

SAEAUT SCADA™

Usage

SAEAUT SCADA™ stands for easy-to-use, flexible, user friendly and affordable solution for **control, monitoring, process automation, alarm processing, event handling, and data logging and storage.**

It can be used in wide spectra of industrial sectors, utilities, power stations, intelligent houses and buildings.

Ground implementation principles

The primer implementation principle - **server / client** makes it possible to form equally **compact as well as distributed solutions.** Basic arrangement consists of **server application, web client and configuration application.** It can be easily installed either on a computer / server with desktop or server Windows operating system or divided into several workstations. **The compact solution can be installed very fast and straightforward.**

Server application

Server application includes **server and client interfaces for connecting of communication and database drivers** as well as **interface for connecting Web and desktop client applications.** It provides processing of data from connected data sources, generates alarms and reports, starts external applications, and mediates processed data to client applications.

Configuration application

Configuration application makes it possible to define connected external data sources, ways of data processing on SAEAUT SCADA Server, defines alternatively maps structure of connected databases, defines alarms and configured reports as well as directory structure for displaying of processed data by client applications. **It enables fast mapping of structure for external data sources – OPC and DDE servers.** It is used also for debugging and as desktop client application.

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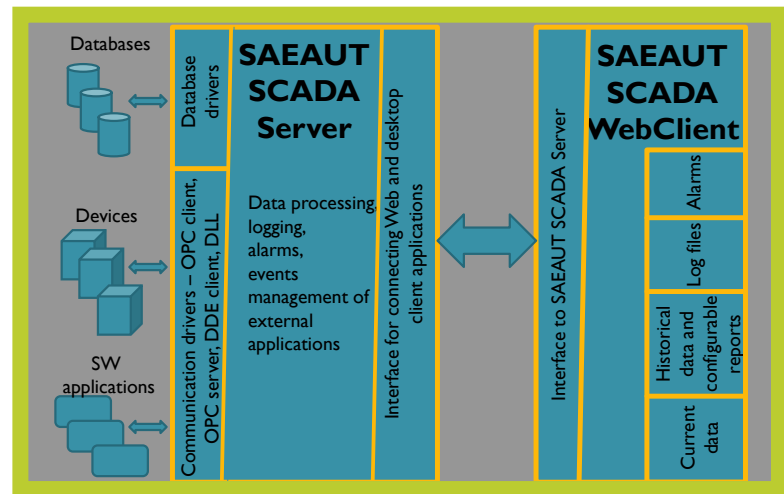


Figure 1 Server / client of SAEAUT SCADA

SAEAUT SCADA - main functions:

- communication with various devices, applications, databases
 - through OPC and DDE servers
 - with exploitation of DLL, ActiveX
 - through database drivers
- data processing
 - configurable
 - programmable (with enhancing DLL's)
- logging in files and databases
- alarm systems
 - according to OPC AE standard
 - proprietary with alarms history
 - alarm client application
 - desktop - in configuration application
 - Web client
- reports
 - configured (request to create report is configured using configuration application)
 - interactive (request to create report is defined in client application)
- historical trend - periodical saving of variable's values to database with configurable backup
- SMS and E-mail can be used for logging, alarms and for application control
- visualization
 - historical data from databases
 - current data from devices and other software applications
 - Implemented as
 - desktop applications
 - Web applications (access through internet / intranet)

What is SAEAUT SCADA Web Client™

SAEAUT SCADA Web Client™ is a web application that allows users to access current data from SAEAUT SCADA Server and also the data saved to process databases. Data can be displayed in various types of web browsers on different devices - PC, tablet or mobile phone.

Its advantage is that the appearance of data for various applications is based on the same principles - the directory tree for the actual data, user-transparent display of tabular data from process databases using SQL commands either automatically generated or user-defined in the Web client. To access the process databases information from the configuration created by configurator is used.

SAEAUT SCADA Web Client™ enables creating of **interactive reports** - it can export data from a database table view in the client application using formats **csv, xls, pdf and doc**. The same way can be exported also snapshots of current data.

Another useful feature is the **log files viewer**. Log files can contain **messages about functionality of the SCADA server itself** with defined level of details as well as **parameterized user messages**, in which the parameters are replaced at runtime by the current values of selected variables.

Birthdate	Comment	First_name	ID	Job	Last_name	Salary
2. 1. 1970 0:00:00		John	1	Chef	DOE	10000
8. 1. 1975 0:00:00		Roger	2	Manger	Beck	5100.6
31. 5. 1982 0:00:00		Maria	3	Operator	Perez	2873.95
7. 8. 1984 0:00:00		Robert	4	Operator	Walker	2873.95

Figure 2. Database table view generated automatically or by custom SQL command.

Built-in **alarm client** provides insight into **actual statuses** of variables for that the option to generate alarm is configured. It enables to view also the **status history** of these alarm sources. Alarms views can be **filtered and sorted** according to different criteria. Within current alarm states view, the activated alarms can be **commented and acknowledged**.

ID	Group	Source	Status	Time	Message	Comment
7	Group2	Alarm Handling Example/Alarm Input	ACKNOWLEDGED	27. 5. 2013 13:08:31	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	Komentár 1
6	Group2	Alarm Handling Example/Alarm Input	COME	27. 5. 2013 14:45:06	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	
5	Group2	Alarm Handling Example/Alarm Input	ACKNOWLEDGED	24. 5. 2013 13:27:59	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	Comment 1
4	Group2	Alarm Handling Example/Alarm Input	COME	24. 5. 2013 12:34:15	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	
3	Group2	Alarm Handling Example/Alarm Input	COME	23. 5. 2013 9:45:00	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	
2	Group2	Alarm Handling Example/Alarm Input	COME	20. 5. 2013 18:09:06	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	
1	Group2	Alarm Handling Example/Alarm Input	COME	11. 5. 2013 10:55:15	Test Alarm Message - Active, Alarm Input = 1, Alarm Ack=0	

Figure 3. Look at the history of alarm sources.

Secure access to current data from the SCADA server is provided by registration for web client access. Registered can be only users already registered in SCADA server domain. **Secure user access to data in process databases** can be defined in detail on the level of the database itself.

“INTEROPERABILITY FOR YOUR EQUIPMENT AND SOFTWARE APPLICATIONS”



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