

Roger Access Control System

VISO Web

Operating manual

Software version: 2.0.4 or newer

Document version: Rev. H

1. DESCRIPTION

VISO Web Server enables RACS 5 system management and monitoring via web browser. In such scenario VISO desktop software is still necessary to configure functional logic of the system in regards of Access Doors, Access Terminals, Inputs, Outputs, Authorizations, Operators, etc. but it is not necessary for everyday management of the system. VISO Web enables:

- Management of Access User Groups, Access User Persons and Access Credentials
- Event monitoring
- Event log browsing
- Access door monitoring
- Attendance zones monitoring
- Automation nodes monitoring
- Alarm zones monitoring
- Execution of Global Commands
- Time and Attendance Reports viewing and generating

Note: In case of VISO 1.4.2 or newer, the VISO Web can be operated with VISO ST and not only licensed VISO EX.

2. CONFIGURATION OF RACS 5 SYSTEM FOR VISO WEB

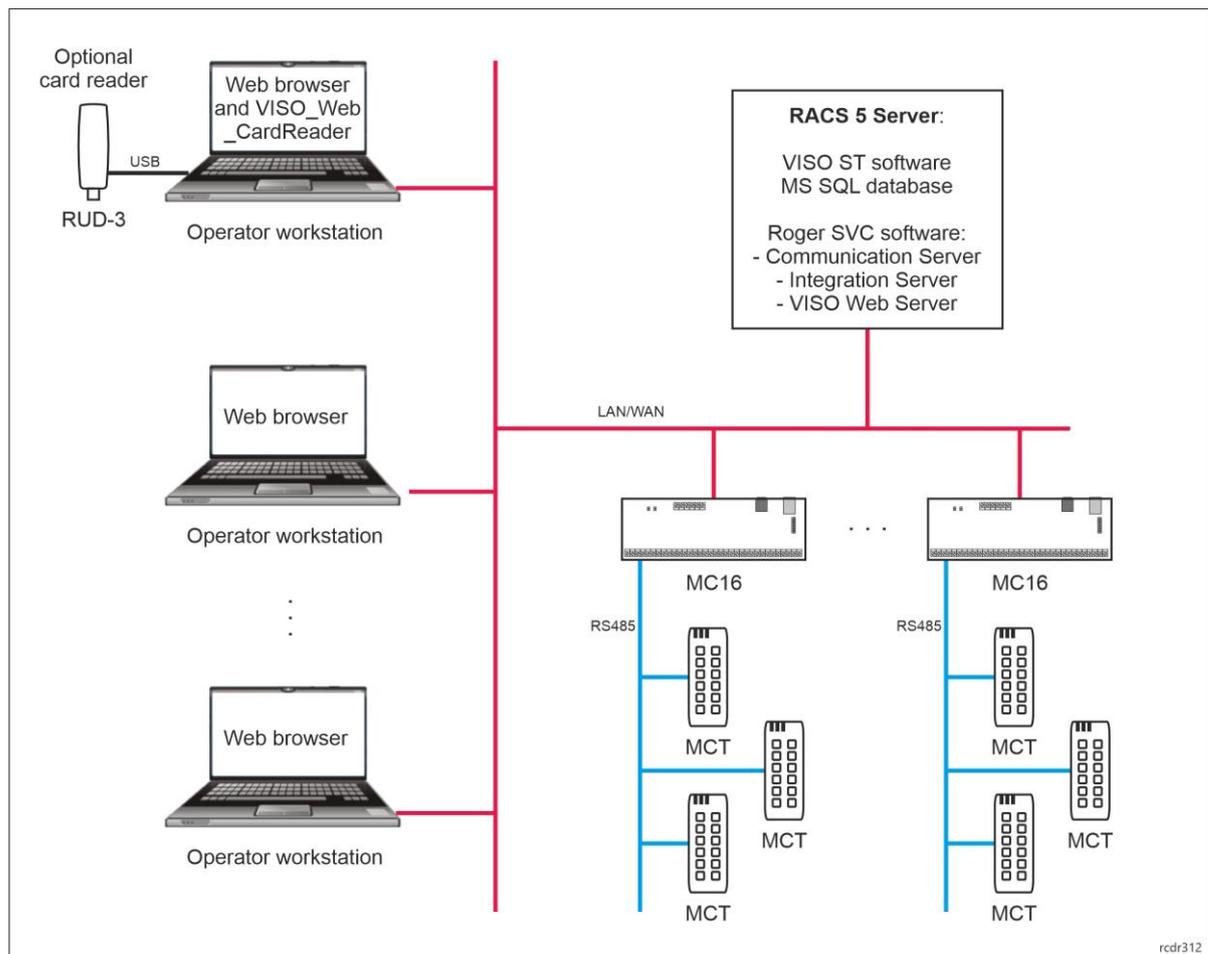
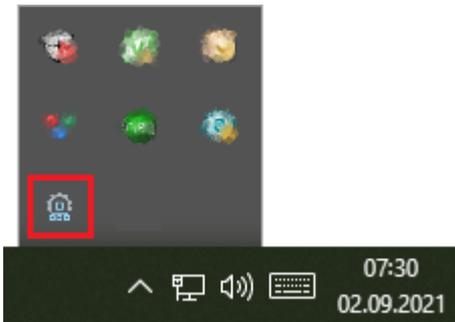


Fig. 1 Example of connections for RACS 5 system with VISO Web

In order to conduct preliminary configuration of RACS 5:

- Install VISO software according to AN006 application note and create centralized database according to AN017 application note.
- Install RogerSVC software and select not only Communication Server but also Integration Server and VISO Web Server. If servers are supposed to be operated on individual computers then install RogerSVC on each computer selecting required servers.
- Start RogerSVC program selecting *Start->ROGER->RogerSVC* in Windows menu.
- Click RogerSVC icon  in Windows tray ( in older versions).



- In the RogerSVC window select *Database Connection* tile and then *Configuration* to indicate previously created RACS 5 database. Return to the main window.



- In the RogerSVC window select *Communication Server*, click *Configuration*, enter IP address of the computer with the server installed e.g. 192.168.11.13 and define port (8890 by default).

- Select *Start* and return to the main window. The server will be started and operated in the background whenever the computer is switched on even if RogerSVC window is closed.
- In the RogerSVC window select *Integration Server* tile, select *Start* and return to the main window. The server will be started and operated in the background whenever the computer is switched on even if RogerSVC window is closed.
- Start VISO software and configure the system in regard of Access Doors, Access Points, Authorisations, Users, etc. according to AN006 application note.
- Additionally define Operator(s), their credentials and their Roles as they will have to be used for the access via web browser. More information on Operators and Roles is given in AN040 application note.
- If necessary start Windows Firewall with Advanced Security on RACS 5 server with RogerSVC software and define new allowing inbound rule for TCP protocol and Integration Server port (by default 8892) and new allowing inbound rule for TCP protocol and VISO Web Server port (by default 8080).

3. VISO WEB SYSTEM STARTING

Method 1 – Configuration of VISO Web Server in Roger SVC

- Install Internet Information Services (IIS) 10 Express software on server. It can be downloaded from Microsoft webpage using exemplary link below:
- <https://www.microsoft.com/en-us/download/details.aspx?id=48264>
- Start RogerSVC software and click its icon  in Windows tray, click *VISO Web Server* tile, enter IP address and port of the server (e.g. 192.168.11.13:8080). These settings shall be used on Operator workstations to connect with the RACS 5 system by web browser. If the Integration Server is installed on the same computer then its default IP address and port i.e. 127.0.0.1:8892 can be unchanged.
- Select *Start* and return to the main window. The server will be started and operated in the background whenever the computer is switched on even if RogerSVC window is closed.

Note: When VISO Web Server is started in RogerSVC using Windows Remote Desktop connection then Windows operator rights might be insufficient. In such case you can start the service manually with Windows administrator rights clicking Roger.Racs.WebAppService.exe file in default location C:\Program Files (x86)\Roger\RogerSVC).

Note: When RACS 5 server is restarted then VISO Web Server may start quicker than IIS. In such case the server shall not work properly until it is restarted manually using RogerSVC program. In order to avoid it, start *Computer management* in Windows, select *Services and Applications*, then *Services* and in the properties of *RACSWebAppService* change *Startup type* into *Automatic (Delayed Start)*.

- When VISO Web Server is started then IIS Express is started automatically and its icon  is available in Windows tray. Right click the icon.

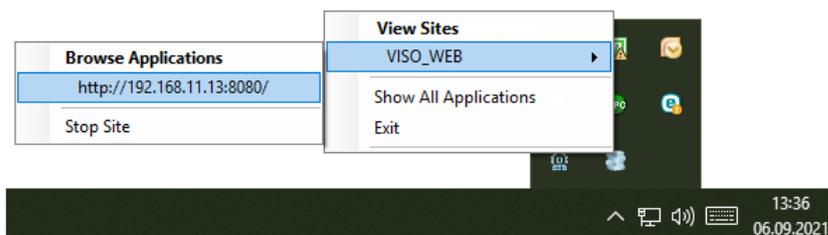


Fig. 2 IIS software

- When the address in *Browse Applications* field is clicked then connection with VISO via web browser is started. Alternatively you can just start web browser and enter IP address and port of VISO Web Server. In the presented example it would be 192.168.11.13:8080. When started for the first time it can take up to 1 minute to load.
- Enter login and password of previously defined VISO Operator in the web browser or use Admin login with proper password.

Problem with rights:

If IIS Express icon is not displayed in Windows tray when VISO Web Server is started then it may result from insufficient rights of Windows operator to start IIS Express in specific pool of URLs. In such case start Windows Command Prompt (cmd) with administrator rights and use following command to reserve URL address for Windows user or group of users:

```
netsh http add urlacl url=http://WebPageAddress:Port/ user=Everyone
```

e.g. netsh http add urlacl url=http://192.168.11.13:8080/ user=Everyone

For possible reverting of URL reservation use following command:

```
netsh http delete urlacl url=http://WebPageAddress:Port/
```

e.g. netsh http delete urlacl url=http://192.168.11.13:8080/

Connection problem

In case of connection problems on the level of web browser it might be necessary to grant writing rights to Windows user for the folder in the location C:\ProgramData\WebAppService. In such case right click the folder, select *Properties*, then *Security* tab and grant rights for writing.

Method 2: Configuration and management of IIS with Windows 10**Turning Windows features on**

IIS web server software is available in Windows operating system. In order to activate the IIS, select *Program and Features* in Windows Control panel, then *Turn Windows features on or off* and in the displayed window select options as in fig. 3. It might be necessary to update some of the components using Windows Update service.

In the next step of IIS configuration register ASP.NET Framework using one of following commands:

Windows 32bit:

```
%windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe -ir
```

Windows 64bit:

```
%windir%\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe -ir
```

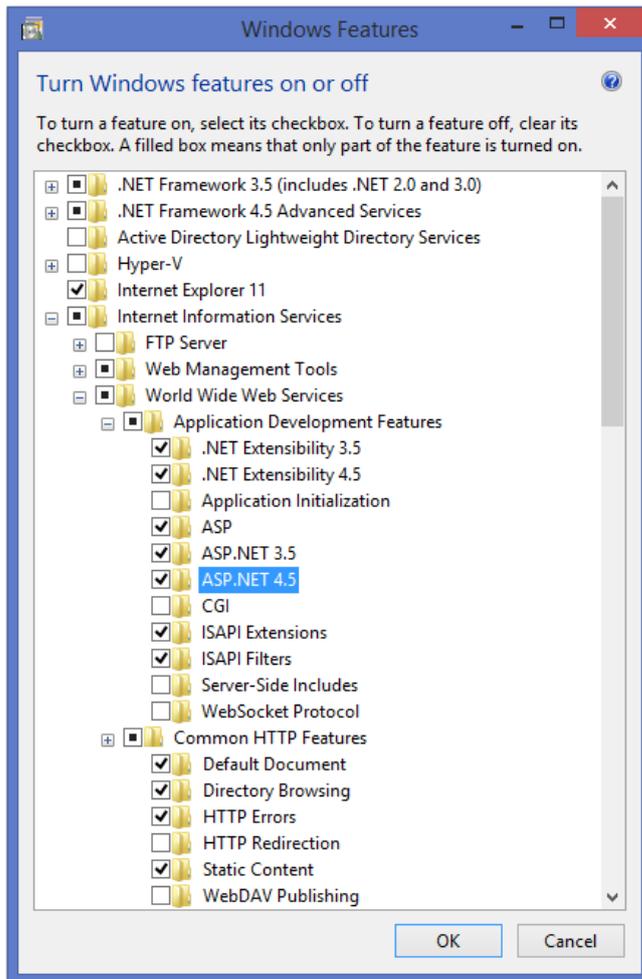


Fig. 3 Minimal list of required features for IIS

Further configuration is possible by starting *Computer management*, selecting *Services and Applications* and then *Internet Information Services (IIS) Manager*.

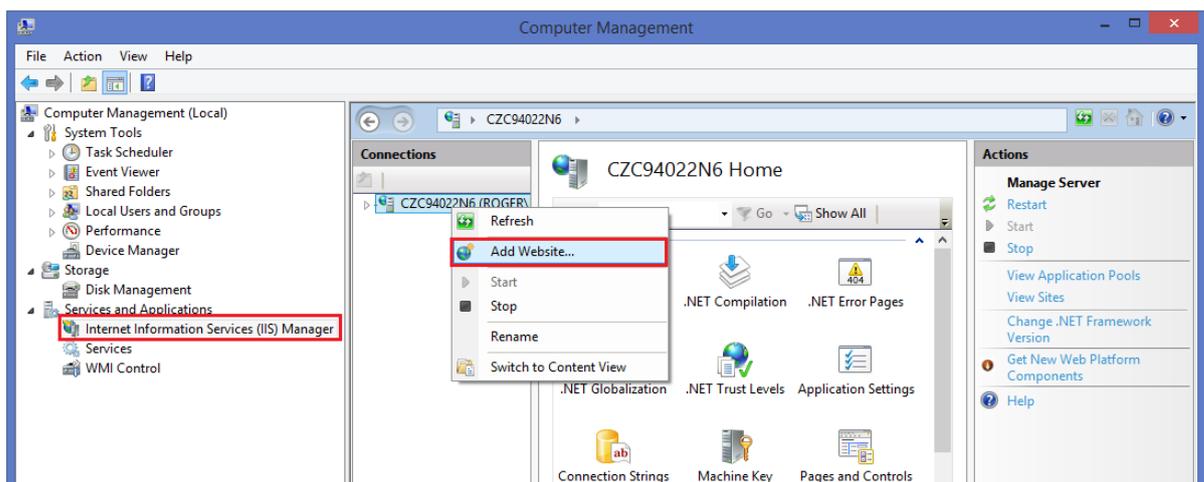


Fig. 4 Internet Information Services (IIS) Manager

Website adding

When website is added then current configuration parameters must be entered. Exemplary settings:

- *Site name: VISO WEB*

- *Physical Path:* *C:\Program Files ROGER\RogerSVC\VISO_WEB* or *C:\Program Files (x86)\ROGER\RogerSVC\VISO_WEB* in case of systems older than RACS 5 v2
- *Port:* *8080*

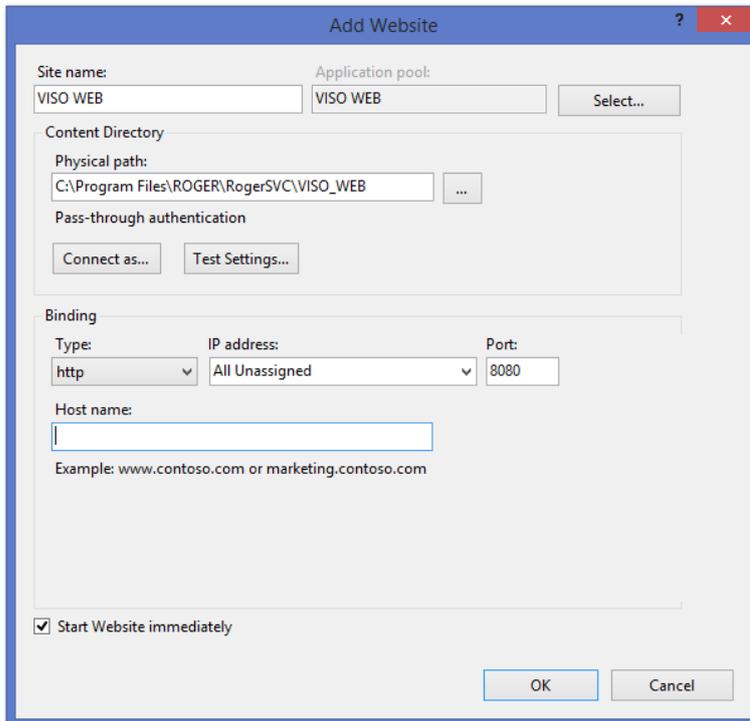


Fig. 5 VISO WEB website adding

Configuration of Application Pools

When VISO Web website is created then the application is created automatically. In order to adapt it to VISO Web requirements followings settings must be applied:

- *.NET CLR version v.4.0*
- *Enable 32Bit Application: False (True in case of systems older than RACS 5 v2)*
- *Start Mode: Always Running*
- *Identity: ApplicationPoolIdentity*

Remaining settings can be default ones. In case of *Identity* parameter, the *Custom account* can be selected but then it must be ensured that selected operator has sufficient rights to manage IIS and to access the location *C:\Program Files\ROGER\RogerSVC\VISO_WEB* and in case of systems older than RACS 5 v2 to the location *C:\Program Files (x86)\ROGER\RogerSVC\VISO_WEB*.

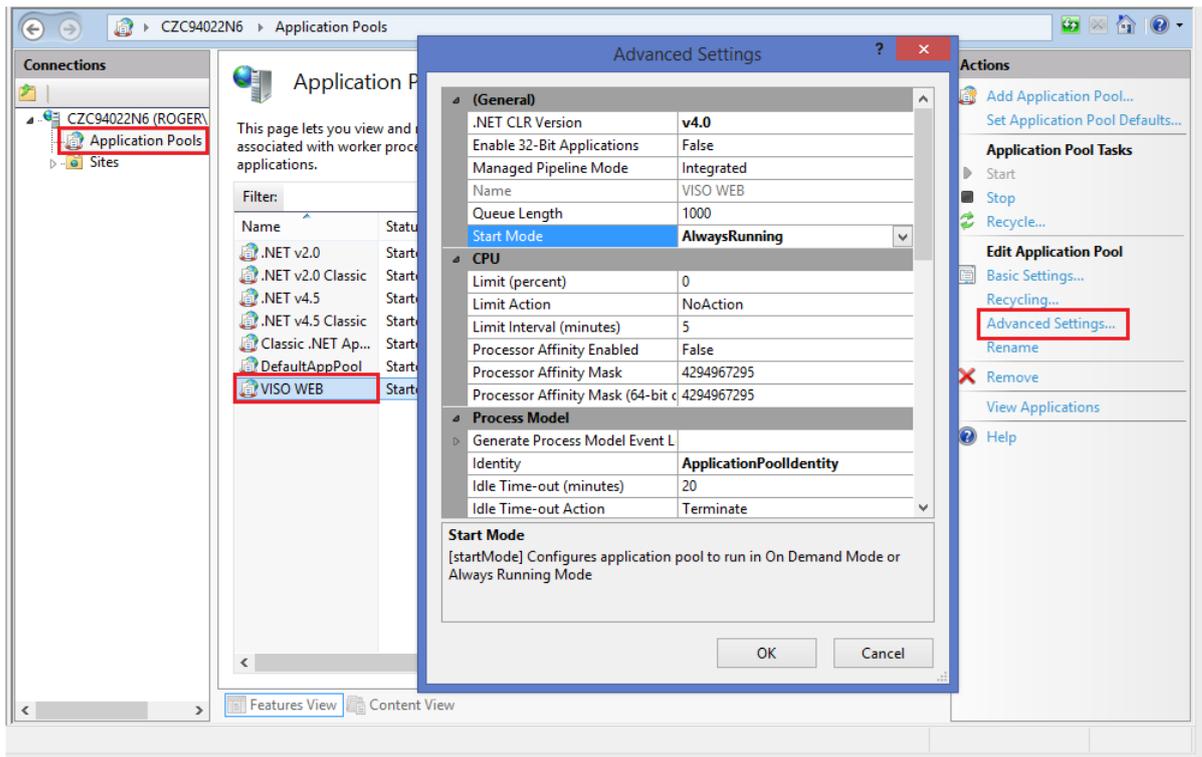


Fig. 6 Advanced settings for VISO Web

Secure communication (HTTPS)

Communication between VISO Web Server and web browser is typically provided via HTTP protocol. It is possible to secure and encrypt the communication via HTTPS protocol. In such case it is necessary to apply proper certificates. One of possible methods is to define IIS certificate as below by double clicking *Server Certificates* and then creating self-signed certificate.

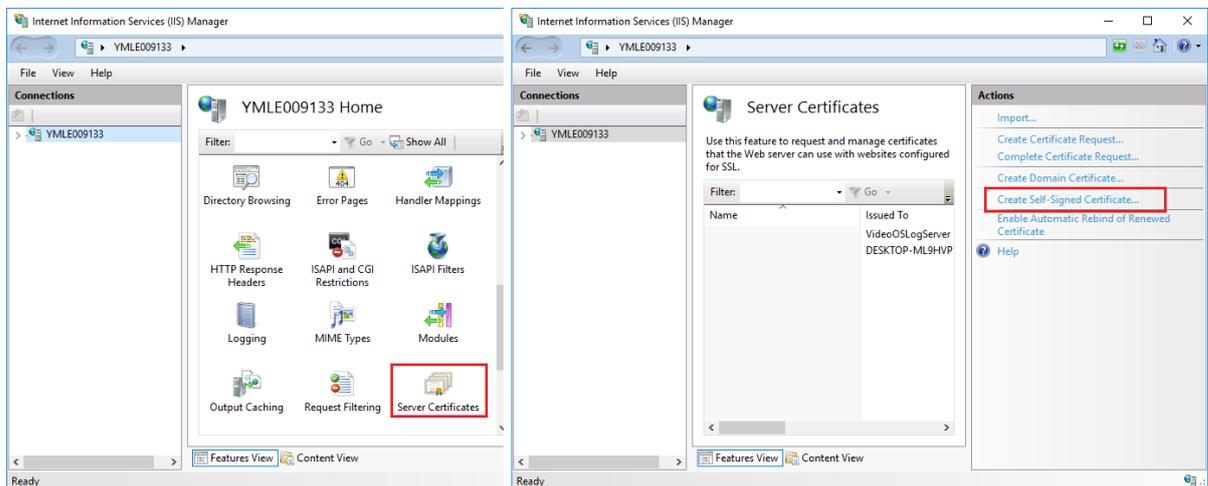


Fig. 7 IIS Server certificate

Communication in WAN

RACS 5 system management via web browser is intended to be used in LAN or VPN but it is also possible in WAN. One of the methods is to use tunnelling offered by ngrok.com service. In order to configure such communication:

- Create recommended PRO account at ngrok.com.

- Log into your account and select *Endpoints->Domains* in order to define own VISO Web domain e.g. viso.eu.ingrok.io.
- Select *Getting started->Your Authtoken* and read your token for further use e.g.
1xIXCEfDzu5adBQ4yi8CrW2zQuT_2jSk7e3DFjo3fK6Zfwf61.
- Download ngrok.exe and save it on your computer with VISO Web Server for example at C:\NGROK and then create ngrok.yml configuration file in this location with exemplary content:

```
authtoken: 1xIXCEfDzu5adBQ4yi8CrW2zQuT_2jSk7e3DFjo3fK6Zfwf61
region: eu
```

```
tunnels:
```

```
demo:
```

```
proto: http
```

```
addr: 192.168.11.13:8080
```

```
hostname: viso.eu.ngrok.io
```

```
bind-tls: true
```

- Start tunnelling with following exemplary command using Windows cmd:

```
ngrok start demo -config C:\ngrok\ngrok.yml
```

It is recommended to configure Windows autostart to enable automatic tunnelling by ngrok when computer is started.

- When tunnelling is started then enter viso.eu.ngrok.io address in your web browser to access RACS 5 login window.

Note: More information on tunneling is given in ngrok documentation.

Note: The option *bind-tls: true* limits the communication to encrypted HTTPS protocol.

4. VISO WEB STARTING

Regardless of IIS configuration method, VISO Web app is available for all computers in the server network and it is started with web browser by entering server web address and port (e.g. 192.168.11.13:8080). VISO Web requires valid VISO operator login and password.

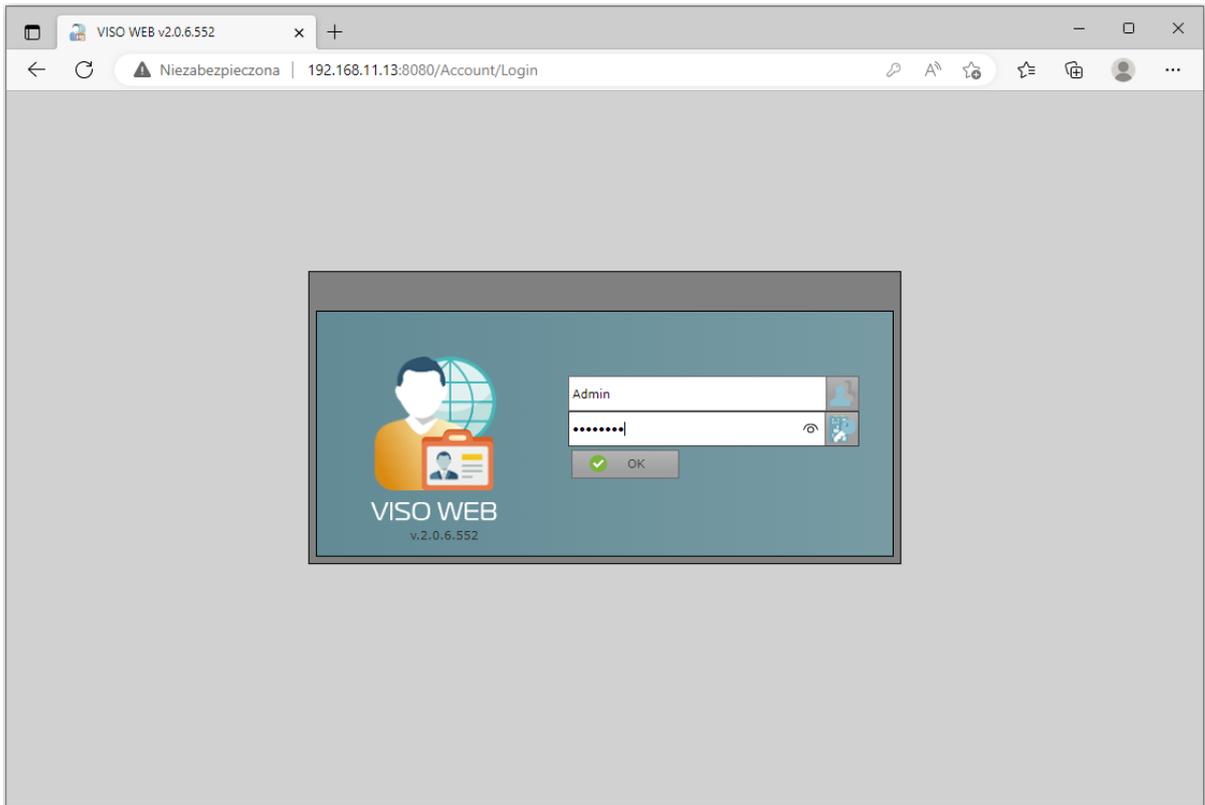


Fig. 8 Login window

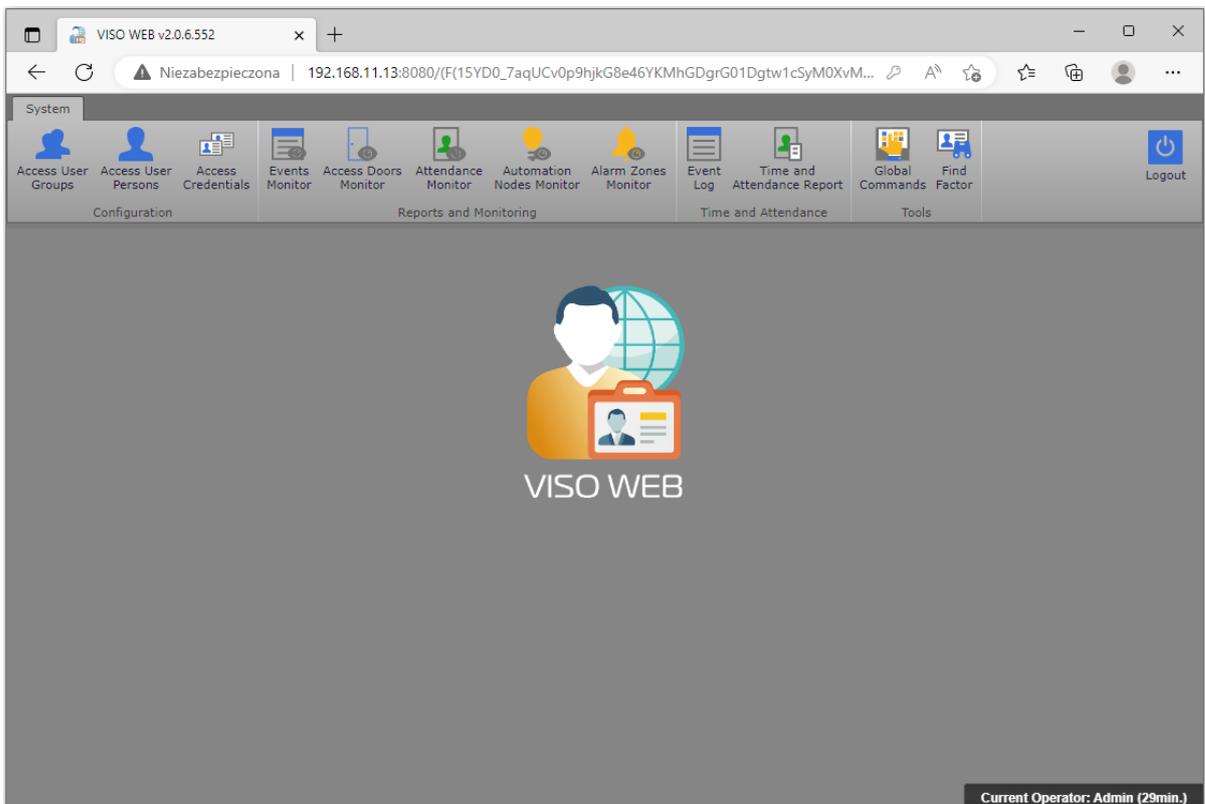


Fig. 9 Main window

Note: If VISO Web app is started on the same computer where VISO Web Server is operated then Windows user must have write permissions to following folders:

```

... \RogerSVC\VISO_WEB\App_Data\UploadTemp
... \RogerSVC\VISO_WEB\Content\Images\Temp
... \RogerSVC\VISO_WEB

```

Note: If the message 'HTTP Error 503. The service is unavailable' is displayed during connection then in Windows select *Start*, then *Run* and enter following command:

```

"%systemroot%\system32\inetsrv\AppCmd.exe" set config -
section:system.webServer/globalModules
/[name='SPNativeRequestModule'].preCondition:integratedMode,bitness64

```

User enrolment

Contrary to VISO desktop software, VISO Web does not enable configuration of Authorizations (access rights) but it allows to use and assign Authorizations from the list created earlier with VISO software.

Method 1:

- In the main window select *Access Credentials* and then *Add*, enter a name and confirm to create Access Credential. The name of the Access Credential could be the name of user who will use it.
- In the bottom select *Authentication Factors* tab and then *Add* to assign card or PIN. In the opened window select type, enter card number or PIN and confirm with *OK* button. If USB reader (e.g. RUD-3) is connected to operator workstation and VISO Web CardReader program is started in the background then card number can be filled automatically with *Read from reader* button when card is read at the reader. Default location of VISO Web CardReader is C:\Program Files (x86)\Roger\RogerSVC\VISO_WEB\CardReader.
- In the bottom select *Assigned Rights* and/or *Assigned Rights Groups* and then use *Assign* button to select which Authorizations (access rights) previously defined in VISO shall be assigned to the Access Credentials.

Method 2:

- Define list of Access Credentials with assigned Authentication Factors (cards/PINS). Both can be defined with VISO or VISO Web.
- In the main window select *Access User Groups* and define such groups with *Add* button. Assign each group with Authorization(s) previously defined in VISO using *Assign* button in the *Assigned Rights* tab.
- In the main window select *Access User Persons*, create a user with *Add* button and assign the user to particular *Group*.
- In the bottom select *Credentials (owns)* and assign Access Credential(s) with previously assigned Authentication Factor(s) i.e. card and/or PINs.

Event Online Monitor

Event Online Monitor in VISO Web is operated similarly to Event Monitor in VISO software and it displays events which currently occur in the system.

Doors Monitor

Door Monitor in VISO Web is operated similarly to Access Doors Monitor in VISO software and it enables to monitor door opening status and lock mode (Door Mode) of Access Doors on the list.

It is possible to remotely control selected Access Door using *Remote Command* button. The command offers functions related to Door Mode switching, remote door opening, door alarm cancelling, etc. Remote command can be used only by Operator with proper rights. Such rights are defined by assignment of Operator to Person with Access Credential with Authorization(s) for functions [121]..[136]. Such association of Person and Operator is done in VISO software in the properties of Person in the tab *Remote management* in the field *Operator*. The most simple method to grant all Authorizations to Operator is to assign such Operator to Person with Access Credential with enabled *Master exemption* option. By default the Admin operator is not assigned to any Person. More information on Operators is given in AN040 application note.

Attendance Zone Occupancy Monitor

Attendance Zone Occupancy Monitor in VISO Web is operated similarly to the corresponding monitor in VISO software and it enables to monitor which users are currently inside and outside particular Attendance zone which can be defined in VISO software. Additionally in case of VISO v1.6.6. or older it is necessary to start the Attendance Zones monitoring process by selection of *Tools* command in the top menu and then *System Processes* icon.

Automation Nodes Monitor

Automation Nodes Monitor in VISO Web is operated similarly to corresponding monitor in VISO software and it enables to monitor Automation Nodes in the system.

It is possible to remotely control selected Automation Node using *Remote Command* button. The command offers functions related to activation, deactivation and switching of node with various time options. Remote command can be used only by Operator with proper rights. Such rights are defined by assignment of Operator to Person with Access Credential with Authorization(s) for functions [145]..[168]. Such association of Person and Operator is done in VISO software in the properties of Person in the tab *Remote management* in the field *Operator*. The most simple method to grant all Authorizations to Operator is to assign such Operator to Person with Access Credential with enabled *Master exemption* option. By default the Admin operator is not assigned to any Person. More information on Operators is given in AN040 application note.

Alarm Zones Monitor

Alarm Zones Monitor is operated similarly to corresponding monitor in VISO software and it enables to monitor Alarm Zones in the system.

It is possible to remotely control selected Alarm Zone using *Remote Command* button. The command offers functions related to Alarm zone arming and disarming. Remote command can be used only by Operator with proper rights. Such rights are defined by assignment of Operator to Person with Access Credential with Authorization(s) for functions [104]..[109] and [222]..[223]. Such association of Person and Operator is done in VISO software in the properties of Person in the tab *Remote management* in the field *Operator*. The most simple method to grant all Authorizations to Operator is to assign such Operator to Person with Access Credential with enabled *Master exemption* option. By default the Admin operator is not assigned to any Person. More information on Operators is given in AN040 application note.

Event Log

Event Log in VISO Web is operated similarly to Event log in VISO software and it displays all events registered in the system according to configurable filter.

Time and Attendance Report

Time and Attendance Report is operated similarly to corresponding reports in VISO software and it requires definition of Attendance Zone(s) in VISO software.

It is possible to generate report which includes entry times, exit times and total attendance time of particular Person in Attendance Zone. Operator who generates report must be properly linked with Person(s) as explained in AN016 application. Report can be exported to PDF or XLS format.

Global Commands

Global commands are defines on the level of VISO software and they can be executed on the level of VISO Web. Global commands similarly to mentioned above Remote commands require assignment of Operator to Person with Access Credential with Authorization(s) for functions included in the Global command and they enable to execute concurrently one or more functions in various locations of the system. For example the Global command can be used to open all doors in the system in case of emergency. The Global command mechanism is provided by the Communication Server. More information on Global Commands is given in AN048 application note.

Find Factor

Functionality is operated in the same way as in VISO and it enables to identify user bases on card reading.

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