

Roger Access Control System 5 v2

Application note no. 005

Document version: Rev. A

RACS 5 software and PC requirements

Note: This document refers to RACS 5 v2.0.4 or newer

Introduction

The RACS 5 software consists of following main components:

- RogerVDM
- VISO and VISO SMS
- RogerSVC
 - Communication Server
 - Integration Server
 - Virtual Controllers Server
 - License Server
- MS SQL Server database

All mentioned programs can be installed and operated either in LAN or WAN. Communication between programs in RACS 5 system is conducted by means of WCF technology. Communication with access controllers is encrypted with AES128 CBC method while communication between Communication Server (RogerSVC) and VISO can be encrypted with TLS 1.2.

Roger VDM

This program operates as a Windows application and is dedicated to so called, low-level configuration of RACS 5 hardware (controllers, reader, expanders). It is used during system installation and does not need connection neither to database nor any other RACS 5 software. Usually it is installed on installer's laptop.

VISO and VISO SMS

VISO operates as Windows application and is dedicated to configuration of RACS 5 high-level logic as well as management of RACS 5 day-to-day operations. In case of RACS 5 v2 it can also be used for low level configuration instead of RogerVDM. VISO can be installed and started on multiple workstations enabling simultaneous management of RACS 5 by multiple operators. The program operator rights (roles) can be defined individually. The VISO application is available in various versions which can be complemented with additional functionalities based on purchased licenses. In case of such licensed functionalities it is necessary to use License Server from RogerSVC software and RUD-6-LKY hardware license key.

VISO SMS is based on VISO software and it offers functionalities of Security Management System. It is mainly used to visualize, monitor and control such security systems as fire alarm system,

intruder alarm system, access control system and CCTV system. It essential element of VISO SMS is Maps Monitor which can be used to localize all kinds alarms and faults in a facility. More information on VISO SMS is give in AN055 application note.

Roger SVC

Communication Server

Communication Server (Windows service) provides communication between access controllers, VISO software and database.

Virtual Controllers Server

Virtual Controllers Server is required for integrations developed by Roger company and concerns among others the integration with fire alarm and intruder alarm systems.

Integration Server

Integration Server (Windows service) provides the API interface for third party programs. The server allows them to access system database and offers range of API functions which can be used either to configure the system (system synchronization) or trigger system action (e.g. remote door opening, alarm clearance, automation control etc.).

License Server

License Server (Windows service) is responsible for validation of system license particularly when additional functionalities or integrations with other systems are required. The hardware key RUD-6-LKY must be connected to the USB port of the computer where the License Server is running.

Database

RACS 5 v2 can operate with centralized type MS SQL Server 2012 SP4 (or higher) e.g. Express, Standard, Enterprise. Contrary to RACS 5 v1 system, the local type MS SQL Compact database cannot be operated because it is not supported by Microsoft company anymore.

In case of centralized MS SQL Server database it is necessary to download and install SQL Server system from Microsoft webpage and then to create the database in such system using VISO program as explained in AN006 and AN017 application notes.

PC Requirements and operating system

The information presented below has an informative character. Generally the more powerful PC the more effectively the software operates. The computers used for RACS 5 system should be selected in conjunction to the system size and required responsiveness.

Operating system

Windows operating sytem with MS .NET Framework 4.8 installed

Required dependencies:

- MS Visual C++ 2010 Redistributable (x86 or x64)
- MS Visual C++ 2015 Redistributable (x86 or x64)

RogerVDM

- RAM: 2 GB
- CPU: Intel Celeron or equivalent
- HDD: 100MB

VISO

- RAM: 4 GB (8 GB for large systems*)
- CPU: Intel Core i5 or equivalent (Core i7 for large systems*)
- HDD: 500 MB for VISO
- Recommended screen resolution: min. 1280x1024

* more than 50 access controllers

VISO SMS

- RAM: 16 GB (32 GB for large systems*)
- CPU: Intel Core i5 or equivalent (Core i7 for large systems*)
- GPU: dedicated, min. 2GB VRAM
- Recommended screen resolution: min. 1920x1080

* large maps in SVG format and more than 100 objects per map

RogerSVC

Small systems (up to 5 access controllers)

- RAM: 4 GB
- CPU: Intel Core i3/i5 (2 cores) or equivalent
- HDD: 500 MB

Medium systems (5 to 50 access controllers)

- RAM: 4 GB
- CPU: Intel Core i5/i7 (4 cores) or equivalent
- HDD: 500 MB

Large systems (more than 50 access controllers)

- RAM: 8 GB
- CPU: Intel XEON (8 cores) or equivalent
- HDD: 500 MB

Centralized database

See Microsoft requirements.

<https://docs.microsoft.com/en-us/sql/sql-server/install/hardware-and-software-requirements-for-installing-sql-server-ver15?view=sql-server-ver15#hwswr>

Contact:
Roger sp. z o.o. sp.k.
82-400 Sztum
Gościszewo 59
Tel.: +48 55 272 0132
Fax: +48 55 272 0133
Tech. support: +48 55 267 0126
E-mail: support@roger.pl
Web: www.roger.pl