

wearTell - Network Setup

wearTell provides a web application for easy control of the system and evaluation of the data in the browser. In addition, the system automatically processes the data and makes the result available via a REST and MQTT API.

The web application as well as the REST and MQTT API are provided by the device itself. For this reason, access to the device via a company-internal network is required to use these functionalities.

This document describes the integration of the wearTell system into a network.

General requirements:

The web application as well as the REST API are accessible via http on the standard port 80.

For the updating of real-time data via MQTT, a WebSocket connection is established on port 80. Any existing proxies or similar have to support WebSockets. The web application can also be used without a working WebSocket connection, though some functionality will not be supported.

The wearTell System does not include an authentication mechanism. Due to this, the device should only be used in company-internal networks and, in particular, should not be accessible from the public Internet without additional safeguards.

Remote maintenance:

In addition to the web interface and the REST API, the wearTell system provides the possibility to enable a remote-maintenance mode. This can for example be used by weartell to perform maintenance or evaluate data.

For this functionality outgoing requests to weartell-connect.com need to be allowed from the wearTell system on Port 443. Accepting incoming connections is not required.

The remote maintenance mode is disabled by default.

Step by step instructions:

The leftmost Ethernet port of the device is intended for integration into a company network and pre-configured for a connection with DHCP.

If you use DHCP in your network, connect the system to the company network. You can then access the system via the assigned IP address.

If you are configuring the network manually, follow the steps below.

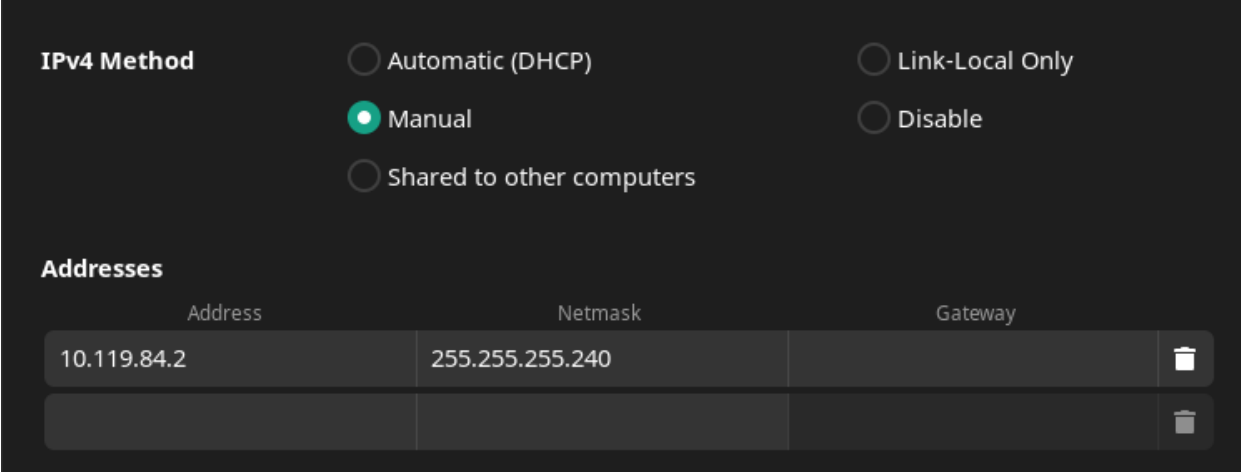
Connect the network cable:

First connect a client to the rightmost Ethernet port of the system. 10.119.84.1/28 is preconfigured as a network, so that access is possible even in the case of a missing or incorrect configuration.

Also connect the leftmost Ethernet port to the company network.



Configure the network interface of your device via 10.119.84.2/28.





IPv4 Method

Automatic (DHCP) Link-Local Only

Manual Disable

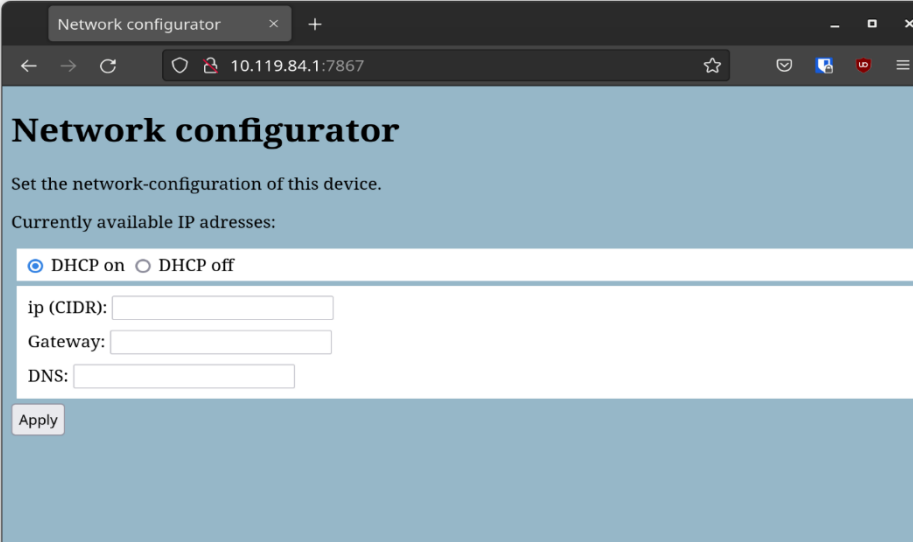
Shared to other computers

Addresses

Address	Netmask	Gateway	
10.119.84.2	255.255.255.240		
			

Open the network settings:

Once the network interface is configured, open <http://10.119.84.1:7867> in your browser. At this address you will find a simple dialog where the network can be configured.



Network configurator

10.119.84.1:7867

Network configurator

Set the network-configuration of this device.

Currently available IP addresses:

DHCP on DHCP off

ip (CIDR):

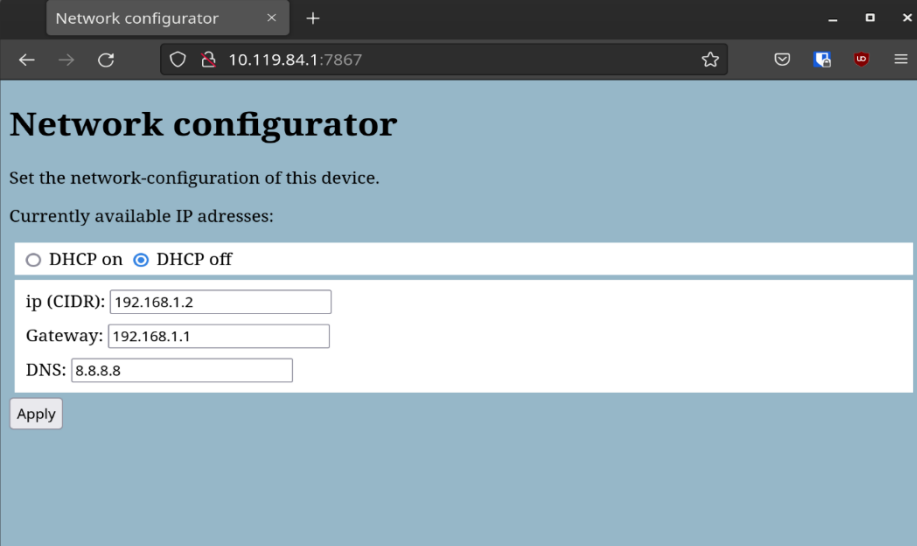
Gateway:

DNS:

Apply

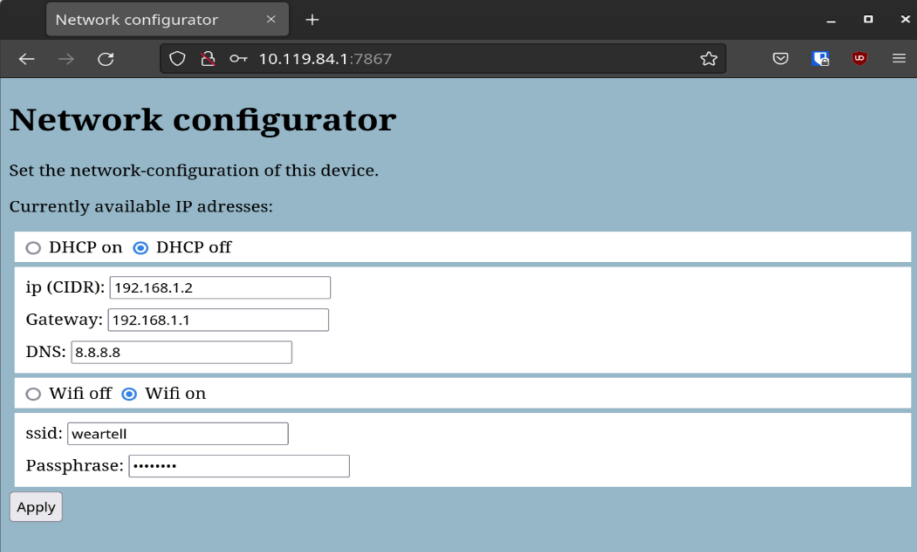
Manual network configuration:

Enter the IP-address, gateway and if applicable the DNS-server and confirm the configuration.



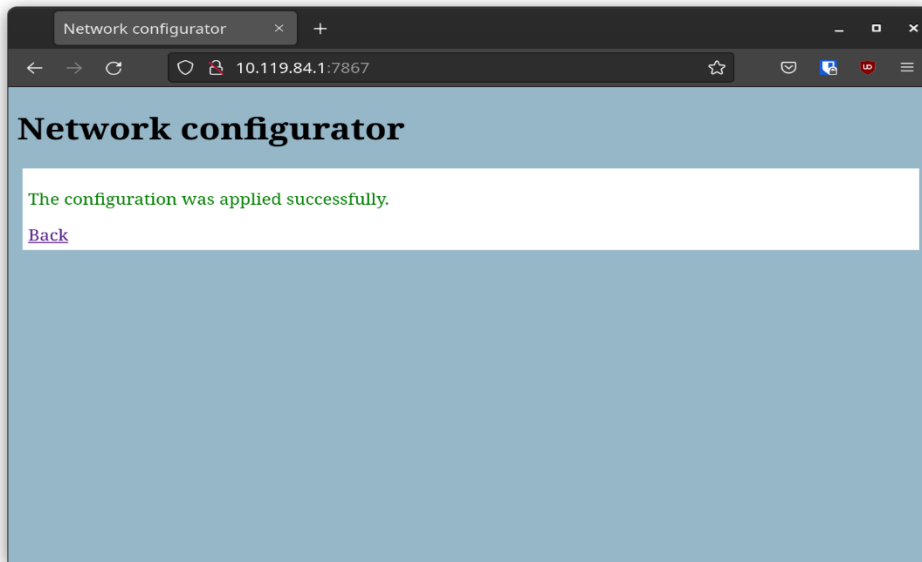
The screenshot shows a web browser window titled "Network configurator" with the address bar displaying "10.119.84.1:7867". The page content includes the title "Network configurator" and the instruction "Set the network-configuration of this device." Below this, it says "Currently available IP addresses:" and provides two radio button options: "DHCP on" (unselected) and "DHCP off" (selected). Underneath, there are three input fields: "ip (CIDR):" with the value "192.168.1.2", "Gateway:" with the value "192.168.1.1", and "DNS:" with the value "8.8.8.8". At the bottom left of the form area is an "Apply" button.

If you have a Wifi-capable system, please select "Wifi on" and enter the SSID and passphrase.



The screenshot shows the same "Network configurator" web browser window. The "DHCP off" option remains selected. Below the IP configuration fields, there are two radio button options: "Wifi off" (unselected) and "Wifi on" (selected). Underneath, there are two input fields: "ssid:" with the value "weartell" and "Passphrase:" with a masked value of ".....". An "Apply" button is located at the bottom left of the form area.

If the configuration is successful, you will see the following message.



Automatic network configuration:

If you later wish to use a DHCP configuration again, select "Automatic (DHCP)" and confirm the selection.