### **Tailor-made service**

ARA-pro is a modular system. To supplement a basic set into a system that corresponds seamlessly to your company's requirements is tailor-made work. Adesys can help you with this so that you will only purchase the modules and extensions that fit within your specific application.



You can use ARA-pro when your company needs:

- a clear alarm handling system for large numbers of alarms, for example when one or two alarm dialers are no longer sufficient to monitor your technical installations.
- monitoring several technical installations possibly in different locations integrated into one system for alarm registration and handling.
- optimal flexibility in the duty rosters for service technicians.
- to determine the urgency of alarms and the way in which they are handled. Example: non-urgent alarms are not reported to the service department during the night time but are recorded to be handled the following morning.

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RELY ON COMMUNICATION

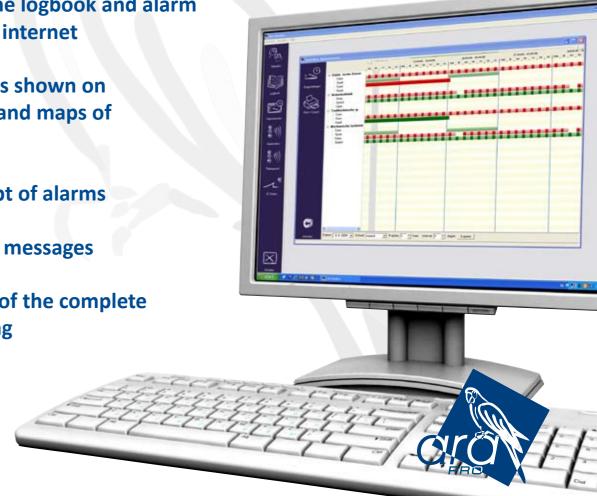


# **ARA-pro**

## Automatic alarm server

ARA-pro is a central alarm server for technical alarms. When an alarm occurs, ARA-pro can automatically call up service technicians. Depending on the time, the location and the nature of the failure, it is determined which technician receives the notification and will solve the failure.

- Alarm notifications via duty rosters of service technicians
- Alarm forwarded through SMS, speech or pager messages
- Registration of the complete alarm handling
- Checking of the logbook and alarm status via the internet
- Alarm statuses shown on photographs and maps of installations
- Flexible receipt of alarms
- Spoken alarm messages
- E-mail report of the complete alarm handling





## The ARA-pro concept

An ARA-pro alarm server consists of alarm server software running on a Windows<sup>®</sup> PC with one or several telephone line interfaces linked to it for receiving alarm information from technical installations and notifying the service technicians.

## **Receipt of alarms**

The system offers four methods of receiving alarms:

- via a telephone line from telephone-based alarm dialers. The alarm dialers then monitor the technical process and the processing of alarms takes place via ARA-pro.
- via TCP-IP from SCADA systems.
- via the Dupline<sup>®</sup> I/O system, alarm contacts are connected directly to the PC.

• via email with 'alarm' in the subject line.

These methods can be used alongside each other.

## **Processing of alarms**

Once in the alarm server system the following actions are taken, among others:

- registration of the alarm in the logbook
- possibly a display notification in the form of a pop-up
- allocation of the urgency level
- based on the urgency level, nature and location of the failure a service group is called.

The shifts of all technicians are recorded in the *extensive duty* roster so that the right technician is always contacted. Depending on the number of alarms to be processed, several telephone line interfaces can be connected at the same time so that incoming and outgoing calls to report failures are distributed across several telephone lines. In the event of a breakdown of the PC, the line interface will automatically call the emergency numbers.

The alarms can be notified in the form of:

- a spoken alarm message (the alarm is reset by means of a pre-set personal 4 digit code)
- SMS (the alarm is reset when the alarm server is called back using a failure specific code)
- pager message (the alarm is reset when the alarm server is called back using a failure specific code).

## **Extensive logbook**

All events are registered in the logbook with a date and time. This contains the following, among others:

- receipt of the alarm
- who was called and who reset the alarms
- when the alarm was solved (in the event of repair notifications).

### **Speech synthesis**

A spoken message is a safe method of notifying alarms. Optionally ARA-pro can make calls through speech synthesis. This means that you do not need to record any speech messages beforehand and changes in alarm texts are automatically implemented and pronounced correctly. Speech synthesis only works in the Dutch language. An English version is in preparation.

### **Extensions**

The following extensions make the alarm server even more user-friendly:

- locations of alarms are shown on photographs and maps of the technical installations/locations
- the Webview module makes it possible to read the logbook and the alarm statuses via the internet.

# Alarm dailers

Every alarm dialer that can send notifications via SMS or to Semadigit or Semascript can communicate with ARApro. This means that it is possible to combine different systems.



ARA-pro can also be used to test the correct functioning of the connected alarm dialers. Every alarm dialer has to report once every 24 hours for this. If this does not happen, this results in a local report and if so desired automatically into a call to a service technician on duty. The telephone line interface that is connected to the PC automatically reports a PC breakdown or failure or a network failure.

# Line interface



RS-232

SCADA system

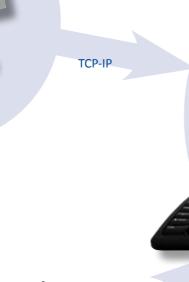
Sending alarm notifications of applications via TCP-IP, such as SCADA or other process computer systems.

# Dupline<sup>®</sup> I/O system

ARA-pro can manage a maximum of 1,000 reporting points within a distance of 10 kilometres in combination with the Dupline<sup>®</sup> I/O bus system.

## Logbook

The logbook provides an insight into the status of every individual notification. Repair notifications are also processed and registered. The logbook can be printed, but a report can also be sent via e-mail.



**RS-232** 



# Service technicia

Service technicians are assigned to service groups based on for example their region or specific service tasks. The duty roster in ARA-pro determines who will be called for the different alarm notifications, taking the shifts into account. It is very easy to process temporary changes, such as sickness reports, into ARA-pro. A return message by telephone ensures that every notification has actually been received and that it is registered who will be handling the alarm.

Ted	Volgne	Alem	Operator / Serviceman	Gebeurtenis
907.15	9263	Turbouvbediji 1 ketel	and the second second second	Oproepen 1 serviceman
807.15	9263	Turbouvbedtijf 1 ketel		Operator Melding
107:45	9264	Tuinbouvbedii#1ketel		Ontvangst susterekting
90811	9263	Turbouvbedrijf 1 ketel	S Carn	Opgeroepen Carin
008:11	9262	Tunbouvbedtijf 1 ketel	S Carin	Cain oproep beverligd
08.12	9263	Turbouvbediji 1 ketel		Oproepprocedure beendigd
08.31	9263	Turbouvbedriji 1 ketel	0	operator melding bevestigd -
00:59	3295	Turbouvbedijf 1 ketel		Distvangst alammelding
08.59	9265	Turbouvbedriji 1 ketel		Oproepen 1 serviceman
00:59	9265	Tunbouvbedi#1ketel		Operator Melding
09:03	9266	Turbowbedriji 1 ketel		Ontvangst rustmelding
09:37	9265	Turbouvbediji 1 ketel	S: Cain	Opgeroepen: Carin
09:37	3265	Tuinbouwbedtig 1 ketel	S. Carin	Cain oproep bevestigd
09:37	9265	Turbouvbediji 1 ketel		Oproepprocedure beendigd
09.46	9265	Turbouvbediji 1 ketel	0	operator melding bevectigit -
6.42.16	3267	Turbouvbedriji 1 ketel		Ontvangst alammelding
64216	9267	Tuirbouvbediiji 1 ketel		Oproepen 1 serviceman
6.42.16	3267	Tunbouvbedijf 1 ketel		Operator Melding
6.42.22	3267	Turbouvbedijf 1 ketel	0: -	operator melding bevestight -
642.26	9268	Tuinbouvbediijf 1 ketel		Ontvangst rustmekting
6 42 48	9267	Turbouvbedrijf 1 ketel	S Cam	Opgeroepen Carin
6.42.40	9267	Tunbouvbedriji 1 ketel	S Cain	Cain oproep bevertigd
6.42.48	3267	Turbouvbedijf 1 ketel		Oproepprocedure beeindigd
7.04.12	9,269	Turbouvbedriji 1 ketel		Ontvangst alammelding
7.04.12	9269	Turbouvbediji 1 ketel		Oproepen 1 serviceman
14:12	9269	Turbouvbedrijf 1 ketel		Operator Melding
	9205	Tuinbouvbediiji 1 ketel	0: -	operator melding bevestigd -
	9270	Tuirbouwbechijf 1 ketel		Ontvangst rustmelding
~	9269	Turbouvbediij 1 ketel	S. Karel	Opgeroepen: Karel
	9269	Tuinbouvbedi#1.ketel	S: Karel	Katel oproep bevestigd
	369	Turbouvbediji 1 ketel		Oproepprocedure beeindigd
	71	Turbouvbediji 1. ketel		Ontvangst alammelding
	1	Turbouvbedrijf 1 ketel		Oproepen 1 serviceman
	1	Turbouvbediji 1 ketel		Operator Melding
	2	Tunbouvbediji 1 ketel	Company of	Ontwangst suctinelding
-	. 1	Turbouvbedijf 1 ketel	S Karel	Opgeroepen Karel
B	л	Turbouvbedijf 1 kelel	S. Karel	Karel oproep bevestigd
1	_n	Turbouvbedijf 1 ketel		Oproepprocedure beiendigd
	\$273	ARA Meldoentrale Prive Office PC uit		Ontvangst alammelding
	9273	ARA Meldcentrale Prive Office PC ult		Geen oproep
	9273	ARA Meldooritale Prive Office PC ult		Oproepprocedure beeindigd
	9271	Tunbouvbediji 1 ketel	D: -	operator melding bevestigd -
-	9274	State of the second	0 -	Alskaten Arakteid -