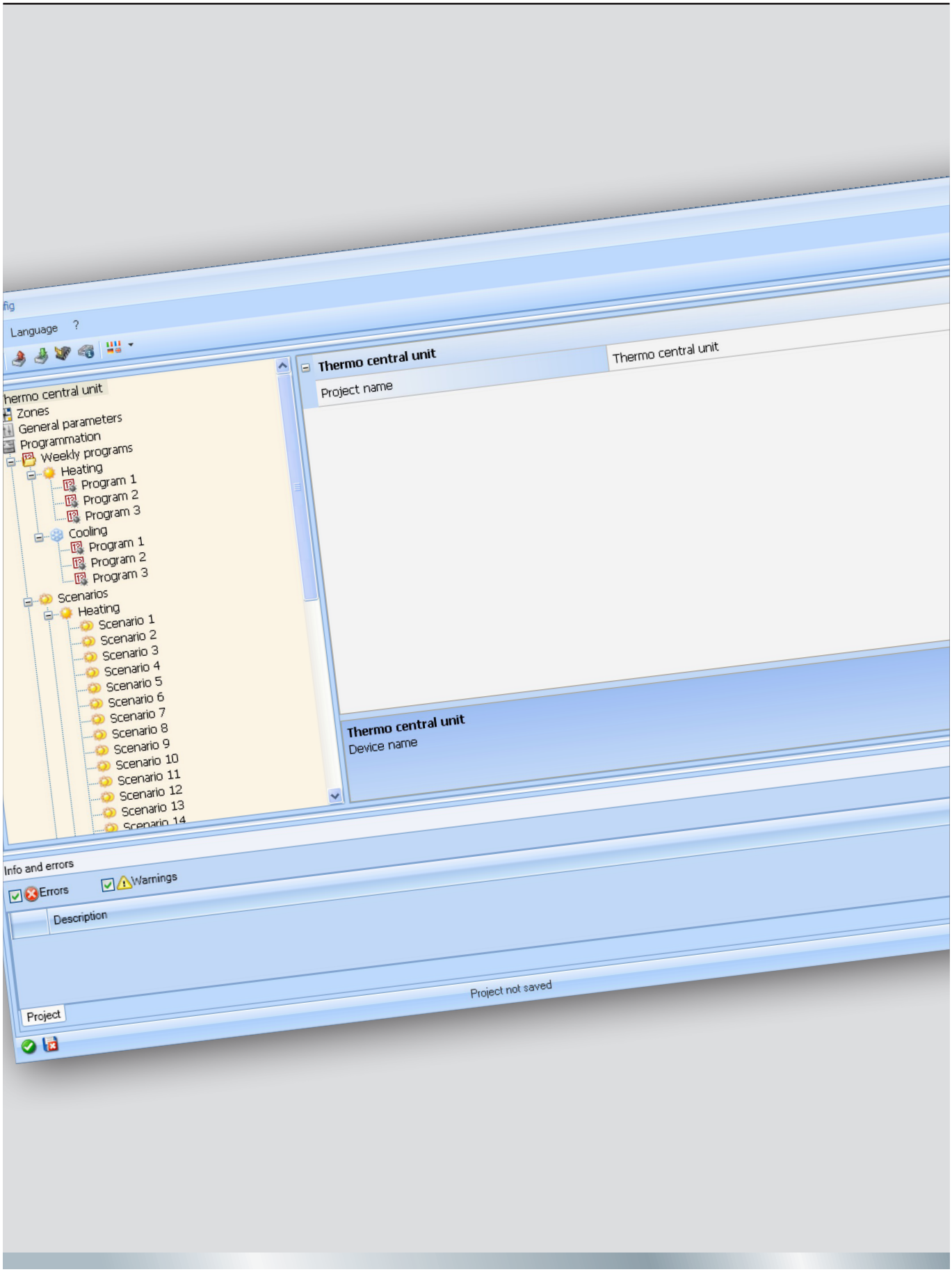
ThermoConfig

Software manual

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Content

1. General description

The **ThermoConfig** software is a tool that allows the user to easily and intuitively determine or change the configuration to be transferred to the Temperature control Unit 674 56, thereby determining the structure of the system and the profiles of the different programs and scenarios to be performed.

Warning: ThermoConfig software is the fundamental tool for the configuration of the temperature central unit, which for the purpose of simplification shall be called "**device**" hereinafter in this manual. The content of this software is protected by exclusive rights owned by the company Legrand.

The functions marked with the FP symbol refer exclusively to systems managed with Fil Pilote (Pilot Wire) system.

2. Minimum system requirements

Hardware requirements

- PC with Pentium 2 GHz or similar
- 512 MB RAM memory (XP) - 1 GB RAM memory (Vista, 7)
- Video resolution 800 x 600, 256 colours
- CD-ROM or DVD reader
- Hard Disk: 500 MB minimum free space available

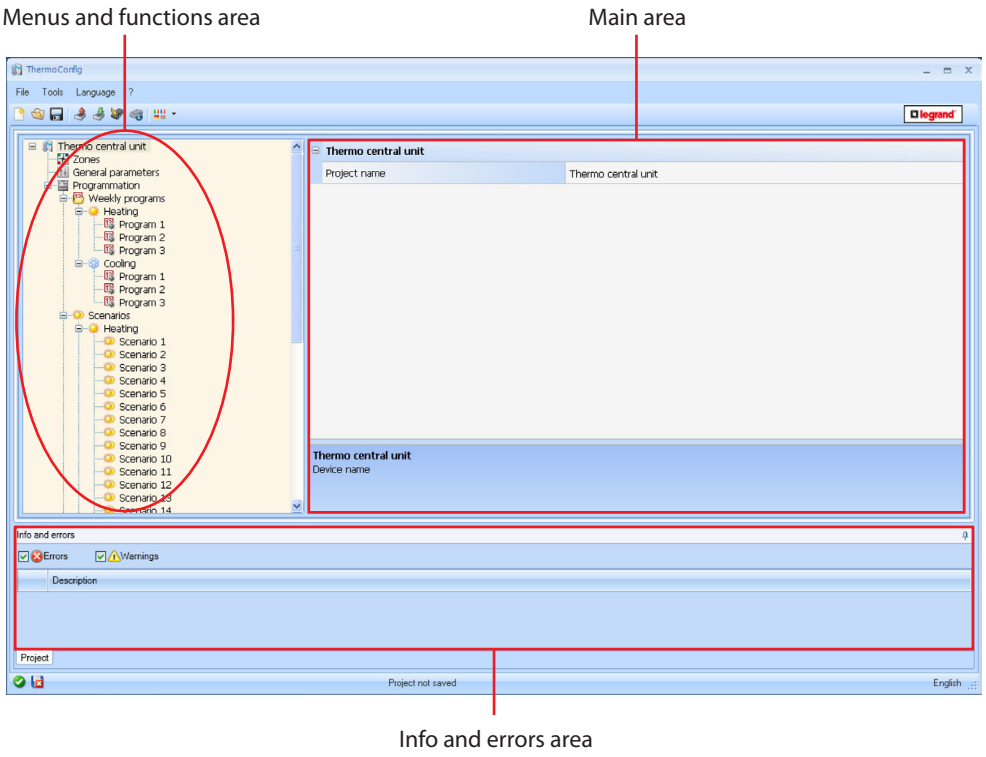
Software requirements

- Windows XP SP2 32 BIT, Windows Vista 32 BIT, Windows 7
- Microsoft™ framework.NET 3.5 SP1

3. Fundamental concepts

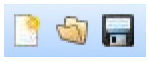
3.1 Start screen, menus and pushbuttons for the selection of the functions

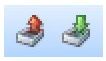
The main screen of the ThermoConfig software shows the following areas:



All the functions that can be performed with ThermoConfig can be selected by clicking the icons on the toolbar, or by selecting the appropriate items from the pull-down menus.

The toolbar includes the following functions:


Creating, Opening and Saving the configuration files


Receive and Send the configuration

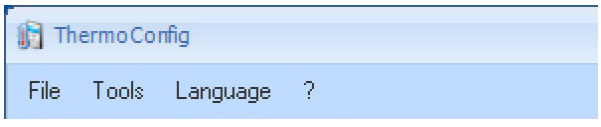

Device firmware update

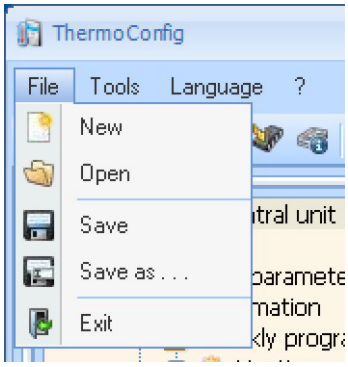

Request device info


Application language selection


Connection to the hyperlink www.Legrand.fr

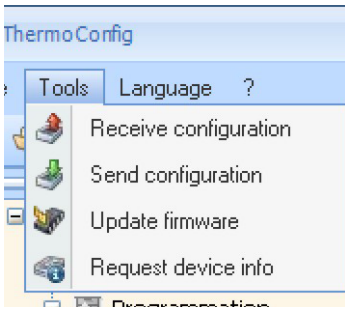
The pull-down menus include the following functions:





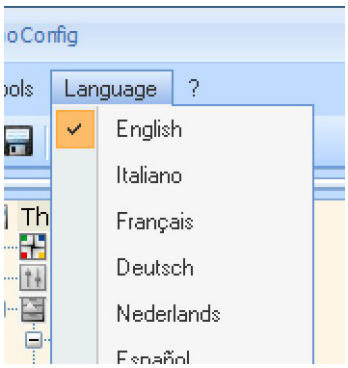
“File” menu

- **New**
  Create a new project
- **Open**
  Open an existing project file
- **Save**
  Save the current project
- **Save as...**
  Save the current project prompting the user to enter a name
- **Exit**
  Exit the program



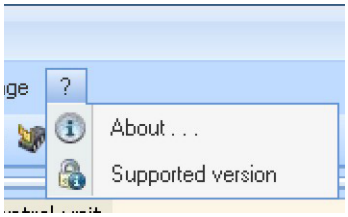
“Tools” menu

- **Receive configuration**
  Acquire and display the configuration currently stored in the device
- **Send configuration**
  Send the configuration to the device
- **Update firmware**
  Update the device resident software
- **Request device info**
  Display some technical information



“Language” menu

- **Language**
  Select the application language

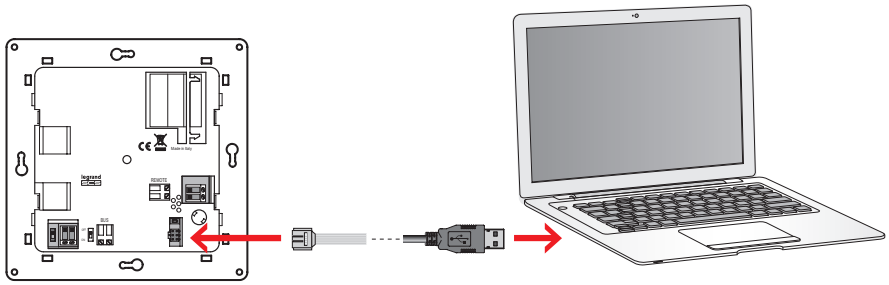


“?” menu

- **About...**
  Display some information about the ThermoConfig software program
- **Supported versions**
  Display a list of device Firmware versions supported by the ThermoConfig software

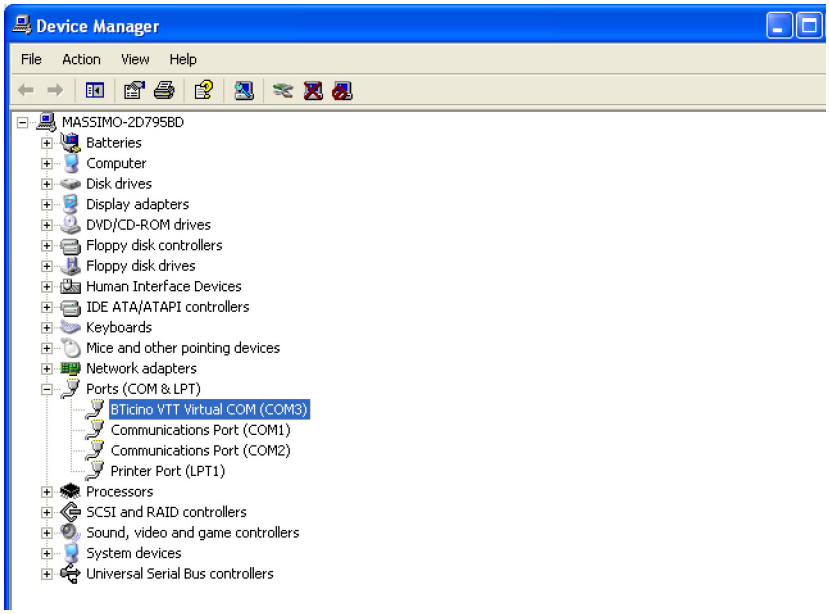
3.2 Connecting the device to a PC

To perform the Download configuration, Upload configuration, Firmware Update and Request device info functions, the user must first connect the device to a PC, and ensure that the correct port has been selected. This operation must be performed as follows:
Connect the 49243 programming cable to a PC USB port.



In order for communication to take place, the device must be connected to the BUS and powered.

The device connected using an 49243 programming cable is recognised by the PC as a virtual port (VIRTUAL COM). To know the number of the COM port assigned to the device open the Device Manager application from "**Control Panel/System/Hardware**".



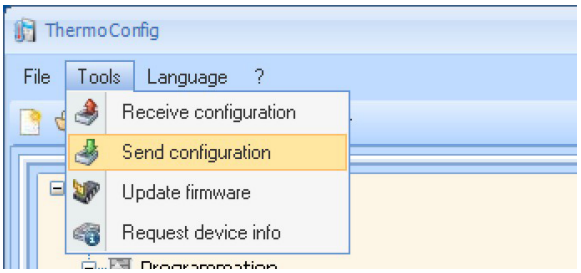
If a project has been created and then just saved as a file, no connection to the device is necessary.

3.3 Send the configuration

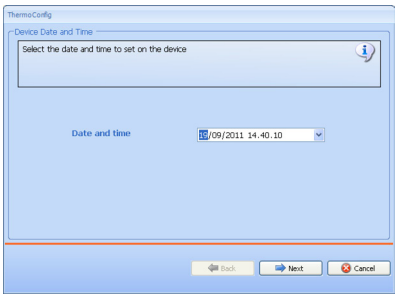
Once the project configuration procedure has been completed, the file must be saved in the working directory, and then sent to the device (Send configuration);
It is also possible to receive the configuration file from the device (Receive configuration function) to perform checks and/or make changes.
In both cases, it will be necessary to connect the PC to the device using the 49243 serial cable. This must be connected to the PC serial port and to a specific connector.

To activate this function:

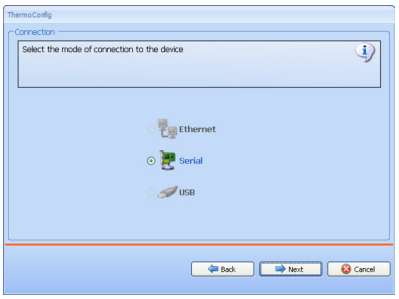
- **Send configuration**
  "**Tools**" pull-down menu

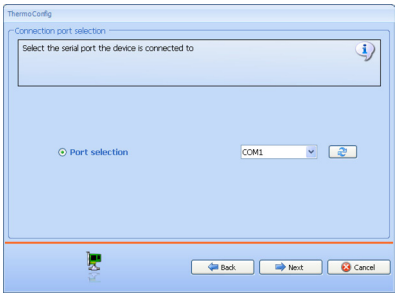


When "**Send configuration**" is selected, a window appears, prompting the user to set the Date and Time.

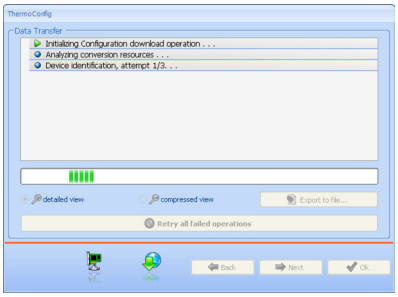


Click "**Next**" to select the mode of connection between the device and the PC





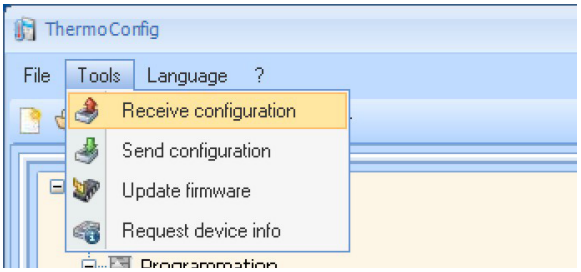
Select "**Next**" to transfer the project to the device.



3.4 Receive the configuration

To activate this function:

- **Receive configuration**
  "**Tools**" pull-down menu

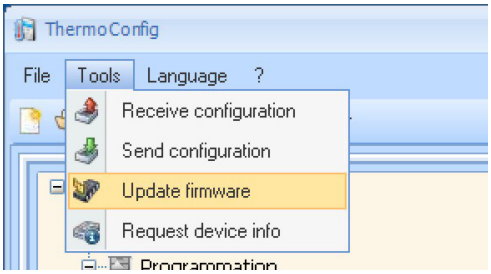


A mask is displayed, for the selection of the mode of connection to the device (for the connection procedures see the **Send Configuration** section).
After selecting the connection mode click "**Next**" to load the project currently stored on the device.

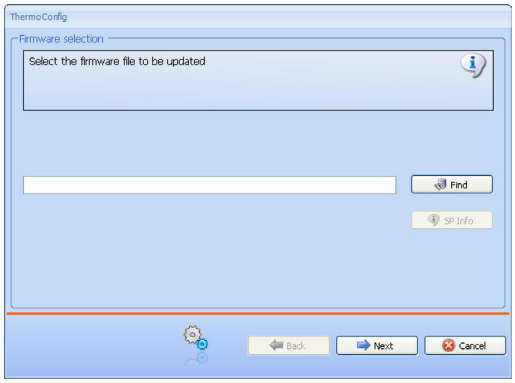
3.5 Update the Firmware

To activate this function:

- **Update firmware**
  "**Tools**" pull-down menu



The following window appears, where the user can search for the folder containing the Firmware file, with **.fwz** extension (compressed file).



Select the file and click "**Open**" to continue.

A mask is displayed, for the selection of the mode of connection to the device (for the connection procedures see the **Send the Configuration** section).

3.6 Request device info

It allows to display some information relating to the device connected to the PC.

Procedure:

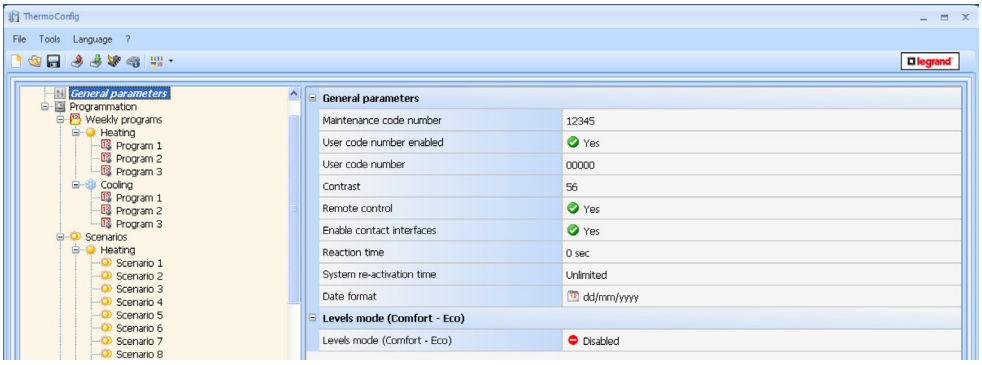
- Connect the device to a PC as indicated in the corresponding section
- From the **Tools** pull-down menu select Request **device info**.

A mask is displayed, for the selection of the mode of connection to the device (for the connection procedures see the **Send Configuration** section).
After selecting the mode of connection, click "**Next**" to open a screen showing the device hardware and software features.

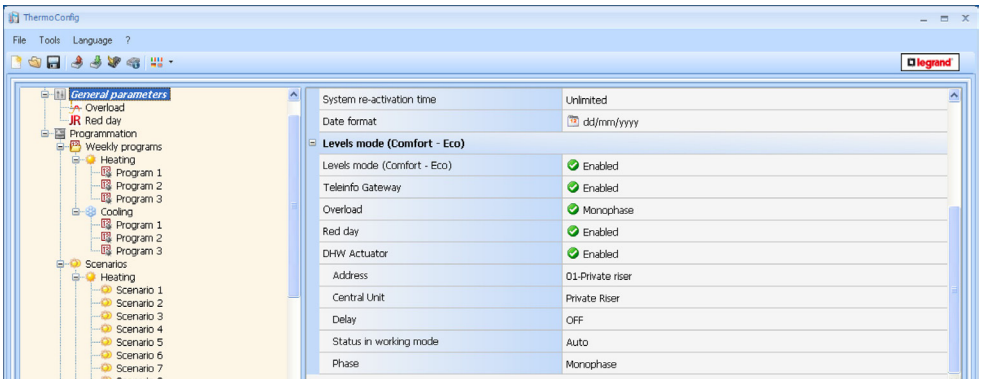
4. Creating a new project

4.1 General parameters

This section can be used to set the configuration parameters for the device



- **General parameters**
  Maintenance code number: customise the "**Maintenance code**" (default 12345).
  User code number enabled: enable/disable the "**User code number**".
  User code number: if "**User code number**" is enabled enter a 5 digit code (default 00000).
  Contrast: enter a value between 0 and 100 to set the device display contrast level (default 56).
  Remote control: enable/disable remote control.
  Enable contact interfaces: enable/disable the contact interface management function.
  Reaction time: zone switch off time delay after the contact has been opened.
  System re-activation time: zone switch on time delay after the contact has been closed.
  Date format: select the device date display format.



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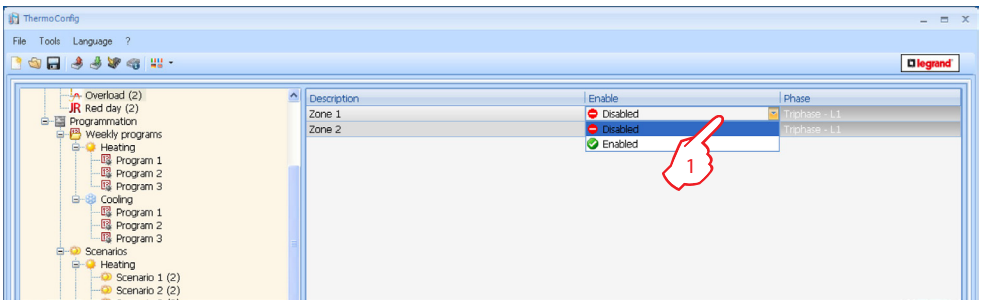
- **Levels mode (Comfort-Eco)**
  Levels mode (Comfort - Eco): to enable level management mode instead of the traditional value management mode (T1, T3).
  Teleinfo Gateway: enable in case of Fil Pilote (Pilot Wire) system.
  Overload: In case of Fil Pilote (Pilot Wire) system, it enables/disables the system overload function, specifying the type of system (single-phase, three-phase).
  Red day: in case of Fil Pilote (Pilot Wire) system, it enables/disables the red day function on the system.
  DHW Actuator: in case of Fil Pilote (Pilot Wire) system, it enables/disables the management of sanitary hot water on the system.
  Address: Enter the sanitary hot water actuator address.
  Central Unit: enter the BUS the central unit belongs to.
  Delay: select the tripping delay for the sanitary hot water actuator.
  Status in working mode: select the working mode of the sanitary hot water actuator;
  ON = always on, OFF = always on, AUTOMATIC = depending on the tariff.
  Phase: if the Overload function is enabled, select the phase used by the sanitary hot water actuator.

Overload

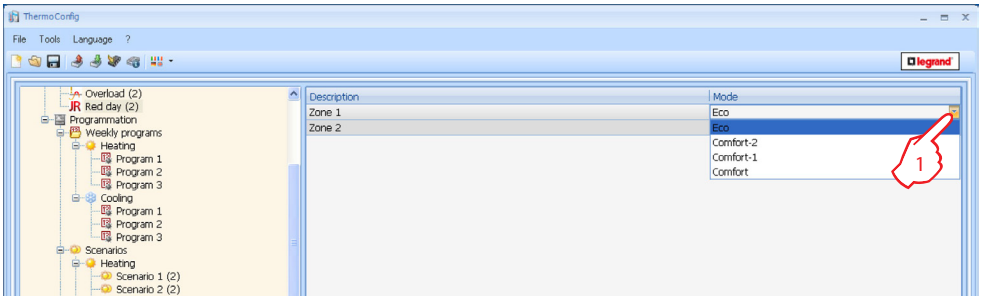
This can be used to enable/disable the overload function for one or more zones. In case of electric system overload, the heating system will be disabled in those zones for which the function has been enabled.



1. Enable/disable the overload function.

Red day

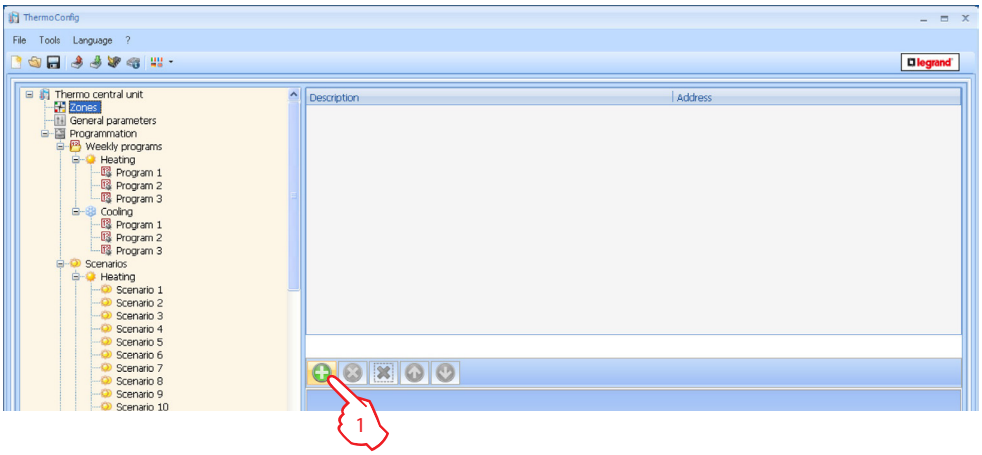
It can be used to select the maximum possible temperature level to be linked to the red day for one or more zones (only if the zone mode is not set to manual).



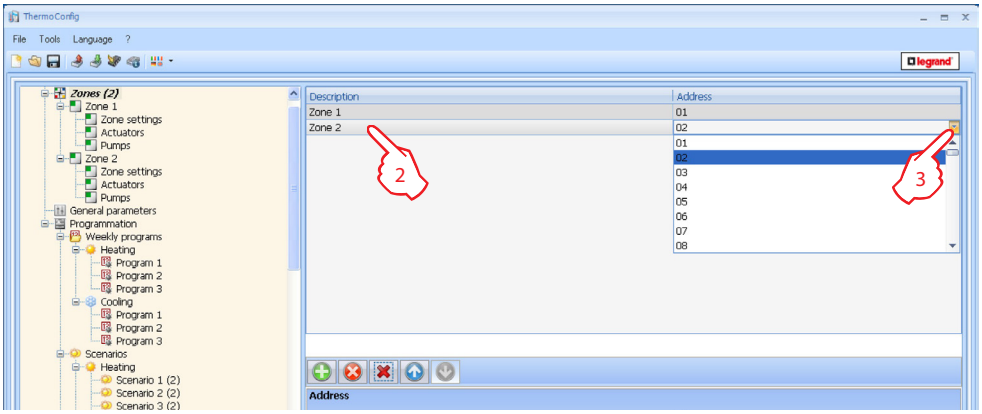
1. Select the temperature level to be linked to the red day.

4.2 Zones

The "**Zones**" section can be used to enter up to a maximum of 99 zones, for which it is possible to customise the description and enter an address.



1. Click  to add one or more zones.



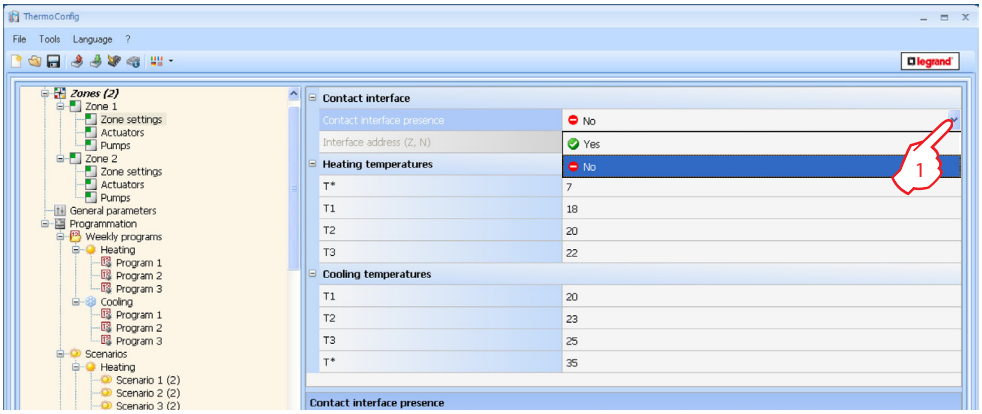
- Add a zone
- Delete the selected zone
- Delete all zones
- Move the selected zone up
- Move the selected zone down

2. It is possible to enter a customised description of the selected zone.

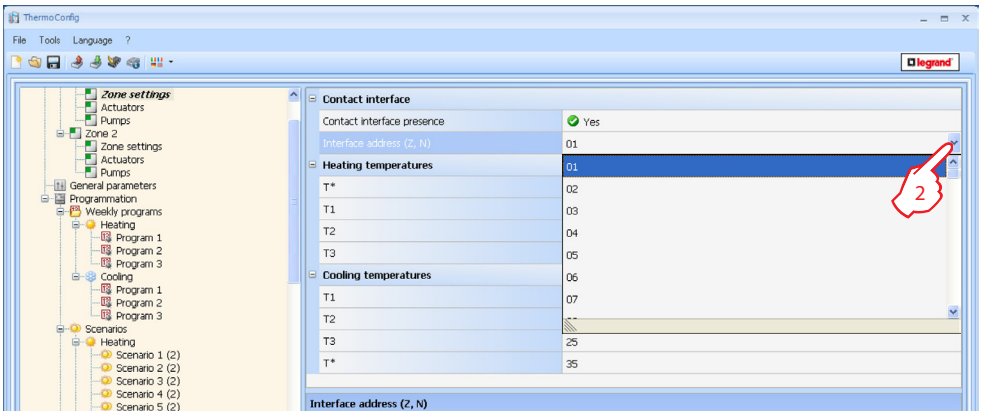
3. Assign the address to the zone

Zone settings

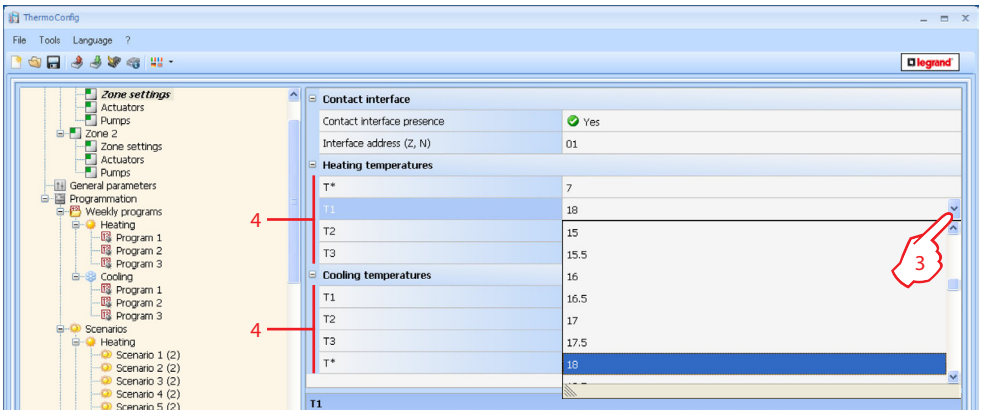
The "**Zone settings**" section of each zone entered can be used to display the zone settings.



1. Select if the contact interface is present or not.



2. If the contact interface is present assign the address associated to the same.



3. Customise the temperature level between 4 °C minimum and 39.5 °C maximum.

4. Repeat the customisation operation for all temperature levels (heating/cooling).

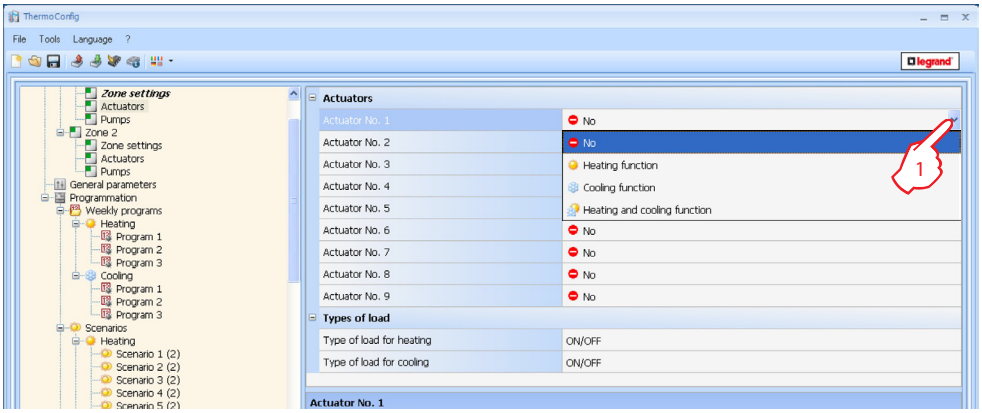
FP In case of Fil Pilote (Pilot Wire) system, the values must not be set.

For level management:

WINTER	SUMMER
T* = Antifreeze	Thermal protection
T1 = Eco	Comfort
T2 = Comfort -2	Comfort +2
T3 = Comfort	Eco

Actuators

From the "**Actuators**" section of each zone included it is possible to select up to a maximum of 9 actuators to associate to the zone itself, as well as the type (heating, cooling, heating+cooling) and the type of load for the function selected (ON/OFF, Open/Close, FanCoil, Gateway, Fil Pilote (Pilot Wire).



1. Select the type of function to assign.

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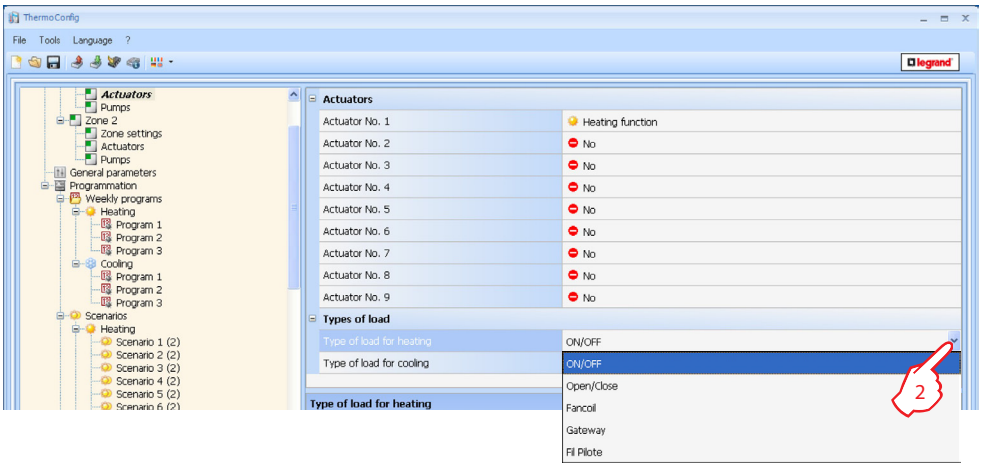
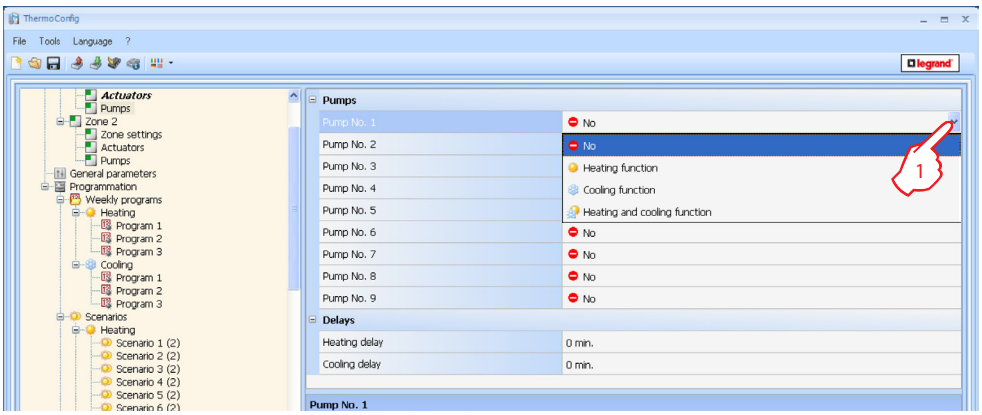


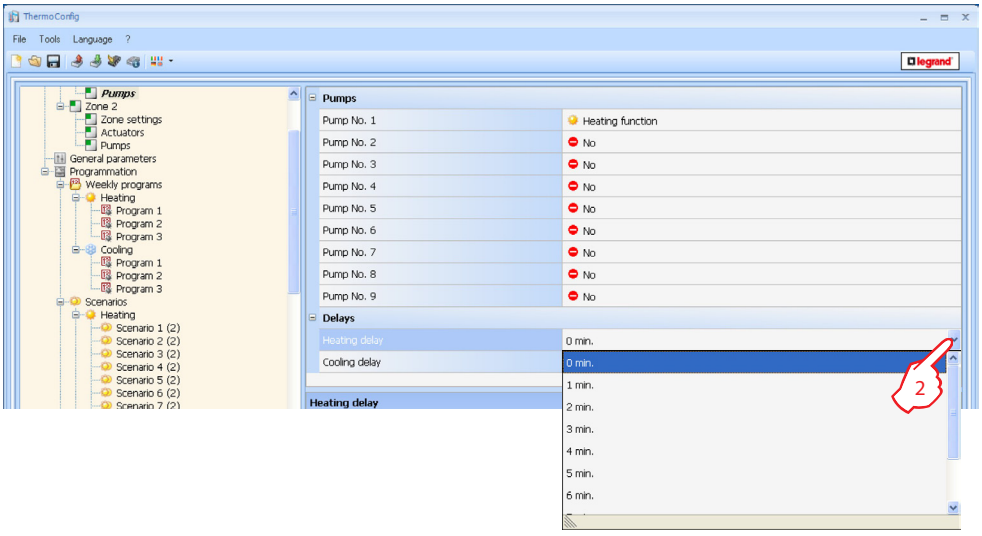
2. Select the type of load for the function selected.

Pumps

From the "**Pumps**" section of each zone included it is possible to select up to a maximum of 9 pumps to associate to the zone itself, as well as the type (heating, cooling, heating+cooling, or no function), and the tripping times delays (from 0 minutes minimum to 9 minutes maximum).



1. Select the type of function to assign.



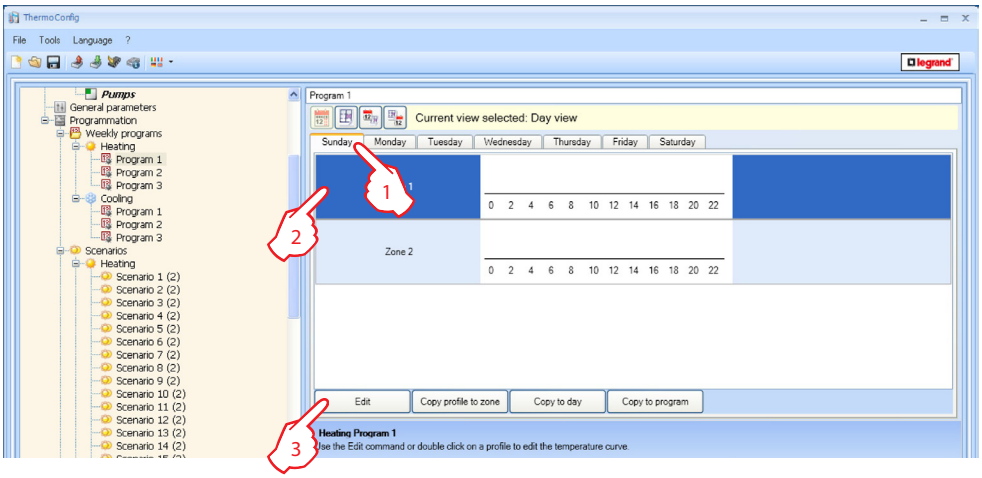
2. Select the time delay for the function selected.

4.3 Programming/Weekly programs

This section can be used to create weekly programs by setting different temperatures on the various zones for any day of the week.

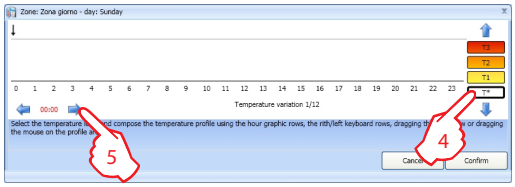
Edit

The "**Edit**" function gives the possibility of creating a new profile for the selected zone.



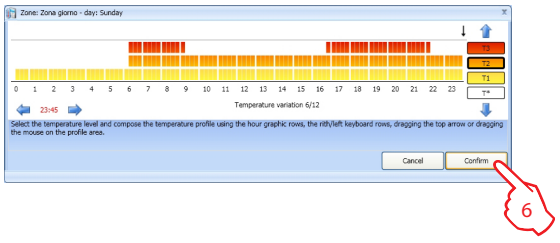
1. Select the day for which the new profile must be created.
2. Select the zone in which the new profile must be created.
3. Click "**Edit**".

FP It does not display the temperature, but the pre-set levels (Eco, Comfort, Comfort, ±1, Comfort ±2)

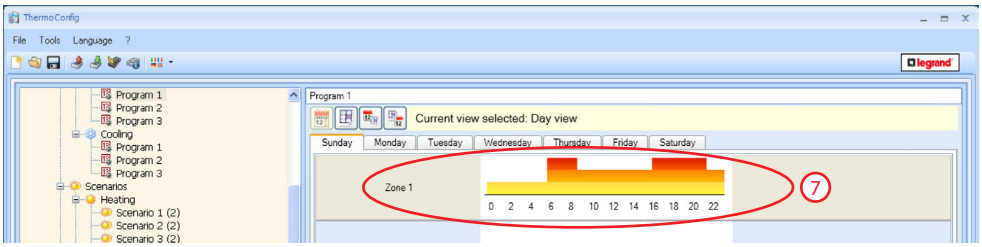


4. Select a temperature level among the previously set ones (e.g. **T1**).
5. Use the arrows ⇦⇨ to select a time during which the temperature level shall activate. Repeat operations 4 and 5 to complete the profile for the 24 hours.

FP It does not display the temperature, but the pre-set levels (Eco, Comfort, Comfort, ±1, Comfort ±2)



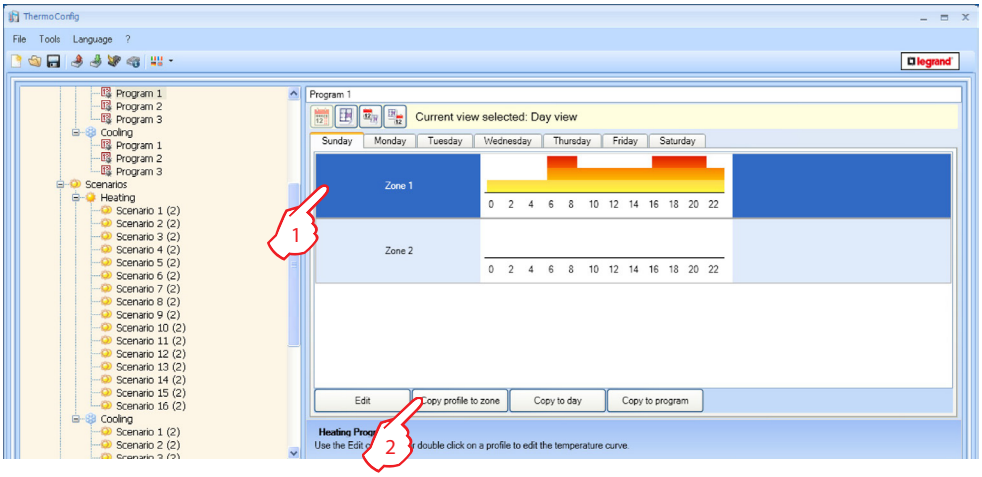
6. Click "**Confirm**".



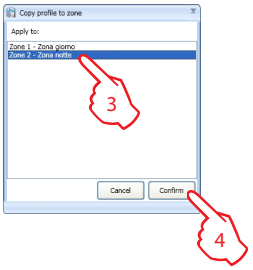
7. The customised profile for the zone has been created.

Copy profile to zone

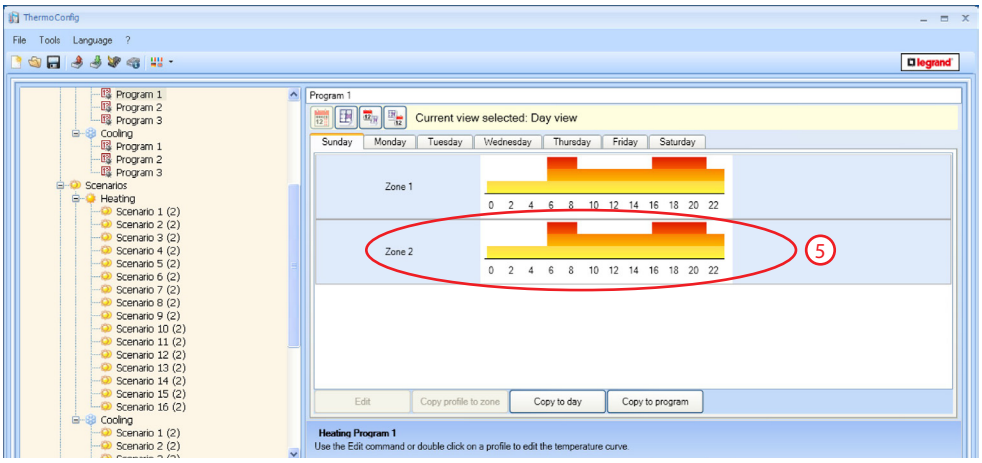
The "**Copy Profile to zone**" function can be used to copy the profile of one zone to another zone.



1. Select the zone from which the profile must be copied.
2. Click the "**Copy profile to zone**" pushbutton.



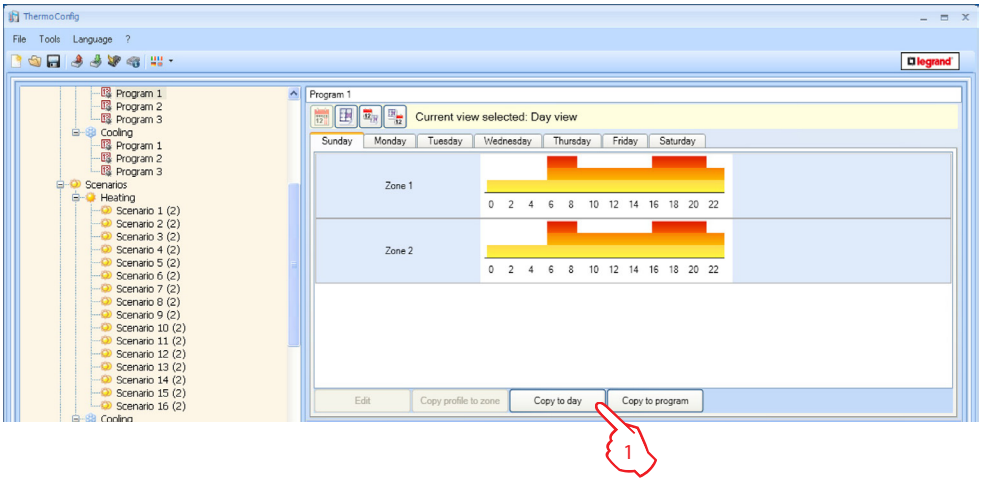
3. Select the zone to which the profile must be copied.
4. Click "**Confirm**".



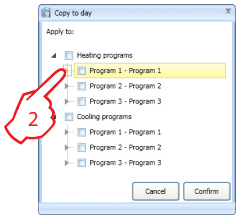
5. The same profile has been copied on the zone.

Copy to day

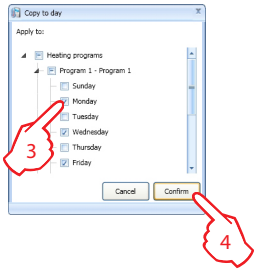
The "**Copy to day**" function can be used to copy an existing daily profile to a different day.



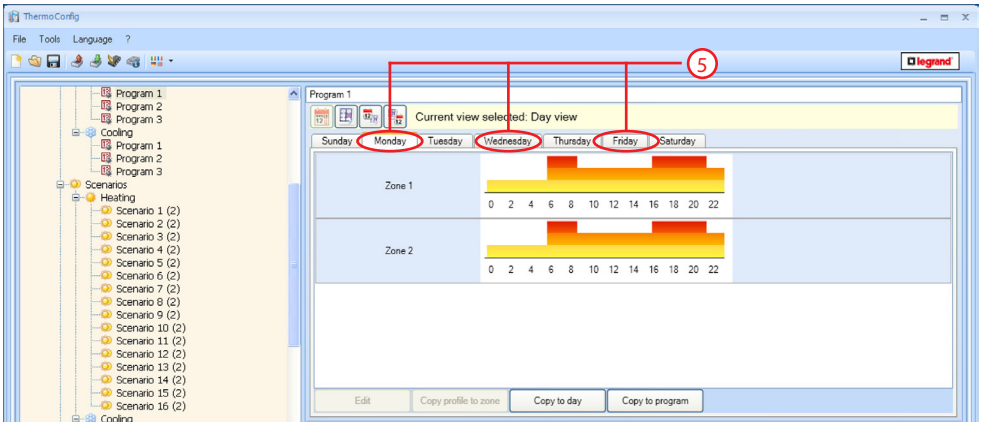
1. Click the "**Copy to day**" pushbutton.



2. Select the program to which the profile must be copied to.



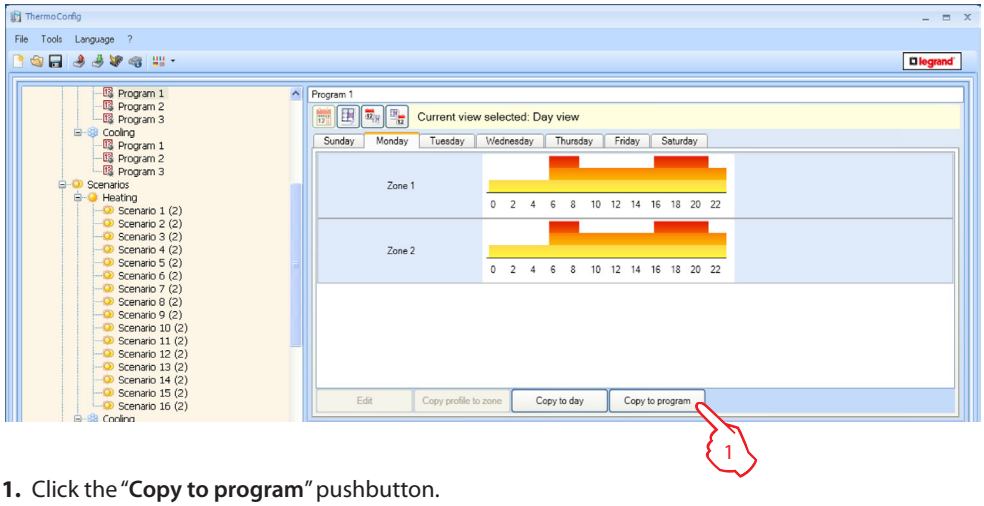
3. Select the day the profile must be copied to.
4. Cliccare sul pulsante Click "**Confirm**".



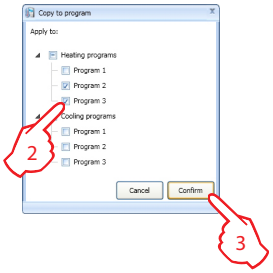
5. The same profile has been copied in the days.

Copy to program

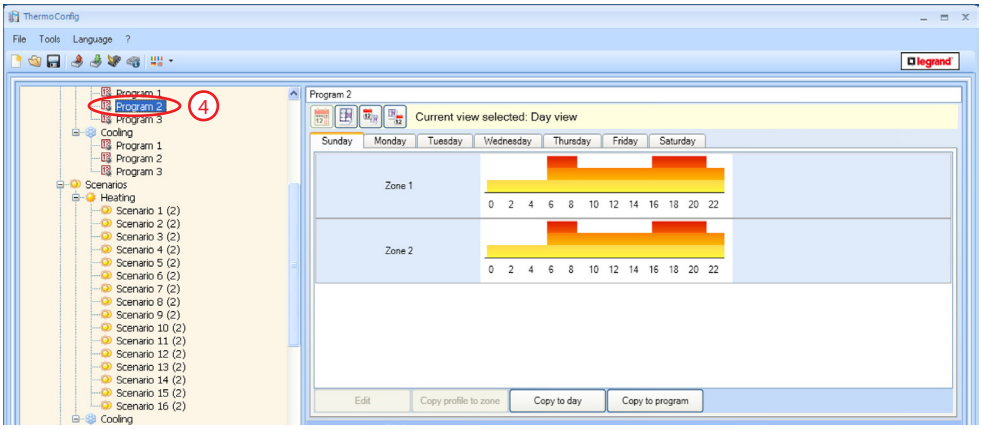
The "**Copy to program**" functions can be used to copy a program to another program.



1. Click the "**Copy to program**" pushbutton.



2. Select the programs to which the program must be copied to.
3. Click "**Confirm**".

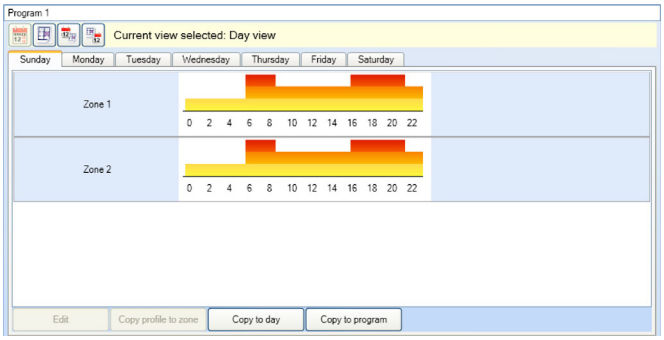


4. The same programs has been copied to the programs.

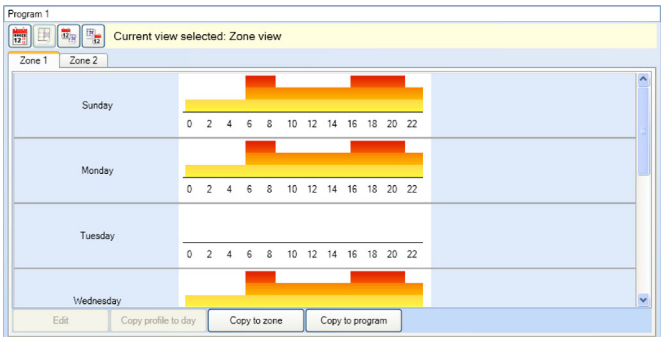
Views

It is possible to display the profiles created in the main areas in 4 different modes (Day view, Zone view, Day/zone view, Zone/day view)

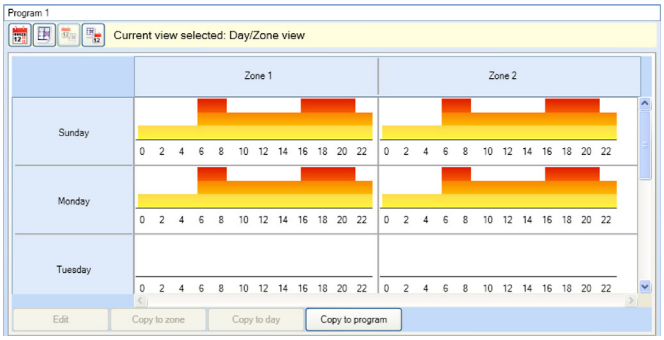
Day view



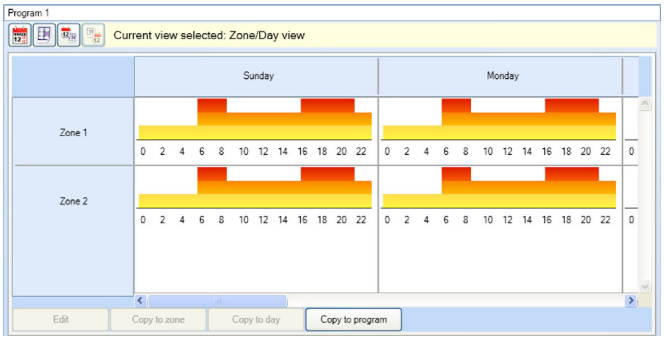
Zone view



Day/zone view

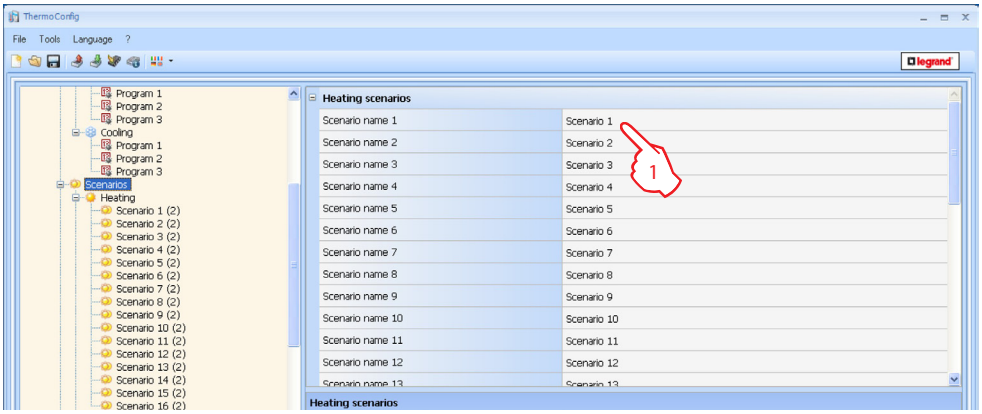


Zone/day view



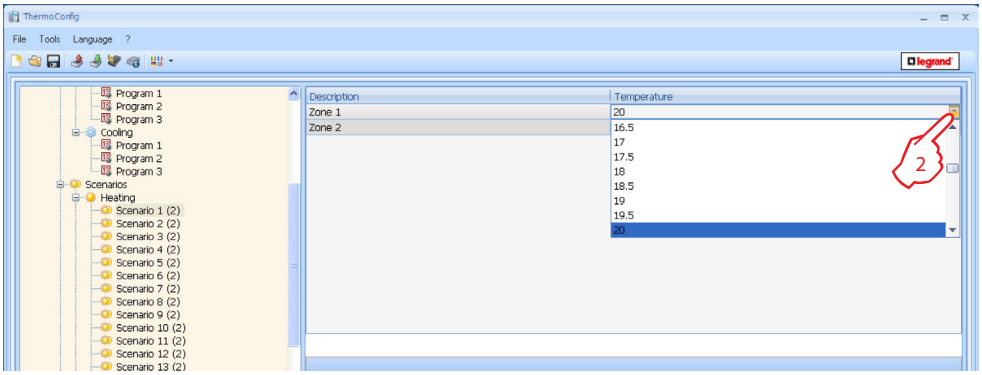
Scenarios

The "**Scenarios**" section can be used to create up to 16 heating scenarios and 16 cooling scenarios, entering the temperature to set for each zone for each scenario. The names of the scenarios can also be changed.



1. Customise the scenario description.

FP Select the pre-set levels (Eco, Comfort, Comfort, ±1, Comfort ±2)

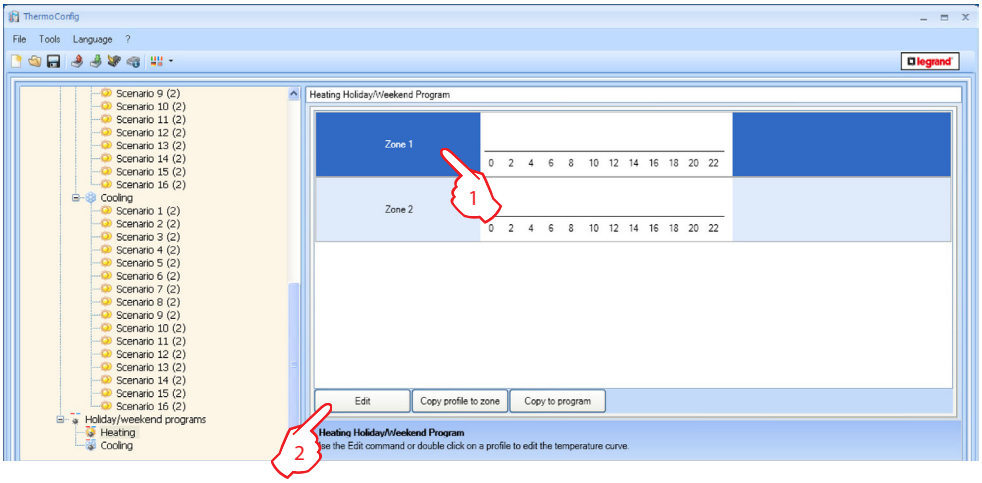


2. Select a temperature (between 3 °C and 40 °C).

Holiday/weekend programs

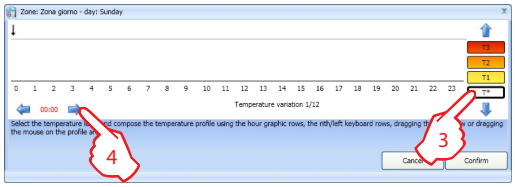
With the same configuration logic described for the weekly program it is possible to create, for the selected mode (Heating or Cooling), a daily profile for each system zone, to be set in case of prolonged absence (holidays).

Edit



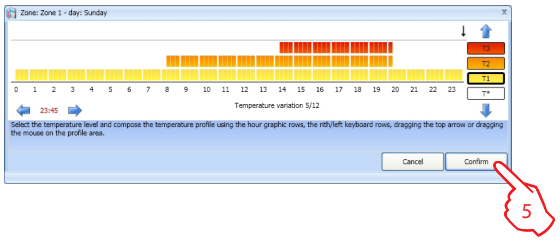
1. Select the zone on which the new profile must be created.
2. Click "**Edit**".

FP It does not display the temperature, but the pre-set levels (Eco, Comfort, Comfort,±1, Comfort ±2)

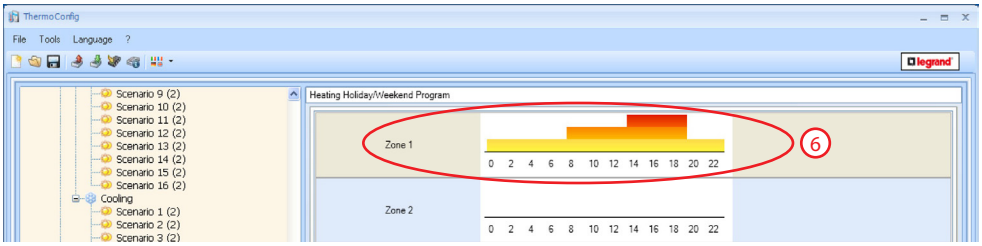


3. **Select a temperature level among the previously set ones (e.g. T1)**.
4. Use the arrows ⬅➡ to select a time during which the temperature level shall activate. Repeat operations 3 and 4 to complete the profile for the 24 hours.

FP It does not display the temperature, but the pre-set levels (Eco, Comfort, Comfort, ±1, Comfort ±2)



5. **Click "Confirm"**.



6. The customised profile for the zone has been created.

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