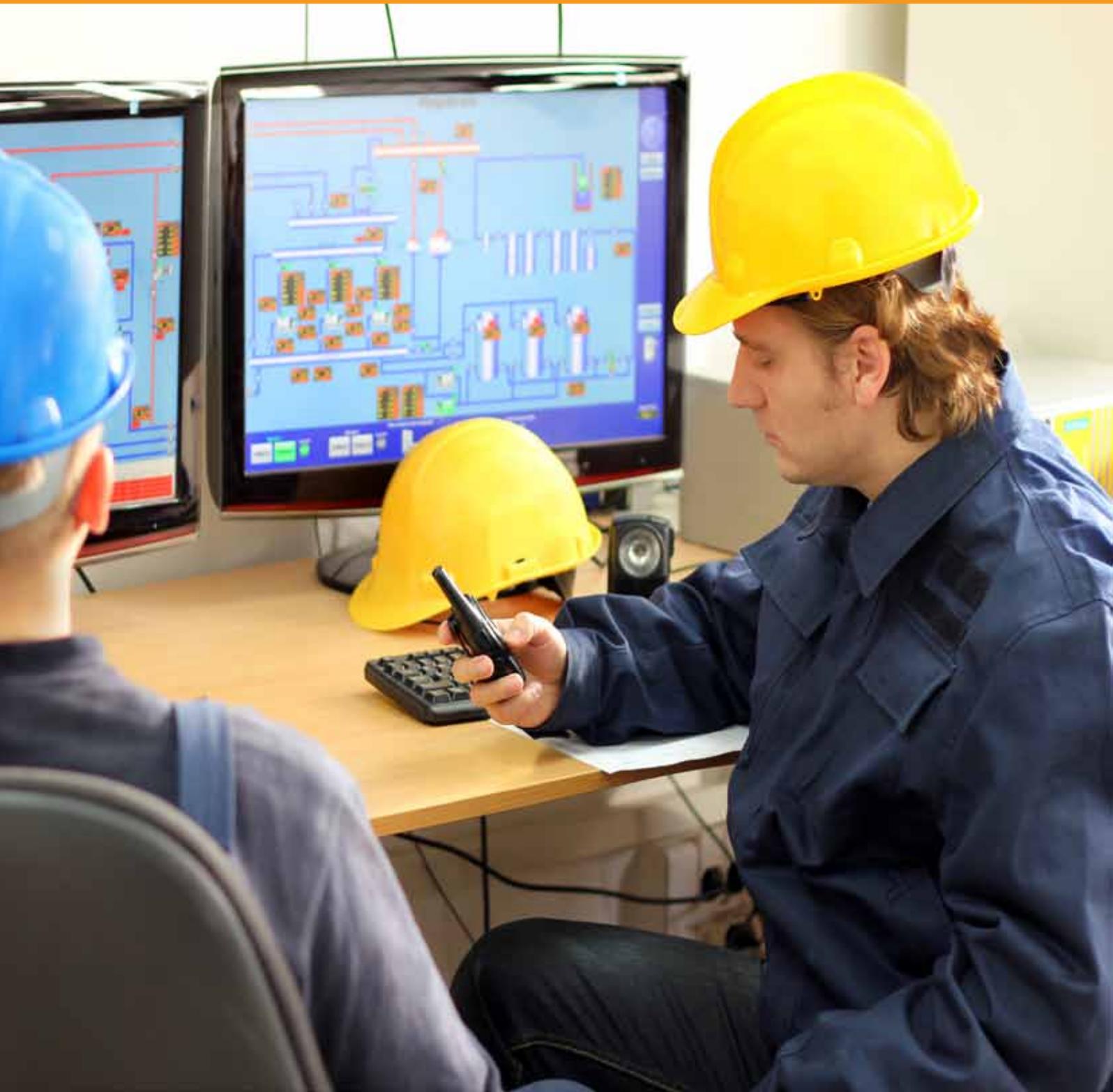# Alert
ALARM MANAGEMENT

Alert
To inform and to alert

Alert is able to treat alarms or intervention demand coming from different sources:

- Supervisor software (SCADA), via DDE, OPC or dedicated interface (mediator)
- PLC, through a communication server
- Analog or Digital I/O
- Serial or IP data transfer
- Files
- Databases
- Phone, mail, SMS, web intervention requests.

Call of on-duty group

The Call group action triggers the call of the operators of the active team of the designated on-call group. In case of failure relief operators are called. The same alarm can rigger several group calls.

Operator call

The Operator call action generates the direct call of the designated operator with the possibility to force the phone number that must be called but without relief possibility to another operator.

Alarm supervision

Advanced call management

Information transmission

Intervention follow- up

Script execution

The script execution action triggers the execution of a designated script of the processor message.

Application execution

The application execution action triggers the execution of a designated command line.

Vocal announcement

The vocal announcement action plays the vocal message associated with the alarm or explicitly designated on the local station.

Command execution

The command execution action triggers the execution of a writing sequence of external tags or outputs by OPC, DDE or through a communication driver.

Functional groups

Data can be organized in a tree structure. Logical organization can then be defined. For example:

- Geographically: buildings, cities,...
- Functionally: heating, electricity, Air conditioning.

These groups can be used as filters for different purposes: consulting the alarm table, reading the alarms history, acknowledging an alarm. These groups can also be used for alarms synthesis (generate an alarm when one of these data is incorrect).On event or alarm activation, Alert starts the execution of an associated action list. Actions can also be triggered on event rollback or alarm acknowledgement.

Advanced multimedia communication solutions

Fax, email, tele-printer

To receive written reports on detected alarms and their context.

SNMP Supervision

To notify alarms to the network supervisor.

Telephone (fixed or mobile)

The operators are called by telephone. They can listen to alarms and acknowledge them, through Alert integrated vocal server. Alert handles all the technologies: analogic, numeric (ISDN), voice over IP, radio (walkie/talkie).

Short messages (SMS)

DECT, public paging systems, To alert operators working off site on their mobile phone or pager.

On-site paging system

To quickly alert maintenance operators working on site.

Public address system

To broadcast specific messages to operators working on site.

Remote monitoring

Alarms transmission to a remote telesurveillance center.

Integrated vocal server

Alert iintegrates a vocal server to consult and acknowledge alarms by telephone. On connection, the vocal server welcomes the transmitter or receiver of

the phone call with a prerecorded welcome message. The operator identifies himself typing its identifying code on the telephone keypad.

This identification automatically acknowledges the call that has been addressed to him (current call or messages transmitted before by SMS or pager).

The vocal server then proposes several functions: listening to the alarms and service messages, selective acknowledgment of the alarms (individually or by group), record of a vocal report, switching into data mode (terminal connection) or callback request (mandatory callback on option).

Voice synthesis option

With the voice synthesis option (Text To Speech), recording messages is not necessary. The welcome message and alarm messages can be automatically synthesized from alphanumeric messages.

With this option, the functionalities of the vocal server can be extended: customized welcome, announcement of alarm number, vocal time stamping of alarms, integration of dynamic values in the vocal alarm messages.

Alert is compatible with the Speech API interface of Windows and supports voice synthesis engine complying with SAPI5 protocol.

VOICE SYNTHESIS

Useful when you need to create or modify a great amount of vocal messages frequently. Essential for dynamic messages.

An advanced on-call management

Operators

A list of media is attached to each operator defined in Alert (phone, cell-phone, email, fax,…). The calls are dialed in the defined list order until a call is considered as acknowledged.

Several media calls can be performed for the same operator (phone and SMS for example). The elements and the order of the list can be dynamically modified from the operator dial number weekly planning.

When an operator is temporarily off duty (sick, vacations, business trip,…), this state can be managed from his duty schedule. It can be set off-duty, with or without substitute, either manually or automatically.

Groups and teams

An on-call group designates all the operators who can intervene in order to deal with a specific category of alarms. Each group consists of teams. Each team designates an operator or a list of operators to be called simultaneously or by rotation (depending on option),

with the possibility of relief operators in case of call failure. An on-call group can be designated as a relief for another group.
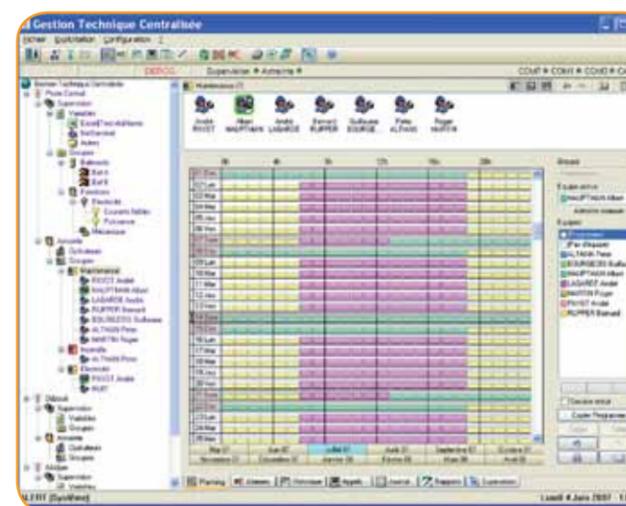

This group will be called in place of the main group when there is nobody on call in the main group or in case of failure of the call cycle of the main group.

Schedule

Each on-call group has an associated schedule which defines the team assignment for a group over a year, by time units of 1, 1/2 or 1/4 h.

The schedule is graphically configurable.

A weekly program can be defined (with holiday management) for automatic assignment of teams in the schedule.

At any time, it is possible to depart from the schedule of an on-call group, temporarily or not. When a group is in derogation state, calls that concern this group are suspended or can be redirected to a derogation team.

Alert transmits information using the latest modern technology media.

Alert integrates advanced on-call management features, enabling in a very easy and intuitive way identification of the persons to be prevented for each type of alarm (included the actions to undertake in case of failure).

The guarantee to be always notified

Call cycle follow-up

When Alert calls an operator to notify an alarm, the software ensures that the information is well transmitted. In case of failure (operator already online, no answer,...), the call is automatically reinitiated according to its parameterization.

If the transmission of the right information to the right recipient is not guaranteed then a call acknowledgment is necessary. If this acknowledgment is not made in a given period, the call is reinitiated.

In case of confirmed failure, the call is redirected either to the next calling number of the operator's calling list or to a relief operator.

Call acknowledgement

When an operator is alerted by the reception of a message, he must confirm that he has received the message.

To do so, he can transmit a call acknowledgment within a given period, either by calling back and identifying himself, or by sending a SMS.

At the end of the waited period, the call is considered as failed and is reiterated to the same operator or a relief operator according to the configuration.

Alarm acknowledgement

The alarm acknowledgment means that the operator has really taken the alarm into account. This acknowledgment can be done either locally on the Alert station or remotely by telephone.

A strengthened security

Redundancy

Alert can be installed on two stations on a network. If the redundant mode is validated, each alert manager supervises its own local application, but only one is active at a given time and triggers calls on detection of an alarm.

The two stations mutually supervise each other. If the active station is no longer capable of fulfilling its functions (PC or call systems are out of order), the other station automatically and immediately takes over without any information loss.

When a station is faulty, the other station automatically detects this state and activates an internal event of "redundancy failure".

If this event is declared in Alert supervision list, a call cycle can be triggered to signal the failure of the other station.

Multilanguage management

Alert integrates a real multilanguage management in its visual as well as vocal interface.

Each operator operating on a server station or an Alert client station can work on an interface entirely written in its language. Labels and alarms can also be translated. This is also true even if other operators with a different chosen language are connected.

The called or calling operator get their alarm messages in their selected language.

The Alert software operator visual and vocal interface is available in 7 languages: English, French, German, Spanish, Italian, Dutch,Chinese (Mandarin).

Alert operates under Windows 2000, XP, 2003 Server and Vista.

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