Getting started with the pWeb Panel MB

Version 1.1

PCD7.412DT5F

PCD7.410VT5F

PCD7.457VT5F

Content

Project history

Date	Author	Modification
17/04/2012	TPM / DE	Creation of Getting Started document for pWEB Panels

1 Introduction

This document serves as a simple introduction to the use of Programmable Web panels MB panels (PCD7.D4xxV). This document in application with the associated PG5 2.0 project can be used as a guide for the creation of a web-based visualisation of a PCD application.

The information contained in this document is a summary of the corresponding Manuals and online Help and will make your getting started easy. For more information, please refer to the corresponding documents (see section "References").

2 Requirements

2.1 Software

The getting started requires an installed PG5 Suite Version $2.0.238, Firmware version 1.19.24 and Hardware version $A or later. The Saia-Burgess development tool allows to program automations easily.

2.2 Hardware

Programmable Panel types working with getting started project:

12.1"   PCD7.412DT5F
10.4"   PCD7.410VT5F
5.7"   PCD7.457VT5F

The getting started project works with all three types of programmable panels. The web project for the visualisation on the panel is designed in VGA resolution (640x480 pixels). If you use a 12.1" panel with SVGA resolution (800x600 pixels) only 2/3 of the display will be used. This doesn't matter for showing the basic functions but if you start an own project on a 12.1" panel you have to work with the correct resolution.
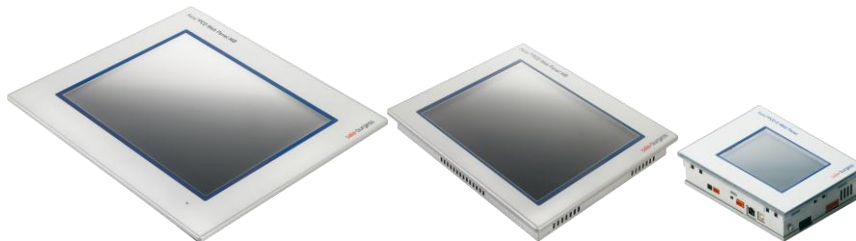

Figure 2.1: PCD7.412DT5F   PCD7.410VT5F   PCD7.457VT5F

The maximum numbers of cycles per second is 10 cycles / sec.

IOs working with the getting started project:

Smart RIO   PCD3.T666
Workshop   PCD3.S100

The demo project uses a Smart RIO Saia PCD3.T666 with a PCD3.S100 workshop module to simulate some IO with simple LED's. The web project works as well without the Smart RIO, you will just have no IO visualisation. If you use another module you have to change that in the hardware configuration.
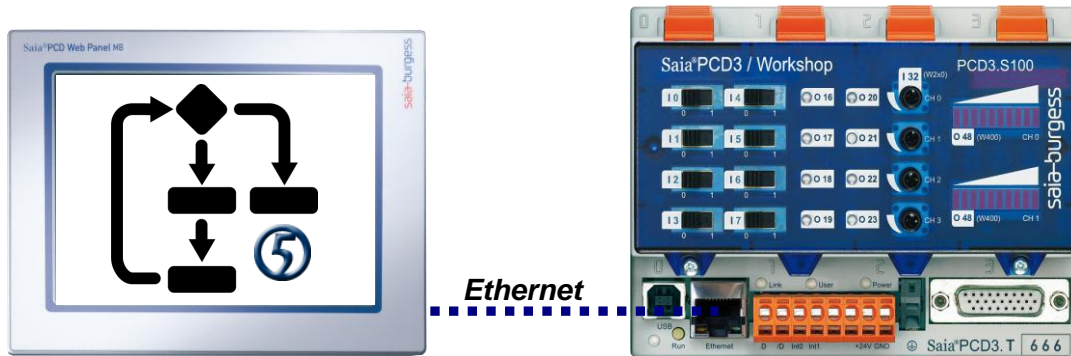
Figure 2.2: Smart RIO with workshop module

3 Saia Project Manager

After you unzipped the getting started package, you can open the PG5 project file *Panel_D412DT5F.saia5pj* by selecting it in your windows explorer. PG5 should start automatically and show a project tree as in **Fehler! Verweisquelle konnte nicht gefunden werden.**. The project tree shows all files linked to your actual project. The files you usually use to make your program are in the Program Files folder.
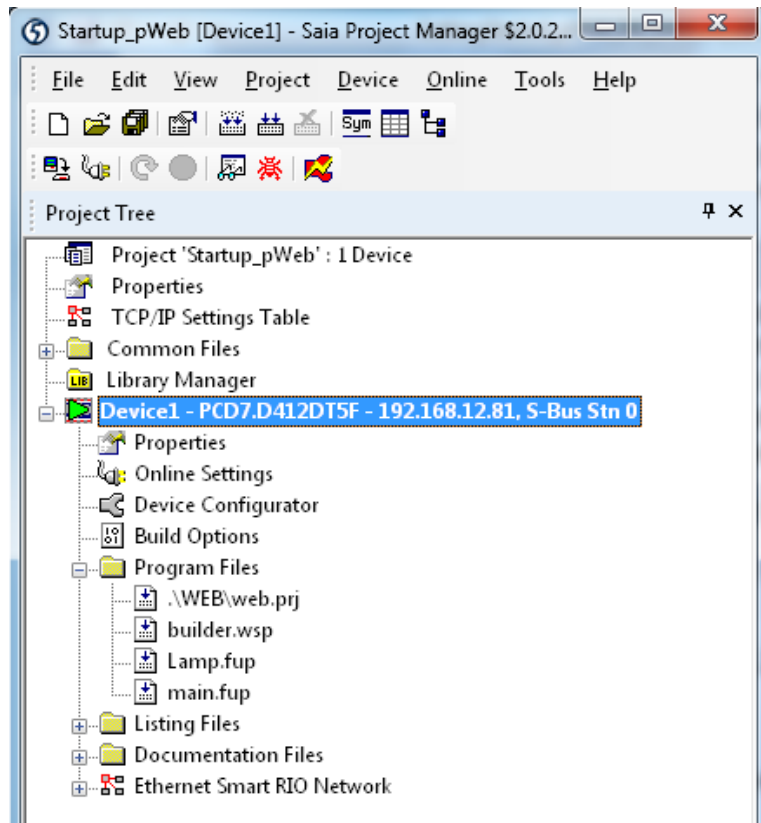

Figure 3.1: PG5 project tree

3.1 Program Files

The Program Files folder contains three files in our project. To give you an idea how a typical PG5 project works, the file types are described in the following sections.

3.1.1 Web Project File *.prj

The web project file contains the visualization data which is shown at your touch panel. By double clicking on the file and a new window with the Saia-Web Editor will appear.
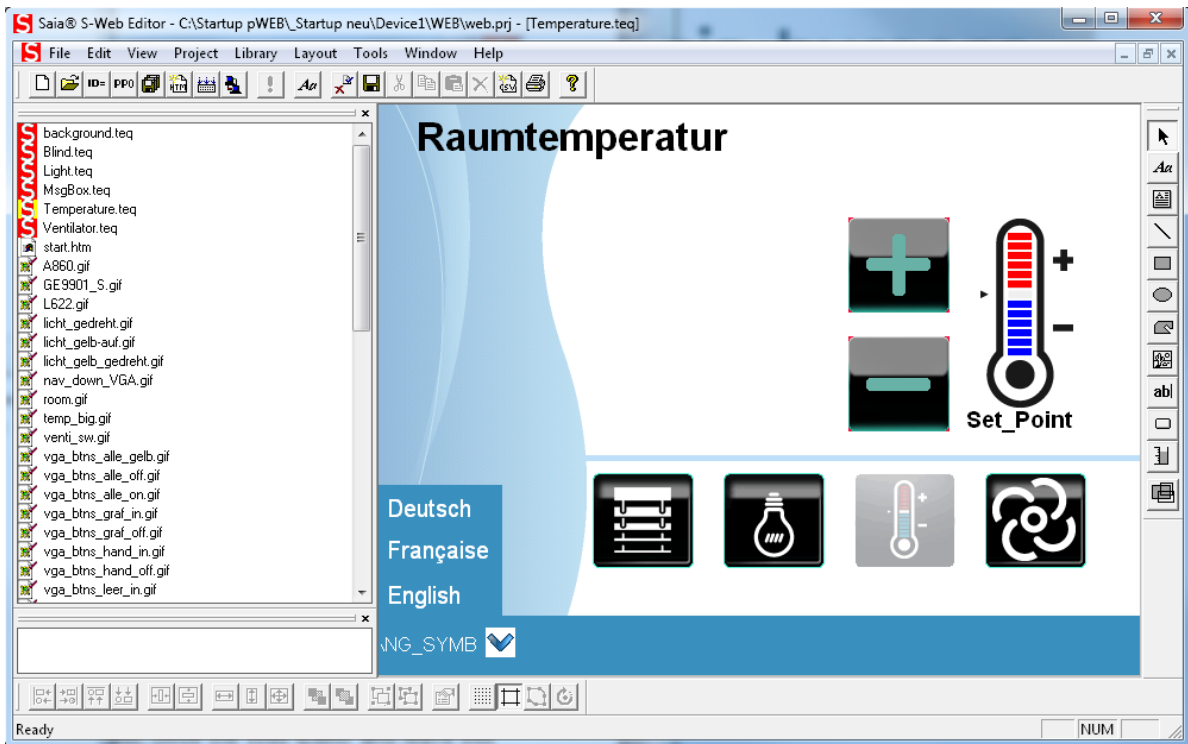
Figure 3.2: Saia-Web Editor with getting started project

With this tool you are able to change the current Web Project or create a new project. For further information concerning the Saia Web Editor refer to the Web Editor Manual. For testing the getting started project, close the Web Editor and leave this file unchanged.

3.1.2 Builder File *.wsp

The builder file contains all information to link your program of the logic controller to the Web Project. Make sure that all files of your web project are included in your WEB Server Content. You can generate the *wsp file by pressing the Generate button.

> After you made changes on your Web Project, you have to generate the *.wsp file again before you make a new Built.
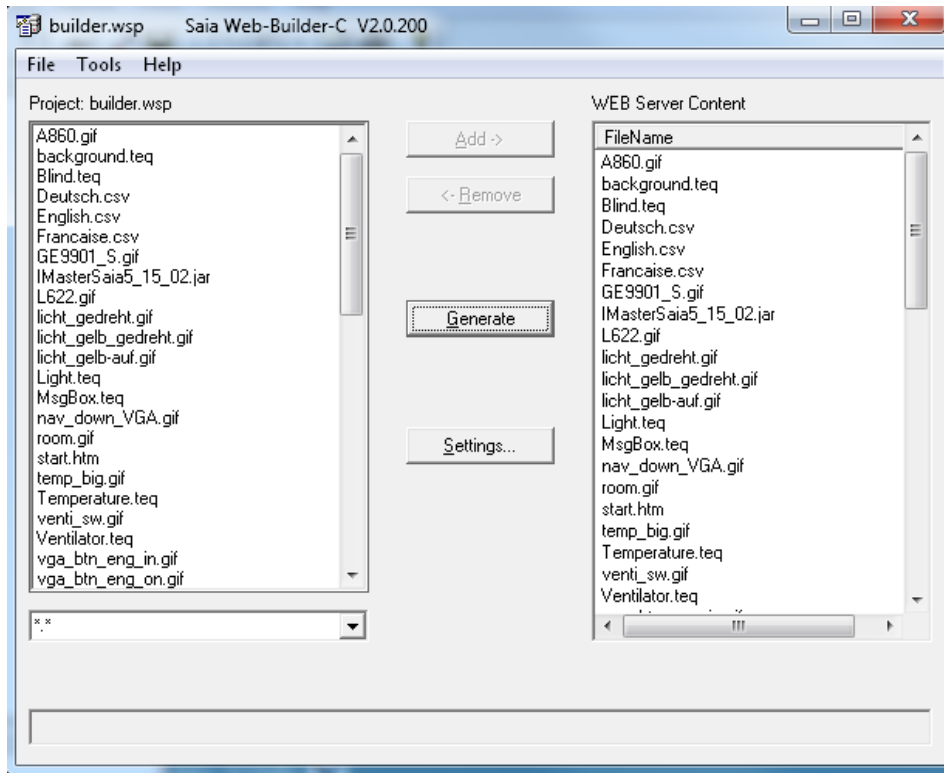
Figure 3.3: Saia Web-Builder

3.1.3 Fupla File *.fup

The *.fup file contains your program on the logic controller. By double clicking on lamps.fup the file will be opened in the Fupla editor. The Fupla file contains the program for the logic controller. The example contains just a simple blink light, which can be switched on and off. If you want to use the variables in the Web project for the visualisation, they have to be public in the symbol editor.
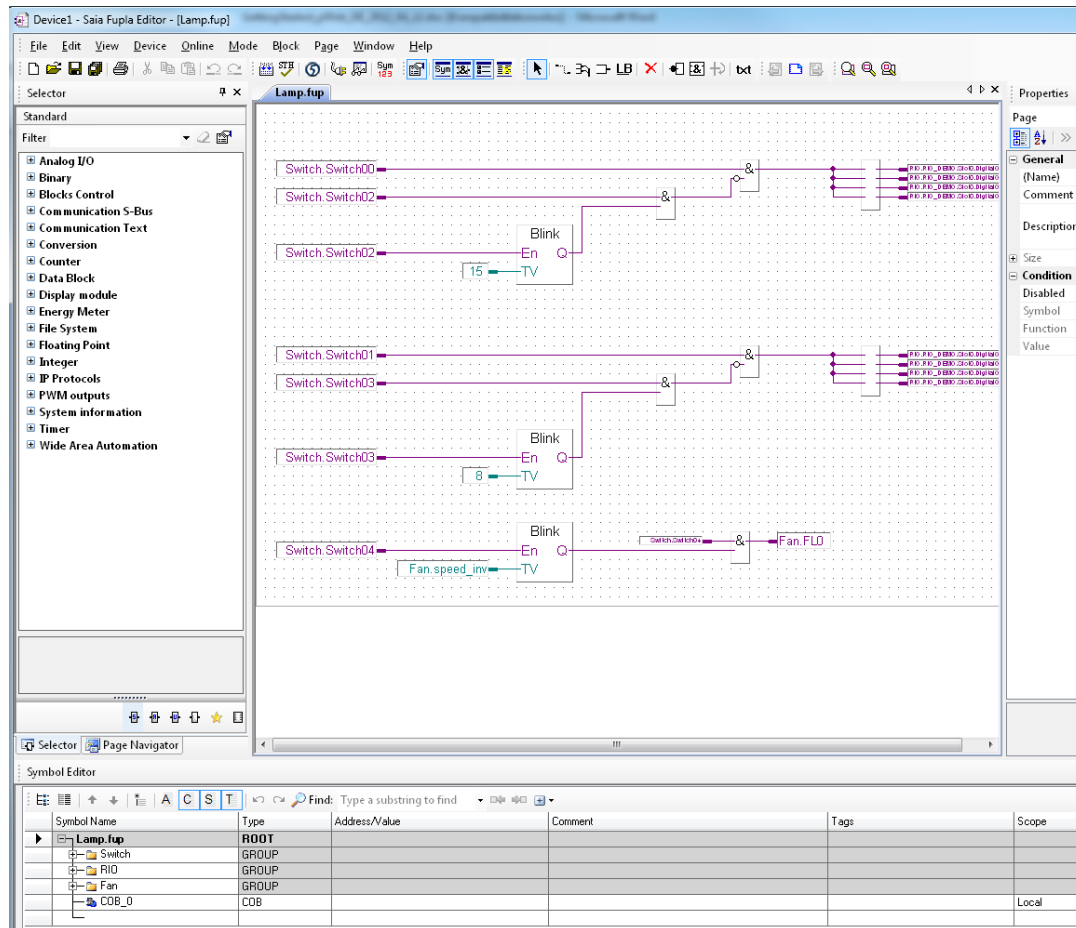
Figure 3.4: Fupla Editor

4 Get your demo file running

4.1 Configuration of the pWeb panel

Connect your pWeb panel to a 24 V power supply. By pressing 5 sec on the display you can open the Setup menu. Open **Web connection** and fill in the following data.

Type: HttpDirect

Start Page: Start.html

Remote host IP: 127.0.0.1

Remote Port: 80

After you finished that close the setup menu (**back to application**) and save the settings.

4.2 Hardware Configuration

To load your project you have to select your panel in the hardware configuration first. The standard pWeb panel used in the getting started Project is the 10" Panel. If you use this panel, there's no need to change the configuration. If you use another one, open the Device Configurator in the Project Tree.
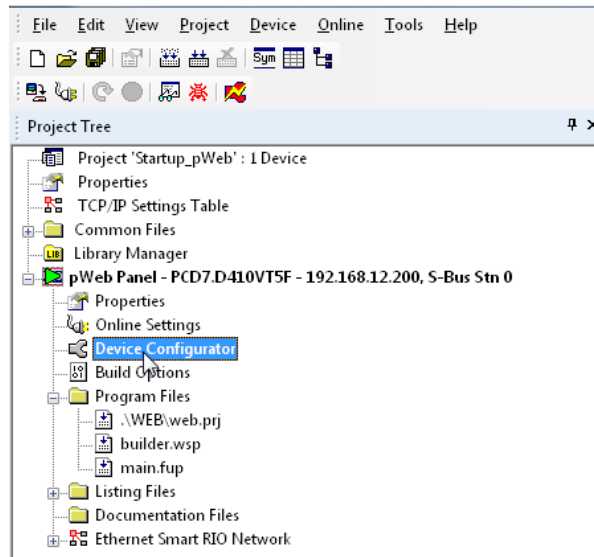
Figure 4.1: Open Device Configurator

Double click the Device Type to open the Device Selector.
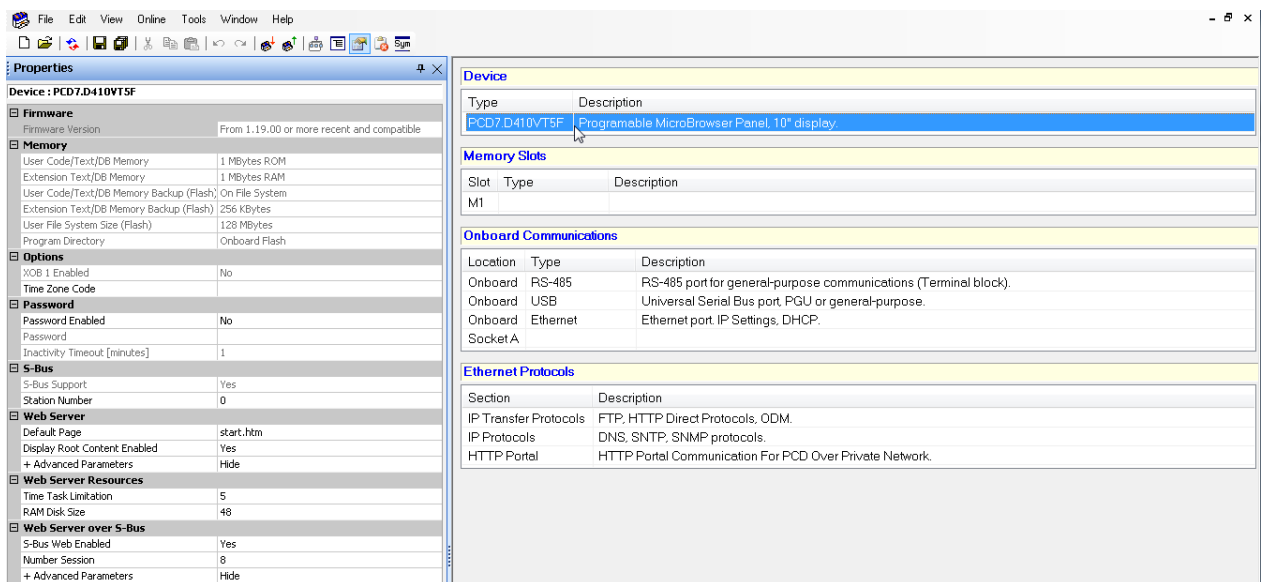
Figure 4.2: Device Configurator
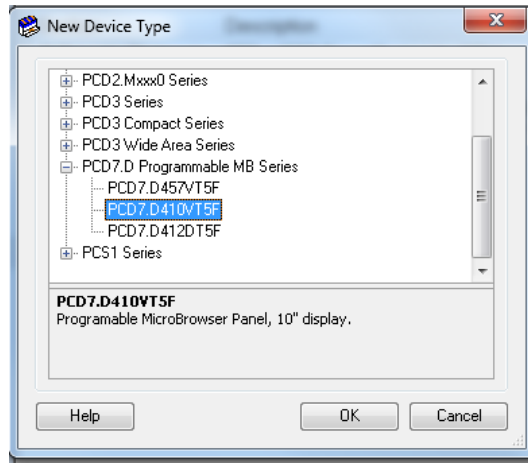
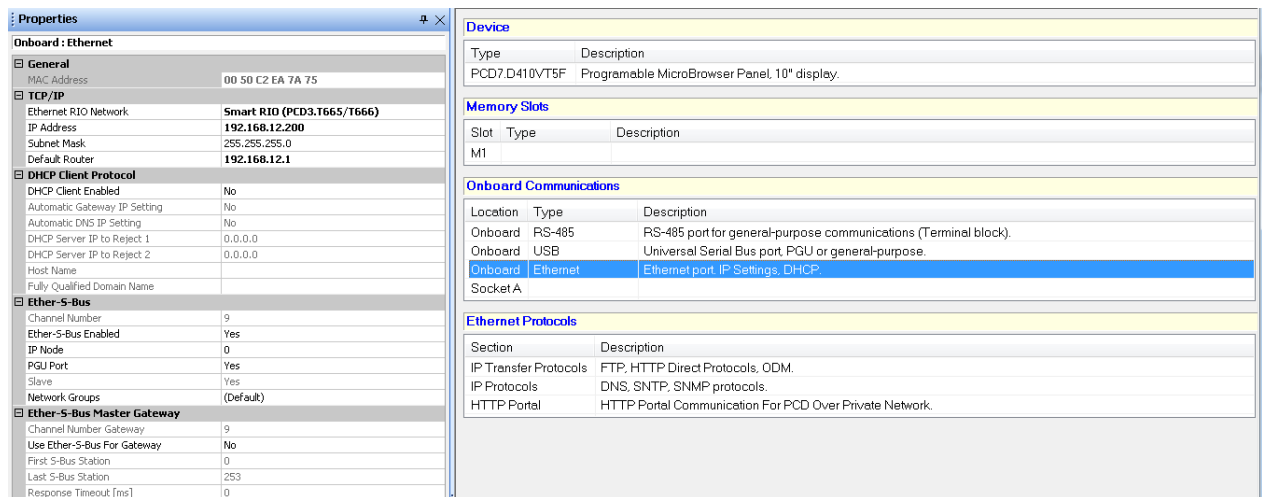Select the device you are using currently and press ok.

Figure 4.3: New Device Type

If you use a Smart RIO or want to connect the panel to your computer via Ethernet, you can configure the Ethernet configuration in the Device Configurator as well. The settings will appear in the properties window after selecting the Onboard Ethernet Communication.

As last step you have to download the configuration to your pWeb panel with the download button.
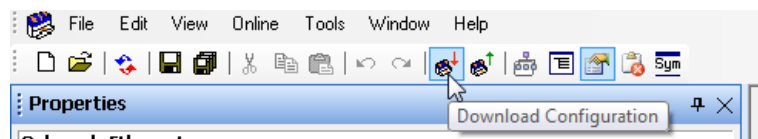

Figure 4.4: Download configuration

4.3 Online Settings

To start your demo file open it with the Saia PG5. Connect the pWeb panel via USB to your computer. Click on the menu **Online** and **Online Settings**
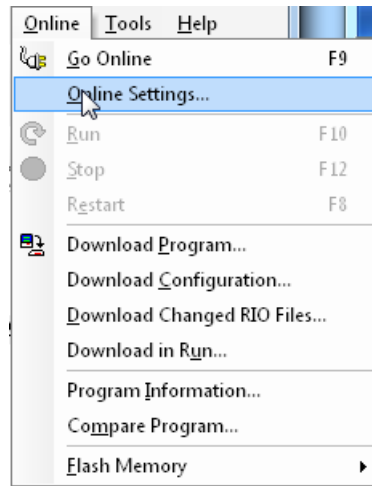
Figure 4.5: Menu Online
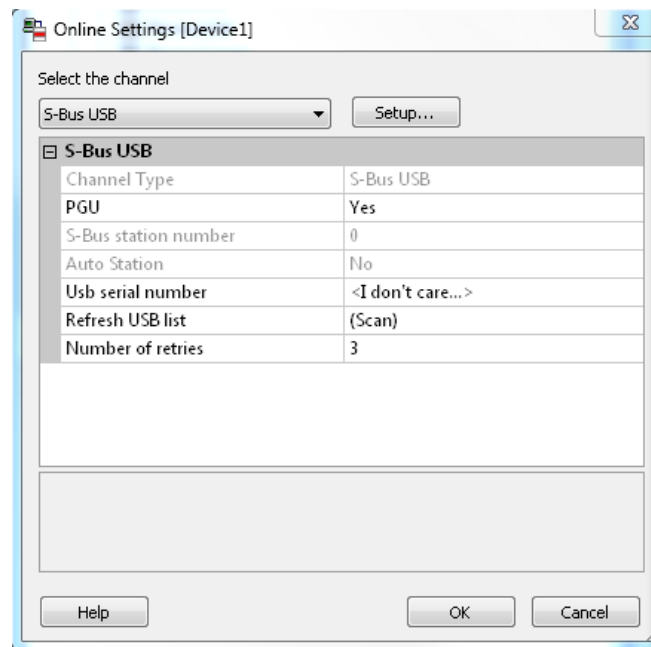
Change the setting like you can see below.

Figure 4.6: Online Settings

Save the changes by clicking OK.

4.4 RIO Settings

If you have an RIO, connect it with an Ethernet patch cable to your Web Panel. To configure it, please refer to the Smart RIO Manual Chapter 3 and 5. The getting started project will work as well without RIO. The outputs just will not work.

4.5 Create build File

To connect the web project with the controller program open the builder.wsp file by double clicking on it. Make sure that all files of the builder.wsp file are included in the Web Server content. Press **Generate** to build the file and close the Web-Builder.
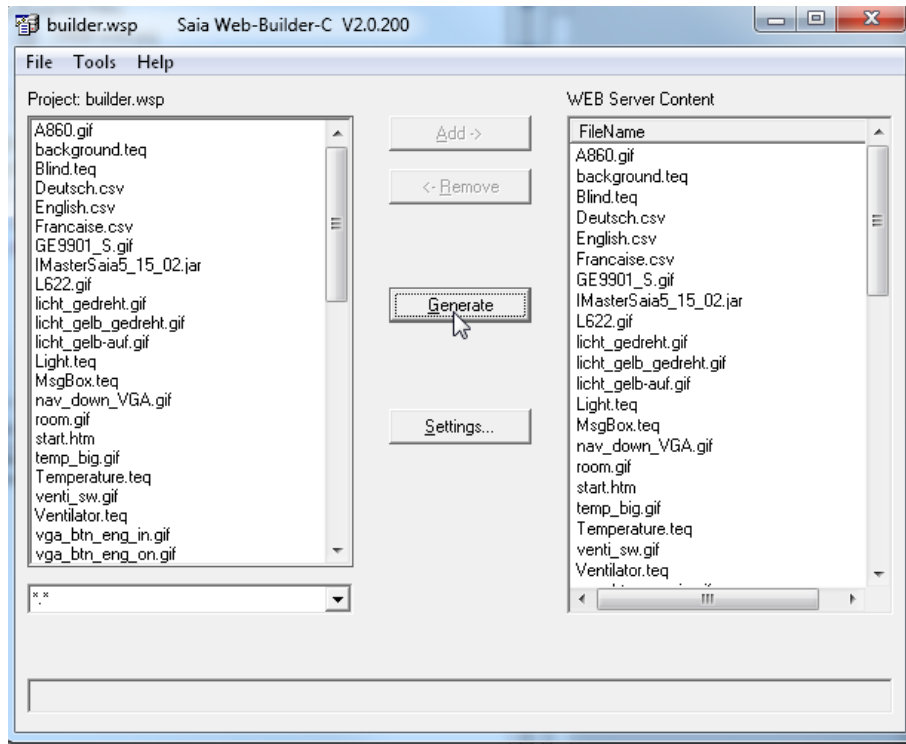
Figure 4.7: Saia Web-Builder-C

If the Ethernet ports are not used, there is no need to configure an IP address.

4.6 Built the project and download it to the pWeb Panel.

To download your program to your panel, go to the menu **Online** and click **Download Program**.
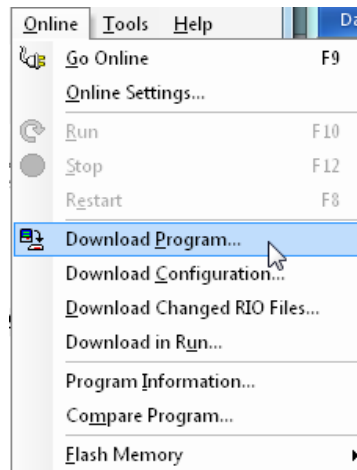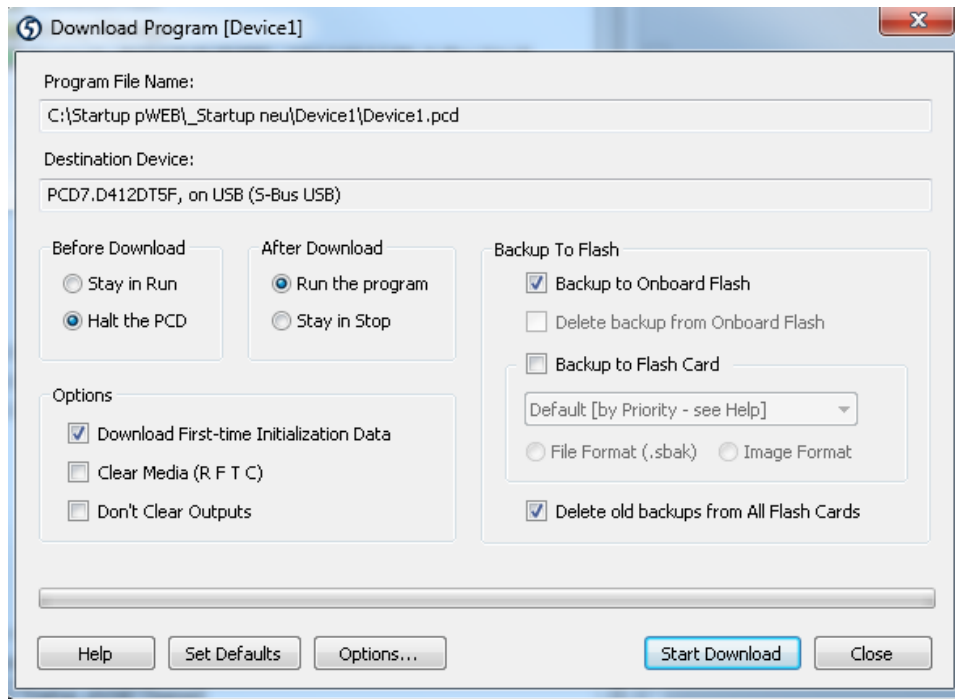

Figure 4.8: Menu Online

Before you download the program change the settings like you can see below. After that you can initialise the download with **Start Download.**
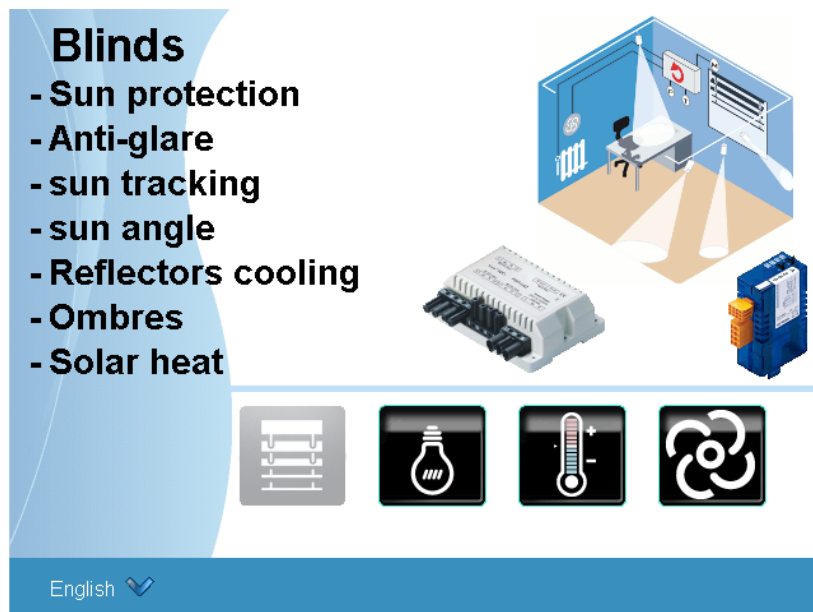
Figure 4.9: Download program

After you downloaded the program you have to restart the pWeb Panel to make the changes on the Web project visible. You can either do this by switching power off and on or in the Setup Menu of the panel.

To open the setup menu press 5 sec on the touch screen. Then System → Reboot → Reboot

4.7 Demo Project

4.7.1 Blinds

Figure 4.10: Blinds menu

The blind menu has in this application just the function of showing what can be possible.
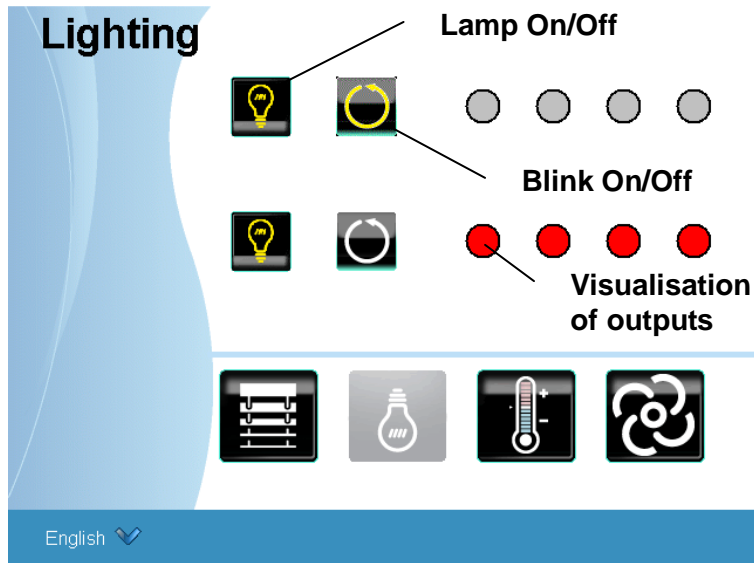
Figure 4.11: Lighting menu

In the Lighting menu are two functions available. You can either switch a lamp on and off or let it blink. The lamps are visualised on the web page as well as on the RIO Demo.
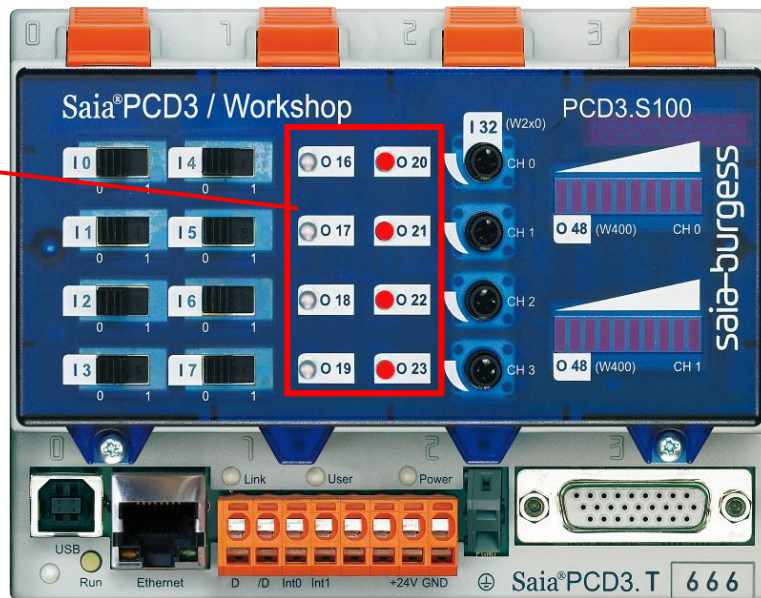

Figure 4.12: Workshop RIO with outputs
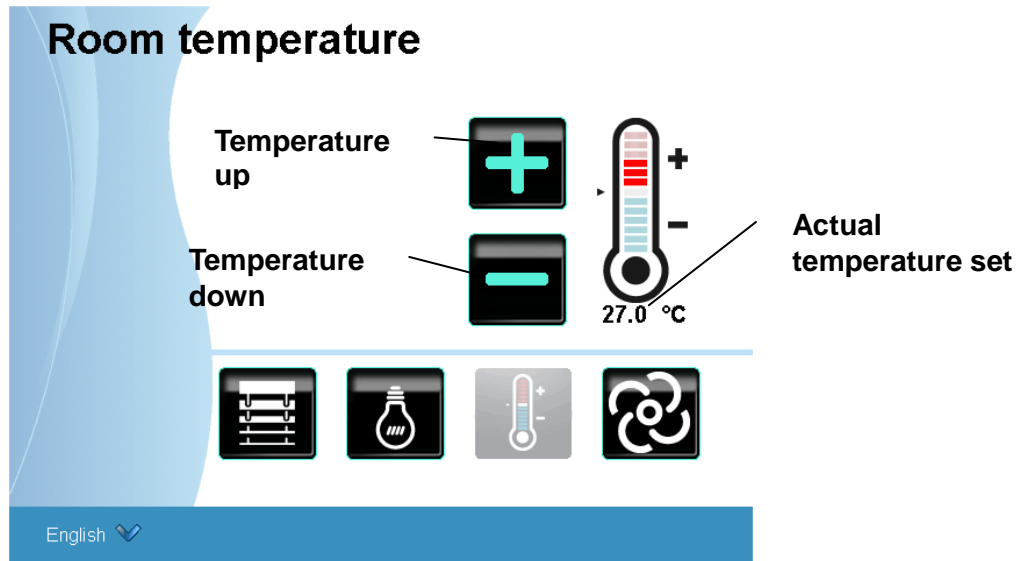
4.7.2 Room temperature

Figure 4.13: Room temperature menu

The Room temperature menu shows the possibility to visualise a room temperature control. You can control the temperature with the + and – buttons. The temperature will also be shown at O48 of the RIO.
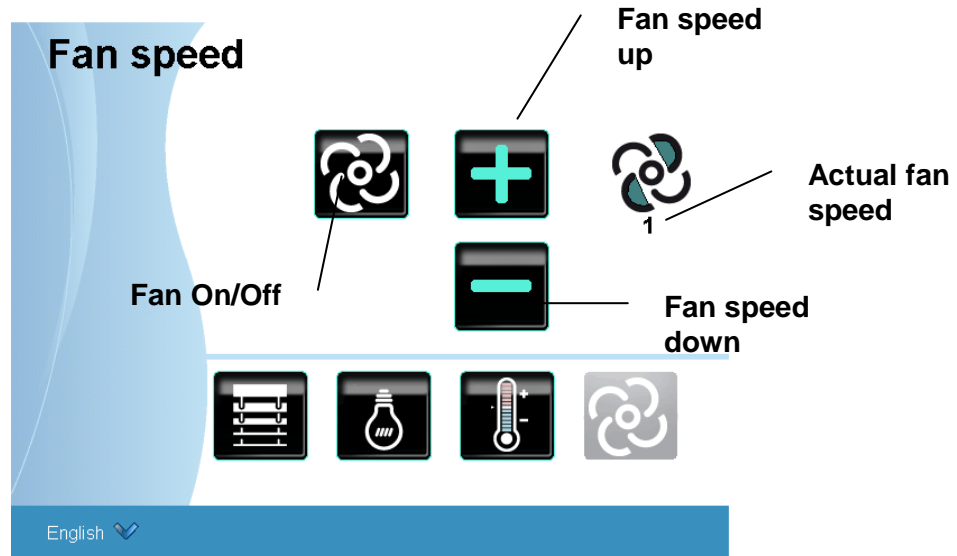
4.7.3 Fan speed

Figure 4.14: Fan speed menu

The fan speed menu shows how you could visualise the fan speed of air ventilation. You can control the speed with the + and – buttons and switch it off with the fan button. The fan speed will also be shown at O48 of the RIO.

saia-burgess

Control Systems and Components

5 References

Topic	Document	No.
S-Web system	Flyer Saia® Web Panels with Micro-Browser Technology	26/435 E7
Smart RIO	Manual Smart-RIO PCD3.T665	26/892 E2
MB panel configuration	Manual PCD7.D4xx	26/851 E2
S-Web-Editor	Technical Information Saia® S-Web-Editor	26/453 E2
WebConnect	Manual Saia®.Net & Web-Connect	26/800 E3
Macros	Online Help – Saia® S-Web-Editor	-
Diverse	Saia® FAQ Manager www.sbc-support.ch/faq	-