



# Ersa TRACE Cockpit

## Software Documentation: 3BA00260-01

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# 1. Install “Ersa TRACE Cockpit”

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## 1.1

### Introduction

These software instructions describe how to set up and use the “Ersa TRACE Cockpit” web app. The “Ersa TRACE Cockpit” software makes it possible for you to control the Ersa i-CON TRACE soldering station via LAN or WLAN. Follow the steps described here to set up “Ersa TRACE Cockpit” and all its functions.

Adhering to the safety instructions and process descriptions in the Ersa i-CON TRACE operating instructions (No. 3BA00252) and the Kurtz Ersa “Safety Notes” brochure (3BA00188) is a prerequisite for operating the soldering station.

#### Functions of the “Ersa TRACE Cockpit” web app

The “Ersa TRACE Cockpit” web app is a server application for controlling Ersa i-CON TRACE soldering stations in the network. The software interface is executed in a web browser. Terminal devices in the same network can connect to the application via the web browser.

Virtual workplaces with different user rights can be created with “Ersa TRACE Cockpit”. The soldering stations are assigned to these workstations, which enables a clearly organised production line.

“Ersa TRACE Cockpit” allows the creation of FIXED JOBS or FREE JOBS, which ensures the traceability of the hand soldering process. Materials such as the soldering tip that the user should or must use can be assigned to each FIXED JOB or FREE JOB. Once the JOB has been completed, an entry is generated that contains all info required to understand the manual soldering process.

## 1.2

### Overview of connection methods and work steps for initial installation

This software manual describes the “Ersa TRACE Cockpit” web app for controlling one or more Ersa i-CON TRACE IoT soldering stations. A Windows server PC with a PostgreSQL database and a network for all connected devices are required.

These instructions do not describe the “Ersa TRACE” mobile app for Android and iOS for controlling one or more i-CON TRACE IoT soldering stations.

“Ersa TRACE” can be used to integrate the soldering station into the WLAN, see no. [2] in the following illustration. A network connection is also possible via Ethernet LAN.

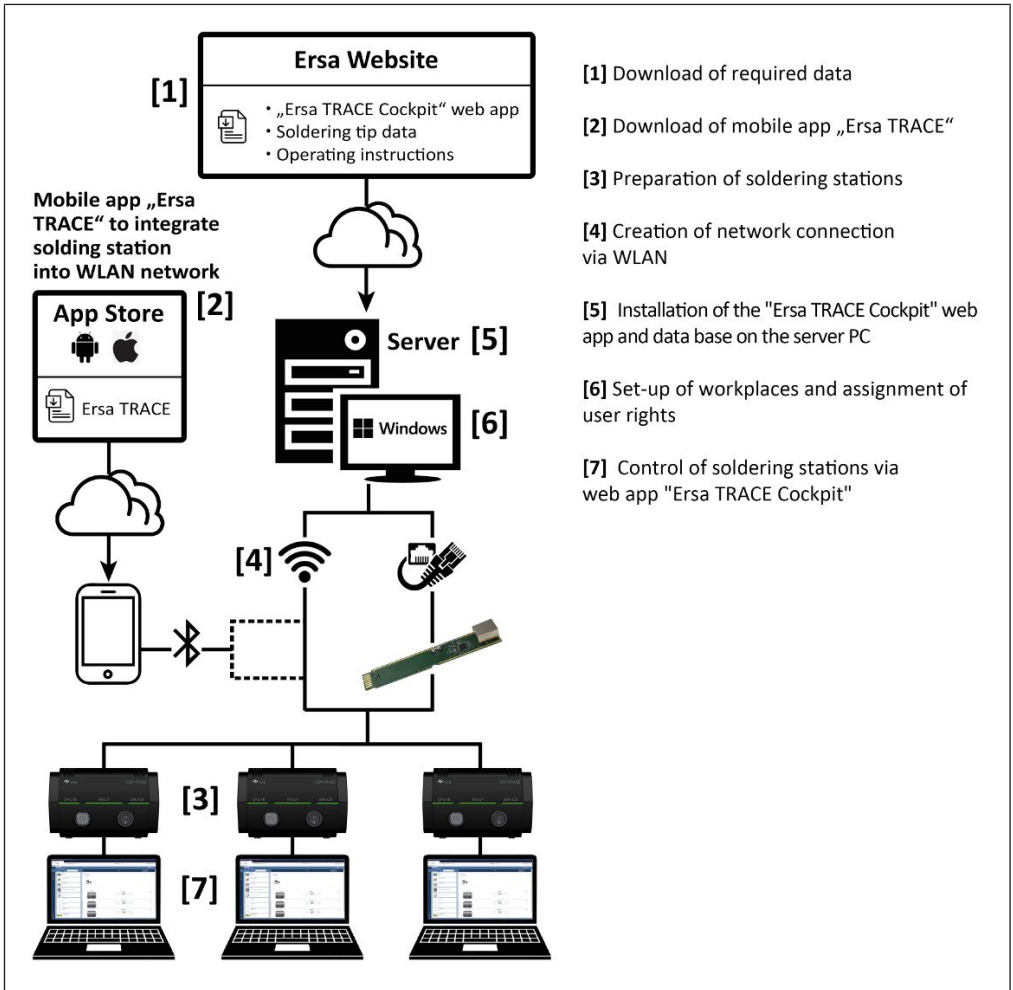


Fig. 1: Connection methods and work steps

## 1.3 The requirements for installing and using the software

### Important info:

This is the software manual for the IoT soldering station i-CON TRACE. The i-CON TRACE operating instructions 3BA00252 must be read and observed before using the soldering station. It can be downloaded from the members section of the Kurtz-ersa website. Please read the following chapter.

### For your safety and to avoid accidents:

- a) Before you set up or operate a soldering station, be sure to follow the safety instructions and process descriptions in the
  - operating instructions for the Ersa i-CON TRACE soldering station (part no. 3BA00252, downloadable in the Ersa member section)
  - and the enclosed brochure "Kurtz Ersa Safety Instructions" (part no. 3BA00188).

### Server PC minimum requirements

| Designation                   |                                        |
|-------------------------------|----------------------------------------|
| Processor (GHz)               | 2,4; Dual Core                         |
| Random access memory RAM (GB) | 4                                      |
| Available data storage (GB)   | 16                                     |
| Operating systems             | Windows 10 (20H2); Windows Server 2016 |

### Web browser minimum requirements

| Designation                |             |
|----------------------------|-------------|
| Screen resolution at least | 1920 x 1080 |
| Firefox                    | v78.0       |
| Google Chrome              | v87.0       |
| Microsoft Edge             | v93.0       |

### WLAN frequency range

| Designation           |     |
|-----------------------|-----|
| Frequency range (ghz) | 2.4 |

### Mobile device minimum requirements

| Designation                   |                   |
|-------------------------------|-------------------|
| Android operating system      | from version 5.0  |
| Apple iOS operating system    | from version 9.0  |
| Apple iPadOS operating system | from version 13.0 |

## Communication

| Designation      |                       |
|------------------|-----------------------|
| Network protocol | MQTT must be approved |

- The soldering station and the terminal device with the "Ersa TRACE Cockpit" web app are connected to the network of the server PC.
- The web browser scaling is set to 100%.

### 1.4 Edit the network ports

For the operation of “Ersa TRACE Cockpit”, the following **server PC** bidirectional **port configurations** must be ensured:

| Communication pro-<br>tocol | Network port    |
|-----------------------------|-----------------|
| HTTP                        | 80              |
| mDNS                        | 5353            |
| MQTT                        | 1883            |
| Postgres                    | 5432            |
| Ersa TRACE Cockpit          | 4660; 8081-8090 |

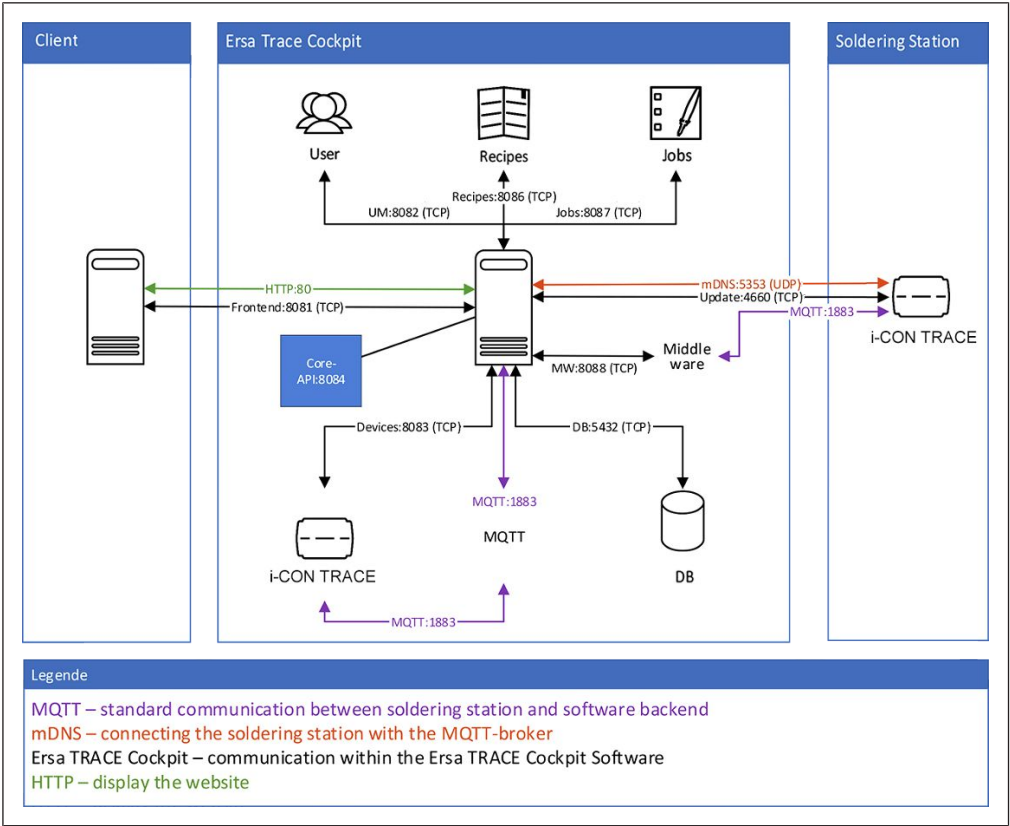


Fig. 2: The ports to be enabled

Enabled ports can be edited in the Control Bench of Ersa TRACE Cockpit. To do so, select the [Port Settings] button.

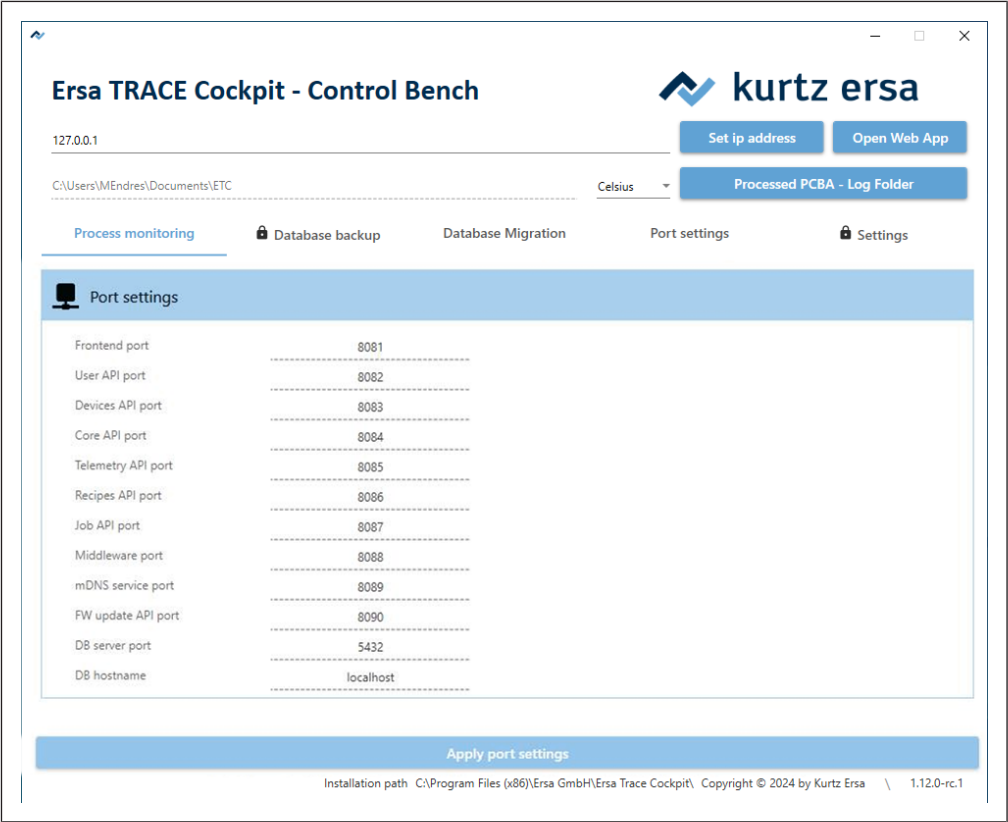


Fig. 3: Editing enabled ports

## 1.5 Set up a user account on the Kurtz ersa website and download the software package

a) Go to the Kurtz ersa login page:

⇒ Via quicklink: [www.login.ersa.com](http://www.login.ersa.com) or [www.login.ersa.de](http://www.login.ersa.de). You can open the links here in the PDF file by clicking on them.

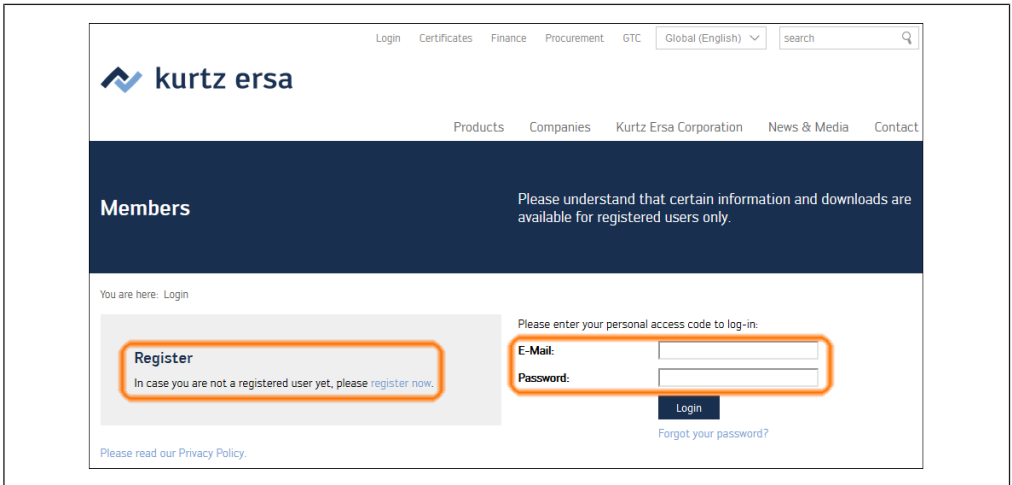


Fig. 4: Register for the Ersa members section

✓ If you are not yet registered for the members section:

- a) Select [Register] and create a user account.
- b) Log in with the login data.
- c) Under [6 Software], switch to the [6.1.5 i-CON TRACE] area.
- d) Download the ZIP file [Ersa TRACE Cockpit Server Software]. It contains:
  - The installation file for the web app [Ersa TRACE Cockpit] for controlling and managing the soldering stations and the associated PostgreSQL database
  - The soldering tip data for the 142 series, the current i-CON TRACE firmware and the instructions
- a) Create a new directory for the downloaded software package on the server PC.
- b) Copy the ZIP file of the soldering tips into it. **Do not unpack this ZIP file.**

If the soldering station is not equipped with the optional Ethernet network card, you will also need a Bluetooth-enabled mobile device with Android or iOS operating system to use the “Ersa TRACE” mobile app. This integrates the soldering station into the WLAN network. Please read the following chapters.

## 1.6 Integrate the i-CON TRACE soldering station into the network

### For your safety and to avoid accidents:

- a) Before you set up or operate a soldering station, be sure to follow the safety instructions and process descriptions in the
  - operating instructions for the Ersa i-CON TRACE soldering station (part no. 3BA00252, downloadable in the Ersa member section)
  - and the enclosed brochure "Kurtz Ersa Safety Instructions" (part no. 3BA00188).

It is recommended to assign a static IP address to the soldering station.

### 1.6.1 Integrate the soldering station into the network if the soldering station is to be controlled via LAN (option)

Info: If the optional Ethernet network card for the LAN connection is plugged in, the soldering station cannot establish a Bluetooth connection.

- ✓ The optional Ethernet network card (order no. 0ICT125) is inserted in the soldering station.  
For correct commissioning and use of the Ethernet network card, read the "Commissioning" chapter of the i-CON TRACE operating instructions. Downloadable in the Ersa members section, part no. 3BA00252.
- ✓ The server PC is connected to the Ethernet LAN connection.
  - a) Plug the LAN cable into the soldering station.

### CAUTION

**Risk of burns! The soldering tip heats up immediately after it is switched on!**

- a) Observe all safety instructions and handling instructions in the operating instructions for the soldering station!
- b) Do not remove the soldering iron from the holder!



- a) Switch on the soldering station.
  - ⇒ The soldering station ONLINE LED lights up green.

### 1.6.2 Integrate the soldering station into the network if the soldering station is to be controlled via WLAN

Only a 2.4 ghz WLAN is supported.

#### Install the "Ersa TRACE" app

- ✓ The server PC on which Ersa TRACE Cockpit is installed is connected to the desired WLAN.

- ✓ The soldering station is prepared for being switched on for the first time as described in the operating instructions.
- a) Activate Bluetooth on the mobile device.
- b) Search for the “Ersa TRACE” app in the Apple App Store (iOS) or the Google Play Store (Android).
- c) To access the “Ersa TRACE” app, you can use the QR code shown here or the QR code on the flyer enclosed in the packaging.



Google Play Store

Apple App Store



Fig. 5: Links to download “Ersa TRACE”

- d) Install and start the “Ersa TRACE” app on the mobile device.
- e) The app requires the following authorisations:
  - Use Bluetooth
  - Using the WLAN function
  - Using the camera
  - Access to the device location



### CAUTION

**Risk of burns! The soldering tip heats up immediately after it is switched on!**

- a) Observe all safety instructions and handling instructions in the operating instructions for the soldering station!
- b) Do not remove the soldering iron from the holder!

## **Integrate the soldering station into the network with the “Ersa TRACE” app**

- a) Switch on the soldering station.
  - ⇒ The soldering station ONLINE LED lights up blue.
- b) Select the [Add device] button (fig. left).

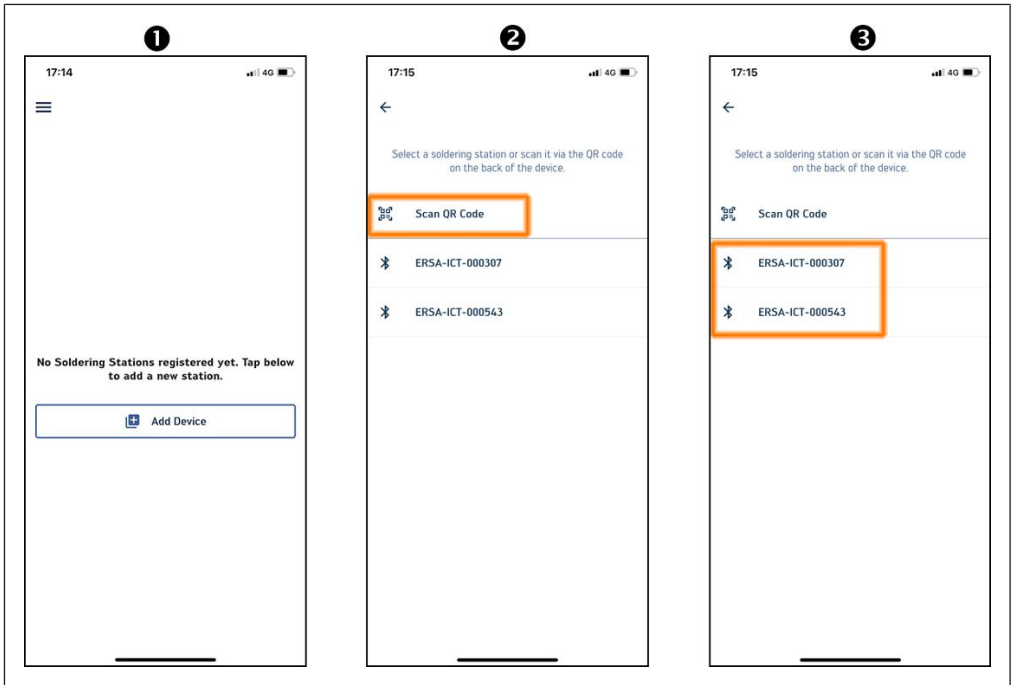


Fig. 6: Integrate the soldering station into the network via Bluetooth

- ✓ Select the soldering station that you want to connect to a network:
- a) Select [Scan QR Code] (Fig. centre) and scan the QR code on the nameplate of the soldering station
- or
- select the desired soldering station in the Bluetooth device list (fig. right) using the serial number (S. no.) on the type plate of the soldering station.

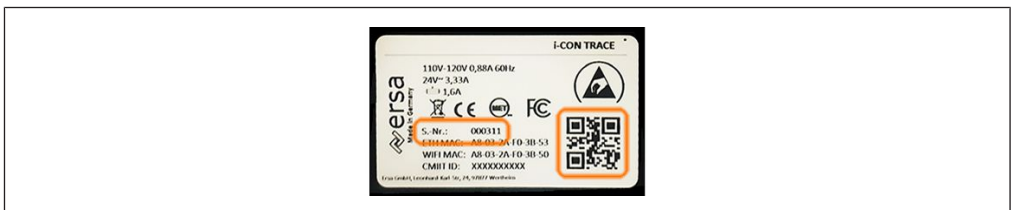


Fig. 7: Example of type plate

- b) On the mobile device, select the WLAN network to which the soldering station is to be connected:
- c) Enter the WLAN password and select [Connect].
- ⇒ The soldering station ONLINE LED lights up green.

- ⇒ If the ONLINE LED lights up yellow, continue to work through the chapters of these instructions one after the other. See chapter If after integrating the soldering station the ONLINE LED lights up yellow or the soldering station is not displayed in the [Devices] menu, [▶ 36] the solution to this problem is described.

## 1.7 Installation step 1: Installing the PostgreSQL database

Info: If an update of the "Ersa TRACE Cockpit" web app is to be carried out, the installation wizard starts as described in chapter [Installation step 2: Install the "Ersa TRACE Cockpit" web app \[ 22 \]](#). The database remains unchanged.

✓ The Windows server PC is configured according to the specifications.

a) Launch the [ECTInstaller.exe] file. (ECT= Ersa TRACE Cockpit)

⇒ The installation wizard for the database starts.

b) Click through the installation wizard using the [Next >] button.

Only use the settings described below.

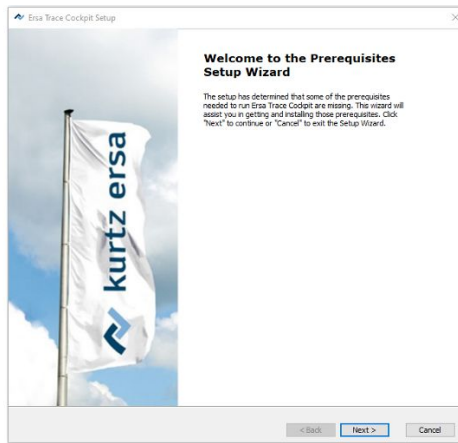


Fig. 8: Start the installation wizard

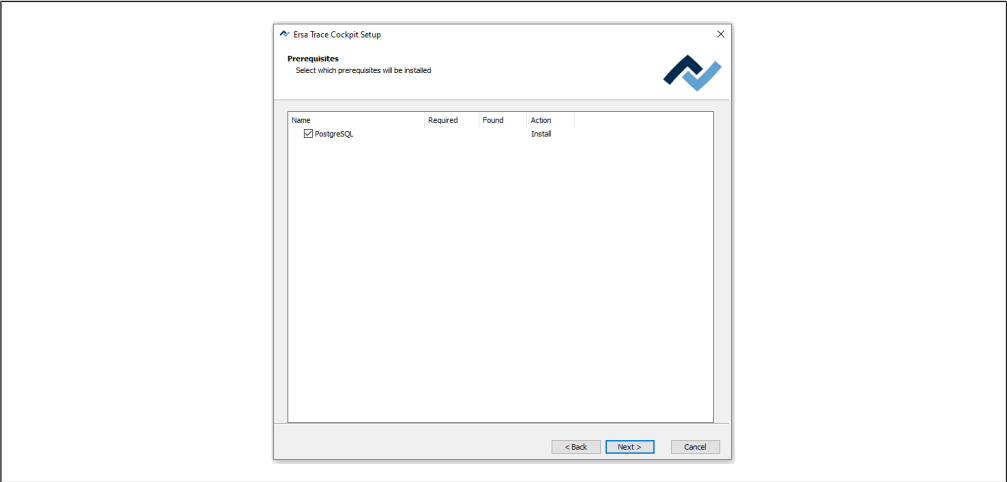


Fig. 9: The PostgreSQL database is installed

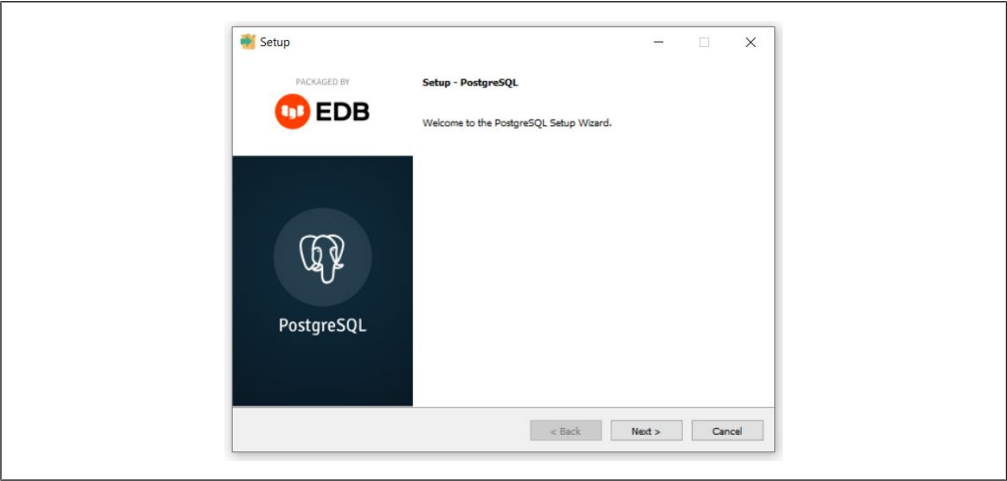


Fig. 10: Start the PostgreSQL installation

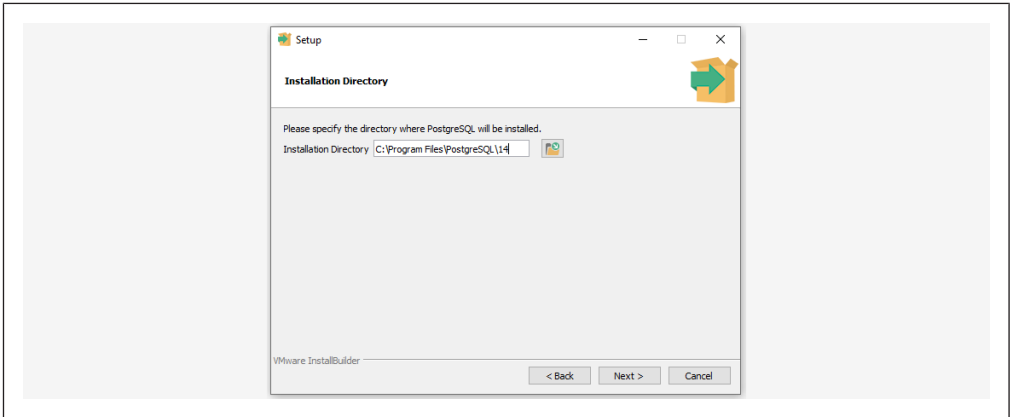


Fig. 11: Do not change the specified data path

a) Deselect the [Stack builder] checkbox.

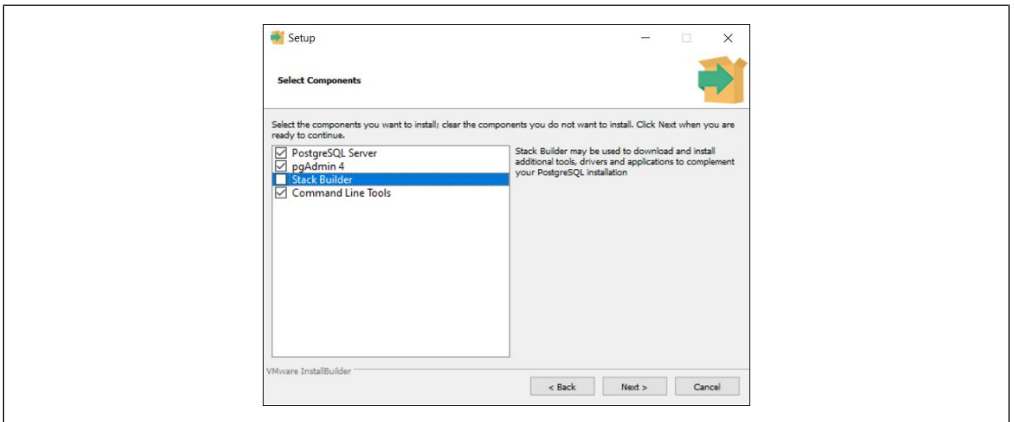


Fig. 12: Deselect the “Stack Builder” checkbox

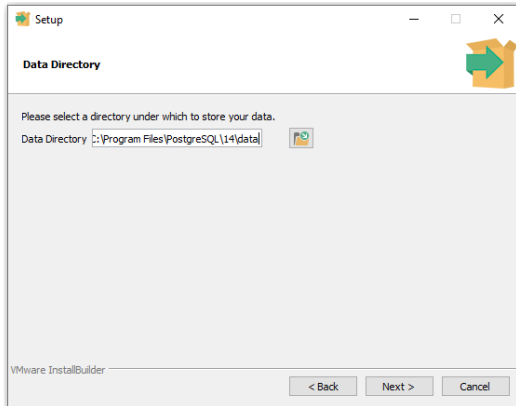


Fig. 13: Specify the saving place of the database data

b) Enter the password “easadmin” twice.

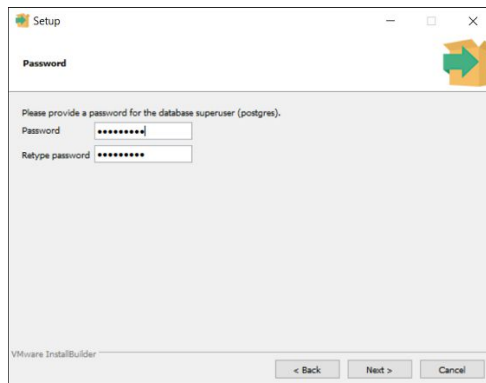


Fig. 14: Enter the password “easadmin” twice

c) The [Port] “5432” is preset. Do not change this port.

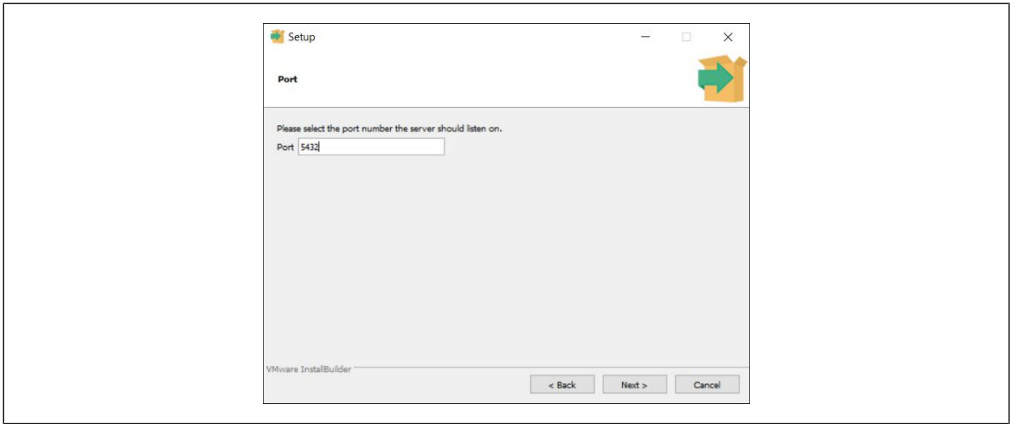


Fig. 15: Enter port number 5432

d) Select the [Default Locale] option as [Locale].

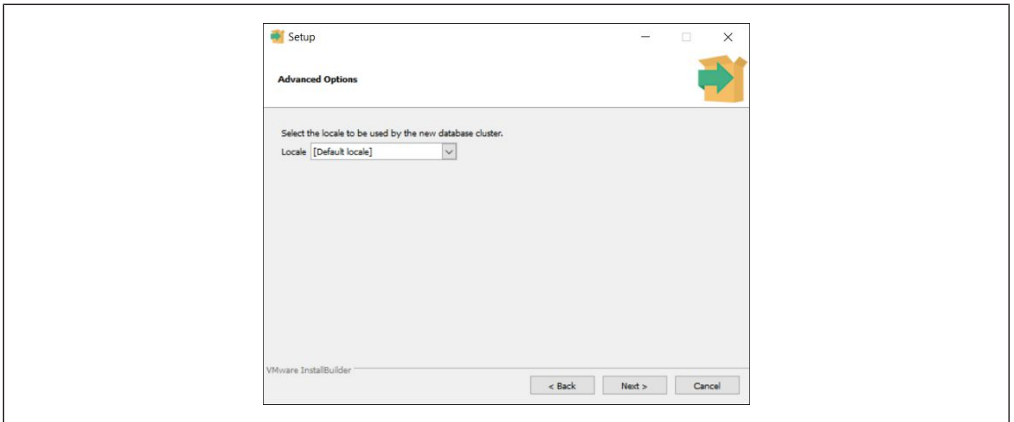


Fig. 16: Select “Default locale”

e) Continue all installation steps with [Next >].

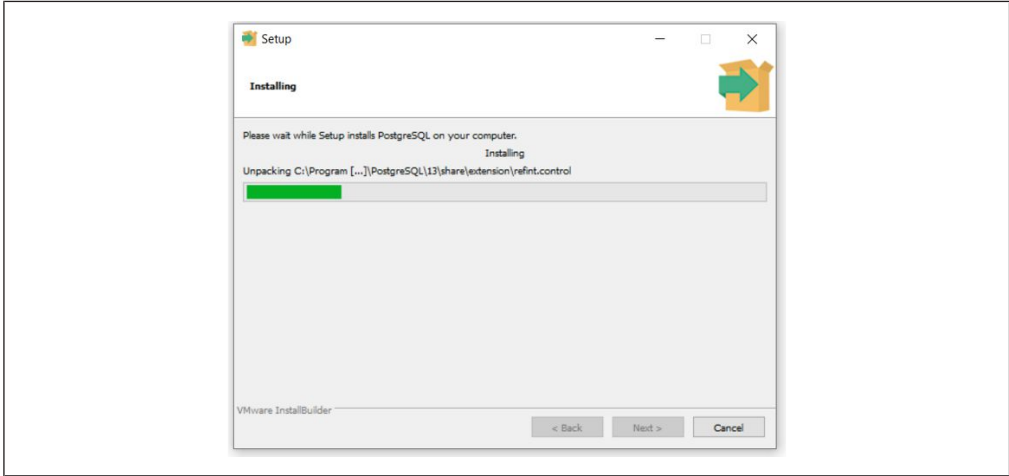


Fig. 17: Installing the database

f) Finally, complete the database installation with [Finish].

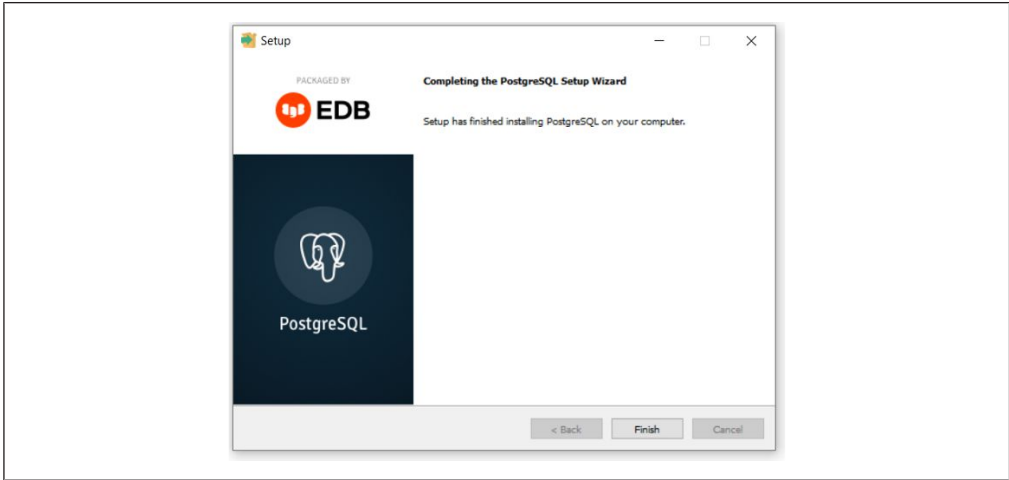


Fig. 18: Database installation completed

## 1.8 Installation step 2: Install the “Ersa TRACE Cockpit” web app

Info: If an update of the “Ersa TRACE Cockpit” web app is to be carried out, the “ECTInstaller.exe” installation wizard starts as described in this chapter. The database remains unchanged. Beforehand, “Ersa TRACE Cockpit” must be uninstalled as described in chapter [Delete the folder in which the PostgreSQL database was saved \[ 56\]](#) .

a) Click through the installation wizard using the [Next >] button.

Only make changes to the default settings described below!



Fig. 19: Starting the Ersa TRACE Cockpit installation wizard

Network administrators have the option of changing the preset ports by clicking the [Use custom ports] button. Changes to the ports may only be made by network administrators.

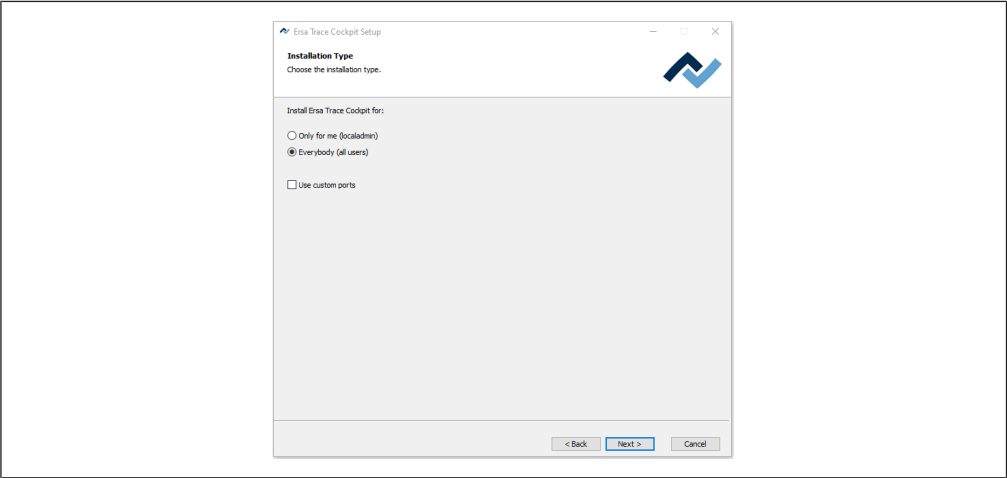


Fig. 20: Select ‘Allow for all users’

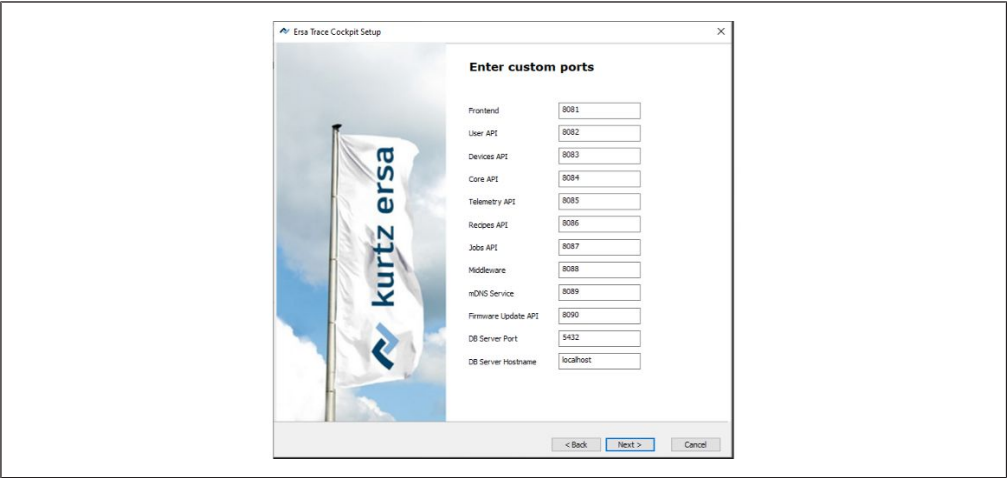


Fig. 21: Port allocation for the network administrator

- a) In the [File Location and Licence Terms] window, accept the end user licence agreement by selecting the checkbox.

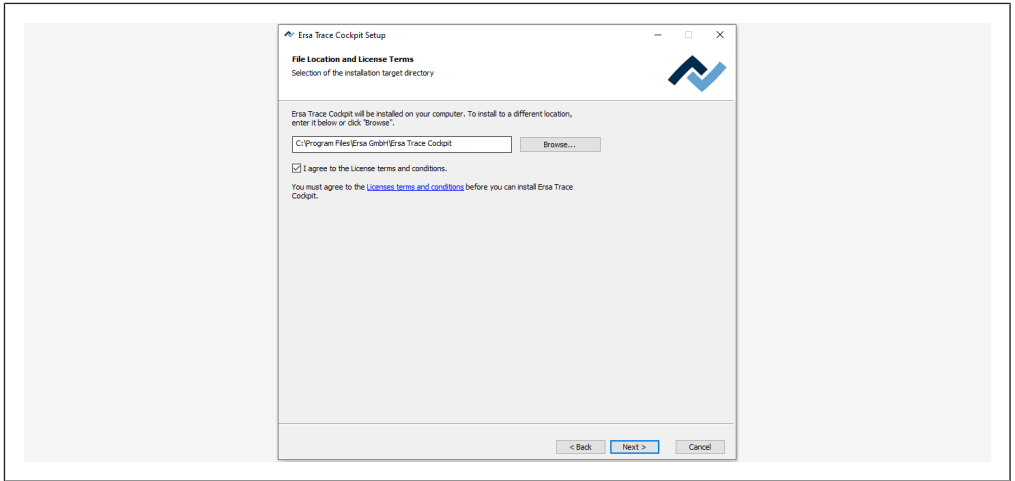


Fig. 22: Installation path and licence agreements

b) Do not change the installation path and agree to the licence agreement.

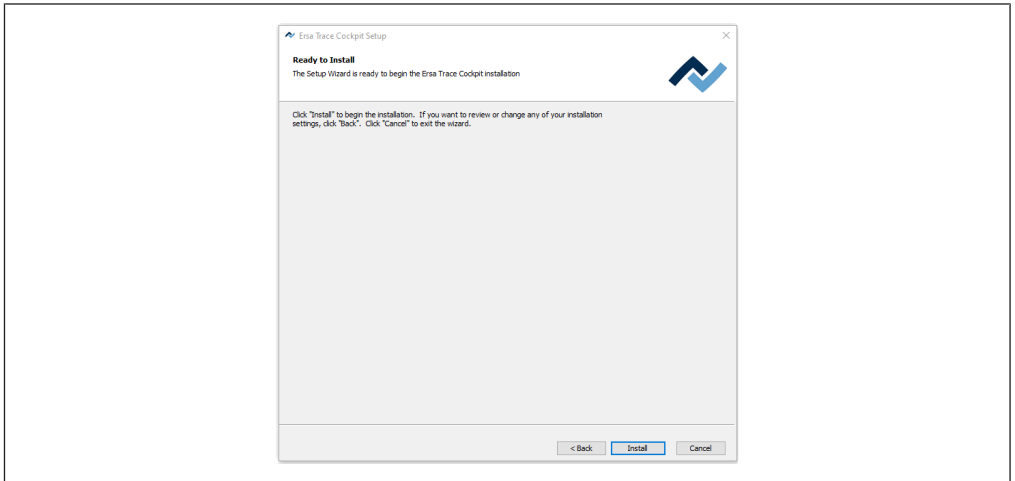


Fig. 23: Start the installation process

c) Click the [Install] button and then complete the installation.

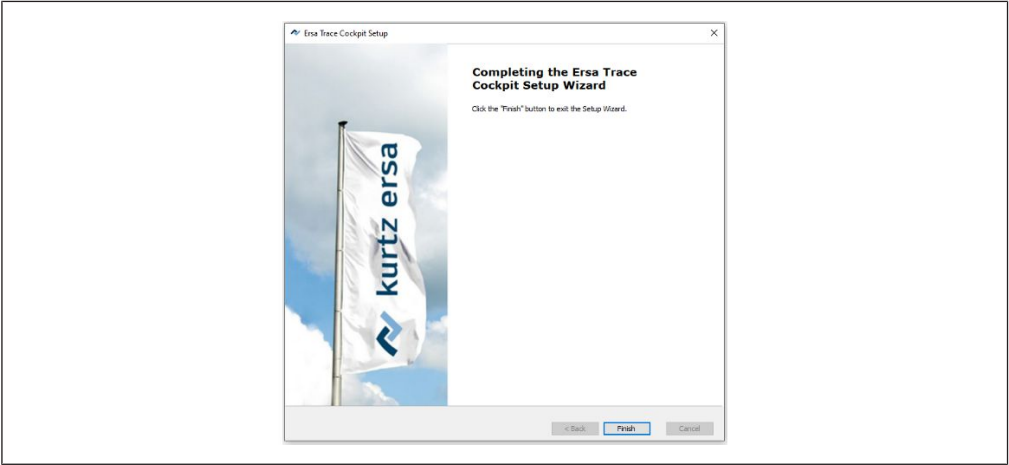


Fig. 24: Finalise the installation

## 1.9 Integrate the “Ersa TRACE Cockpit” server application into the network

### 1.9.1 Determine the IPv4 address of the server PC

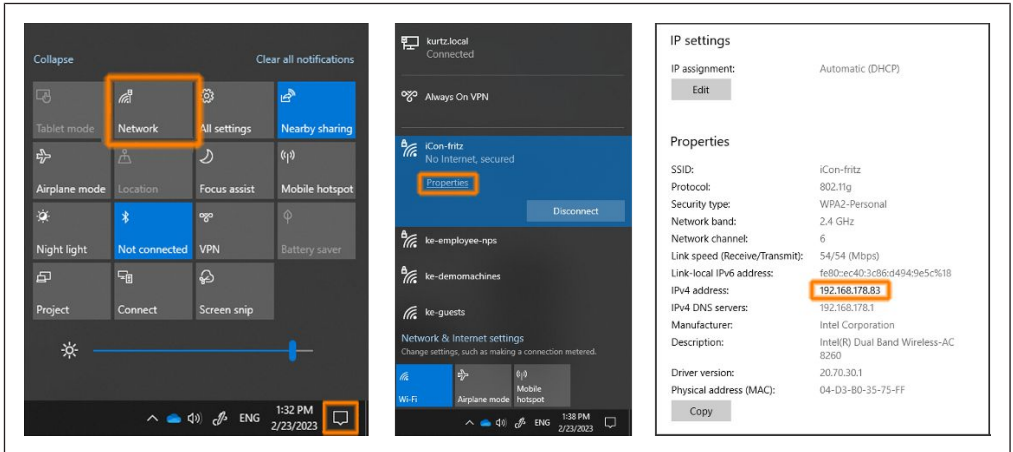


Fig. 25: Display server IP-address

- ✓ The server PC on which “Ersa TRACE Cockpit” is installed is connected to the desired WLAN or LAN network.
- a) Click on the Info Centre icon on the far right of the Windows taskbar.
- b) Click on [Network].
- c) Select the network used and click on [Properties].
- d) Make a note of the IP address of the server PC or copy it to the clipboard.

### 1.9.2 Start the installed web app “Ersa TRACE Cockpit” and integrate the server application

- a) Press the Windows key on the server PC and enter “ersa trace cockpit” in the search field.

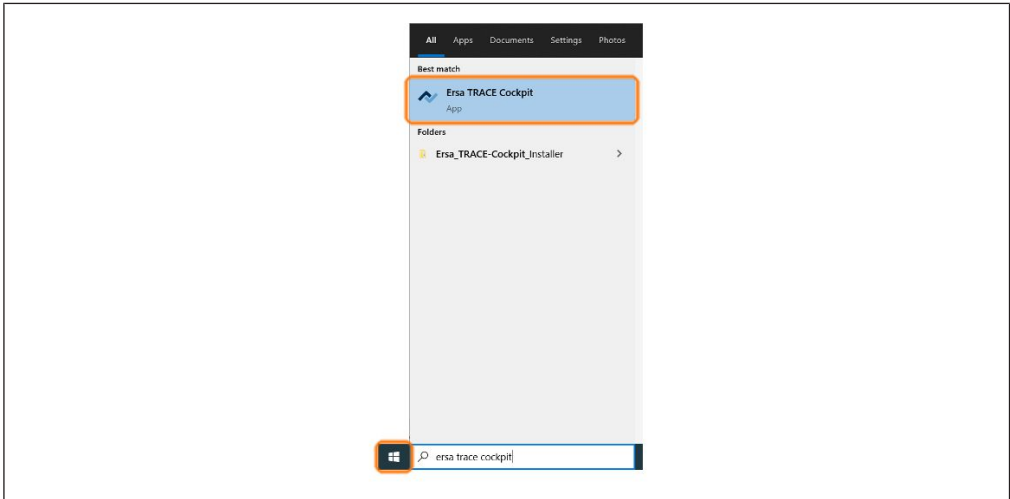


Fig. 26: “Ersa TRACE Cockpit” in the Windows menu

- b) “Ersa TRACE Cockpit” is displayed. Click this to start it.  
⇒ The [Control Bench] starts.

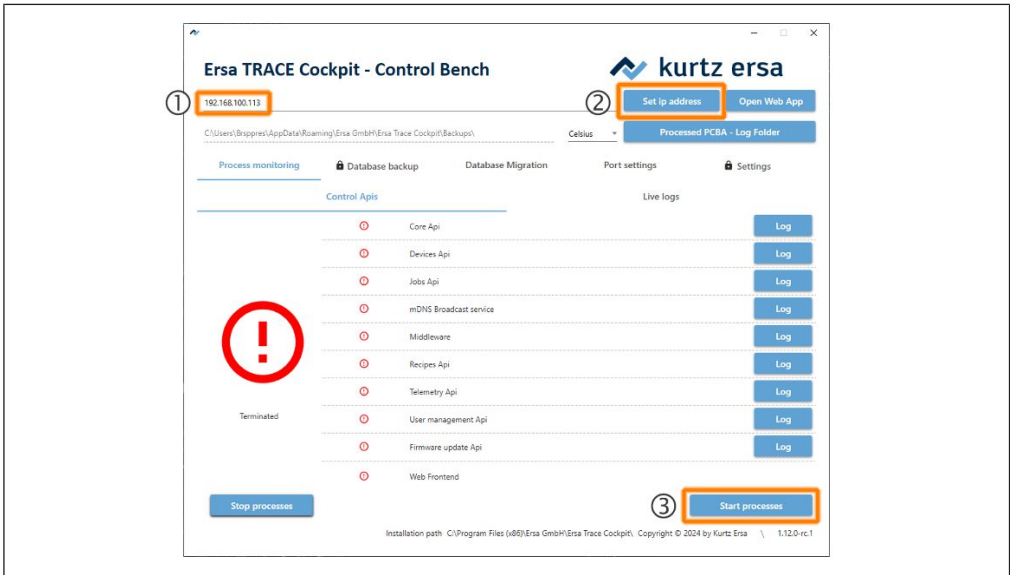


Fig. 27: Red indicates that the “Ersa TRACE Cockpit” web app has not yet been started

- c) Enter the noted IPv4 address in the field at the top left.  
d) Click on [Set ip address] and then click on [Start processes].

- ⇒ The colour of all status displays in the [Control Bench] changes to green (= online). The process may take a few seconds.

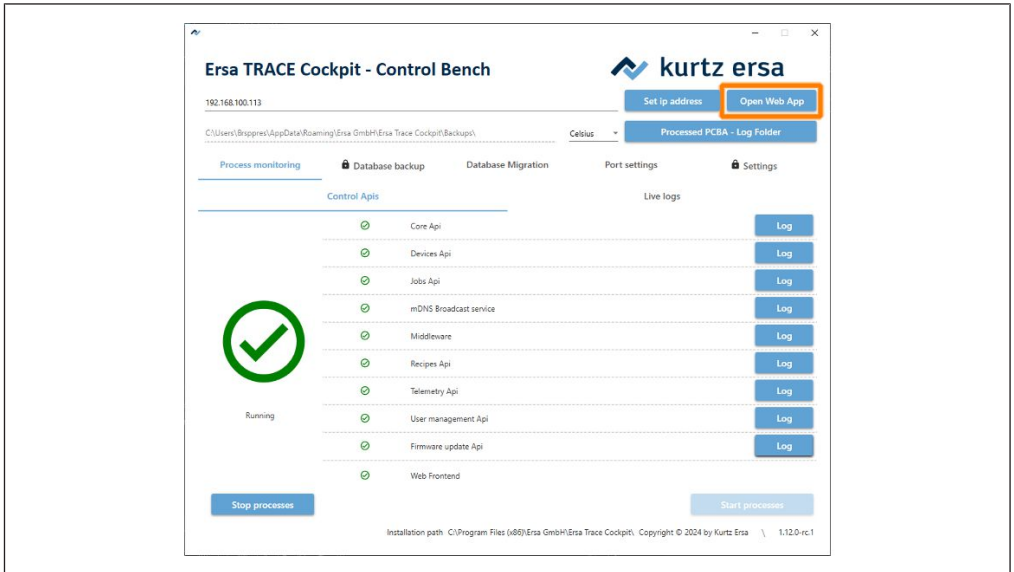


Fig. 28: Green indicates that the “Ersa TRACE Cockpit” web app has been started

The [Control Bench] must remain permanently open for “Ersa TRACE Cockpit” to function. If the [Control Bench] was inadvertently closed, reactivate it by restarting “Ersa TRACE Cockpit”.

a) Click on [Open Web App].

- ⇒ The web browser on the server PC opens with the “Ersa TRACE Cockpit” web app.
- ⇒ The IPv4 address is automatically inserted in the address line of the web browser.
- ⇒ The integration of the server application is complete.

## 1.10

## Define the data path for the automatic saving of process data

a) Click on [Stop processes].

⇒ The “Ersa TRACE Cockpit” server application is shut down.

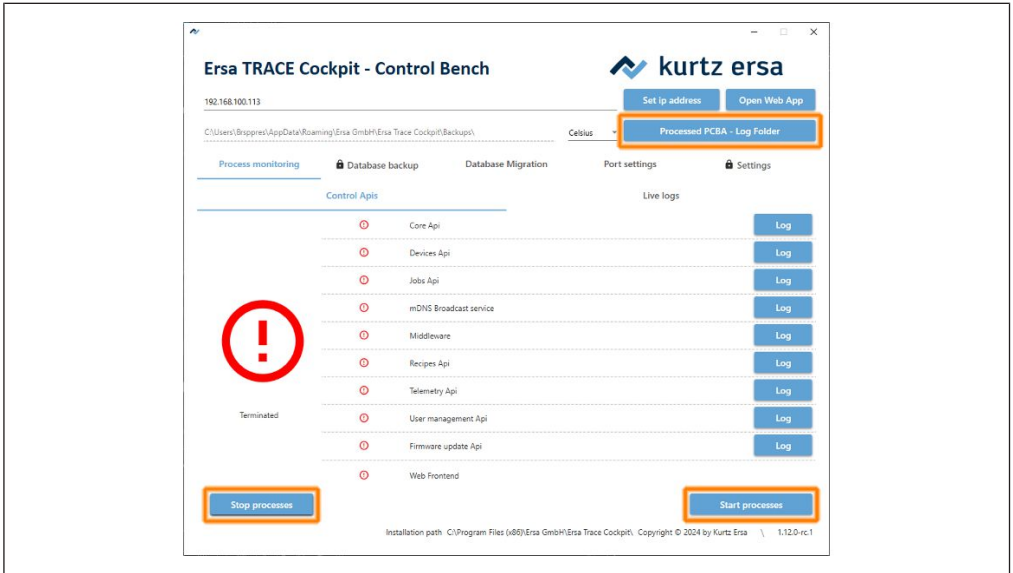


Fig. 29: Define the process data path

b) To automatically save the recorded soldering process data in XML format for administrator purposes, click on “Processed PCBA-Log Folder”.

c) Select the desired saving place.

d) Important: Ensure that this folder with this name can be accessed permanently. Failure to do so may result in errors when using the software. The data stored there can be used for analyses, but may not be changed manually.

e) Click on [Start processes].

⇒ The server application is restarted.

The [Control Bench] must remain permanently open for “Ersa TRACE Cockpit” to function.

## 1.11 The inaccessible functions in the Control Bench

Only the system administrator is authorised to use the inaccessible functions in the Control Bench.

- Click on the inaccessible functions [Database backup] or [Settings].
- Enter the password “eaas”.

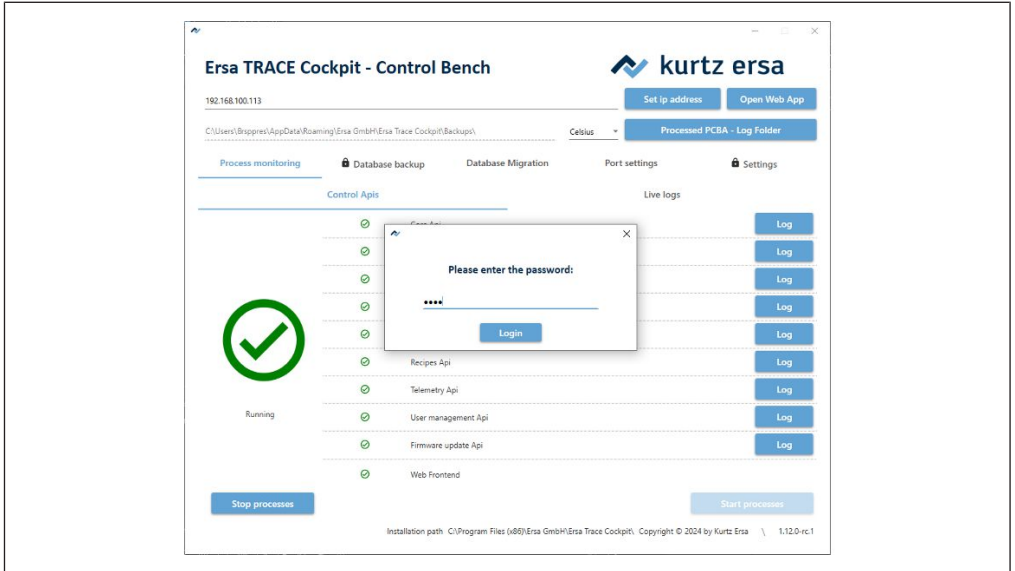


Fig. 30: Unlock [Database backup] and [Settings]

The menu items remain unlocked until the Control Bench is closed.

### 1.11.1 The functions of [Database backup]

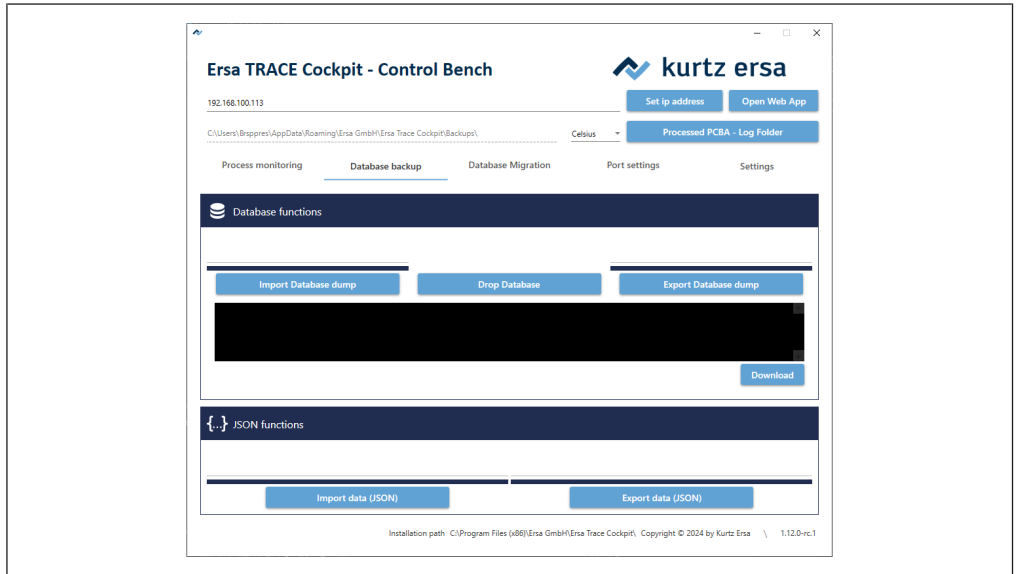


Fig. 31: Menu item Database backup

#### **Export Database dump**

- Save the contents of the database to any location.

#### **Import Database dump**

- Import a saved database.

#### **Drop Database**

- Permanently delete the entire contents of the database.

### 1.11.2 The function of [Settings]

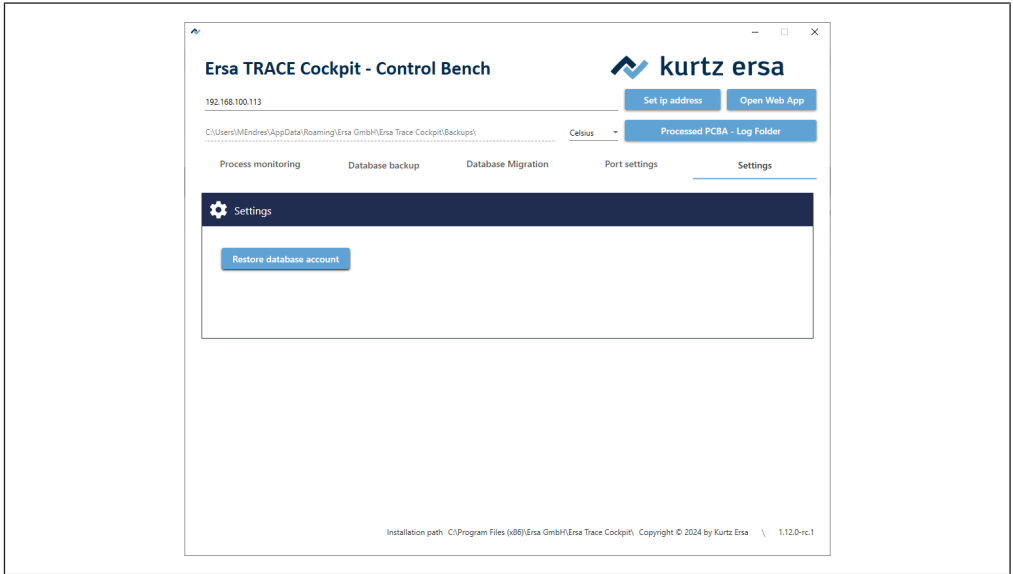


Fig. 32: Menu item Settings

#### Restore database account

- Reset the logged in administrator account to the state of the default account, as before the first login after program installation. Other user accounts are retained.

2. Operate the “Ersa TRACE Cockpit”

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  - 2.1.1 First login to “Ersa TRACE Cockpit” ..... 34
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## 2.1 First steps for setting up “Ersa TRACE Cockpit”

### For your safety and to avoid accidents:

- a) Before you set up or operate a soldering station, be sure to follow the safety instructions and process descriptions in the
  - operating instructions for the Ersa i-CON TRACE soldering station (part no. 3BA00252, downloadable in the Ersa member section)
  - and the enclosed brochure “Kurtz Ersä Safety Instructions” (part no. 3BA00188).

### 2.1.1 First login to “Ersa TRACE Cockpit”

- ✓ Ersa TRACE Cockpit must be started with administrator rights.
- a) Start the web browser on the device on which the “TRACE Cockpit” web app is being operated. Only required if not started automatically via the “Open Web App” button in the Control Bench.
- b) Enter the following in the browser address bar:  
The IPv4 address of the server PC immediately followed by the characters “:8081/login” (without inverted commas). Read more about this in Chapter [Determine the IPv4 address of the server PC](#) [▶ 26].

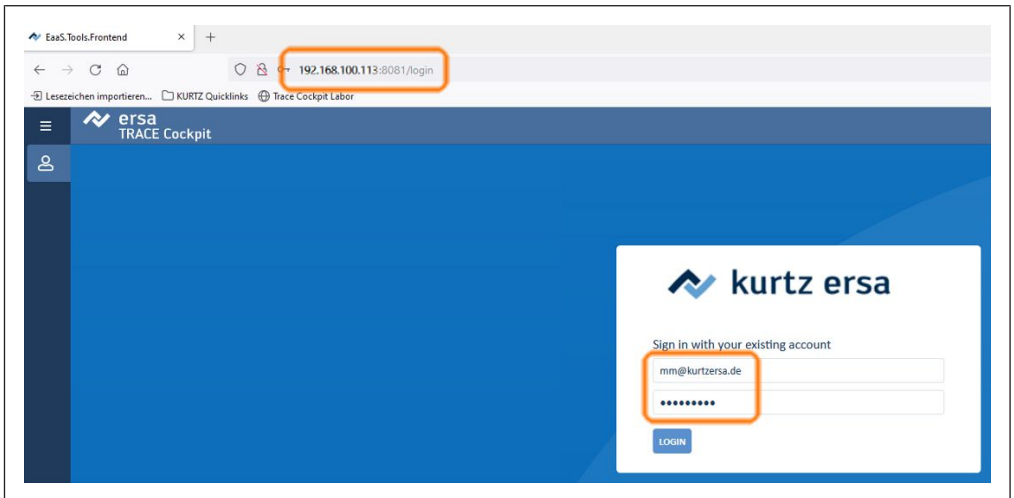


Fig. 33: Enter predefined login data

- c) Log in to the web app with the predefined e-mail address:  
“mm@kurtzera.de”  
and with the temporary password:  
“kurtzera”  
⇒ You now have administrator rights in Ersa TRACE Cockpit.

There are three user roles:

1. Administrator. They have full user rights. They can create and edit users.
2. Superuser. They have the same rights as the administrator, but cannot create or edit users.
3. User. It can process FIXED JOBS or FREE JOBS.

### 2.1.2 Create your own administrator user account and add additional users

- a) Select  [User administration] button.
  - b) Select  the button in the top centre to create a user.
  - c) Enter the user data.
  - d) To create the first user with unrestricted user rights, assign the [Administrator] user role.
  - e) Confirm the entries with the [Save] button.
- ⇒ The administrator user account has been created.

Additional users  can be added via [User administration].

### 2.1.3 Check integrated soldering stations

- ✓ In the menu  [Devices], the online LED of the soldering station is displayed in green.

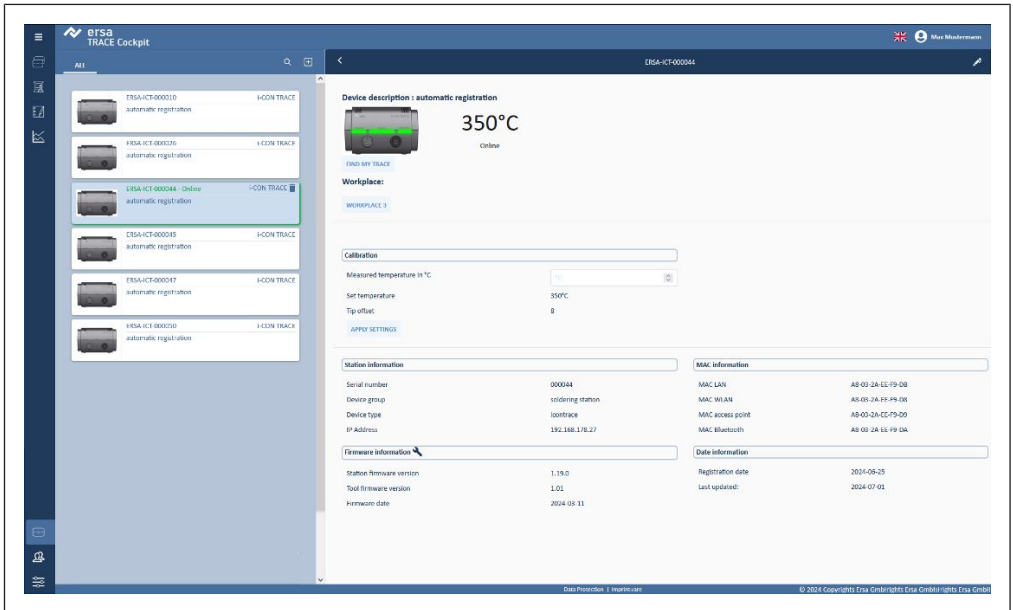


Fig. 34: Display a soldering station in the [Devices] menu

- a) If the soldering station or the online LED is not displayed as required, continue with the following chapter.

### 2.1.3.1

**If after integrating the soldering station the ONLINE LED lights up yellow or the soldering station is not displayed in the [Devices] menu,**

- a) In Ersa TRACE Cockpit, press the key combination [Ctrl] + [F5] to refresh the display and the browser cache.

If the soldering station is still not displayed:

You need the IP-address of this soldering station. Can be read, for example, in the “Ersa TRACE” mobile app.

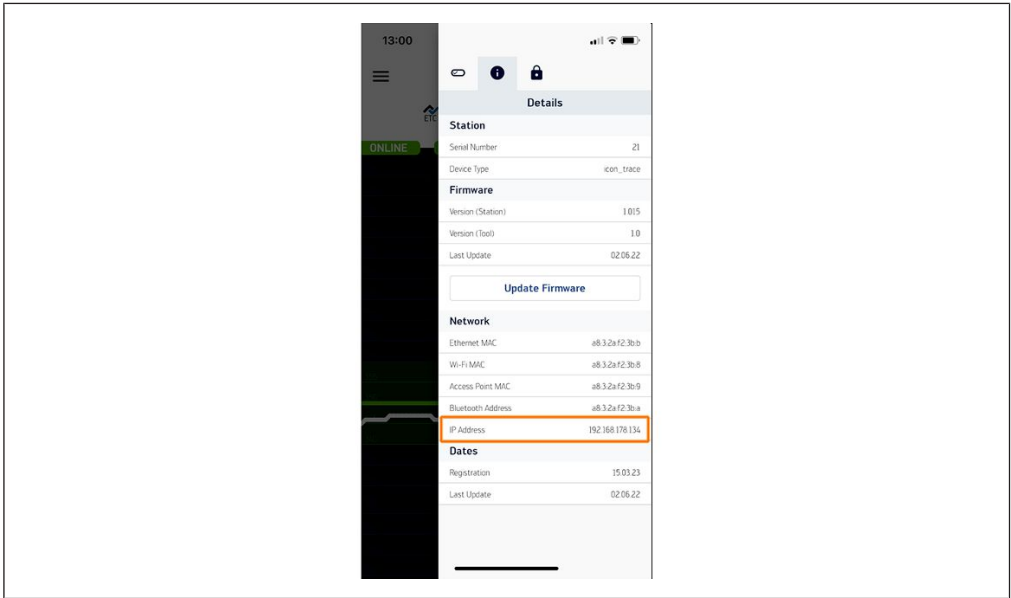


Fig. 35: “Ersa TRACE” display of the IP-address of the soldering station

- a) Open the menu  [Devices].
- b) Select  to add a new soldering station.

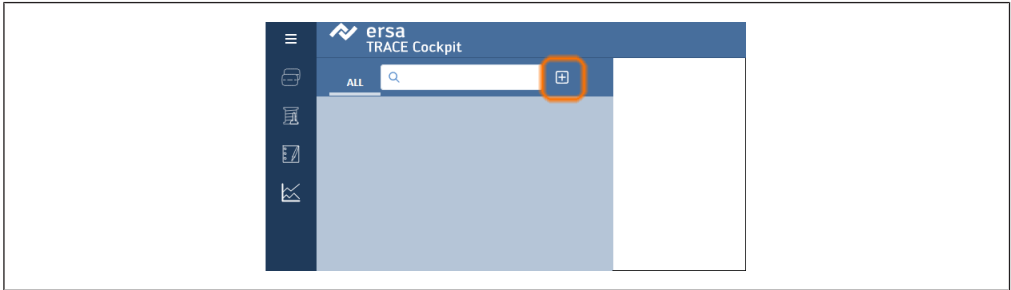


Fig. 36: Add a soldering station manually

- c) Enter the IP-address of the soldering station and confirm with [OK].

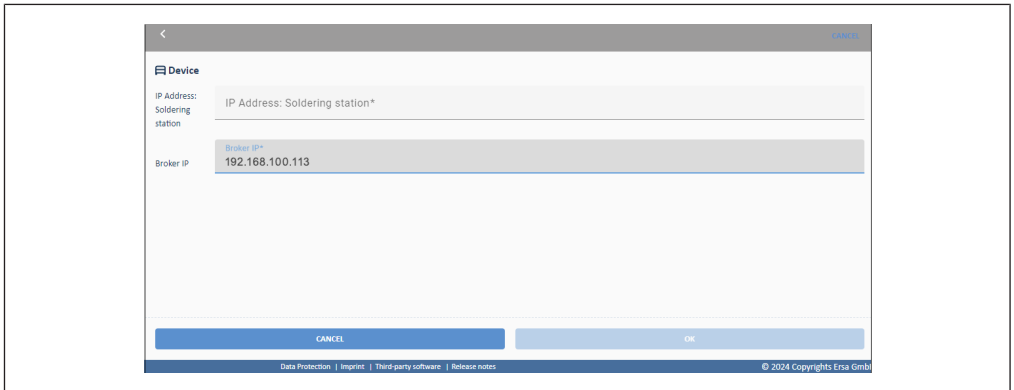


Fig. 37: Enter the IP-address of the soldering station

- ⇒ The soldering station is shown in the menu  [Devices] and the ONLINE LED lights up green.

## 2.1.4

### Create a workplace

First create a workplace to which soldering stations are then connected. The workstations are then assigned to the users.

- Select  [Workplace].
- Select the [All] tab.
- Select  to create a workplace.
- A picture can be added for better identification of the workplace.
- Confirm the entries with the [Save] button.

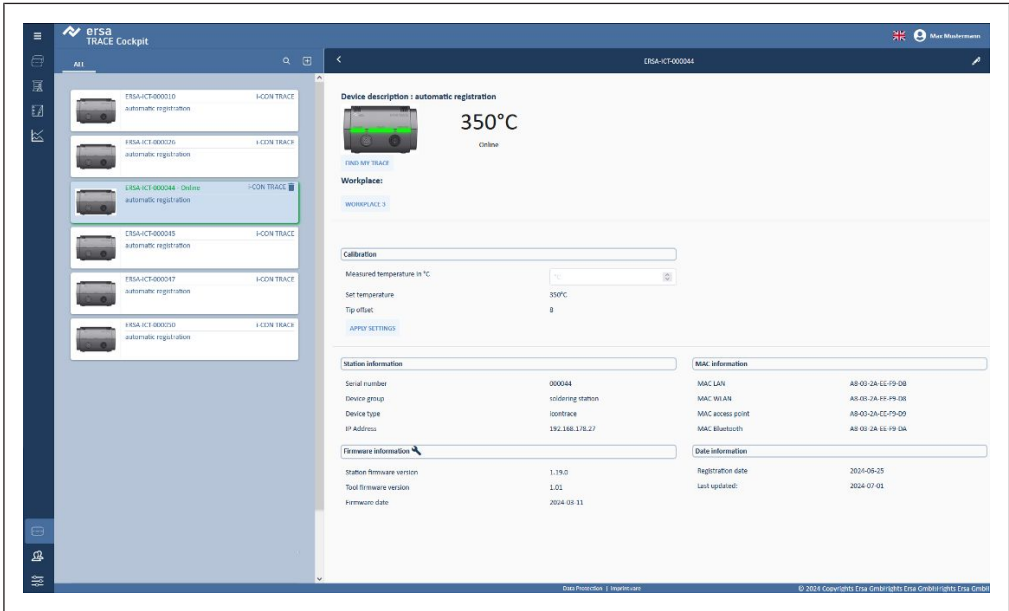


Fig. 38: Display a soldering station in the [Devices] menu

### 2.1.5 Assigning a soldering station to a workplace

All soldering stations that were integrated into the network are available for selection here.

- Select  [Workstations].
- Select the [All] tab.
- Select the workplace which a soldering station is to be assigned to.
- Select  button at the top right.
  - ⇒ The soldering stations that have not yet been assigned to a workplace are listed in the right column.
- Drag and drop the desired soldering station onto the workplace.
  - ⇒ The soldering station is now assigned to the workplace. Your current parameters are displayed.

### 2.1.6 Assigning a workplace to a user

- Select the [User Administration] button. 
- Select a user to whom a workplace is to be assigned.

- c) Select the top right button. 
  - ⇒ The workplaces that have been created are listed in the right column.
- d) Drag and drop the desired workplace onto the user.
  - ⇒ The assignment has been made.
  - ⇒ The workplace is now located under the [Workplaces] button in the [Favourites] and [All] tabs. 

## 2.1.7 Change the user

- a) Select the current user name at the top right.
- b) To log out this user, select the [Logout] button.
- c) Log in with the desired user data.
  - ⇒ The user can use their workplace with the user rights assigned to them.

## 2.1.8 Pasting materials for the soldering work

### 2.1.8.1 *Importing materials data of the soldering tip*

To be able to assign a soldering tip type to a FIXED JOB or FREE JOB, the soldering tip data must be imported into the material management.

- ✓ The installation package has been downloaded from the Ersa website. Read more about this in chapter ["Set up a user account on the Kurtz ersa website and download the software package \[▶ 11\]"](#).

- a) Select the menu  [Material management].
- b) Select the button in the [Tip] tab .
- c) Select the [Upload file] button.
- d) Navigate to the directory in which the installation data is stored.
- e) Import the ZIP file with the soldering tip data.
  - ⇒ The material data for all soldering tips in the 142 series has been imported and can be used.

Future additions or changes to the soldering tip data are imported in the same way.

### 2.1.8.2 *Adding additional materials to material management*

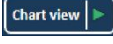
In order to be able to assign materials of the [Solder wire], [Flux material] and [User defined] types to a FIXED JOB or FREE JOB, they must be created in Material management. Any material type can be optionally created under [User defined].

- a) Select the menu  [Material management].

- b) Select the desired material type in the drop-down menu (tip, solder wire, flux material or other).
- c) Select  button to insert the material.
  - Import soldering tip data as a zipped file
  - Enter and save solder wire data, flux material data or user-defined material in the mask. A picture can be added for easier identification.
- a) Confirm the entries with the [Save] button.

## 2.2 The menu items on the left

Can I always delete jobs and what are the consequences of this???

|  | Menu item [Workplace]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   | Display of all created workplaces including the logged in user's workplace.                                                                                                                                                                                                                                                                                                                                                                                                                              |
|  | Only in the [All] tab, at middle top:<br>Adding a workplace.<br>Read more about this in Chapter <a href="#">Create a workplace</a> [▶ 38].                                                                                                                                                                                                                                                                                                                                                               |
|  | At the top right:<br>Assign a soldering station to a workplace.<br>Read more about this in Chapter <a href="#">Assigning a soldering station to a workplace</a> [▶ 39].                                                                                                                                                                                                                                                                                                                                  |
|  | Assign the selected workspace to the [Favourites] tab or deselect it from favourites.                                                                                                                                                                                                                                                                                                                                                                                                                    |
|  | Permanently delete the selected workplace.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|  | Green arrow buttons:<br>Display of the live chart of the temperature value and power value of the soldering station, which can be selected in the menu item  [Workplace] is selected.<br><br>Info: When a JOB is started, the temperature and power value are automatically recorded (tracking) and saved as a chart. Read more about this in Chapter <a href="#">Showing the recorded soldering protocol</a> [▶ 49]. |
|  | Controlling the soldering station from your own workplace. Read more about this in Chapter <a href="#">Soldering station control</a> [▶ 45].                                                                                                                                                                                                                                                                                                                                                             |

|  | Menu item [Material]                                                                                                                                                                                 |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    | Create work materials to be assigned to a FIXED JOB or FREE JOB.                                                                                                                                     |
| [Tip]                                                                              | Soldering tip data is only provided by Ersa as a download. Read more about this in Chapter <a href="#">Set up a user account on the Kurtz ersa website and download the software package</a> [▶ 11]. |
| [Soldering wire]<br>[Flux material]<br>[Other]                                     | How to paste other work materials is described in chapter <a href="#">Adding additional materials to material management</a> [▶ 40].                                                                 |

|  | Menu Item [Jobs]                                                                                                                     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | Create and execute a FIXED JOB or FREE JOB. Read more about this in Chapter <a href="#">Creating a FIXED JOB or FREE JOB</a> [▶ 47]. |
|  | Delete job / Delete material                                                                                                         |

|                                                                                         |                                                                                 |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|        | <b>Menu item [Job Logs]</b>                                                     |
| Display the parameters and the chart of finished or running jobs or boards for logging. |                                                                                 |
| Finished jobs                                                                           | Display the parameters and the chart of completed jobs and boards.              |
|        | Delete the job.                                                                 |
| Boards                                                                                  | Display the current status of jobs and boards that have not yet been completed. |

|                                                                                                                                                                          |                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|                                                                                         | <b>Menu item [Soldering station]</b>                                                    |
| Show current settings of a soldering station and edit the basic data  using the button. |                                                                                         |
|                                                                                         | Remove soldering station from the network.                                              |
| Range [Calibration]                                                                                                                                                      | Read more about this in Chapter <a href="#">Calibrating a soldering station</a> [► 50]. |

|                                                                                   |                                                                                                                                              |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Menu item [User management]</b>                                                                                                           |
| Display of users and user parameters.                                             |                                                                                                                                              |
|  | Create a user. Read more about this in Chapter <a href="#">Creating a user</a> .                                                             |
|  | At the top right. Display of the created workplaces. Read more about this in Chapter <a href="#">Assigning a workplace to a user</a> [► 39]. |
|  | Edit the selected user.                                                                                                                      |
|  | Delete the selected user.                                                                                                                    |

|                                                                                     |                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Menu item [Settings]</b>                                                                                                                                                                 |
| [Firmware update]                                                                   | To update the firmware, read the chapter <a href="#">Performing updates</a> [► 51].                                                                                                         |
| [Advice]                                                                            | Display of all previous system messages, warnings and error messages.<br>Select the soldering station in the first drop-down menu.<br>Use the other drop-down menus to filter the messages. |
| [API Online State]                                                                  | State of the “Ersa TRACE Cockpit” web app modules. The [Frontend version] function shows the currently used version of the web app.                                                         |
| General settings                                                                    | If a company logo is uploaded, it is displayed in the PDF soldering protocol.                                                                                                               |

|                                                                                                                                                                     | Menu item [Settings]                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p data-bbox="248 161 454 199">Barcode</p> <div data-bbox="260 204 415 523"></div> | <p data-bbox="454 161 1067 247">Option to print out the QR codes if required [Skip, skip scanning] and [Clear, delete entries] for the workplace.</p> |

## 2.3 Working with Ersa TRACE Cockpit

### 2.3.1 Soldering station control

Select the menu  [Workstations].

Select  button to display the control of the soldering station.

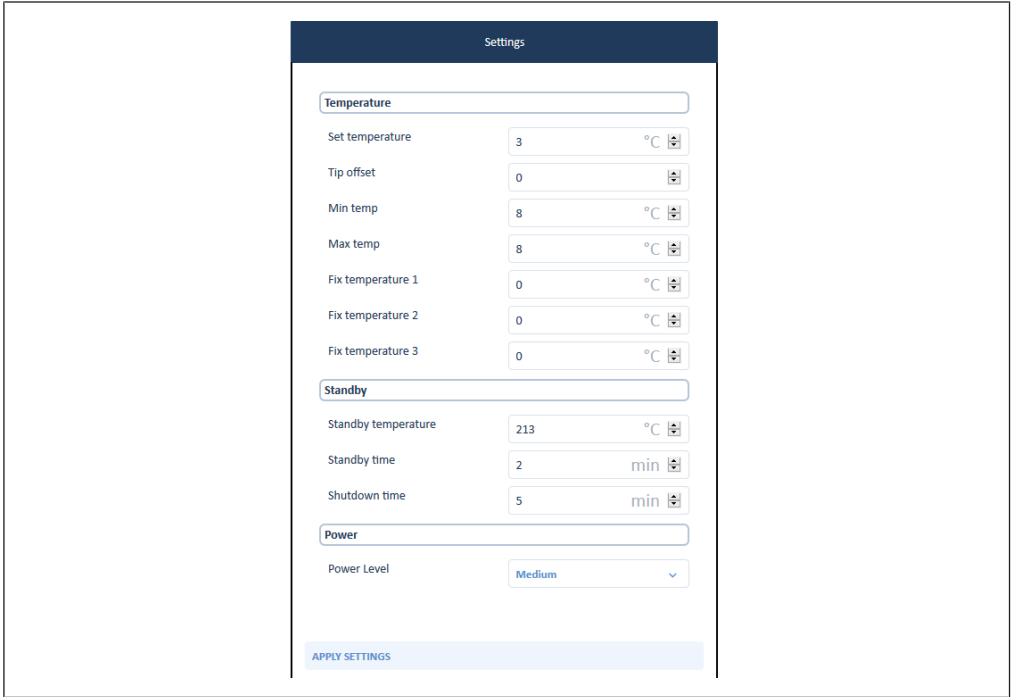


Fig. 39: [Settings] window for controlling the soldering station

#### [Temperature] range

**Target temperature** (50...450 °C / 122...842 °F)

The target temperature is the desired soldering tip working temperature.

**Temperature range below (rel) / temperature range above (rel)** (Standard setting  $\pm 20$  °C /  $\pm 68$  °F)

A temperature range with upper and lower limit values can be defined for the soldering tool. If the tool temperature is outside this range, the READY LED turns red.

#### Fixed temperatures 1, 2 and 3

Three fixed temperatures to be called up with one click can be set. To show these temperature buttons, select the middle one.

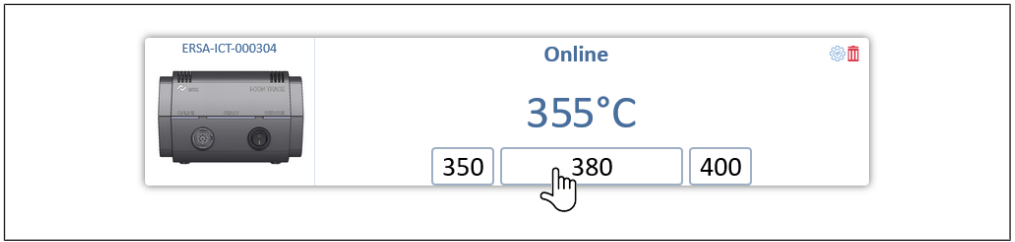


Fig. 40: Three buttons for fixed temperatures

### Range [Standby]

**Standby temperature** (Standard setting 210 °C / 410 °F)

During work breaks, the soldering station automatically switches to [Standby temperature] after [Standby time] has elapsed. The READY LED lights up yellow in standby mode. The soldering iron must be moved to trigger reheating from standby temperature.

**Standby time** (1 min...60 min)

[Standby time] is the span from the last time you worked with the soldering tool until when [Standby temperature] is enabled.

### Shutdown time



#### CAUTION

**Attention Risk of burns!**

After switching off, the soldering tip remains hot for a long time!

Span from when [standby temperature] has been reached until the heating element is switched off (shutdown). The READY LED blinks yellow in shutdown mode. The soldering iron must be moved to trigger reheating from shutdown.

### Range [Energy]

**Energy level**

Affects the heating and post-heating behaviour of the soldering station. The three control characteristics [Low], [Medium] and [High] make it possible to adjust to different sizes of soldering tips and components.

[Low]: Minimal post-heating behaviour, for soldering work with low heat requirements.

[Medium]: Stronger post-heating behaviour, for soldering work with average heat requirements.

[High]: Maximum post-heating behaviour, for soldering work with high heat requirements.

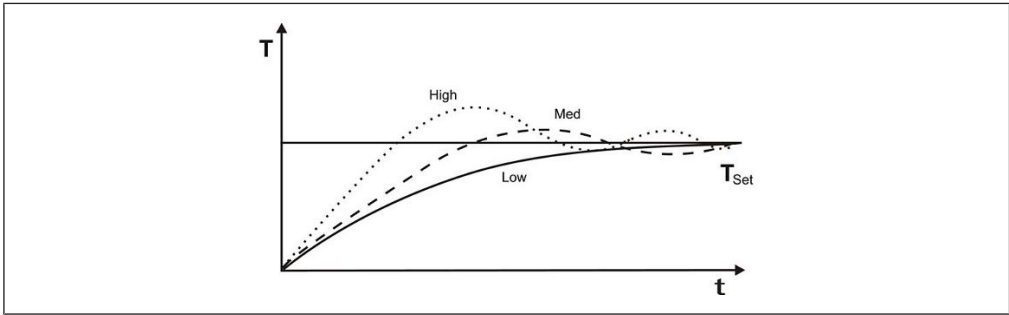


Fig. 41: Energy level, temperature/time diagram

Select the [Apply settings] button to apply changes.

### 2.3.2 Creating a FIXED JOB or FREE JOB

Users who are logged in as administrator or superuser can create FREE JOBS or FIXED JOBS.

**FREE JOBS:** Soldering materials that are defined for a FREE JOB are not checked for availability before the job is carried out. The use of these materials is optional. The soldering materials used can be recorded after the job has been completed.

**FIXED JOBS:** Soldering materials that are defined for a FIXED JOB are checked for availability before the job is carried out. The defined materials must be used, otherwise the job cannot be started. FIXED JOBS are marked with a padlock symbol.

#### Create a JOB

- a) Select the menu  [JOBS].
  - b) To create a new FIXED or FREE JOB, press the button  at the top centre.  
Use the slider to select the job type FIXED or FREE JOB.
  - c) Optionally, the [Soldering temperature], [Job number] and the [Job size] can be entered.
  - d) Call up the materials intended for use by pressing the [Soldering tip], [Flux material], [Soldering wire] and, if necessary, also [Customised material] buttons.
  - e) Drag & drop the material to be used onto the button.  
The materials used can be scanned with a barcode scanner. To do so, connect the scanner to the device on which the “Ersa TRACE Cockpit” web app is running.
  - f) Select the [Save] button.
- ⇒ The job has been added to the list of FIXED or FREE JOBS.

### 2.3.3 Performing a FIXED JOB or FREE JOB

Adhering to the safety instructions and process descriptions contained in Ersä i-CON TRACE operating instructions and the Kurtz Ersä “Safety Notes” brochure is a prerequisite for properly operating the soldering station.

#### Select job

- a) Select the menu  Select [Jobs].
- b) Select the FIXED JOB or FREE JOB.
- c) Select the workplace and the soldering station used in the relevant drop-down menus.
  - ⇒ With the pen button  the job can be changed if the user has the necessary user rights. Select the [Update] button to confirm the changes.
- d) Select the [Begin soldering job] button.
  - ⇒ The job starts.

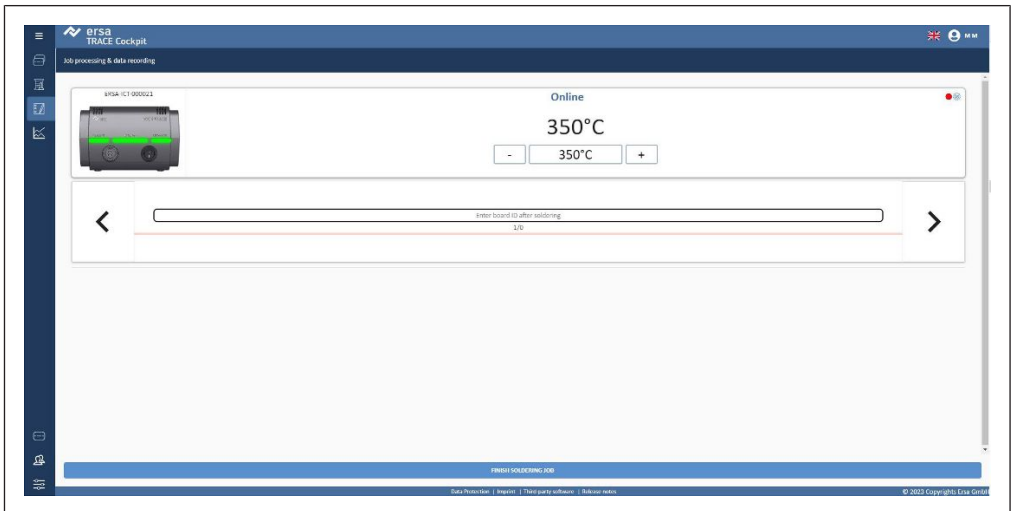


Fig. 42: Performing the soldering process

#### Perform the job

- a) Enter the board used in the “Enter Board id here” window by scanning it with the hand scanner or using the keyboard.
- b) Once the job on a board has been completed, the next board can be selected using the right arrow key. When using the scan function, the next board is automatically displayed if you are working without a scanner. The next board is automatically displayed during scanning.

- ⇒ Depending on the user roles, users can use the cogwheel button to edit the temperature parameters of the soldering station. Read more about this in Chapter [Soldering station control](#) [▶ 45].
- ⇒ The temperature and power value of the soldering station are recorded during the soldering process. Read more about this in Chapter [Showing the recorded soldering protocol](#) [▶ 49].

### Finalise job

- a) With FREE JOBS, more boards can be soldered and scanned than defined. A FREE JOB must therefore be ended manually with the [Complete soldering job] button.  
A FIXED JOB will automatically close when the last board is scanned.
- b) Information on the FREE JOB can be edited again.
- c) Select the [Summary] button.
  - ⇒ The jobs that have been carried out are displayed.
- d) Select the [Download] button to save the live chart data in CSV (Comma Separated Values), XML or PDF format.
- e) Select the [Save] button.
  - ⇒ The job is saved.

## 2.3.4

### Showing the recorded soldering protocol

The automatically recorded data of completed jobs can be viewed under the button  [Job Logs]. The materials or boards used and the parameters are displayed.

- a) Select the [Download] button to save the live chart data in CSV (Comma Separated Values), XML or PDF format.
  - ⇒ The Control Bench determines the saving place for the data.

## 2.4

### Calibrating a soldering station

Calibrating will bring the temperature reading into line with the actual soldering tip temperature. If provided with the necessary user rights, users can calibrate. You need a calibrated controller (e.g. Ersa DTM 110). The adjustable calibration range is  $-70...+50\text{ }^{\circ}\text{C}$  /  $-126...+90\text{ }^{\circ}\text{F}$ .

#### Determining the soldering tip temperature

- a) Ensure quiet air conditions during calibration to avoid measurement errors.
- b) Select  [Workplace].
- c) Select the soldering station to be calibrated.
- d) Select the cogwheel  button to display the control of the soldering station.
- e) Set the desired [target temperature] of the soldering tip here and wait at least 30 seconds until a stable state is reached.
- f) Measure the soldering tip temperature with a calibrated controller (e.g. Ersa DTM 110) at about 2 mm from the outermost point of the soldering tip. To do so, read the operating instructions for the controller. The work steps specified therein must be followed for accurate measurement.

#### Enter the determined soldering tip temperature into the "Ersa TRACE Cockpit" web app

- a) Select  [Soldering station].
  - b) Select the soldering station to be calibrated.
  - c) Enter the controller's temperature reading into the [Measured temperature] edit control.
  - d) Select the [Apply] button.
- ⇒ The soldering station has been calibrated.

## 2.5

### Performing updates

Administrators and super users can perform updates.

Software updates for the i-CON TRACE soldering station are available on the Ersa website in the members section under “6.1.5 Software/Tools/i-CON TRACE”. Compare the version numbers.

#### Update the “Ersa TRACE Cockpit” web app

Ersa TRACE Cockpit must be uninstalled before installing a newer version. The database remains unchanged.

- a) Select  the [API Online Status] tab in the [Settings] menu. The version number is displayed here.
- b) To uninstall, follow the chapter [Delete the folder in which the PostgreSQL database was saved](#) [▶ 56].
- c) Then install the new version. Read more about this in Chapter [Installation step 2: Install the “Ersa TRACE Cockpit” web app](#) [▶ 22].

#### Update the soldering station firmware

- a) Select  the [Firmware Update] tab in the [Settings] menu. The version number is displayed here.
  - b) Select the [Upload file] button or import the update file using drag & drop.
  - c) Navigate to the update file (file extension \*.bin) and import the file.
  - d) Select all soldering stations to be updated in the [Update] column.  
The update process of several soldering stations will run simultaneously.
  - e) Click on the [Update] button.
- ⇒ All LEDs blink yellow during the update process. The update process can take more than 20 minutes.

## 2.6

### Resetting the soldering station with the reset key

If connection problems occur between the “Ersa TRACE” mobile app or the “Ersa TRACE Cockpit” web app and the soldering station, which cannot be remedied, re-setting the soldering station to the factory settings is recommended.

The factory settings are specified in the “Factory settings (defaults)” section of the operating instructions for the soldering station.

#### Resetting the soldering station

- ✓ Switch off the soldering station.
- ✓ Remove the soldering iron cable.
- ✓ Connect the mains plug.
  - a) If any, disconnect the optional LAN cable.
  - b) Carefully turn the soldering station over so that the bottom of the device is facing upwards. When doing so, beware of the connected mains cable.
  - c) Press and hold the reset button [12] at the bottom with a suitable object (e.g. paper clip). Do not use a pointed object.

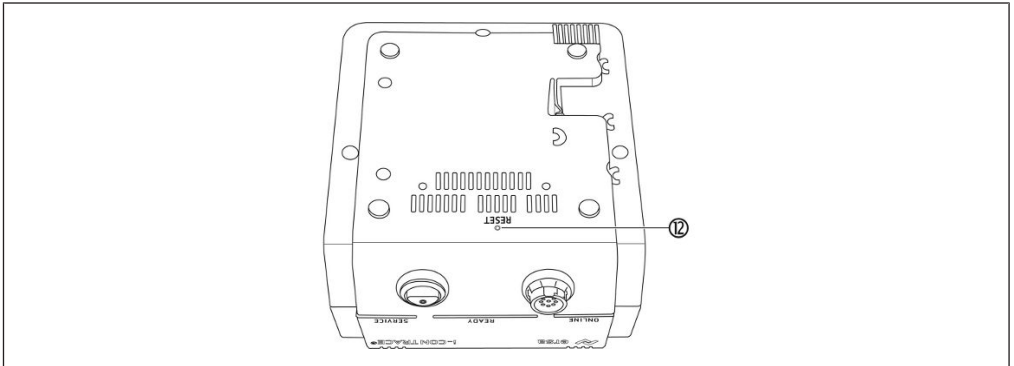


Fig. 43: Reset button [12] on the bottom of the device

- d) With the reset button pressed in, switch on the soldering station.
- e) When all 3 LEDs light up yellow, release the reset button.
  - ⇒ The soldering station has been reset to factory settings.
- f) Turn off the soldering station.
- g) Plug back in the disconnected cable.
- h) When using a WLAN for network connection:
 

After a reset, the soldering station must be reintegrated into the WLAN. To do this, use the Bluetooth function of the “Ersa TRACE” mobile app on a mobile

device.

Read the chapter “Establishing a WLAN connection between the soldering station and a network” in the operating instructions for the soldering station.

### 3. Uninstall TRACE Cockpit

#### 3.1 Uninstalling the Ersa TRACE Cockpit web app

- a) Press the key combination [Windows] + [X].
- b) Select the [Apps and features] function in the expanded quick link menu.

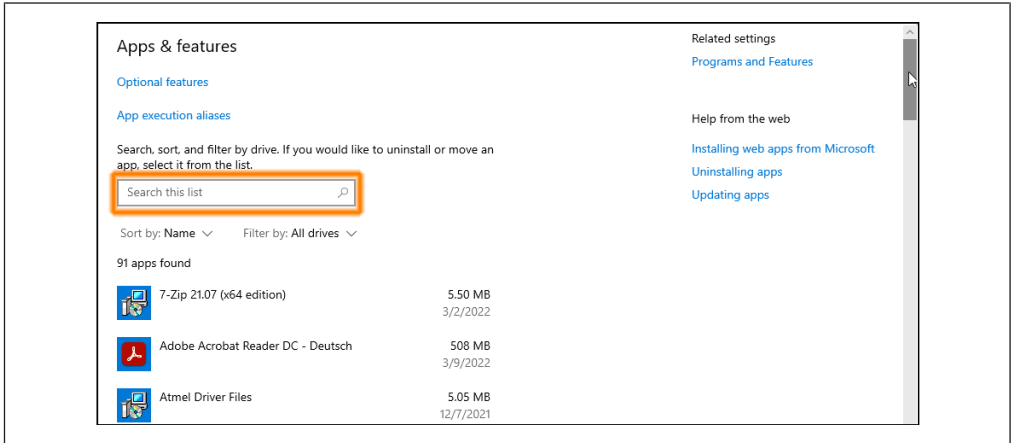


Fig. 44: Input field for app search

- c) Enter "Ersa TRACE Cockpit" in the input field.
- d) [Ersa TRACE Cockpit] is displayed. Click this to uninstall it.  
⇒ The uninstall wizard starts.

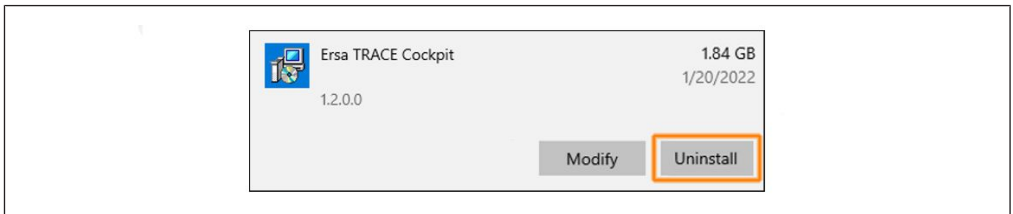


Fig. 45: The Ersa TRACE Cockpit uninstall wizard

- e) Click [Uninstall] several times.
- ⇒ Ersa TRACE Cockpit is uninstalled.

#### 3.2 Delete the folder in which Ersa TRACE Cockpit was installed

- ✓ Search for the folder in which Ersa TRACE Cockpit was installed.

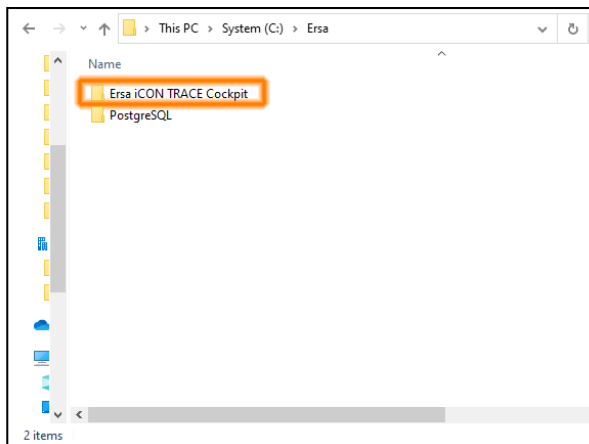


Fig. 46: Select [Ersa iCON TRACE Cockpit] folder for uninstallation

- a) Right-click on this folder and select the [Delete] menu item.
- ⇒ The folder is deleted.

### 3.3 Uninstall the PostgreSQL database and delete its contents

Important: If you perform a TRACE Cockpit update, do not uninstall the PostgreSQL database!

Read more about this also in Chapter --- FEHLENDER LINK ---.

- a) Select the [Apps and features] function in the quick link menu.
- b) [PostgreSQL] is displayed. Click this to uninstall it.
  - ⇒ The uninstall wizard starts.
- c) Click [Uninstall] several times.
- d) Select [Delete entire application].

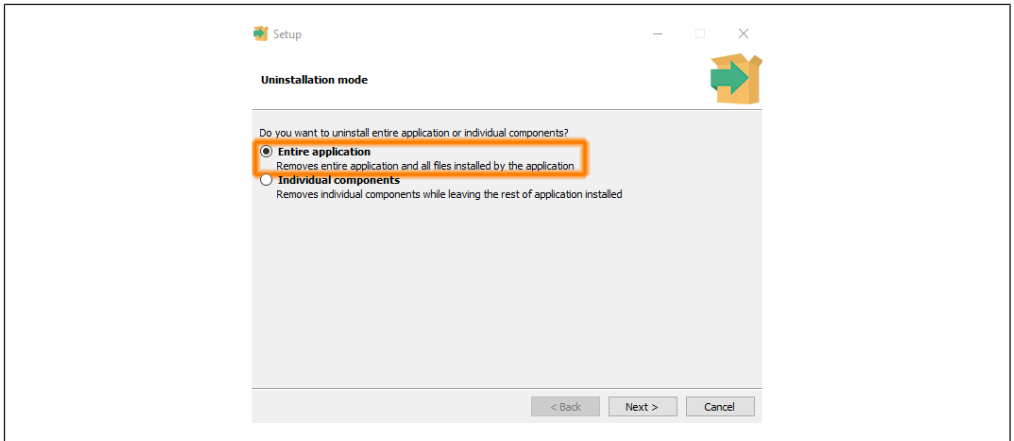


Fig. 47: Select [Entire application] for complete uninstallation

- e) Click [Next].
  - ⇒ The uninstallation begins.
- f) Click [OK] several times.
  - ⇒ PostgreSQL is uninstalled.

### 3.4 Delete the folder in which the PostgreSQL database was saved

- a) Search for the folder in which the PostgreSQL database was saved.

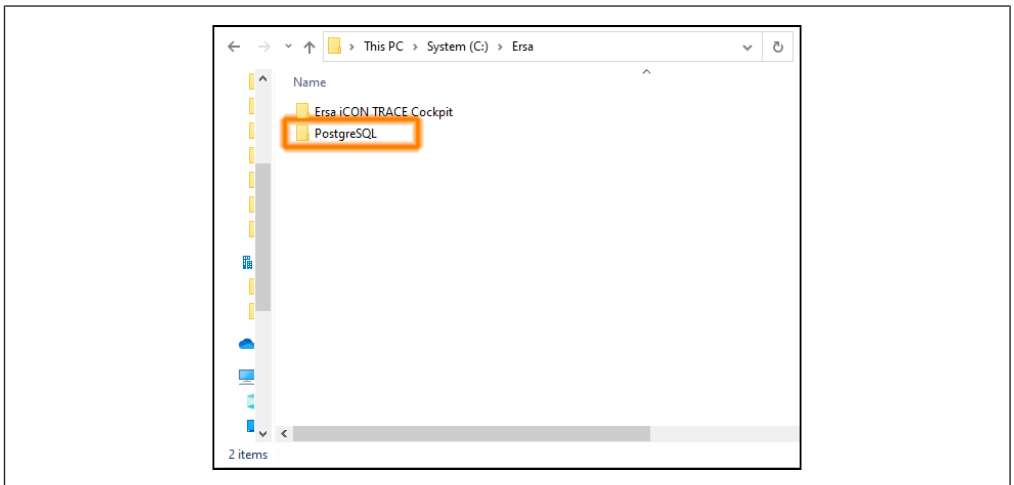
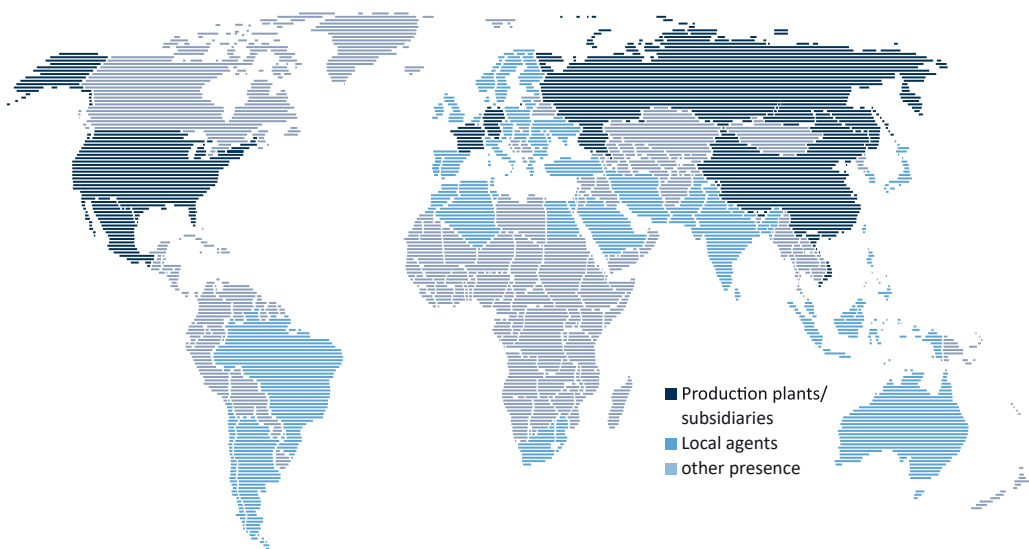


Fig. 48: Select [PostgreSQL] folder for uninstallation

- b) Right-click on this folder and select the [Delete] menu item.
- c) The folder is deleted.

## 4. FAQ - Frequently asked questions

- “Ersa TRACE Cockpit” cannot be started.
  - Check the specified network port 5432 for the database. This network port must not be changed.
- A network connection with the soldering station is not possible.
  - Ensure that all devices in the network, including the router, support the 2.4 GHz radio frequency.
- The IP-address for integrating the soldering station is not displayed in the “Ersa TRACE” mobile app.
  - Connect the mobile device to the same network to which the soldering station and “Ersa TRACE Cockpit” are connected.
- The soldering station is no longer recognised after a certain time and must be re-integrated.
  - The soldering stations may have been assigned a new IP address by the network. It is recommended to assign a static IP address to the soldering stations.



Electronics Production Equipment

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