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TECHDOCK

remote2control

Connectivity Software

User Manual

Table of Revisions

Revision	Description	Date
0	Document Creation	04.11.2022
1	Review & Revisions	02.01.2023
2	Insert new options in the Service area	22.04.2024
3	Insert new option Audit Trail and Languages	16.03.2024
4	Insert new option video recordings	08.07.2025

Index	Initial	
	Date	Name
Created	03.09.2025	S. Mislin
Approved	04.09.2025	M. Mislin

www.techdock.ch

TECHDOCK

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Figure Legend:

Glossar :

c4l:	control4log	v4l:	vpn4log	r2c:	remote2control
N.A.:	Not applicable	VPN:	Virtual Private Network	USB:	Universal Serial Bus
ETH:	Ethernet	HMI:	Human Machine Interface	I/O:	Input / Output
vUSB:	Virtual USB	PA:	Parameter	TP:	Text parameter
TD:	Techdock GmbH	x4l:	Product control4log, vpn4log, vpn4log PoE		

1 Introduction

This manual covers information on the installation and use of the remote2control software.

1.1 Mandatory Action Symbols

General Mandatory Action Symbol

Fig. 1: Mandatory Action Symbol

2 Saftey Guidelines

2.1 Intended Use

Please read the user manual carefully and completely before using the device for the first time. The device must only be operated by trained personnel. Any damage caused by failure to follow the instructions in the user manual is excluded from any liability.

The software is only to be used in the manner described in the user manual. Using the software in any other manner than the intended can lead to serious issues.

Fig. 2: Warning Symbols

2.2 Customer Service

TECHDOCK GmbH
Paradiesstrasse 34
CH – 4102 Binningen
E-Mail: info@techdock.ch

Fig. 3: QR-Code

2.3 Hazards

The software saves files on your system; check the installation with your IT department, if necessary.

3 Description

The open source software remote2control is available under the MIT license.

Always store this manual close to the device.

The operating instructions can also be downloaded under the following link:

- https://techdock.ch/dl/remote2control

3.1 Area of Application

The remote2control software was developed to enable users to access the x4l at any time and from anywhere via the internet to read out or change current parameters and sensor values.

3.2 x4l

The control4log device is a data logger and offers the ability to configure the device with TCP/IP or USB stick, read stored values via TCP/IP or USB stick, query current values via TCP/IP, send alarms for digital and analogue threshold values via email, and mediate USB connections over the internet.

The vpn4log device offers the ability to configure with TCP/IP or USB stick, read stored values via TCP/IP or USB stick, and mediate USB connections over the internet.

More detailed information about the control4log and the vpn4log can be found under the following link:

- https://techdock.ch/en/downloads/documents

4 Specifications

4.1 Operating System

The remote2control software is a Windows 10 based open source software.

4.2 Rules and Regulations

It is always up to the owner of the x4l whether to change data with the remote2control software.

Adapting and changing the devices on the operating system and application level is done at your own risk. In the event of a defect, the device can only be reset by the TECHDOCK customer service. However, this will reset the device to its factory settings.

5 Installation

5.1 Operating System

The remote2control software is a Windows 10 based open source software.

5.2 remote2control Installation

- Go to the website https://techdock.ch/dl/software
- Click on the "remote2control (ClickOnce)" link to download the installation file.
- Once the download is complete, double-click the remote2control.application file to start the installation process.
- Follow the on-screen instructions to install the application.
- Once the installation is complete, you can launch the application from the start menu, or by clicking on the desktop icon.

Please note that remote2control is a ClickOnce application that is installed over the Internet. It is recommended to maintain a stable internet connection during the installation process.

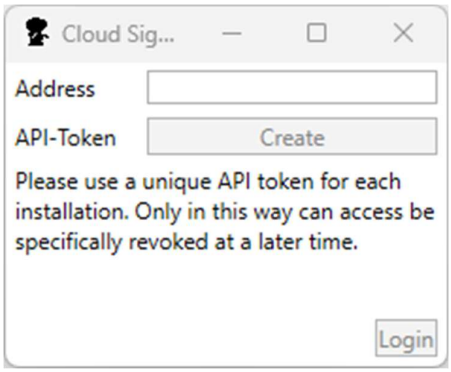
5.3 Storage Location

The data is saved in the following folders:

Custom Settings: %AppData%\remote2control
Local Database: C:\Users\<Benutzername\Documents\remote2control

5.4 remote2control Setup

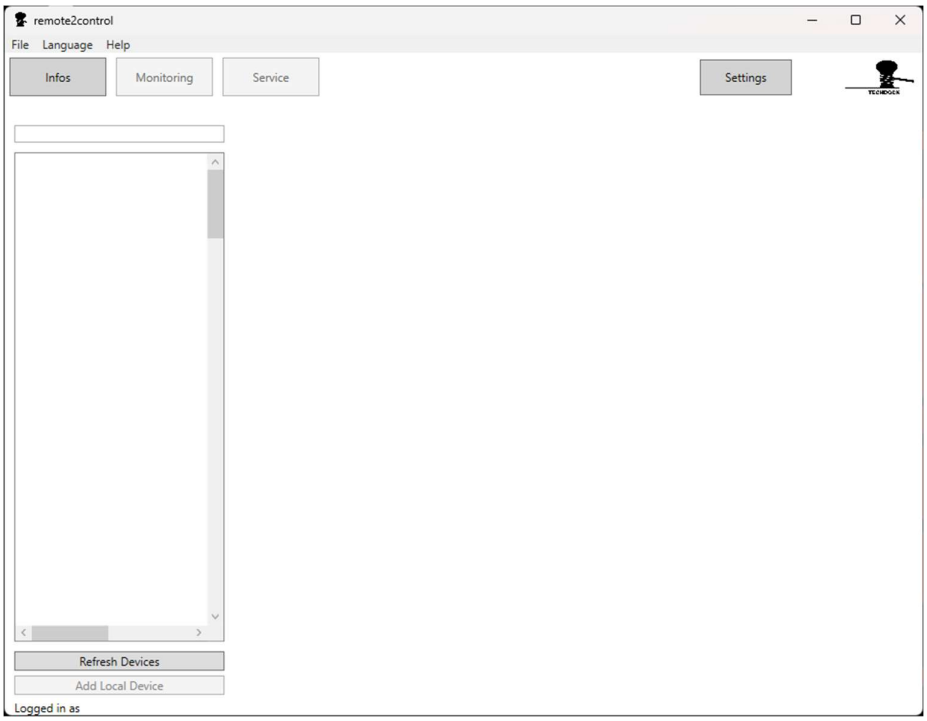
1. Start the "remote2control" application for the first time.
2. You will be asked for access credentials to ensure a seamless connection to the cloud. The access credentials consists of the Cloud URL and an API token.
3. To receive an API token, enter the address of your cloud provider in the specified input field and then click on the "Create" button.
4. A browser window with the page of your cloud should open. Sign in if you haven't already.
5. You should now be taken to the Manage your API tokens page. Create a new API token. The name of your own computer is suitable as the name for the API token. Please create a separate API token for each installation.
6. Copy the newly created API token into the «API token» input field in the "remote2control" application.
7. Save your entries and continue using the application.



Under settings you also have the option to connect or manage a cloud at a later point in time.

6 Overview of remote2control Functions

6.1 Overview



6.2 File Tab

Open:

- Opening a saved local database.

Save:

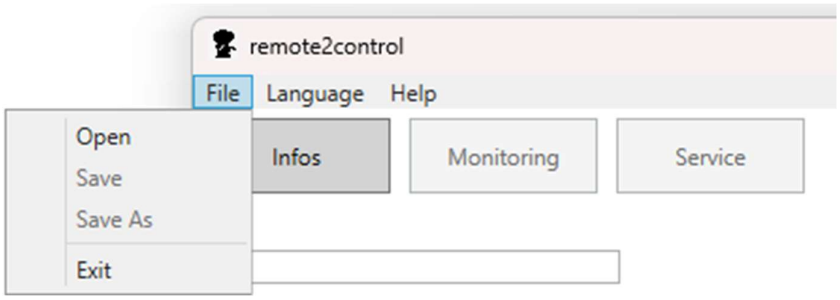
- Saving a created local database.

Save under:

- Saving a created local database to a different folder.

Exit:

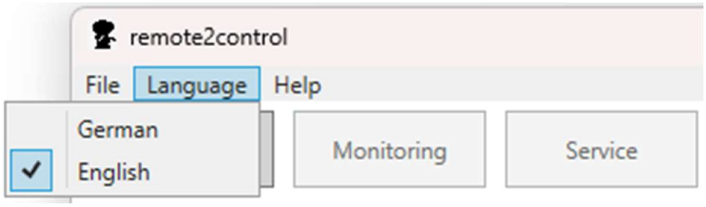
- Exit the remote2control software.



6.3 Language Tab

Language:

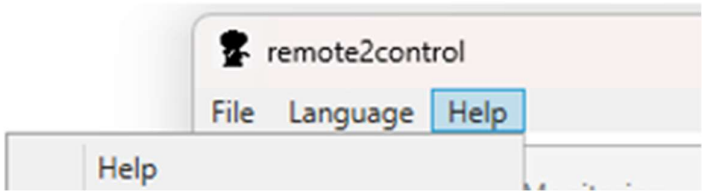
- The default language setting of the application, German or English, can be configured here.



6.4 Help Tab

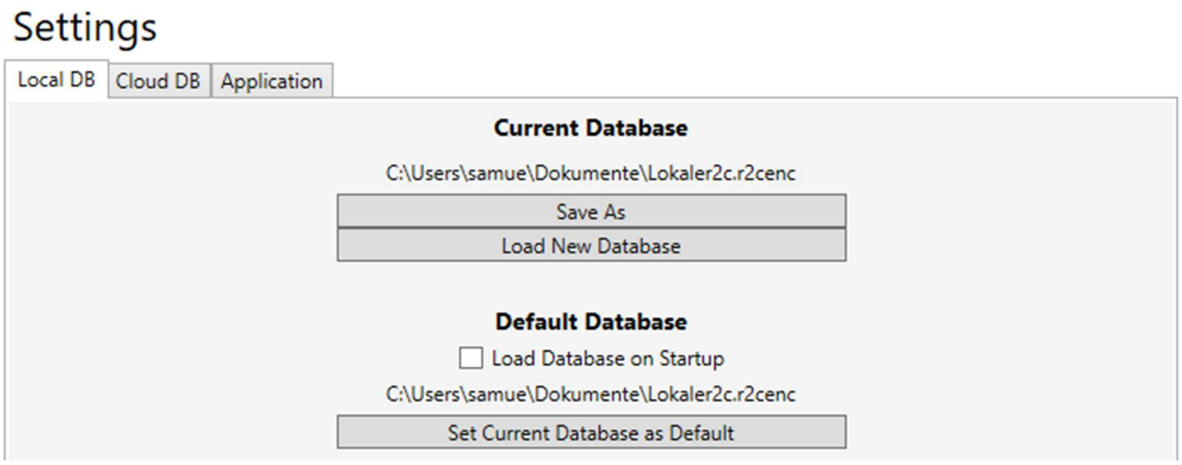
Help:

- Here you can see the manufacturer, the website and a contact option for support.



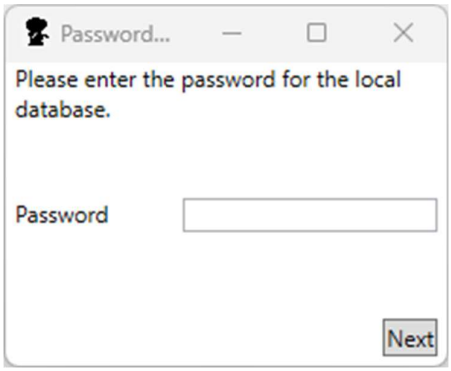
7 Settings

In the settings menu you have the option of managing your currently loaded database, editing the stored clouds, or adding a new cloud connection.



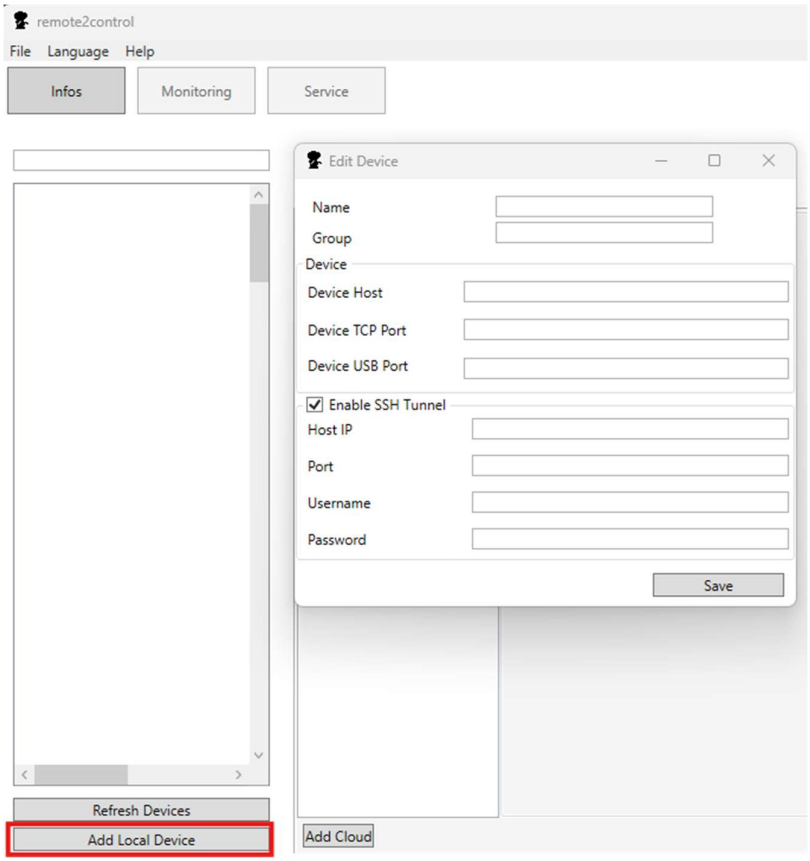
7.1 Create a local database

A local database can be created or loaded here.
If the local database has been created under "Save as", a window opens in which the database can be protected with a password.

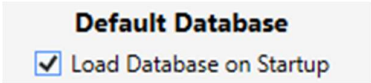


7.2 Adding a local device

A device can be created and added to the local database using the "Add local device" button.

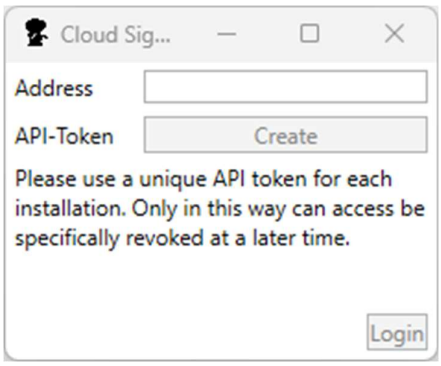


If you have created a local database, you can activate automatic loading when starting r2c.



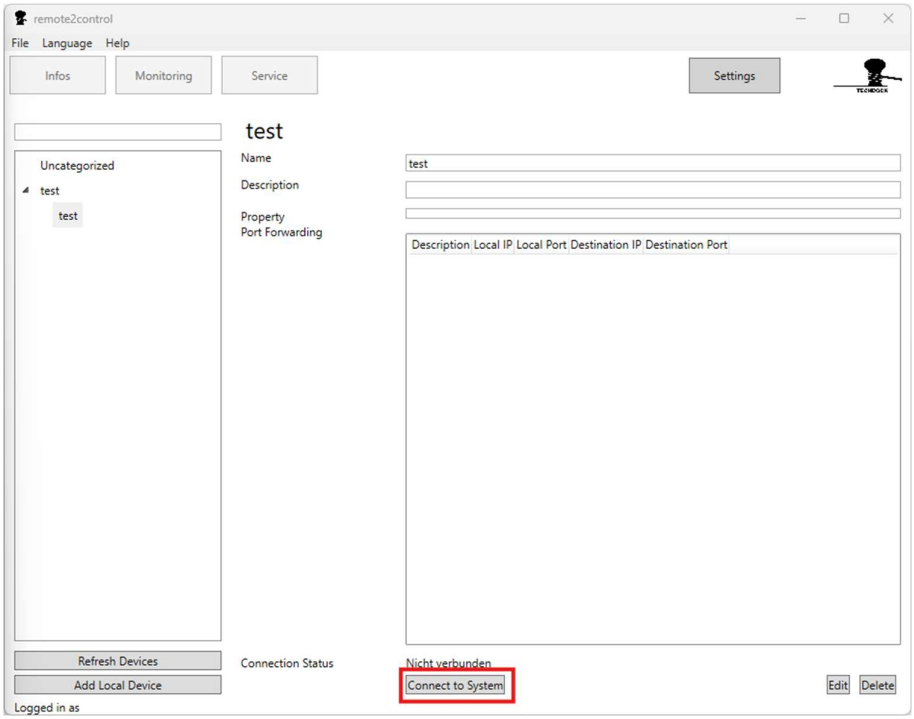
7.3 Cloud Database

To connect remote2control to a cloud database, you need the cloud URL address (MyCloud.com) as well as the API token that must be generated using the personal cloud user.



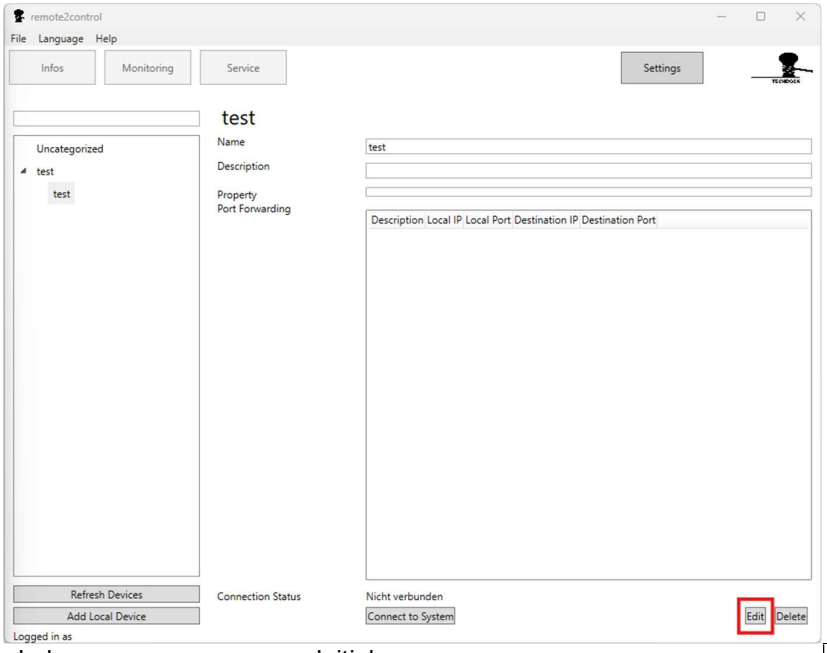
8 Connect to a System

The system is selected by double-clicking and can be connected by choosing "Connect to system".



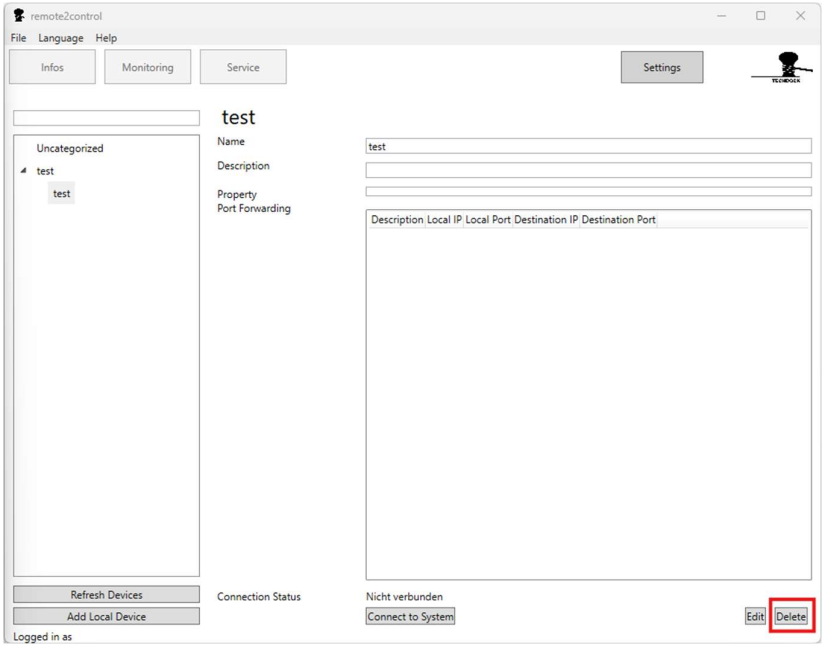
8.1 Editing

The current connection information can be changed at any time via the "Edit" button.



8.2 Delete

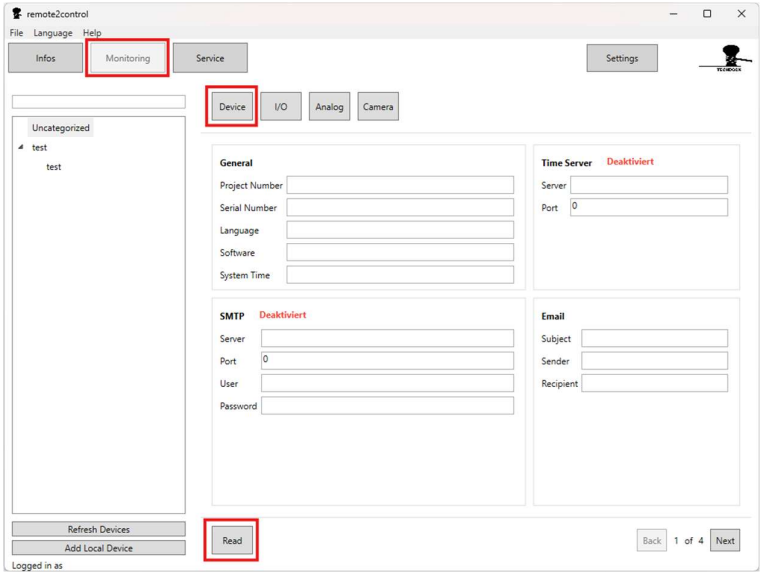
The currently selected system can be deleted using the "Delete" button.



9 Monitoring

9.1 Device

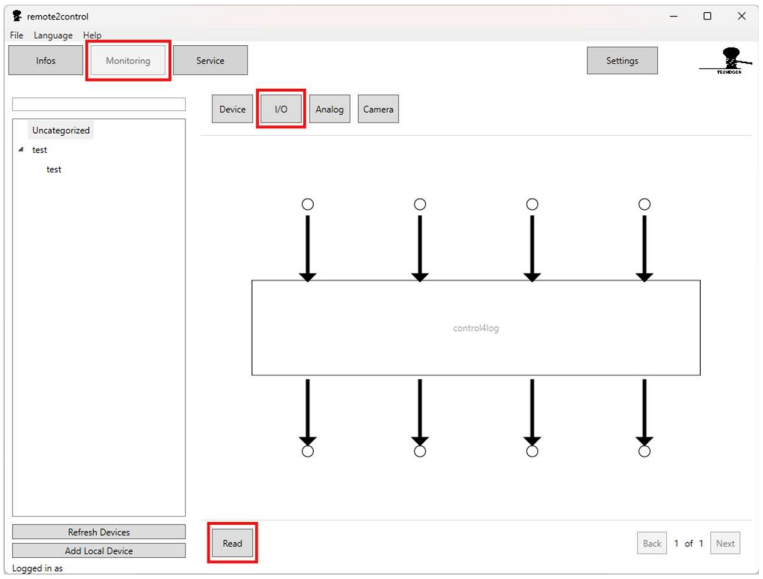
When the system is connected, the parameters stored in the x4l can be read out using the "Read" button.



9.2 I/O

Attention: Only available for control4log!

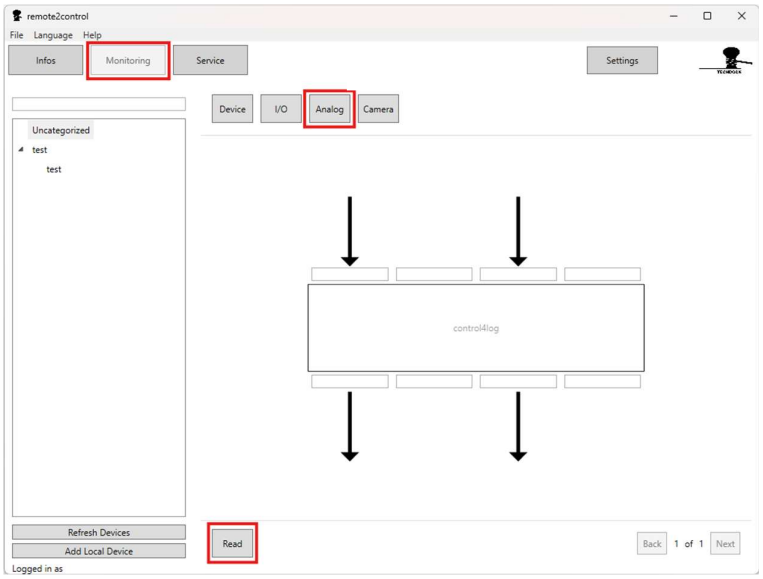
When the system is connected, the current status of the I/Os on the control4log can be read out using the "Read" button.



9.3 Analog

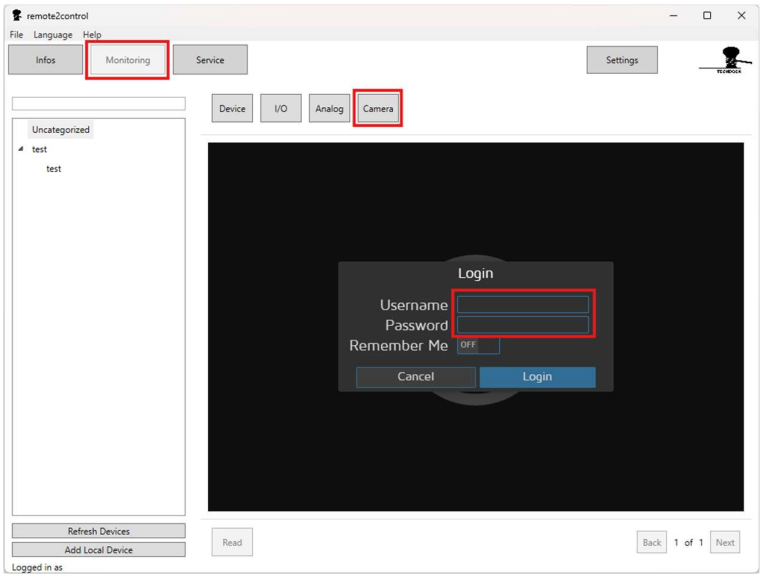
Attention: Only available for control4log!

When the system is connected, the current sensor values can be read out on the control4log using the "Read" button.



9.4 Videostream

If the system is connected and a USB-camera is installed, a live video stream to the camera can be established here using the "Camera" button.
User data is the responsibility of the operator or owner of the end device, for more information please contact the responsible administrator.



9.5 GMPSS (Option)

Only possible in combination with cloud as authorization tokens for the device session are assigned by the cloud based on user authorizations.

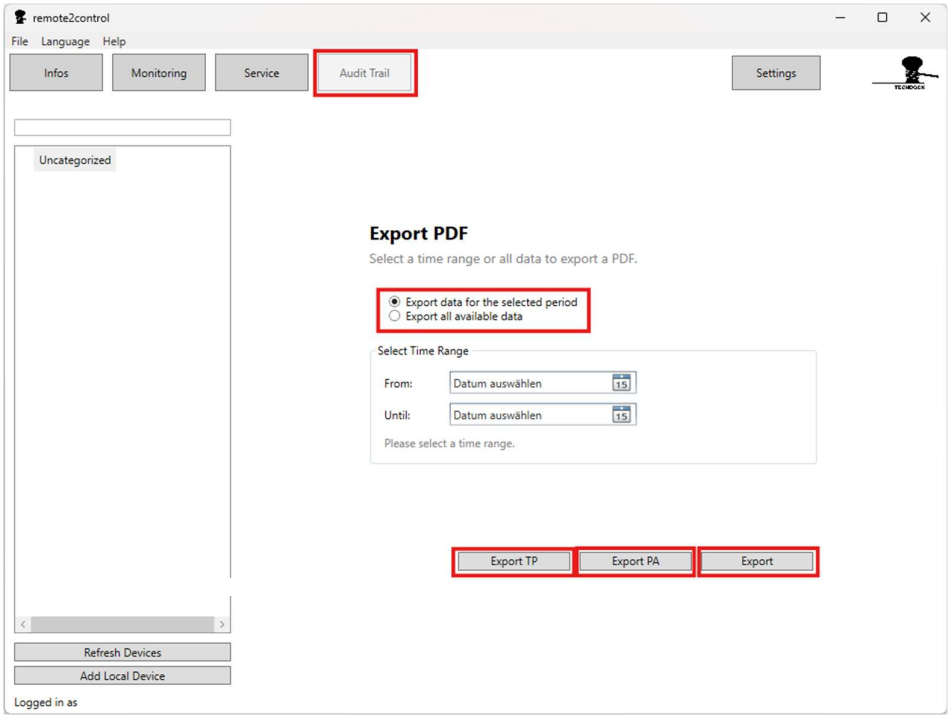
Attention: Only available for control4log!
Attention: Only available with cloud connection!

The parameters and text parameters set on the x4l can be downloaded as a PDF via the following button.

- "Export PA" → x4l parameters
- "Export TP" → x4l text parameters

If the option is activated, the “Export" button can be used to download the audit trail from the x4l as a PDF.

- Download complete audit trail as PDF
- Download audit trail for a defined period as PDF



The following data is always recorded with user ID and time stamp:

- Logins
- Logouts
- Changes to parameters (before / after)
- Changes to text parameters (before / after)
- PDF complies with GMP requirements

Gerät:
Serial Nr.:
Erstellungsdatum:

User ID:
User:

Seite 1 von

Zugriff auf

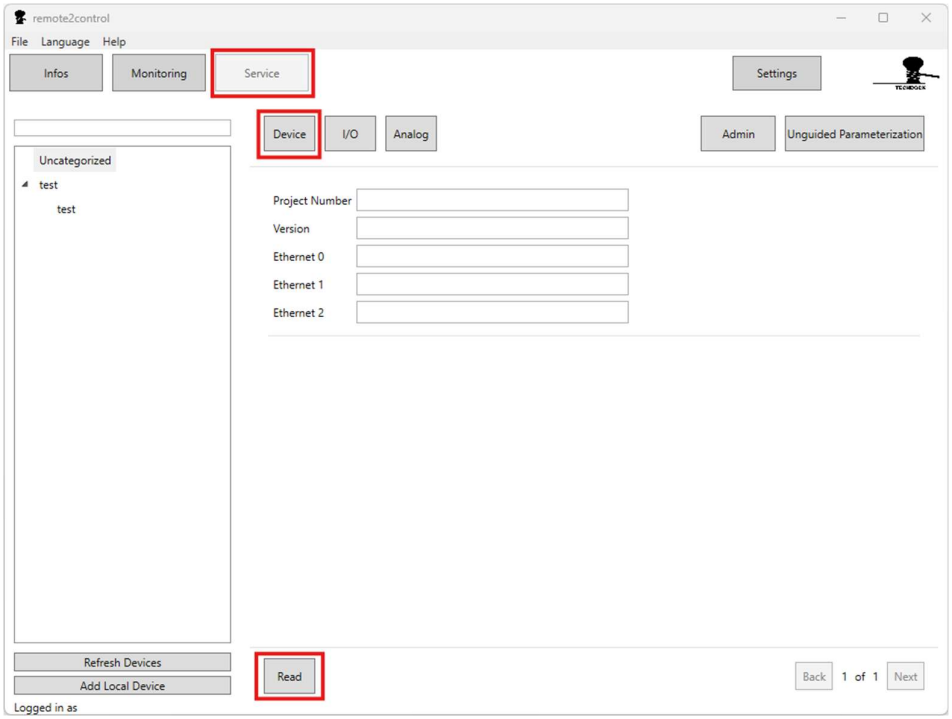
Name:		**Seriennummer:**	
Zeitraum Log:	2025-07-05 bis 2025-07-12	**Zeitzone:**	Europe/Zurich
Download Log:	2025-07-12 09:21:23 +0200		

Laufnummer	User	Datum	Beschreibung	DP	Wert von	Wert nach
3376		2025-07-05 12:22:15 +0200	logged_in			
3377		2025-07-05 12:27:11 +0200	logged_out			
3378		2025-07-05 15:19:53 +0200	logged_in			

10 Service

10.1 Device

In the Service menu, the parameter stored on the x4l can be called up in the Device tab via the "Read" button.



10.2 I/O

Attention: Only available for control4log!

In the I/O tab, the parameter stored on the x4l can be called up using the "Read" button. The fields can be overwritten directly with the desired value and then saved using the "Write" button.
The device requests a restart to activate the entered values.

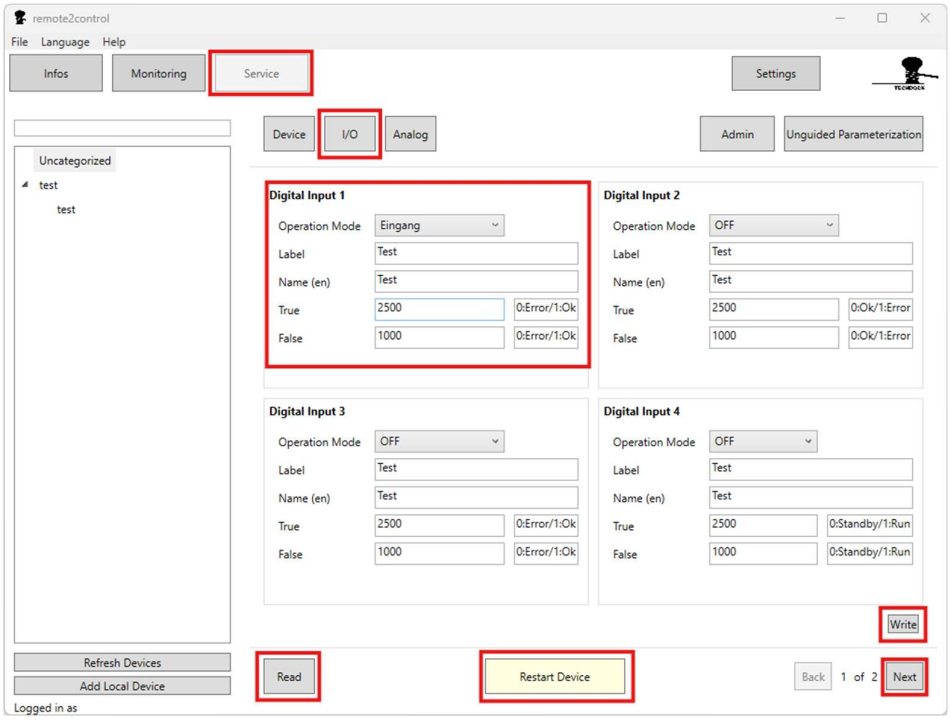
Fig. 1

If these values are changed without knowledge of the configuration of the x4l, this can result in incorrect monitoring and alarms.
Information on the parameterization of the x4l can be found in the operating instructions under the following link:

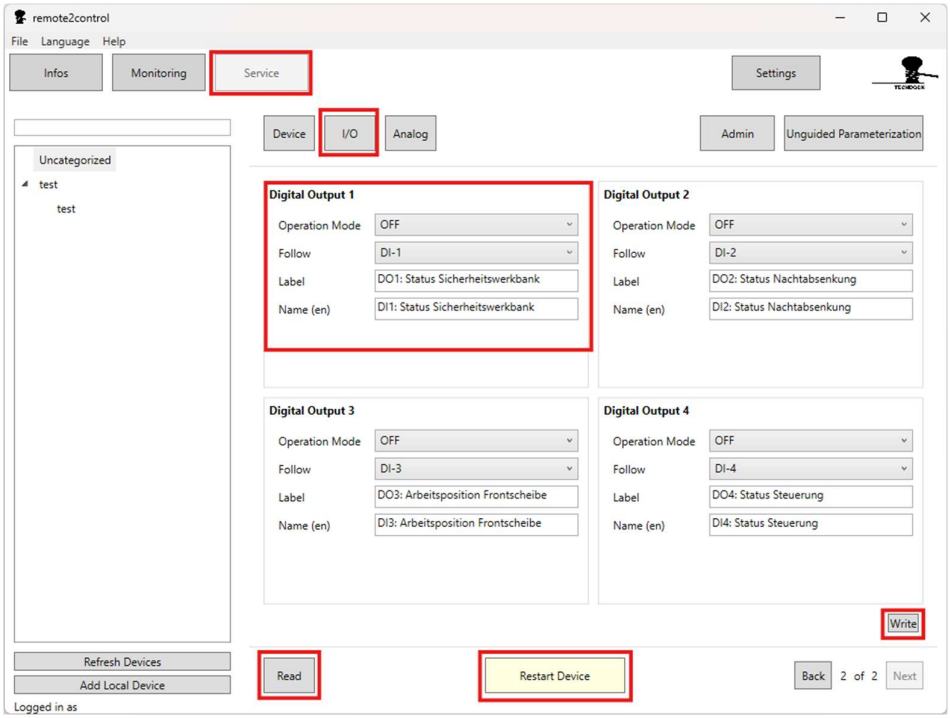
- https://techdock.ch/en/downloads/documents

- Page 1: Digital Inputs
  - ON / OFF
  - Parameter settings
    - Label
    - Name
    - Switch point On

- Switch point Off



- Page 2: Digital Outputs
  - Operating mode
    - OFF
    - Switch NO
    - Switch NC
    - Push-button NO
    - Push-button NO
    - Pacesetter
  - Define which digital input the output should follow.
    - OFF
    - DI1
    - DI2
    - DI3
    - DI4
  - Label
  - Name



10.3 Analog

Attention: Only available for control4log!

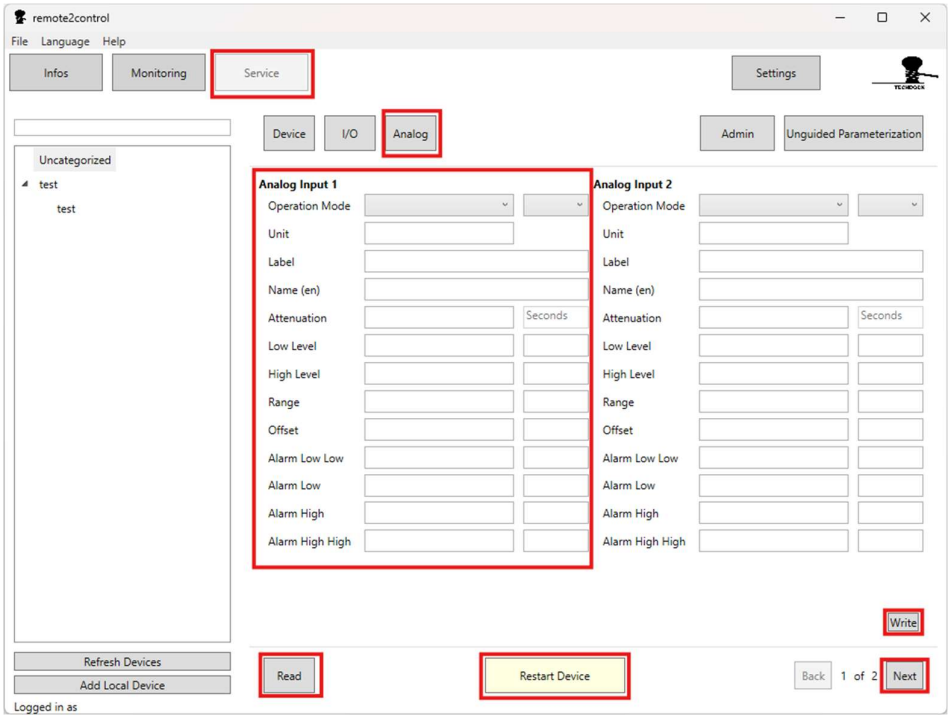
In the Analog tab, the parameter stored on the x4l can be called up using the "Read" button.The fields can be overwritten directly with the desired value and then saved using the "Write" button.
The device requests a restart to activate the entered values.

Fig. 1

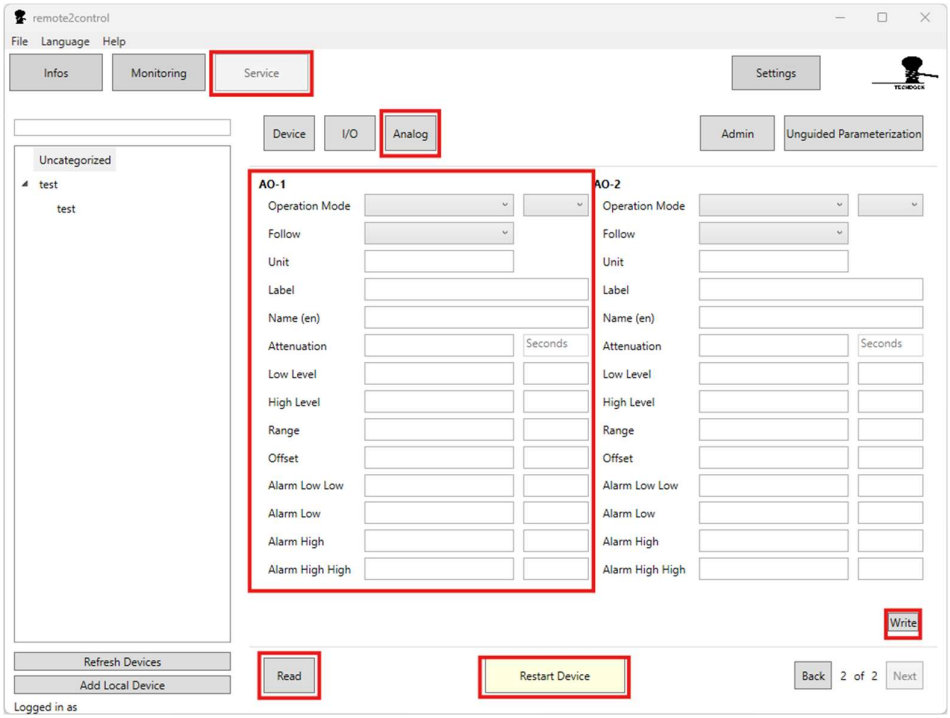
If these values are changed without knowledge of the configuration of the x4l, this can result in incorrect monitoring and alarms.
Information on the parameterization of the x4l can be found in the operating instructions under the following link:

- https://techdock.ch/en/downloads/documents

- Page 1: Analogue Inputs
  - Operating mode
    - OFF
    - Input
    - mV
    - mA
  - Parameter settings



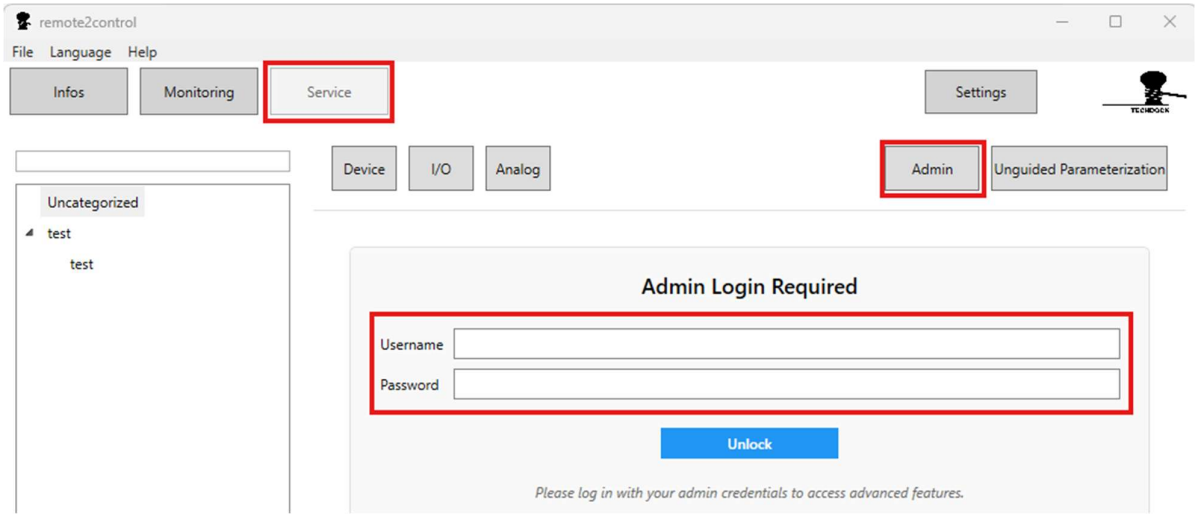
- Page 2: Analogue Outputs
  - Operating mode
    - OFF
    - Input
    - mV
    - mA
  - Define which digital input the output should follow.
    - OFF
    - DI1
    - DI2
    - DI3
    - DI4
    - AI1
    - AI2
  - Parameter settings



10.4 Administrator

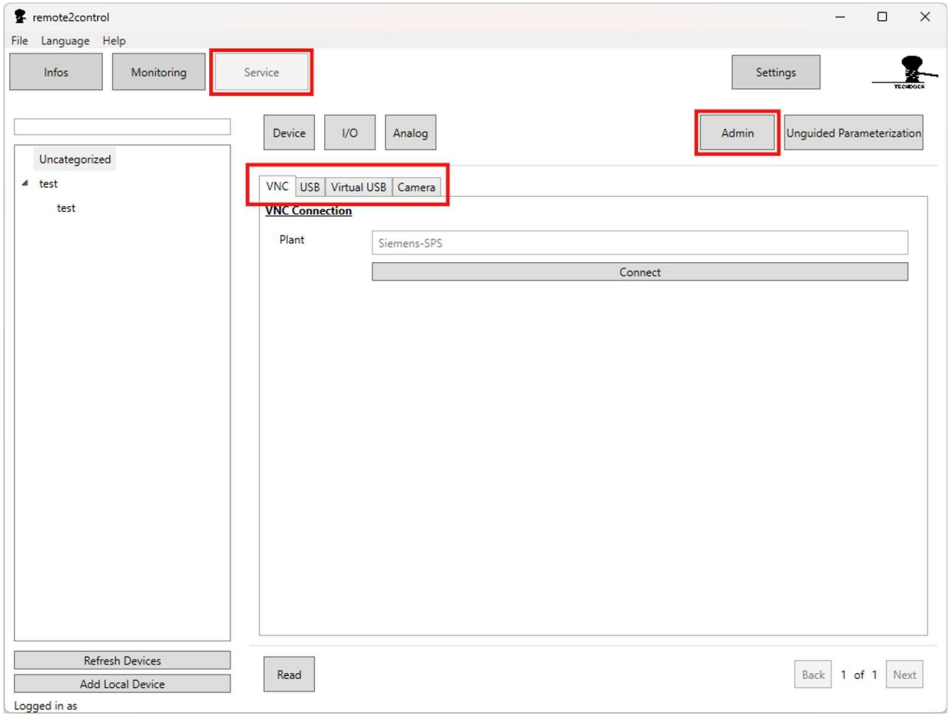
Log in under "Admin" with user and password to verify the connection and activate the options.

User data falls under the responsibility of the operator or owner of the end device, for more information please contact the responsible administrator.



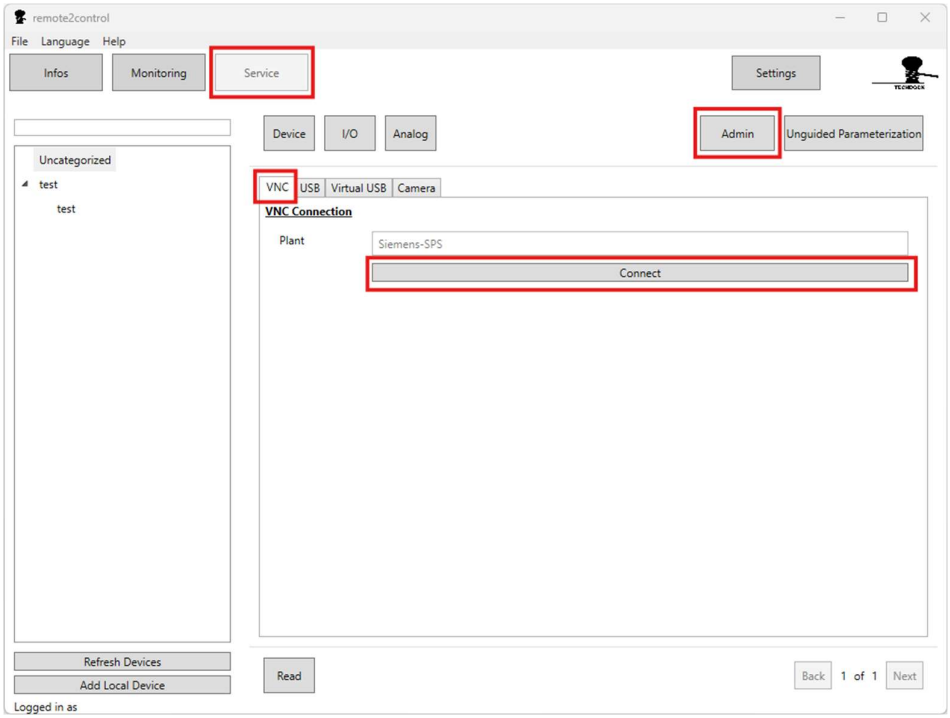
When connected to the system, the following actions can be performed via the individual tabs.

- VNC: Establish a connection with the connected controller on the local computer.
- USB: Connect and disconnect attached USB devices
- vUSB: Connect a virtual USB stick to the controller or the local computer.
- Camera: Access to streaming, video server and recording



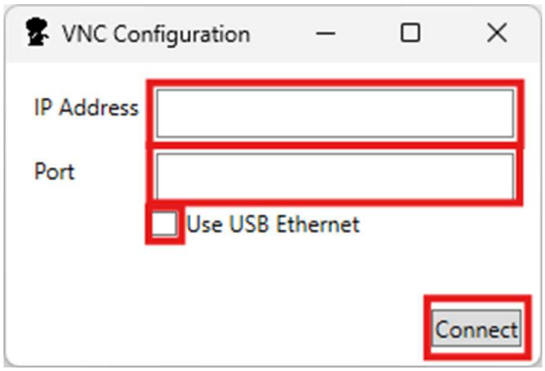
10.4.1 VNC with cloud connection

The VNC connections, if available, can easily be established using the "Connect" button and opened by entering the password.
The target address is configured in the cloud and retrieved when the remote2control software is opened. Once the interface is connected, a window will automatically open on the local computer through which the end device can be controlled.



10.4.2 VNC without cloud connection

With a VNC connection within a local private network LAN via an x4I, a window opens in which the IP destination address and the port can be entered. If the interface is connected, a window is automatically opened on the local computer via which the end device can be controlled.

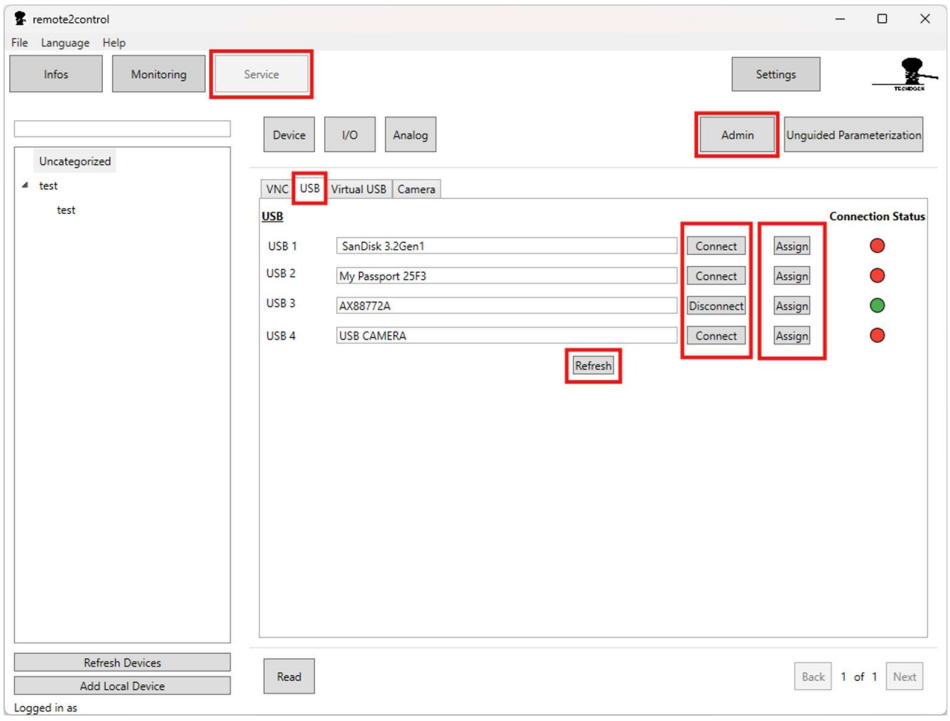


10.4.3 Connecting USB Interfaces

The USB connections are read out automatically when the tab is opened; they can also be called up manually using the "Read" button. If USB connections are available, they can simply be connected to the computer using the "Connect" button.
If the interface is connected, a software for the end device can be assigned using the "Assign" button.

Before a device is connected, it must be ensured that it is not currently being used on the x4l. For example, if a USB camera is used by one user to create recordings and another user connects the USB camera locally to their computer, the recording will be interrupted.

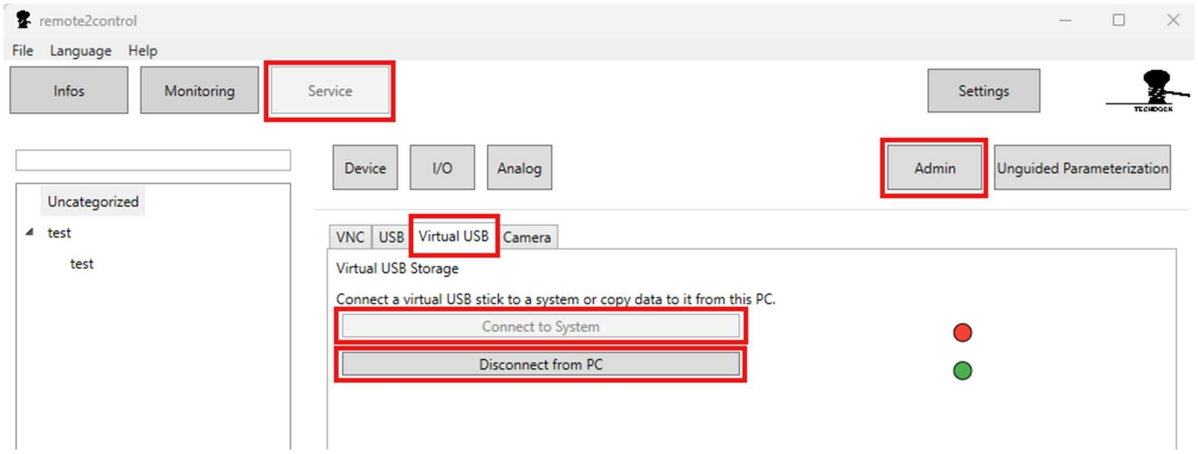
Fig. 1



10.4.4 Virtual USB

Attention: Only available for control4log!

The virtual USB is located on the control4log and has 2GB of storage space as the standard configuration. The virtual USB can be connected either to the device's controller or to the local computer by pressing the respective buttons.



10.4.5 Camera

The camera offers several functions and applications.

- **Streaming**
  - If the system is connected and a USB-camera is installed, a live video stream to the camera can be established here using the "Camera" button.
  - User data falls under the responsibility of the operator or owner of the end device, for more information please contact the responsible administrator.

- **Recording**
  - The recording starts via the "Start recording" button
  - The recording can be stopped via the same "Stop recording" button
  - To avoid loss of videos and large video files, the system saves the videos every minute. If required, these can be easily merged using commercially available freeware.

- **Admin portal**
  - The video server installed on the x4l opens automatically in the browser
  - Provides the option to manage all camera settings
  - Provides the option to manage access data

- **Cache**
  - To avoid overloading the x4l's storage medium, a USB cache must be installed. It is recommended to use a USB stick with high write cycles.
  - This is used as a ring buffer; if the set storage time for files on the USB used is exceeded, it automatically deletes older files.
  - The system is configured so that when a final storage device is connected, the video files are automatically copied from the temporary storage device to the final storage device.
  - A minimum USB memory capacity of 34GB is recommended

- **Final storage**
  - A storage medium with high storage capacity can be connected directly to one of the 4 USB ports and connected to the x4l via the "Connect" button
  - FTP or SFTP server connection can be parameterized directly in the video server admin portal.
  - The system is configured so that when a final storage is connected, the video files are automatically copied from the temporary storage to the final storage.

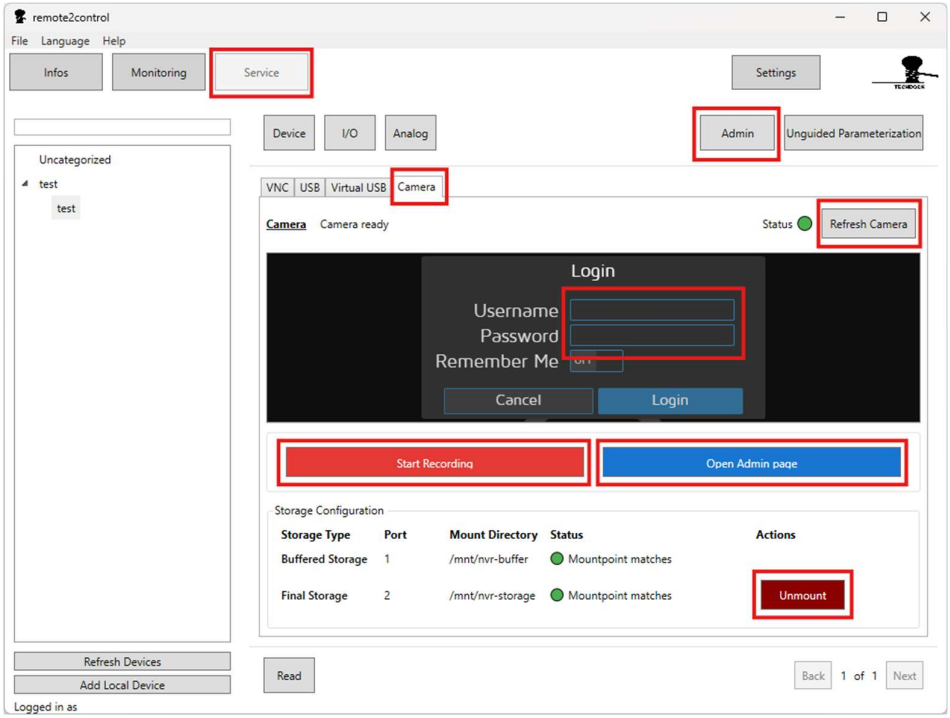
- To connect an SSD or HDD storage medium to an x4l, the"Attach" switch must be used. Failure to do so may result in data loss.
- To remove an SSD or HDD storage medium from the x4l, the "Unmount" switch must be used. Failure to do so may result in data loss.

Fig. 1

If the final memory is used incorrectly, recorded video files in the temporary memory may be overwritten. The video files are then lost and cannot be restored.
Techdock GmbH declines all responsibility for improper handling and the associated loss of data.

Fig. 1

It is mandatory to comply with the data protection guidelines at all times. The data protection guidelines may vary depending on the country in which the system is being used and must be complied with at all times. Techdock GmbH declines all responsibility for any breach of the data protection guidelines.



10.5 Unguided Parameterization

In this mode, you can read out and change all parameters using the x4l operating instructions.

- Queries or inputs:
  - Queries or inputs are carried out via the input field and confirmed with the "Send" button.
  - The log provides an overview of queries or inputs sent and the feedback from the x4l

- Export parameters and text parameters:
  - Export all parameters
  - Export all text parameters

- Import parameters and text parameters:
  - Entire parameters or text parameter files can be uploaded via "Batch import".

- Command directory:
  - Here you can quickly and easily read the individual commands or parameters.
  - More detailed information on the parameters can be found at:
    - https://techdock.ch/en/downloads/documents

Fig. 1

If these values are changed without knowledge of the configurations of the x4l, this can result in incorrect monitoring and alarms.
Information on the parameterization of the x4l can be found in the operating instructions under the following link:

- https://techdock.ch/en/downloads/documents