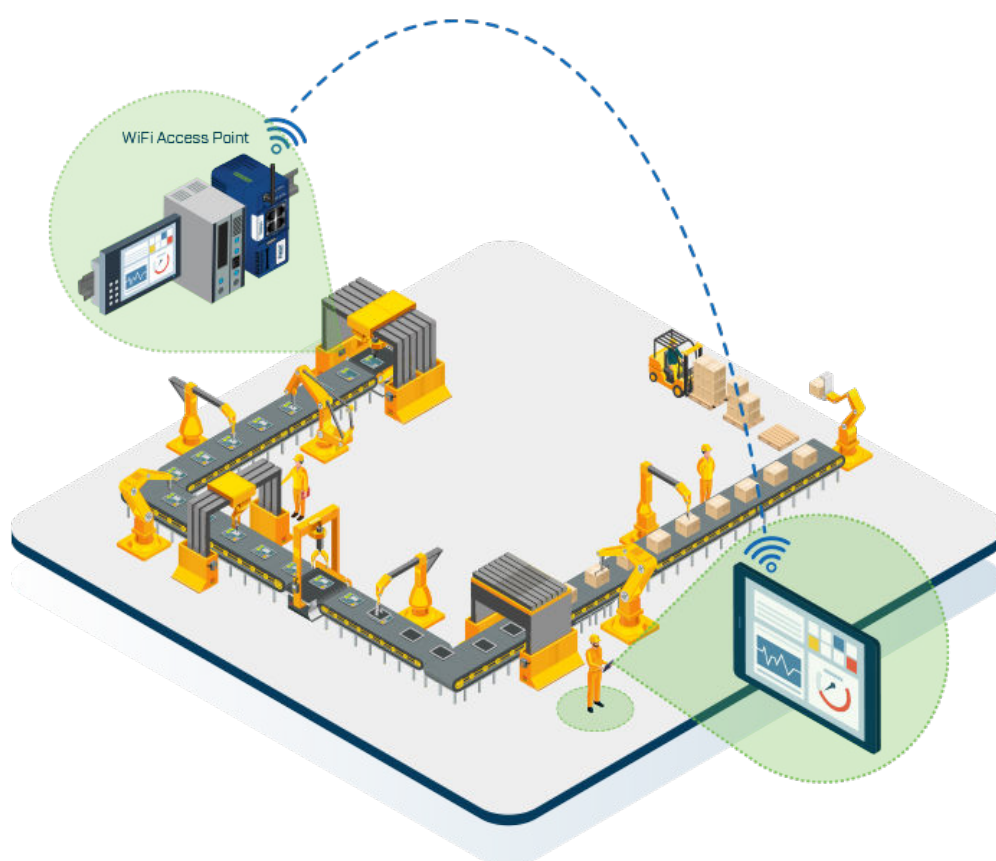


Enable a local WiFi access point on your Ewon[®] Cosy+ device

PRODUCT TYPE: COSY+

SSH-0303-01-EN
Publication date 29/12/2022



Important User Information

Disclaimer

The information in this document is for informational purposes only. Please inform HMS Networks of any inaccuracies or omissions found in this document. HMS Networks disclaims any responsibility or liability for any errors that may appear in this document.

HMS Networks reserves the right to modify its products in line with its policy of continuous product development. The information in this document shall therefore not be construed as a commitment on the part of HMS Networks and is subject to change without notice. HMS Networks makes no commitment to update or keep current the information in this document.

The data, examples and illustrations found in this document are included for illustrative purposes and are only intended to help improve understanding of the functionality and handling of the product. In view of the wide range of possible applications of the product, and because of the many variables and requirements associated with any particular implementation, HMS Networks cannot assume responsibility or liability for actual use based on the data, examples or illustrations included in this document nor for any damages incurred during installation of the product. Those responsible for the use of the product must acquire sufficient knowledge in order to ensure that the product is used correctly in their specific application and that the application meets all performance and safety requirements including any applicable laws, regulations, codes and standards. Further, HMS Networks will under no circumstances assume liability or responsibility for any problems that may arise as a result from the use of undocumented features or functional side effects found outside the documented scope of the product. The effects caused by any direct or indirect use of such aspects of the product are undefined and may include e.g. compatibility issues and stability issues.

Copyright © 2022 HMS Networks

Table of Contents

1. Introduction	1
2. Set up a local WiFi access point on your Ewon® Cosy+	2
2.1. Enable WiFi Access Point and the DHCP Server	2
3. LED behavior	7
4. Limitations	8
5. Configure WiFi Access Point using FTP	9

1. Introduction

In this document you will discover how you can enable a local WiFi Access Point (AP) on your Ewon® Cosy+ in order to extend your LAN machine network.

This feature allows you to create a wireless access to your machine.

You can enable this feature if your Ewon® Cosy+ is connected to Internet using the WAN Ethernet connection. It is not possible to enable the WiFi access point when connected to Internet using WiFi client or 4G connection.

**NOTE**

Note that the access point supports the 2,4 GHz channel only. The 5GHz channel is not supported.

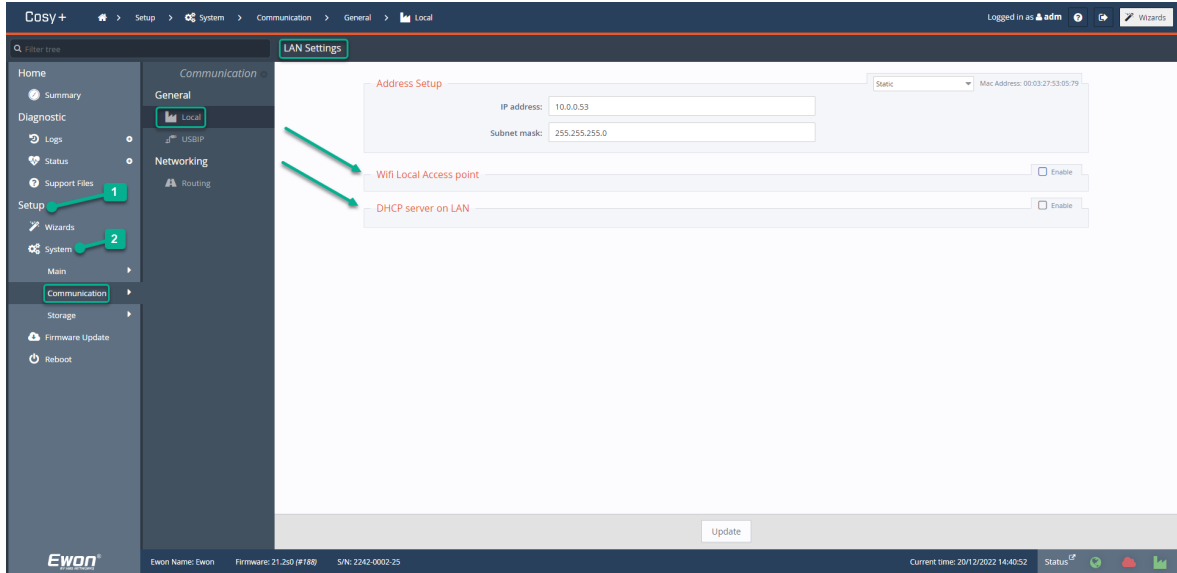
2. Set up a local WiFi access point on your Ewon® Cosy+

2.1. Enable WiFi Access Point and the DHCP Server

Within the Web Configuration Interface, you will first create and enable the WiFi Local Access Point on your Ewon® Cosy+ . Second, you will enable the **DHCP server** on your Ewon® Cosy+ device for the LAN network.

First step: Enable and configure your WiFi Access Point

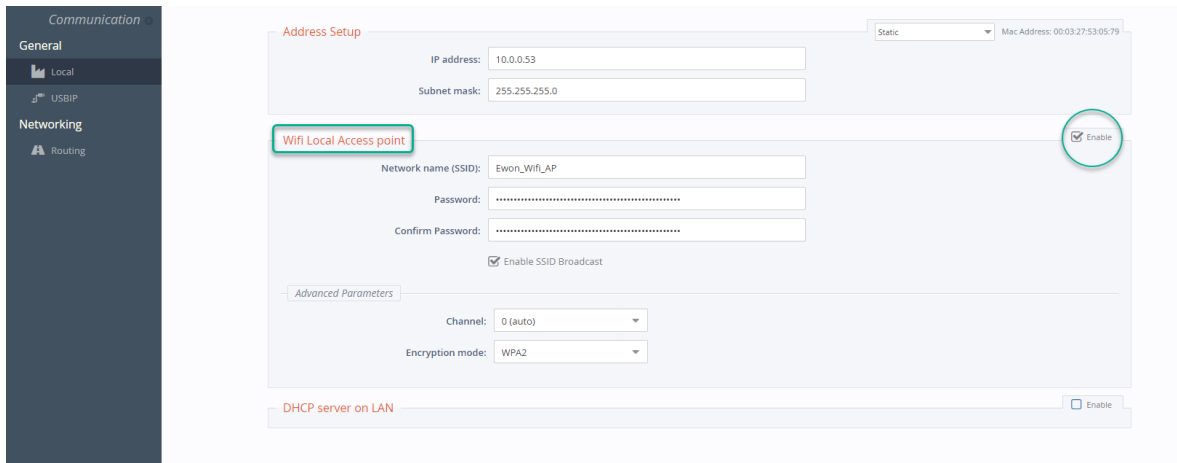
1. Verify your Ewon® Cosy+ is connected and operative.
2. In your browser, access the **Web Configuration Interface** of your Ewon® Cosy+.
3. From the left menu click on **Set up** and then on the subsection **System**.
4. Select **Communication** and click on **Local**



The Adress Setup section indicates the LAN Network information used by the Ewon® Cosy+.

Figure 1. LAN Settings Overview

5. In the tab **WiFi Local Access Point**, at the right, check the box **Enable** to set up this option.



6. Fill in the information as below:
 - a. **Network name (SSID):** Give a name to your WiFi Local Access Point.
 - b. **Password:** Set the password you will need to connect to the WiFi Local Access Point.

NOTICE For security reasons, we recommend you to create a strong password that mixes uppercase and lowercase characters, digits, etc.

- c. **Enable or disable SSID broadcast:** If you wish to display or hide the name of your network for the WiFi clients.

**NOTICE**

If you hide your network SSID, the users will have to type manually the WiFi AP name in the client settings.

7. If needed, in the **Advanced Parameters** you can set up:
 - The **Channel** number of your WiFi network. Keep it on 0 (auto) if you don't know which frequency is the best for your network.
 - The **Encryption Mode** .

**NOTE**

To disable the WiFi Local Access point, uncheck the **Enable** checkbox.

If you wish to attribute IP setting automatically to your WiFi clients, you need to enable the DHCP Server on LAN.

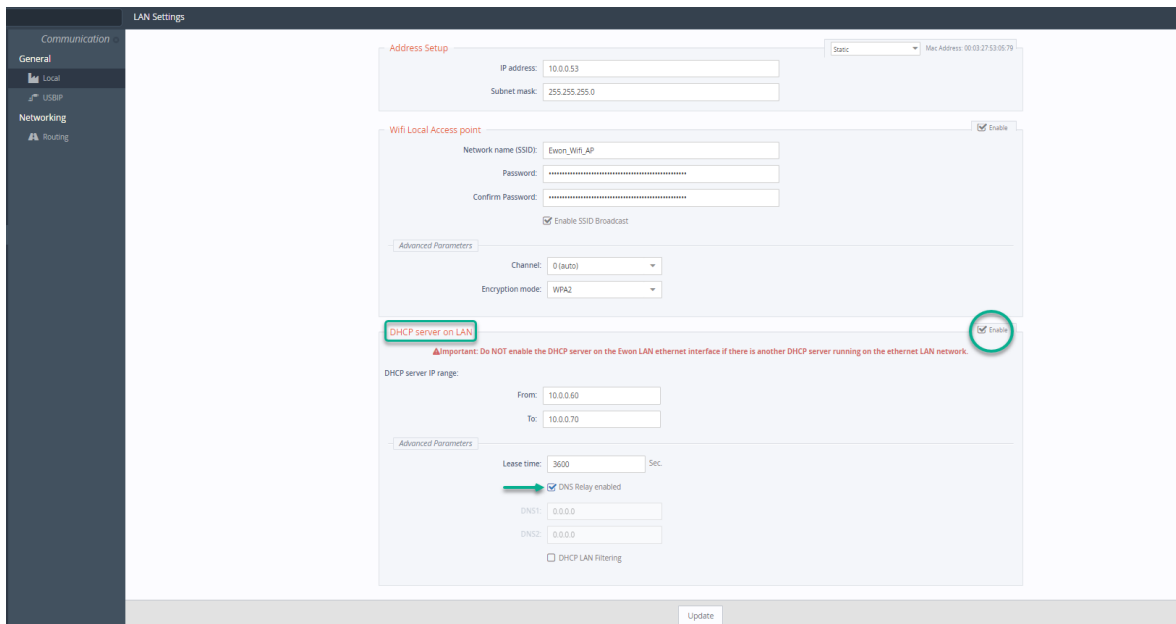
- **Second step:** Enable and configure your DHCP Server

The Dynamic Host Configuration Protocol (DHCP) is a protocol that dynamically assigns an IP address to devices on a network so they can communicate through this IP address.


**NOTICE**

The WiFi AP and the LAN network are bridged. To avoid network conflicts, make sure you do not have any existing DHCP server running on LAN network.

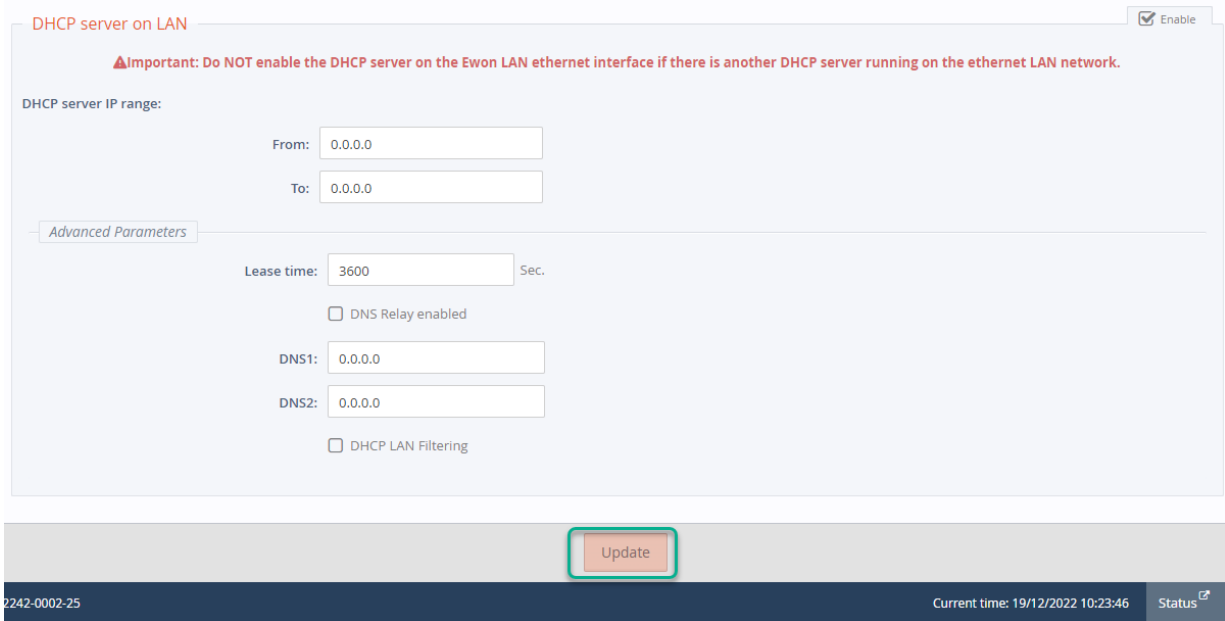
1. Stay in the **LAN Settings** overview.
2. In the tab **DHCP server on LAN** at the right, check the box **Enable** to set up this option.



3. Once enabled, you can fill in the fields based on your LAN information.
 - a. **DHCP server IP range:** range of IPs within your LAN. You must enter a range that excludes your Ewon® Cosy+IP address and any IP address that might be present on the LAN network.
 - b. In the **Advanced Parameters** there is no need to change the information if not required. If required you can set up:
 - **Lease Time:** The amount of time an IP address will be reserved for a specific device.
 - If **DNS Relay Enabled:** forwards LAN DNS queries to the Ewon® Cosy+ DNS server.
 - If **DNS relay disabled:** enter the IP addresses of the DNS servers (DNS1, DNS2).
 - If **DHCP LAN Filtering enabled:** DHCP server will be applied only on devices connected through the access point but not on devices connected on the LAN switch.

 **NOTE**
 The DNS configuration fields are not mandatory if LAN devices also need to connect to internet using the WAN connection of the Ewon® Cosy+

Click on the **Update** button to save your settings.



Once everything is setup correctly and if the SSID was not hidden in the settings, your PC should spot the WiFi AP you created through your Ewon® Cosy+.

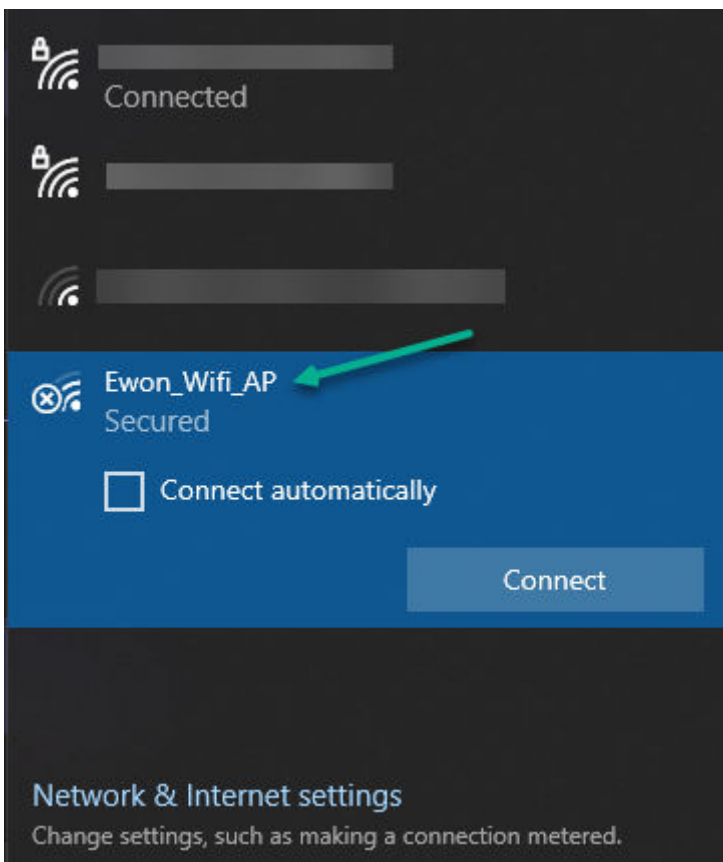
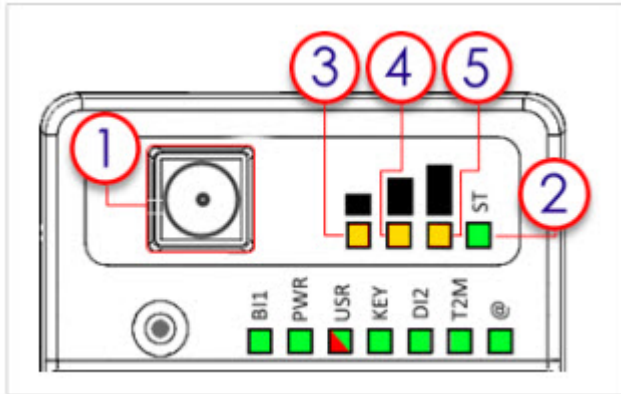


Figure 2. Example from a PC

3. LED behavior

Once the WiFi Local access point of your Ewon® Cosy+ is active, the LED behaviour is the following:

- The **ST LED (2)** is **blinking green slowly**.
- The other LED's (3,4,5) lights are turned off.



4. Limitations

There are some limitations to this feature. You must be aware of the following:


1. This option is only available if your Ewon® Cosy+ is connected to the Internet through its Ethernet WAN connection.

 **NOTICE**
It is **not possible to enable the WiFi access point when connected to Internet using WiFi client or 4G connection**. A warning message will popup in the WiFi Local Access point section:



The screenshot shows the 'LAN Settings' interface. The 'Address Setup' section is visible with fields for IP address (10.0.0.53) and Subnet mask (255.255.255.0). The 'Wifi Local Access point' section is highlighted with a yellow border and contains a red warning message: 'WARNING: Wifi client must be SHUT DOWN before activating the access point.' The 'DHCP server on LAN' section is also visible with an 'Enable' checkbox.

2. By default the WiFi and LAN network of an Ewon® Cosy+ do not have access to Internet. Therefore, it is not an Access Point by default that provides access to Internet.

 **TIP**
If an internet access is required, read our document [SSH-0068-00 - Allow Internet access for Ewon Cosy LAN devices](#) .

Your Ewon® Cosy+ needs to be configured to act as a gateway and allow traffic from its LAN network to its WAN network.

3. There's a **limitation of 3 devices** that can connect to the Ewon® Cosy+ access point.

5. Configure WiFi Access Point using FTP

This section is for advanced use only.

If for some special reasons (mass configuration for example) you do not want to use the Ewon® Cosy+ user interface for the configuration, the settings for the Access Point can also be set using an **FTP access**.

Hereunder are listed the corresponding parameters of the **comcfg.txt** file:

APEnabled:1
APSSID:Ewon_Wifi_AP
APPassphrase:MyWifiPwd
APBroadcastSSID:1
APChannel:0
LANDHCPSEnable:1
LANDHCPSStartIP:10.0.0.100
LANDHCPSEndIP:10.0.0.105
LANDHCPSLeaseTime:3600
DNSREnabled:1
LANDHCPSDns1:0.0.0.0
LANDHCPSDns2:0.0.0.0
LANDHCPSFilter:1