

WebAccess / SCADA

Modern SCADA Software for Connected and Future-Ready Operations



Features

- Preserve Traceable Operational Data for Compliance-Ready Operations
- Connect new and legacy field equipment through built-in drivers and protocols to lower modernization barriers
- Support LDAP integration and operation audit logs to meet enterprise governance and internal control needs
- Store long-term time-series data for diagnostics, energy optimization, predictive maintenance, and future AI applications
- Cross-Platform Visualization for Faster Decision Alignment

Introduction

Advantech WebAccess is a modern IIoT/SCADA software platform designed to help industrial automation operators connect field assets, visualize operations, and transform real-time data into actionable insights. By combining equipment connectivity, unlimited tag licensing, historical data logging, alarm monitoring, enterprise user source integration, and built-in low-code visualization tool, WebAccess helps users build a reliable digital foundation for daily operation, energy management, remote monitoring, compliance-oriented data management, and future AI-driven applications.

As operational data becomes increasingly important for automation, optimization, ESG reporting, and predictive intelligence, WebAccess enables users to collect, organize, and retain field data in a structured way. This makes it easier to support future applications such as energy optimization, anomaly detection, predictive maintenance, and AI-assisted operation.

WebAccess is especially suitable for system integrators and facility operators who need to modernize monitoring systems, integrate both new and legacy devices, reduce license planning complexity, and prepare customers for long-term digital transformation.

Basic Components:

1. **Project Node:** Provides centralized project configuration, user management, license management, visualization management (EdgeView Server), and system administration. It helps system integrators manage project resources and maintain the overall system configuration in one environment.
2. **Data Node:** Data runtime engine to connect field equipment, collects real-time data, processes alarm information, records historical data, and provides operational data for visualization and external integration.
3. **EdgeView:** Build-in specialized graphics innovative tool in WebAccess software. With features like real-time data presentation, command control options, dynamic data analysis charts, and customizable animations, it provides comprehensive support for enterprise visualization management. Users can easily create bespoke data displays and animations using open widget properties and parameter configuration options. Additionally, the tool includes pre-built data analysis charts and customizable widget templates, simplifying scene animation creation. Online editing and previewing further enhance efficiency, allowing for multitasking design directly from the client side.

Features

Trusted Data Integrity for Compliance-Ready Operations

WebAccess helps users preserve operational data with traceability and integrity-oriented data management. By retaining reliable historical records and system operation information, organizations can better support compliance verification, sustainability reporting, and third-party audits.

For enterprise customers, this creates a trusted operational data foundation for internal governance, ESG-related reporting, and green supply chain participation. For system integrators, it provides a stronger value proposition beyond basic monitoring by helping customers address compliance and audit-readiness requirements.

Complete Data Acquisition across New and Legacy Assets

WebAccess supports data acquisition from both modern and existing field equipment through common industrial and building automation protocols. This allows users to collect broader operational data without immediately replacing legacy devices.

It reduces project barriers when modernizing existing facilities and helps maximize the value of installed assets while building a more complete data foundation for future optimization and AI analysis.

Combined with unlimited tag licensing, users can expand monitoring coverage more freely without avoiding useful data collection due to tag-count cost concerns.

Enterprise Identity Integration and Operation Auditability

WebAccess supports enterprise user source integration, via integrating LDAP, to help organizations align SCADA (OT area) user management with existing employee account and access control systems.

Operation audit logs help record system activities and support accountability. When abnormal events occur, administrators can more quickly determine whether the issue was caused by user operation, permission settings, or system configuration. This is especially important for enterprise IT/OT governance, internal control, and protection of digital operational assets.

High-Efficiency Historian for AI-Ready Operational Data

WebAccess provides historical data logging for time-series operational data. Users can retain equipment status, process values, energy data, and other operational records for long-term analysis and review.

A reliable historian helps users move from real-time monitoring to data-driven improvement. Historical data can support trend analysis, equipment diagnostics, energy optimization, abnormal condition detection, predictive maintenance, and future AI model training. This enables WebAccess to serve not only as a monitoring system, but also as an AI-ready operational data foundation.



Cross-Platform Visualization for Faster Decision Alignment

WebAccess/EdgeView provides visualization access across different operation environments, including desktop clients, browser-based access, and mobile app access. This helps managers, operators, and maintenance teams view the same operational information from the control room, office, or field site. For system integrators, cross-platform visualization also improves project flexibility and helps meet different customer deployment scenarios.

Additional Capabilities:

Built-in Visualization Development

WebAccess/EdgeView includes built-in visualization tools for creating HMI/SCADA monitoring screens, dashboards, alarm views, and trend displays for improving daily operation monitoring and automation management to next level.

Alarm Monitoring

Alarm monitoring helps operators identify abnormal site or equipment conditions. Alarm views and historical alarm records support daily operation, troubleshooting, and maintenance planning.

Software Specifications

Advantech WebAccess X-Lite

- **Number of I/O Tags** Unlimited
- **Number of Internal Tags** Unlimited
- **Number of Drivers** Supports common PLCs and industrial protocols

Network Architecture

- **Device Redundancy** Supported

User Management

- **Local User Source** Supported
- **Enterprise User Source** LDAP integration supported

Historian Data

- **Historical Data Logging** Supported
- **Time-Series Data Foundation** Supported for historian data

Alarm and Logs

- **Alarm Monitoring** Supported
- **Number of Alarm Logs** Number of tags (per Data Node)
- **Operation Audit Log** Supported
- **Action Logs (EdgeView)** Supported

Open Connectivity

- **OPC UA Client** Supported (per Data Node)
- **Modbus Server** Supported (per Data Node)

Open Interface

- **Developer API (HTTPS REST API)** Supported

Others

- **Database** PostgreSQL, Oracle, MySQL, SQLite; MSSQL (via ODBC)
- **Supports IPv6** Supported
- **Electronic Signature** Supported

Graphics (EdgeView)

- **Number of Graphics Drawings** Unlimited
- **Variables Per Graphic Drawing** Unlimited
- **Points of data source** Unlimited
- **Desktop/Browser Viewer** Yes
- **Preview in Edit Mode** Yes
- **Graphics Widget Model** Yes
- **Support Image Format** SVG, JPG, PNG, GIF, BMP
- **Support Audio Format** WAV, MP3, WMA
- **Opacity Mask** Yes
- **Stackable Animations** Move, Scale, Rotation, Path, Flow Marquee, Blink, Visible, Display, Frame

Graphic Development Tools (EdgeView)

- **Charts** Pie, Polar, Radar, Scatter, Bubble, Bar, Progress Bar, Timeline, Calendar pie, Sankey, Funnel
- **Tables** Value, Log, Multi-column, Action log
- **Realtime Trend** Yes
- **History Trend** Yes
- **Realtime XY Plot** Yes
- **History XY Plot** Yes
- **Alarm Summary and Log** Yes
- **Display Widgets** Label/LCD/Image/GIF/SVG/Gauge/ Web-view/Video/Barcode/QR code
- **Control Widgets** Button/Selectors/Slider/Switch/ Navigation/Textbox/Recipe/Time controller/Group selectors
- **Shape Widgets** Polyline, Arc, Pipeline, Polygon, Pie, Star Rounded, Quadrilateral
- **Source Widgets** Drawing, Customized widget
- **Plug-in Widget** Yes
- **Script Editor** Yes
- **Variable Editor** Yes
- **SVG Editor** Yes
- **Audio Management** Yes
- **Image Management** Yes
- **File Management** Yes
- **Record Management** Yes
- **Recipe Management** Yes
- **I/O Tag Group Management** Yes
- **Notification (Audio)** Yes
- **Independent Time Controller** Yes

Graphic Data Source

- **HTTP API** Record and variable function
- **Database Access** MS SQL, MySQL, Oracle, PostgreSQL, InfluxDB

Graphic Others

- **Scripting Language** JavaScript
- **Recipe Control** Yes
- **Embedded Web Page** Yes
- **Built-in Color Palette Templates** Yes
- **Marquee Text** Yes
- **Custom Query Time Option** Yes
- **Desktop Client** Edit mode and View mode
- **Web Client** Edit mode and View mode
- **Map** Google, Baidu
- **Barcode** CODE128, COE39, EAN-13, EAN-8, ITF-14 MSI, Pharmacode
- **Sankey Diagram** Real-time and historical values

Ordering Information**USB Dongle License**

- **WA-PLT-U64KE** WebAccess Lite, Unlimited I/O tags

Rebindable License (from Marketplace)

- **32WAPLTP000101** WebAccess Lite, Unlimited I/O tags

Upgrade Features

- **32WAPXLP000101** WebAccess Lite Data Nodes upgrade
- **32WAPEAP000101** WebAccess EdgeView Mobile APP Module upgrade

Minimum Requirements**Project Node/Data Node**

- **Operating System(64-bit)** Windows 10 LTSC 2019 (1809 or later), Windows 11 Pro, Windows Server 2022
- **Hardware** CPU: Intel® 3rd Gen Core™ i3 or equivalent/higher; AVX and AES-NI support required
- **RAM** 8 GB
- **HDD** 200 GB free space (Requirements vary by usage)
- **Display Resolution** 1920 x 1080 (lower resolutions also supported)
- **USB port** USB port for license hard key on the Project node

EdgeView Desktop Client

- **Operating System** Windows 10 LTSC 2019 (1809 or later), Windows 11, Linux Ubuntu 24.04
- **Hardware** CPU: Intel® Core™ i3
- **RAM** 4 GB
- **Graphic Card** Supports OpenGL 3.3 or above

EdgeView Browser Client

- **Browser** Supports WebGL 2.0 or above
Chrome (versions > 56)
Edge (versions > 83)
Fire Fox (versions > 51)
- **Hardware** RAM: 8 GB (recommended)
- **Graphic Card** Supports OpenGL 3.3 or above

EdgeView APP Client

- **Android** Android 9 to 16
- **iOS** iOS 16 or higher

Supports Multi-Language Systems

- **English / Traditional Chinese / Simplified Chinese**