

**Easy and Wireless Home Automation**



# **Zigbee™ network Management**

## **CleoBee V5.0**

### **User Manual**

Version 5.0

Document reference: UM\_CLEOBEE\_20090130\_005\_00\_00

## WARRANTY

The device supplied to the buyer and/or the recipient is guaranteed by CLEODE against any malfunctions originating from a design and/or manufacturing flaw, for a period of twelve (12) months following delivery. The buyer and/or recipient is (are) responsible for proving the existence of the said defects or flaws. This warranty is applicable in accordance with articles 1641 to 1648 of the French Civil Code and in compliance with the French statutory warranty. The warranty covers the replacement free of charge of devices and parts affected by a design and/or manufacturing flaw excluding conspicuous defects in the device that are covered by the buyer and/or the recipient.

In order to invoke the warranty, the buyer must immediately send written notice to CLEODE of the flaws that it attributes to the device. It must enable CLEODE to have access to the device to observe these defects and repair them. The warranty provided by CLEODE is strictly limited to the equipment provided and shall only have for effect the replacement or repair, at CLEODE's expense, on its own premises, of all devices or parts that are not functioning as a result of defects or flaws. CLEODE reserves the right to modify the devices in order to comply with the warranty.

The warranty does not apply to replacement or repairs that may result from normal wear and tear of devices, systems or products, damage or accidents resulting from negligence, failure to supervise or maintain, or incorrect use of the devices, systems and/or products.

The maintenance service is provided by CLEODE with all reasonable care possible and in compliance with the current state of the arts.

The exchange of parts or repairs performed under the warranty cannot result in extending the length of the warranty. In no event can the unavailability of the device due to servicing give rise to compensation for any reason whatsoever. The seller is released from all obligations relating to the warranty if the product or device has been modified without prior written consent, or if original parts have been replaced by parts which it has not manufactured without prior consent. If unforeseen damage is caused by the device, it is expressly agreed that the seller can only be liable for the reimbursement of monies received for the purchase of the device if it has been destroyed. Under no circumstances can the seller be held liable for indirect or contingent damage. The seller is released from any liability and the buyer waives any rights against it if an accident or direct or indirect damage is caused to the buyer following a defect, incorrect usage, incorrect maintenance or normal wear of the device sold.

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## GLOSSAIRE

<b>CleoBee™</b>	Software of Network management
<b>UBEE</b>	Coordinator
<b>ZPlug</b>	Router and Power Outlet
<b>ZRC</b>	Wall switch for ZPlug or Zlight and Temperature sensor
<b>ZMove</b>	PIR motion detector
<b>ZDoor</b>	Open Door Detector
<b>ZGas</b>	Detector of carbon monoxide and smoke
<b>ZHum</b>	Humidity and temperature sensor
<b>ZLum</b>	Illuminance sensor
<b>ZLeak</b>	Water leak detector
<b>ZMeter</b>	Metering of water or electricity
<b>ZLight</b>	2 lights 500 W max command
<b>ZLock</b>	Door lock command
<b>ZShade</b>	Roller shutter or blind command
<b>ZSC</b>	Remote control for ZShade or ZLock
<b>ZScreen</b>	LCD screen to show measures of sensors
<b>ZXpand</b>	Router to expand the Zigbee network
<b>ZLoad</b>	Product for updating CLEODE objects
<b>SMTP</b>	Simple Mail Transfer Protocol
<b>SSL</b>	Secure Socket Layer
<b>TLS</b>	Transport Layer Security

## TABLE OF RÉVISIONS

Version	Author(s)	Description	Date
1.0	CLEODE	Initial version	12/12/2008
1.2	CLEODE	Add functionalities	30/01/2008
1.3	CLEODE	Add software actions	12/08/2009
1.4	CLEODE	Add bindings	06/10/2009
1.5	CLEODE	Change in the license management	21/10/2009
1.6	CLEODE	Add network actions (Email, URL, SMS)	29/01/2010
1.7	CLEODE	Add filter of ZigBee nodes, storage in database, configuration Zigbee network parameters	18/05/2010
2.0	CLEODE	Major change for download of the UBee (Zstack 2.3.0)	29/06/2010
2.5	CLEODE	Add opening of the association duration, Network security keys and improvement of several functionalities	09/03/2011
3.0	CLEODE	Major change in the network management by UBee and add network parameters save/restore	23/05/2011
4.0	CLEODE	Major change concerning the software actions to allow the remote access to a Wibee by CleoBee	07/05/2012
5.0	CLEODE	Major change concerning the multi-triggers, the auto-update of CleoBee.	17/02/2014

# I INTRODUCTION

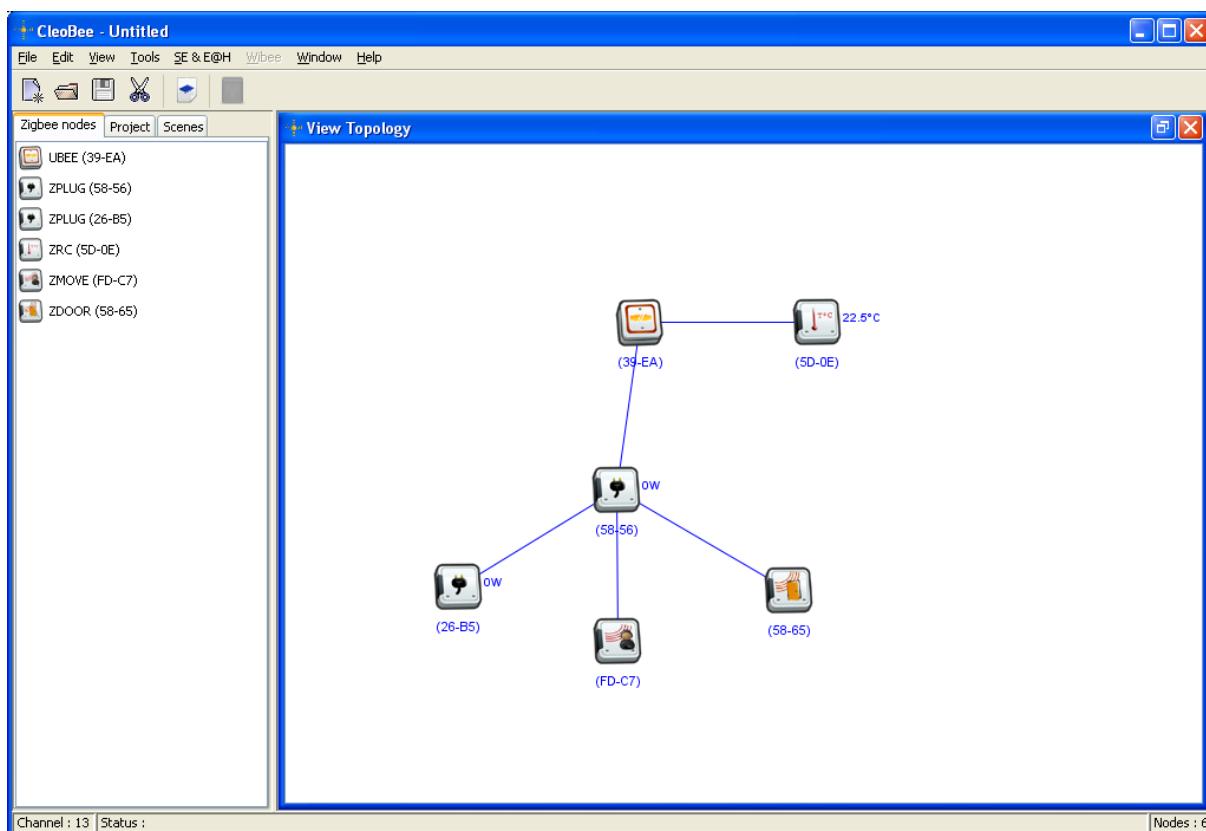
## I.1 FONTIONALITIES

The manager of network CleoBee™ has to manage the Zigbee nodes. That is:

- Display Zigbee nodes belonging to the network,
- Authorize the Zigbee nodes to enter in the network,
- Configure Zigbee nodes of the network,
- Configure the Zigbee network parameters,
- Display alarms generated by Zigbee nodes,
- Define binding between Zigbee nodes of the network.
- Define groups and scenes on Zigbee nodes of the network.
- Define software actions,
- Display software actions triggered.

Below the main screen of the manager with on the left the list of Zigbee nodes is belonging to the network and on the right a geographical view presenting the position of some objects.

On the left in the state bar is displayed the Zigbee network channel and on the right the number of Zigbee nodes detected on this channel.



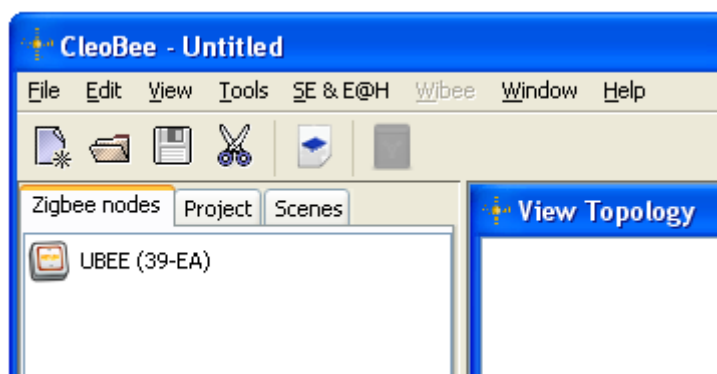


## I.2 FIRST USE

### I.2.1 STANDARD VERSION

- 1) Run the installation program of CleoBee™ « cleobee\_install.exe » being on Cd-Rom (cf. Chap.III).
- 2) Launch CleoBee™ with the shortcut installed on the desktop.

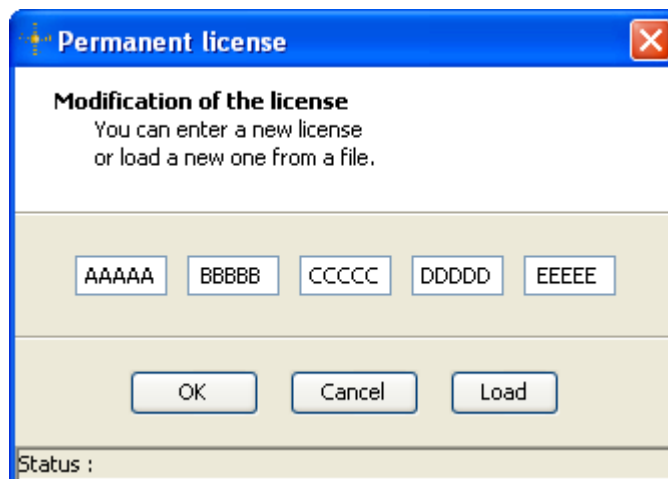
After few seconds, the coordinator should appear in the list of Zigbee nodes on the left side of the screen in the tab “Zigbee nodes”.



If the following message is displayed in the status bar in the screen bottom, it means that the license typed during the installation of CleoBee™ does not correspond to your UBEE key.

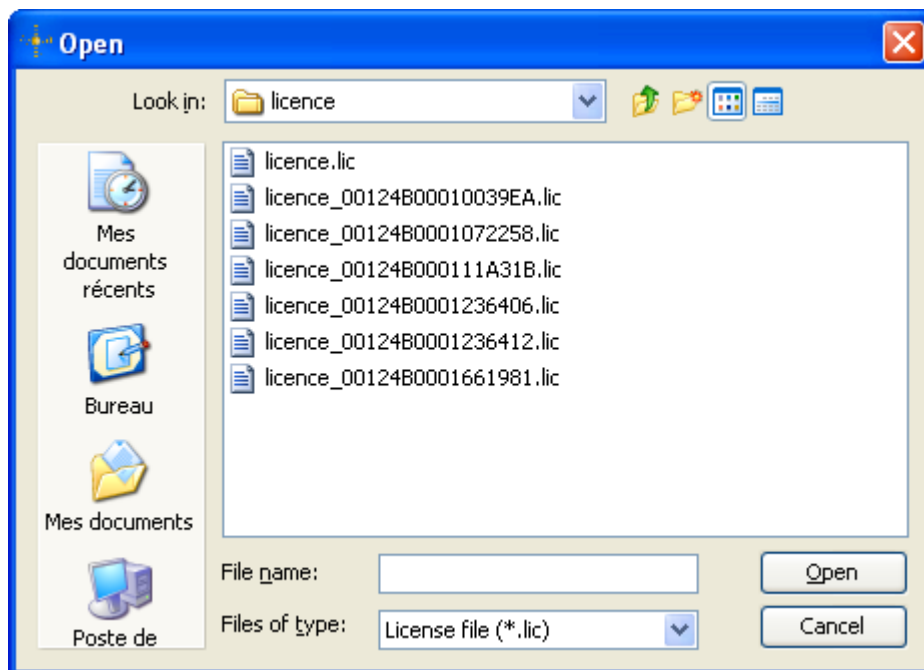


In that case, click on **Help** of the menu bar then on **License/Permanent license**, the following window opens and allows you to write your license number supplied with the Cd-Rom or to load a file containing your license.



If you use several UBee separately on your PC, you can create as many license files and change license easily according to the UBee used.

To create a license file to load, copy 5 blocks of 5 characters without space in a “.lic” file with the IEEE address of the UBee in the file name.



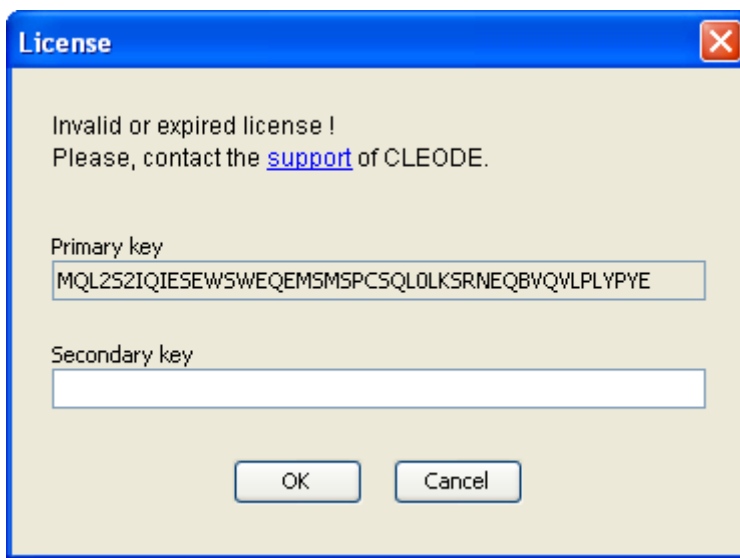
If the problem persists, please contact [support@cleode.com](mailto:support@cleode.com) by specifying the IEEE address of your UBEE key and the license.

## I.2.2 EVALUATION VERSION

At the first use of CleoBee™, the following message will be shown in the state bar at the bottom of the screen for the evaluation version.



Click on **Help** of the menu bar then on **License/Temporary license**, the following window opens and allows you to write your license number (That is the secondary key).

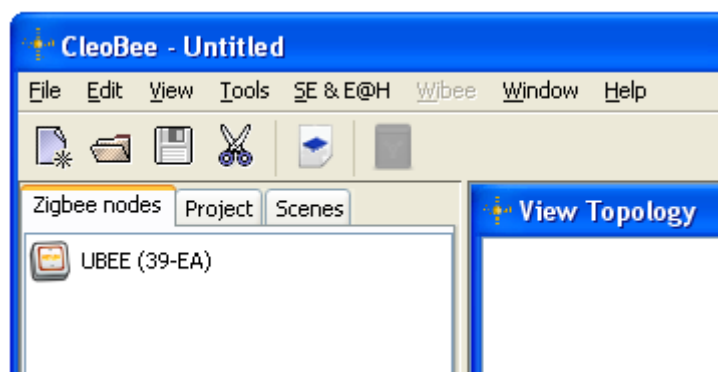


Contact [support@cleode.com](mailto:support@cleode.com) to ask a license and give the primary key.



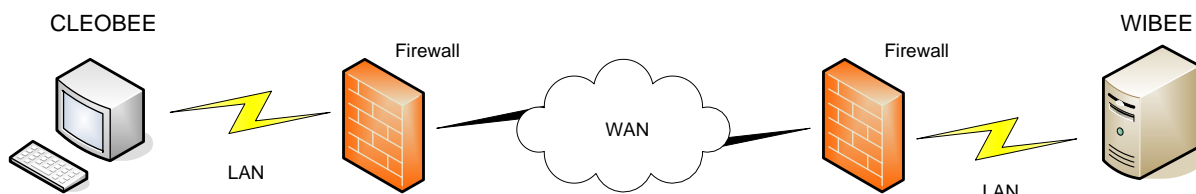
The primary key is regenerated each time you open the window, then you must not close it before type the secondary key when you ask the support.

Quit and reload CleoBee™, after few seconds, the coordinator should appear in the list of Zigbee nodes on the left side of the screen in the tab “Zigbee nodes”.



### I.2.3 REMONTE CONNECTION TO A WIBEE

It is possible to make a remote connection of CleoBee to Wibee if equipments are connected to the same local area network but it is also possible to connect on Wibee through the global Internet. For that purpose, it is necessary to authorize the port 22 (SSH port by default) or that of your choice and to redirect this port towards the port 22 of Wibee in the configuration of the firewall situated in front of Wibee.



The remote connection of CleoBee to Wibee is realized through SSH tunnelling. The user of the server SSH is “admin” and its password is “admin” by default. This password may have been changed through the application console of Wibee.

The user of the Wibee is “admin” and its password is “admin” by default. This password can be changed through the Wibee specific screens in CleoBee.

If you want to save the passwords for the next use of CleoBee, tick the box “Save the passwords”.

To have access to this screen during the launch of CleoBee, it is necessary to set the variable `WIBEE_REMOTE_ACCESS` in true in the file " CleoBee.conf ".

```
# Enable/disable WiBee remote access
WIBEE_REMOTE_ACCESS=true
```

### Connection login

**Connection login**  
You can choose between a connection on UBee of a USB serial port either a remote connection by SSH on a WiBee of the IP network.

Local connection :

USB Serial port

Remote connection :

Wibee name	IP Address
wibee-040	192.168.85.34
wibee-012	192.168.1.53
wibee-imx	192.168.85.161
raspberrypi	192.168.85.29
wibee-012	192.168.85.22

**SSH Server**

SSH Server:  SSH port:

User:  Password:

**Wibee**

User:  Password:

Change default port Wibee port:

Save the passwords

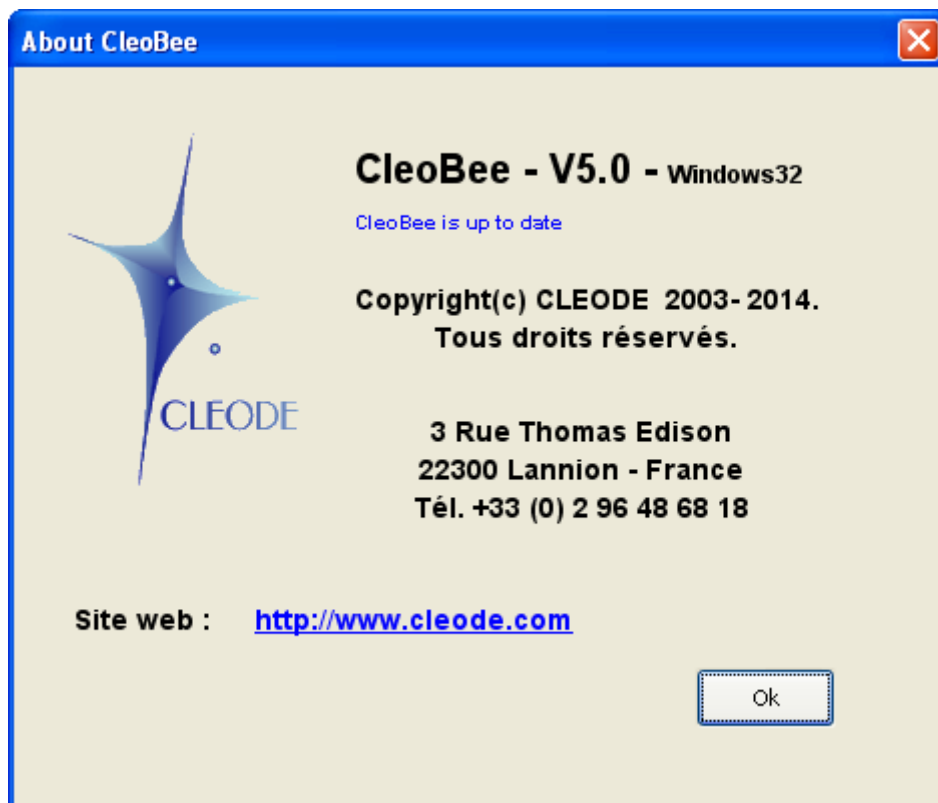
Status :

## I.2.4 AUTO UPDATE OF CLEOBEE

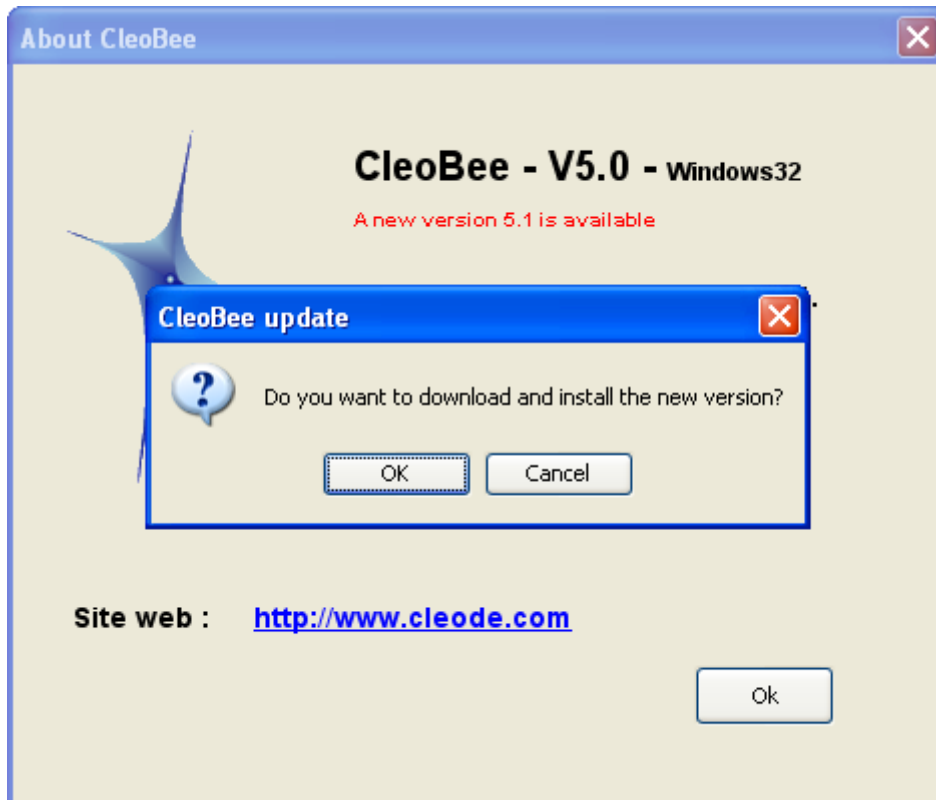
It is possible to verify if there is a more recent version of CleoBee by going to the menu “**Help / About CleoBee**”.

An Http request will be sent to the website of Cleode to determine if the current version is the last one or not.

If the current version is the last one available, the message “*CleoBee is up to date*” will be displayed after a few seconds.

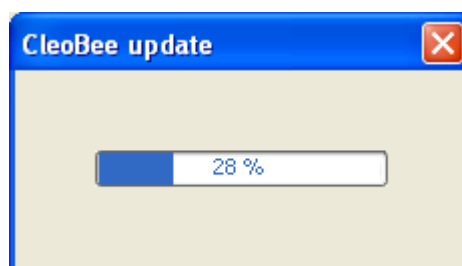


Otherwise the message “*A new version X.Y is available*” will be displayed after a few seconds and a window will suggest you downloading this new version.



**Warning:** The download of a new version will force the closure of the CleoBee application.

If you accept the download of the new version, a window will indicate you the download progress.



## II USE


### II.1 DEFINE A PROJECT

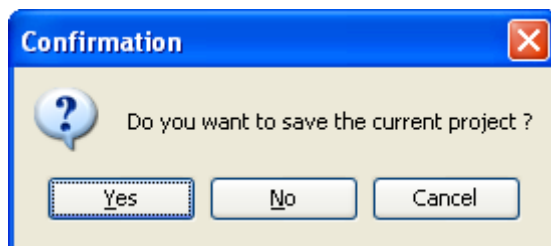
A project allows saving a representation of a network Zigbee to allow the user to get back his configuration.

A project is constituted by the following elements:


- One or several geographical views placed Zigbee nodes,
- Information concerning the symbolism of Zigbee nodes,
- Information concerning the software actions.

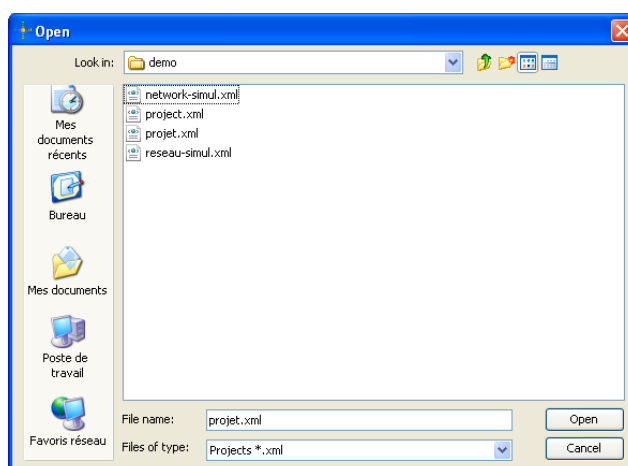
#### II.1.1 CRÉATE A NEW PROJECT

Click on the button  of tool bar. If a not empty project is opened, the following window opens to record it before closing this project.

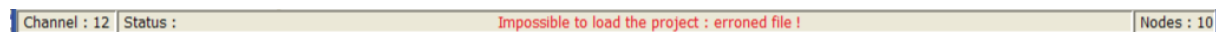


#### II.1.2 LOAD A PROJECT

Click on the button  of the tool bar, the following window opens to load the project.




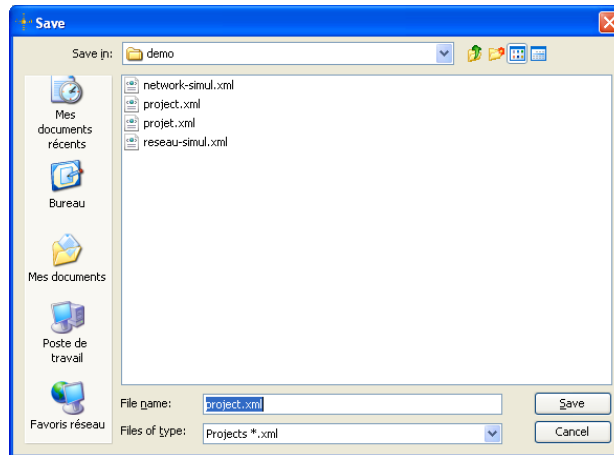
If the file « .xml » is not recognized like a file describing a CleoBee™ project, the following message will be shown in the status bar at the bottom of the screen.






### II.1.3 BACK UP THE CURRENT PROJECT

Click on the button  of tool bar, the following window opens to choose the name and the place of the file « .xml » to record the project.



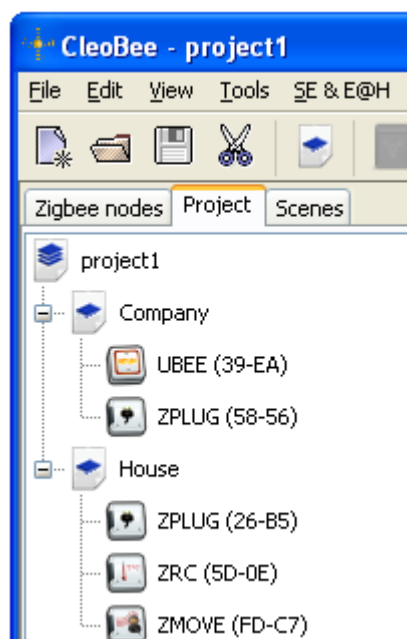
### II.1.4 DELETE THE CURRENT PROJECT

Click on the button  of the tool bar, a window opens and ask you to confirm the deletion of the current project. This action removes the file « .xml » of the hard disk.

### II.1.5 DISPLAY THE CURRENT PROJECT

By clicking the tab "Project" to the left of the screen, a vision of the current project is presented under treelike shape.

The root node is the name of the project, the intermediate nodes are plans belonging to the project and leaves are the present Zigbee nodes on the various plans.



## II.2 GEOGRAPHICAL VIEW

A geographic view is a plan allowing placing a Zigbee node. An object can be placed only once on the various plans establishing the project.

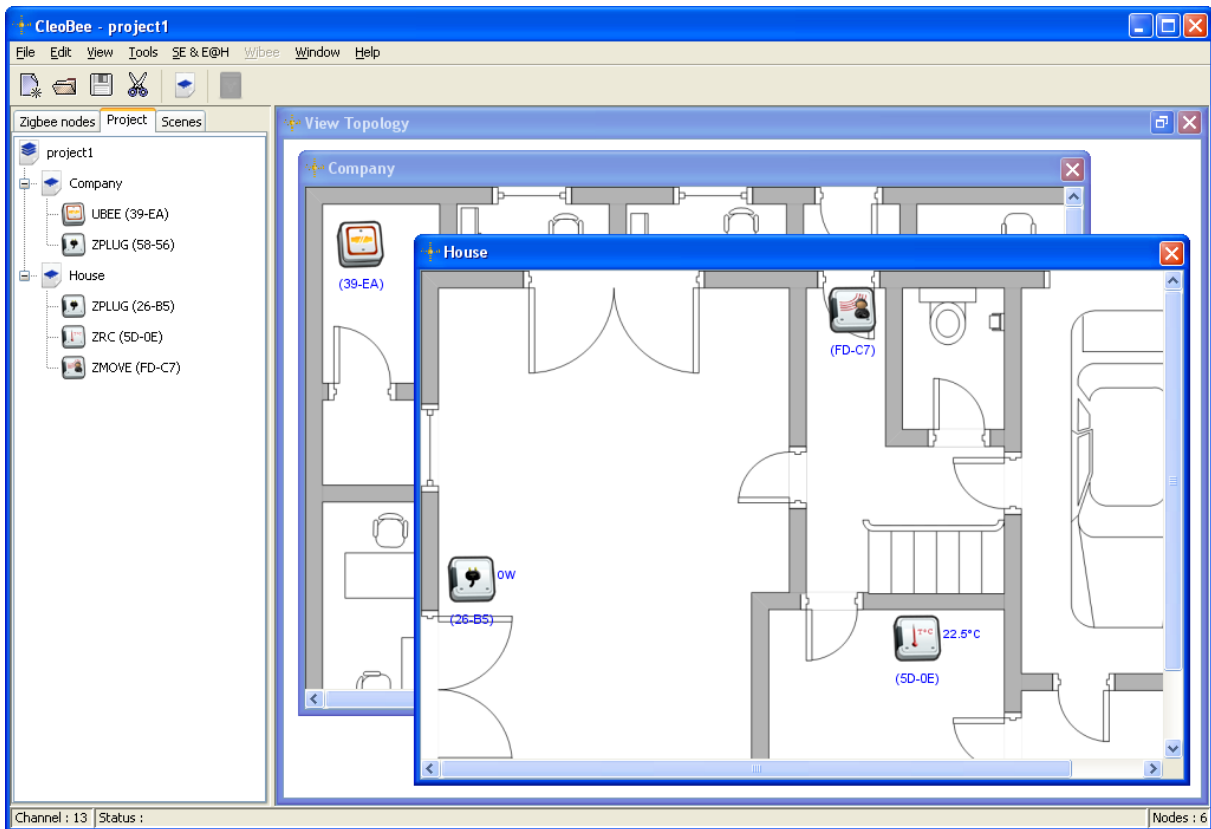

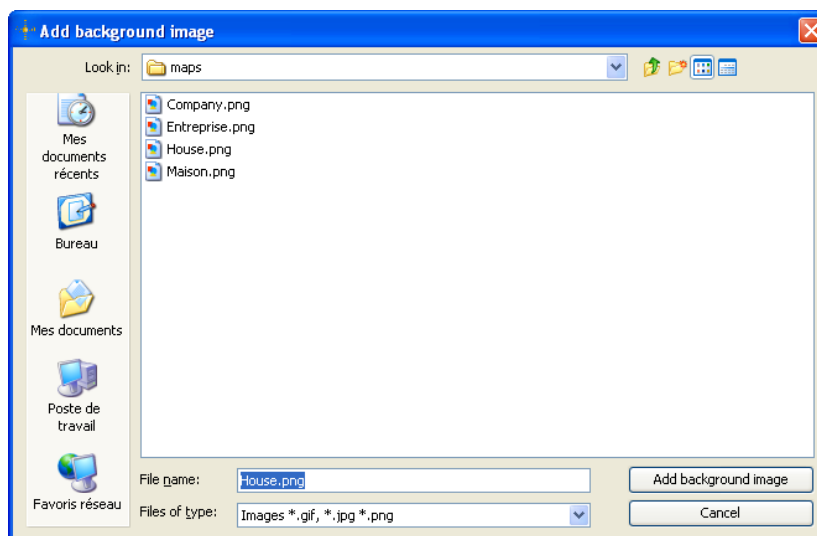


Figure 1: Geographical View

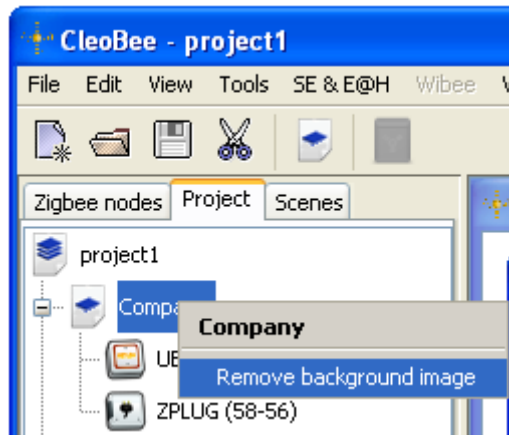
### II.2.1 ADD A PLAN

Click on the button  of the tool bar, the following window opens and choose a plan to creation a new geographic view.

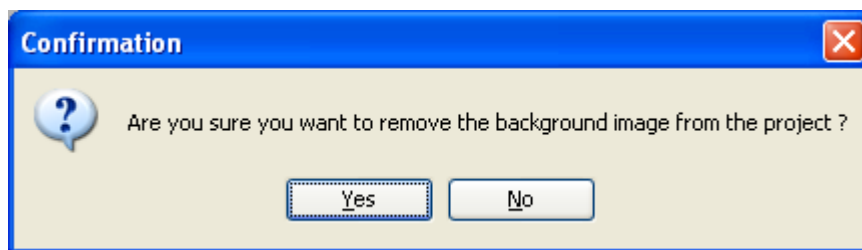


## II.2.2 DELETE A PLAN

Select the plan in the tree, click on the right button on the mouse to access to the popup menu. Choose the action « Remove Background image ».

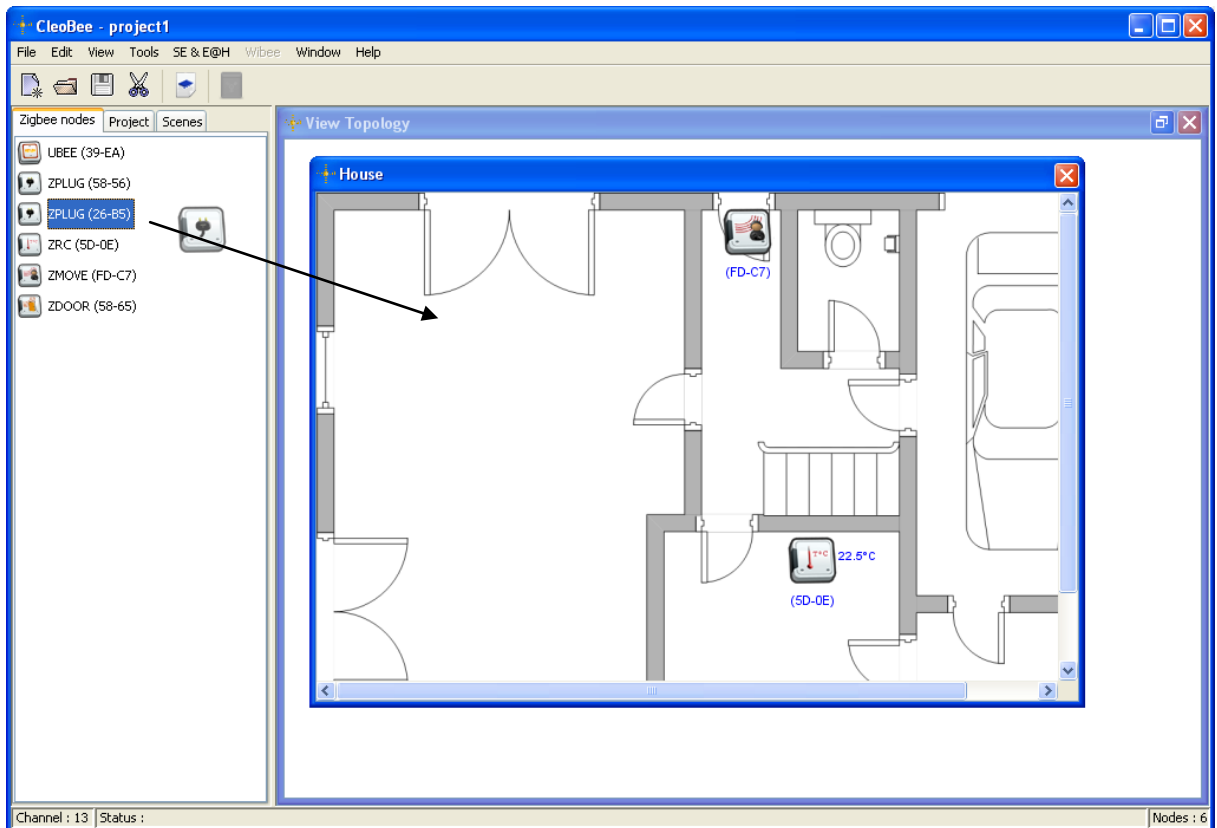


The following window appear to ask a confirmation



## II.2.3 ADD A ZIGBEE NODE

Make a drag and drop of a present Zigbee node in the list of the tab “Zigbee nodes” on a geographical view.



## II.2.4 DELETE A ZIGBEE NODE

Select the Zigbee node that is present in a plan by a click and press the touch « del » to delete it. The multi-selection of the Zigbee nodes is possible by maintaining the touch « Shift » supported during the selection of objects.

A frame of orange color around this object visualizes a selected Zigbee node.



## II.3 TOPOLOGICAL VIEW

The topological view present associations between the various Zigbee nodes managed by the administrator; an association is a link of communication between two Zigbee nodes.

On the topological view below, we have seen a coordinator in communication with 5 Zigbee nodes, a node of which acts as router for 3 of these Zigbee nodes.

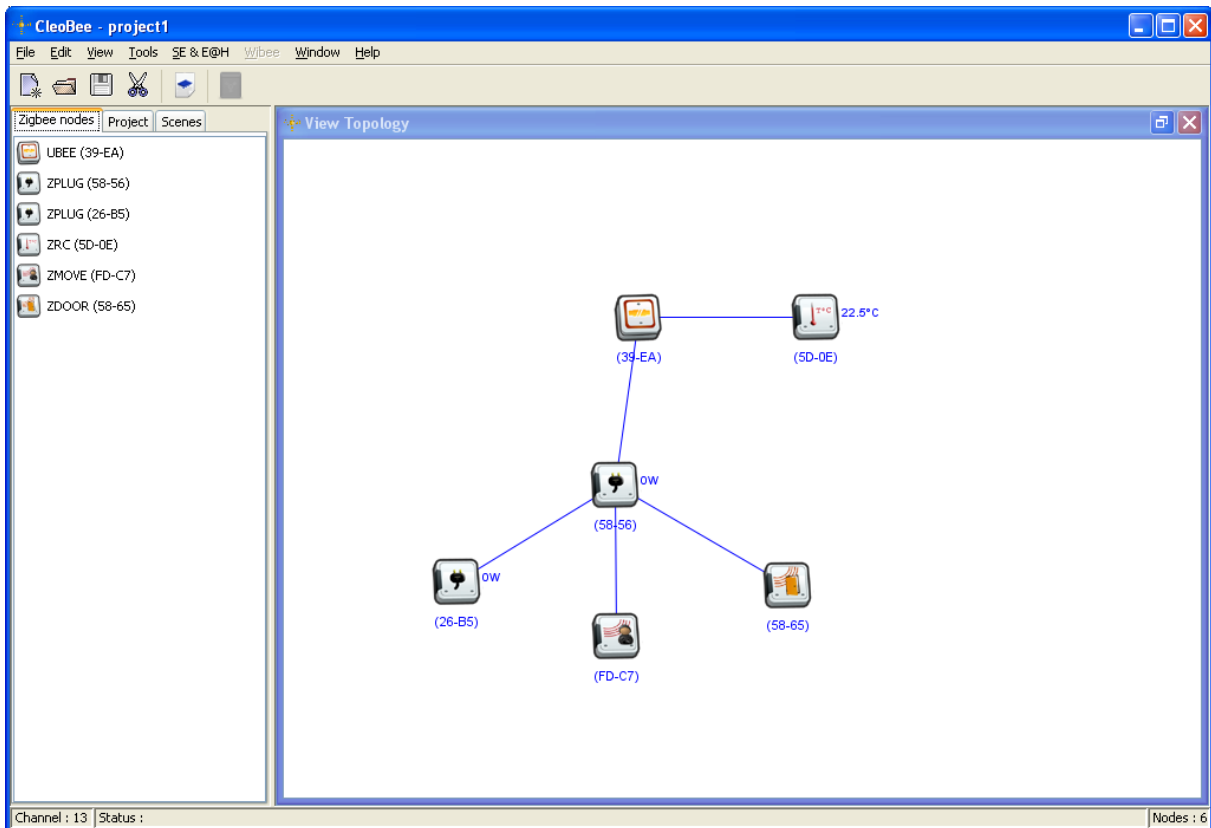


Figure 2: Topological View

## II.4 VIEW OF ALARMS LOG

The window of alarms log is accessible from the menu “View/Log Alarms”.

This view displays the log of Zigbee node alarms with the time stamp and the cluster, which has generated it.

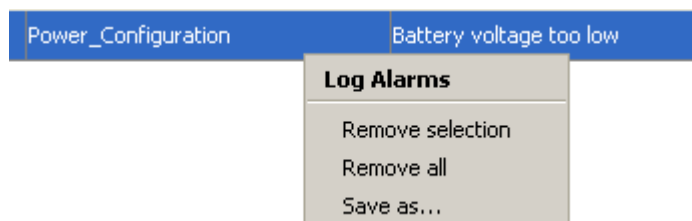
However, this view doesn't display the current state of the alarms because the end of alarms is not signaled by the Zigbee nodes. It is thus possible that an alarm is not present any more.

Time stamp	Zigbee node	Cluster	Alarm
07/10/2009 18:05:22	ZRC (65-04)	Power_Configuration	Battery voltage too low

Figure 3: View of alarms log

A pop-up menu accessible on the right button of the mouse allows to:

- Remove the selected alarm,
- Remove all alarms,
- Save the alarms in a cave file.



## II.5 VIEW OF SOFTWARE ACTIONS LOG

The window of software actions log is accessible from the menu “View/Log Actions”.

This view displays the log of the software actions executed with the triggering time and the description of the software action.

It is limited to the 50 software actions, oldest are deleted for the benefit of the new software actions.

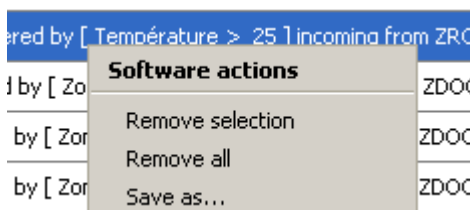
 A screenshot of the 'View Log Actions' window. The window title is 'View Log Actions'. It contains a table with two columns: 'Time stamp' and 'Software actions'. The table lists several actions with their corresponding timestamps and descriptions.
 

Time stamp	Software actions
2010/03/02 17:01:30	Zigbee (Toggle command) : triggered by [ Température > 25 ] incoming from ZRC (65-04)
2010/03/02 17:01:16	Zigbee (Off command) : triggered by [ Zone status bit 0 = 0 ] incoming from ZDOOR (64-0A)
2010/03/02 17:01:12	Zigbee (On command) : triggered by [ Zone status bit 0 = 1 ] incoming from ZDOOR (64-0A)
2010/03/02 17:01:12	Zigbee (On command) : triggered by [ Zone status bit 0 = 1 ] incoming from ZDOOR (64-0A)
2010/03/02 17:00:41	Zigbee (Toggle command) : triggered by [ On/Off : Toggle state received ] incoming from ZRC (65-04)
2010/03/02 16:41:38	Zigbee (Off command) : triggered by [ Humidity < 40 ] incoming from ZHUM (66-02)

**Figure 4: View of software actions log**

A pop-up menu accessible on the right button of the mouse allows to:

- Remove the selected software action,
- Remove all,
- Save the software actions in a csv file.



## II.6 POP-UP MENU OF ZIGBEE NODES

The pop-up menu of Zigbee nodes allows showing the following information or deleting this node from the Zigbee network:

- The properties of this node,
- The clusters of this node,
- Software upgrade.

Click on the right button of the mouse to display the pop-up menu, the following window opens to choose the information to be shown.

The pop-up menu is accessible from Zigbee nodes being on plans but also from Zigbee nodes being in the lists of the tabs “Zigbee nodes” and “Project”.



### II.6.1 PROPERTIES OF ZIGBEE NODE

The properties of a Zigbee node are the following ones:

- IEEE address of the Zigbee node (not modifiable)
- Network address of the Zigbee node (not modifiable)
- A name given by the operator, which will be stored in the project.
- A description given by the operator which will be stored in the project
- The « ModelIdentifier » of the Zigbee object (not modifiable)
- The device type of the Zigbee object (not modifiable)
- The manufacturer code of the Zigbee node (not modifiable)
- A modifiable graphic symbol by the operator, which will be stored in the project.

**ZPLUG Office**

**Properties of the Zigbee node**  
 The name and the description will be stored in the current project  
 The name will be possibly recorded in the Zigbee node if the option Sync is marked.

IEEE Address : 00-12-4B-00-01-24-58-56

Network address : 0xE70B



Name : Office  Sync

Description :

Model Identifier : ZPLUG

Device type : Router

Manufacturer code : 0x10B9

Graphical symbol :  

Apply this symbol to all Zigbee nodes having the same Model Identifier :

OK Cancel

Status :

Figure 5: Properties of a Zigbee node

## II.6.2 CLUSTERS OF A ZIGBEE NODE

A cluster is a related collection of commands and attributes, which together define an interface to specific functionality and which allow to communicate between two Zigbee nodes.

Double-click on the cluster to display its attributes.

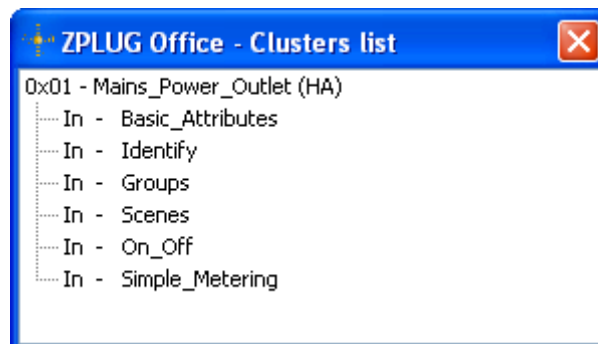


Figure 6: Clusters of a Zigbee node



Below the “Basic cluster” of a ZPlug of Cleode.

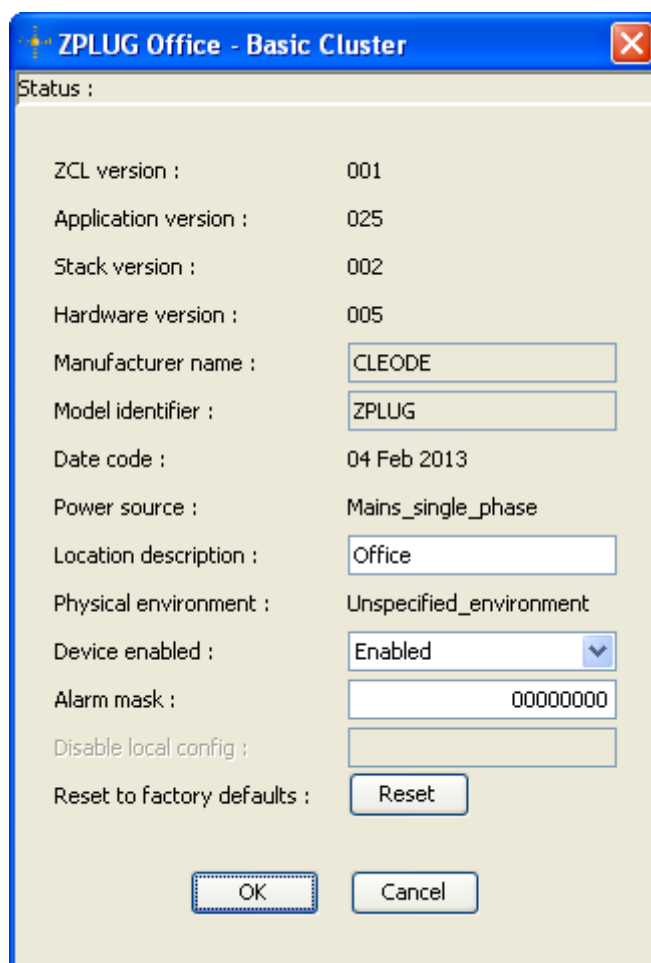
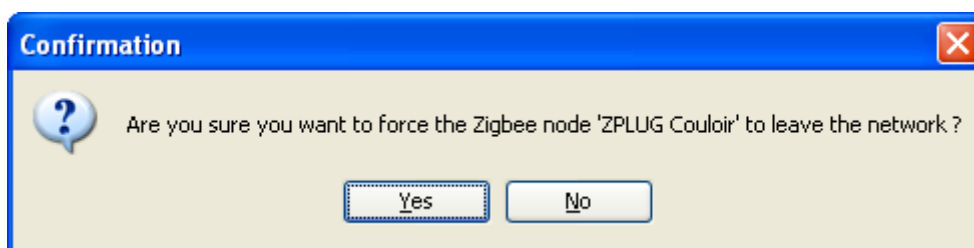


Figure 7: Basic cluster of a ZPlug

### II.6.3 DELETE A ZIGBEE NODE FROM THE NETWORK

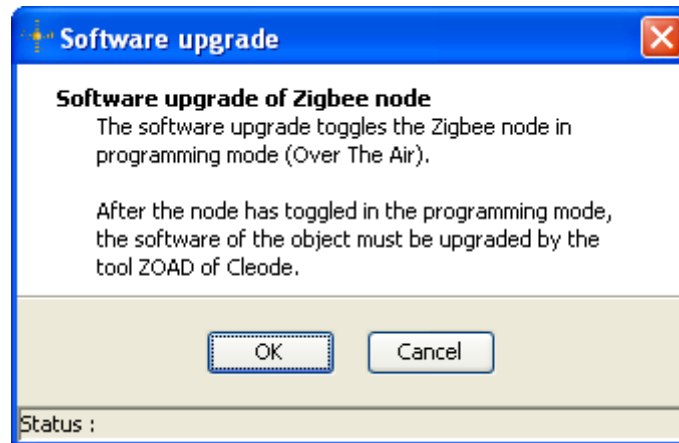
The deleting of a Zigbee node consists in forcing this object to leave the network and/or in remove this object from the list of Zigbee nodes in CleoBee.

The following window appear to ask a confirmation



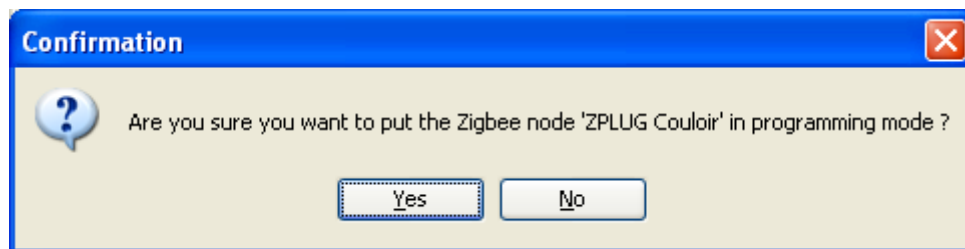
### II.6.4 SOFTWARE UPGRADE OF A ZIGBEE NODE

The menu “Software upgrade” allows the Zigbee node Cleode selected to switch in the programming mode. Then, the tool ZLOAD of Cleode must upgrade the node.

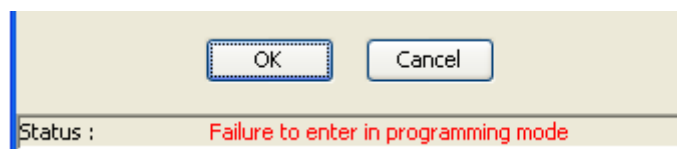


**Figure 8: Software upgrade of Zigbee node**

The following window appears to request a confirmation



If your node Zigbee of Cleode has not this feature, an error message will appear in the window status.



After confirmation, the node will remain in programming mode until that a software upgrade is done.

## II.7 EDITION OF BINDINGS

The edition window of the bindings is accessible from the menu “Edit/Bindings”.

A binding is a unidirectional logical link between a source endpoint/cluster identifier pair and a destination endpoint, which may exist on one or more Zigbee nodes.

The button “Refresh” allows updating the list of bindings by requesting all Zigbee nodes. The refreshment can take several tens of seconds depending on the sleep time of the Zigbee nodes.

Below the window displaying the list of bindings in the network.

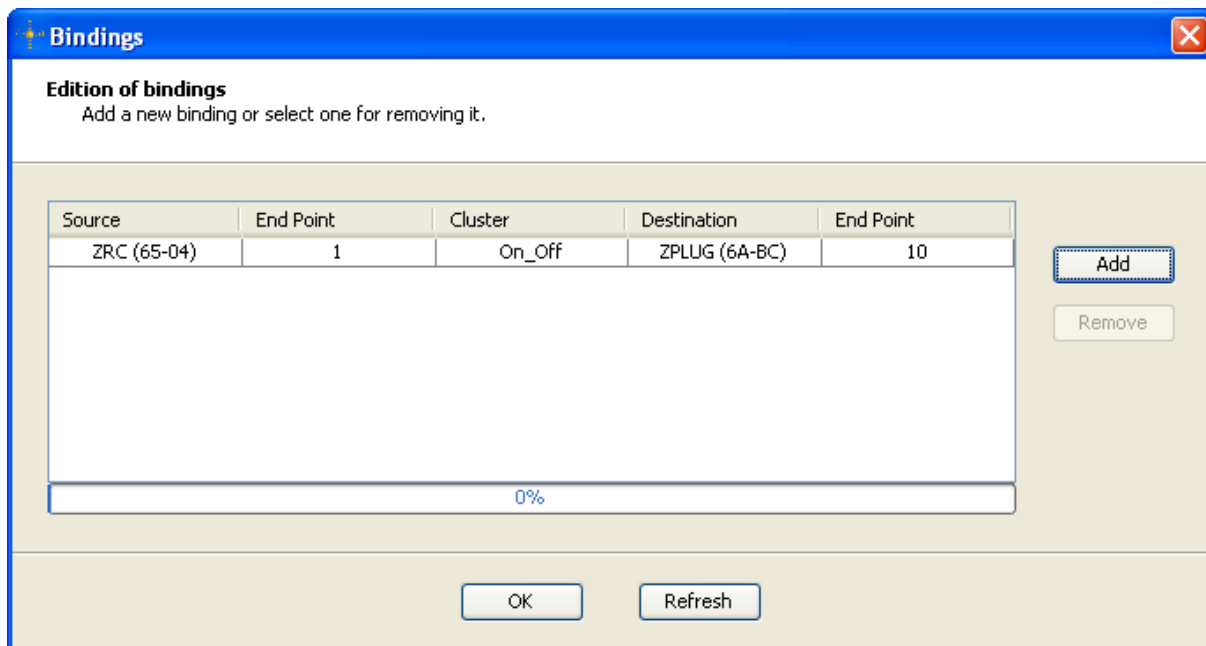
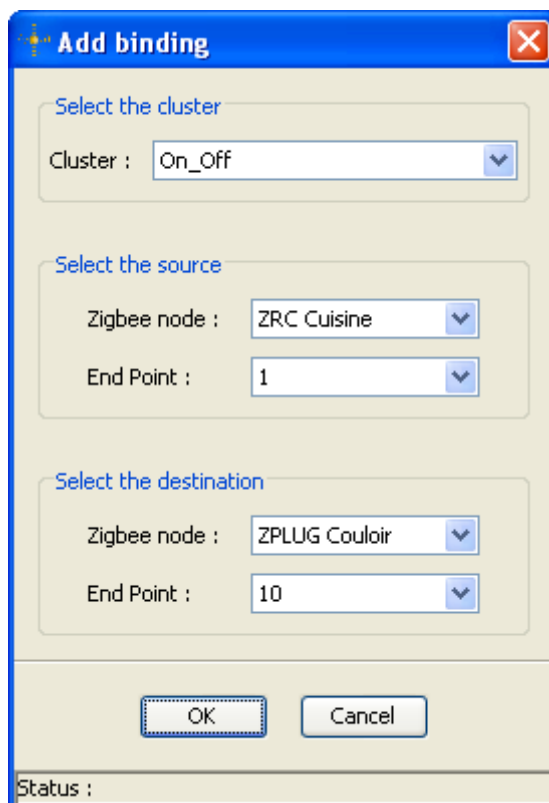


Figure 9: Edition of bindings

## II.7.1 ADD A BINDING

Click on the button « Add », the following window opens and allows selecting the cluster, the source and the destination.

The addition can take few seconds depending on the sleep time of the Zigbee node.

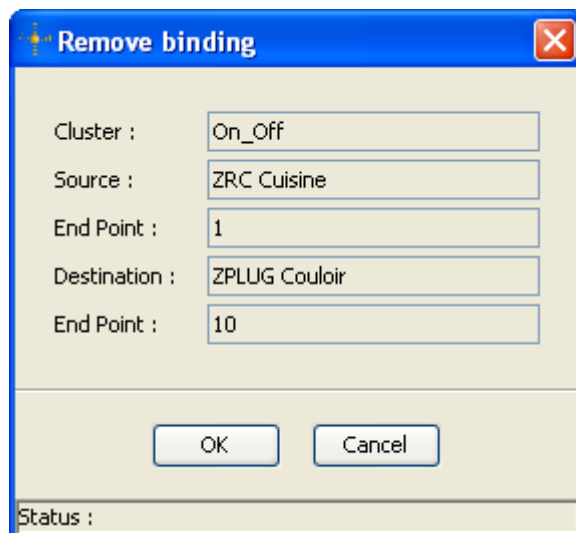


## II.7.2 DELETE A BINDING

Select a binding in the list and click on the button “Remove”.

The following window appears to ask a confirmation.

The deletion can take few seconds depending on the sleep time of the Zigbee node.



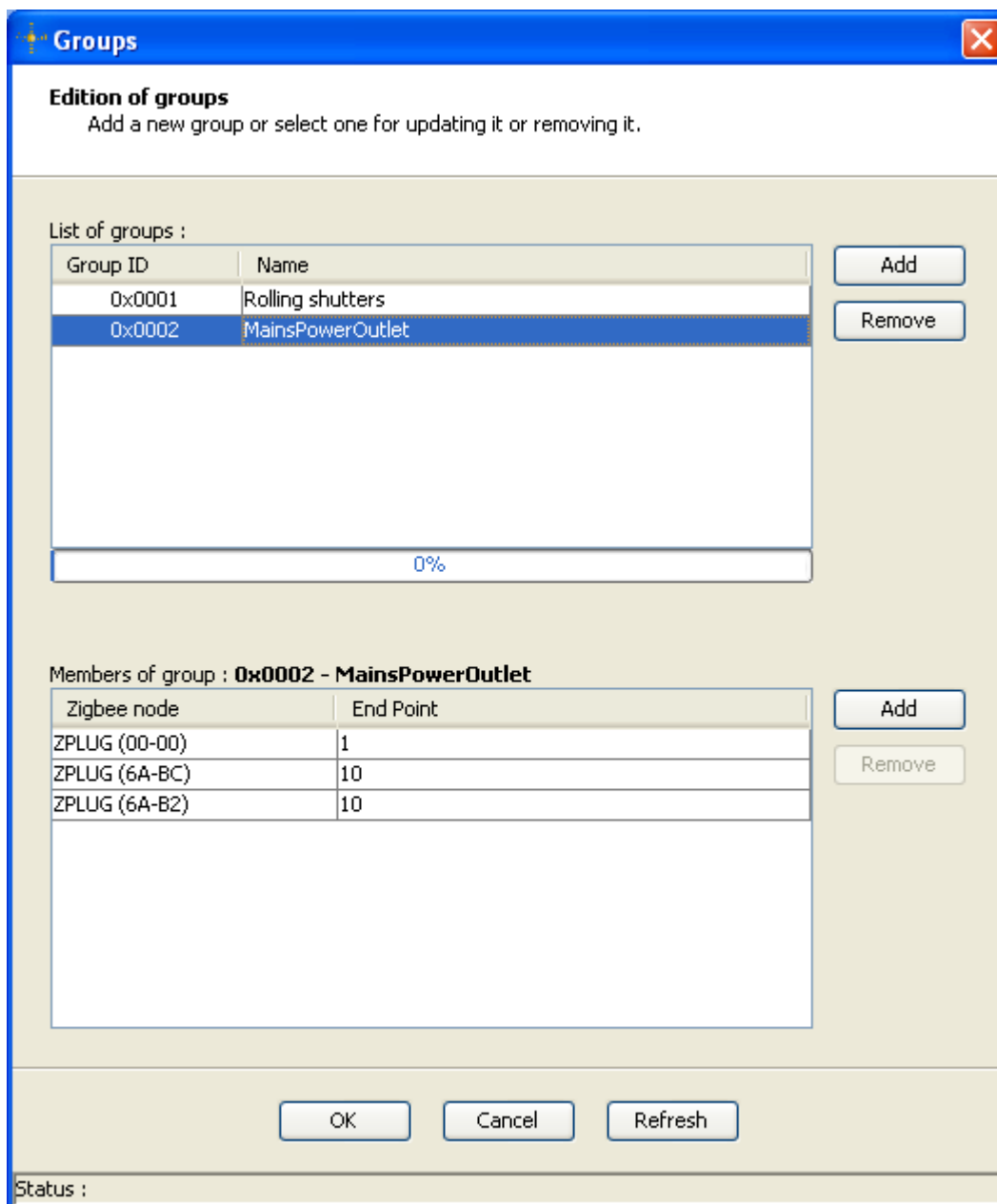
## II.8 EDITION OF GROUPS

The edition window of the groups is accessible from the menu “Edit/Groups...”

A group is a set of Zigbee nodes / endpoint which can be reachable by a common network address, in this particular case the group identifier.

The button “Refresh” allows updating the list of the groups and the scenes by requesting all Zigbee nodes of the network. The refreshment can take several tens of seconds.

Below the window displaying the list of current groups in the network



The selection of a group in the list of the groups allows displaying the members of this group in the list “Members of group”.

A member is characterized by a Zigbee node and an Endpoint.

### II.8.1 LIST OF GROUPS OF A ZIGBEE NODE

To know about which groups belongs a Zigbee node, double-click on its symbol in the topological view (cf. II.6.2). The following window opens and allows displaying in a synthetic way, the membership of a Zigbee node in various groups.



## II.8.2 ADD A GROUP

Click on the button « Add », the following window opens and allows defining the identifier and the name (optional) of the group. The creation of a group becomes effective only when a member is added to this group. That is no request is emitted at this stage of the operation.

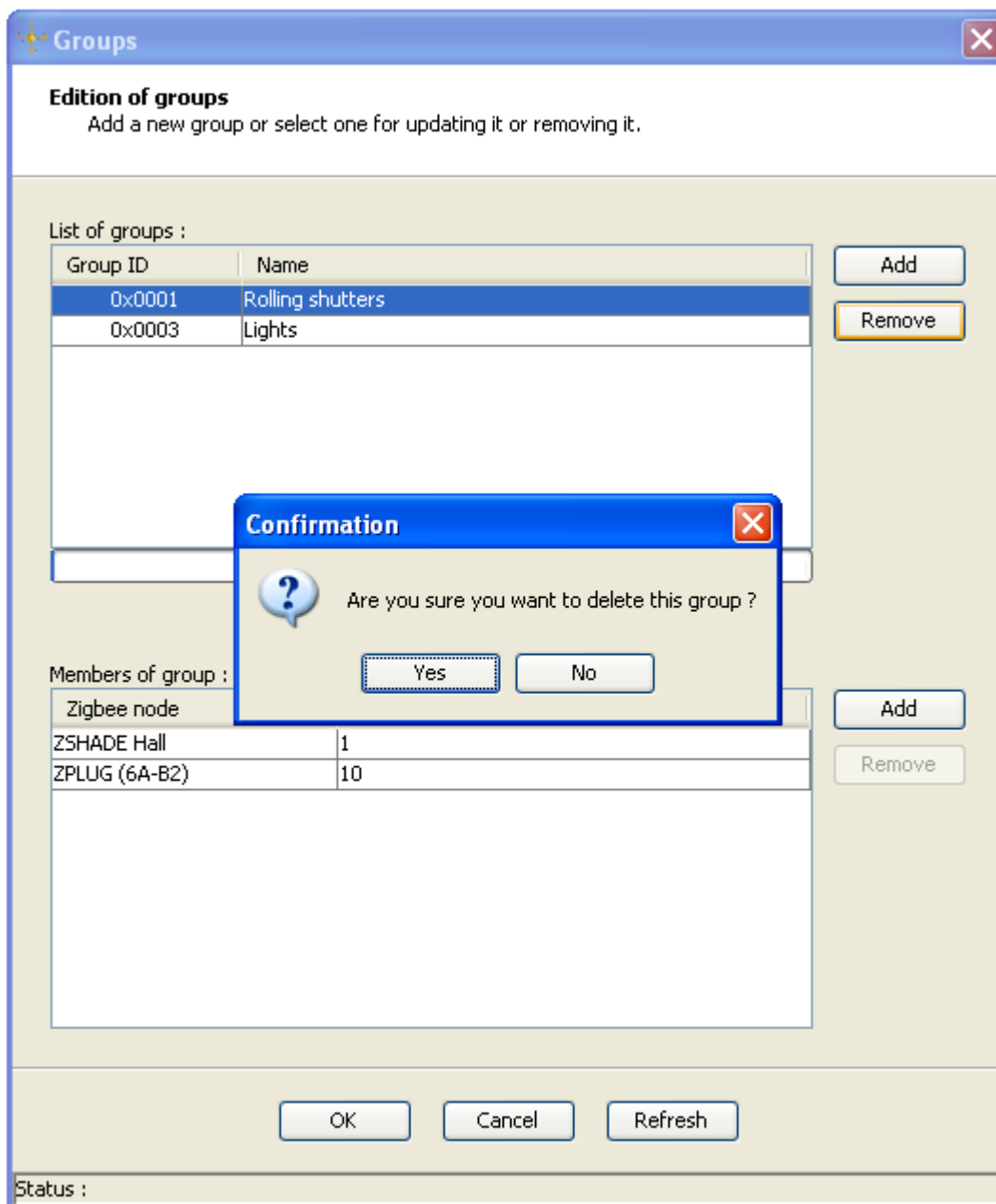


## II.8.3 REMOVE A GROUP

Select a group in the list of groups and click on the button “Remove”, the following window appears to require a confirmation of you.

A request is sent to all members of the group to delete them of this group.

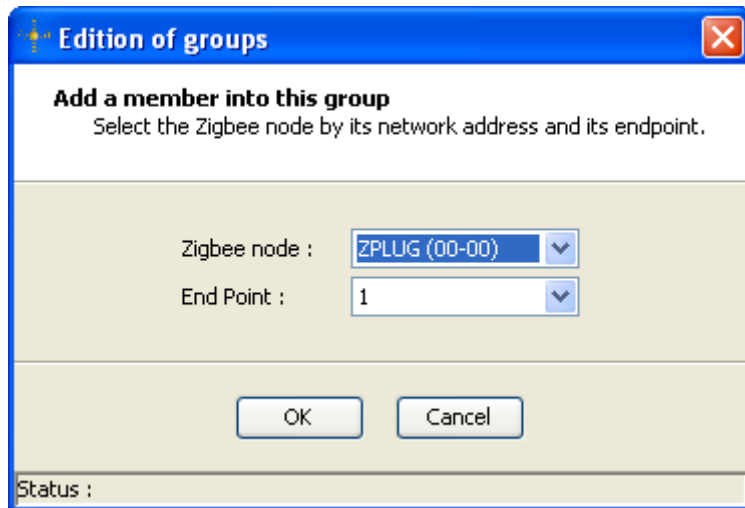
It is not possible to delete a group if a scene is always associated with this group to delete.



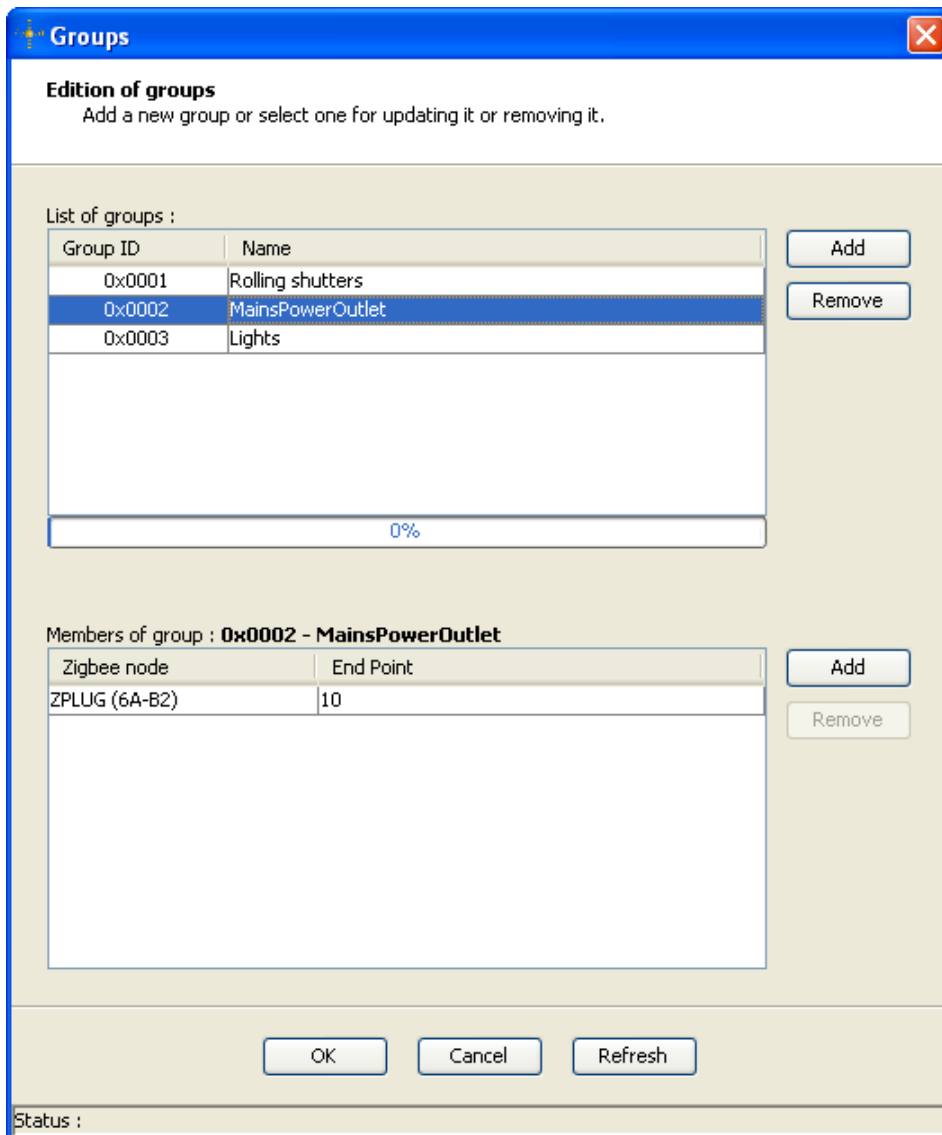
## II.8.4 ADD A MEMBER INTO A GROUP

Select a group in the list of groups, and then click on the button “Add” situated at the level of the list “Members of group”; the following window opens and allows adding a member into the group.

A request is sent to this Zigbee node to add it into the group.



If the operation is successful the window closes automatically and the Zigbee node is inserted into the list of the members.

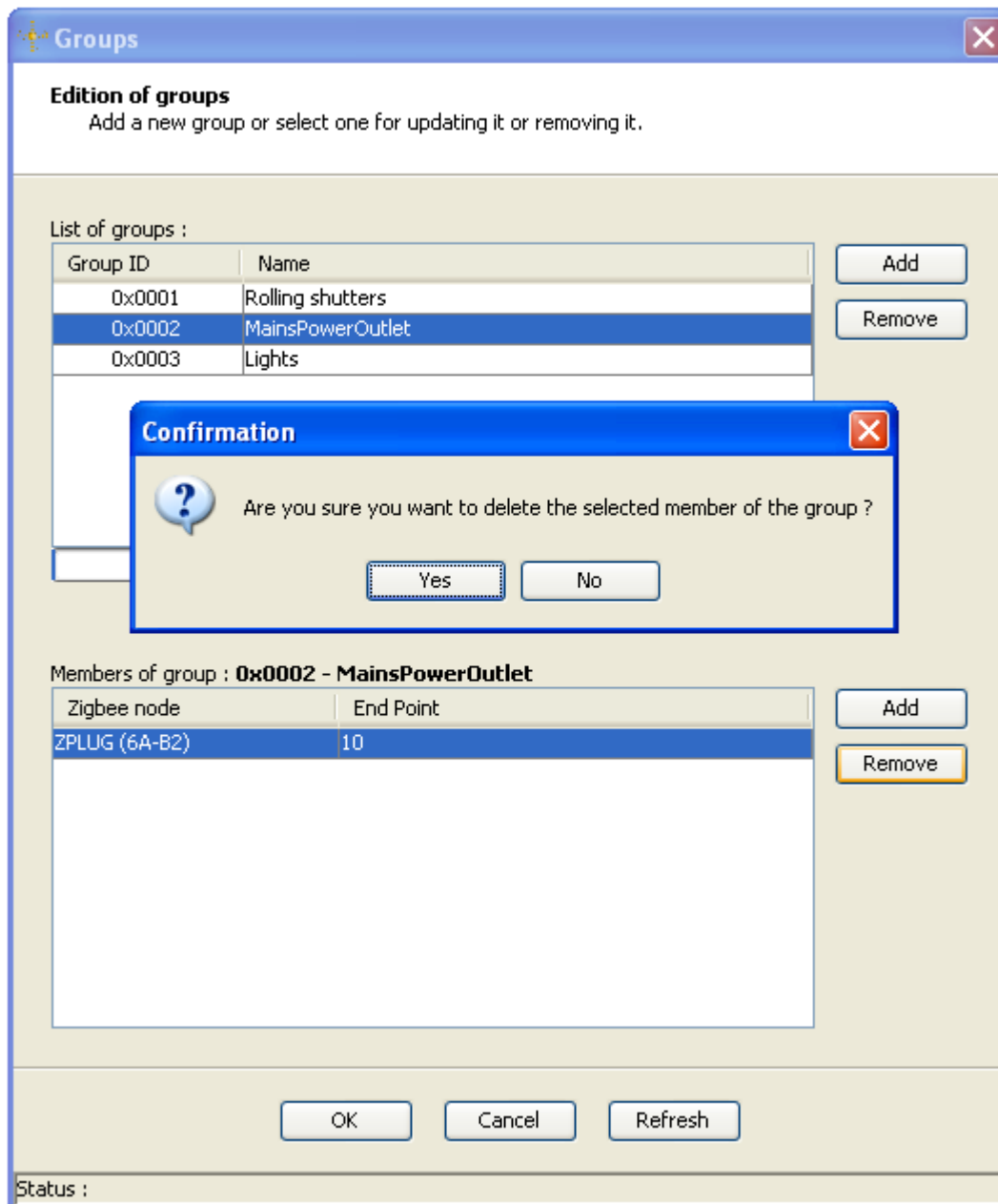




## II.8.5 DELETE A MEMBER FROM A GROUP

Select a member in the list of “Members of group” and click on the button “Remove”, the following window appears to require a confirmation of you.

A request is sent to this Zigbee node to delete it from the group.



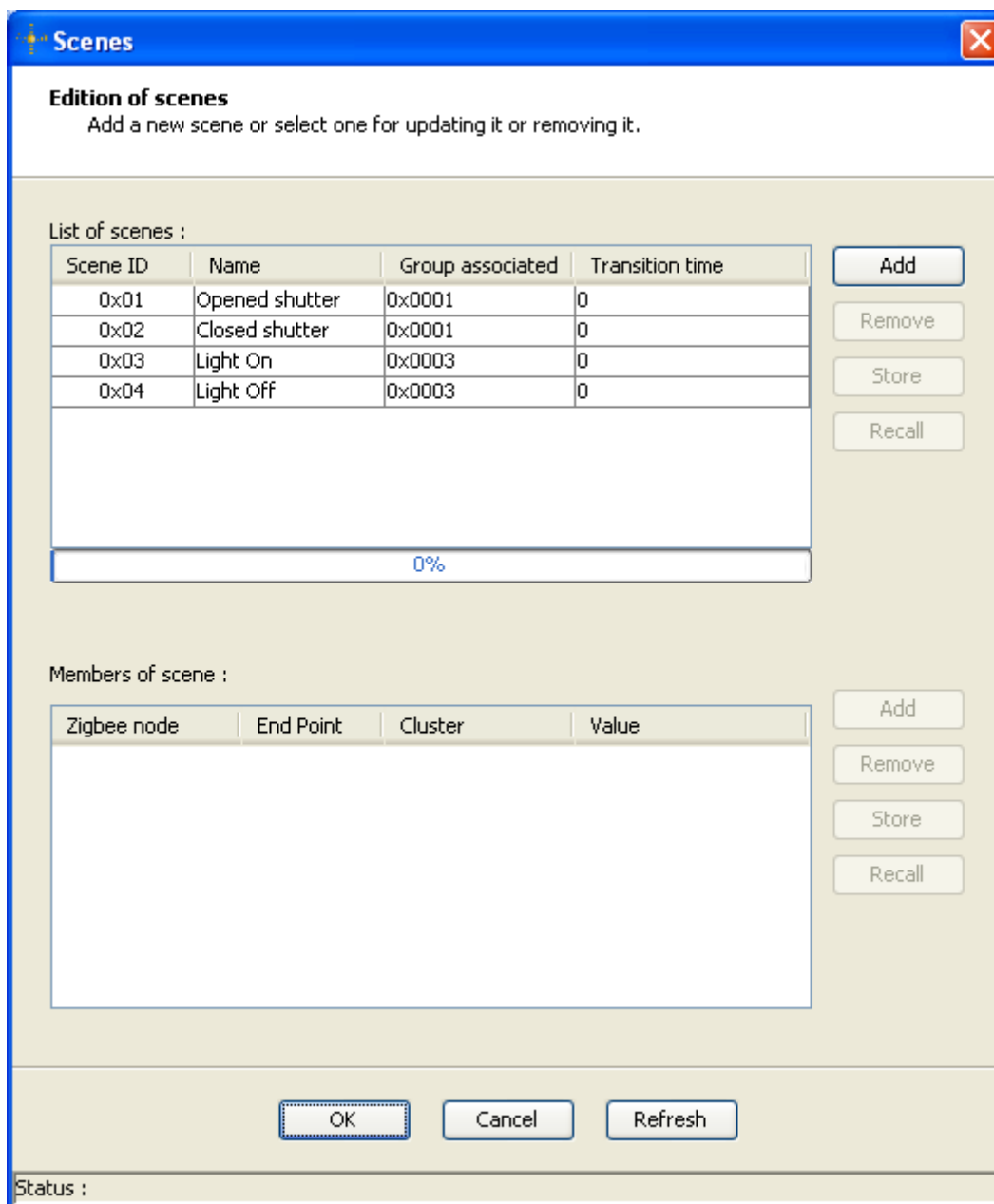
## II.9 EDITION OF SCENES

The edition window of the scenes is accessible from the menu “Edit/Scenes...”

A scene is a set of predefined states of Zigbee nodes belonging to this scene.

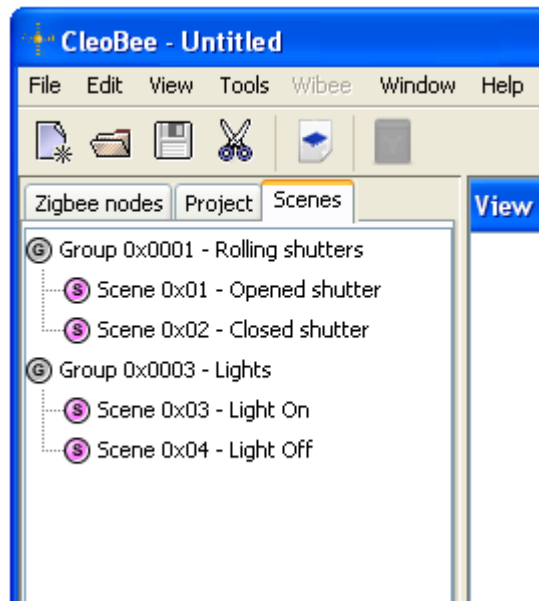
The button “Refresh” allows updating the list of the groups and the scenes by requesting all Zigbee nodes of the network. The refreshment can take several tens of seconds.

Below the window displaying the list of current scenes in the network



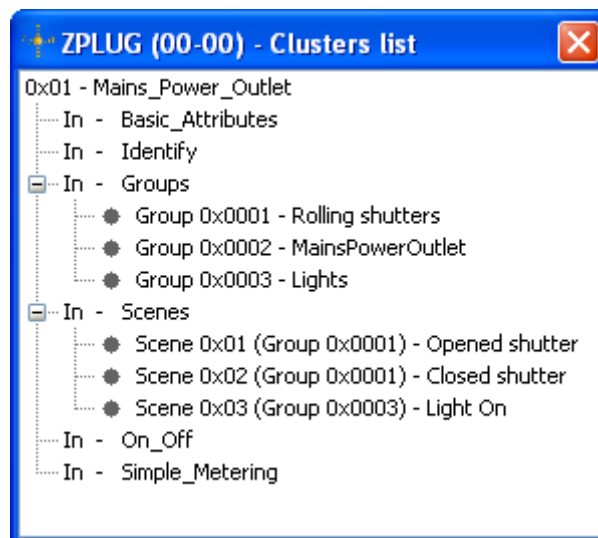
## II.9.1 LIST OF SCENES ASSOCIATED TO A GROUP

The scenes associated to a group are also displayed on the left side of the screen in the tab “Scenes”. It is possible to recall a scene by double-clicking on its name.



## II.9.2 LIST OF SCENES OF A ZIGBEE NODE

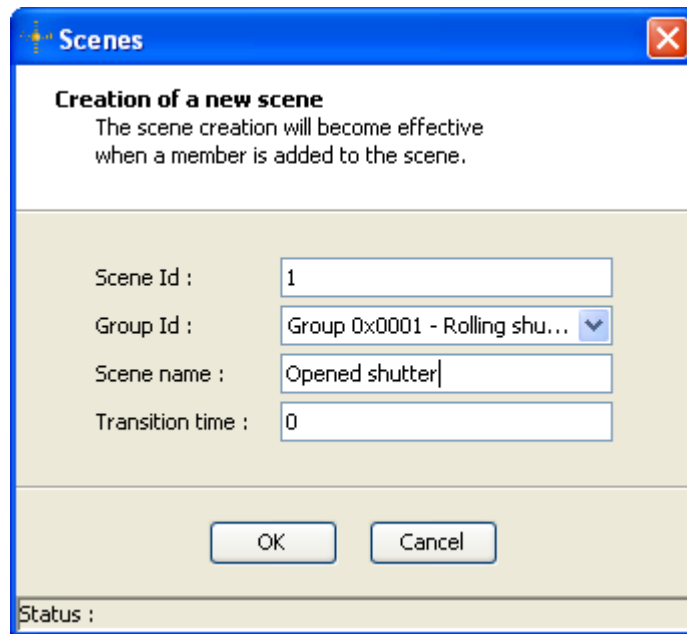
To know about which scenes belongs a Zigbee node, double-click on its symbol in the topological view (cf.II.6.2). The following window opens and allows displaying in a synthetic way, the membership of a Zigbee node in various scenes.



## II.9.3 ADD A SCENE

Click on the button « Add », the following window opens and allows defining the identifier, the group associated to the group, the name (optional) of the scene and the transition time (not used for the moment in Zigbee nodes Cleode).

The creation of a scene becomes effective only when a member is added to this scene. That is no request is emitted at this stage of the operation.

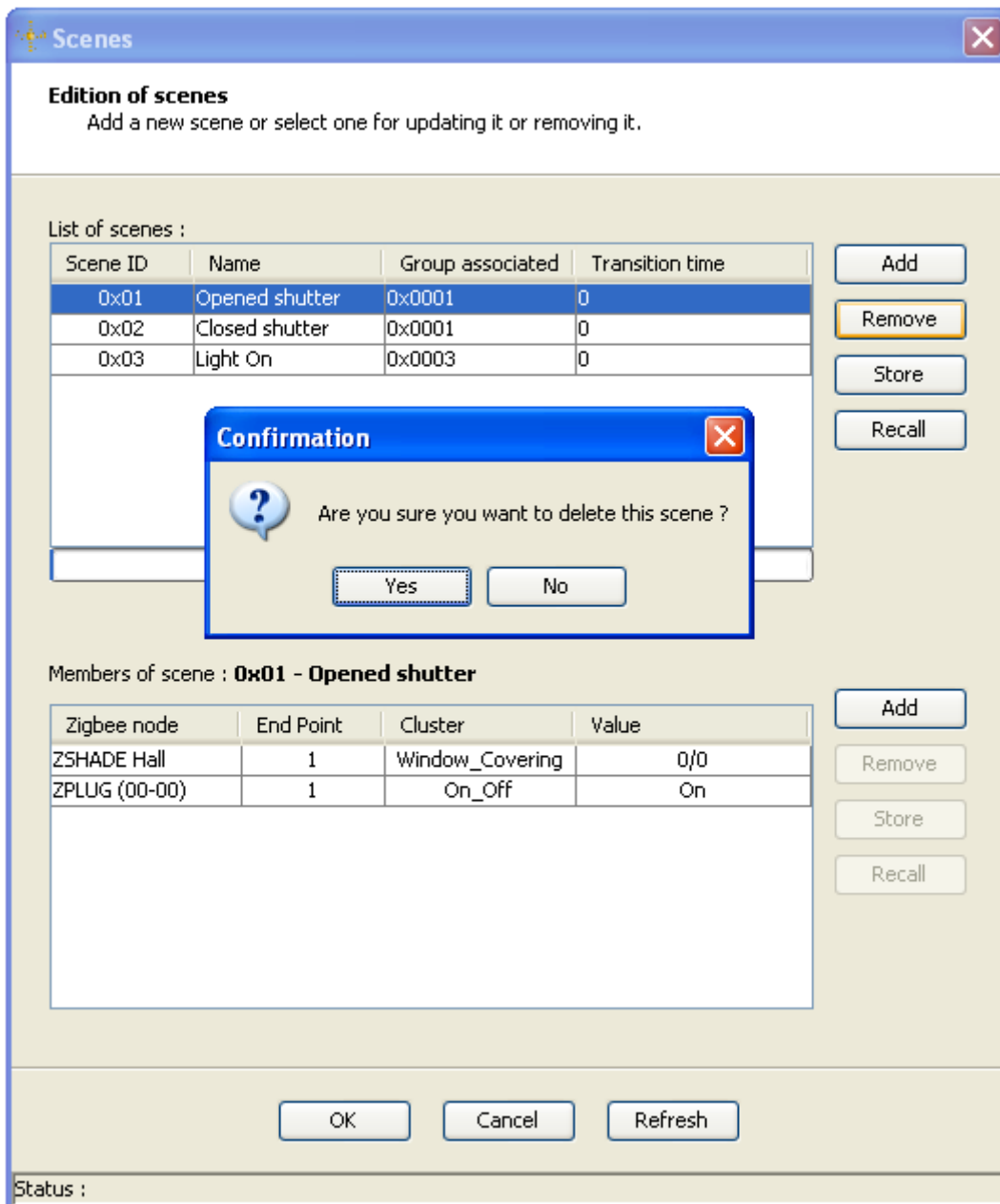


The screenshot shows a dialog box titled "Scenes" with a close button in the top right corner. The main heading is "Creation of a new scene". Below this, a message states: "The scene creation will become effective when a member is added to the scene." The dialog contains four input fields: "Scene Id" with the value "1", "Group Id" with a dropdown menu showing "Group 0x0001 - Rolling shu...", "Scene name" with the text "Opened shutter", and "Transition time" with the value "0". At the bottom, there are "OK" and "Cancel" buttons. A "Status:" label is visible at the very bottom left of the dialog area.

#### II.9.4 REMOVE A SCENE

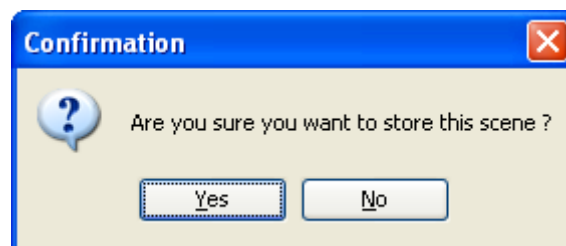
Select a scene in the list of scenes and click on the button “Remove”, the following window appears to require a confirmation of you.

A request is sent to all members of the scene to delete them of this scene.



## II.9.5 STORE A SCENE

Select a scene in the list of scenes and click on the button “Store”, the following window appears to require a confirmation of you.



A request is sent en broadcast (on the common network address of group) to store the current state of Zigbee nodes which are member of this scene as the predefined states of this scene.

## II.9.6 RECALL A SCENE

Select a scene in the list of scenes, and then click on the button “Recall”. A request is sent in broadcast (on the common network address of group) to set the Zigbee nodes which are member of the scene in their predefined states for this scene scène.

## II.9.7 ADD A MEMBER INTO A SCENE

Select a scene in the list of scenes, and then click on the button “Add” situated at the level of the list “Members of scene”; the following window opens and allows adding a member into the scene.

A request is sent to this Zigbee node to add it into the scene.

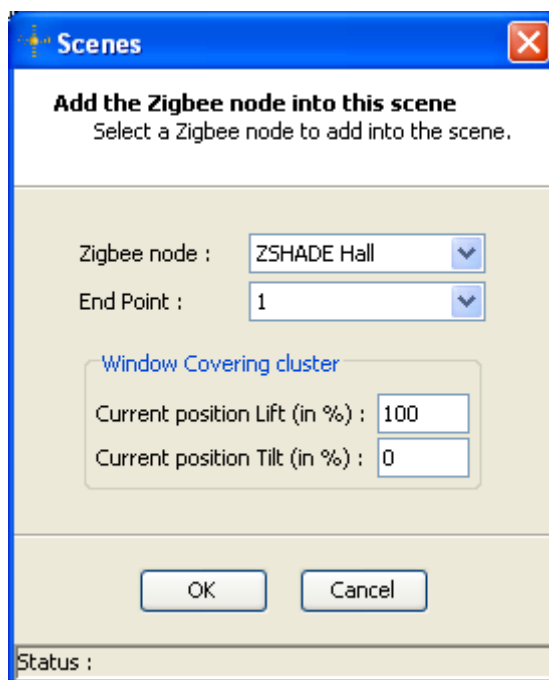
Only the Zigbee nodes being a member of the group associated with the scene and possessing in the same endpoint the cluster “Scenes” and at least one of the following clusters can be added in a scene :

- On\_Off
- Level\_Control
- Color\_Control
- Door\_Lock
- Thermostat
- Window\_Covering

The selection of the predefined state of the scene is different according to the cluster of the selected Zigbee node.

### *Input screen for the cluster “On Off”*

The screenshot shows a dialog box titled "Scenes" with a close button in the top right corner. The main heading is "Add the Zigbee node into this scene" followed by the instruction "Select a Zigbee node to add into the scene." Below this, there are two dropdown menus: "Zigbee node" is set to "ZPLUG (6A-B2)" and "End Point" is set to "10". A section titled "On/Off cluster" contains a "State:" label with two radio buttons: "On" (which is selected) and "Off". At the bottom of the dialog are "OK" and "Cancel" buttons. A "Status:" label is located at the very bottom of the dialog box.

***Input screen for the cluster “Window Covering”***

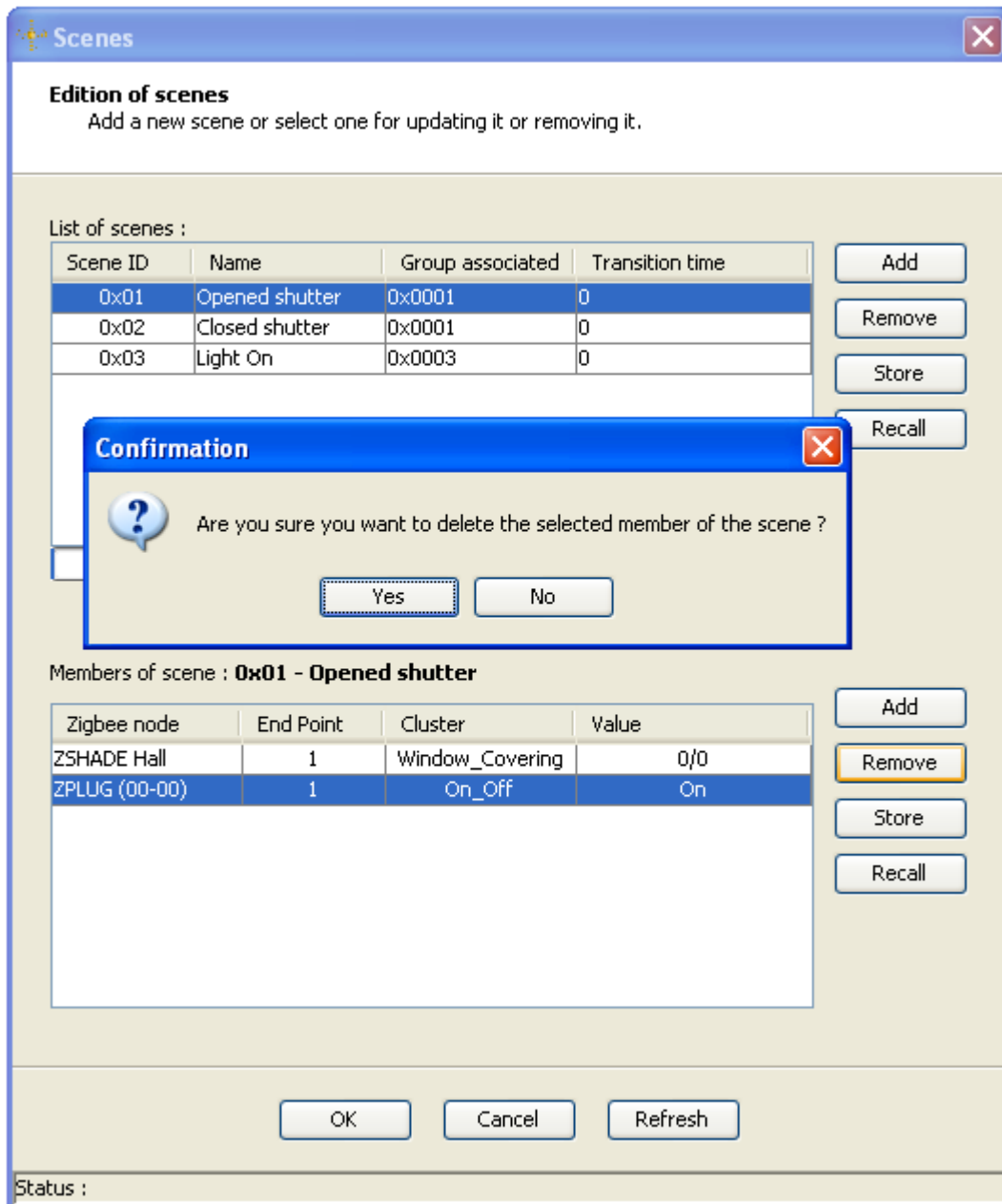
The screenshot shows a dialog box titled "Scenes" with a close button (X) in the top right corner. The main heading is "Add the Zigbee node into this scene" followed by the instruction "Select a Zigbee node to add into the scene." Below this, there are two dropdown menus: "Zigbee node" set to "ZSHADE Hall" and "End Point" set to "1". A section titled "Window Covering cluster" contains two input fields: "Current position Lift (in %)" set to "100" and "Current position Tilt (in %)" set to "0". At the bottom, there are "OK" and "Cancel" buttons. A "Status :" label is visible at the very bottom of the dialog box.

If the operation is successful the window closes automatically and the Zigbee node is inserted into the list of the members.

**II.9.8 DELETE A MEMBER FROM A SCENE**

Select a member in the list of “Members of scene” and click on the button “Remove”, the following window appears to require a confirmation of you.

A request is sent to this Zigbee node to delete it from the scene.



## II.9.9 STORE THE STATE OF A MEMBER OF A SCENE

Select a member in the list of “Members of scene” and then click on the button “Store”.  
A request is sent to the selected member to store the current state of the cluster as the predefined state for this scene.

## II.9.10 RECALL THE STATE OF A MEMBER OF A SCENE

Select a member in the list of “Members of scene” and then click on the button “Recall”.  
A request is sent to the selected member to this Zigbee node in the predefined state for this scene.



## II.10 EDITION OF SOFTWARE ACTIONS

The edition window of the software actions is accessible from the menu “Edit/Software actions...”

An action is to execute one or more commands depending of the state of a trigger. The trigger can be a receipt of a command or an incoming notification from a source as a Zigbee node or a temporal event.

It is thus necessary to define the source with its trigger and the target in order to execute one or more commands.

A source trigger can be:

- a Zigbee node,
- a time event,
- a multi-trigger.

A device trigger is characterized by its type and by its operators (binary or unary, according of the type). A value must be defined for the binary operators.

A time event is characterized by one hour during the day and its weekly, monthly or annual periodicity.

A target command can be:

- a device command,
- a scene command,
- an Email sending,
- an HTTP URL call,
- a macro of commands.

It is possible to put into service, or out of service, a software action, without it being deleted, by modifying the checkbox “In service”.

It is possible to define an operating range on the hours of the day, on the days of the week and over the months of the year.

It is possible to delay the execution of the command associated with a software action.

The asterisk that is situated in the first column of each software action indicates that this software action is not validated. This action is not validated because it has just been added or it has just been modified. Press the button “Ok” or “Apply” to take account of this software action.

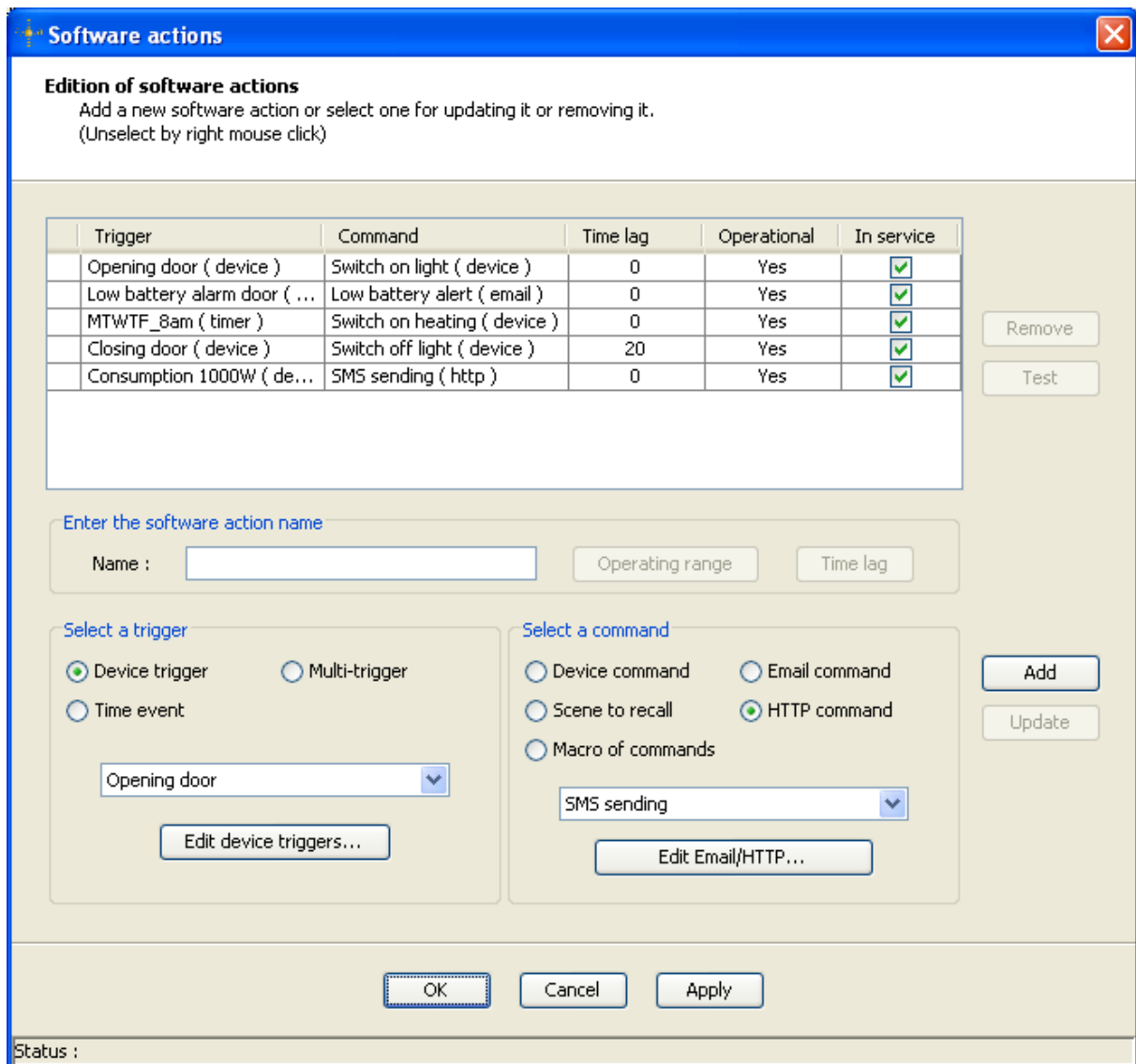


Figure 10: Edition of software actions

### II.10.1 ADD AN SOFTWARE ACTION

Select the source and target of a software action then click on the button “Add” to the right of the screen for adding this new action in the list.

It is necessary to validate by the button “Ok” or “Apply” to take account of this software action. The only difference being that the button “Ok” close the windows of edition of software actions.

So that a device trigger is functional, it is necessary to create a binding between the source Zigbee node and the coordinator. The following window can appear to ask for the confirmation to create immediately the binding.

### *Example for a trigger using the cluster “On Off”*

**Add binding**

A binding is necessary to make operational the software action. Do you want to create this binding now ?

**Cluster**

On\_Off

**Source**

Zigbee node : ZPLUG Office

End Point : 1

**Target**

Zigbee node : UBEE (39-EA)

End Point : 10

OK Cancel

Status :

## II.10.2 UPDATE AN SOFTWARE ACTION

Select a software action in the list; the input fields of the source and the target are filled according to the values of this action.

Change these values then click the button “Update” on the right of the screen for updating the action in the list.

It is necessary to validate by the button “Ok” or “Apply” to take account of this software action. Otherwise to cancel the current modifications, leave by the button “Cancel”.

To modify the operating range, click the button “Operating range”.

The following window appears to allow defining the hours of the day, the days of the week and the months of the year during which the software action will be functional.

**Software actions**

**Define the operating range**  
You can define the operating range on the hours of the day, on the days of the week and over the months of the year.

Software action name  
Alert Plug to ON

**Operating hours**  
Start 19:00 End 06:00

00:00 04:00 08:00 12:00 16:00 20:00 24:00

**Days of week**  
 Monday  Tuesday  Wednesday  
 Thursday  Friday  Saturday  Sunday

**Months of the year**  
 Jan  Feb  Mar  Apr  May  Jun  
 Jul  Aug  Sep  Oct  Nov  Dec

OK Cancel

Status :

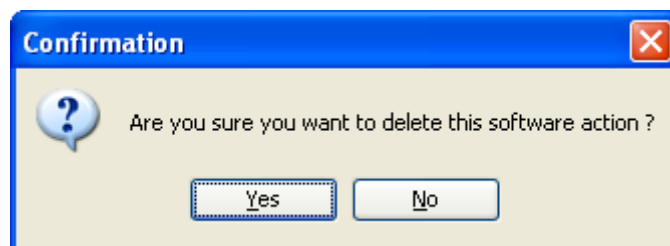
To modify the temporization of a software action, click on the button “Temporization”.  
The following window appears to allow to define a fixed or random time in the execution of the command associated with the software action.



### II.10.3 REMOVE AN SOFTWARE ACTION

Select a software action in the list of software actions and click on the button “Remove” on the right of the screen.

The following window appears to require a confirmation of you.

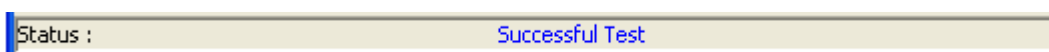


So that the software action is not operational any more, it is necessary to validate by the button “Ok” or “Apply”. Otherwise to cancel the current modifications, leave by the button “Cancel”.

### II.10.4 TEST AN SOFTWARE ACTION

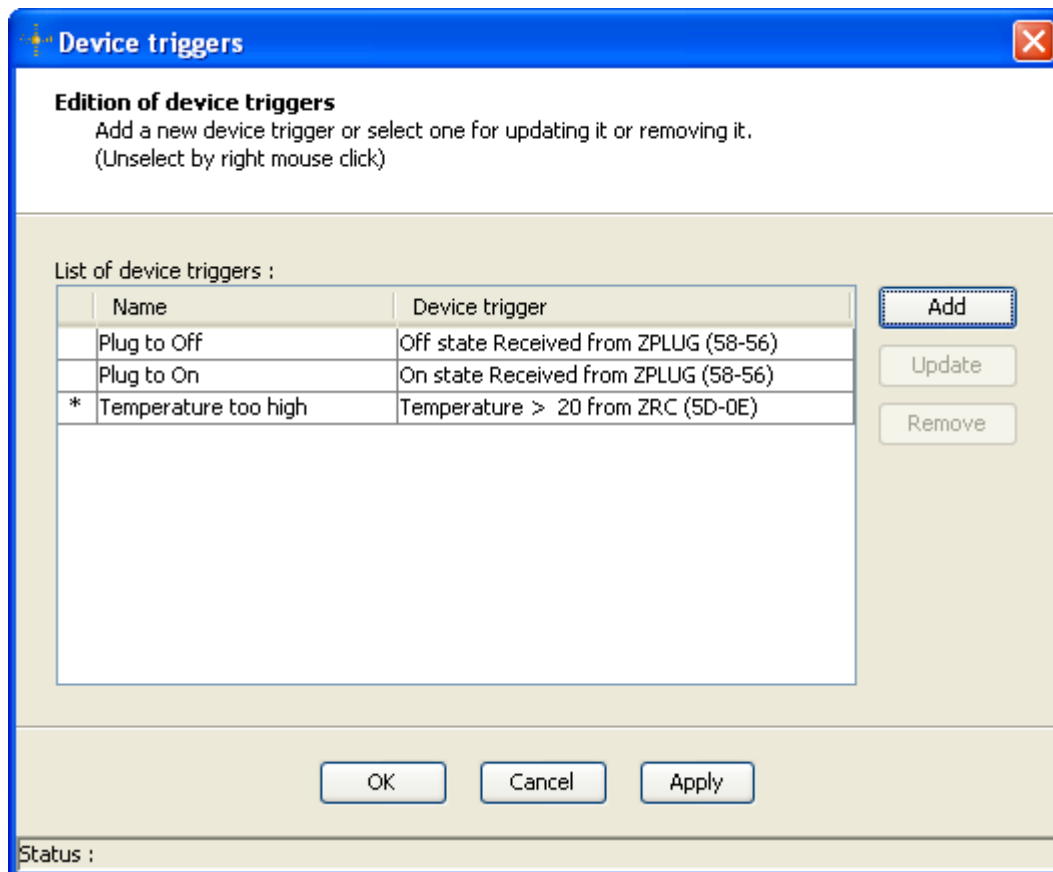
Select a software action in the list of software actions and click on the button “Test” on the right of the screen.

The result of the test is shown in the status bar.



## II.11 EDITION OF DEVICE TRIGGERS

The edition window of device triggers is accessible from the edition window of software actions when you click on the button “Edit device triggers ...” in the trigger zone.



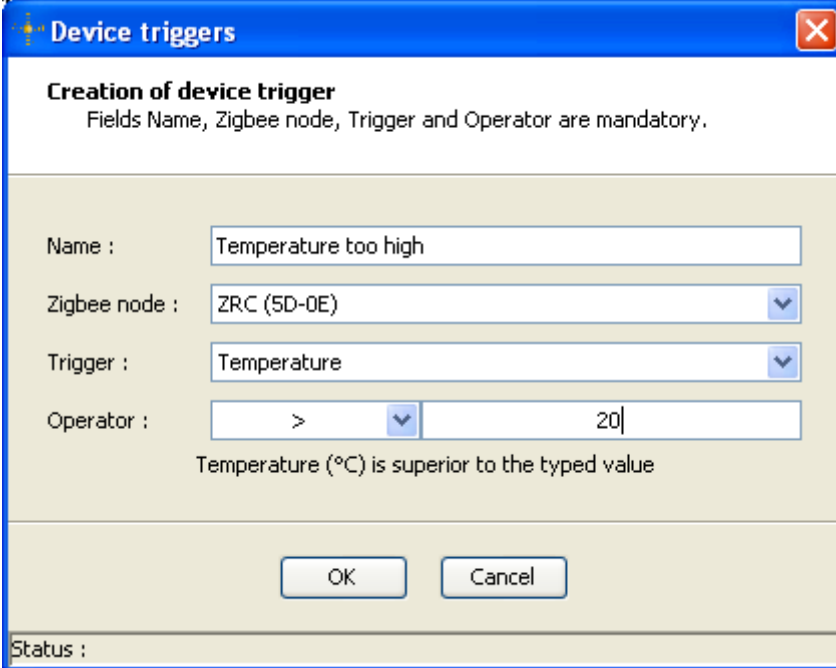
The asterisk that is situated in the first column indicates that this Device trigger has not been taken into account.

It is necessary to validate by the button “Ok” or “Apply” to take into account this device trigger. The only difference being that the “OK” button closes the edition window.

### II.11.1 ADD A DEVICE TRIGGER

Click on the button “Add”, the following window appears and allows you to define the parameters necessary for a time event.

- Trigger name,
- Source Zigbee node,
- Trigger,
- Operator,
- Value for a binary operator.



**Device triggers**

**Creation of device trigger**  
Fields Name, Zigbee node, Trigger and Operator are mandatory.

Name :

Zigbee node :

Trigger :

Operator :

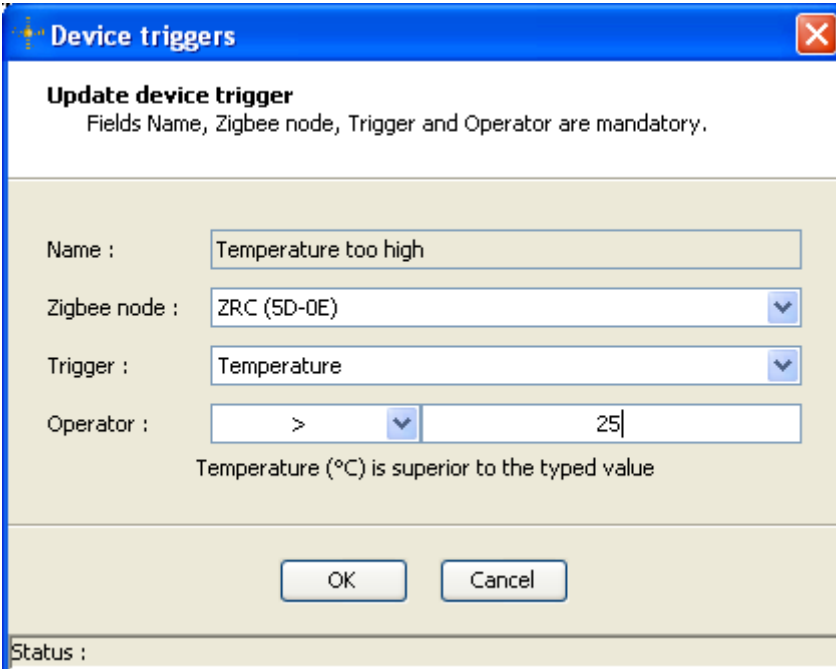
Temperature (°C) is superior to the typed value

Status :

## II.11.2 UPDATE A DEVICE TRIGGER

Select a device trigger into the list of device triggers and click on the button “Update” or simply double-click on the trigger that must be updated.

The following window appears and allows you to change all the parameters of the device trigger except the name given that it is unique and that it corresponds to the name of this trigger and the source Zigbee node.



**Device triggers**

**Update device trigger**  
Fields Name, Zigbee node, Trigger and Operator are mandatory.

Name :

Zigbee node :

Trigger :

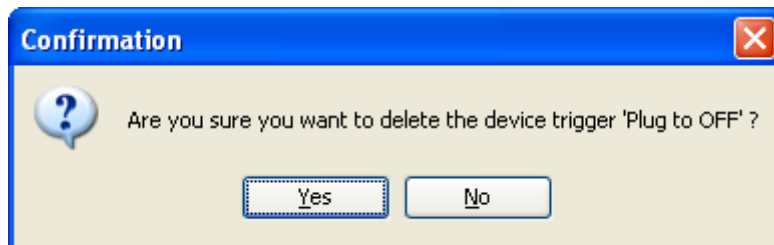
Operator :

Temperature (°C) is superior to the typed value

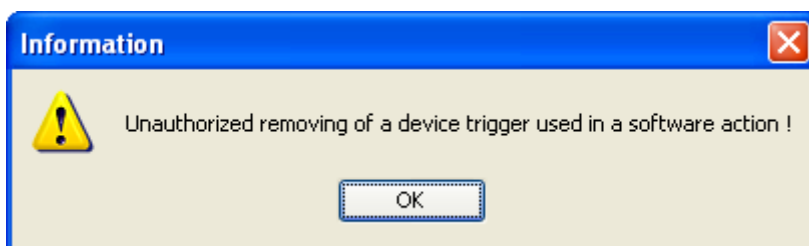
Status :

### II.11.3 REMOVE A DEVICE TRIGGER

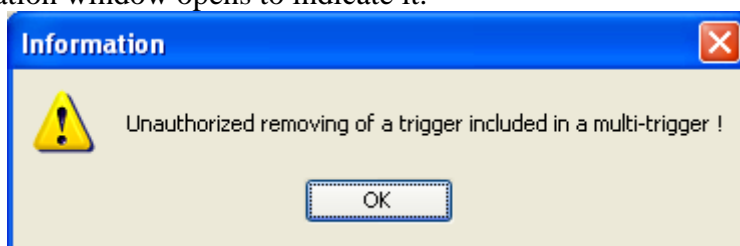
Select a device trigger in the list of device triggers and click on the button “Remove”. The following window appears to require a confirmation of you.



It is not possible to delete a device trigger used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



It is not possible to delete a device trigger included in a multi-trigger; in that case the following information window opens to indicate it.

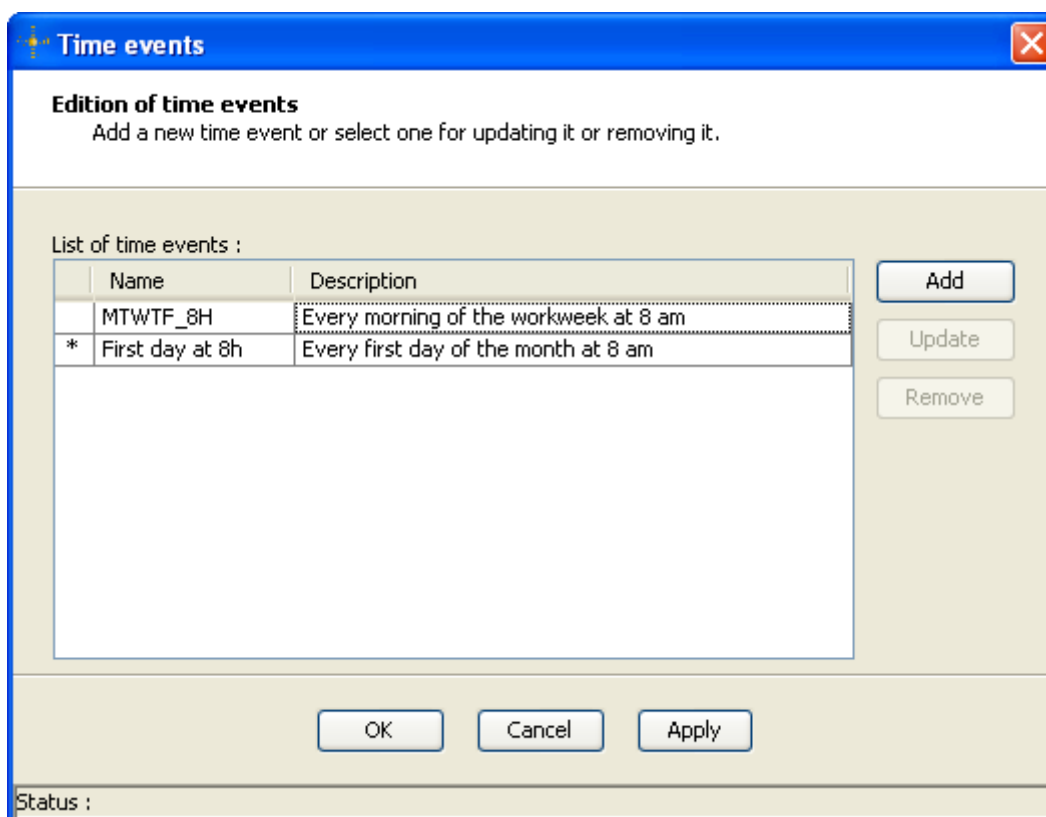


So that the deletion of a device trigger becomes permanent, it is necessary to leave the window “Edition of device triggers” by the button “Ok” or “Apply”. Otherwise to cancel the current modifications, click on the button “Cancel”.

## II.12 EDITION OF TIMER TRIGGERS

The edition window of time events is accessible from the edition window of software actions when you click on the button “Edit time events ...” in the trigger zone.





The asterisk that is situated in the first column indicates that this time event has not been taken into account.

It is necessary to validate by the button “Ok” or “Apply” to take into account this time event. The only difference being that the “OK” button closes the edition window.

### II.12.1 ADD A TIME EVENT

Click on the button “Add”, the following window appears and allows you to define the parameters necessary for a time event.

- Event name,
- Event description
- Trigger time,
- Information of periodicity.

The screenshot shows a dialog box titled "Time events" with a close button in the top right corner. The main heading is "Creation of new time event" with a note: "Fields Name and Hour are mandatory." The dialog is divided into two sections: "Time events" and "Periodicity".

**Time events section:**

- Name :
- Hour :  (dropdown menu)
- Description :

**Periodicity section:**

- Radio buttons:  Weekly,  Monthly,  Annual
- Text: "Every day selected of the week"
- Days:  Monday,  Tuesday,  Wednesday,  Thursday,  Friday,  Saturday,  Sunday

Buttons: OK, Cancel

Status :

## II.12.2 UPDATE A TIME EVENT

Select a time event into the list of time events and click on the button "Update" or simply double-click on the event that must be updated.

The following window appears and allows you to change all the parameters of the time event except the name given that it is unique and that it corresponds to the name of this trigger.

**Time events** [Close]

**Update time event**  
Fields Name and Hour are mandatory.

**Time events**

Name :  Hour :  [v]

Description :

**Periodicity**

Weekly  
 Monthly  
 Annual

1 of every month  
 The last day of every month

Jan  Feb  Mar  Apr  May  Jun  
 Jul  Aug  Sep  Oct  Nov  Dec

OK Cancel

Status :

### II.12.3 REMOVE A TIME EVENT

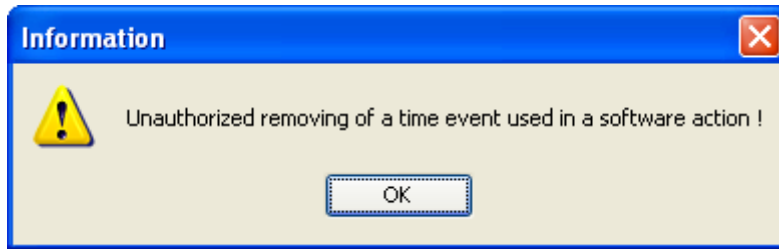
Select a time event in the list of time events and click on the button “Remove”. The following window appears to require a confirmation of you.

**Confirmation** [Close]

? Are you sure you want to delete the time event 'MTWTF\_8H' ?

Yes No

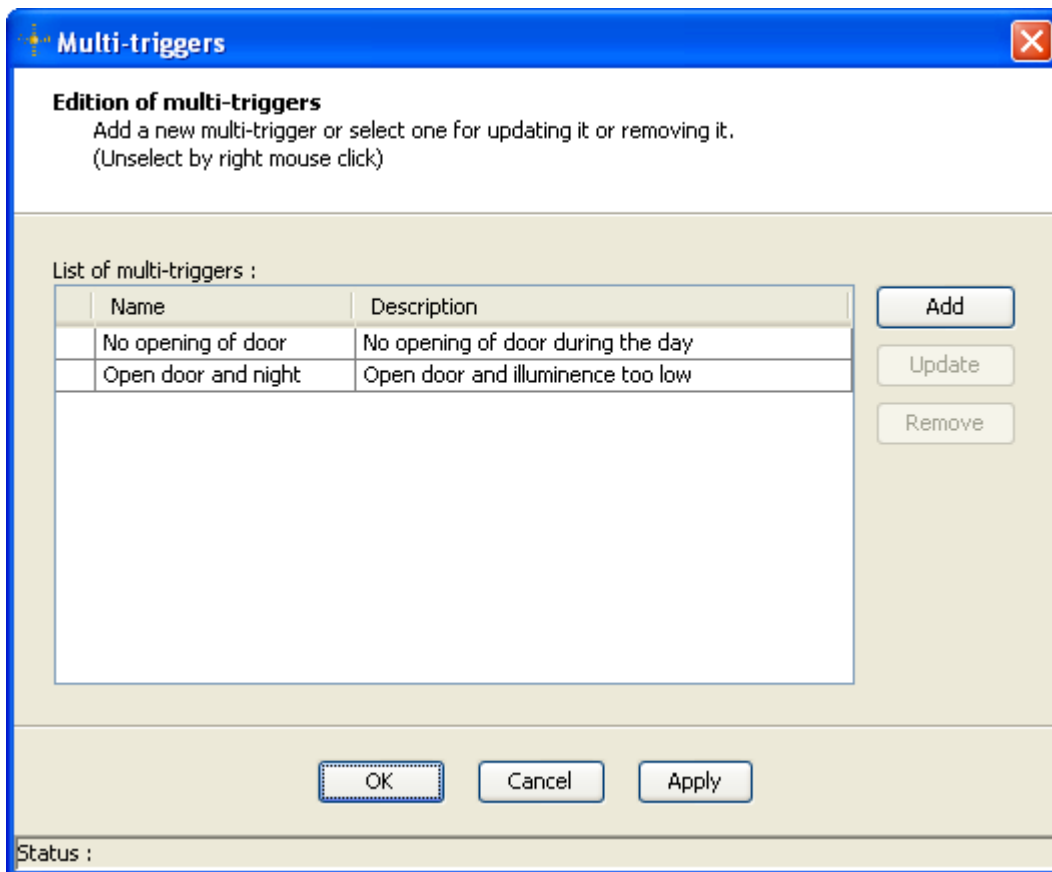
It is not possible to delete a time event used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



So that the deletion of a time event is permanent, it is necessary to leave the window “Edition of time events” by the button "Ok". Otherwise to cancel the current modifications, leave by the button “Cancel”.

## II.13 EDITION OF MULTI-TRIGGERS

The edition window of multi-triggers is accessible from the edition window of software actions when you click on the button “Edit multi-triggers ...” in the trigger zone.



The asterisk that is situated in the first column indicates that this multi-trigger has not been taken into account.

It is necessary to validate by the button “Ok” or “Apply” to take into account this multi-trigger. The only difference being that the “OK” button closes the edition window.

## II.13.1 ADD A MULTI-TRIGGER

Click on the button “Add” of the edition window, the following window appears and allows you to define the parameters necessary for a multi-trigger.

- Multi-trigger name,
- Description of multi-trigger (optional)
- Operator,
- Contents of multi-trigger.

**Multi-triggers**

**Creation of new multi-trigger**  
Fields Name and Operator are mandatory and at least one trigger.

**Multi-trigger**

Name : Open door and night  
Description : Open door and illuminence too low  
Operator : AND

**Contents of multi-trigger**

Name	Type
Open door	device
Illuminence too low	device

Add  
Remove

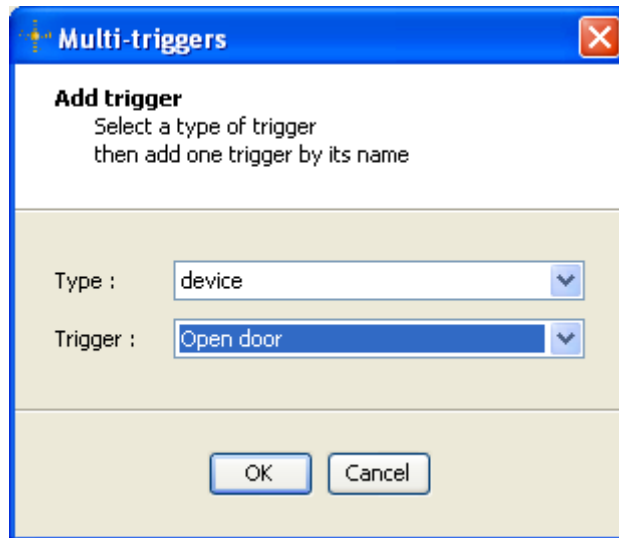
OK Cancel

Status :

A multi-trigger with the operator “AND” consists only of device triggers. It starts when all triggers are active at the same time. The evaluation of the multi-trigger is done in every change of one of these triggers.

A multi-trigger with the operator “No activity” consists of a time event and one or several device triggers. It starts when the time event is triggered and no device trigger was activated since the last evaluation of the time event.

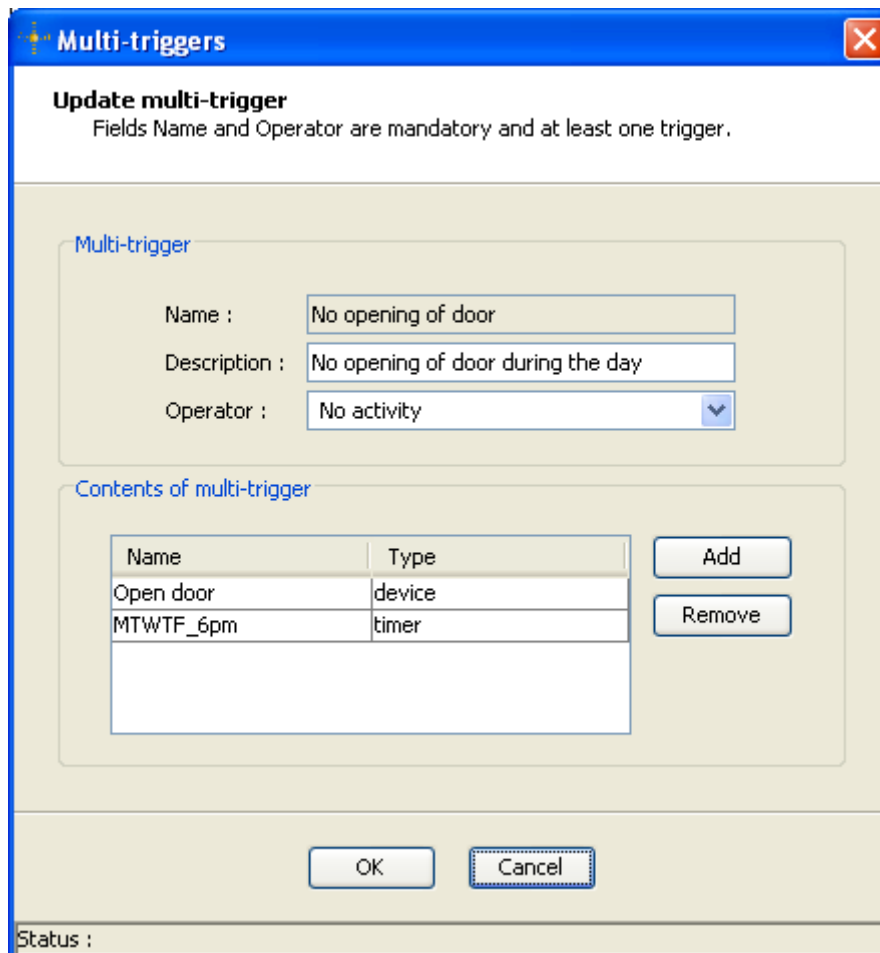
Click on the button “Add”, the following window appears and allows you to add the contents of multi-trigger.



### II.13.2 UPDATE A MULTI-TRIGGER

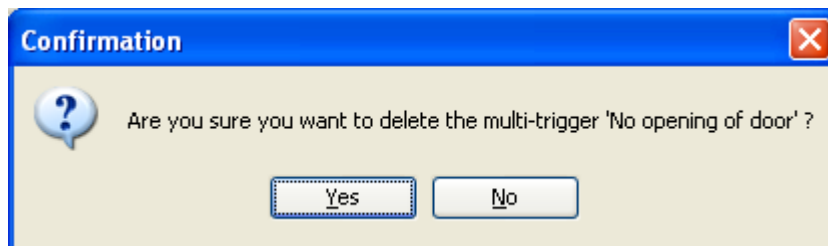
Select a multi-trigger into the list of multi-triggers and click on the button “Update” or simply double-click on the trigger that must be updated.

The following window appears and allows you to change all parameters of the multi-trigger except the name given that it is unique and that it corresponds to the name of this trigger and the operator.

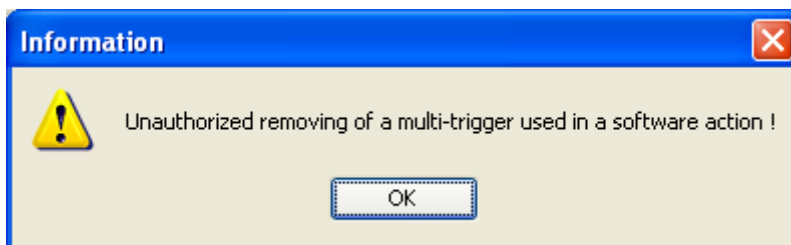


### II.13.3 REMOVE A MULTI-TRIGGER

Select a multi-trigger in the list of multi-triggers and click on the button “Remove”. The following window appears to require a confirmation of you.



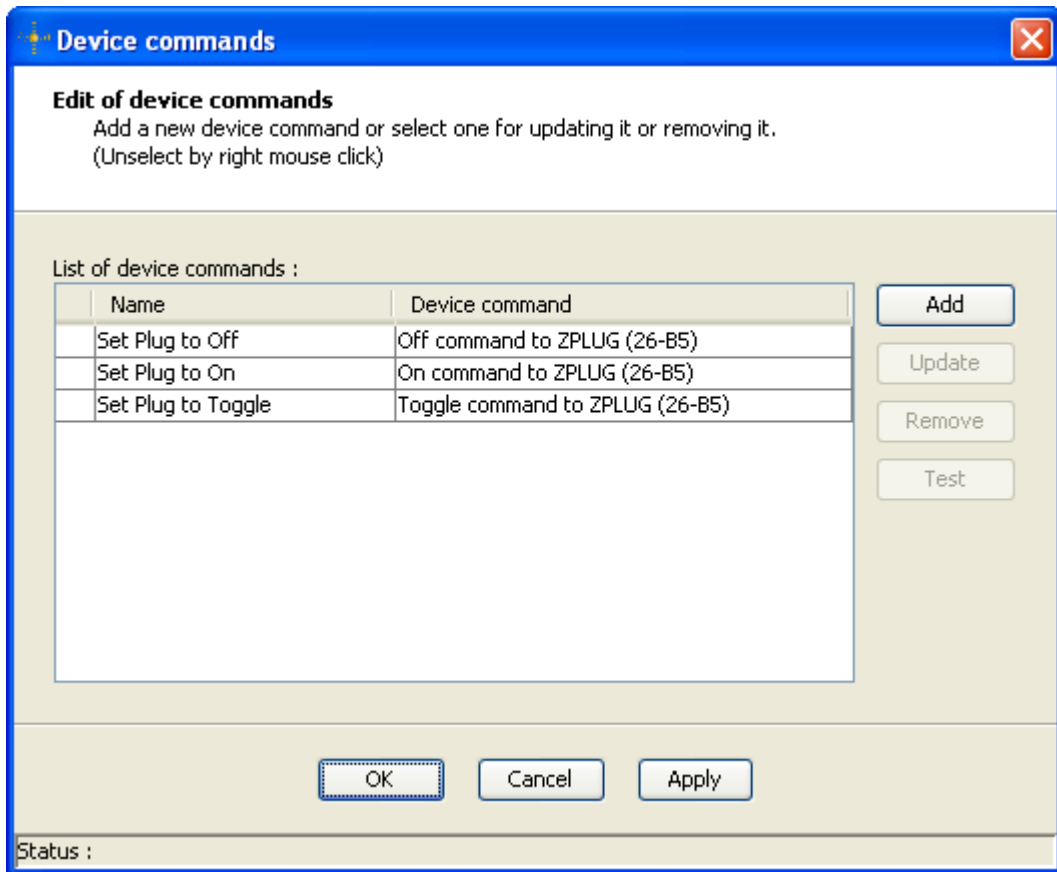
It is not possible to delete a multi-trigger used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



So that the deletion of a multi-trigger becomes permanent, it is necessary to leave the window “Edition of multi-triggers” by the button "Ok". Otherwise to cancel the current modifications, click on the button “Cancel”.

## II.14 EDITION OF DEVICE COMMANDS

The edition window of device commands is accessible from the edition window of software actions when you click on the button “Edit device commands ...” in the command zone.

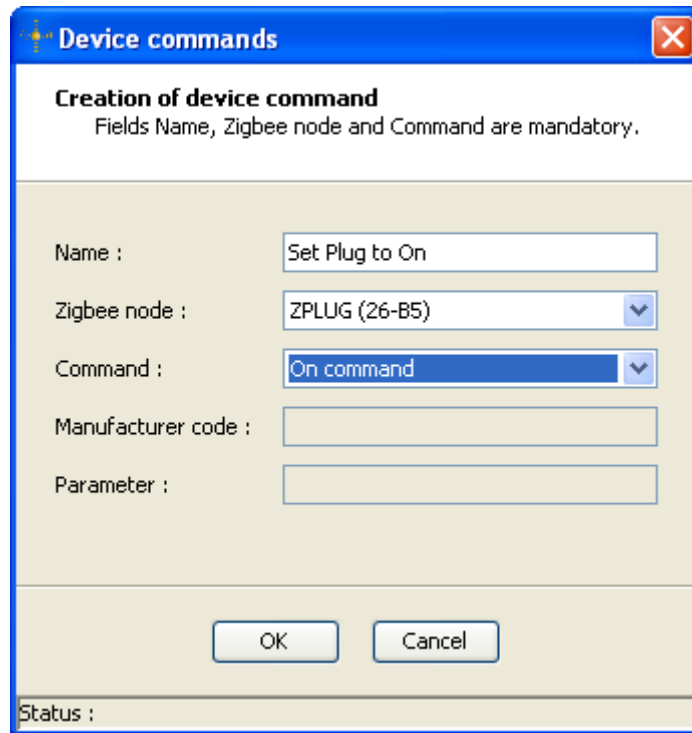


### II.14.1 ADD A DEVICE COMMAND

Click on the button “Add” of the edition window, the following window appears and allows you to define the parameters necessary for a device command

- Device command name,
- Target Zigbee node,
- Command,
- Manufacturer code if necessary,
- Parameter if necessary.





**Device commands**

**Creation of device command**  
Fields Name, Zigbee node and Command are mandatory.

Name :

Zigbee node :

Command :

Manufacturer code :

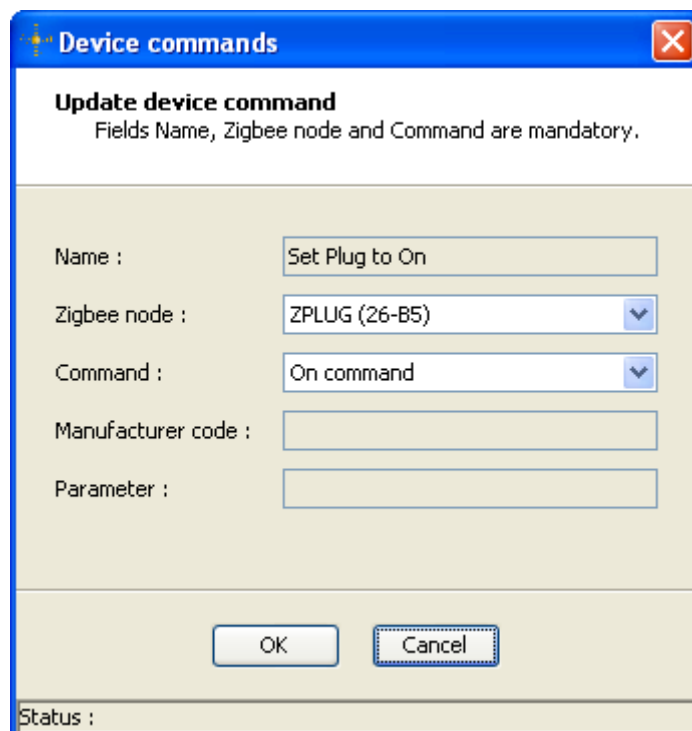
Parameter :

Status :

## II.14.2 UPDATE A DEVICE COMMAND

Select a device command into the list of device commands and click on the button “Update” or simply double-click on the command that must be updated.

The following window appears and allows you to change all parameters of the device command except the name given that it is unique and that it corresponds to the name of this command.



**Device commands**

**Update device command**  
Fields Name, Zigbee node and Command are mandatory.

Name :

Zigbee node :

Command :

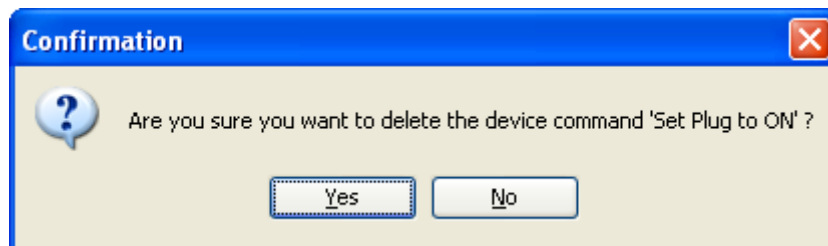
Manufacturer code :

Parameter :

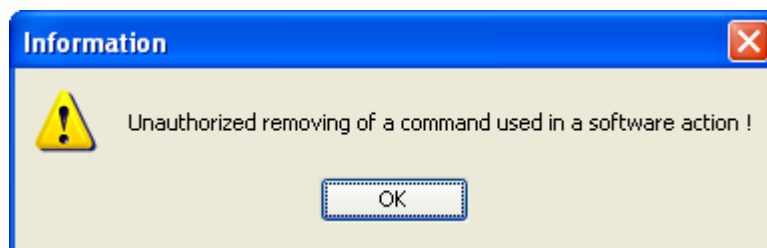
Status :

### II.14.3 REMOVE A DEVICE COMMAND

Select a device command in the list of device commands and click on the button “Remove”. The following window appears to require a confirmation of you.



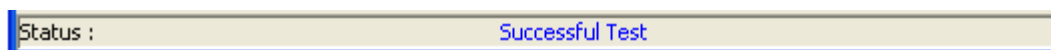
It is not possible to delete a device command used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



So that the deletion of a device command becomes permanent, it is necessary to leave the window “Edition of device commands” by the button "Ok". Otherwise to cancel the current modifications, click on the button “Cancel”.

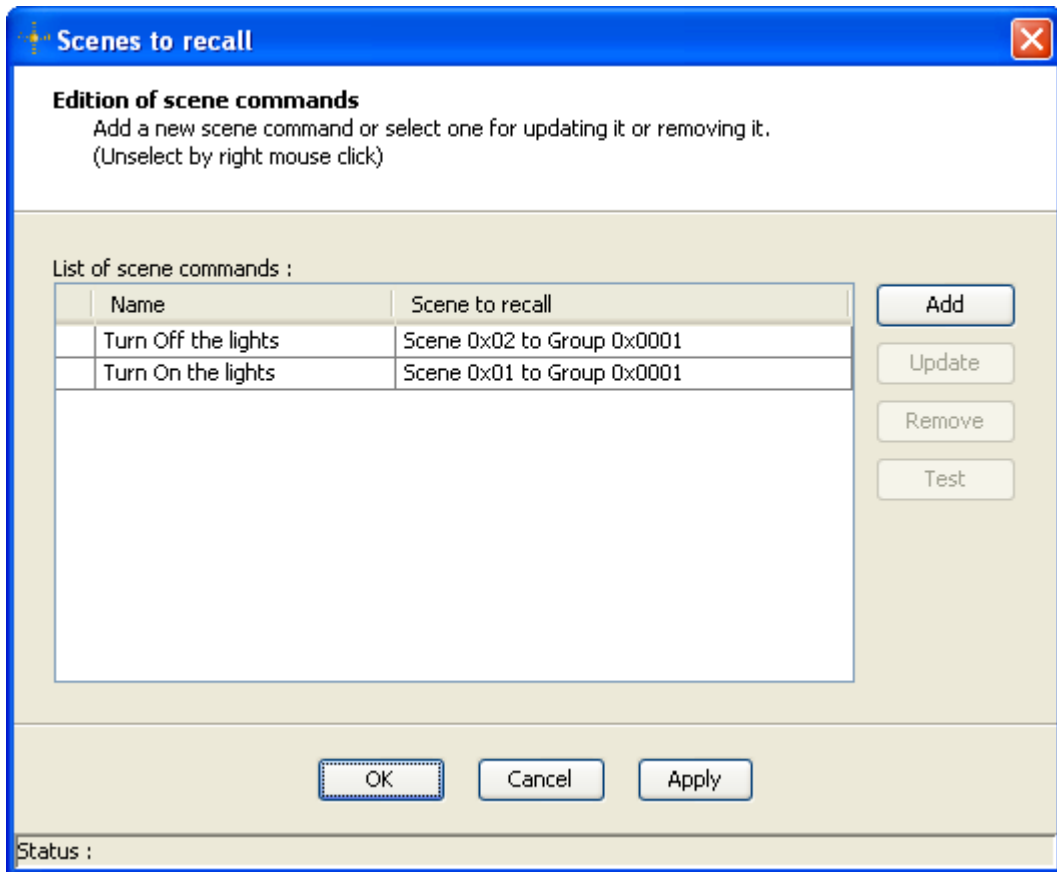
### II.14.4 TEST A DEVICE COMMAND

Select a device command in the list of device commands and click on the button “Test”. The result of the test is shown in the status bar.



## II.15 EDITION OF SCENE COMMANDS

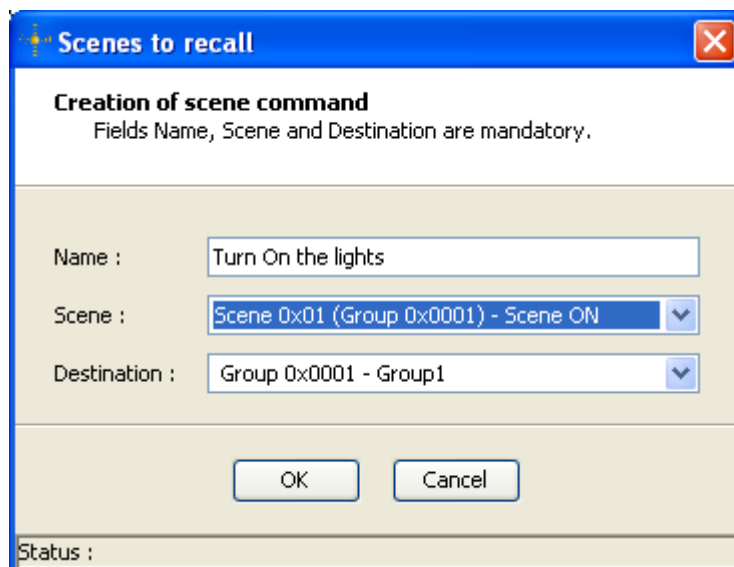
The edition window of scene commands is accessible from the edition window of software actions when you click on the button “Edit scenes to recall ...” in the command zone.



## II.15.1 ADD A SCENE COMMAND

Click on the button “Add” of the edition window, the following window appears and allows you to define the parameters necessary for a scene command

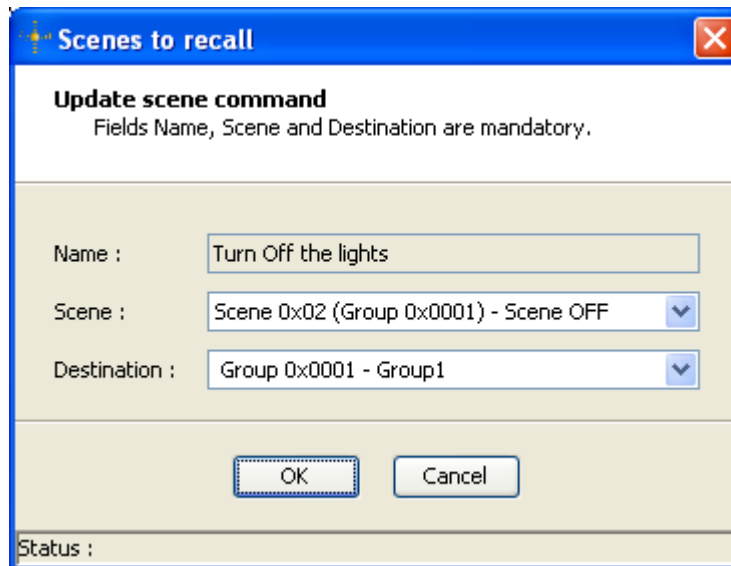
- Scene command name,
- Scene to recall,
- Group or Target Zigbee node.



## II.15.2 UPDATE A SCENE COMMAND

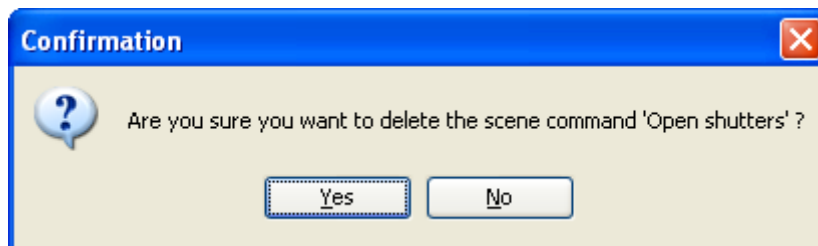
Select a scene command into the list of scene commands and click on the button “Update” or simply double-click on the command that must be updated.

The following window appears and allows you to change all parameters of the scene command except the name given that it is unique and that it corresponds to the name of this command.

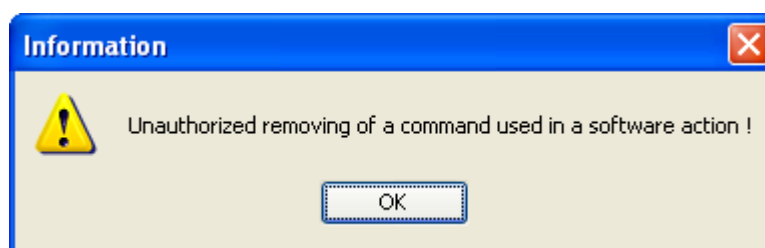


## II.15.3 REMOVE A SCENE COMMAND

Select a scene command in the list of scene commands and click on the button “Remove”. The following window appears to require a confirmation of you.



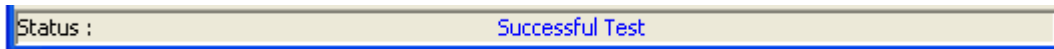
It is not possible to delete a scene command used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



So that the deletion of a scene command becomes permanent, it is necessary to leave the window “Edition of scene commands” by the button "Ok". Otherwise to cancel the current modifications, click on the button “Cancel”.

#### **II.15.4 TEST A SCENE COMMAND**

Select a scene command in the list of scene commands and click on the button “Test”. The result of the test is shown in the status bar.



#### **II.16 EDITION OF NETWORK COMMANDS**

The edition window of network commands is accessible from the menu “Edit Email/HTTP ...” or from the software actions edition window when you click on the button “Edit Email/HTTP ...” in the command zone.

A network command is:

- The Email sending on Internet,
- The HTTP URL call of Web site,

It is characterized by a name that must be unique and the information appropriate for each type of command: Email or HTTP.

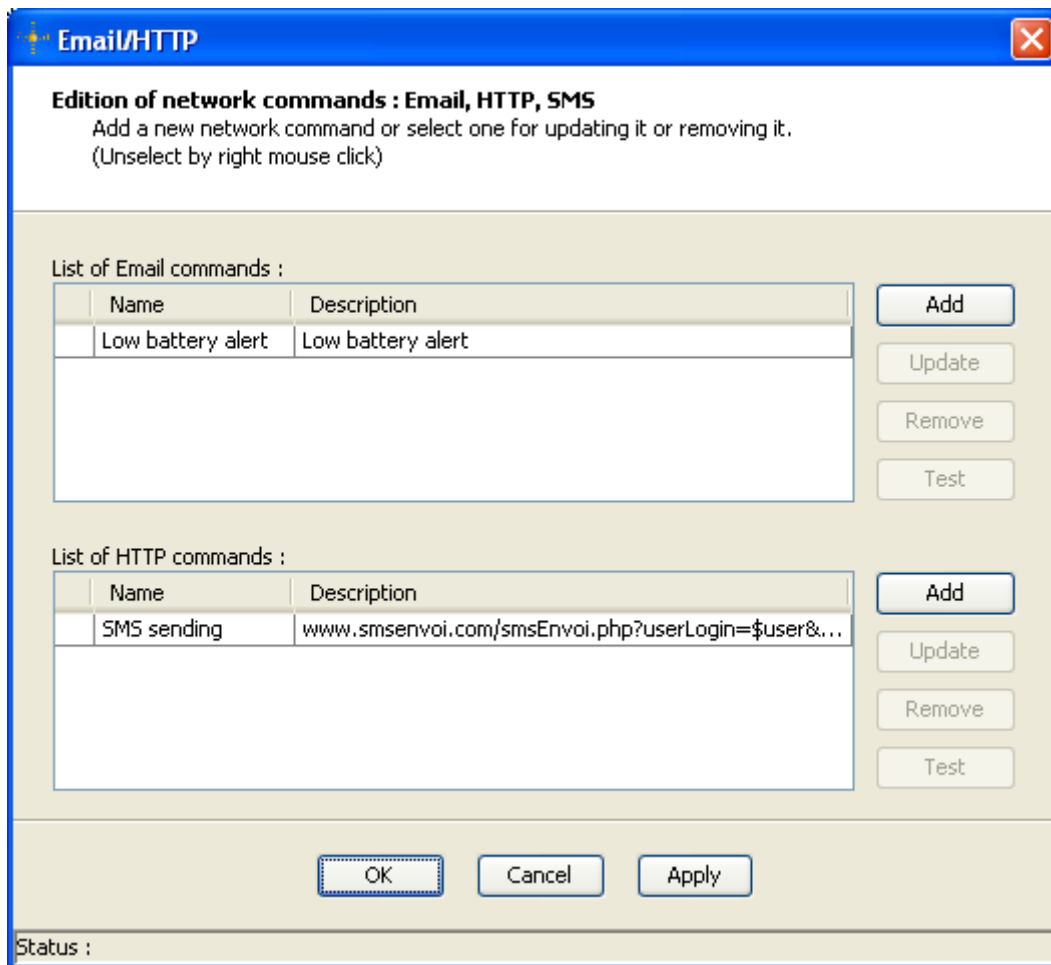


Figure 11: Edition of network commands


## II.16.1 ADD A NETWORK COMMAND

Click on one of the buttons “Add”, one of the following windows opens and allows defining the information corresponding to the new network command.

### *Creation of a new Email command*

**Figure 12: Creation of an Email command**

- The field “Email name” allows defining a unique name in this network command (mandatory field).
- The field “Email account” allows choosing on which SMTP server, the Email will be sent (mandatory field). At least an Email account must be beforehand created (cf. chap. II.18).
- The field “Recipient” allows defining the recipient of this Email (mandatory field). No check is made on the validity of this address.
- The field “Recipient in copy” allows defining a recipient in copy of this Email (optional field). No check is made on the validity of this address.
- The field “Subject” allows defining the subject of this e-mail (mandatory field).
- The field “Contents” allows defining the contents of this e-mail (optional field).
- The extra text is a text describing the triggering of the software action.

To display a brief help on the Email contents building, you can click on the symbol  being at the top of the window.

**Brief help on the Email contents building**

The Email contents can contain variables informing about the trigger.

**Variables which can be inserted into an Email contents :**

- \$nwkAddr** : The network address of the source Zigbee node
- \$ieeeAddr** : The IEEE address of the source Zigbee node
- \$modelId** : The ModelIdentifier of the source Zigbee node
- \$name** : The name of the source Zigbee node
- \$date** : The triggering date of the software action
- \$report** : The reported value which triggered the software action
- \$text** : The text on the triggering of the software action

**Examples :****Email contents Alert Low Battery**

Low Battery (\$report V) incoming from \$name

**Email contents Alert Instantaneous demand**

\$date : Instantaneous demand = \$report W incoming from \$modelId \$ieeeAddr

*Creation of a new HTTP command*

**Creation of new HTTP command**  
Fields HTTP name and URL are mandatory. ?

HTTP name :

URL :

User :

Password :

Connection with Authentication (Basic)

Session identifier :

Password :

Connection by Proxy server

Proxy name :

Proxy port :

Proxy login :

Proxy password :

OK Cancel Test

Status :

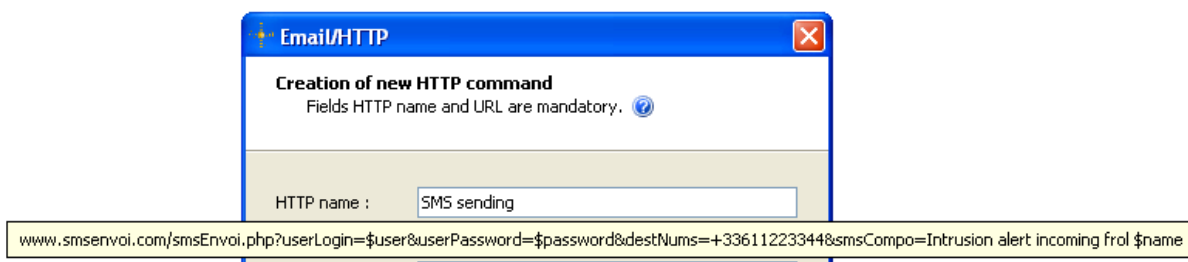



**Figure 13: Creation of a HTTP command**

- The field “URL name” allows defining a unique name in this network command (mandatory field).
- The field “User” allows defining a user name that we can insert into the URL thanks to the variable \$user (optional field).
- The field “Password” allows to define a password that we can insert into the URL thanks to the variable \$password (optional field).
- The field “URL” allows defining the URL to be called. It is composed of the Web site to be reached and variables (mandatory field).
- Fields “Session identifier” and its “Password” are used for a connection to the Web server with authentication (optional fields).
- Fields “Proxy name” and its “Port of the proxy” are used for a connection to the Web server through a proxy (optional fields).

To facilitate the typing of the URL, it is possible to write it in a file text and to make a copy / paste to the field “URL”.

It is also possible to display completely the URL by a right click on the mouse in the field “URL”.



To display a brief help on the URL building, you can click on the symbol  being at the top of the window.

**Brief help on the URL building**

The HTTP URL has to be composed of the Internet address of the Web server followed possibly by parameters passed on by the GET method. The value of one pair name/value of a parameter can be one of variables described below.

**Variables which can be inserted into an URL :**

**\$user :** The contents of the field User  
**\$password :** The contents of the field Password  
**\$nwkAddr :** The network address of the source Zigbee node  
**\$ieeeAddr :** The IEEE address of the source Zigbee node  
**\$modelId :** The ModelIdentifier of the source Zigbee node  
**\$name :** The name of the source Zigbee node  
**\$date :** The triggering date of the software action  
**\$report :** The reported value which triggered the software action  
**\$text :** The text on the triggering of the software action

**Examples :****Record an image of a network camera**

192.168.1.10/camera-cgi/image.cgi

**Sending of a SMS by a retail website**

www.smsenvoi.com/smsEnvoi.php?userLogin=\$user&userPassword=\$password&destsNums=+33611223344&smsCompo=Alerte temperature provenant de \$name

**Writing in a database**

localhost/insertionBdd.php?source=\$nwkAddr&action=\$text

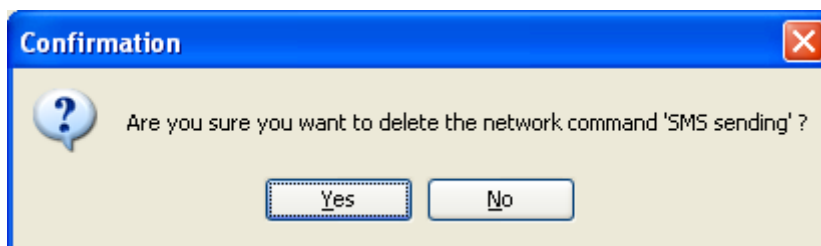
## II.16.2 UPDATE A NETWORK COMMAND

Select a network command in one of the lists and click on the button “Update” or simply double-click on the network action to be modified.

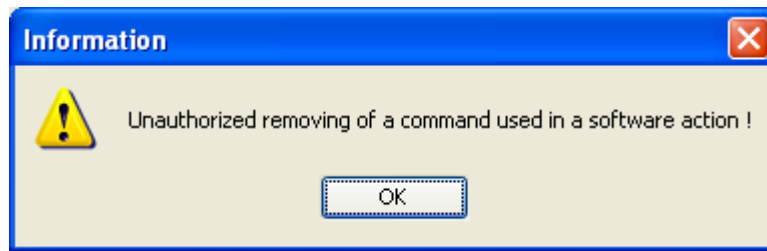
The window corresponding to the type of the selected action opens and allows you to change all the parameters of the network command except the name given that it is unique and identify this command.

## II.16.3 REMOVE A NETWORK COMMAND

Select a network command in one of the lists and click on the button “Remove”. The following window appears to require a confirmation of you.



It is not possible to delete a network command used in an already created software action or one is ongoing of edition; in that case the following information window opens to indicate it.



So that the deletion of a network command becomes permanent, it is necessary to leave the window “Edition of network actions” by the button "Ok". Otherwise to cancel the current modifications, click on the button “Cancel”.

## II.17 EDITION OF MACROS

The edition window of macros is accessible from the menu “Edit/Macros of commands” or from the edition window of software actions” when you click on the button “Edit macros of commands...” in the command zone.

A macro is a set of commands of different type: Device, Scene, Email, HTTP and SMS. It is characterized by a name, which must be unique, and an optional description.

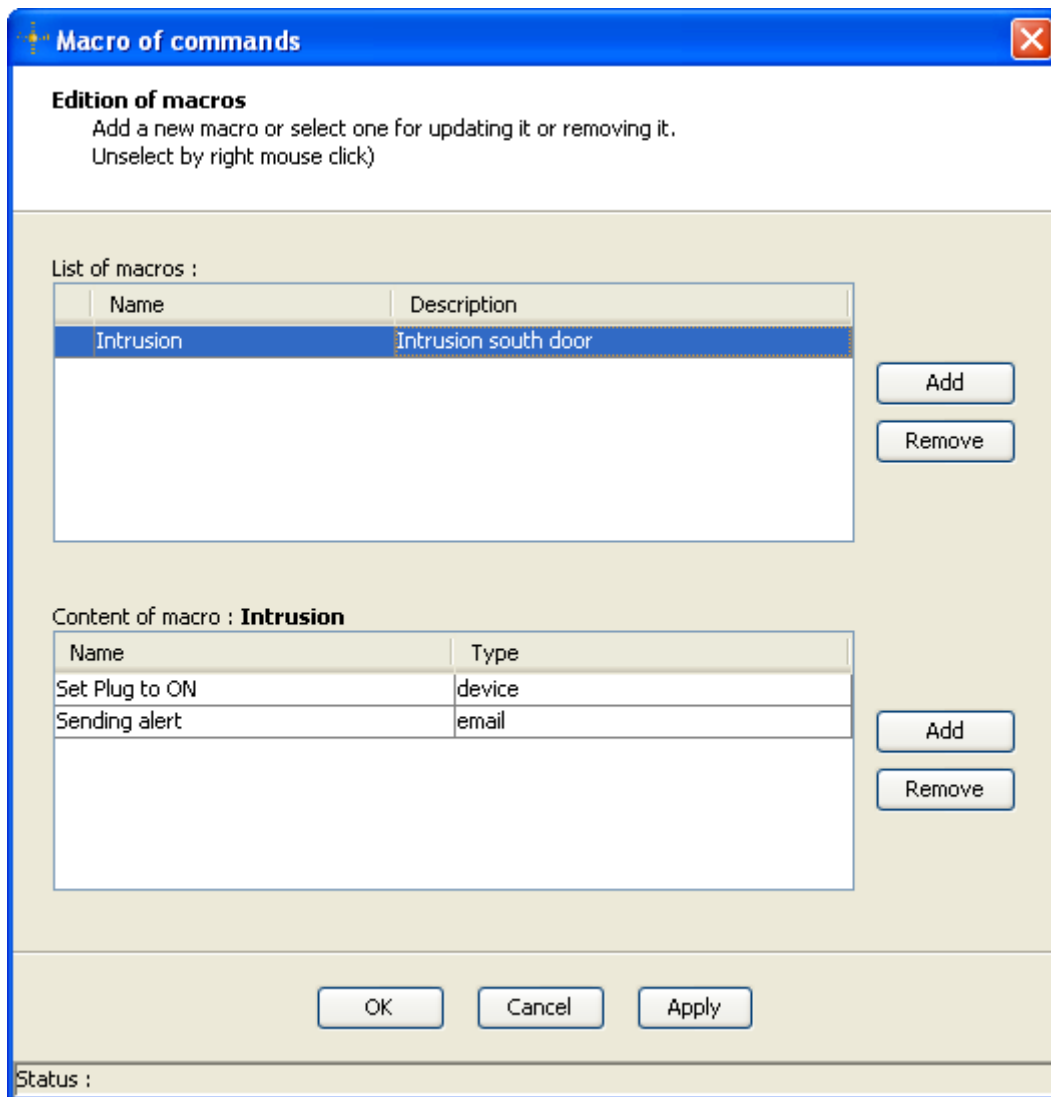


Figure 14: Edition of macros

### II.17.1 ADD A MACRO OF COMMANDS

Click on the button « Add », the following window opens and allows defining the name and the (optional) description of the new macro.

**Add a macro of commands**  
Field Macro name is mandatory.

Macro name :

Description :

OK Cancel

At this stage, the contents of the macro are empty; it is thus necessary to select it in the list of macros and to modify its contents (cf. Chapter “Update a macro”).

It is necessary to leave the window “Edit macros” by the button “Ok” for taking into account the add of this macro. Otherwise to cancel the current modifications, leave by the button “Cancel”.

## II.17.2 UPDATE A MACRO OF COMMANDS

It is necessary to leave the window “Edit macros” by the button “Ok” for taking into account the update of this macro. Otherwise to cancel the current modifications, leave by the button “Cancel”.

Beforehand, select the macro to be modified in the list of macros.

**To modify the description of the macro:** double-click on the field "description" of the macro in the table, type the new description and validate by the touch “Enter”.

**Macro of commands**

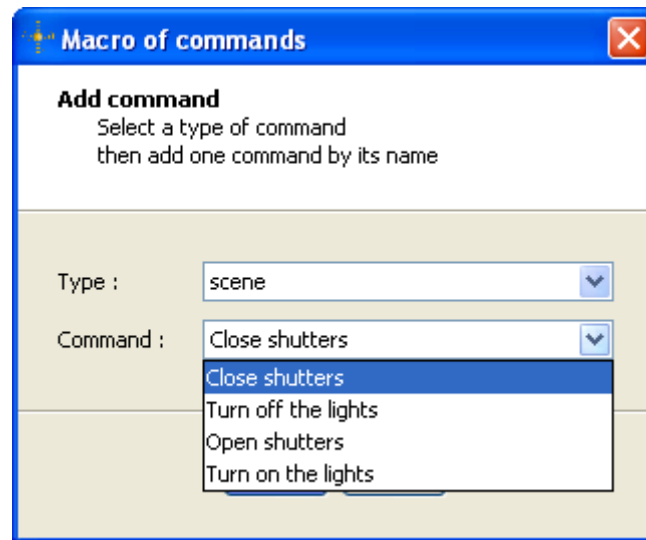
**Edition of macros**  
Add a new macro or select one for updating it or removing it.  
Unselect by right mouse click)

List of macros :

Name	Description
Intrusion	Intrusion south door

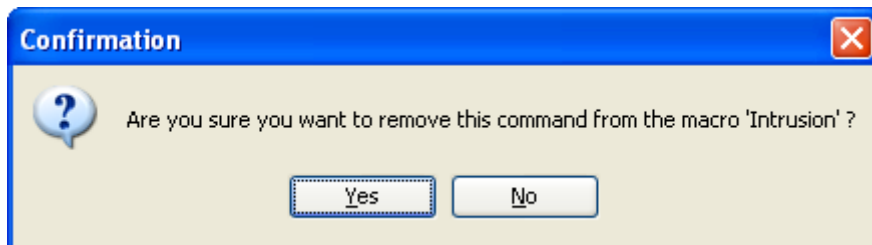
Add Remove

**To add a command:** click on the button "Add", the following window opens and allows choosing the type of command and the command.



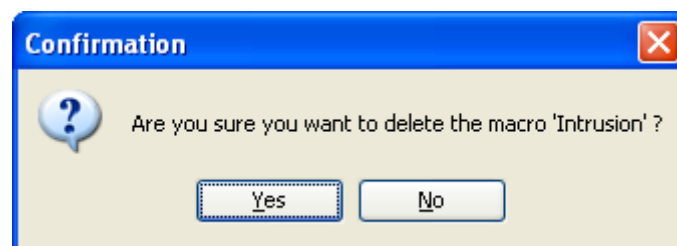
**To remove a command:** select the command in the contents of the macro and click on the button "Remove".

The following window appears to require a confirmation of you.

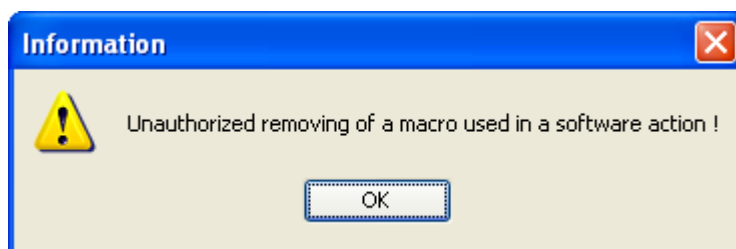


### II.17.3 REMOVE A MACRO OF COMMANDS

Select a macro in the list of macros of commands and click on the button "Remove". The following window appears to require a confirmation of you n.



It is not possible to delete a macro used in an already created software action or one is ongoing of edition. In this case the following information window opens to indicate it.



It is necessary to leave the window "Edit macros" by the button "Ok" or "Apply" for taking into account the remove of this macro. Otherwise to cancel the current modifications, leave by the button "Cancel".

## II.18 CONFIGURATION OF EMAIL ACCOUNTS

The window of configuration of Email accounts is accessible from the menu "Tools/Email accounts..."

An Email account is a set of information on the SMTP server used to send Emails on Internet network and on the sender name.

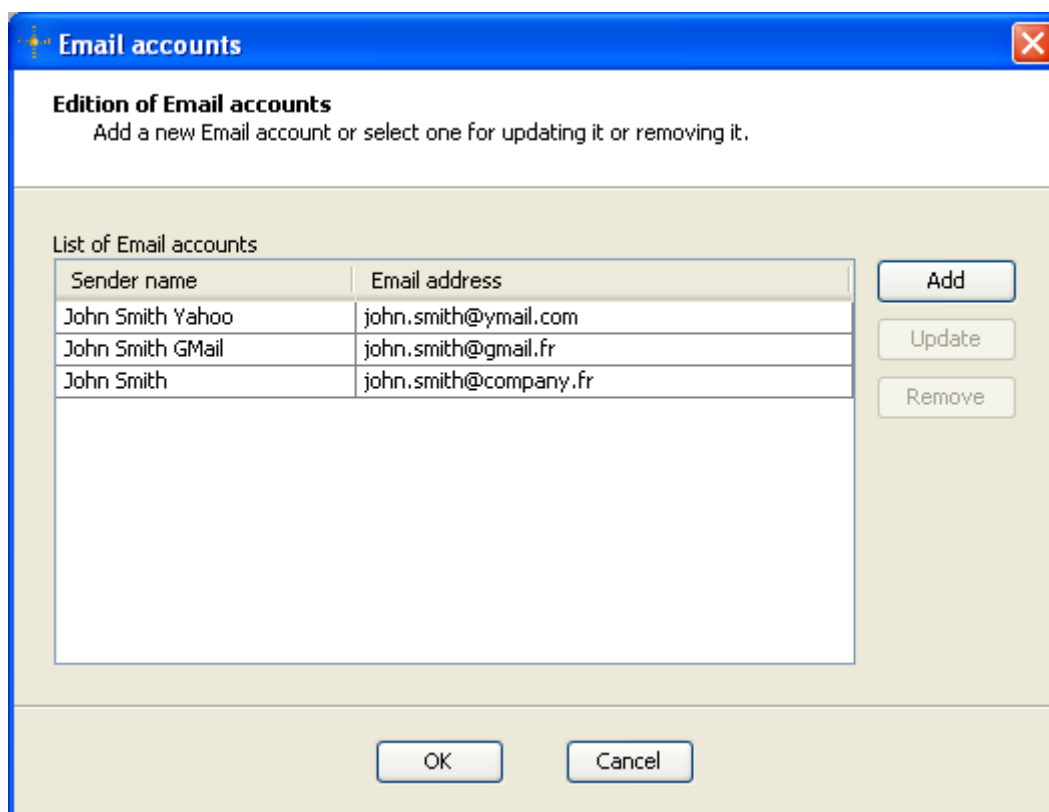


Figure 15: List of Email accounts

## II.18.1 ADD AN EMAIL ACCOUNT

Click on the button “Add”, the following window appears and allows you to define the parameters necessary for an Email account.

- Sender name,
- Email address,
- SMTP server and its port
- Session identifier and its password for a connection with authentication to the SMTP server,
- Secure mode.

The button “Test” allows sending a message on the Email address of the sender, in order to test the connection parameters to the SMTP server. This action is displayed in the window of the log actions (cf. Chapter II.5).

Below, the example for an Email account with a not secure connection to a SMTP server.

**Email accounts**

**Parameters of Internet Email**  
The first four parameters are mandatory so that your Email account works. ?

**User information**

Sender name : John Smith

Email address : john.smith@company.fr

**Email server information**

Outgoing Email server (SMTP) : smtp.company.fr

Port of the Email server (SMTP) : 25

Connection with Authentication

Session identifier :

Password :

Secure mode of the session :  None  SSL  TLS

OK Test Cancel

Status :

**Figure 16: Email account no secure**

To display a brief help on the Email account configuration, you can click on the symbol ? located at the top of the window.



**Brief help on the Email account configuration**

An Email account has to contain at least the name of the sender, its Email address, the SMTP server and its port. The connection to the SMTP server often requires an authentication on a secured protocol SSL or TLS.

**Examples :****Orange**

SMTP server : smtp-msa.orange.fr

Port of server : 587

Secure mode : None

**Yahoo**

SMTP server : smtp.mail.yahoo.fr

Port of server : 465

Secure mode : SSL

**GMail**

SMTP server : smtp.gmail.com

Port of server : 587

Secure mode : TLS

The second example shows the settings for an Email account with a secure connection to a server SMTP as Yahoo, Gmail, etc....

The screenshot shows a dialog box titled "Email accounts" with a sub-header "Parameters of Internet Email". Below the sub-header is a note: "The first four parameters are mandatory so that your Email account works." The dialog is divided into two sections: "User information" and "Email server information".

**User information:**

- Sender name : John Smith Yahoo
- Email address : john.smith@ymail.com

**Email server information:**

- Outgoing Email server (SMTP) : smtp.mail.yahoo.fr
- Port of the Email server (SMTP) : 465
- Connection with Authentication
- Session identifier : john.smith@ymail.com
- Password : [masked with dots]
- Secure mode of the session :  None  SSL  TLS

At the bottom of the dialog are three buttons: "OK", "Test", and "Cancel". A "Status :" label is visible at the very bottom left of the dialog area.

**Figure 17: Email account secure**

## II.18.2 UPDATE AN EMAIL ACCOUNT

Select an Email account into the list of Email accounts and click on the button “Update” or simply double-click on the account that must be updated.

The following window appears and allows you to change all the parameters of the Email account except the sender name given that it is unique and that it corresponds to the name of this network action.

**Email accounts**

**Parameters of Internet Email**

The first four parameters are mandatory so that your Email account works. ?

**User information**

Sender name : John Smith GMail

Email address : john.smith@gmail.fr

**Email server information**

Outgoing Email server (SMTP) : smtp.gmail.com

Port of the Email server (SMTP) : 587

Connection with Authentication

Session identifier : john.smith@gmail.fr

Password : ●●●●●●●●

Secure mode of the session :  None  SSL  TLS

OK Test Cancel

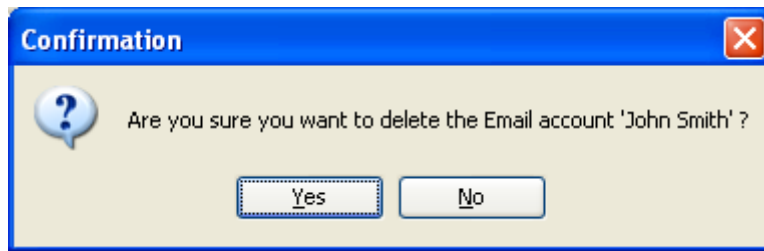
Status :

Figure 18: Parameters of Internet Email

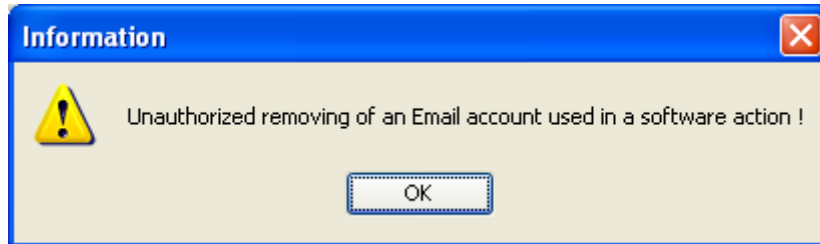
So that the modification of an Email account become permanent, it is necessary to leave the window of “Parameters of Internet Email” by clicking on the button "Ok". Otherwise, to cancel the current modifications, click the button “Cancel”.

## II.18.3 REMOVE AN EMAIL ACCOUNT

Select an Email account into the list of the Email accounts and click on the button “Remove”. The following window appears to require a confirmation of you.



It is not possible to delete an Email account used in an already created software action or one is ongoing of edition; in that case the following information window appears to indicate it.

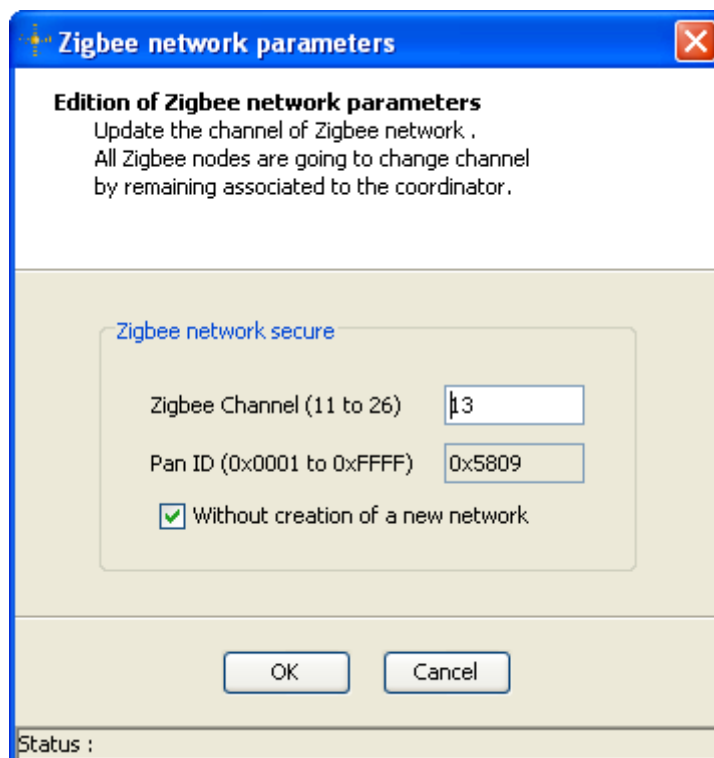


So that the deletion of an Email account become permanent, it is necessary to leave the window "Edition of Email accounts" by clicking on the button "Ok". Otherwise, to cancel the current modifications, click on the button "Cancel".

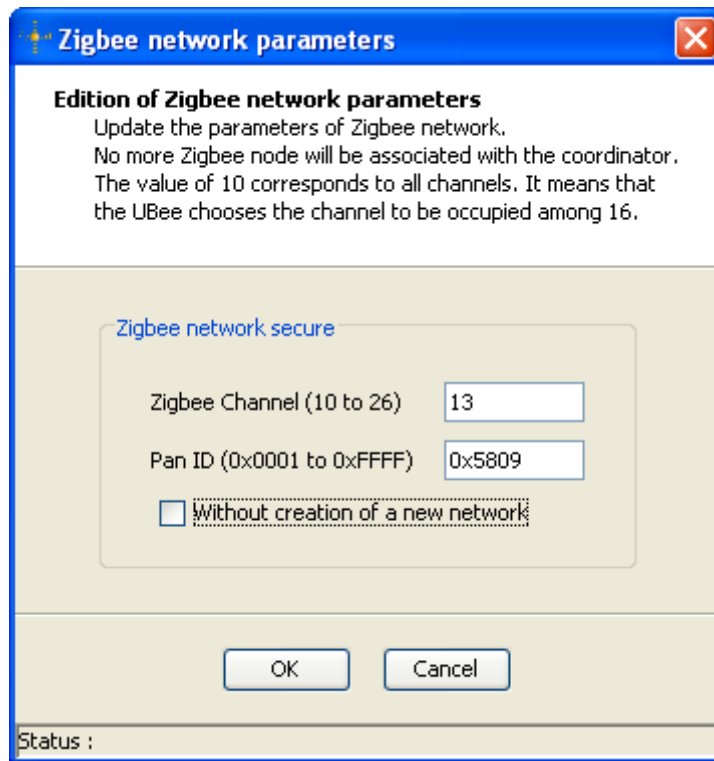
## II.19 CONFIGURATION OF THE ZIGBEE NETWORK

### II.19.1 EDITION OF THE NETWORK PARAMETERS

The edition window of network parameters is accessible from the menu "Tools/Zigbee network parameters/Configure...".



The first window shows how to change the channel of the Zigbee network without creation of a new network. All Zigbee nodes are going to change channel by remaining associated to the coordinator.



**Figure 19: Edition of the network parameters**

As it leaves the factory, the UBee chooses a Zigbee channel among 16 available channels according to the criteria of radio quality and also chooses the identifier of network (Pan ID).

To force the UBee to use a particular channel, you have to enter a value of channel included between 11 and 26. It is also possible to choose a particular Pan ID by entering a value included between 1 and 65534.

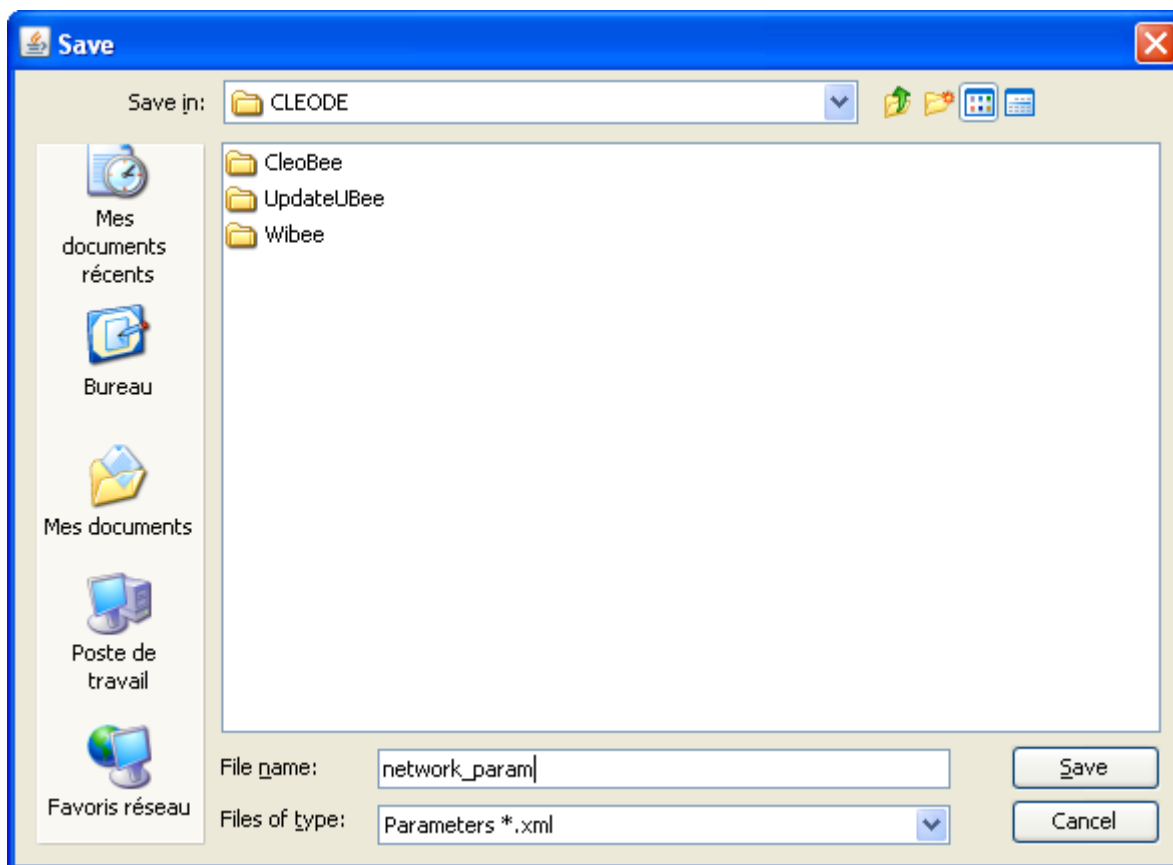
To enter a value in hexadecimal, you have to enter the value by beginning by 0x and tap on the TAB key to validate the value.

To note that the value 10 for the channel allows restoring the choice of the channel by the UBee and the value 0xffff (65535) for the Pan ID allows you to restore the choice of the identifier of network by the UBee

## II.19.2 SAVE THE NETWORK PARAMETERS

The edition window of network parameters is accessible from the menu “Tools/Zigbee network parameters/Save...”.

This file will afterward allow restoring the parameters of a Zigbee network on any UBee.

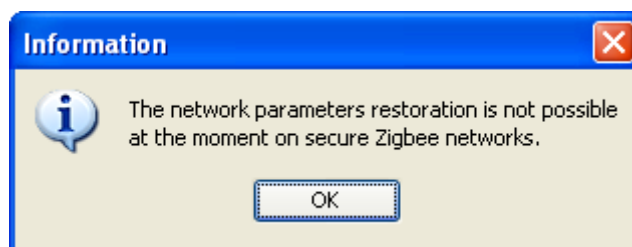


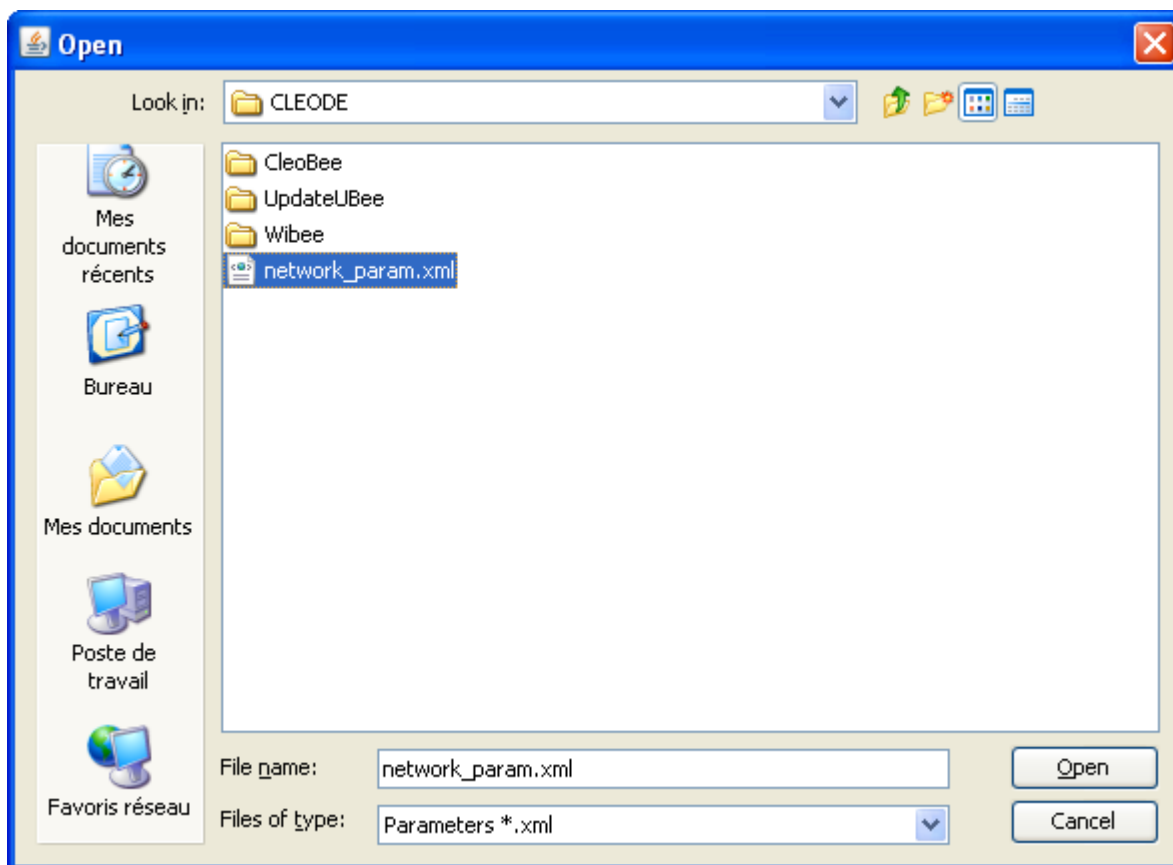
### II.19.3 RESTORE THE NETWORK PARAMETERS

The edition window of network parameters is accessible from the menu “Tools/Zigbee network parameters/Restore...”.

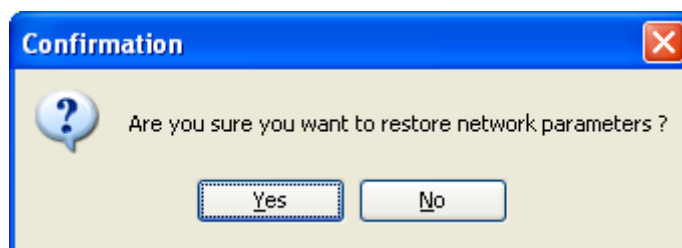
The network parameters restore allows to change a defective UBee by a new UBee and to apply the saved parameters to it.

The network parameters restore is possible at the moment only on the Zigbee networks not secure. Otherwise, the following window will be displayed.





The following window appear to ask a confirmation



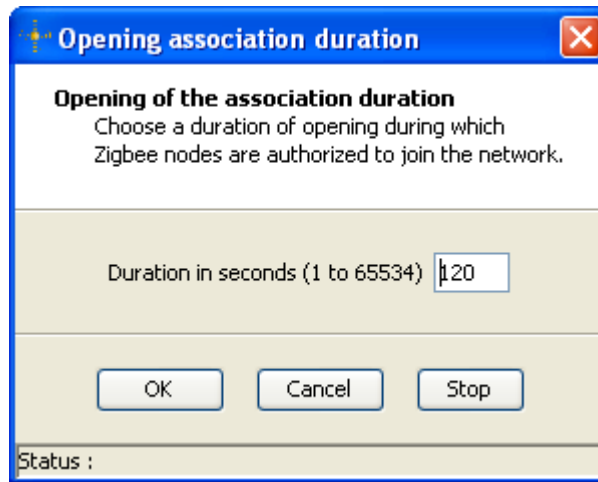
#### II.19.4 OPENING OF THE ASSOCIATION DURATION

The settings window of the pairing duration is accessible from the menu “Tools/ Opening association duration...”.

The Zigbee pairing allows new Zigbee nodes to join the network during a specified duration. By default the duration of opening is 2 minutes.

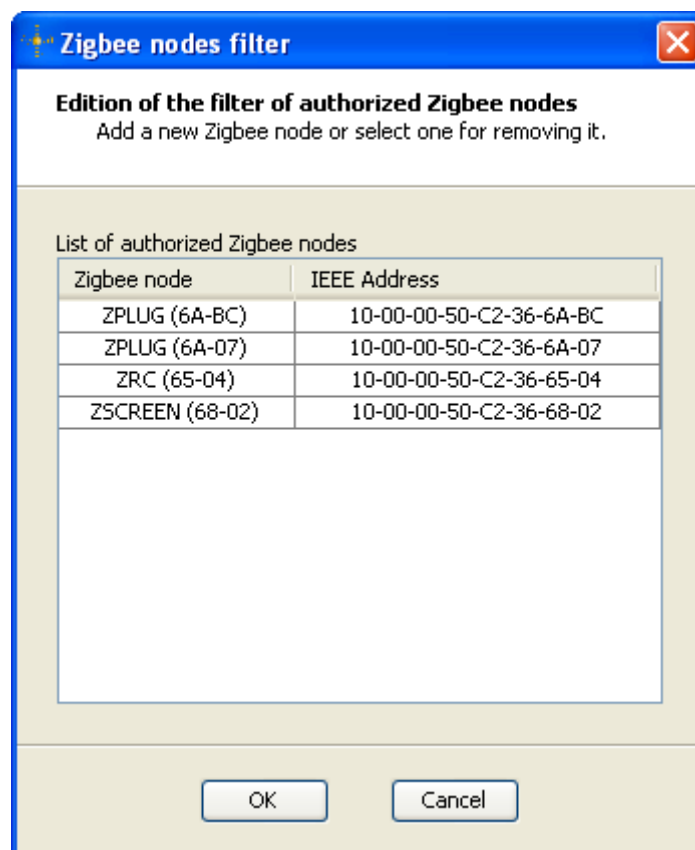
The led of the UBee blinks during the Zigbee pairing.

The “Stop” button allows you to close the pairing process.



## II.19.5 EDITION OF THE FILTER OF AUTHORIZED ZIGBEE NODES

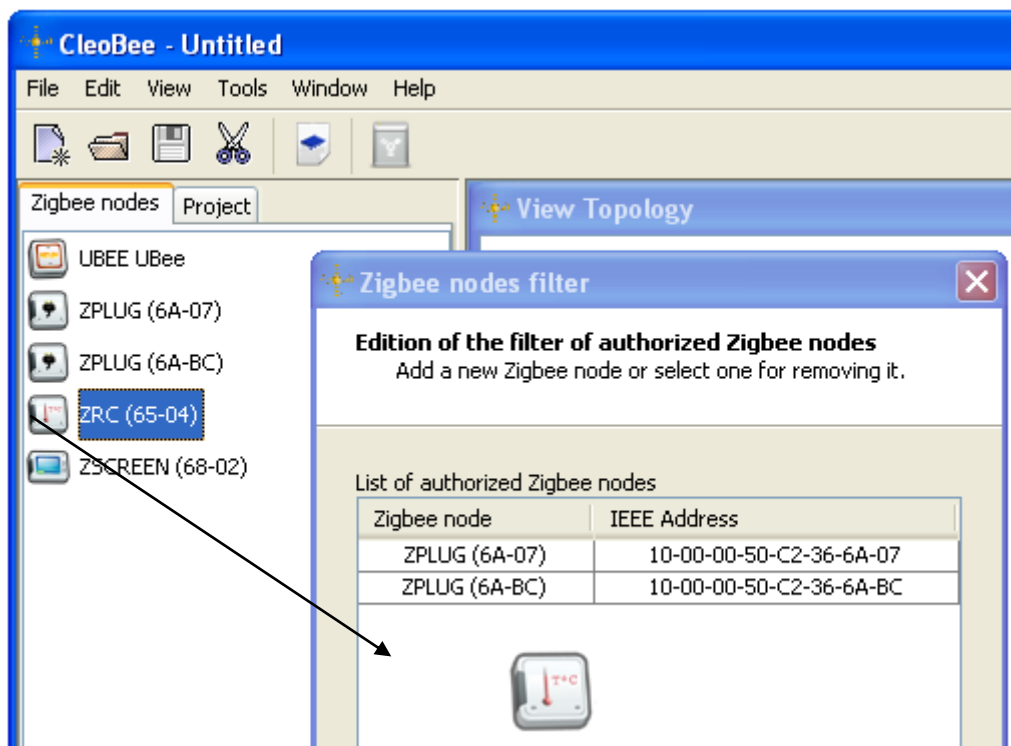
The edition window of Zigbee nodes authorized to enter in the network is accessible from the menu “Tools/ Zigbee nodes filter...” .



**Figure 20: Filter of authorized Zigbee nodes**

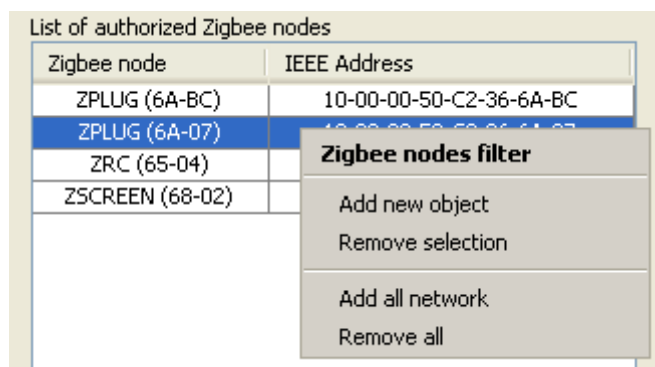
To add a new Zigbee node already present in the network, make a drag and drop of this node in the list of the window of filter edition.

After validation of the filter by the touch “OK”, the Zigbee nodes not present in the filter are forced to leave the network. Except when the filter is empty which corresponds to accept all Zigbee nodes in the network.



A pop-up menu accessible on the right button of the mouse allows to:

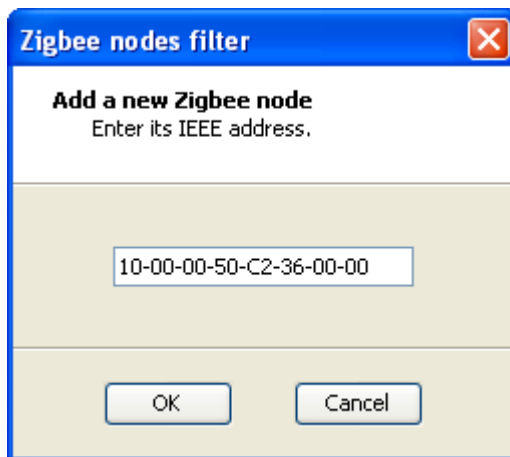
- Add a new Zigbee node by its IEEE address,
- Remove the selected Zigbee node(s),
- Add all Zigbee nodes of the network,
- Remove all Zigbee nodes.





## II.19.6 ADD A NEW ZIGBEE NODE

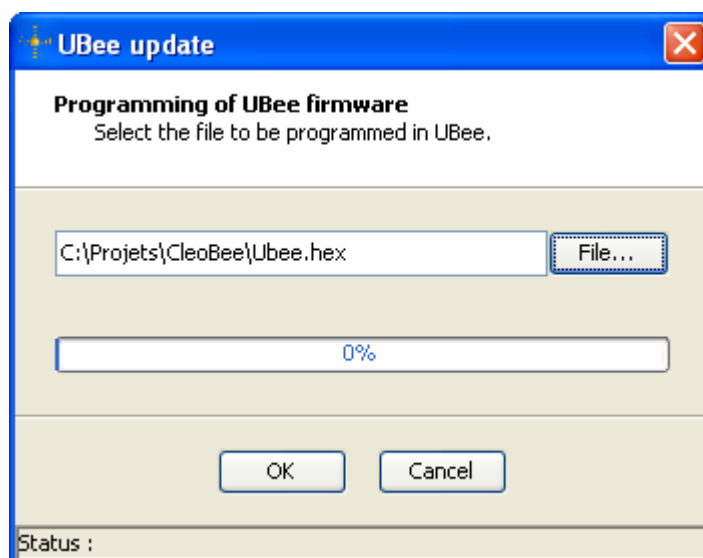
To accept a new Zigbee node in the network if a filter is present, it is necessary to enter the IEEE address of this new object, then to validate this addition and then to reset the Zigbee node so that it begins again its association phase with the UBee.



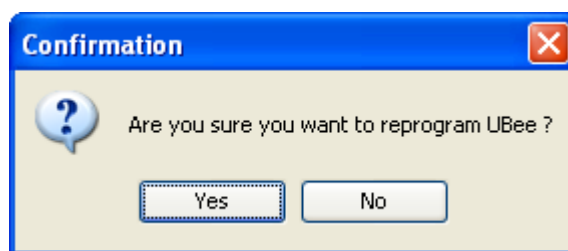
## II.20 PROGRAMMING OF UBEE FIRMWARE

The window of the programming of UBee firmware is accessible from the menu “File/UBee update...”

Select the HEX file of the UBee supplied by CLEODE thanks to the button “File” and validate to begin the download.



The following window appear to ask a confirmation



The UBee update time is estimated at approximately 15 minutes.

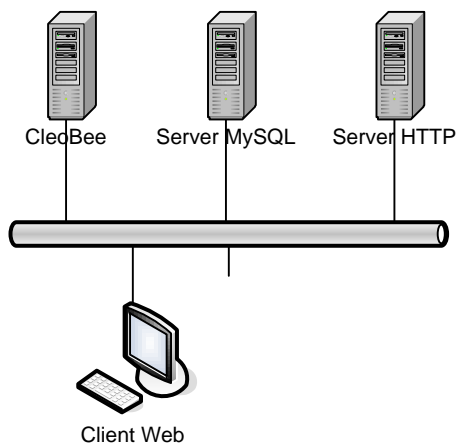
**Warning:** don't turn off the computer or remove the UBee during the download at the risk of a defective programming of the UBee.

## II.21 INSTALLATION OF THE ACCESS BY INTERNET

The access by Internet to the management of the Zigbee network requires a MySQL / PostgreSQL server and a HTTP server (Apache for example) with an interpreter PHP 5.2.5 at least.

Each of 2 servers can run on the computer where CleoBee is launched or on another computer connected to the same IP network.

Refer to the documentation of MySQL and Apache for the installation of these servers.



For computers under Windows, a simple solution is to use “wampserver” (<http://www.wampserver.com>) which includes an Apache server, a MySQL server and a PHP interpreter. A version of “wampserver” is available on the CD-ROM of CleoBee.

## II.21.1 CONFIGURATION OF THE DATABASE

It is necessary to create a user account and a database on MySQL / PostgreSQL server and to update the configuration file “CleoBee.conf” being in the directory of installation of CleoBee.

```
#Activation du stockage en Database
DBASE_STORAGE=true

# Driver Base de donnees : mysql / postgresql
DBASE_DRIVER=mysql

# Adresse IP du serveur de base de donnees
DBASE_SERVER=localhost

# Utilisateur de la base de donnees
DBASE_USER=zcleode

# Mot de passe de l'utilisateur de la base de donnees
DBASE_PASSWORD=zcleode

# Nom de la base de donnees
DBASE_NAME=zcleode

# Nombre maximum de logs par objet Zigbee
DBASE_LOGS_MAX=1000

# Port du serveur de commande ZCL
ZCL_SERVER_PORT=8585

# Enable/disable WiBee remote access
WIBEE_REMOTE_ACCESS=false
```

At the first starting up of CleoBee in mode “storage in database”, the tables of the database will be automatically created.

## II.21.2 CONFIGURATION OF THE HTTP SERVER

It is necessary to activate the following PHP modules:

- php\_mysql or php\_pgsql
- php\_pdo\_mysql or php\_pdo\_pgsql
- php\_sockets
- php\_gb2

It is necessary to recopy PHP pages of the Web site in the appropriate directory of your HTTP server, and to modify the configuration file “siteweb.conf” being among PHP pages.

```
; Adresse IP du serveur de base de donnees
DBASE_SERVER=localhost

; Utilisateur de la base de donnees
DBASE_USER=zcleode

; Mot de passe de l'utilisateur de la base de donnees
DBASE_PASSWORD=zcleode

; Nom de la base de donnees
```

```
DBASE_NAME=zcleode
```

```
; Type du serveur de base de donnees : mysql / postgresql
DBASE_TYPE=mysql
```

### II.21.3 PROTECTION OF THE WEB SITE

The Web site is protected by password thanks to the “.htaccess” file of the Apache server.

In the “.htaccess” file being in the root of the Web site, not to forget to change the absolute path towards the “.htpasswd” file which is in the directory “private”.

```
AuthUserFile C:\wamp\www\cleobee\private\.htpasswd
```

The “.htpasswd” file groups together the users authorized to reach the Web site. By default, the user “admin” with password “admin” is defined.

#### To modify the password of a user or to add a new user

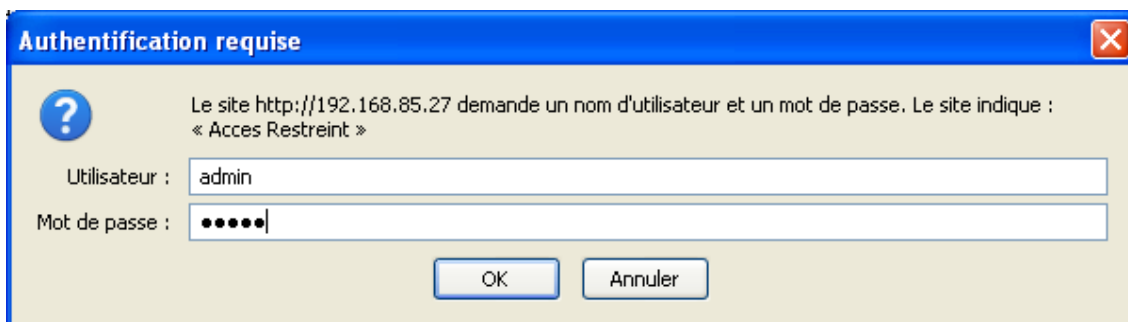
```
C:\wamp\bin\apache\Apache2.2.11\bin\htpasswd.exe .htpasswd admin
```

#### To remove a user

```
C:\wamp\bin\apache\Apache2.2.11\bin\htpasswd.exe -D .htpasswd toto
```

### II.21.4 CONNEXION TO THE WEB SITE

For each connection to the Web site from a browser, the following dialog box will display to ask you for your user's name and your password.



By default, the user's name is " admin " and the password is " admin ". It is strongly recommended to change the password at the first connection (cf. chap. II.21.5).

### II.21.5 CHANGE OF THE PASSWORD

This screen allows you to change the password of the user “admin”. It is accessible by clicking the link "Administration" in the general menu.

Give the old password, then the new password twice and validate by the button named “Apply”.

**Change the password**

User :

Old password :

New password :

Confirm the new password :

Figure 21 : Change of the password

If the change of the password is successful, a new identification will be required via the dialog box (cf. chap. II.21.4) of connection.

If you forgot your password, it is possible to reset it (cf. chap. II.21.3).

## II.21.6 EXAMPLE OF WEB PAGES

**WibeE** Easy and Wireless Home Automation

Network Energy Alarms Battery Bindings Parameters Management

**List of Zigbee™ nodes (6)** All residences Residence...

Name	Location	Useful information	
<a href="#">UBEE (39-EA)</a>	No name	Started	2014/13/03 11:35:20
<a href="#">ZRC (5D-0E)</a>	No name	23.0 °C	
<a href="#">ZPLUG (26-B5)</a>	No name	0 W	25.82 kWh
<a href="#">ZPLUG (58-58)</a>	No name	46 W	0.32 kWh
<a href="#">ZMOVE (FD-C7)</a>	No name	<b>Presence</b>	2014/13/03 11:46:49
<a href="#">ZDOOR (58-85)</a>	No name	Closed	2014/13/03 11:35:31

- [Zigbee ghost nodes](#)
- [No accessible Zigbee nodes](#)

La nouvelle génération d'objets communicants

8 Rue Bourseul, 22300 Lannion - France  
Tel : +33 2 96 48 68 18  
Fax : +33 2 96 48 19 11

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**Wibee** *Easy and Wireless Home Automation*

[Network](#)
[Energy](#)
[Alarms](#)
[Battery](#)
[Bindings](#)
[Parameters](#)
[Management](#)

### Properties of ZPLUG (26-B5)

Model Identifier	ZPLUG
Device Type	ROUTER
Network Address	0xBDC0
IEEE Address	00-12-4B-00-02-20-26-B5 <input type="button" value="Identifier"/>
Name	<input type="text" value="No name"/> <input type="button" value="Apply"/>
Location	<input type="text"/> <input type="button" value="Apply"/>
Manufacturer code	0x10B9
Application version	021
Parent	<a href="#">ZPLUG (58-56)</a>
Children	<a href="#">ZRC (5D-0E)</a> <a href="#">ZMOVE (FD-C7)</a> <a href="#">ZDOOR (58-65)</a>
<a href="#">Instantaneous consumption</a>	<input type="button" value="Reset of History"/>
<a href="#">Accumulation consumption</a>	25.82 kWh <input type="button" value="Reset of History"/>
<a href="#">Power outlet state</a>	<a href="#">History</a> <input type="button" value="Reset of History"/>
Power outlet state	<span style="color: red; font-weight: bold;">On</span> <input type="button" value="Off"/>

La nouvelle génération d'objets communicants

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### History of ZRC (50-15)

#### Temperature

5-Mar-2014

6-Mar-2014

7-Mar-2014

8-Mar-2014

9-Mar-2014

10-Mar-2014

11-Mar-2014

12-Mar-2014

13-Mar-2014

14-Mar-2014

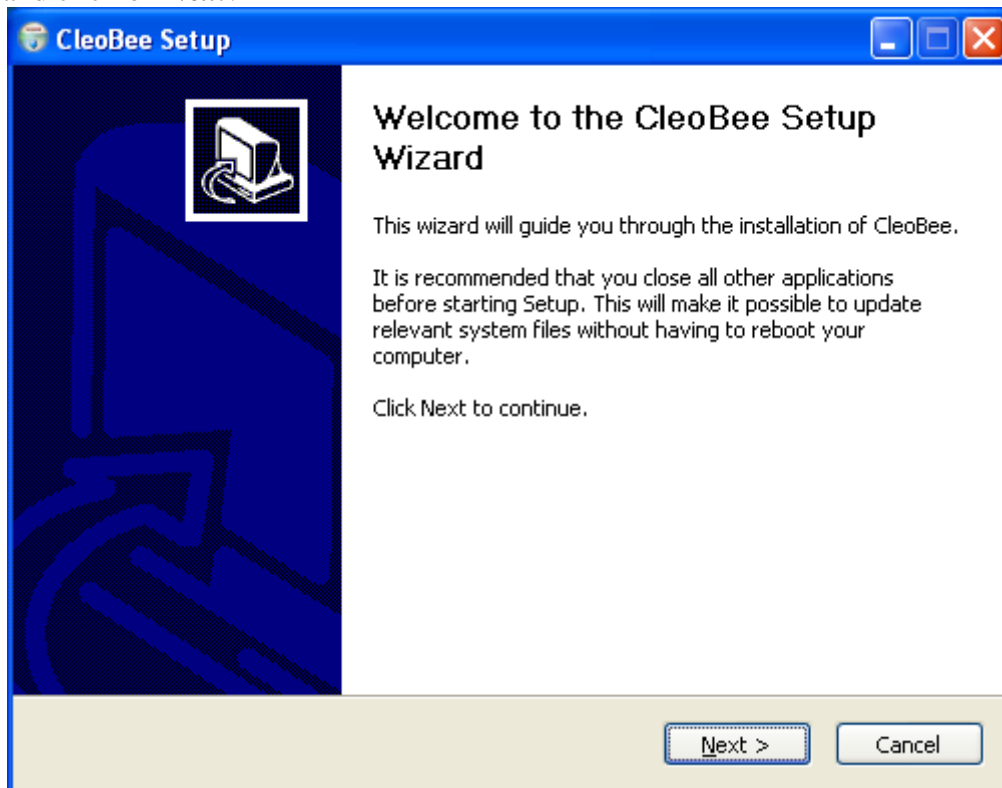
La domotique facile et sans fil

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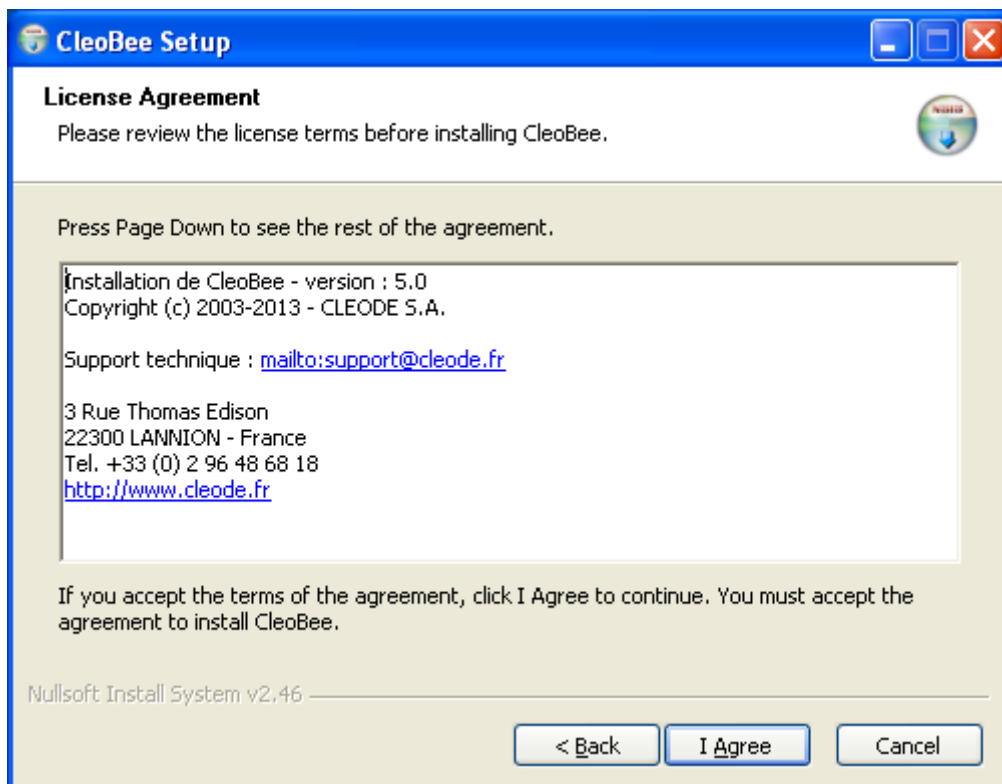
3 Rue Thomas Edison, 22300 Lannion - France  
 Tel : +33 2 96 48 68 18  
 Fax : +33 2 96 48 19 11

### III INSTALLATION OF CLEOBEE™

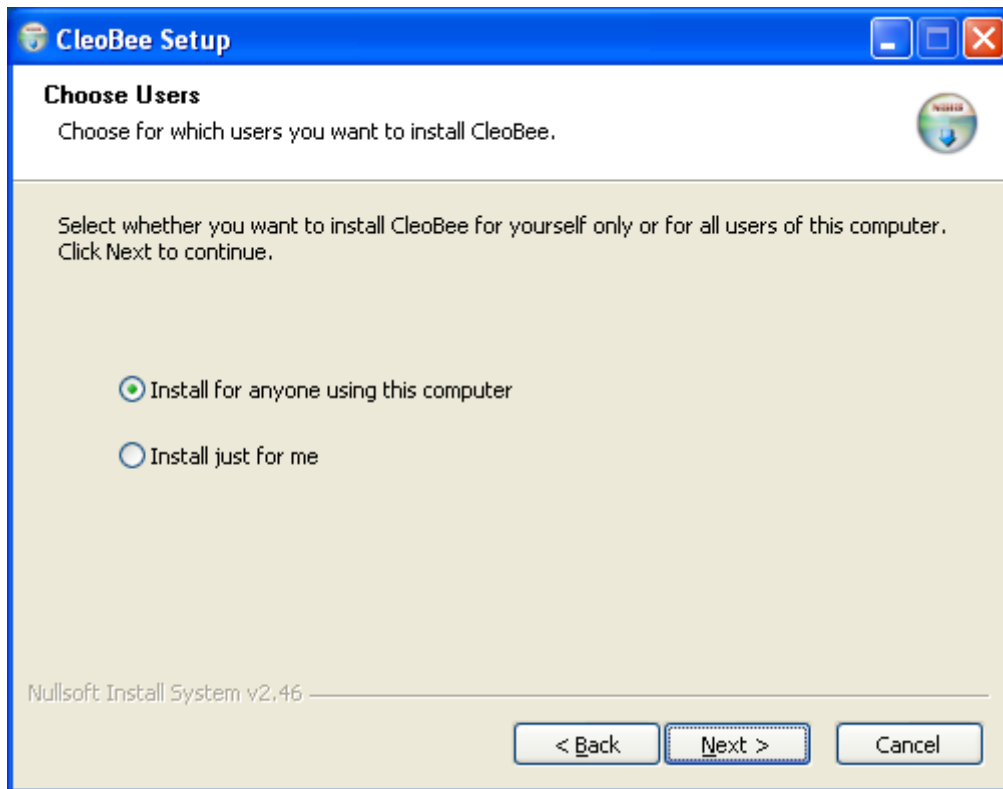
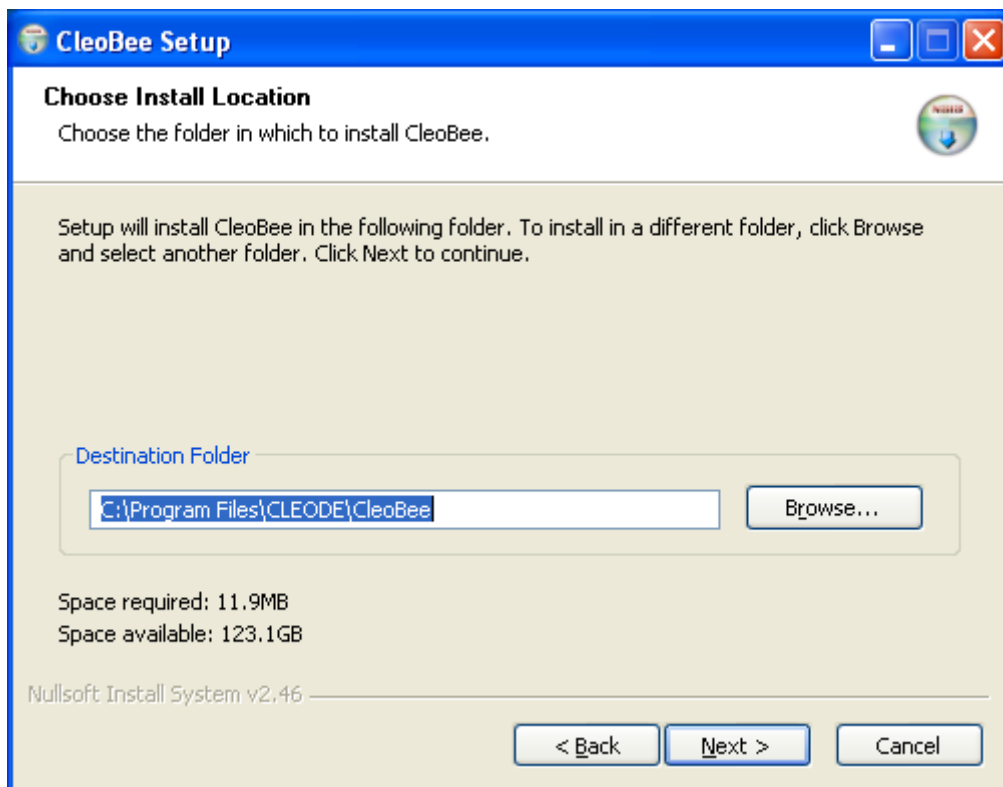
- 1) In the root of the CD-ROM, run application *cleobee\_install.exe*, choose the language and click on *Next*:



- 2) Accept the conditions of the user license by clicking on *I Agree*

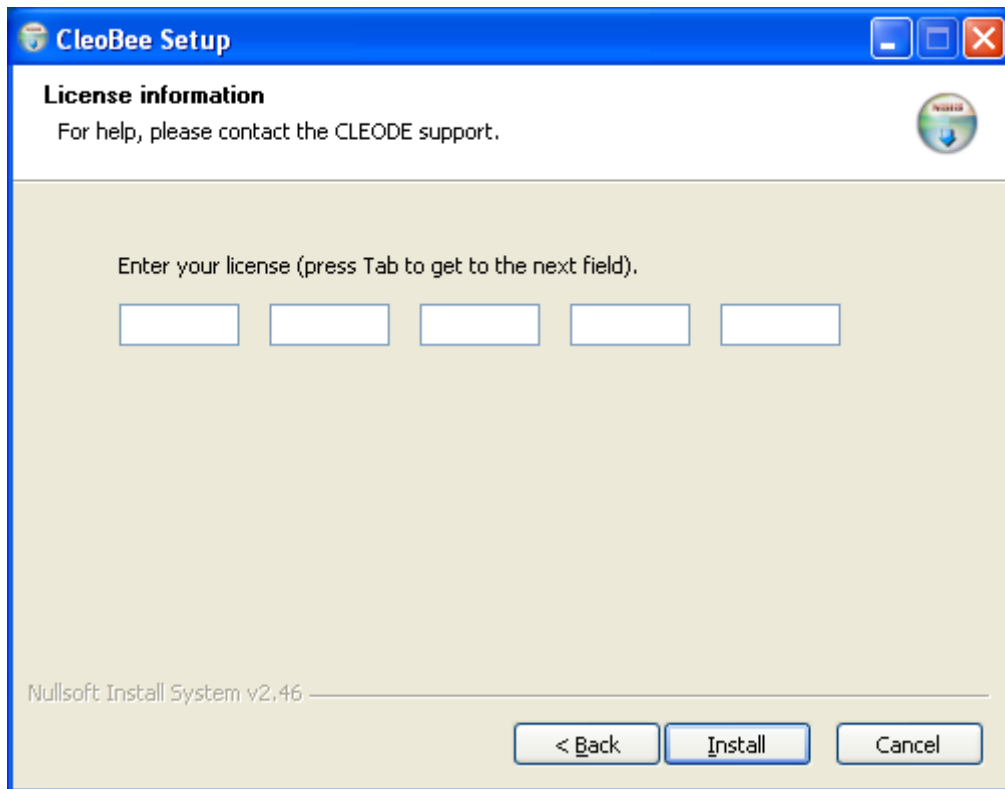


## 3) Choice to install for anyone using this computer or just for me

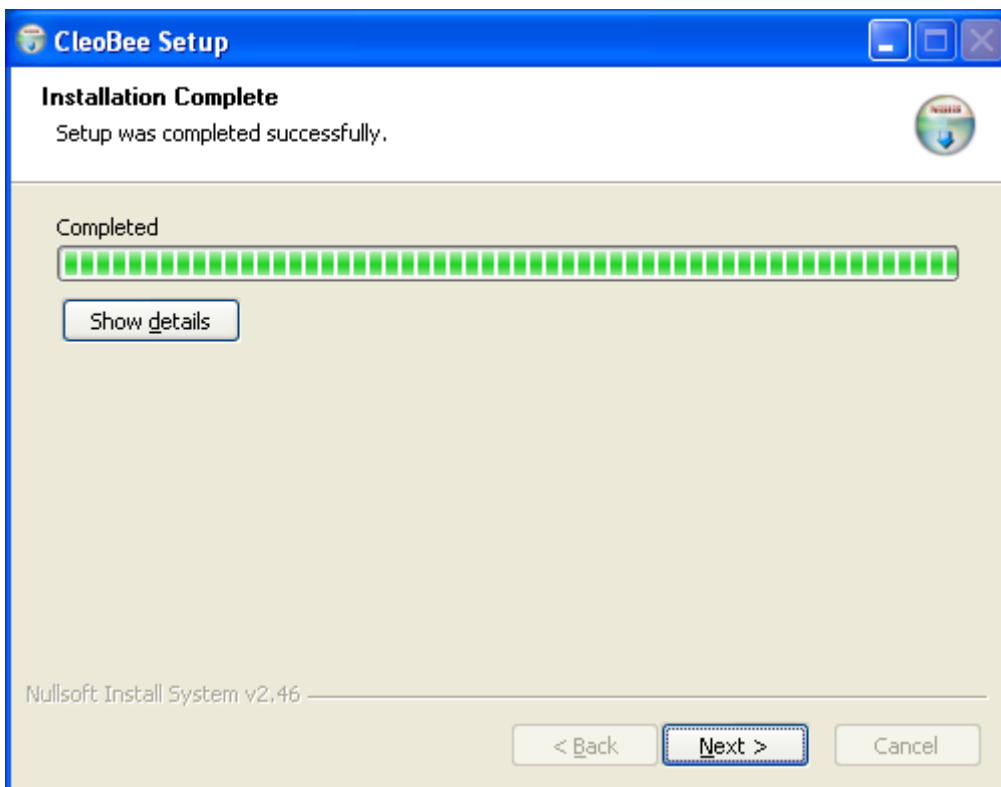
4) Choose the directory of installation and click on **Install**



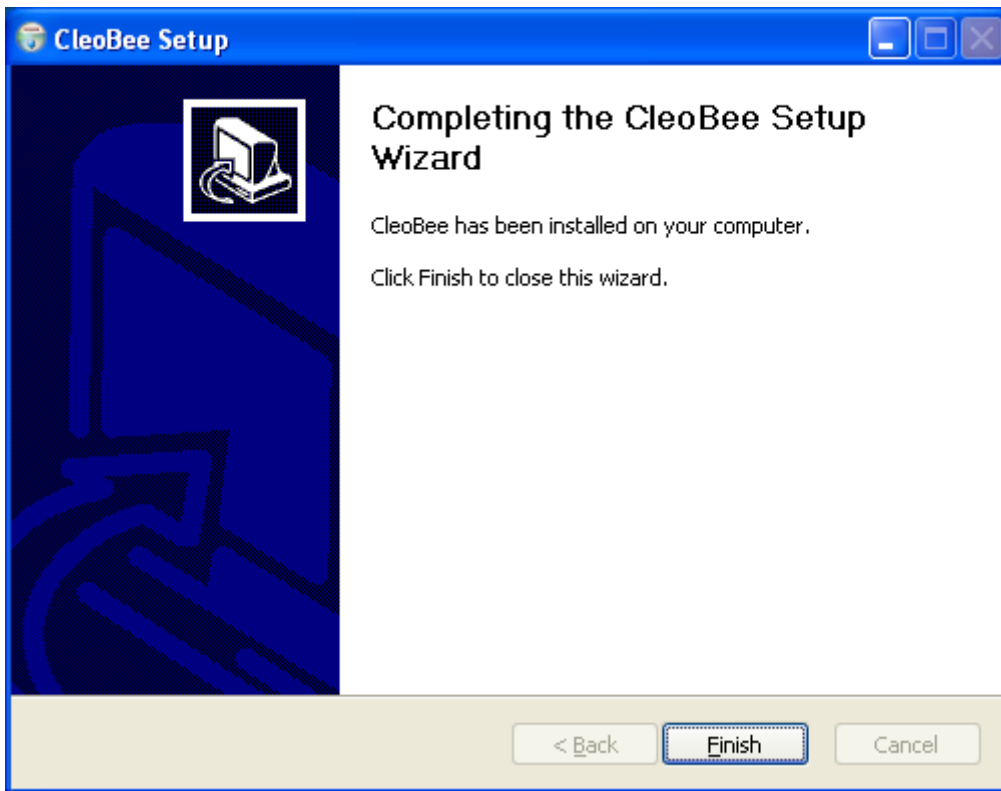
- 5) Enter your license being on the CD jacket, and click on **Install** to continue.



- 6) A window of progress appears, to click on **Next** to continue.



- 7) Click to ***Finish*** to Finish the install.



- 8) A shortcut to CleoBee™ was installed on the desktop of the computer:



Any request of support must be sent at following mail address or by email at [support@cleode.com](mailto:support@cleode.com):



CLEODE S.A.  
Support and Maintenance

3 Rue Thomas Edison  
22300 Lannion  
Phone: +33 (0) 2 96 48 68 18  
Fax: +33 (0) 2 96 48 19 11

E-mail: [support@cleode.com](mailto:support@cleode.com)  
Web: <http://www.cleode.com>

**End of the user manual**