# WebAccess/HMI

## HMI Software


Runtime      Designer
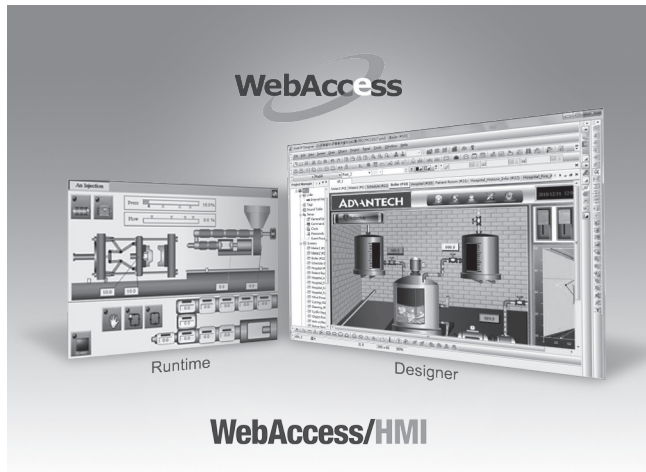
WebAccess/HMI

## Features

- Allows users to manage multiple HMI applications in one project
- Allows users to dynamically switch language, with Unicode and multilingual screen text supported
- Offers password protection for designs, macros, and upload/download operations
- Supports the running of various open platform applications with various OS, such as RTOS/WinCE and Windows
- Automation controller can be linked and controlled from the platform directly
- Provides index registers for modifying device addresses at runtime
- Collects data from multiple devices using various methods
- Supports diverse data acquisition and trend presentation techniques
- Operation log facilitates event review and investigation
- Flexible runtime download through serial/Ethernet and memory cards
- Allows application updates from USB memory sticks
- Supports numerous drivers and over 450 industrial communication protocols, such as SIMATIC S7-1200, BACNet MSTP, and BACNet IP

## Introduction

WebAccess/HMI Designer is a powerful and intuitive software program for creating comprehensive human machine interface solutions. WebAccess/HMI Designer is an easily integrated development tool with proven value in many application fields. The features include solution-oriented screen objects, high-end vector graphics, Windows fonts for multi-language applications, receipts, alarm functions, as well as data and operation logging capabilities. WebAccess/HMI Designer also supports online/offline simulation and utility programs such as Data Transfer Helper (DTH), recipe editor, and text editor.

WebAccess/HMI Runtime, a component of WebAccess/HMI, guarantees the reliability and performance of Open Platform because of the minimum system overhead, high data communication rates, sub-second screen switching, and 24/7 operation. Additionally, Advantech's fast response software team is continually adding new functions, communication drivers, and solutions to the software to meet dynamic needs.

## System Requirements

### Minimum OS Requirements

- Windows XP SP2 (for all flavors of XP such as Home, Media Center, Tablet PC)
- Windows Server 2003
- Windows Vista
- Windows 7
- Windows 10

## Project Development Steps



| Create Project | Define global settings for all applications in the project - Languages, Font Templates, Global Tags, Global Macros, Picture Database, Text Database |
| Add Application | Configure individual application settings - Communication Links, Tags, Command Blocks, Passwords, Alarm Blocks, Recipe Blocks, Data Loggers, Operation Logging |
| Add Screen | Define the screen properties - Screen Type, Screen Size, Printed Area, Base Screen, Background, OPEN macro, CLOSE macro, CYCLE macro |
| Add Object | Place, resize, and configure the screen object |
| Compile | Adjust and/or correct the settings that did not pass complier verification |

Simulate    Download

## Feature Details

### Global Settings and Resources Sharable to All Project Applications

- Multiple languages (up to 10 languages)
- Font templates (up to 20 fonts for each language, TrueType fonts supported)
- Picture database (+PNG and SVG), sound database (WAV), and text database
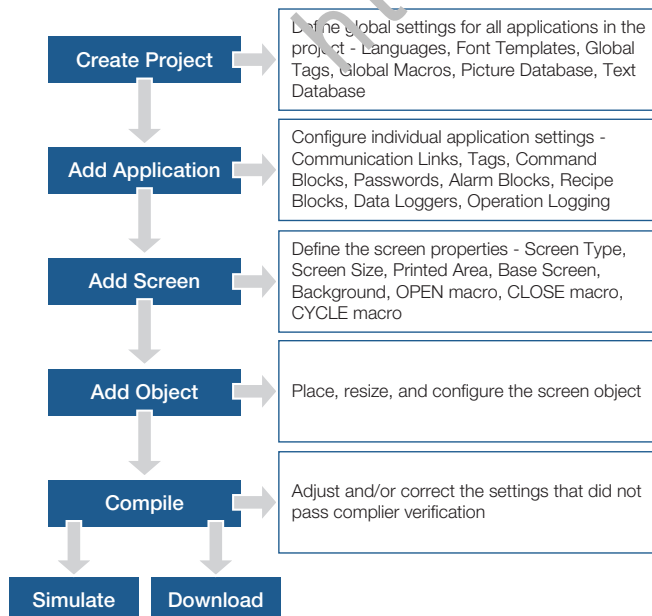- Global tags
- Global macros

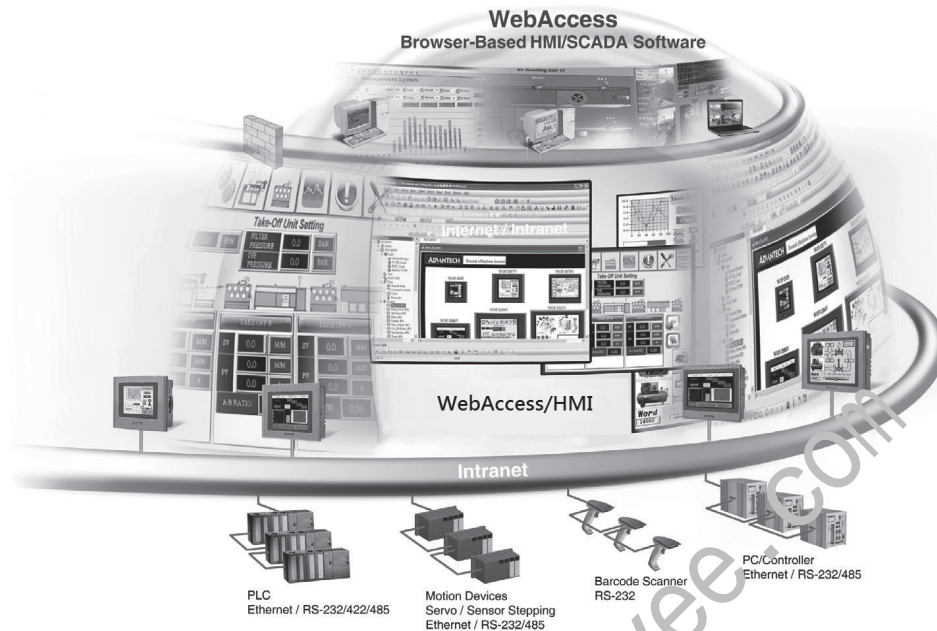### Numerous Solution-Oriented Screen Objects

- For common HMI needs
  Buttons, lamps, message displays, numeric displays, numeric entries, character displays, character entries, time displays, date displays, bar graphs, meters, etc.
- For animations
  Picture displays, GIF displays, animated graphics, dynamic rectangles, dynamic circles, pipelines, circular bar graphs, etc. Customizable basic graphic object colors (text, lines, rectangles, circles, etc.), as well as button and lamp shapes.
- For advanced functions
  Line charts, scatter charts, recipe selector, recipe table, alarm history display, active alarm display, alarm count display, historic trend graphs, historic data table, historic event table, historic line charts, operation log display, sub-link table, etc.

### Communication Links

HMI products can have up to four built-in communication ports. WebAccess/HMI Designer software allows users to create up to four links and 255 sub-links for a single application. The inclusion of more than 450 communication drivers enables 1-to-N (one panel to a wide variety of industrial devices) or N-to-1(multiple panels to one device) connections. WebAccess/HMI Runtime supports up to 16 built-in communication ports and allows users to create up to 16 links for 255 sub-links with serial ports, as well as 128 sub-links with Ethernet ports for a single application.

### One Design for All Models

WebAccess/HMI Designer software features an automatic resizing function for resizing all objects to fit the screen size if the HMI model is changed. Thus, HMI model changes can be rapidly implemented.

### Easy to Accumulate/Reuse Design Achievements

- Import/Export Function
  WebAccess/HMI Designer provides a simple method for importing and exporting data between applications and projects. This data can include language settings, font templates, pictures, sounds, text, tags, macros, applications, screens, alarm messages, control blocks, and status word settings.

- Object Library
  The object library enables convenient configuring, managing, and sharing of user-defined objects. The object library contains default objects, common objects, object groups, and global objects.

### Enhanced Intellectual Property Protection

WebAccess/HMI Designer offers enhanced IP protection with up to 9 password levels for securing operations and restricting object access. Users can set passwords to protect projects, tables, and global macros, and also prohibit the uploading and copying of panel applications stored in the HMI unit.

### Recipes

WebAccess/HMI Designer provides comprehensive solutions for recipes.

- Supports up to 16 recipe blocks
- Provides a recipe selector for selecting recipes and a recipe table for displaying and modifying recipe data at runtime
- Provides Recipe Editor, an independent executable program, for viewing and editing recipe data saved in binary files
- Supports bit notification when recipe operations are performed successfully to prevent data loss

### Supports Data Saving to CSV/TXT Files

Supports the saving and loading of collected data to/from CSV or TXT files. These two standard file formats ensure easy manipulation of data on a PC.

### Alarms

WebAccess/HMI Designer supports up to 16 discrete alarm blocks and up to 16 analog alarm blocks. The software also offers alarm history display, active alarm display, alarm count display, and alarm marquee for displaying the application alarms.

### Macros Offer an Easy-to-Learn Language with Simple Syntax

Application developers can program their own solutions using macro commands for the following:

- Operations not supported by a standard object or feature of WebAccess/HMI Designer sequential, interactive, conditional and file operations
- Non-linear data conversions
- Data exchanges between two controllers
- Simple communication drivers
- Difficult-to-implement tasks in controllers
- Reducing controller load to boost performance

### Simplified Architecture

- Real-time WYSIWYG screen editor, eight toolbars, and a screen manager
- Screen overview showing the relationship between the application screens
- Link overview showing the relationship between application links of the current application
- Object list showing the screen objects and associated I/O address of the current screen
- I/O list showing all I/O addresses of the project and their owners
- Compiler for building, verifying, and optimizing designs
- Online/offline simulation for design verification
- Data Transfer Helper (DTH), an independent executable program, for obtaining and updating application data via a serial or Ethernet port
- Text Editor for editing all screen texts in multiple languages

## Ordering Information

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| ▪ **968WH021P0** | WebAccess/HMI V2.1 150 tags S/W license |
| ▪ **968WH021P1** | WebAccess/HMI V2.1 300 tags S/W license |
| ▪ **968WH021P2** | WebAccess/HMI V2.1 1500 tags S/W license |
| ▪ **968WH021P3** | WebAccess/HMI V2.1 5000 tags S/W license |
| ▪ **WA-H21-U99HE** | WebAccess/HMI V2.1 S/W USB dongle 9990 tags |