

WebIQ V2.11 HMI based on Linux Ubuntu Core 20

WebIQ HMI consists of different components:

- **WebIQ Server (arm64):** The runtime app for installation on ctrlX CORE.
- **WebIQ Server (amd64):** The runtime app for installation on ctrlX CORE ^{Virtual}.
- **WebIQ Designer:** The engineering software for developing web HMIs that must be installed on your engineering PC.



WebIQ V2.11 Compatibility

ctrlX Version 1.10 based on Linux Ubuntu Core 18

- ☐ WebIQ 2.11 can be used with Ubuntu core 18 compatibility app

ctrlX Version 1.12 based on Linux Ubuntu Core 20 (ctrlX release Version)

- ☐ WebIQ 2.11 can be used without restriction

ctrlX Version 1.14 based on Linux Ubuntu Core 20 (ctrlX prototype version)

- ☐ WebIQ 2.11 can be used without restriction

Prerequisites for using the WebIQ Designer

The WebIQ Designer is always bound to a WebIQ Server (HMI Runtime).

When the Designer setup is executed, both software components (Designer and Server) are installed on the Windows PC and are connected with each other by default.

If you want to connect the Designer to a WebIQ Server on the ctrlX CORE or ctrlX CORE^{virtual}, you must adjust the properties of the Designer desktop icon (see below).

It is recommended to create a WebIQ Designer desktop Icon for each WebIQ Server running on the Windows PC, on the ctrlX CORE or on the ctrlX CORE^{virtual}

You can create the shortcuts manually or you can use the VB-Script program "NewWebIQ-Designer-shortcut.vbs" to generate the shortcuts automatically.

Prerequisites for using the WebIQ Designer License

WebIQ Designer software requires a license to work properly. The WebIQ license on ctrlX CORE supports both, designing the WebIQ application and running it. However, the ctrlX CORE-based Designer licensing requires an online connection to the ctrlX CORE controller and some settings need to be made.

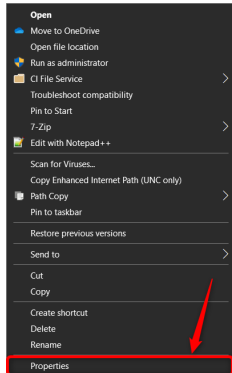
If you want to edit your project offline on the PC, the Designer license on the ctrlX CORE cannot be used. A separate Designer license is required for this.

The license can be purchased from Smart HMI directly (contact: BRINKS@SMART-HMI.DE for ordering or request a 30-day trial license).

Bosch Rexroth will offer PC-based WebIQ licenses from July/August 2022.

Create WebIQ Designer shortcut for communication with ctrlX CORE

To connect the Designer to ctrlX CORE and use the activated WebIQ license, please right-click the WebIQ Designer shortcut on your desktop and click Properties.

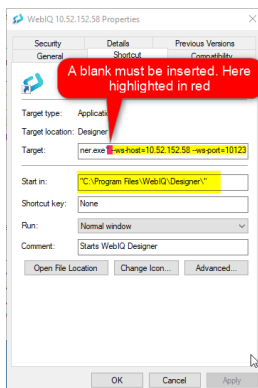


Then perform the following configuration in “Target” field:

- Add the string “*--ws-host=xxx.xxx.xxx.xxx*” (where xxx.xxx.xxx.xxx is your ctrlX CORE IP address)
 - Add the string “*--ws-port=10123*” (10123 is the default port address of the WebIQ Server)
 - Add the string “*--user-data=webiq-designerctrlx*” (where “webiq-designerctrlx” is the workspace name located in folder %AppData%)
- ➔ Ensure that there is a blank between each entry

Example for Designer property:

“C:\Program Files\WebIQ\Designer\webiq-designer.exe” --ws-host=192.168.1.1 --ws-port=10123 --user-data=webiq-designerCtrlx



Check if the path settings (“Start in” field) corresponds to the Designer software path in your computer. (Hint: with WebIQ versions older than V2.11 the “Start in” field was empty)

Note:

If you use the Designer on a PC with different WebIQ Servers (Windows PC, ctrlX CORE^{Virtual}, ctrlX CORE), you should set different workspaces in the properties (*--user-data=webiq-designerCtrlx*). This prevents the designer's workspace from being accidentally overwritten.

Create WebIQ Designer shortcut for communication with ctrlX CORE^{virtual} *1

The ctrlX CORE^{virtual} allows the WebIQ Designer to be used for 4 hours with a maximum of 30 process tags. To connect the Designer to the ctrlX CORE^{virtual} on the same Windows PC, the following has to be considered:

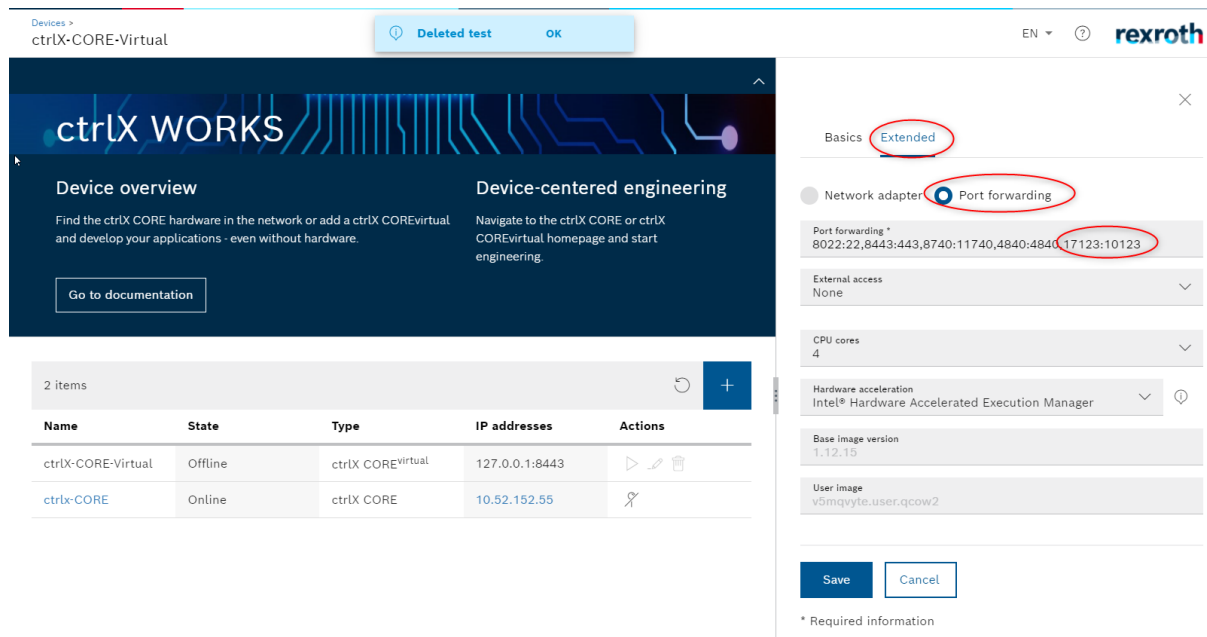
As mentioned above, when installing the Designer software on the Windows PC, a WebIQ Server is also installed. This Server uses the same network address (Local Host=127.0.0.1) and port address (10123) as the WebIQ Server on the ctrlX CORE^{virtual}.

To enable the Designer to communicate with the Server of the ctrlX CORE^{virtual}, the port address must be changed in the properties of the Designer desktop icon. Please use a free Port address of your Windows PC (e.g. 17123).

The properties of the Designer icon for communication with the ctrlX CORE^{virtual} can then look like this:

"C:\Program Files\WebIQ\Designer\webiq-designer.exe" --ws-host=127.0.0.1 --ws-port=17123 --user-data=webiq-designerctrlxvirtual

To enable the communication between the WebIQ Designer (with the newly set port address) and the WebIQ Server on the CORE^{virtual}, "port forwarding" must be activated in the ctrlX CORE^{virtual} and the two port addresses must be entered (mapped) e.g. 17123:10123 (*port host PC:port virtual control*)



The screenshot shows the 'ctrlX WORKS' interface. On the left, the 'Device overview' table lists two devices: 'ctrlX CORE-Virtual' (Offline) and 'ctrlX CORE' (Online). The 'ctrlX CORE-Virtual' device is selected, and its properties are shown on the right. The 'Extended' tab is active, and the 'Port forwarding' option is selected. The port mapping '17123:10123' is entered in the 'Port forwarding *' field. The 'Save' button is visible at the bottom of the settings panel.

Name	State	Type	IP addresses	Actions
ctrlX CORE-Virtual	Offline	ctrlX CORE ^{virtual}	127.0.0.1:8443	[Play] [Edit] [Delete]
ctrlX CORE	Online	ctrlX CORE	10.52.152.55	[Link]

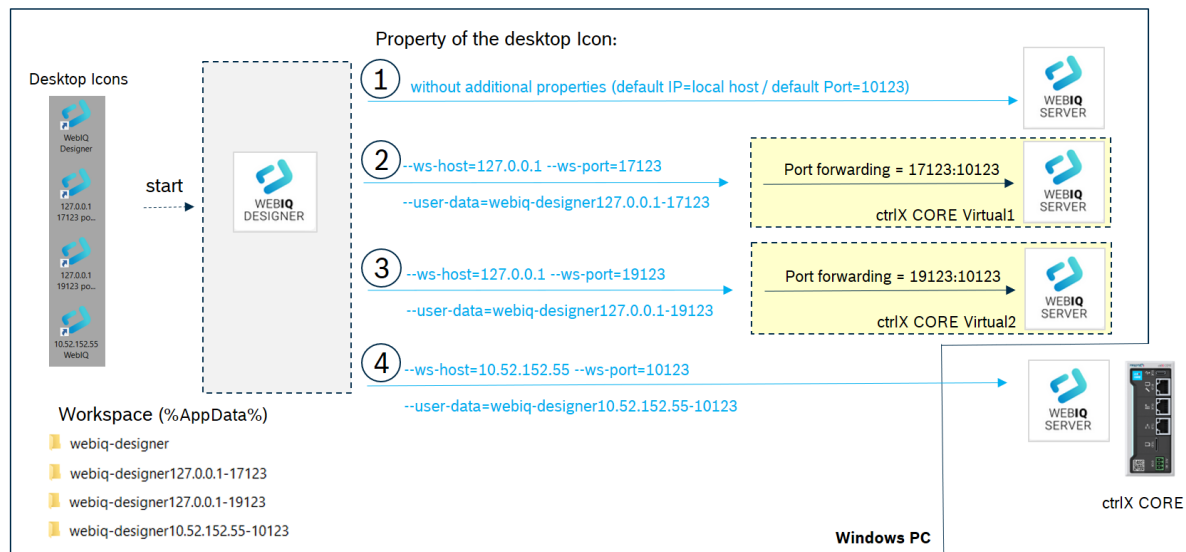
*1 There is currently a known issue with port forwarding in ctrlX CORE^{virtual}. Until the problem is solved, the ctrlX CORE^{virtual} is not usable with WebIQ.

Examples for WebIQ Designer shortcuts

Property settings depending on WebIQ Server installation:

1. WebIQ Server installed with the WebIQ Designer (same Windows PC)
2. WebIQ Server installed on ctrlX CORE^{virtual} (selected Port number 17123)
3. WebIQ Server installed on ctrlX CORE^{virtual} (selected Port number 19123)
4. WebIQ Server installed on ctrlX CORE (IP address: 10.52.152.55 Port = 10123 default)

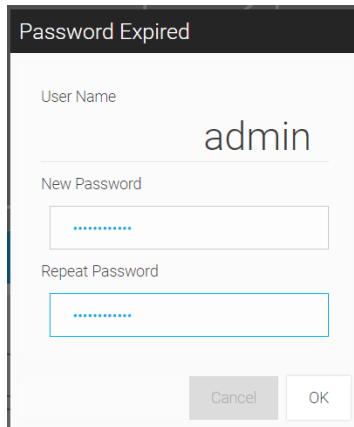
Overview WebIQ Designer property settings



The desktop Icons were generated automatically via VB script: "NewWebIQ-Designer-shortcut.vbs"

First connection to the WebIQ Server

The first time the user connects to WebIQ Server app on ctrlX CORE via WebIQ Designer, the user must enter the default password “boschrexroth”, and then is asked to set a new password:



Password Expired

User Name

admin

New Password

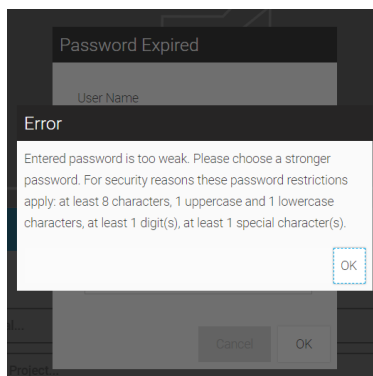
.....

Repeat Password

.....

Cancel OK

The new password must follow some requirements:



Password Expired

User Name

Error

Entered password is too weak. Please choose a stronger password. For security reasons these password restrictions apply: at least 8 characters, 1 uppercase and 1 lowercase characters, at least 1 digit(s), at least 1 special character(s).

OK

Cancel OK

NOTE: The shown requirements are only valid when connecting to the WebIQ Server app on ctrlX CORE.

NOTE: When you forget this password, you must uninstall and reinstall the app, which means that the default password is back again. But keep in mind that all WebIQ projects will be removed.