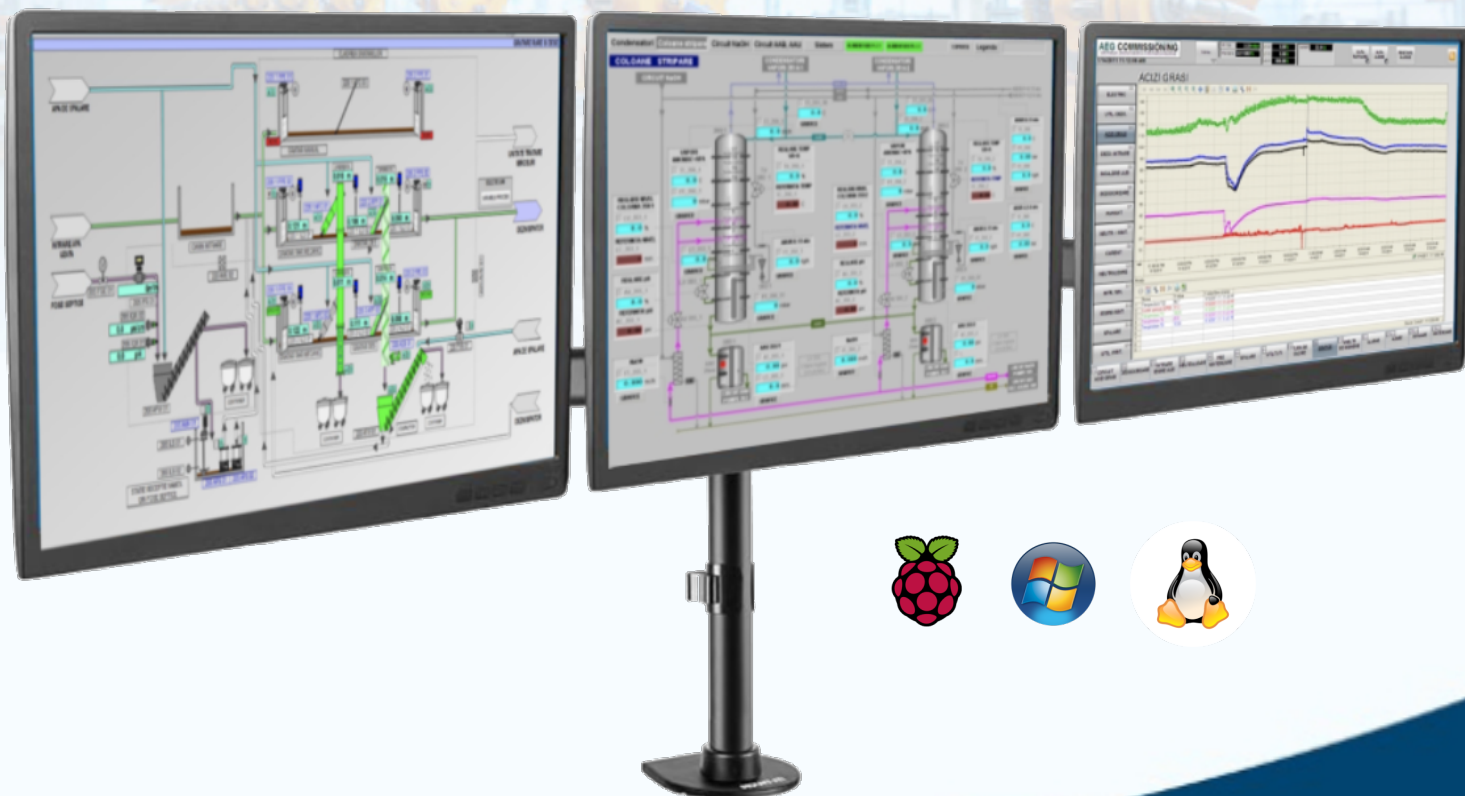




WEBICC
SCADA SOFTWARE

From edge to cloud – smart SCADA, everywhere



MODERN, VERSATILE, AND EASY TO USE

WEBICC SCADA is a modern software solution built on the latest **web technologies**, designed to be **scalable and component-based**, ideal for monitoring and controlling **industrial processes** and **smart infrastructure**. The entire system configuration is done directly in the **web browser** through an intuitive interface that significantly reduces SCADA project development time.

The platform is **flexible and easy to use** for both **system integrators** and **end users**, helping to **streamline operations**, **reduce costs**, and **enhance operational safety**.



Powerful and Extensible System

WEBICC provides a wide range of functionalities which, combined with a flexible architecture, enable the rapid development of modern SCADA applications. Its object-oriented graphical interface and browser-based access offer an intuitive experience for the end user and complete control over relevant information.

Efficient configuration, directly from the browser

The WEBICC platform integrates an online configurator that enables rapid application development without additional installations. Implementation time is significantly reduced thanks to instant preview, predefined templates, and quick configuration of communication with field devices.

Complete Solution for Automation

WEBICC is a complete solution for monitoring and control of industrial systems, smart buildings, or energy infrastructures. The platform is modular and can be used in both small-scale applications and large-scale SCADA systems distributed across multiple locations.

Versatile Applications

WEBICC is a general-purpose SCADA solution suitable for industrial automation, energy management, building monitoring, pumping stations, production lines, or IoT applications. Support for standard industrial protocols (Modbus, BACnet/IP, MQTT, etc.) ensures easy integration with various equipment.

Flexibility in architecture

The combination of WEBICC Runtime, Remote Client, and Web Client provides integrators with the freedom to develop local or distributed applications, with secure remote access, including from mobile devices.

Simple and cost-effective licensing

To meet the diverse needs of customers, WEBICC is available in multiple editions with progressively higher levels of functionality. Licenses can be scaled according to the number of variables and functions required, enabling cost-effective implementation in projects of any size.

MODERN AND SECURE SCADA SYSTEM

With WEBICC SCADA, developing a SCADA project is fast and efficient, thanks to the intuitive interface, easy integration with various devices and platforms, and real-time monitoring and control capabilities.

Extended Connectivity

WEBICC SCADA offers multiple options for communication with field equipment. The integrated OPC UA protocol allows connection to a large number of PLCs and other industrial devices. Additionally, the Modbus TCP/IP Master and Modbus RTU Master protocols are natively included, with no extra cost.

Smart Dynamics

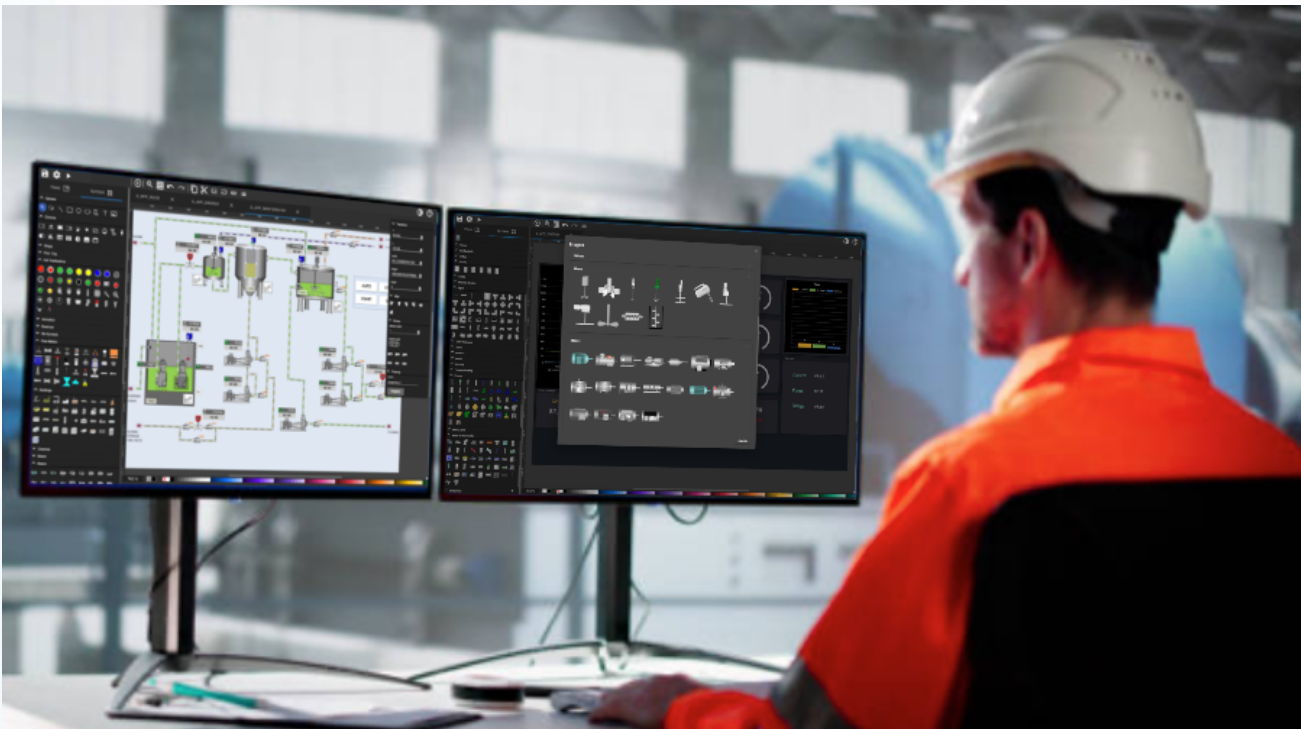
By associating the properties of graphic objects with system variables, WEBICC creates a dynamic and interactive display. All object properties can be linked to real-time data for an intuitive visualization of the process.

Modern Vector Graphics

WEBICC uses a well-organized structure for creating vector graphics. Graphic objects can be quickly customized by color, transparency, rotation, size, or borders, providing an intuitive and modern interface for the end user.

Reusable Object Library

WEBICC includes an extensive library of standard objects, making configuration more efficient and the interface easy to standardize. Objects can be reused and maintained with ease, and the system includes ready-to-use examples and components to accelerate application development.



Advanced Security

WEBICC implements advanced encryption mechanisms to ensure secure communication between the server and clients. Security measures are active by default and guarantee the protection of sensitive data under all operating conditions.

Compatibility with Multiple Operating Systems

WEBICC works on both Windows and Linux (including Raspberry Pi OS). Projects can be developed on one operating system and run on another, and hybrid solutions can combine multiple types of equipment within the same installation.

WEBICC WEB CLIENT

WEBICC Web Client is an integrated web module that connects to the WEBICC runtime and allows monitoring and interaction with the industrial installation directly from a modern web browser, both from computers and mobile devices.

Unified Design

WEBICC Web Client is available on all WEBICC instances, including HMI panels and edge devices such as the WEBICC MiniBOX PC. All client types in the system are configured using the same graphical tool — WEBICC Designer — so an application created for an operator panel will have the same functionality and interface in the browser, without requiring additional adjustments, except in special cases.

High Security

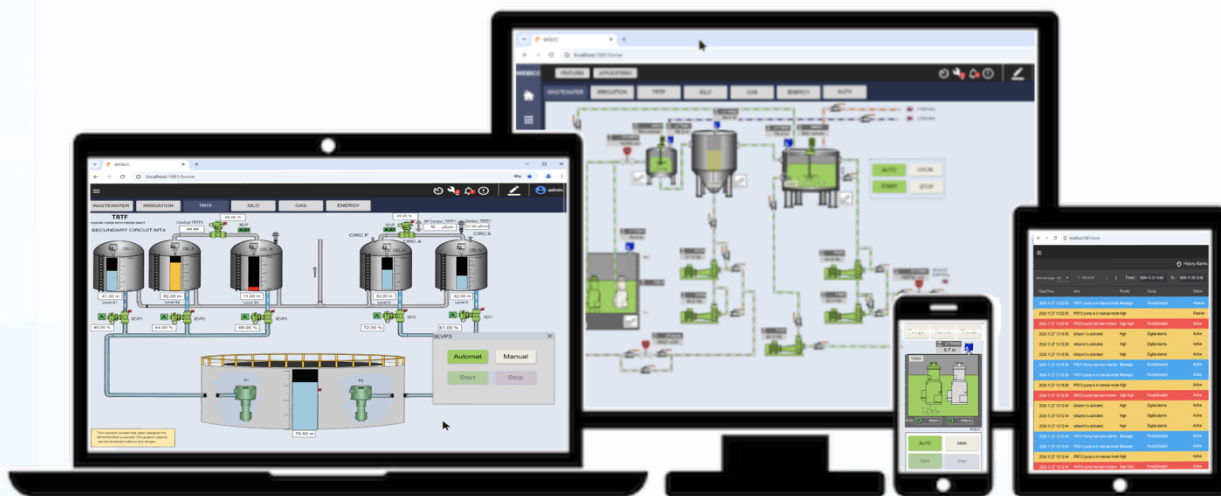
WEBICC Web Client uses modern technologies that ensure a high level of security in the communication between the web server and the browser. Among other measures, connection authenticity verification is implemented to prevent various cyberattacks commonly encountered in online environments.

Compatibility with Modern Browsers

WEBICC Web Client is built on HTML5 and JavaScript technologies, making it compatible with most modern browsers (Chrome, Firefox, Edge, etc.) across various operating systems such as Windows, Linux (including Raspberry Pi OS), and macOS.

No Plugins Required

WEBICC Web Client does not require any browser plugins to be installed. A modern browser is all that's needed for the SCADA application to run. This enhances security by reducing exposure to vulnerabilities associated with third-party software.



Mobile Platform Support

WEBICC Web Client functionalities are also available on mobile devices running iOS, Android, and Windows Mobile, providing operators with easy access to SCADA applications directly from their phone or tablet..

Screen Splitting

A unique feature is the ability to split the screen into multiple sections of any size, allowing for simultaneous visualization of different areas of the monitored technological process.

Fast and Efficient Configuration

WEBICC Designer is a powerful development tool that provides users with an intuitive and flexible environment for configuring HMI and SCADA applications aimed at monitoring and controlling industrial processes. Project development time is significantly reduced thanks to smart features, instant preview, and quick configuration of communication with PLCs and other I/O devices. This allows integrators to rapidly build professional monitoring systems with user-friendly and easy-to-use interfaces.



Single Tool for All Applications

A major advantage is that WEBICC Designer allows the development and configuration of all WEBICC applications, whether they are intended for HMI panels, local SCADA systems, or browser-accessible applications via the WEBICC Web Client. Applications are built using objects that are easy to configure and adapt to the requirements of each project.

Clear Project Visualization

The project structure is organized in a unified control center, making it easy to navigate between resources. This includes the area for defining variables (data store), followed by graphic screens (workviews), alarms, logs, schedules, scripts, users, access rights, and much more – all managed from a single point.

Efficient Configuration

WEBICC Designer includes numerous features that simplify the configuration process for SCADA and HMI applications. The interface supports multi-monitor usage, and work windows can be docked or freely placed to maximize development efficiency. Property windows can be repositioned according to preferences, providing a flexible working experience.

Instant Preview, No Compilation Required

A WEBICC project does not require compilation. The final code is generated automatically as you add objects and graphic elements. This allows for instant preview of the project directly in WEBICC Designer, enabling you to see how the application will look and function on the operator panel or in the browser—before being implemented on external equipment.

CREATE CLEAR AND EFFICIENT ALARM SYSTEMS

With WEBICC, you can build an efficient and well-structured alarm system that allows for the quick detection of critical errors and minimizes production process downtime. To understand the cause and effect of events, operators can analyze alarms, identify correlations, and generate relevant statistics.

Alarms are displayed in a clear list, along with their severity level and detailed information. The state of each alarm is highlighted with specific symbols that are easy to recognize. The alarm system operates in a client/server architecture, enabling centralized monitoring and acknowledgment of alarms coming from multiple systems.

Date/Time	Item	Priority	Group	Status	OFF Date/Time	ACK Date/Time	ACK User
2025.03.11 11:55:47	Pump PMS11 is ALARM	Message	Run/stop/leak	Active			
2025.03.10 09:39:06	bAlarm1 is activated	High	Digital alarms	Active			
2025.03.10 09:39:06	bAlarm2 is activated	High	Digital alarms	Active			
2025.03.10 09:39:06	bAlarm3 is activated	High	Digital alarms	Active			
2025.03.10 09:39:03	bAlarm1 is activated	High	Digital alarms	Active			
2025.03.10 09:39:03	bAlarm2 is activated	High	Digital alarms	Active			
2025.03.10 09:39:03	bAlarm3 is activated	High	Digital alarms	Active			
2025.03.10 09:39:04	bAlarm1 is activated	High	Digital alarms	Active			
2025.03.10 09:39:04	bAlarm2 is activated	High	Digital alarms	Active			
2025.03.10 09:39:04	bAlarm3 is activated	High	Digital alarms	Active			
2025.03.09 20:00:26	The 4-10 threshold has been reached	High-High	Analog alarms	Active			
2025.03.09 20:00:26	The 4-10 threshold has been reached	Message	Analog alarms	Passive	2025.03.09 20:00:26		
2025.03.09 20:00:24	The 8-1-100 threshold has been reached	High-High	Analog alarms	Passive	2025.03.09 20:00:26		
2025.03.09 20:00:19	The 5-1-80 threshold has been reached	High	Analog alarms	Passive	2025.03.09 20:00:25		
2025.03.09 20:00:14	The 3-1-80 threshold has been reached	Message	Analog alarms	Passive	2025.03.09 20:00:20		
2025.03.09 20:00:10	The 2-1-80 threshold has been reached	Message	Analog alarms	Passive	2025.03.09 20:00:16		
2025.03.09 20:00:05	The 1-1-20 threshold has been reached	High	Analog alarms	Passive	2025.03.09 20:00:11		
2025.03.09 18:54:47	bAlarm1 is activated	High	Digital alarms	Active			
2025.03.09 18:54:47	bAlarm2 is activated	High	Digital alarms	Active			
2025.03.09 18:54:47	bAlarm3 is activated	High	Digital alarms	Active			

Using Alarms

Each alarm defined in WEBICC is associated with a variable in the data store, which reflects its current state. The values of these variables are automatically updated by WEBICC Runtime, based on the defined conditions. Multiple alarms can be combined into logical expressions, useful for triggering specific actions or dynamic animations in the interface.

Alarm Groups

For efficient management, alarms can be organized into groups, each with its own activation conditions. These can be quickly configured in WEBICC Designer, and for maximum flexibility, activation can also be controlled through scripts. Each group can be assigned specific colors, properties, and behaviors. Alarms can become variables that are usable in the application logic.

Email Alarms

WEBICC can be configured with an email server to send critical events to an email client.

Alarm Presentation

WEBICC offers several ways to display alarms to the operator:

Alarm List: displays all active alarms, with sorting options by time, severity, or alphabetical order.

Alarm Bar: highlights one of the active alarms according to a user-defined prioritization criterion. Acknowledgment can be done directly from the bar.

Alarm Log: keeps a complete history of alarm state changes, with advanced sorting and filtering options for efficient troubleshooting.

Event Log

In WEBICC, the event log contains a detailed history of acknowledged alarms (those acknowledged by the operator) and validated alarms (those that are no longer active). This log provides a clear record of how alarms have been managed over time, serving as an essential tool for traceability, auditing, and post-event analysis. Operators can track who acknowledged an alarm, when it was validated, and how long it remained active, thus facilitating the optimization of incident response.

Alarms via Telegram Application

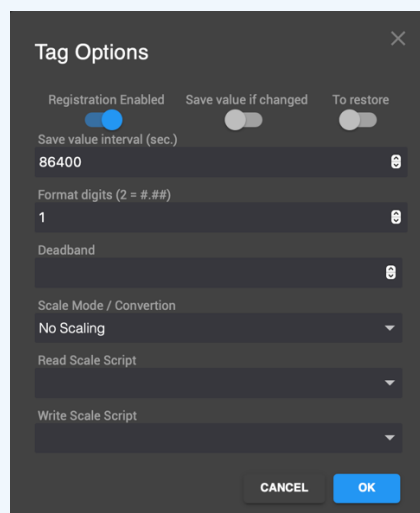
Critical instant messages can be configured to trigger alarms via Telegram.

HISTORY AND TRENDS

One of the main purposes of a monitoring system is the collection and storage of data for recording or analysis. WEBICC can record selected information from an installation, saving these values in a logger (logging unit), making it an efficient tool for analysis.

Creating a Data History

Creating a record of a variable is done very easily by configuring the recording setting for each tag, with additional options for setting Deadband and Scaling



The Tag Options dialog box is shown with the following settings:

- Registration Enabled: ☒
- Save value if changed: ☒
- To restore: ☐
- Save value interval (sec.): 86400
- Format digits (2 = #.##): 1
- Deadband: 0
- Scale Mode / Conversion: No Scaling
- Read Scale Script: (empty)
- Write Scale Script: (empty)

Buttons: CANCEL, OK

History Settings

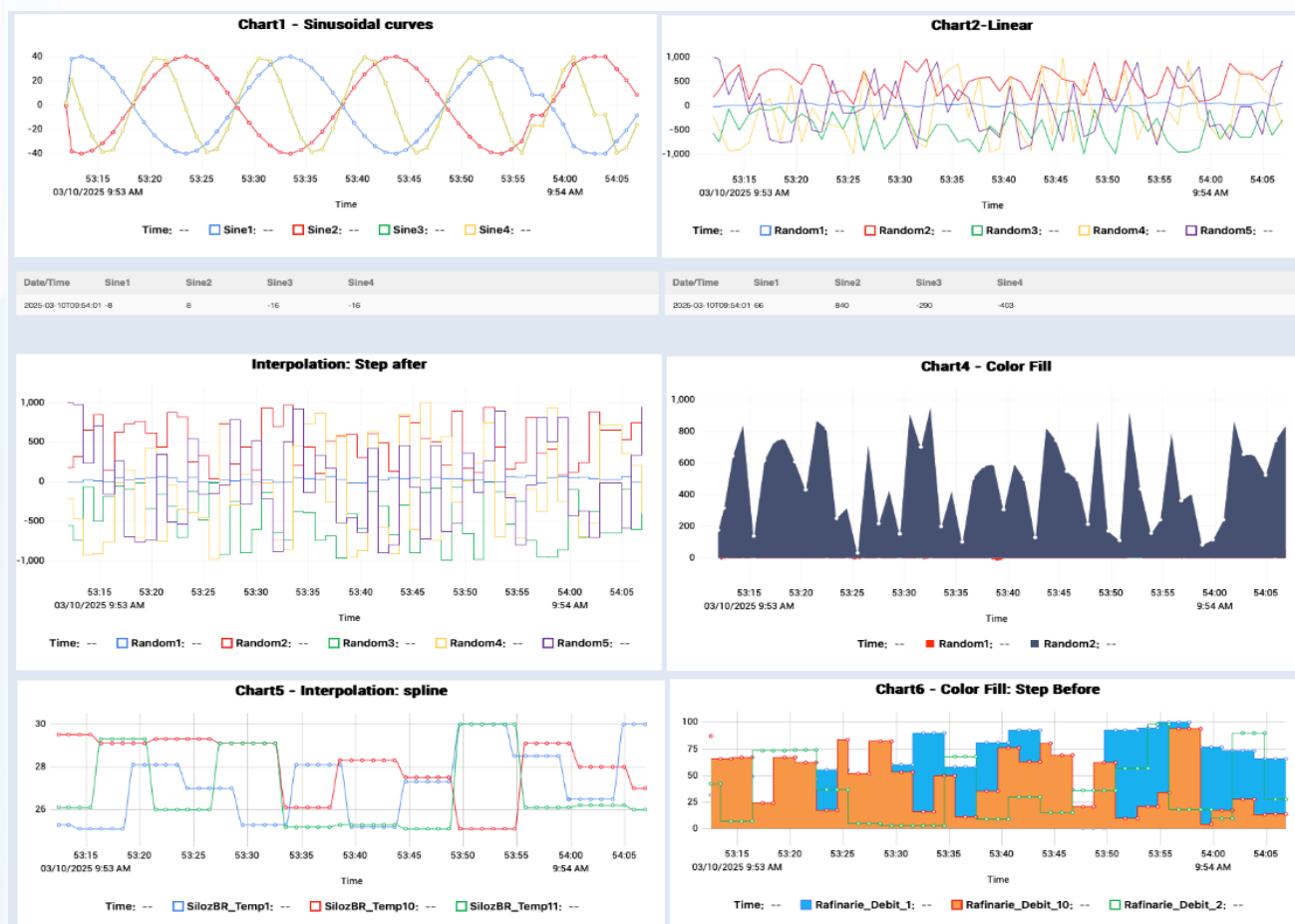
For each logging unit, the user can configure the time interval and frequency at which values are recorded, as well as the duration for data retention. The scaling for each signal can be adjusted individually, allowing the operator to focus on the relevant values at any given time.

Trend Object

The Trend object in WEBICC is an essential tool for graphical analysis of processes. It allows the display of a value's variation over a period of time, both in real-time and historically. Data is displayed in the form of graphs (curves), providing the operator with a clear view of the signals' evolution in real-time.

Interpolation

The graph control can display linear curves, step after/before types, and spline curves for one or multiple Y axes in different colors, with different color fillings.



COMMUNICATION

WEBICC SCADA offers remarkable flexibility in integrating with industrial equipment and IT systems, both at the lower levels (I/O, PLC) and at the higher levels (SCADA, MES, ERP systems).

SUPPORTED PROTOCOLS:

- **OPC UA** (Client and Server) – Integration with other SCADA systems or industrial middleware.
- **Modbus RTU / Modbus TCP** – Direct communication with PLCs, I/O devices, or meters.
- **Siemens S7** (S7-1200, S7-1500, S7-300/400)** – Integration via native S7 protocol or through OPC gateway.
- **EtherNet/IP** – Communication with Rockwell / Allen-Bradley equipment and other compatible devices.
- **BACnet/IP** – Ideal for HVAC applications and building automation.
- **MQTT** – Perfect for IoT applications or cloud platform integration.
- **Web API**– Enables integration with external IT systems and web applications, using JSON data exchange.

Thanks to this versatility, WEBICC can be easily integrated into both new systems and existing infrastructures, allowing system integrators to deliver customized, scalable, and efficient solutions tailored to the specific needs of each end client.



Examples of I/O and PLCs Supported by WEBICC:



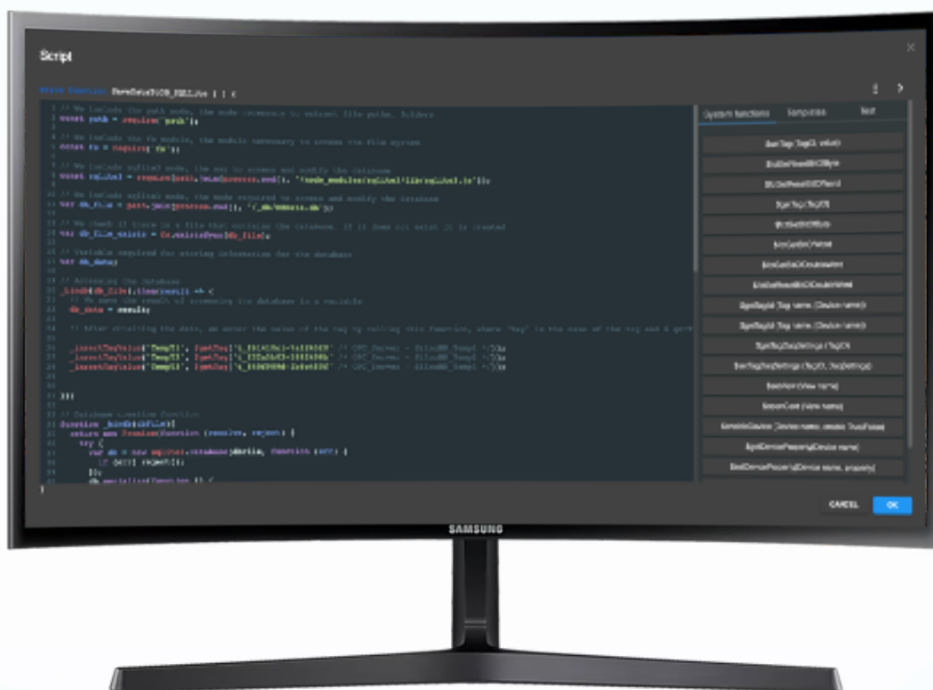
PREDEFINED ACTIONS, FUNCTIONS

WEBICC includes a generous set of predefined functions that can be directly attached to graphical objects for common actions, such as changing values, switching pages, or activating conditional visibility. For more complex scenarios, the system features a JavaScript scripting engine that allows for the development of custom functions.

These scripts can be:

- called directly from graphical objects (on click, mouse-over, etc.),
- or run cyclically, at any desired time interval, for advanced automation or monitoring.

By combining predefined functions with custom scripts, WEBICC offers an extremely flexible framework for creating interactive interfaces, dynamic process logics, and adaptive behaviors, perfectly tailored to the needs of each project.



Planning the functions

JavaScript functions can be scheduled to run on the server-side (backend) or client-side (frontend) at cyclic time intervals, upon application startup, or according to a preset schedule based on date and time.

Function Library

Functions for packing and unpacking bits for common data types: Byte, Word, DWord. Functions for reading and setting tag values, animation functions and much more.

Function parameters

Custom functions can accept any number of parameters of type Tag or data type. These parameters are particularly useful in the operational logic and greatly simplify programming.

Software Troubleshooting

Integrated console in the scripting application for viewing function results

WEB REPORTS

WEBICC SCADA includes two report configuration environments: one in the WEBICC Standard version and one in the WEBICC Professional version. In the standard version, reports have a basic configurable component for cyclic email reports for alarms and recorded data.

In the professional version, there is an advanced web environment known as Report Designer for generating professional reports. It allows connection to various databases used in SCADA applications and beyond, facilitating access to recorded data for creating various reports, from standard ones to more complex ones.

Key features of the Report Designer:

Extended connectivity

Supports multiple types of databases, including MS SQL Server, MySQL, SQLite, and JSON. Optionally, it can be configured for PostgreSQL, Oracle, Microsoft Excel, and others.

Advanced customization

It offers a rich set of static and dynamic controls such as lines, shapes, tables, charts, images, and text, allowing the creation of elegant and easy-to-read reports.

Export and distribution

Generated reports can be exported in various formats, including PDF, DOCX, XLSX, CSV, TXT, and HTML, making it easy to distribute them physically or electronically.

Dynamic filtering

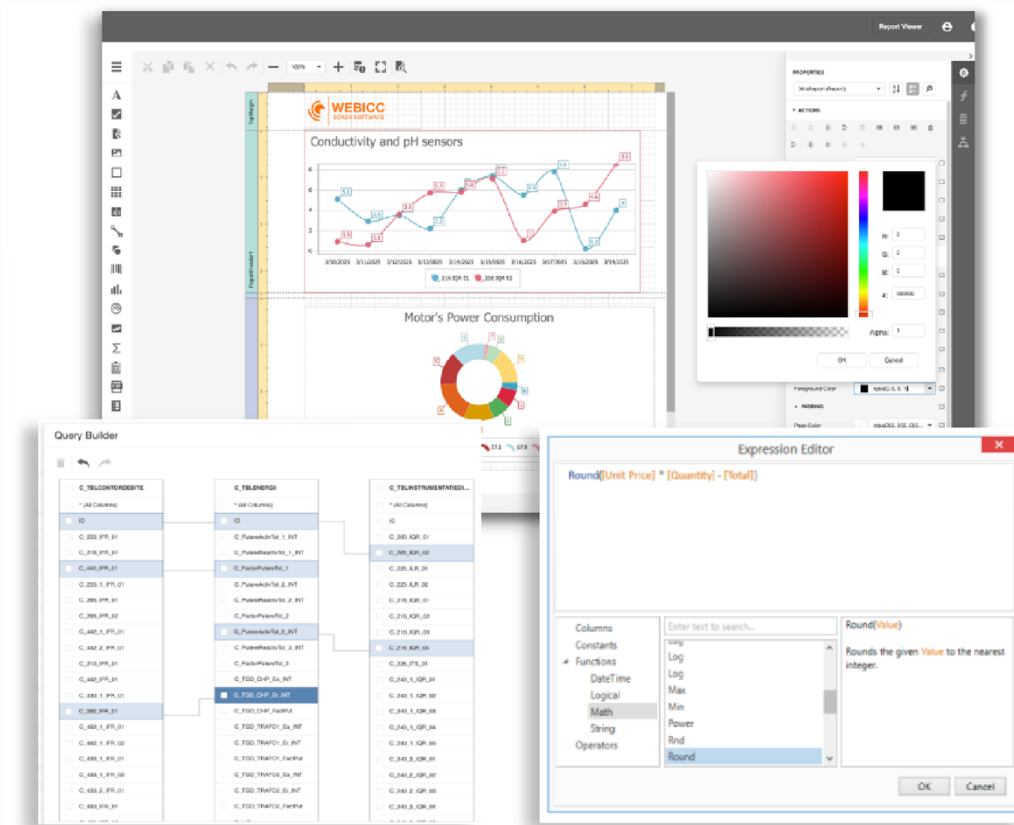
It features a flexible parameter engine, allowing users to dynamically filter report data through an intuitive interface.

Expression editor

It is a particularly important feature as it allows performing mathematical operations between the values to be displayed in the reports.

Graphic SQL programming

An important feature is the ability to create relationships between database table fields using a wizard. SQL language is also allowed.



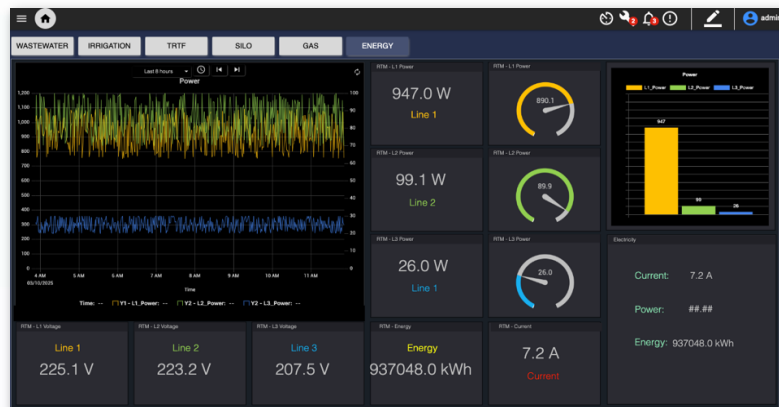
Through Report Designer, users can maximize productivity and minimize effort in the reporting process, benefiting from an integrated solution within the WEBICC PROFESSIONAL license.

GRAPHICAL SCREEN TYPES IN WEBICC

WEBICC SCADA offers three distinct types of screens for viewing information in an interactive, flexible, and application-specific manner for modern industrial requirements:

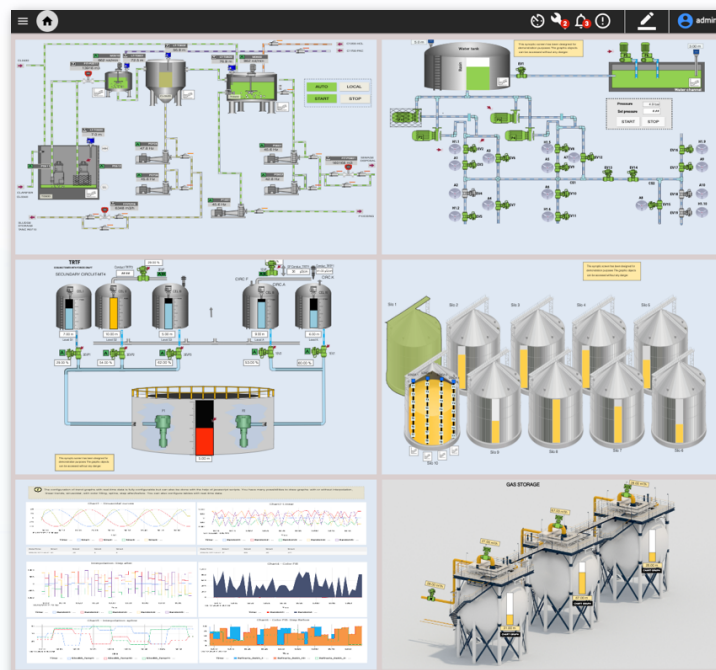
1. Standard Screens (Standard Views)

These provide all the necessary functionalities for building a complete graphical interface, using both static objects (texts, shapes, images) and dynamic objects (symbols, trends, states, animations, commands, etc.). The designer has full control over the behavior of each object, including actions, functions, and JavaScript scripts.



2. Multi View Container

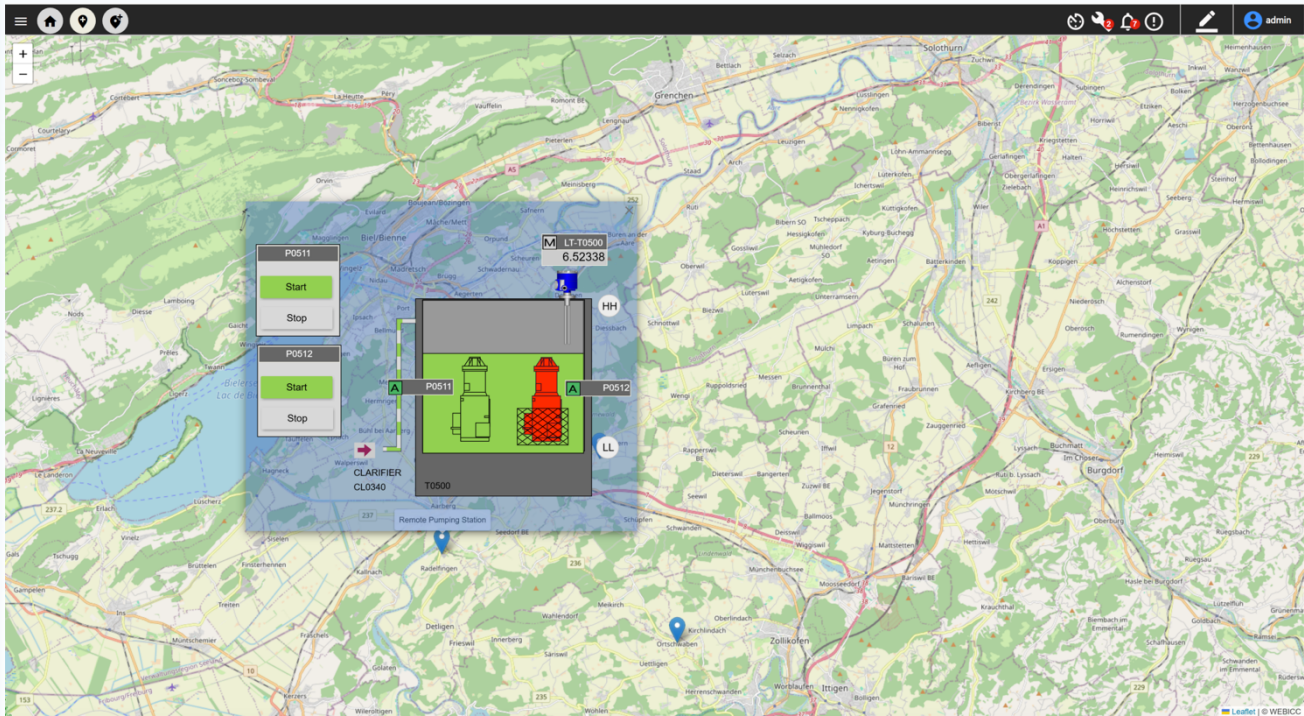
This type of screen allows a classic view to be divided into multiple sections (panels), where other WEBICC screens can be loaded simultaneously. It is ideal for applications that require parallel display of multiple areas or subprocesses, enabling efficient monitoring and fast navigation.



3. Maps View – Geospatial Visualization (Leaflet-based)

Using the Leaflet engine, Maps View allows real-time monitoring and representation of data on a map. It is a powerful feature for tracking assets, locations, sensors, or geographically distributed processes. The maps can

be fully interactive and enriched with markers, dynamic states, and actions specific to each point.



LICENSE

WEBICC is a **scalable SCADA software solution** designed for **small to medium-sized projects**, offering advanced real-time monitoring and control capabilities.

The platform is available in two editions: **Standard** and **Professional**.

The **Professional** edition includes a powerful, fully configurable **report generator**, built on modern web technologies. Report development is intuitive and user-friendly, following a workflow similar to editing a Microsoft Word document, without requiring programming skills.

WEBICC is licensed based on the number of **process tags**, allowing for flexible scaling to match the specific needs of each project.

ADDRESS

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