

Introduction

WebIQ Designer is a powerful tool to create HTML5 machine visualizations. Nevertheless, the following functions are still missing:

Add-On: Variable Manager

- Important variable attributes clearly listed in one table
- Editing an attribute of multiple variables with one click, e.g. set communication interval for all selected variables.
- Cross reference list
- OpcUA variables check.
 - Is the variable still defined in the PLC?
 - PLC Data type changed?

Add-On: Recipe Template Manager

- Change the sort order of the items.
- Group items into pages, which can be selected at runtime (only supported by cx-recipe)
- Define items that can be used for filtering (only supported by cx-recipe).
When nothing defined, the first 10 items are used.

Add-On: Unit Class Manager

- GUI to create WebIQ unit classes (file json/unit-classes.json)

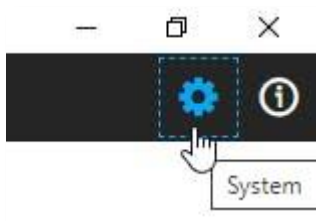
This WebIQ Add-on, developed by Bosch Rexroth, provides these functions. It is a standalone HTML5 page that is displayed in a web browser. The WebIQ Connect API, documented at <https://www.smart-hmi.com>, is used to implement these functions.

HINT: The undocumented internal WebIQ data format is read. Because this format may change with newer WebIQ versions, the add-ons may no longer work in the future.

Configure webserver port of WebIQ Designer

The add-on no longer works with the default port 10123, so the port must be changed. Even if you are working with multiple WebIQ Designer instances simultaneously, each instance must have a unique port.

- Open **Project list** of Designer
- Open System page, by clicking on gear icon in the right upper corner.



System icon WebIQ

- Select Designer Settings
- For every Designer instance enter a unique port number. E.g. 10125, 10126,...

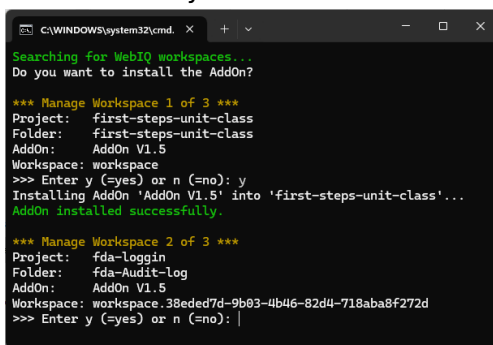


WebIQ Designer Server Settings

Installation

The Add-on must be installed for each WebIQ project by the steps below:

- Open project in WebIQ Designer
- Unzip attached file install-webiq-addonV*.zip to your computer
- Execute the file **install-webiq-addonV*\add.bat**, by double click
Confirm with "y" to install the add-on.



Screen shoot of add.bat

- Alternatively, you can copy the addon folder into the designer's data directory.
- The data directory is displayed in the "About WebIQ Designer" page.

Batch files	Description
add.bat	Installs addon after confirmation
add-all.bat	Installs addon in all WebIq projects without confirmation
del.bat	Deletes addon after confirmation
del-all.bat	Deletes addon in all WebIq projects without confirmation
list.bat	List with installed addon version
open-unit-class.bat	Opens editor with file json/unit-classes.json As workaround while there is no WebIQ API to write the file

Usage

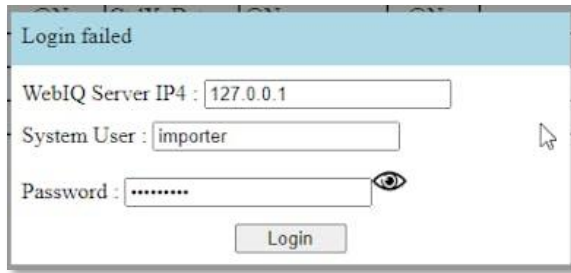
The add-on uses the WebIQ web server. Therefore, it only works if the project is open in the WebIQ Designer.

- Open your project in WebIQ Designer
- Enter URL (e.g.: **localhost:10125/addon**) in your web browser.
- Alternatively, you can start the browser preview in the WebIQ Designer and append /addon to the URL.
- All changes in the Designer must be saved before they can be displayed in the add-on.

First login

At the first login, or when the login changes, you must provide a system user with password.

Use 127.0.0.1 or localhost (which means local PC) instead of the IP address of your PC.



Login dialog WebIQ-AddOn

HINT: The login data is stored unencrypted in the browser's local storage.

Variable versus Item

In WebIQ 2 terms are used for variable/item. It is important to understand their different meanings.

Variable

The word "variable" has a different meaning in WebIQ than in nearly every other programming language. Variables in WebIQ are simply rules that describe how to create an item. This allows parents to pass on attributes to their children.

Note: To create/update items from variables, the "Update items" button in the "Process Data Manager" of the WebIQ Designer must be pressed.

Item

An item is the object where the value of a "PLC variable" is stored. Additionally, an item has attributes like data type, minimum/maximum value, unit, label, digits, ...

In other words:

- Variable = cake recipe
- Item = cake

In WebIQ, the OpcUA browser function creates a variable for every PLC variable, even if the PLC variable is an array or a structure. Therefore, the difference between variables and elements is difficult to discern. However, since WebIQ supports arrays and structures, these functions may be integrated into the OpcUA import in the future.

In contrast, when you create a WebIQ structure or array variable in the Process Data Manager, all members are linked to the parent element. As a result, they inherit its properties. For example, if you change the update interval of the parent variable, all children will inherit this change, by default.