

**ALERT**



Quick Start  
With  
**ALERT**

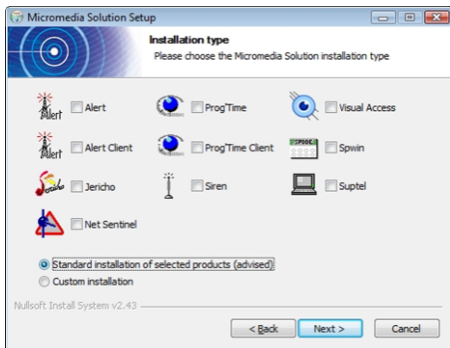


**MICROMEDIA**  
INTERNATIONAL  
telecommunication & multimedia

# INSTALLATION

To launch the installation of Micromedia Solution, insert the installation CD-ROM in the CD/DVD drive. If the installation program does not start automatically after a few seconds, launch the installation program “**SETUP.EXE**” located at the root of the CD-ROM.

The Windows session must be opened in administrator mode.



The installation program lets you choose the installation language, the applications to install and the type of installation.

If you select **ALERT** with “**standard installation**”, the software will be implemented in the most typical and common configuration:

- ⇒ One language (the installation language) for the operator interface, the vocal server and the vocal synthesis.
- ⇒ The most common communication tools are: vocal (telephone), SMS, beeper, fax, printer, ISDN short messages...
- ⇒ The most common mediators and Message Processor prototypes.

If you wish to install several languages, choose communication drivers, mediators or additional Message Processor prototypes, you have to select the option “**Custom installation**”. The next screen will allow you to choose the components to install.

If you have to use specific communication media (on-site paging system, DECT paging, displays...) the appropriate communication drivers must be selected.

**NOTE:** some communication drivers require specific resources (MAPI mail, OXEPaging, Ascom IP...). If these resources are not installed on the system, error messages can be generated when loading these communication drivers. It is thus recommended to install these drivers wisely.

The installation program offers you the possibility to choose the installation directory before copying the files of the selected modules and options.

## LAUNCHING THE SOFTWARE


You can now launch the **ALERT** software by using one of the following methods:

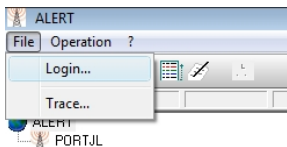
- Double-click on the **ALERT** icon on the desktop:
- Select the command **Programs > Micromedia > Alert** in the Windows menu displayed by clicking on the “**Start**” button



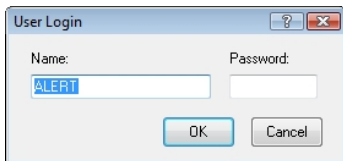
The main window of the **ALERT** software opens.

Before any action, you have to log in:

- Select the **Login** command in the menu **File**,
- or simply click on this icon  on the toolbar.



if necessary, enter your **name** and your **password** in the dialog box.



If no operator is specified in **Alert**, enter the default user name:

**"ALERT"** (without password)

The **ALERT** software can now be configured.

# CONFIGURATION METHOD

## Working principle



Alarm !!!



I warn



Who ?



How ?

## Configuration process

3

I select the tags to be supervised in my application and indicate, for each of them, the categories of staff (groups) to be warned in case of an alarm.

2

I configure the operators to call and the duty schedule (Groups, teams, schedules).

1

I define the medias used to warn the operators (Interfaces and communication medias used).

Configuration steps



## HOW TO WARN THE OPERATORS ?

---

In order to call the on-duty operators and transmit them the alarm information, it is necessary to define and configure the software and hardware devices **ALERT** will use.

In most cases (vocal call, SMS and fax sending), it will be necessary to use a **modem** (or **telephone coupler**), either connected on a serial or USB port (external device) or plugged inside the PC (PCI or PCI-Express card), and to configure the connection with this equipment.

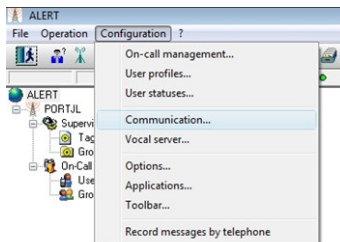
Various technologies can be used:

1. **Numerical:** card or external USB modem, connected on a numerical telephone line (**ISDN**) and requiring the configuration of a **CAPI** type connection. This technology can be used for all the telephone communications. It is particularly recommended for vocal communications.
2. **Analog:** external USB or serial modem connected to an analog telephone line and requiring the configuration of a communication port (**COMx**). This technology can be used for all the telephone communications, but not recommended for vocal communications (bad quality and reliability).
3. **GSM:** external USB or serial GSM modem with its antenna, requiring the configuration of a communication port (**COMx**) and specific GSM driver parameters. This technology can be used for the transmission (and reception) of SMS. Vocal communications are also available with **vocal GSM modem**.
4. **IP network:** no hardware device is needed (except the network connection). This technology can be used for the transmission (and reception) of emails, the communication through private paging systems (pagers and text messages on DECT) and for vocal communication using Voice Over IP technology (**VOIP**).

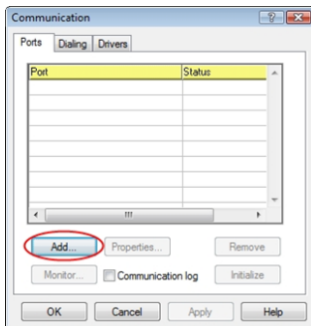
## Configuration of an ISDN adapter

- Menu **Configuration** > **Communication**

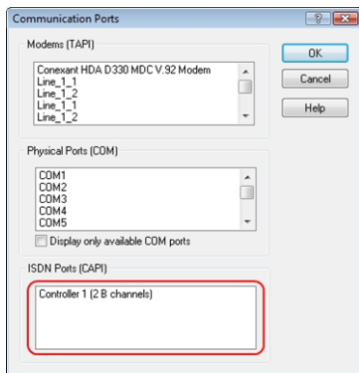
- Or this button  on the toolbar



- Click on the **Add** button



- Select the port **Controller 1** (or any other available controller) then click on **OK**



Check the appropriate checkboxes according to your needs for outgoing calls:

- **Vocal** to manage vocal calls
- **Fax** to manage fax calls
- **Modem** to manage data exchanges with an analog modem
- **Data** to manage data exchanges with an ISDN device

The **calling number** indicates the number of the outgoing line used for the corresponding mode. This configuration can be required by some telephone installations.

If you need **to dial a prefix** to call external numbers, type it here.

ISDN link properties

ISDN controller n° 1

Max communication time (sec): 0

Prefix to dial: 0

Periodic line test  Relief

Outgoing call

Calling number 1010

Vocal  Fax  Modem  Data

Incoming call

Vocal  Modem No response  Data No response

Called number 1010

Add Remove

Check the appropriate checkboxes according to your needs for incoming calls:

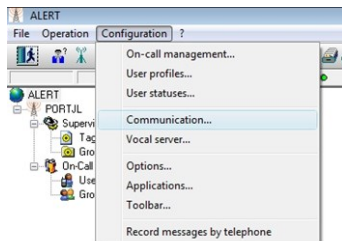
- **Vocal** to manage vocal calls
- **Modem** to manage data exchanges with an analog modem
- **Data** to manage data exchanges with an ISDN device

The **called number** indicates the number the controller will have to answer to. If this number is not known, it is possible to type "\*" to accept all the incoming calls.

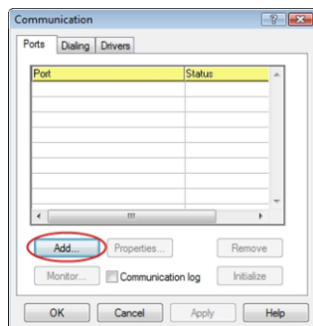


## Configuration of an analog or GSM modem

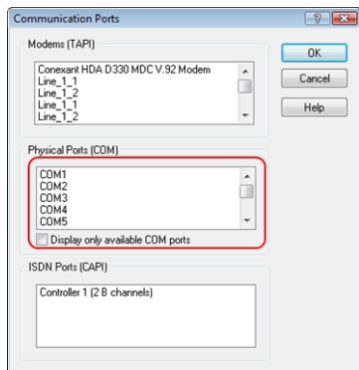
- Menu **Configuration** > **Communication**
- Or this button  on the toolbar



- Click on the **Add** button



- Select the port **COM1** (or any other available port), then click on **OK**



## Configuration for vocal messages

Default parameters to use in most cases.

If you need to **dial a prefix** to call external numbers, type it here.

The screenshot shows the 'COM1: Port parameters' dialog box with the following settings and annotations:

- Link Type:** Hayes Modem (highlighted by a red dashed box).
- Baud Rate:** 115200 (highlighted by a red dashed box).
- Bits:** 8 (selected, highlighted by a red dashed box).
- Stops:** 1 (selected, highlighted by a red dashed box).
- Parity:** none (selected, highlighted by a red dashed box).
- Flow Control:** None (selected, highlighted by a red dashed box).
- Incoming call management:** Vocal response (selected, highlighted by a red dashed box).
- Relief:** unchecked (highlighted by a red dashed box).
- Prefix to dial:** 0 (highlighted by a red dashed box).
- Voice Modem:** checked (highlighted by a red dashed box).
- Fax Modem:** unchecked (highlighted by a red dashed box).
- GSM/PCS Modem:** unchecked (highlighted by a red dashed box).
- Carrier detect (DCD):** checked (highlighted by a red dashed box).
- Modem parameters...:** button (highlighted by a red dashed box).
- Max communication time (sec):** 0 (highlighted by a red dashed box).

Check the GSM/PCS Modem box if your modem is a **vocal GSM modem**. Then, click on the button on the right to configure the GSM parameters (see page 12).

If you want **ALERT to answer incoming calls** vocally, select "Vocal response".

To specify the modem as a **voice modem**, check this box (check also if your modem is **vocal GSM modem**). Then, click on the button on the right to configure the vocal parameters (see the next page).

## Vocal modem parameters

Select, in this list, the modem that you use according to its brand and model. If your modem does not appear in the list, verify that it has been validated by our technical department for a vocal usage.

Modem parameters in vocal mode

Modem: Qlitec Fax/Modem/Vocal

Transmission format: Rockwell ADPCM, 4bits, 7200hz

Silence detection (voice receive)

Silence Detection Period (x100 ms): 20

Silence Sensitivity Tuner:

Low  Medium  High

DTMF tone detection on:

transmission  
 reception  
 command mode

Other parameters

Ringback goes away timer (100 ms): 50      Deadman Timer (sec): 30

Ringback never appeared timer (100 ms): 100      Voice Gain Transmit (0-255): 128

Reinitialization in vocal mode

Baud: 38400

Flow control:  None  Hardware  Xon/Xoff

Begin Voice Communication:

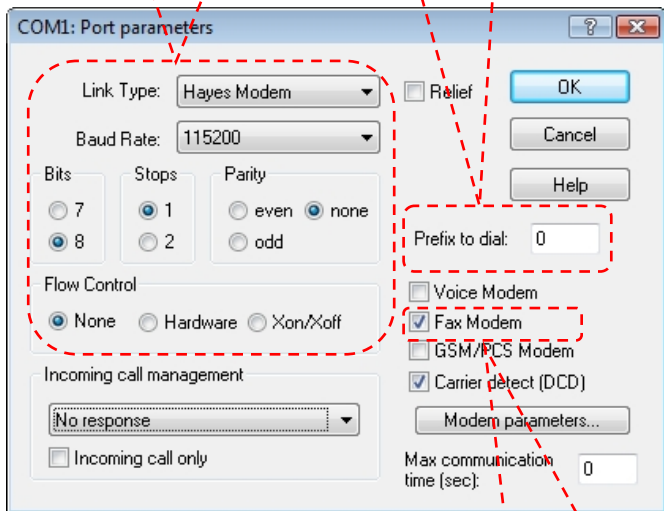
End Voice Communication: AT#BDR=0V1

All other parameters depend on the selected modem and are automatically adapted to this selection. These parameters were defined by our technical department for an optimal use with every modem. It is not recommended to modify them.

## Configuration for fax messages

Default parameters to use in most cases.

If you need to dial a prefix to call external numbers, type it here.



The screenshot shows the 'COM1: Port parameters' dialog box. A blue arrow points from the left towards the dialog. Red dashed boxes highlight specific areas: one around the 'Link Type' (Hayes Modem), 'Baud Rate' (115200), 'Bits' (8), 'Stops' (1), and 'Parity' (none) settings; another around the 'Prefix to dial' field (0); and a third around the 'Fax Modem' checkbox, which is checked. Other visible settings include 'Relief' (unchecked), 'Voice Modem' (unchecked), 'GSM/PCS Modem' (unchecked), 'Carrier detect (DCD)' (checked), 'Incoming call management' (No response), and 'Incoming call only' (unchecked). Buttons for 'OK', 'Cancel', and 'Help' are on the right. A 'Modem parameters...' button is at the bottom right. The 'Max communication time (sec):' field is set to 0.

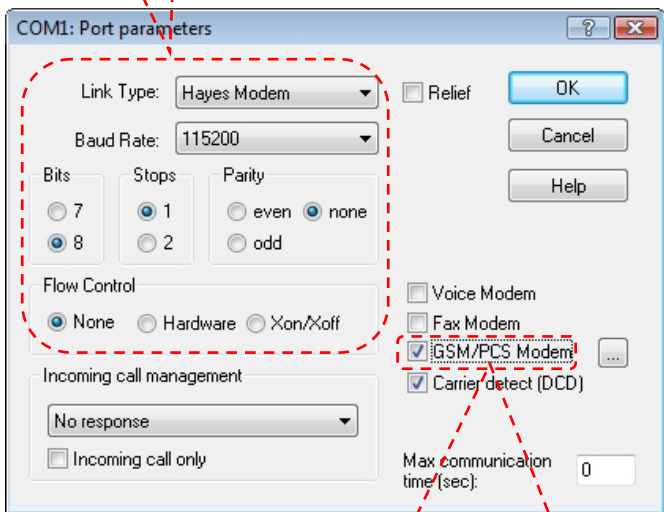
To specify the modem as **Fax modem**, check this box.



**Note:** most analog modems can be configured in voice **AND** Fax mode.

## Configuration SMS transmission (GSM modem)

Default parameters to use in most cases.



COM1: Port parameters

Link Type: Hayes Modem  Relief

Baud Rate: 115200

Bits:  7  8 Stops:  1  2 Parity:  even  none  odd

Flow Control:  None  Hardware  Xon/Xoff  Voice Modem  Fax Modem  GSM/PCS Modem

Incoming call management:  Incoming call only  Carrier detect (DCD)

No response  Max communication time (sec):

To specify the modem as a **GSM modem**, check this checkbox. Then click on the button on the right to configure the parameters of the GSM modem (see the next page).



**Note:** For **vocal GSM modem**, the Voice Modem box must be checked in order to also be able to use the vocal feature of the GSM modem.

## Modem GSM parameters

Select your **country**.

Select the **GSM service provider** that matches the subscription of the SIM card plugged in the modem.

Type the **PIN number** supplied with your SIM card.

If you want to process the SMS received by your GSM modem, you can configure this here.

The example shown gives you the ability to acknowledge the calls by sending a SMS with the "ACK" message or to deny the call by sending the "NACK" message.

The screenshot shows the 'GSM/PCS Modem parameters' dialog box. Red dashed boxes highlight the following elements:

- The 'Country' dropdown menu, currently set to 'United Kingdom'.
- The 'GSM Service Provider' dropdown menu, currently set to 'Vodafone UK - GSM'.
- The 'PIN Number' field, which is currently empty and masked with four dots.
- The 'Parameters' section, which includes:
  - Checkboxes for 'Incoming call identification' and 'Processing of received messages: cycle (sec)' (set to 0).
  - Text fields for 'Call acknowledged' (set to 'ACK') and 'Call denied' (set to 'NACK').
  - Text fields for 'Team changeover' and 'End'.
  - A 'Message processor' dropdown menu.

Other visible fields in the dialog include 'SMSC number' (+447785016005), 'Write number to SIM card' checkbox, 'SMS format' (Auto, PDU, Text), and 'Network information' (Operator, Signal, Min value (0-31) set to 5).

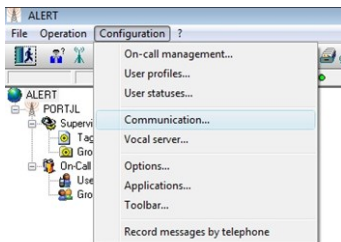
## Configuration of the communication drivers

Communication drivers are independent software modules that support data exchange for a specific communication media (SMS, email, fax, pager).

In order to be able to use a particular communication media, it is necessary to install the appropriate driver and to configure the parameters of this specific driver.

The example below shows you how to add a GSM driver in order to send SMS.

- Menu **Configuration** > **Communication**
- Or this button  on the toolbar

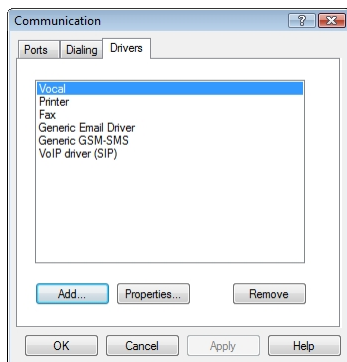


- Select the **Drivers** tab

Drivers in this list are the drivers that can be used to transmit information.

To send SMS, we can use the "Generic GSM -SMS" driver. We can also use the driver corresponding to the recipient's GSM provider (for example "Vodafone").

If this driver is not in the list, click on the **Add** button.

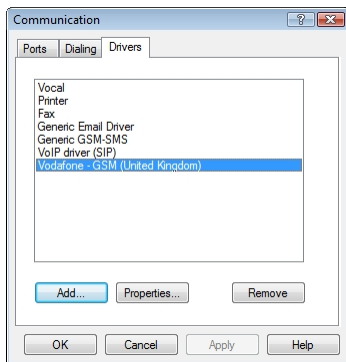


- Verify that the checkbox “**with GSM modem**” is checked.
- Search for the driver in the list (here “Vodafone - GSM”).
- Click **OK** to validate



The new driver appears in the Drivers list and can be used to send SMS.

If you want to configure operating parameters (message headers, character set, delivery report), click on **Properties** or double-click on the driver in the list.



### **Beware :**

Some drivers cannot be directly used when configuring the operator's phone numbers:

- Generic Email (to send emails),
- Printer (to send messages on a network printer),
- Ascom IP (to send pager messages through the network)
- ...

To be able to use these drivers, it is necessary to configure them in order to define sub-drivers with their specific parameters.



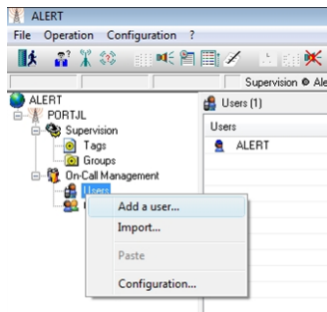
# WHO TO CALL ?

Once the hardware and software used for sending messages have been defined, it is necessary to identify the operators who are likely to be alerted, as well as their organization in groups and on-duty teams.

## Configuration of the operators

The example below shows how to **create an operator** and to define a vocal **telephone number** for this operator.

- Right-click on **"Users"** in the **ALERT** tree structure.
- Click on **"Add a user..."**.



- Type the **name** and the **first name** of the operator.
- Click on **"Add"** to add a telephone number.

A screenshot of the 'User record' dialog box. It has a title bar with 'User record' and standard window controls. The 'Identification' section contains fields for 'Name' (SMITH), 'First Name' (John), 'Language' (Anglais (États-Unis)), and 'Class' (Operation). There are also fields for 'ID' (002) and 'Code'. A 'Virtual user' checkbox is present. The 'Duty status' section has a checkbox for 'Off duty, substituted by:' and a 'Schedule...' button. At the bottom, there is a 'Dial numbers' section with a table and an 'Add...' button circled in red. The table has columns for 'Id', 'Type', 'Number/Address', 'Calls', and 'Ack'. Buttons for 'OK', 'Cancel', 'Help', 'Messages...', and 'Advanced...' are on the right side.

- Select the **number type** according to your needs (the list of previously defined drivers is displayed).
- Type the **number** (or the email **address** in the case of an email).
- Validate with **OK**.

Number / Address

Number type: Vocal

Number / Address: 04123456789

Attempt number if call fails: 3  Default

Timeout before new attempt (seconds): 60  Default

User call validated if successful call

Automatic call acknowledgment:  Yes  No  Default

Attempt number if call not acknowledged: 2  Default

Timeout for call acknowledgment (minutes): 5  Default

- The number added earlier is now displayed in the **dial numbers** list.
- If you want the operator to be notified on different media, repeat the previous steps.

User record

Identification

Name: SMITH First Name: John

Language: Anglais (E tats-Unis) Class: Operation

Virtual user ID: 002 Code:

Duty status

Off duty, substituted by: Schedule...

Id	Type	Number/Address	Calls	Ack
<input checked="" type="checkbox"/>	Vocal	04123456789	3 (60 s)	Auto

Add... Edit... Delete... Schedule



The operator added earlier appears in the list of operators which is shown when you click on **"Users"** in the tree structure.

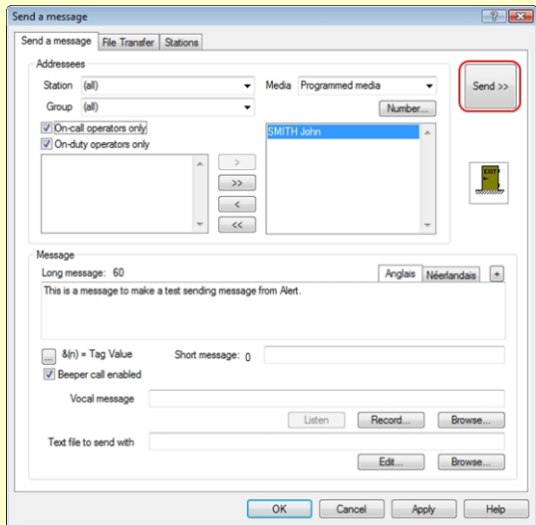
All the operators who are in the same on-call organization need to be added the same way.



## Tip of the day

**ALERT** is now ready to send messages to the defined operators.

To perform a test, you can right-click on an operator in the operator list and select the command **“Send a message...”**.



Type your text message and then click on the **“Send >>”** button.

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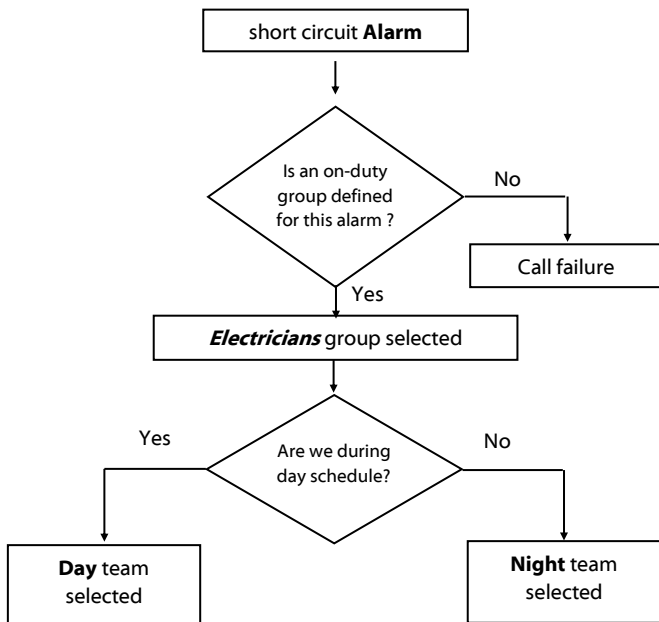
## Groups and teams configuration

Before configuring the on-call management, it is important to have a good understanding of the mechanism used by **ALERT** to manage the on-call schedule.

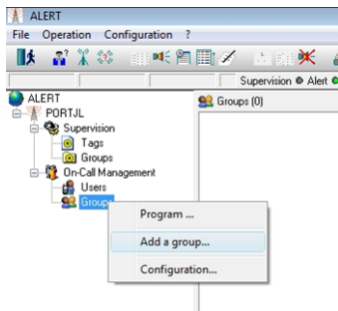
When an alarm is detected by **ALERT**, the software starts a cycle of calls to the on-duty groups associated with the alarm.

For example, an alarm is detected indicating an electrical short circuit. **ALERT**'s instructions for this alarm is to call the *Electricians* group which contains 2 teams corresponding to the day time and night time duty.

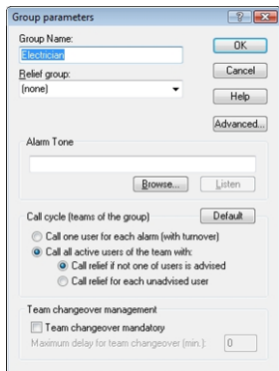
The call engine is going to work according to the following flowchart:



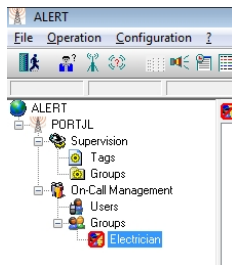
- Right click on “**Groups**” in the **ALERT** tree structure (under the branch “**On-Call Management**”).
- Select the command “**Add a group...**”.



- Type the **Group Name**.
- Validate with **OK**.

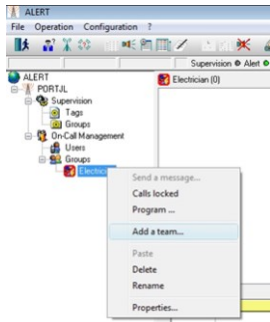


- The name of the added group is displayed in the **ALERT** tree structure.

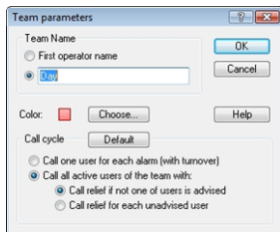


## Creation of the teams of the group

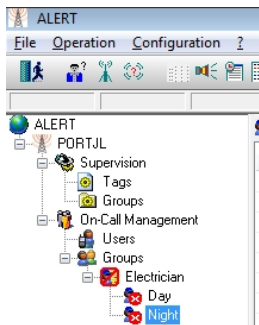
- Right click on the group we have just created (here « *Electricians* »).
- Click on “**Add a team...**”.



- Type the **Team Name**.
- Validate with **OK**.

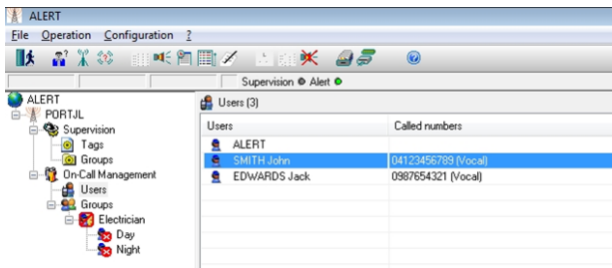


- The name of the added team is displayed in the **ALERT** tree structure, under the branch of the created group.
- Repeat the same operation for the second team.

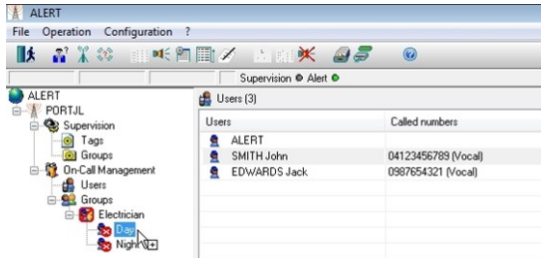


## Matching operators with on-duty teams

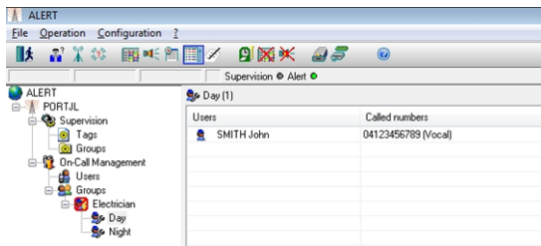
- Right click on **"Operators"** in the **ALERT** tree structure.
- Select the desired operator in the list on the right.



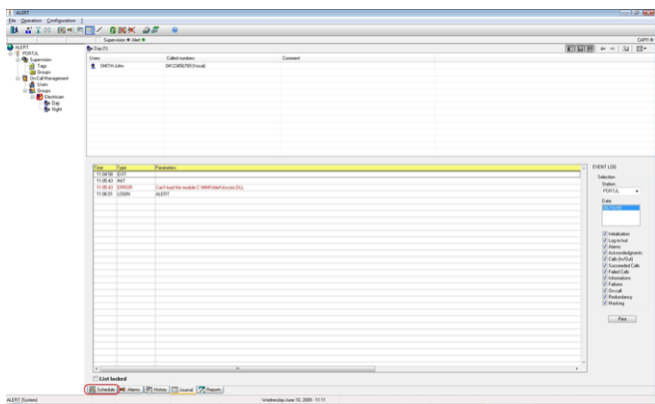
- Drag and drop the selected operator to insert him in the team.



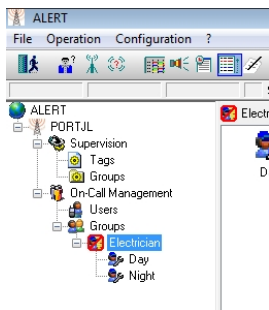
- As soon as a team contains an operator the icon  becomes .



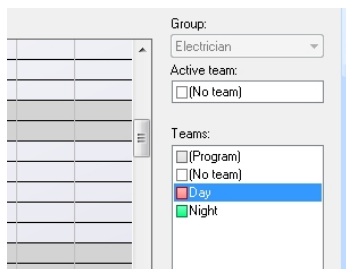
- Select the **Schedule** tab at the bottom of the main window.



- Select the group you want to configure the schedule for.

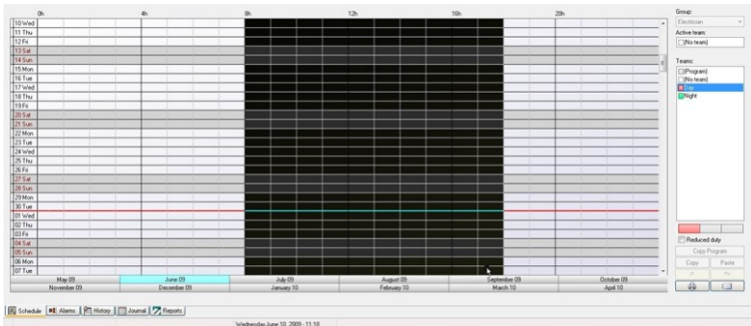


- On the right of the **ALERT** window, the list of the teams of the selected group appears, with the color associated with each of them.
- Select a team.

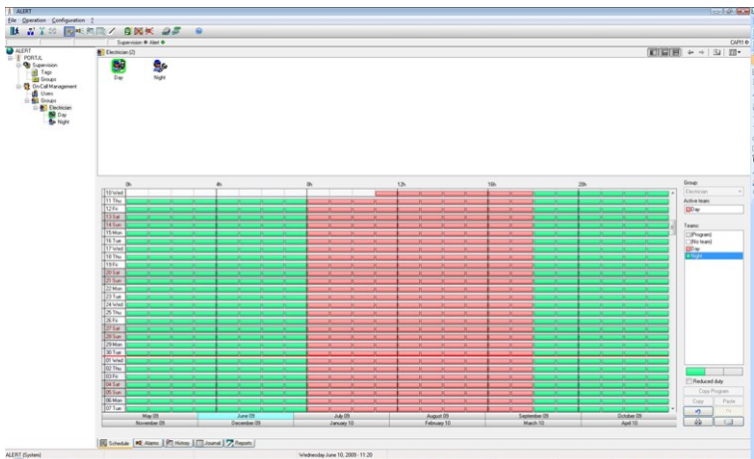




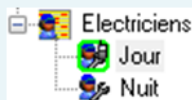
- Position the mouse cursor on the planning at the beginning of the on-duty period of the selected team.
- Click and hold down the left button of the mouse, then move the mouse to select the on-duty period of the team. Release the mouse button to validate the selection. The defined period is set with the color of the selected team.



Here is an example of a schedule defined with 2 teams.



One should note that the team selected as the on-duty team for the current time is highlighted in green.

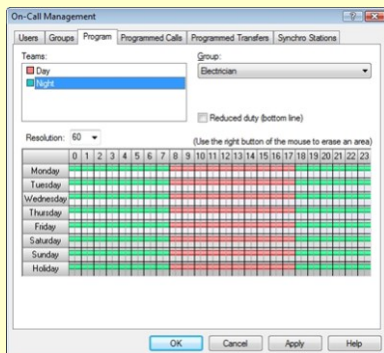


### **Note:**

The method used above is perfectly adapted to define schedules over any periods. It is convenient for an on-call schedule which changes from one week to the other.

When the on-call schedule follows a weekly schedule, it can be more efficient to configure a **weekly on-call schedule** program which defines the default on-call schedule of the group. It is later possible to modify this schedule as above.

To define a weekly on-call program, right click on the concerned group in the **ALERT** tree structure. Then select the "**Program...**"



command.

Use the same method mentioned above to draw the on-duty periods in the schedule.

## WHICH ALARM ?

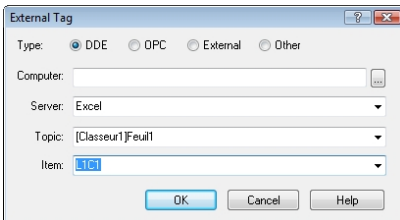
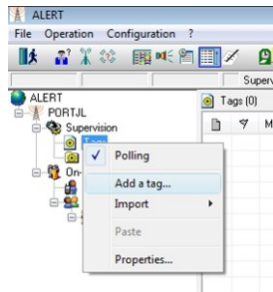
Once the on-call schedule has been organized and configured with the various groups which are likely to be alerted, the data to supervise and the treatment of the alarms generated by these data can be defined and configured.

In most cases, the data that has to be supervised comes from an external application (SCADA, OPC server communicating with a PLC,...).

### Addition of a tag

The following example shows you how to configure an alarm generated by a variable supplied by a DDE server application (Excel in this case). The same method can be used to add a variable coming from an OPC server.

- Right click on **"Tags"** in the **ALERT** tree structure (under the **"Supervision"** branch).
- Select the **"Add a tag..."** command.



- Select the type of connection to the external data server and then fill in the different fields.

Choose the alarm triggering condition.

Choose the group(s) to be notified for this alarm.

Type the message which will be sent by SMS, e-mail or any other text media to notify of the alarm.

If the "Voice synthesis" option is activated, this message will also be synthesized to produce the vocal message used for vocal calls.

Select or record the vocal message that will be broadcasted during the vocal calls. This configuration is not necessary when the "Voice synthesis" option is activated.

Tag parameters: ExcelSheet1R1C1 (OID=0)

Type:  Variable  Event  Acknowledg.  Not redundant

Name:

Station: PORTML-VISTA Value...

Group:

Event

Condition: NOT EQUAL 0

Transitory  Reactivable  Schedule...

DDE/OPC Polling

Advise  Periodic Request  On Group Alarm

Alarm

Alarm enabled Alarm masked by:

Priority: 1

Period for automatic priority increment (sec): 0  Default

Alarm Processing Reset Processing Acknowledgment Processing

Actions:

Action	Label	Notice
Call Group	Electrician	

Long message: (39)  Anglasi +

Breaker failure detection on Building A

Short message: 1  Format...

Vocal Message

Listen Record... Browse...

Text File (instructions)

Edit Browse...

ALERT

Supervision - Alert

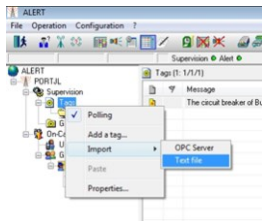
Tags (1: 1/7/1)	Message	Value	P	On-call Group	Call st.	Comment
Excel(Classroom)Feul	The circuit breaker of Building A has suffered a failure	0	1	Electrician		

The configured alarm is displayed in the supervision list.

The method described above configures one by one the tags to be supervised from an external application, DDE or OPC server.

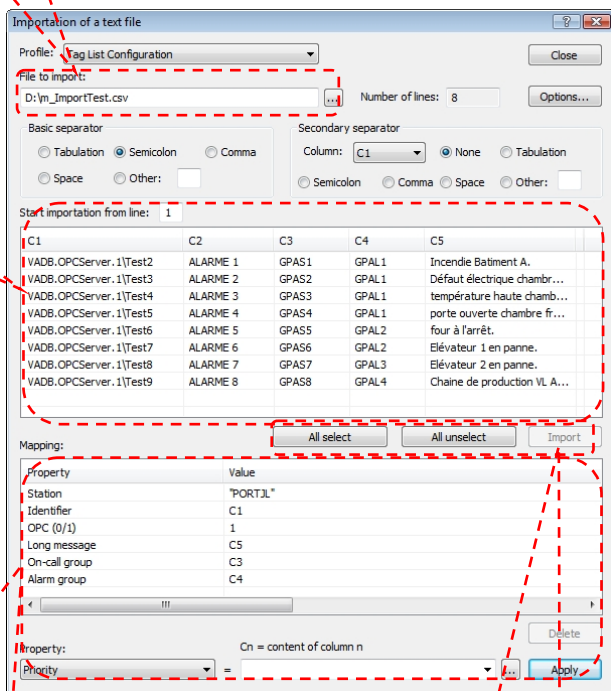
This method can be painstaking when we have an important number of tags to configure. For numerous tags configurations, it can be more efficient to describe the list of tags to import in a text file, with their necessary parameters and then use the standard **import text file** feature of **ALERT**.

- Right click on **"Tags"** in the ALERT tree structure (under the **"Supervision"** branch).
- Select the **"Import"** command, then **"Text file"**.



1. Select the file to be imported.

2. Verify that the file was correctly read.

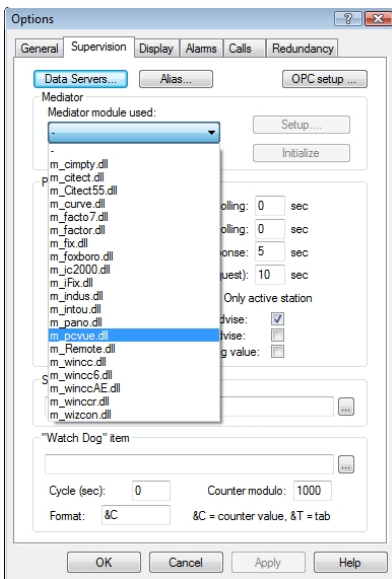


3. Create the mapping between the ALERT properties ("Property" drop-down list) and the column representing this property in the text file (by clicking on the corresponding header column in the list (C1, C2).

4. Select the lines which you wish to import in the list then click on the "Import" button.

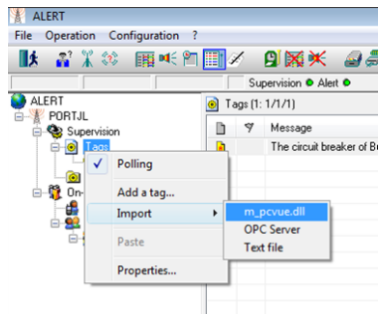
**ALERT** is compatible with most of the industrial SCADA. Interface modules with these SCADA ("mediators") are supplied in the standard ALERT package, in order to easily import a list of alarms to monitor the data that has been configured in the SCADA.

To use the import function of a mediator, it is necessary to first load the mediator according to the used SCADA.



- To load a mediator, select in the ALERT main menu the command **Configuration > Options...**
- Select the **"Supervision"** tab.
- In the **"Mediator module used"** list, select the mediator module according to your SCADA.

- Right-click on "**Variables**" in the ALERT tree structure (under the "**Supervision**" branch).
- Select the "**Import**" command, then the name of the loaded mediator module (m\_pcvue.dll in our example).



The following actions depend on the mediator that is used.

Generally, the screen displays a list of data configured in the SCADA application, possibly filtered by criteria's specific to each SCADA (data type, group...). In so far as the destination of the alarms is rarely defined in the SCADA application, a list of the on-call groups defined in ALERT can be used to select the group to call for the imported alarms.

The import operation often consists in selecting a set of variables in the list of the SCADA data, defining additional importation parameters for these variables (group to call, functional group...), then clicking on the "Import" button to import the selected variables.

This operation can be repeated as often as necessary to import groups of variables with different parameters (variables attached to the group "Maintenance" group, variables attached to the "Security" group for example).



# ADVANCED COMMUNICATION SOLUTIONS

Mobility

MOBILITY

SECURITY

Security

Reactivity

Traceability

Traceability

ACTIVITY



## ALERT:

On-call management and alarm supervision

- Supervision of your installation (industrial process, building automation, ...)
- Call triggering to the concerned operators when an alarm is detected
- Advanced traceability of alarms, off-peak interventions
- Visual control and localization of your alarms
- A universal solution: supports every possible languages and can be integrated in a great variety of systems.



## NET'SENTINEL

SNMP supervision

- Open interface (DDE, OPC, ...) for supervision of equipment connected to TCP/IP network (routers, switches, servers, printers, PLC, UPS, ...)
- Complete MIB browser integrated



## SIREN

Staff mobilization and mass alert

- Automated system for staff mobilization and mass alert in case of :
  - Major natural risk (flood, cyclone, ...)
  - Technological risk (gas leak, explosion, fire, ...)
  - Sanitary risk (hospital emergency, ...)



## PROG'TIME

Scheduling server

- Ergonomic graphical interface for configuring your time programs
- Drivers in real time current status of time-scheduled functions or returns a list of the next status changes



## JERICO

Telecommunication software platform

- OEM solution for integration of written and vocal paging functions
- Open to many media: fixed or mobile phone, SMS, pager/beeper, fax, email, ...
- Allows development of customized vocal applications (vocal server, call center, ...)





telecommunication & multimedia



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