



# 3A Assono Alert Application

Mass notification via phone or SMS



## Blazing fast mass notifications even in an emergency

Thunderstorms, severe snowfalls, floods, industrial or traffic accidents, public utility breakdowns and many more situations require a quick response which depends on notifying several dozens or even hundreds of people simultaneously, within the shortest possible time. A notification can only be really accurate if the messages are customised to specific situations and can be confirmed by recipients.

Using the 3A System the duty officer of government agencies, local authorities, public utility providers, power plants, mines, schools and universities, hospitals, public transport companies etc. can quickly, automatically and simultaneously notify groups of people who are "on call", i.e. who need to appear at their place of work or any other place or to perform a specific job.

### The notification process

The 3A System automatically dials the pre-defined phone numbers of people in a group from a call list tailored to the particular emergency and plays back the relevant voice message. The persons called can confirm receipt of the message by pressing a pre-defined button on their handset. The confirmation is reconfirmed by a voice

message and the system hangs up the call. Failed call attempts and/or confirmations are managed as described below. In case of SMS notifications pre-defined or ad-hoc messages can be sent to the selected call list. The simultaneous use of phone and SMS ensures prompt communication.

### System structure

The 3A System is an application running in a server environment and is accessed by users (dispatchers, supervisors and administrators) via a web browser. The server can connect directly to SIP trunks of IP PBX units or service providers. If there are no SIP trunks installed, BRI (ISDN2) or PRI (ISDN30) connections through IP-ISDN gateways can also be used.

## Preparations

Careful preparation is the key to successful and efficient notifications. The more accurate the database, the more precisely tailored the notifications, and the more attention devoted to continuous data maintenance, the more successful the management of emergencies can be.

Within the 3A System you can pre-assemble and continuously update and edit an On-Call Database, i.e. you can compile a phone book featuring all the persons whom you plan to alert in an emergency using the 3A System. All entries can have a name, a position, an organisational unit, an organisation, three notification phone numbers, and a priority code. The On-Call Database can be imported from a suitably compiled CSV file, i.e. you can upload your existing data to the 3A System.

Using third-party software voice messages (voice prompts) can be created and uploaded to the system that will be played back when making the notification calls. One or more confirmation options (codes) can be set up for any particular voice message. Separate voice messages can be created to reconfirm successful and unsuccessful confirmations by the person called. The system evaluates the confirmation code entered by the called person, then decides whether it is within the range of pre-defined correct confirmations and plays back the appropriate voice message to reconfirm the confirmation as successful or unsuccessful. E.g. the persons called can press 1 to confirm that they will be at their duty station within one hour, press 2 to confirm that they will arrive within three hours and press 3 to confirm that they cannot come at all. Thus, if any of these numbers are pressed the system will play back the message that reconfirms the confirmation as successful. If the number key pressed is



outside this range, the message reconfirming the confirmation as unsuccessful will be played back. You can specify how many times the system should play back the message in lack of a confirmation and also how long it should wait for the confirmation (in seconds). The notification message, the confirmation options and the voice messages together form one Message Object, of which more than one can be set up.

After the On-Call Database and the message objects have been created, several call lists can be compiled in advance using the Call List Editor Module to prepare for various situations. By assigning priority codes to persons the notification sequence can be controlled (persons with the same priority are notified in ascending order by their ID).

## Notifications

Notifications can be instantaneous (ad-hoc) or scheduled. The former can be used in emergencies, while messages scheduled for future dates and times can be used to convey information, warn on-call personnel etc.

The Instant Call Module can be activated by the dispatcher (operator), the admin and the supervisor as follows:

- Select the message to be sent;
- Select the pre-defined call list to be used for the notification;
- Select the people to be notified;
- Launch the alert call (subject to confirmation).

The alert process commences. The 3A System starts to dial the phone numbers on the call list (by order of priority and, within the same priority category, by order of ID) using all available channels. The first phone number of each person is called first, then the second and the third one (if any). When the call is answered the system plays back the message selected previously. During or after the message the person called can confirm the call using the number keys on their phone. If the confirmation code entered is correct (i.e. it is one of the pre-defined confirmation codes), the system plays back the reconfirmation message and the confirmation code and the time stamp are logged and assigned to the particular person. If the call was not confirmed with one of the

pre-defined codes, the system plays back the message stored for incorrect confirmation codes and plays back the alert message itself again. In lack of a correct confirmation code the system plays back the alert message as many times as defined in the Message Object. If no correct confirmation is received, the call is terminated and stored in a database as an unsuccessful call.

If a call to the first phone number of a particular person is not answered or if the call is answered but there is no confirmation, the system starts dialling the second phone number and, if unsuccessful, also the third number (provided there is a second and a third number in the database).

## The Monitoring Module

The Monitoring Module supports the user's work by providing a status overview of the notification process in progress. The screen shows whether the notification of any particular person has not been started yet, is in progress or has been completed.

The screen shows the name of the Call List and the number of started, confirmed and failed calls and also, in separate fields, the names of the persons being called at the moment through each channel available. The calling process can be terminated if necessary.

Upon completion of the notification task the text in the screen changes colour and the "Dialling Complete" message appears. A detailed list can be recalled by scrolling the page. Calls can be filtered and the complete or filtered list can be printed or exported to an MS Excel table. The results can be recalled from the Call Log Module.

## The Call Log Module

The Call Log Module stores the results of all the alert notification calls (call events). This module can only be accessed by operators with supervisor or administrator rights.

The Call Log Module stores detailed information about all notifications (call events), including the user name, the task identifier, the name, position, organisational unit and the organisation of the person called, the confirmation code received, the name of the message object, the status code and date/time of the event.

## SMS Module

In addition to voice messages, the system can also send SMS messages. When sending an SMS pre-written, previously saved and prompt messages can be used. Recipients can be those in one/more call list(s) or one/more person(s).

The screenshot displays the 'Dialling...' interface within the 'Monitoring module' of the 'Assure Alert Application'. At the top, there are navigation tabs for 'Settings', 'Addressees handling', 'Call list handling', 'Call log', 'Instant call module', 'Monitoring module', 'Immediate grp. SHS', 'SHS informations', and 'Logout'. The 'Monitoring module' tab is active. Below the navigation, there are three status bars: 'Total number of calls: 4', 'Total acknowledged number of calls: 4', and 'Total unsuccessful number of calls: 0'. The main content area is titled 'Dialling...' and contains two tables.

**People on dialing list**

Person on duty ID	Person on duty name	Position	Department	Organisation	Phone number
439	Tah Ibadya				8520

**Dialled people list**

ID	Person on duty ID	Person on duty name	Dialled phone number	Date of calls	Acknowledgement	Acknowledgment DTMF code	Acknowledgment date
1	431	Mahdi Soudai	8503	2018-05-02 14:18:13	Successful	A bit better (2)	2018-05-02 14:18:22
2	437	Károly Kovács	8529	2018-05-02 14:18:13	Successful	Excellent (5)	2018-05-02 14:18:24
3	393	Ibadya Tah	8514	2018-05-02 14:18:13	Successful	Average (3)	2018-05-02 14:18:30
4	436	Miki László	8532	2018-05-02 14:18:13	Successful	Excellent (5)	2018-05-02 14:18:30

# Specifications

- Number of call lists: 35
- Number of scheduled alerts: 10
- Number of Message Objects stored: 25

## Licensing:

3A System – Basic module

Includes the following modules (i.e. the full set of features) but requires an additional Call Management (Media) Module with an optional number of channels.

- On-Call Database (Phonebook)
- Call List Editing Module
- Instant Calling Module
- Scheduled Calls Module
- Monitoring Module
- Call Log Module
- SMS Module

Call Management (Media) Module

Available capacities:

2, 4, 8, 15, 30, 60 or 120 channels – this determines the maximum number of simultaneous alert calls.

## Recommended hardware requirements and operating system:

Control unit

A server with the following specifications:

- CPU: 2.4 GHz/core
- Storage: 120 GB
- RAM: 4 GB minimum
- Operating System: Windows 7, 10 or Windows Server 2012

Media unit

A server with the following specifications:

- CPU: 2.4 GHz/core
- Storage: 120 GB
- RAM: 4 GB minimum
- Operating System: OpenSUSE 12.3

## Minimum hardware requirements and operating system:

A PC with the following specifications:  
(for up to 30 simultaneous calls)

- CPU: 2.0 GHz/core
- Storage: 120GB
- RAM: 2 GB minimum
- Operating System:  
Windows 7 Home Professional

A PC with the following specifications:  
(for up to 30 simultaneous calls)

- CPU: 2.0 GHz/core
- Storage: 120 GB
- RAM: 4 GB minimum
- Operating System: OpenSUSE 12.3  
(preinstalled version not suitable for virtual environments!)

## IP communications systems tested (on a SIP Trunk):

- Mitel MX-ONE Telephony system 4.1, 5.0, 6.x
- Cisco UCM 11.x

## ISDN – IP gateway devices tested:

- Patton SmartNode SN4634