

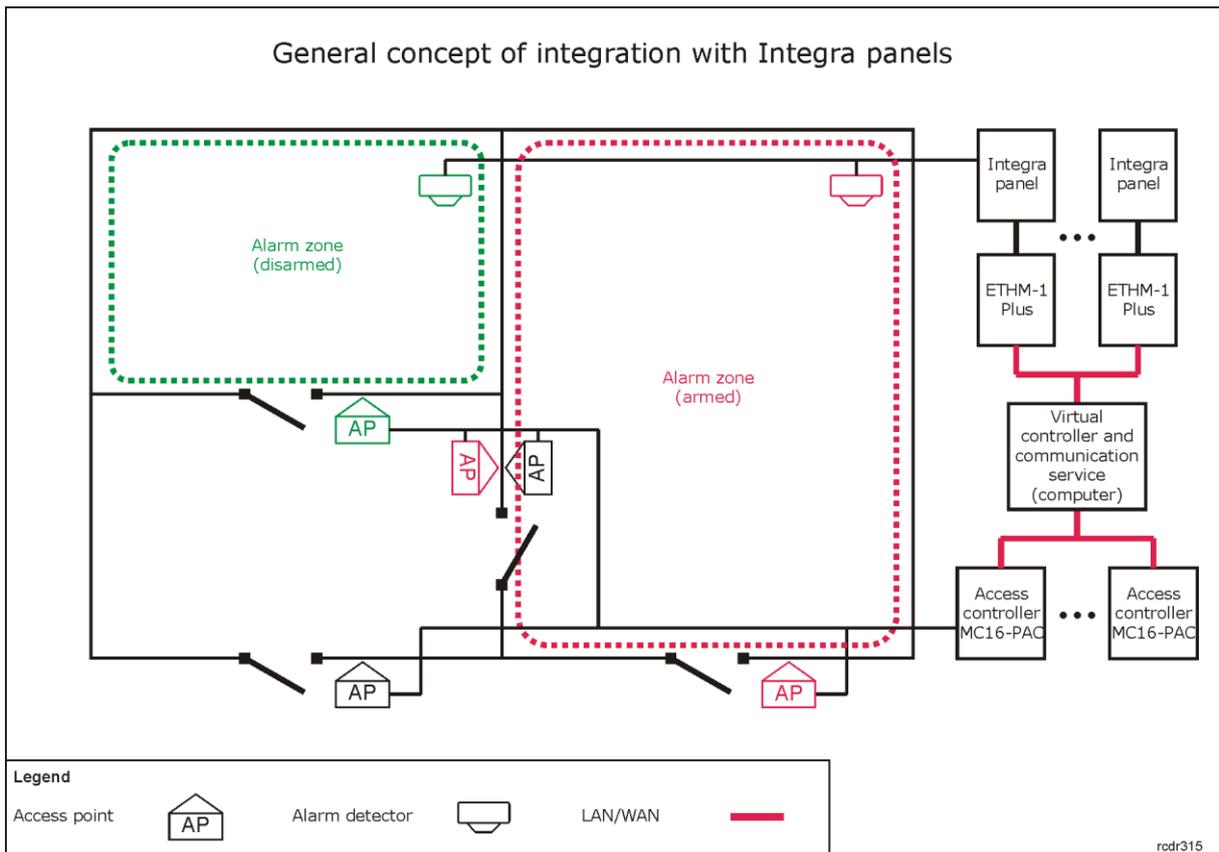
Roger Access Control System 5
 Application note no. 036
 Document version: Rev. C

Integra (SATEL) integration

Note: This document refers to RACS 5 v1.6.6 or higher

Introduction

RACS 5 system enables not only universal hardware integration with intruder alarm systems which is described in AN027 Application note but also dedicated software integration with Integra alarm control panels from Satel company. In such scenario the communication of access control system with alarm system is ensured by virtual controller (Windows service) from RogerSVC software package. Alarm system can include multiple alarm control panels, each equipped with ETHM-1 Plus module. The integration is offered within free of charge VISO ST software.



The concept of integration is based on logical connection of RACS 5 system Alarm Zones which include Access Points (readers) with Integra system Alarm Zones which include detectors. In practical application it means that the Armed mode of reader(s) and associated detector(s) is the same. Therefore the integration:

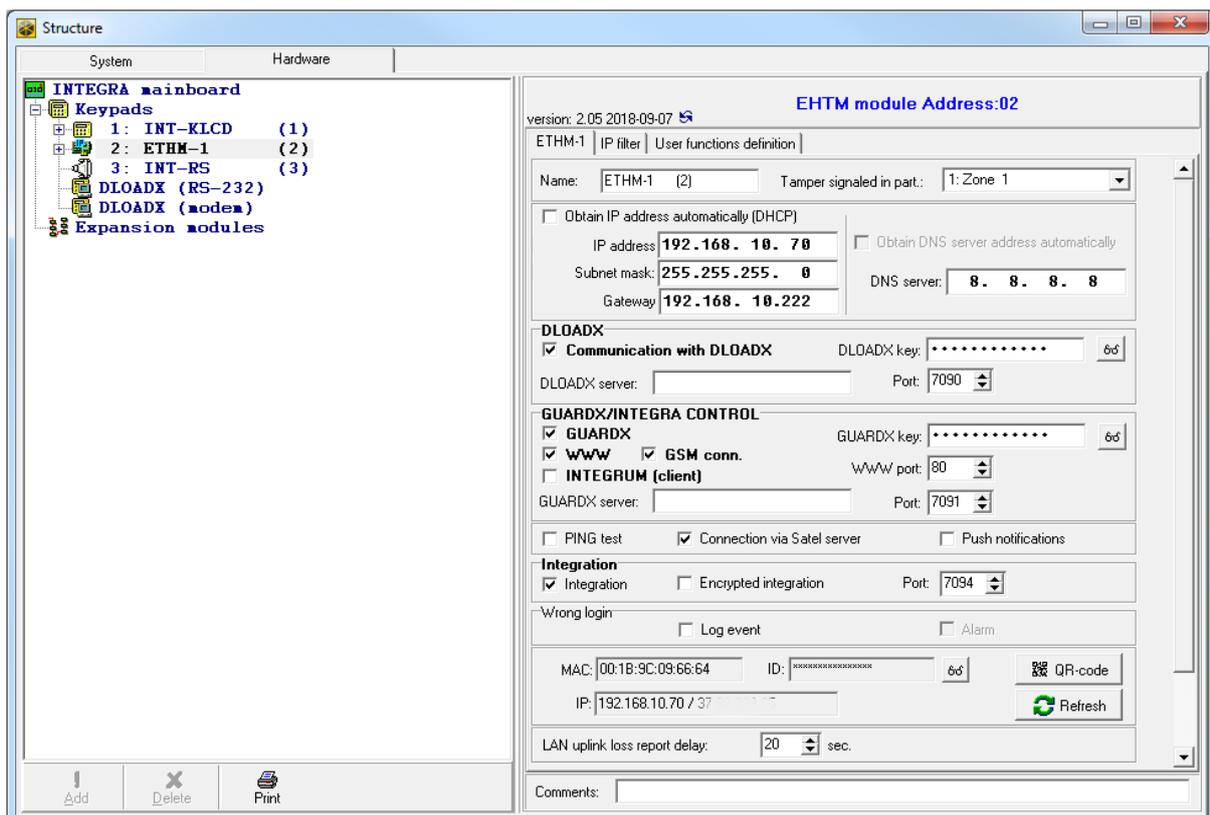
- Makes the management of both systems more convenient as Alarm Zones in both systems can be controlled from devices of one of the systems e.g. RACS 5 readers
- Allows to warn users about armed detectors in particular zone of alarm system as it can be presented on readers' LED indicators.
- Enables to avoid unnecessary alarms as the entry to the zone with armed detectors can be denied at access control readers because in such situation they would also be armed while getting into armed zone would require readers disarming which automatically results in detectors disarming.

Additionally the integration enables monitoring and remote control of Integra alarm system in RACS 5 management software by means of available monitors, maps and remote commands.

Note: The integration enables association of multiple RACS 5 Alarm Zones with multiple Integra Alarm Zones but only single partition in Integra panel can be applied.

Configuration of alarm system

Configure the intruder alarm system with Integra control panels according to manufacturer manuals and guidelines. Additionally start DLOADX software, select *Data->System and hardware structure->Hardware->ETHM-1* and in the properties of each ETHM-1 Plus module enable *Integration* option and specify communication port.



Configuration and control of RACS 5 Alarm Zones

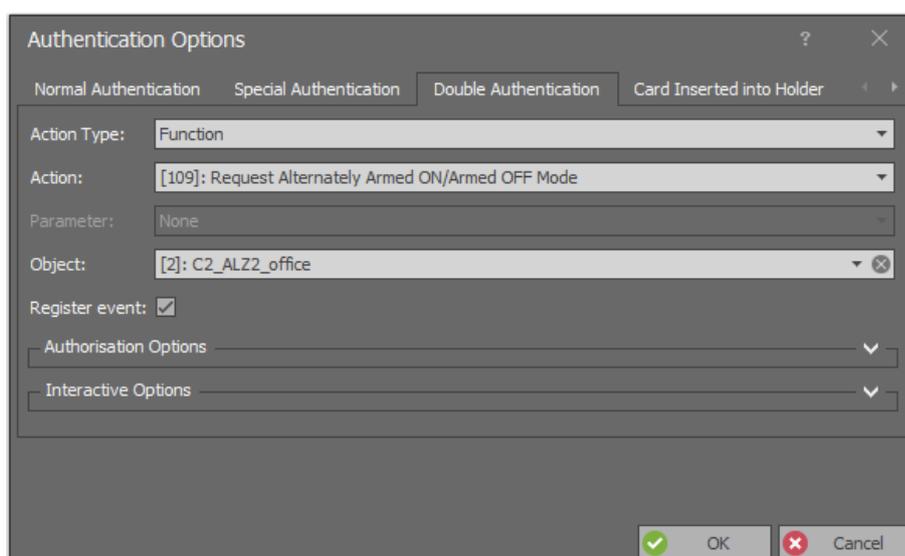
RACS 5 system enables configuration of Alarm Zones, each within single RS485 bus including MC16 access controller and its peripheral devices such as readers and expanders. Alarm Zone includes Access Points (readers) called Arming Points which are armed/disarmed concurrently which means that all Arming Points of particular zone are always in the same Armed mode. In order to create Alarm Zone:

- Configure access control system according to AN006 Application note and in case of RogerSVC software install also virtual controller service.
- In the navigation tree of VISO software within particular MC16 access controller double click *Alarm Zones* command.
- In the opened window click *Add* button and optionally enter zone's name.
- Enable the option *Disable physical access when zone armed*, if Access Points of armed zone are supposed to deny access to users with access rights till zone disarming.
- Click *OK* button.
- In the bottom select *Arming Points* tab and assign Access Points to the Alarm Zone. These points (readers) will be armed/disarmed concurrently within their zone.
- Upload settings to controller. Red LED SYSTEM indicators on readers signify armed zone while green LED SYSTEM indicators signify disarmed zone.

Alarm Zone and assigned readers can be armed/disarmed with card, PIN, input, function key and remote command. These methods are described in detail in AN027 Application note which is available at www.roger.pl. The integration works in both directions which means that arming/disarming of Alarm Zone in RACS 5 results in arming/disarming of associated zone in alarm system while arming/disarming of zone in alarm system e.g. from its keypad results in arming/disarming of associated Alarm Zone in RACS 5 system.

In case of integration with Integra, arming/disarming can be initiated in RACS 5 only with functions which request arming/disarming. The concept of integration is such that RACS 5 system sends request to alarm system and if arming/disarming occurs in alarm system then based on a feedback it also occurs in RACS 5 system. Therefore in case of this integration, input functions [107]..[109] must be applied and functions [101]..[106] cannot be used. Consequently there is no need to use output functions as in hardware integration because in case of communication with Integra panels no outputs are used. All mentioned functions are listed and described in AN027 Application note which is available at www.roger.pl.

The image below presents exemplary settings in *Authentication Options* tab of Access point to enable arming/disarming by double card reading or PIN entering. In such case a user must be also assigned with Advanced Authorisation for function [109] as shown in AN027 Application note. At the same time single card reading or PIN entering can still be used for access granting.



Configuration of communication between systems

In order to configure the integration between both systems it is necessary to enter Integra network parameters, to read Integra configuration, to link alarm zones of both systems and possibly define

Integra inputs and outputs on the level of RACS 5 system. It is also necessary to install virtual controller service included in RogerSVC software package and to start RACS 5 communication service, preferably on the same computer as virtual controller. In order to configure virtual controller:

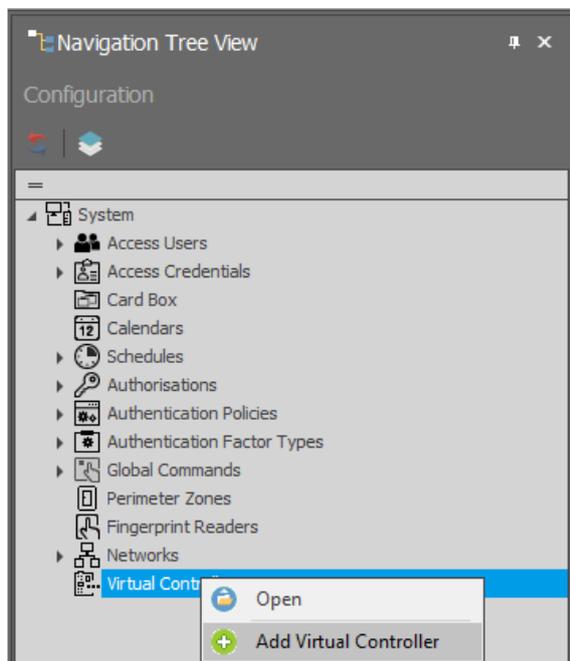
- Start RACS Service Manager selecting *Start->ROGER->RogerSVC* in your Windows OS.
- Click manager icon in Windows tray.



- In manager window select *Virtual controller service* tile, then *Configuration* command, enter computer's IP address and port for communication (8895 by default). All services are automatically started and operated in the background regardless of the manager whenever computer is started.

In order to configure connection between virtual controller and Integra alarm panel:

- Start VISO software.
- In the navigation tree of VISO software right click *Virtual controllers* command and select *Add Virtual Controller*.



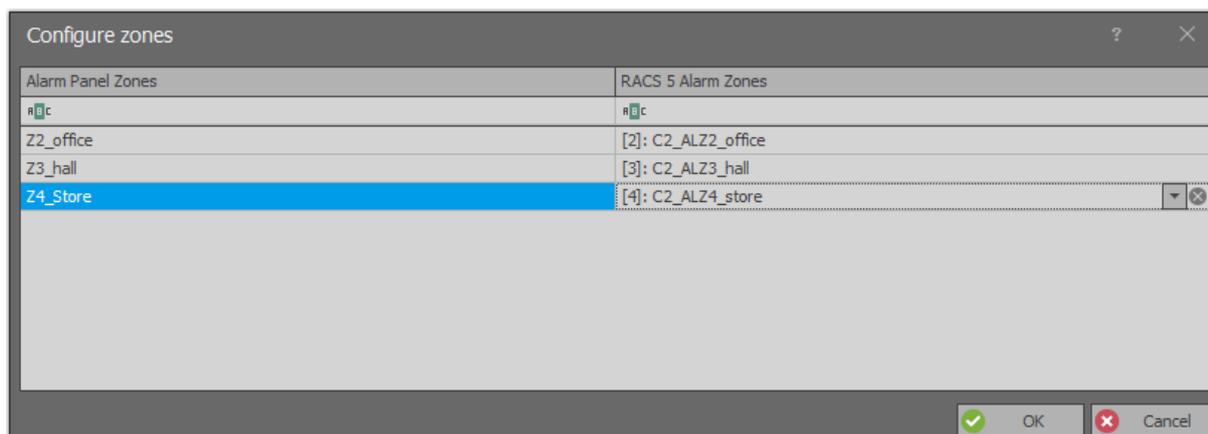
- In the opened window enter IP address and port which were previously defined with RACS Services Manager. Click *Connect* and select *Integra Integration Controller*. Close the window with *OK* button.

- In the navigation tree of VISO software click and expand your virtual controller, double click *Integra panels* command and select *Add* in the opened window.
- In the next window enter such parameters as ETHM-1 module IP address, integration port (7094 by default) and Integra administrator password (1111 by default) or Integra user password if such user has proper arming/disarming rights defined in Integra. Close the window with *OK* button.

- Select *Initialize* and then *Run* in the opened window to download alarm zones , inputs and outputs defined in Integra panel. Close the window.

Note: If zones downloading from Integra panel fails then you can consider different port (7094 is used by default) and/or configure allowing connection rules for TCP protocol at your Windows firewall.

- Select *Configure zones* and in the opened window associate alarm zones of both systems.
- Upload settings to the system.



Alarm zones from both systems can be linked in 1:1 relation. If it is necessary to assign single Integra zone to multiple RACS 5 zones then such Integra zone can be divided into master and subordinate zones each linked with one of RACS 5 zones.

Additional information

The integration enables bidirectional arming and disarming of alarm zones in RACS 5 system and Integra intruder alarm system. All events generated by Integra are downloaded, displayed and recorded in RACS 5 database. Therefore it is possible to configure alerts for such events including messages displayed by VISO and email or mobile text (SMS) sent automatically by communication service. Additionally it is possible to monitor and control Integra system on VISO map.

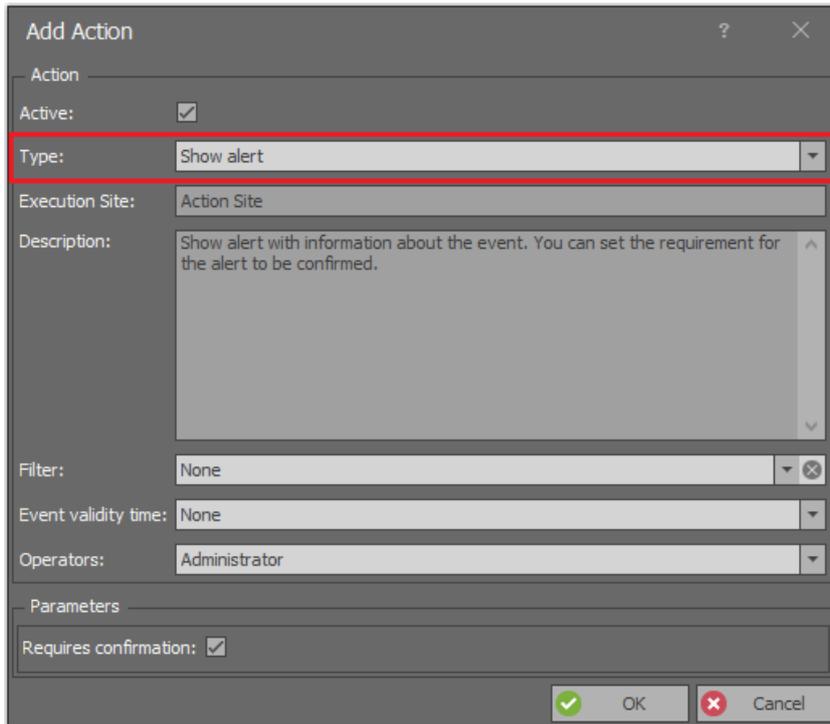
Arming and disarming

According to the description in AN027 application note, Alarm Zones in RACS 5 system can be armed and disarmed by means of Authentication Factors (card, PIN) on the level of Access Points (reader) and by means of Inputs, Function Keys and Remote Commands. The integration is bidirectional so Alarm Zones in both systems can also be armed and disarmed by means of Integra keypads and schedules.

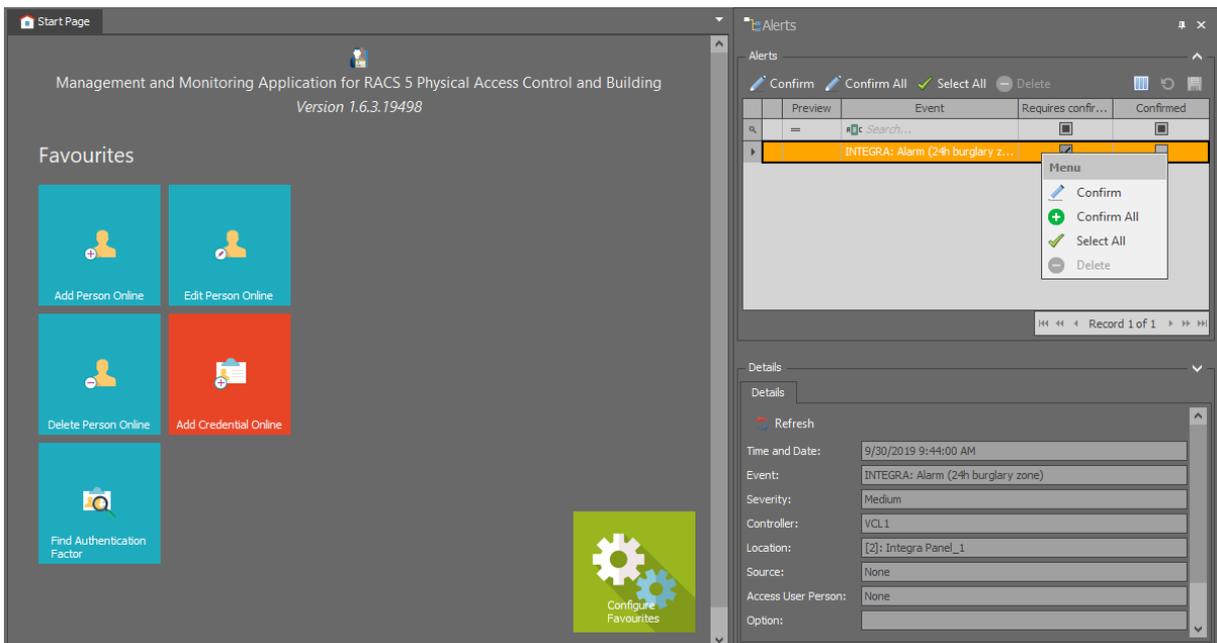
Alerts

When event is registered in RACS 5 software then actions can be started automatically. The action could among others consist in alert window displaying in VISO software and email or mobile text (SMS) sending. RACS 5 can also collect and display Integra events. In order to define automatic alert displaying in VISO software when exemplary event [I133N]: *INTEGRA: Alarm (24h burglary zone)* is registered:

- In the top menu of VISO software select *Event Log* and then *Event Types*.
- In the list find and select event [I133N].
- In the bottom select *Actions* tab and then *Add* button.
- In the opened window select *Show alert*, select operator(s) who can view the alert and enable the option *Requires confirmation* so the alert would require operator confirmation before closing. Such confirmations are registered in log which can be accessed by selection of *Administration* command in the top menu of VISO software. If it is necessary to limit alerts to specific [I133N] events e.g. only from certain alarm panel then define and assign your filter. Close the window with *OK* button.



When event [I133N] is registered in the system and VISO software is started then alert window is displayed automatically.



Similarly other actions such as email or mobile text (SMS) can be defined but in their case it is also necessary to define SMTP Account and/or SMS Gate by selection of *Tools* command in the top menu of VISO software. Emails and mobile texts are controlled by communication service of RogerSVC software and they do not require VISO to be started.

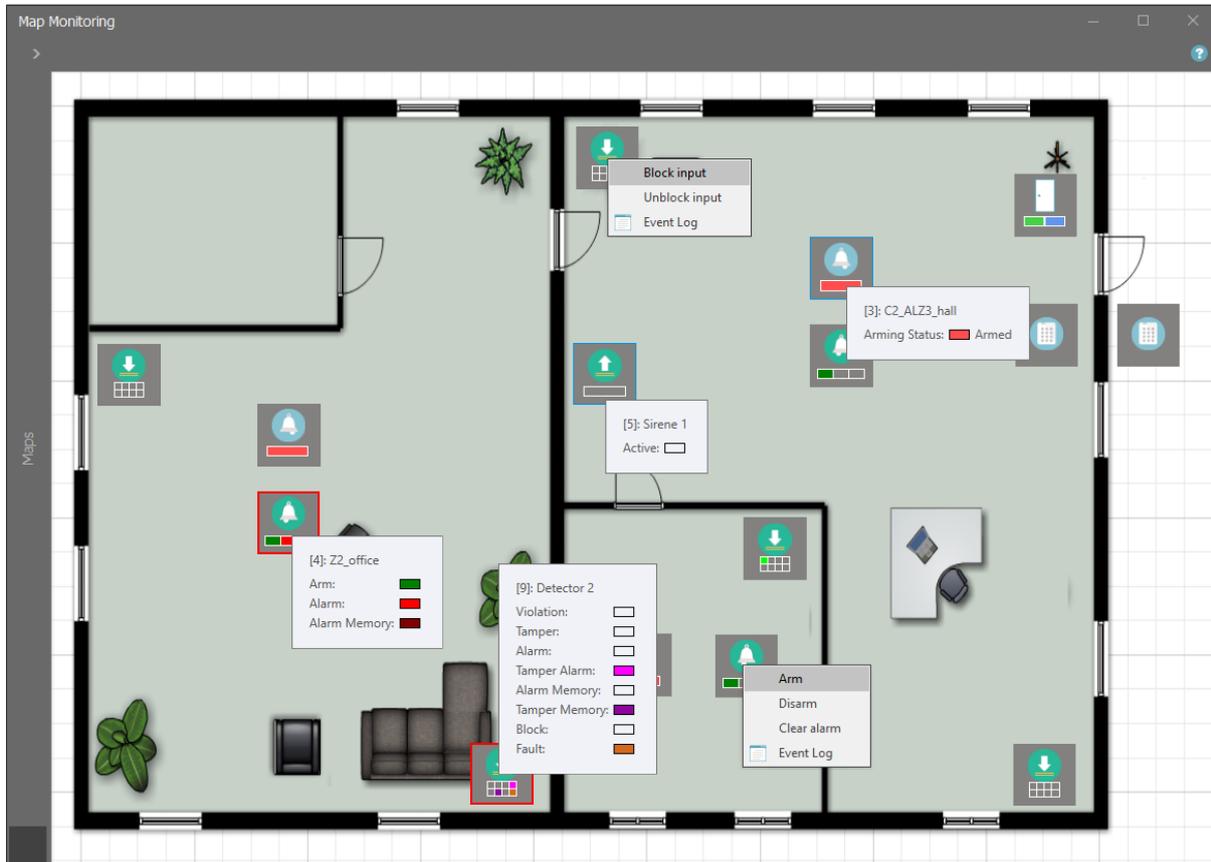
More information on alerts and notifications is given in AN041 application note.

Map

VISO software offers interactive map which can be used to monitor building. The map presents status of RACS 5 and Integra Alarm Zones and it shows alarms which are detected and registered

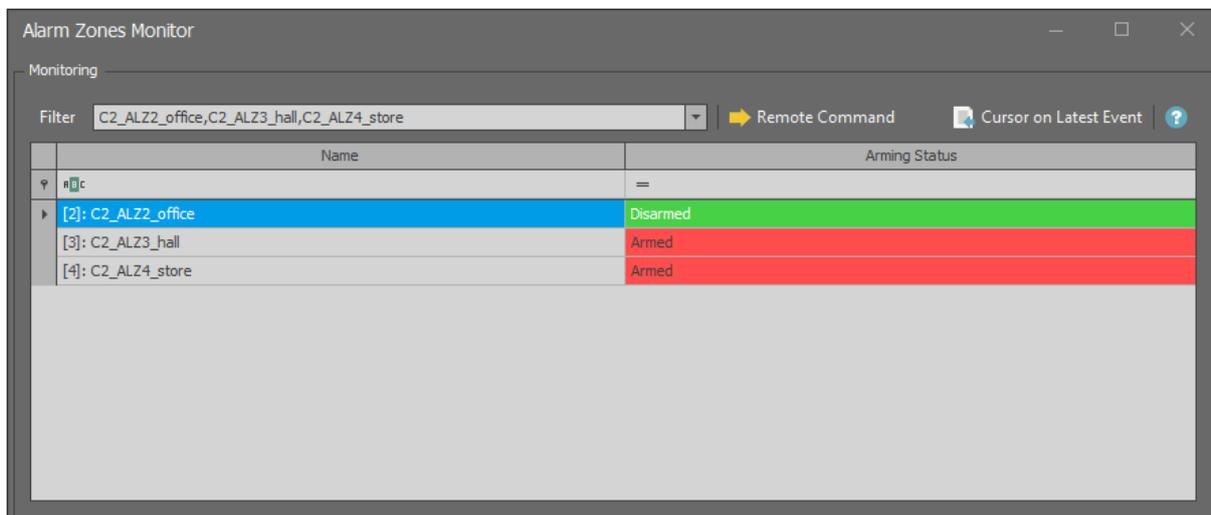
in Integra alarm system. Additionally the map can be used to remotely control Integra system e.g. arm zone, block input, etc. The map can display not only object which are shown in the figure below such as Alarm Zones, Inputs, Outputs, Access Doors and Access Points but also such objects as Access Zones, Automation Nodes and CCTV devices which can show video online.

Note: Alarms monitoring process must be enabled by selection of *Tools* in the top menu of VISO software and then *System Processes* in order use mentioned functionalities.



Alarm Zone Monitor

When *System Monitors* command in the top menu of VISO software is selected then Alarm Zones Monitor can be started. The monitor displays status list of Alarm Zones in RACS 5 and it can be used to start Remote Commands.



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