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

PRODUCT TYPE: COSY+
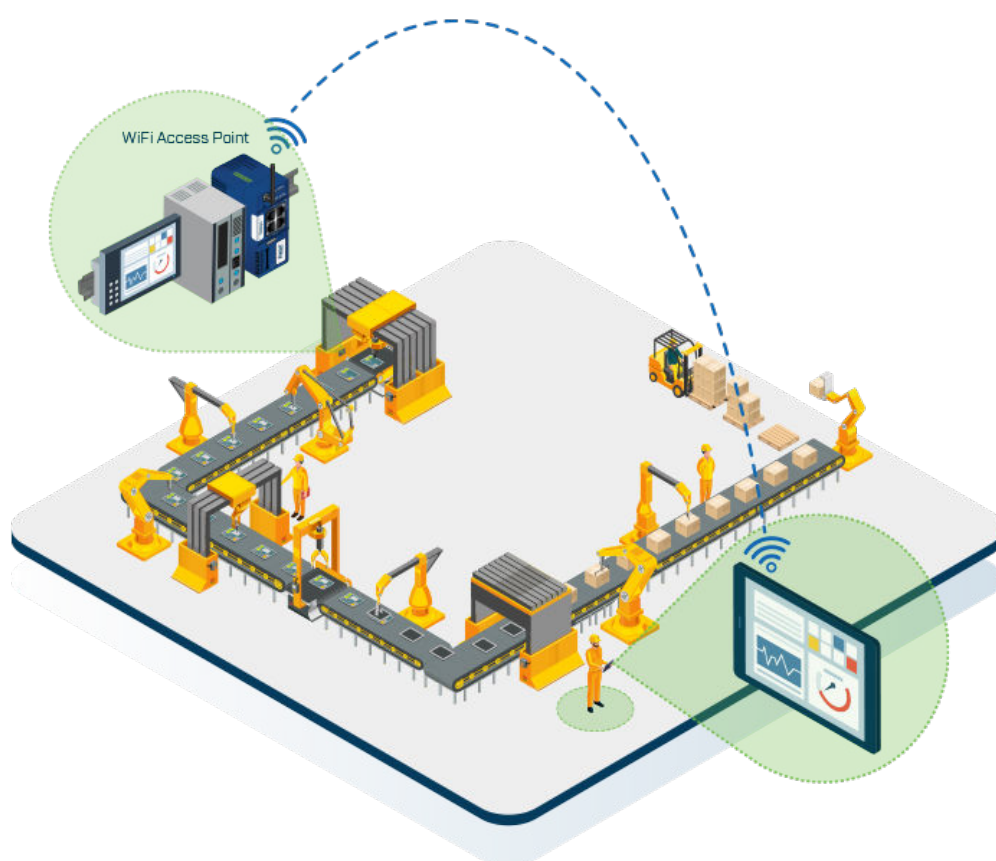
Important User Information

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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+ EC7133J_00MA, secondly 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**
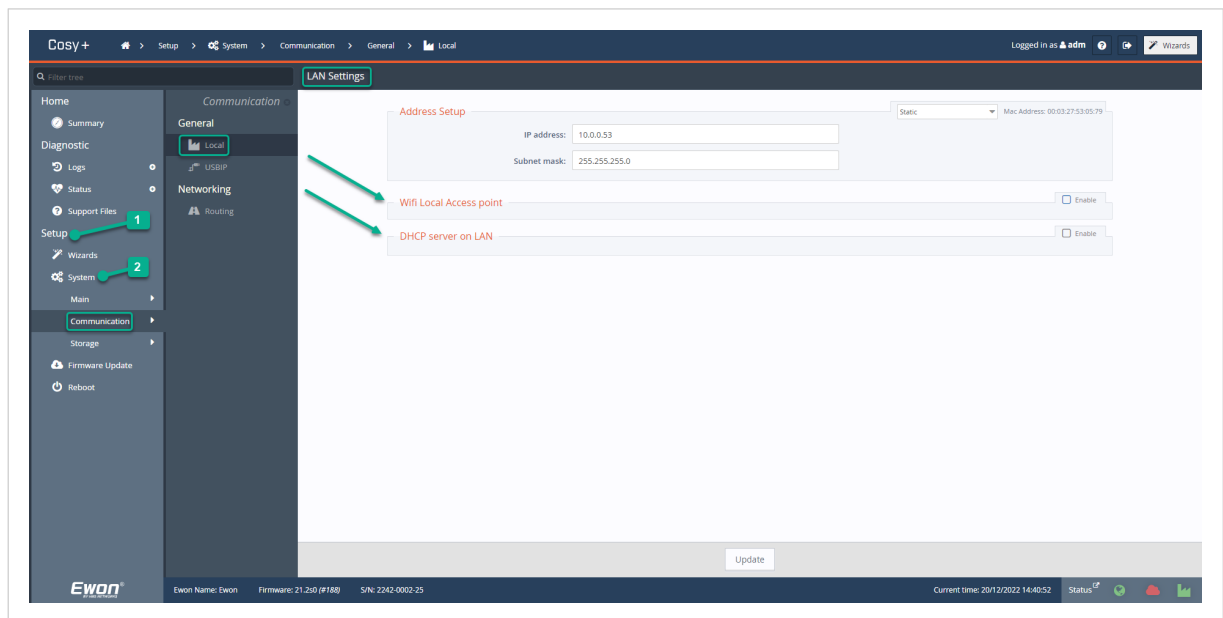
The Adress Setup section indicates the LAN Network information used by the Ewon® Cosy+.

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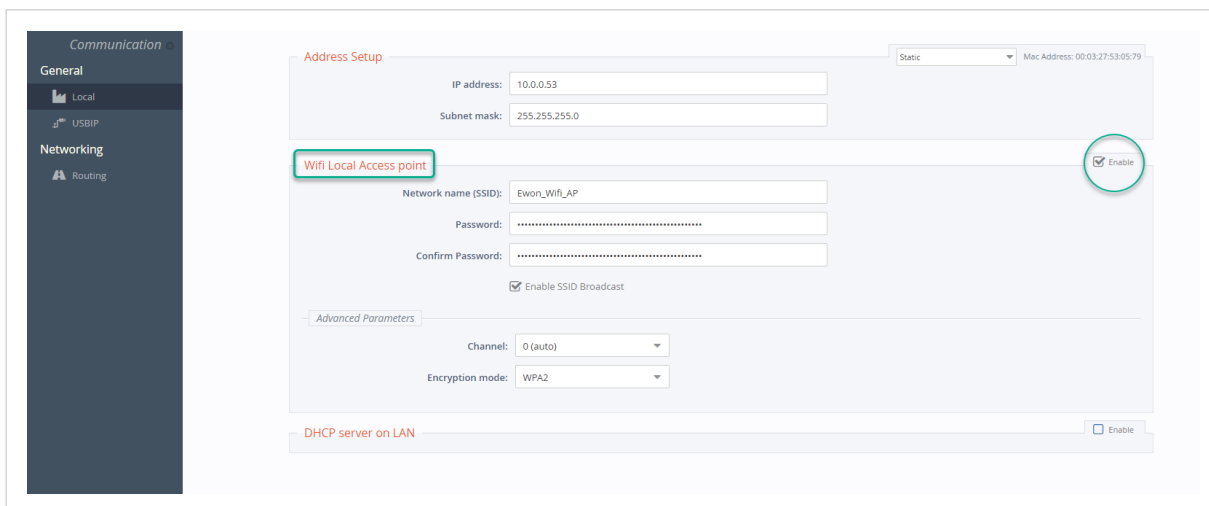
6. Fill in the information as below:
    a. **Network name (SSID)**: Give a name to your WiFi Local Access Points.
    b. **Password**: Set the password you will need to connect to the WiFi Local Access Point.

    > **ⓘ 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 unable 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.
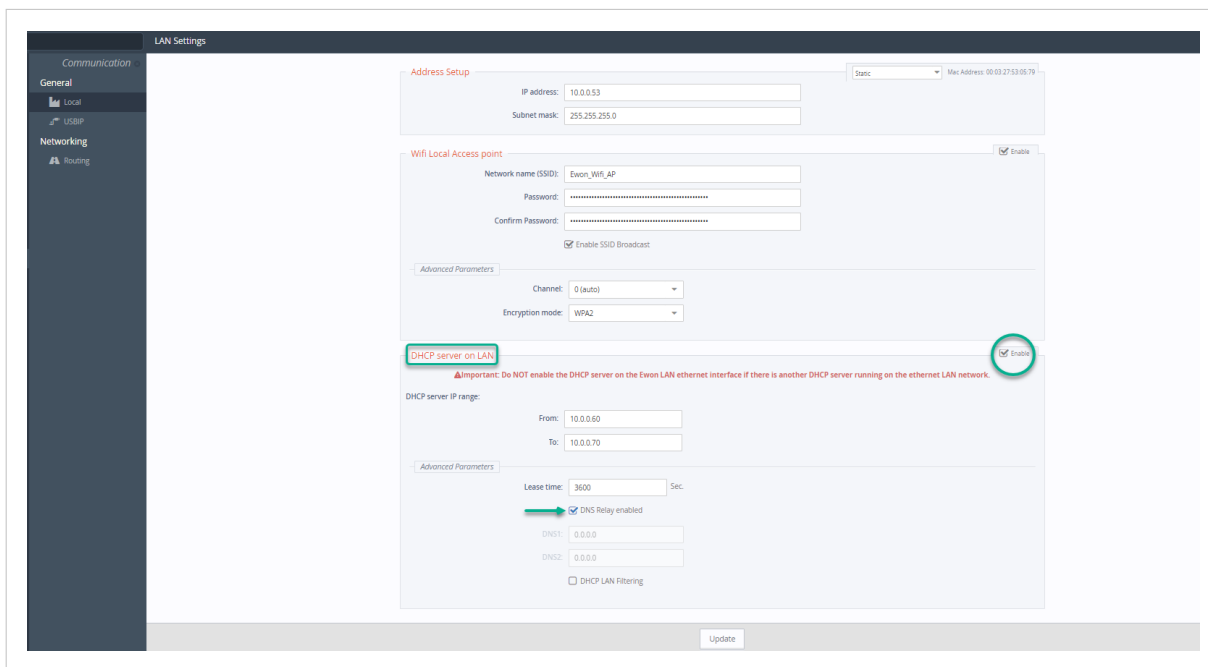
3. Once enabled, you can fill in the fields based on your LAN information.
    a. **DHCP server IP range**: range of IPs within your LAN. You must enter a range that excludes your Ewon®
        Cosy+IP adress and any IP address that might be present on the LAN network.
    b. In the **Advanced Parameters** 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.
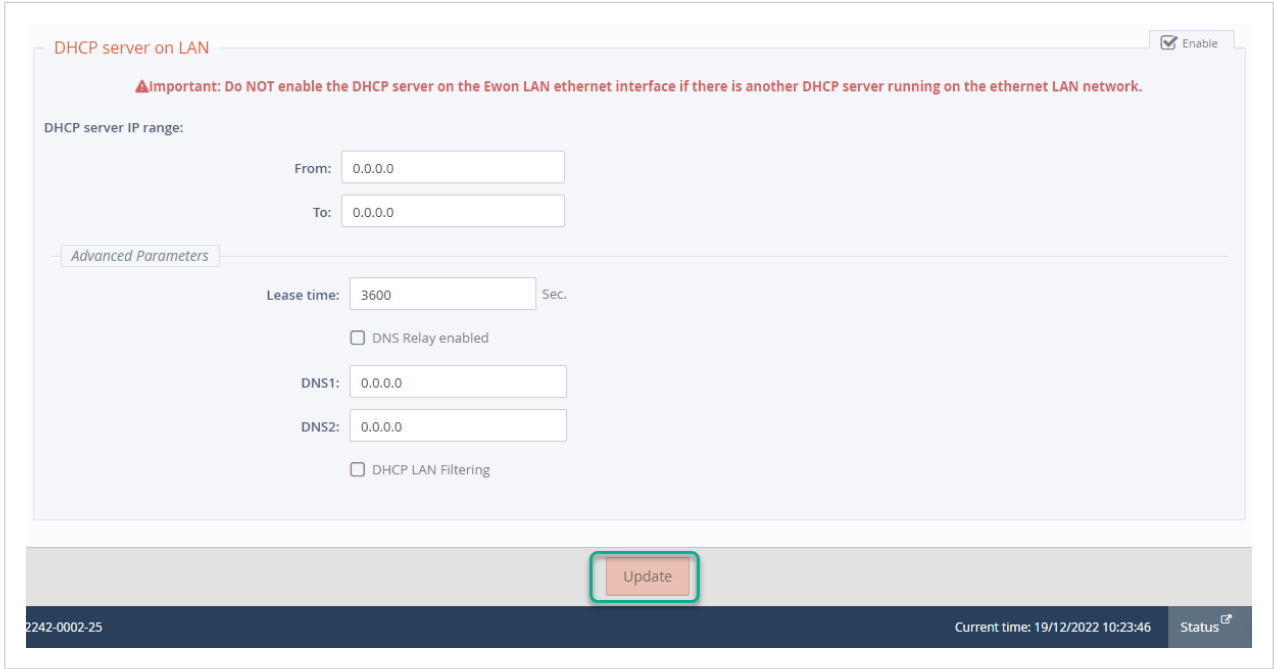
Once everything is setup correctly and if the SSID was not hidden in the settings, your PC should spot the WiFi AP you created through your Ewon® Cosy+.
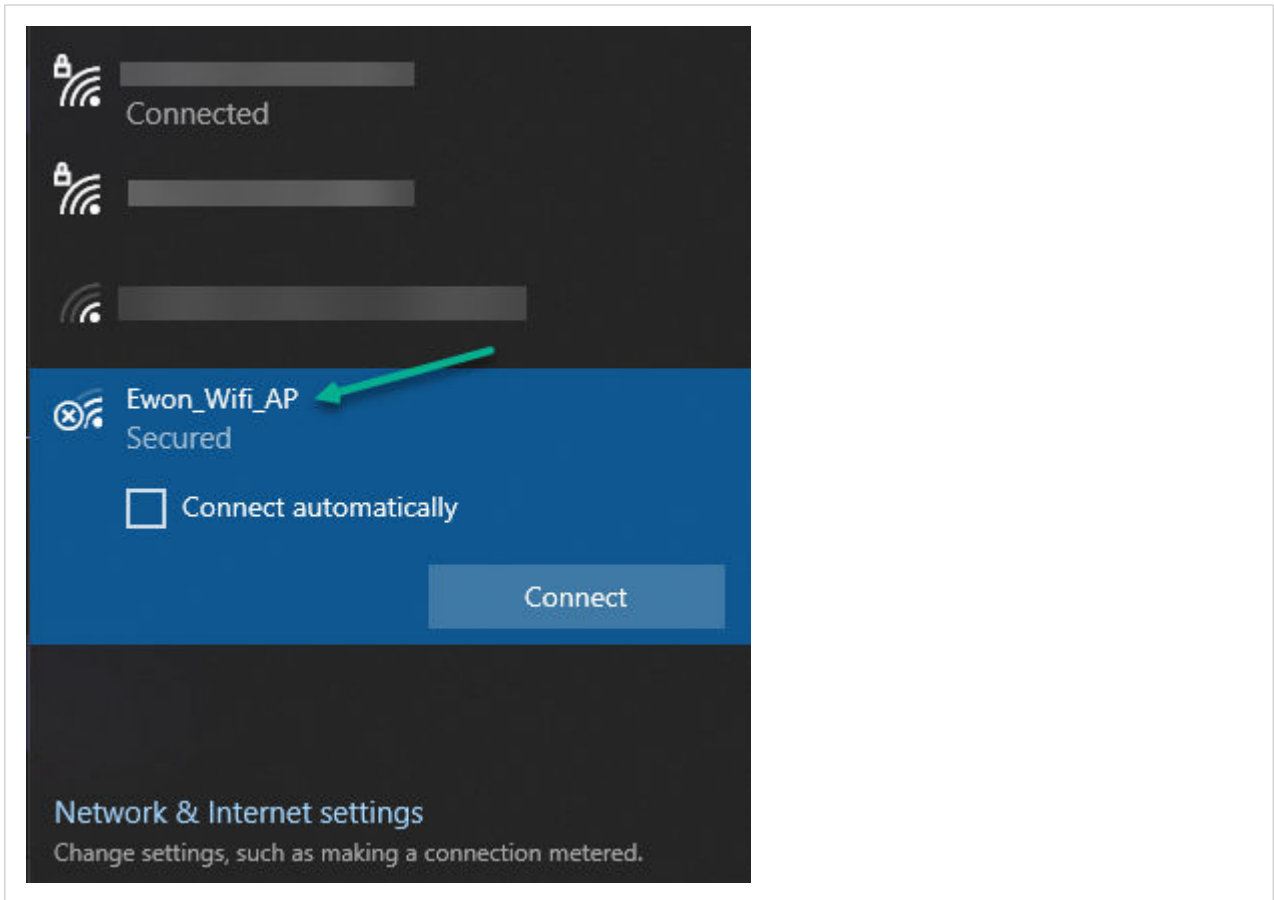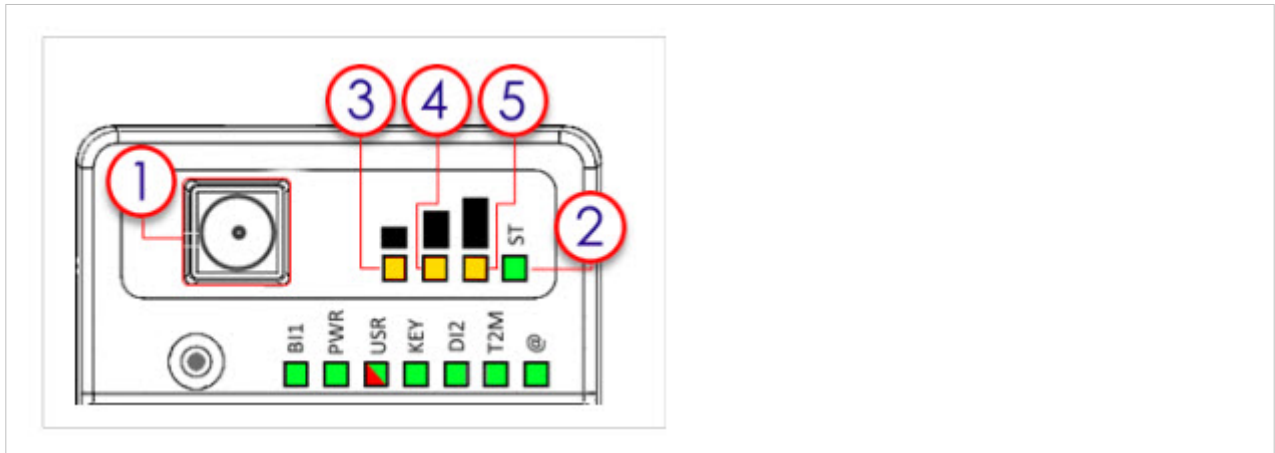

Figure 2. Example from a PC

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:

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.

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