ECpv2

Quick Start Guide

Document change log

2022-06-28	First version

Introduction

All configuration and real time monitoring of the ECpv2 is done by connecting with a standard web browser to its built-in webserver (ECweb). The ECweb can run on any device featuring a web browser. Use for instance a panel PC as a local HMI on site. A laptop or portable device which will give you monitoring and control capabilities even from remote if connectivity to the ECpv2 is in place.

Note that it is not mandatory for the control and balancing of the PV, genset and Mains part to work to have HMI or laptop connected to ECweb. It is required for commissioning of the ECpv2 only.

This document explains how to establish a connection to the ECpv2 from your laptop and mobile devices.

Refer to the ECpv2 manual for information on the features provided by the ECpv2.

ECweb

ECweb is the built-in webserver of the ECpv2. All configuration and real time monitoring of the ECpv2 is done via ECweb. Connection to ECweb is done with a standard web browser

Using a laptop/PC and either the Internet Explorer browser or the Pale Moon browser running on Java is the best option for connecting to ECweb. Other browsers and mobile devices can be used as well.

Connecting to ECweb with Internet Explorer or Pale Moon browser on PC/laptop

Java from oracle must be installed on PC/laptop. Java can be downloaded from the link below. Note that either the Internet Explorer or the Pale Moon browser must be used for the download.
[Java download]

1: Type in IP address of the ECpv2 in the browser command line.
Default IP address is:
192.168.1.101.

2: Type in login credentials when prompted.
Default login credentials are:
user: web_user0
password: web_password0

3: Accept/Ignore all warnings populated.

4: If tiles on the front page are out of order, click on the page and they will fall into place. If any Icons are missing on the tiles, restart the browser and start over.

Connecting to ECweb using any other browser or mobile device

For all other browsers on PC/laptop or from any browser on mobile devices.

1: Type in IP address/webvisu.html in the browser command line.
Default IP address is:
192.168.1.101.

2: Type in login credentials when prompted.
Default login credentials are:
user: web_user0
password: web_password0

Troubleshooting

If connection can't be established verify that:

1. ECpv2 is powered up and running. ECpv2 must have 24VDC (+/- 15%) supply voltage. The green Power and the green Run LEDs in the front of the ECpv2 must both be illuminated. Note that a two low supply voltage can result in a situation where sufficient voltage is present to power up the ECpv2 but not to run the program. In this case the Power LED is illuminated but the Run LED. When powering up the ECpv2 the Power LED will light up first and the Run LED will come approximately 30s after when ECpv2 is initialized and the program is up and running.
2. Your laptop must be on the same subnet as the ECpv2. Even though you have an ethernet cable going directly from your laptop to the ECpv2 you still need to make sure that your laptop is provided with a suitable IP address. In the case where the default IP address of the ECpv2 192.168.1.101 is kept a suitable IP address for your laptop would be 192.168.1.x, where x is a number in the range [2;249] excluding "101" as this is used by the ECpv2 itself.
3. Once the IP of your laptop is in place you must be able to ping the ECpv2. This can be done by opening a command prompt and writing the command "ping xxx.yyy.zzz.www" where xxx.yyy.zzz.www is the IP address of the ECpv2 as shown below. First when the ECpv2 replies to the command it is verified that your laptop and the ECpv2 can see each other on the network and you can connect to ECweb using the browser as described above.

```
C:\Users\Claus>ping 192.168.1.101

Pinging 192.168.1.101 with 32 bytes of data:
Reply from 192.168.1.101: bytes=32 time=15ms TTL=255
Reply from 192.168.1.101: bytes=32 time=25ms TTL=255
Reply from 192.168.1.101: bytes=32 time=1ms TTL=255
Reply from 192.168.1.101: bytes=32 time=11ms TTL=255

Ping statistics for 192.168.1.101:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 25ms, Average = 13ms
```

Connection to ECweb established

First page to be displayed after an initial welcome page when connection is established is the front page of ECweb.
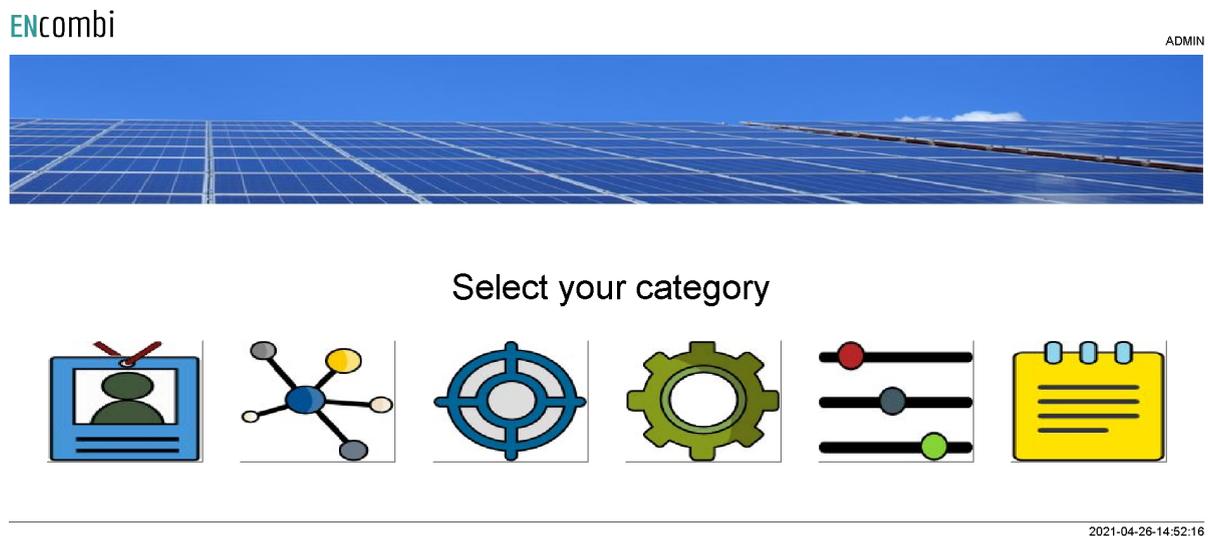
Whenever navigating around the ECweb you can always return to this page by clicking the ENcombi logo in the upper left corner.

In the upper right corner you can see the current access login level. Find more information about this in the chapter revolving password scheme.

In the lower left corner ECpv2 will display any info and warning messages it wants to communicate to the user. Some messages will clear themselves automatically. Others demand user action to be acknowledged first. In that case a dedicated button with a garbage can symbol will be presented alongside with the messages. Furthermore when changing certain settings etc. a reboot of the ECpv2 is required before the changes take effect. This will be communicated in the message as well and a dedicated button with refresh symbol will be presented alongside with the messages.

In the lower right corner is the internal clock of the ECpv2 displayed.

In the lower center a total of six menu tiles are available. These are from the left:

1. "Identifiers" gives access to overview of SW version installed and extras present in the ECpv2 as well as set up of project details (name, location etc.), password scheme etc.
2. "EClogic" provides the possibility of making project specific logical expressions when required. That could be for linking physical digital inputs applied on power meters to the position of breakers or similar. Also here RRCR can be set up

providing the option of a superior control system to give power references for the ECpv2 to follow.

3. "Monitoring" provides a high level overview of the installation as well as detailed information about each individual inverter and power meter.
4. "Control" gives access to set up of ECpc controller related parameters such as IP configuration, Internal clock handling etc.
5. "Settings" give access to setup of site specific parameters such as number and ratings of genset, grid connections, and inverters, which power meters are used, power and reactive control schemes etc.
6. "Logs" give access to setup of log specific parameters.