

# Roger Access Control System 5 v 2

Application note no. 031

Document version: Rev. A

## Additional quantitative access limiting

Note: This document refers to RACS 5 v2.0.8 or higher

### *Introduction*

RACS 5 system with MC16-AZC controllers enables additional quantitative access control in regard of user entries to Access Zone. The functionalities explained in this document can be used in car parks, gyms and other similar objects requiring advanced access control in zones.

MC16-AZC controller enables to:

- control how many users from particular group can access the zone
- control how many times a user can access the zone
- control what is the number of days for user to access the zone
- control is the number of days for user to lose access if no entry is made
- control when usage limits are automatically renewed based on schedule
- modify manually the value of user occupancy counter

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Note: Additional information on Access Zones, Anti-passback and standard quantitative access limiting is given in AN004 Application note which is available at [www.roger.pl](http://www.roger.pl).

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### *Group Occupancy Limits*

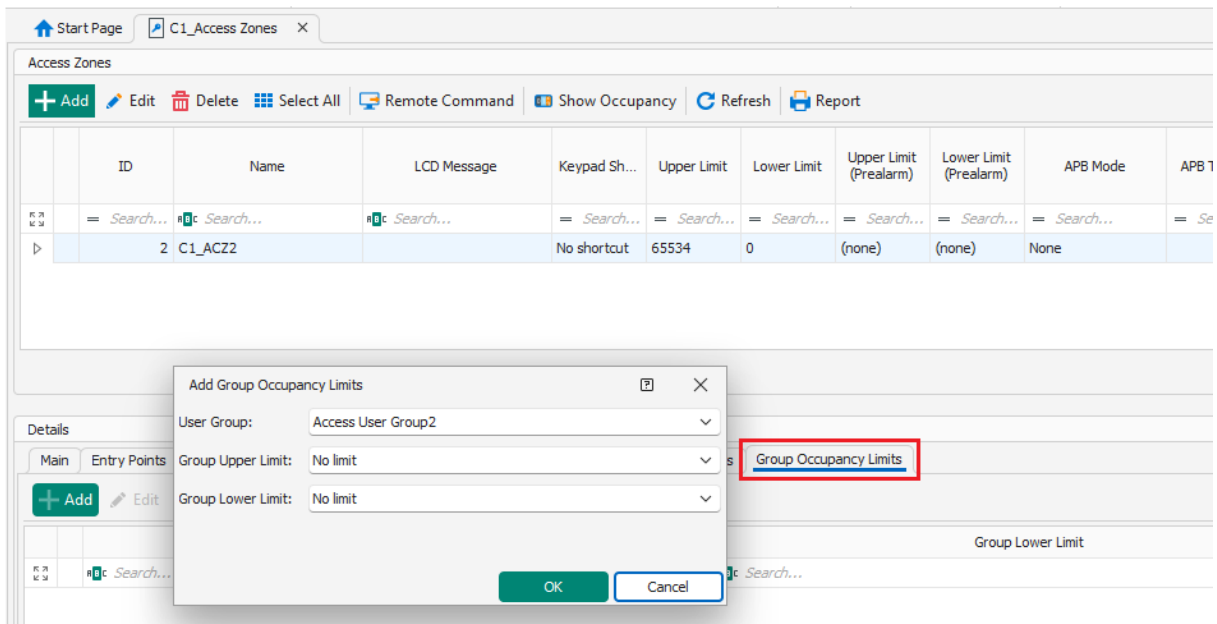
Group Occupancy Limits functionality is used mainly in car parks where the number of places is lower than the number of cars which could enter the car park and it mainly enables to define how many users (vehicles) from various groups of users can enter Access zone (car park). One such specialized zone can be defined per single MC16-AZC controller.

In order to define Access zone with Group Occupancy Limits:

- Configure access control system according to AN006 Application note.
- In the top menu select *Configuration* command and then *Access User Groups*.
- In the opened window create Access User Groups with *Add* button.
- In the top menu select *Wizards* command and then *Add Person Online* wizard to create some users.
- Assign users to previously created groups.

- In the navigation tree of VISO software within particular MC16 access controller double click *Access Zones* command.
- In the newly opened window click *Add*, enter zone name, enable *Group Occupancy Limits* option and then confirm with *OK* button.

- In the bottom, define Entry Point(s) and Exit Point(s) assigning previously created Access Points. Access Points which include system readers are usually defined when Access Doors are created using for example wizard from *VISO*-> *Wizards*-> *Add Access Controller Wizard*.
- In the bottom select *Group Occupancy Limits* tab and then *Add* button to define limits for selected groups of users.

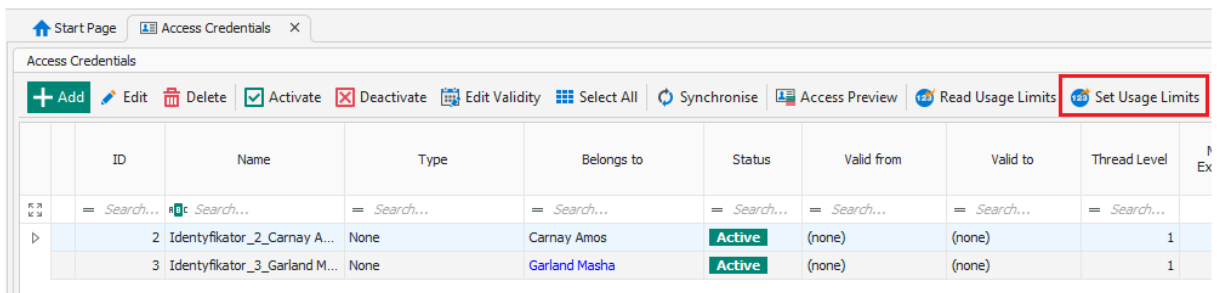


## Credential usage limits

In practical applications, usage limits are applied in scenarios where it is necessary to limit the number of entries by users to Access Zone. Such limits can be configured only for Access Zone with enabled *Group Occupancy Limits* option. One such specialized zone can be defined per single MC16-AZC controller.

### Usage limits defining

- Configure access control system including users and their Access Credentials according to AN006 Application note.
- Create Access Zone with the option *Group Occupancy Limits* enabled in the same way as in previous section.
- In the navigation tree of VISO software double click *Access Credentials*.
- In the opened window select any credential and then the command *Set Usage Limits*.



- In the opened window define limits using following parameters:
  - Usages remaining*: the number of remaining usages of credential at Entry Points of the Access Zone.
  - Days remaining*: the number of remaining days when credential can be used.
  - Absentee time*: the number of days without use of credential after which the parameter *Usages remaining* expires and the credential cannot be used anymore. If the credential is used within *Absentee time* which is counted from the next day after its defining then the *Absentee time* parameter is deactivated.
- Close the window with OK button to upload limits to access controller.

## Usage limits reset

It is possible to define General Purpose Momentary type Schedule for particular credential usage limit. The schedule applies to all Access Credentials in the Access Zone and in defines moment(s) when default values are restored. Schedules are defined with *Schedules* command in the navigation tree of VISO software and they are assigned in the properties of Access Zone.

The screenshot shows the 'Edit Access Zone' dialog box with the following fields and values:

- General
  - ID: 2
  - Name: C1\_ACZ2
  - Group Occupancy Limits:
  - LCD Message: (empty)
  - Keypad Shortcut: No shortcut
  - Description: (empty)
- Occupancy Count: (dropdown)
- Anti-passback: (dropdown)
- Neighboring Options: (dropdown)
- Credential Usage Reset Schedules (highlighted with a red box)
  - Usages Remaining Reset Schedule: Reset Schedule1
  - Days Remaining Reset Schedule: (none)
  - Absentee Time Reset Schedule: (none)

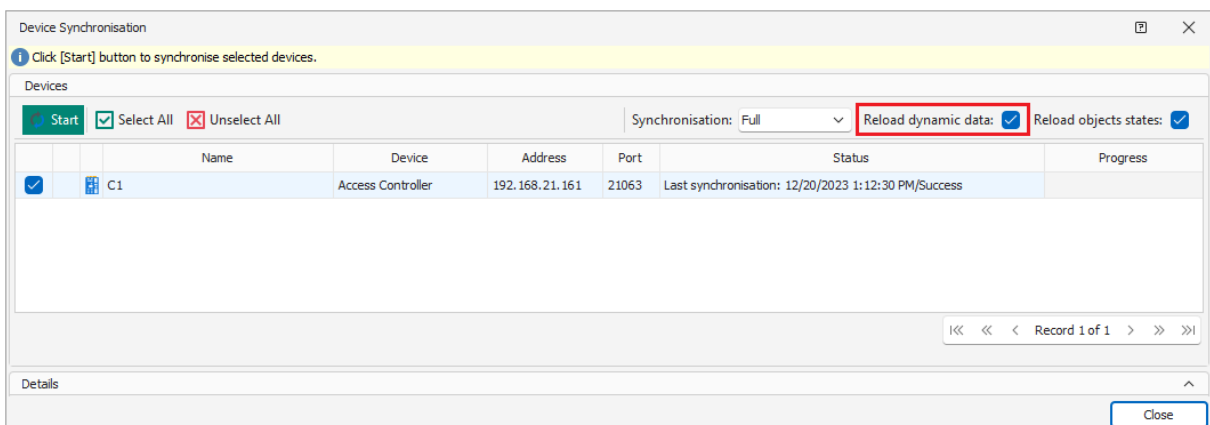
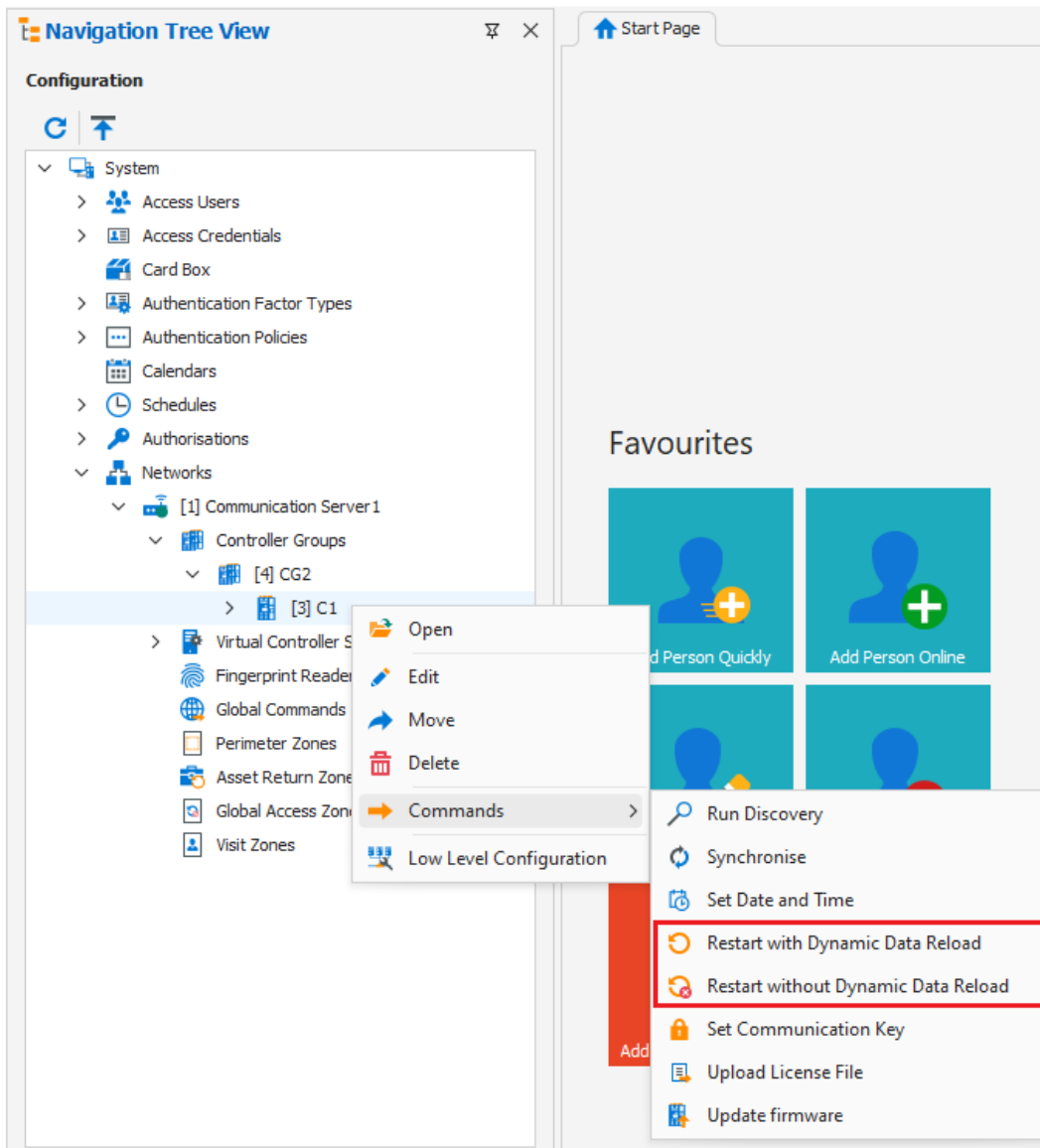
Buttons: OK, Cancel

## Manual modification of Upper Limit

In RACS 5 v2, it is possible to manually and temporary modify Occupancy Upper Limit in Access Zone. Such manual intervention into system may be useful when for example a guard notices that Person left a zone without identification at exit. In such case the system will not count the absence of such Person and consequently another Person will not be able to enter if Upper limit is defined. The counter can be modified by input functions [260]-[265] which temporarily modify Upper Limit. Additionally, output functions [265]-[267] were implemented for monitoring of Upper Limit modifications as well as display function [014] was implemented and explained in AN011 application note.

## Dynamic data

Dynamic data concerns counters and registers of MC16 controller which change their states when users relocate in the system. Dynamic data concerns among others occupancy limits, credential usage limits, anti-passback (APB), etc. During controller synchronization and restarting, the dynamic data by default are preserved, but it is possible to erase dynamic data.



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