

Roger Access Control System 5

Application note no. 011

Document version: Rev. B

Displays

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

Introduction

In RACS 5 system, devices which are equipped with displays can present default content or administrator specified content. This concerns both terminals with displays (e.g. MCT88M-IO, MCT68ME-IO) and dedicated displays (e.g. ASCD-1). The content can be static (e.g. company name, welcome text) or it can dynamically represent various conditions in the system such as for example current T&A mode or Armed mode. The information which can be presented on the display is not limited to current states of the terminal equipped with the display. For example, the terminal can present arming mode of particular Alarm zone even if the terminal is not assigned to this Alarm zone but in such case the terminal must be connected to the MC16 controller which controls the Alarm zone.

Note: This application note is focused on display control by MC16 controller and it does not describe all configuration possibilities in regard of displays. Additional settings as for example splash screen and function keys icons of MCT88M-IO terminal or scrolling speed of ASCD-1 display are covered in respective Operating manuals.

System configuration

Configure RACS 5 system according to AN006 Application note creating database, defining services and configuring RACS 5 structure in regard of doors, terminals, users, authorisations and other required elements.

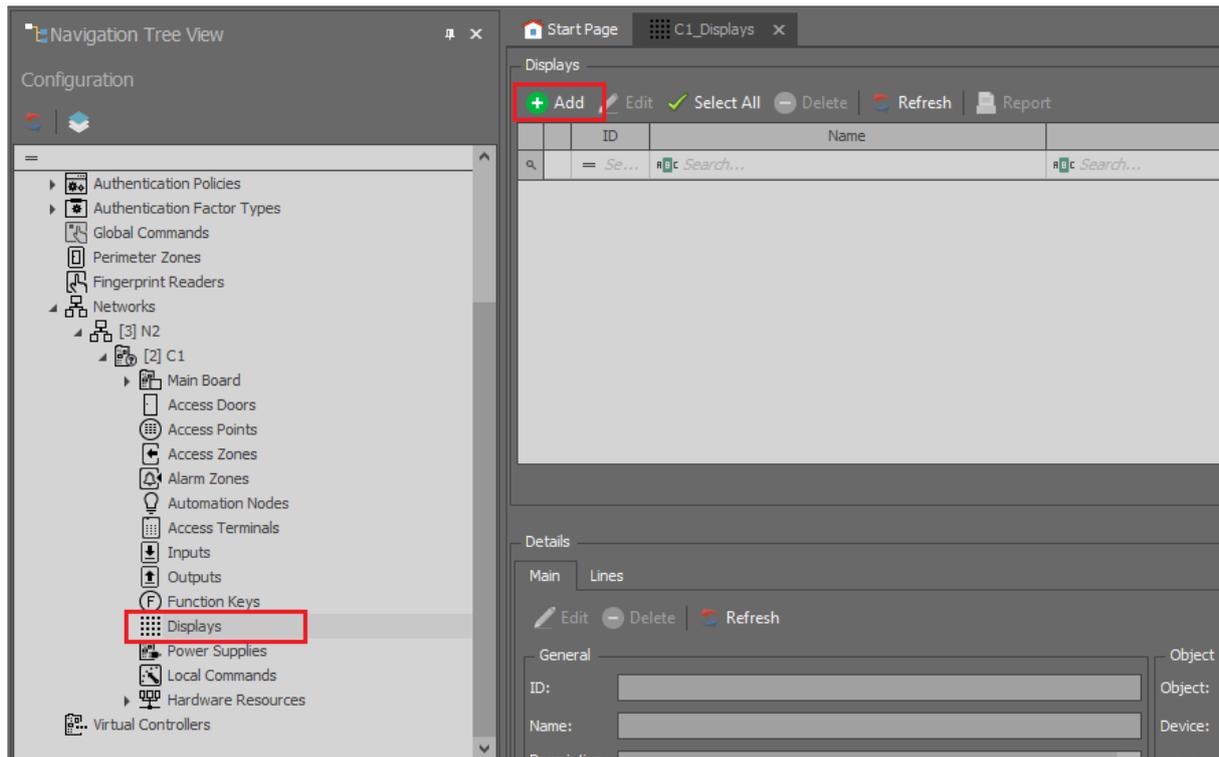
Display object

Display object can be configured for a device which is equipped with display. Currently following devices with displays are offered in RACS 5 system:

- MCT68ME-IO terminal (4 lines x 20 characters)
- MCT88M-IO terminal (4 lines x 16 characters)
- ASCD-1 LED matrix display (1 line x 32 scrolled characters)
- MD70 graphic panel (several modes including 4 lines x 20 characters)

In order to configure display object:

- In the navigation tree of VISO software within particular MC16 access controller double click *Displays* command.
- In the opened window click *Add* button.



- In the next window, in the *Object* field indicate the location of display.

The 'Add Display' dialog box is shown with the following fields:

- General:** Name: C1_110_DISPLAY; Description: (empty)
- Object:** Object: MCT88M v1.0_192.168.10.75_110_DISPLAY (highlighted with a red box)
- Device:** MCT88M v1.0
- Label:** DISPLAY
- Comment:** (empty)
- Type:** LCD 1/[272629763]: 4 Lines | 16 Extended | Volatile | Characters in line
- IP Address:** 192.168.10.75
- RS Address:** 110

At the bottom, there are 'OK' and 'Cancel' buttons.

- In the bottom select *Lines* tab and then *Edit* button in order to assign functions to particular lines of the display. The list of all available functions is given in the next section.

Display functions

Functions can present state of logic object (e.g. Access Point) which is operated within particular MC16 access controller and its peripheral devices such as readers and expanders.

No.	Name	Description
000	None	Empty line
001	Date and Time	Function displays current date and time of MC16 access controller.
002	Time and Attendance Mode	Function displays current T&A mode of selected Access Point (reader).
003	Door Mode	Function displays current Door mode (normal, unlocked, conditional unlocked, locked) of selected Access Door.
004	Authentication Policy	Function displays current Authentication Policy (e.g. Card Only, Card and PIN) of selected Access Point (reader).
005	Armed Mode	Function displays current Armed mode (armed, disarmed) of selected Alarm Zone and it displays warning about incoming auto-arming of the Alarm Zone.
006	Context Message First Line	Function displays following context messages from selected Access Point: <ul style="list-style-type: none"> • Access granted • Access denied • Blocked (if the input function [158], which blocks access at the Access Point is activated) • Identify... i.e. read card or enter PIN (if T&A mode registration is initiated with input function [155]) • T&A registered (if T&A mode registration is initiated with input function [155]) • T&A registration denied (if T&A mode registration is initiated with input function [155])
007	Context Message Second Line	Function displays following context messages from selected Access Point: <ul style="list-style-type: none"> • Anti-passback violation • Identify... i.e. read card or enter PIN (if T&A mode registration was initiated with input functions [153] or [154]) • T&A registered (if T&A mode registration is initiated by access granting using functions [151], [153] or [154]) • T&A registration denied (if T&A mode registration is initiated by access granting using functions [151], [153] or [154])
008	Occupancy in Zone	Function displays current number of users inside selected Access Zone.
009	Availability in Zone	Function displays current number of available spots for users in selected Access Zone. The number is calculated based on Occupancy Count Upper Limit of the zone and the actual number of users inside the zone.
010	Welcome User Text	Function displays static text, which is defined with the

		parameter [20] in LCD_MSG.NEW file on memory card of MC16 controller.
011	Company name	Function displays static text, which is defined with the parameter [21] in LCD_MSG.NEW file on memory card of MC16 controller.
012	Occupancy for Group in Zone	Function displays current number of users from selected Group inside Access Zone. The function [012] is available only if MC16-AZC controller is applied.
013	Availability for Group in Zone	Function displays current number of available spots for users from selected Group in Access Zone. The number is calculated based on Upper Occupancy Limit of the Group and the actual number of users from selected Group inside the zone. The function [013] is available only if MC16-AZC controller is applied.

Typical display functions for terminals

Access terminal

Line_1 = function [001]

Line_2 = function [004]

Line_3 = function [000]

Line_4 = function [006]

Access and arm/disarm terminal

Line_1 = function [001]

Line_2 = function [004]

Line_3 = function [005]

Line_4 = function [006]

Time and Attendance terminal

Line_1 = function [001]

Line_2 = function [002]

Line_3 = function [006]

Line_4 = function [007]

Car park terminal

Line_1 = function [001]

Line_2 = function [007]

Line_3 = function [008] or [012]

Line_4 = function [009] or [013]

Additional settings

Some of display functions e.g. [011] require additional configuration while in case of other functions it is possible to modify their default messages. This is done by means of LCD_MSG.NEW text file on memory card of MC16 controller. When the file is uploaded to memory card the full configuration of MC16 controller from VISO software is necessary to make the file effective.

No.	Display function	Description
1	002	Header for displayed T&A mode
2	005	Message for switching Alarm Zone into Armed mode
3	005	Message for switching Alarm Zone into Disarmed mode
4	005	Message for announcing countdown for auto-arming of Alarm zone (schedule)
5	005	Message for announcing very close auto-arming of Alarm Zone (2-3 min before auto-arming)
6	003	Message for switching Access Door into Normal Door mode
7	003	Message for switching Access Door into Unlocked Door mode
8	003	Message for switching Access Door into Conditional Unlocked Door mode
9	003	Message for switching Access Door into Locked Door mode
10	003	Header for displayed Door mode
11	006 and 007	Message for prompting a user to read card, enter PIN or use any other factor for identification
12	006	Message for announcing access granting
13	006	Message for announcing access denying
14	006	Message for announcing Access Point blocking when input function [158] is activated
15	007	Message for announcing Anti-passback violation
16	006 and 007	Message for announcing T&A mode registration
17	006 and 007	Message for announcing T&A mode registration denying
18	008	Header for the number of users inside Access Zone
19	009	Header for the number of available spots for users inside Access Zones
20	010	Message for custom static text
21	011	Message for custom static text
23	012	Header for the number of users from Group inside Access Zone
24	013	Header for the number of available spots for users from Group inside Access Zones

Typical content of LCD_MSG.NEW text file located on MC16 access controller memory card is given below:

1=

2=Zone armed

3=Zone disarmed

- 4=Auto-arming
- 5=Auto-arming
- 6=Normal
- 7=Unlocked
- 8=Cond. unlocked
- 9=Locked
- 10=
- 11=Identify...
- 12=Access granted
- 13=Access denied
- 14=Blockade
- 15=APB violation
- 16=T&A registration
- 17=T&A reg. denied
- 18=Occupied by:
- 19=Available for:
- 20=
- 21=
- 22= Occupied by:
- 23= Available for:

Note: The last line of LCD_MSG.NEW file must include end of line (EOL) character.

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