

# **WirelessProfessional WLZent**

## ***Operating Instructions***



### Contents

<b>1</b>	<b>General Information</b> ..... Fehler! Textmarke nicht definiert.	
<b>2</b>	<b>Technical Data</b> .....	<b>7</b>
<b>3</b>	<b>Structure</b> .....	<b>8</b>
<b>4</b>	<b>Assembly Instructions for Wireless Professional WLZent</b> .....	<b>10</b>
<b>5</b>	<b>Operating the Wireless Professional WLZent</b> .....	<b>12</b>
5.1	Touch operation .....	12
5.2	The on-screen keyboard .....	14
5.3	Using a USB stick for storage on the Wireless Professional WLZent.....	16
5.3.1	Ejecting via taskbar symbol .....	17
5.4	Meaning of signals in indicator windows.....	19
<b>6</b>	<b>Tamper-Proof Operating System</b> .....	<b>20</b>
<b>7</b>	<b>Maintenance Mode</b> .....	<b>21</b>
7.1	Launching Maintenance mode .....	21
7.2	Exiting Maintenance mode .....	22
<b>8</b>	<b>Commissioning the Wireless Professional WLZent</b> .....	<b>24</b>
8.1	Switching on for the first time .....	24
8.2	How the WLZent responds to a power supply failure .....	25
8.3	How the WLZent responds to power being restored.....	25
8.4	Rebooting the Wireless Professional WLZent.....	25
8.4.1	Software restart .....	25
8.4.2	Hardware reboot .....	26
8.5	Switching off the Wireless Professional WLZent.....	26
<b>9</b>	<b>Setting Date and Time</b> .....	<b>28</b>
<b>10</b>	<b>Screensaver</b> .....	<b>29</b>
<b>11</b>	<b>Setting Background Lighting</b> .....	<b>30</b>
<b>12</b>	<b>WLX Settings Tool</b> .....	<b>32</b>
12.1.1	Screensaver Settings.....	33
12.1.2	Firewall Settings .....	34
12.1.3	Change User Password.....	36
<b>13</b>	<b>Network Configuration</b> .....	<b>38</b>
13.1	Connecting with a cable network .....	38
13.1.1	Static IP address.....	38
13.2	Connecting to a wireless network.....	42
<b>14</b>	<b>Bluetooth</b> .....	<b>45</b>
14.1	Enabling Bluetooth .....	45
14.2	Disabling Bluetooth .....	46
14.3	Pairing a device via Bluetooth .....	46
14.4	Disconnecting a paired device.....	50



# Wireless Professional WLZent

## Installation Guide

<b>15</b>	<b>Remote Access via RustDesk</b> .....	<b>51</b>
15.1	Establishing connection .....	51
15.2	Terminating connection .....	54
15.3	Changing RustDesk connection password .....	55
15.4	RustDesk connections from the WLZent to other devices .....	55
<b>16</b>	<b>VNC Remote Connection</b> .....	<b>56</b>
16.1	VNC Viewer .....	56
16.1.1	Establishing VNC connection to a device.....	58
16.1.2	Terminating VNC connection to a device .....	60
16.1.3	Closing VNC Viewer .....	60
16.1.4	Scaling view.....	61
16.2	VNC-Server .....	62
<b>17</b>	<b>Moving Systems onto the WLZent</b> .....	<b>63</b>
17.1	Moving Wireless Professional from CPC to WLZent.....	63
17.1.1	CPC with Wireless Professional version 2.4 and newer .....	63
17.1.2	CPC with Wireless Professional version 2.2 and older.....	63
17.1.3	Transferring data to CPC3 .....	66
17.2	Import data from WLZentx/WLTouchx .....	69
17.2.1	Preparing WLZent1/WLZent2 for the migration .....	69
17.2.2	Preparing WLTouch for the migration .....	71
17.2.3	Transferring data to the WLZent3 .....	71
<b>18</b>	<b>Web Browser</b> .....	<b>75</b>
18.1	Launching web browser.....	75
<b>19</b>	<b>Text editor</b> .....	<b>76</b>
19.1	Launching text editor.....	76
19.2	Inserting text.....	76
19.3	Saving file.....	77
19.4	Closing program .....	79
<b>20</b>	<b>Firewall</b> .....	<b>80</b>
<b>21</b>	<b>Operating System and Wireless Professional Updates</b> .....	<b>81</b>
<b>22</b>	<b>Backing up Wireless Professional WLZent Data</b> .....	<b>82</b>
22.1	Automatic backup.....	82
22.2	Manual backup.....	82
22.3	Copying backup files to another device.....	84
22.3.2	Daten vom Backup USB-Stick an der WLZent kopieren .....	85
22.4	Backup Daten zurückspielen .....	90
<b>23</b>	<b>Long-Term Backup</b> .....	<b>94</b>
<b>24</b>	<b>Reinstalling Language Files</b> .....	<b>95</b>
<b>25</b>	<b>FAQ</b> .....	<b>96</b>

25.1	What devices can be connected to the USB socket?.....	96
25.2	Can additional software be installed on the device?.....	96
25.3	Are software updates automatically downloaded from the Internet? .....	96
25.4	Is a backup to a network drive possible?.....	96
25.5	Why does the Wireless Professional application keep restarting? .....	96
<b>26</b>	<b>Revision History.....</b>	<b>97</b>
<b>27</b>	<b>Contact Information.....</b>	<b>98</b>

### 1 General Information

These operating instructions are intended for the following target group: certified electricians in accordance with DIN VDE 0105 and authorised qualified personnel. They explain how to safely and professionally work with the monitoring system. The general safety regulations and local accident prevention regulations applicable to the area of use as well as other instructions and safety notices must be observed. The operating instructions, especially the section on safety, should be read in full before starting any work on the system.

These operating instructions have been compiled under consideration of the applicable regulations. These operating instructions should be kept close to the system at all times and be freely accessible to everyone working with the system.

All legislation, standards and guidelines of the country in which the system is set up and operated should also be observed.

The manufacturer provides no guarantees and assumes no liability for damage, or subsequent damage, resulting from:

- non-intended use
- unauthorised or improper changes to the system's connections, settings or programming
- failure to observe regulations and rules of conduct for safe operations

Packaging materials are not waste, but valuable materials which should be reused or recycled.

Batteries and electronic components contain materials, which will cause harm to human health and the environment if not properly disposed of. National guidelines and regulations for correctly disposing of used batteries and electronic components should be observed!

## **2 Introduction**

The Wireless Professional WLZent is an industrial PC with touch display, integrated power supply and Wireless Professional USB coordinator, as well as a USB and network socket accessible from the exterior. A Linux operating system, a VNC viewer, remote access software and the Wireless Professional software are installed on the industrial PC.

The Wireless Professional WLZent is intended for use as a central testing device in the Wireless Professional system. The device can be operated using the touch display. The WLZent satisfies the requirements of an automatic test system in accordance with EN 62034.

**Note:** This documentation is stored on the device at `/home/rp/Desktop/manual/`.

### 3 Technical Data

Processor chip set	ARM Cortex-A72 quad
Processor clock speed	1.5 GHz
RAM	4GB SDRAM
LAN	Gigabit Ethernet
Power consumption	Max. 17W, PF 0.52
Protection	Protection class 1
Dimensions	H 225mm x W 295mm x D 75mm including wall bracket
Type of mounting	Wall mounting
Ambient temperature	15 °C to 30 °C
Weight	4 kg

### 4 Structure

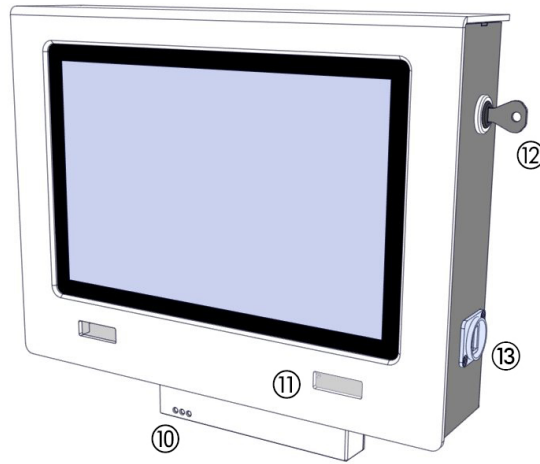


Figure 1 View of WLZent from left

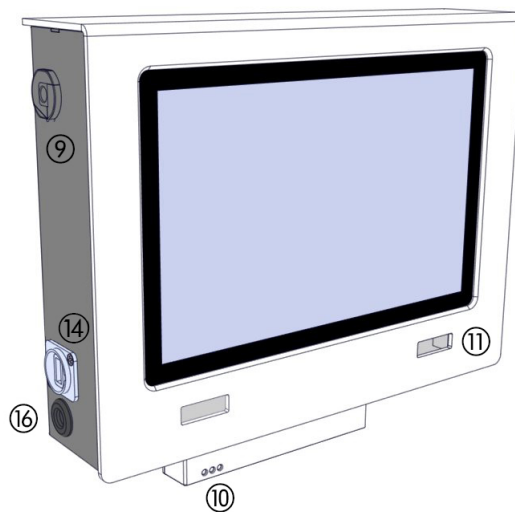


Figure 2 View of WLZent from right

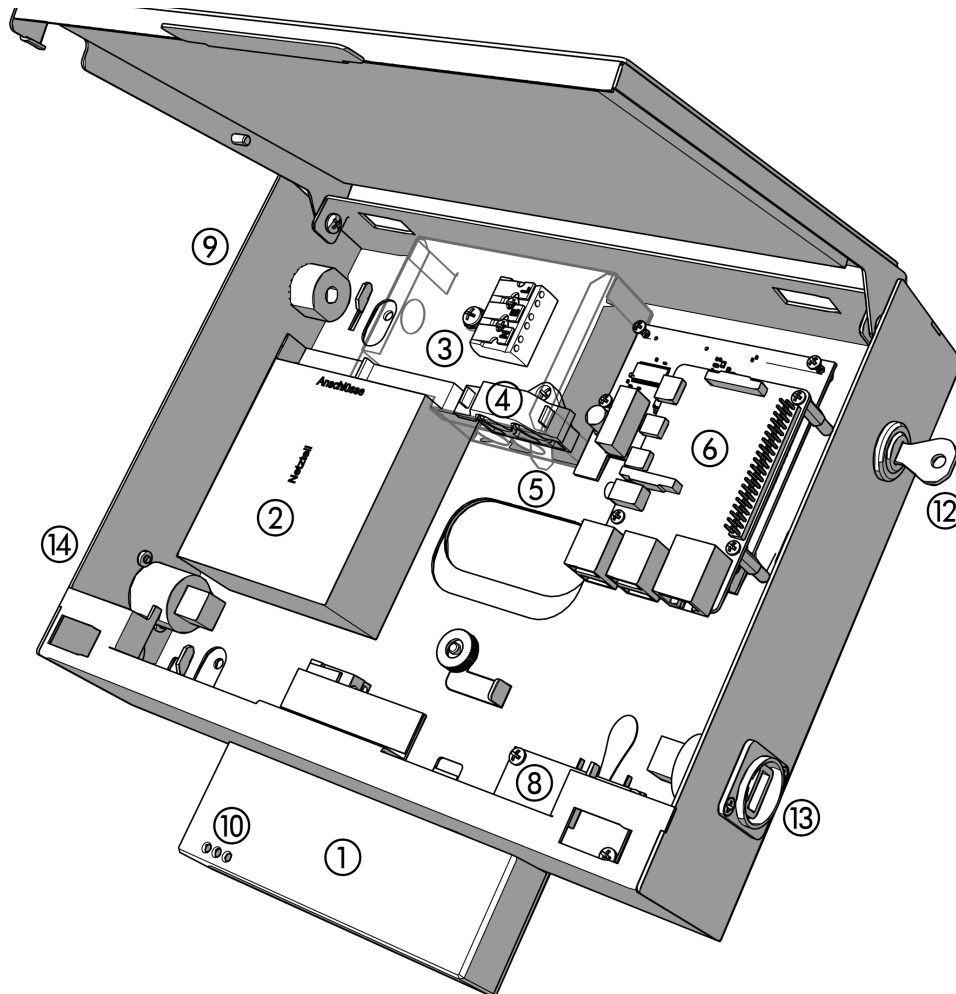


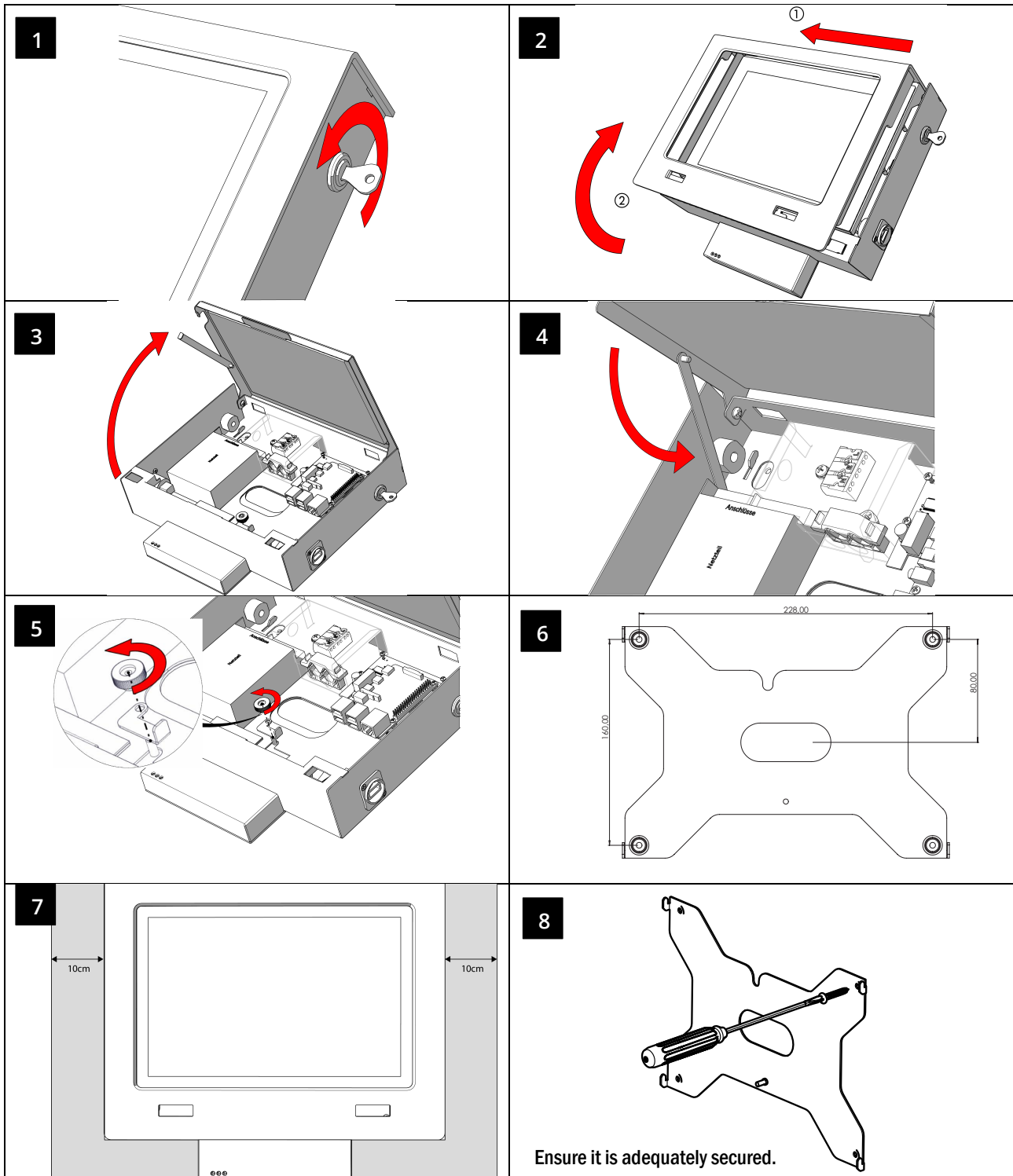
Figure 3 WLZent internal components

1	Wireless coordinator	9	Optional cable entry point on side with strain relief Or blanking plug
2	Power supply	10	Indicator window for coordinator
3	Mains supply terminal	11	Indicator window for WLZent processor board
4	Internal strain relief	12	Casing lock
5	Junction box	13	Network socket
6	WLZent processor board with SD card	14	USB socket
7	Knurled nut with oval washer	15	Touch display
8	RTC board	16	Second cable entry on the side, e.g. for fault indication contact

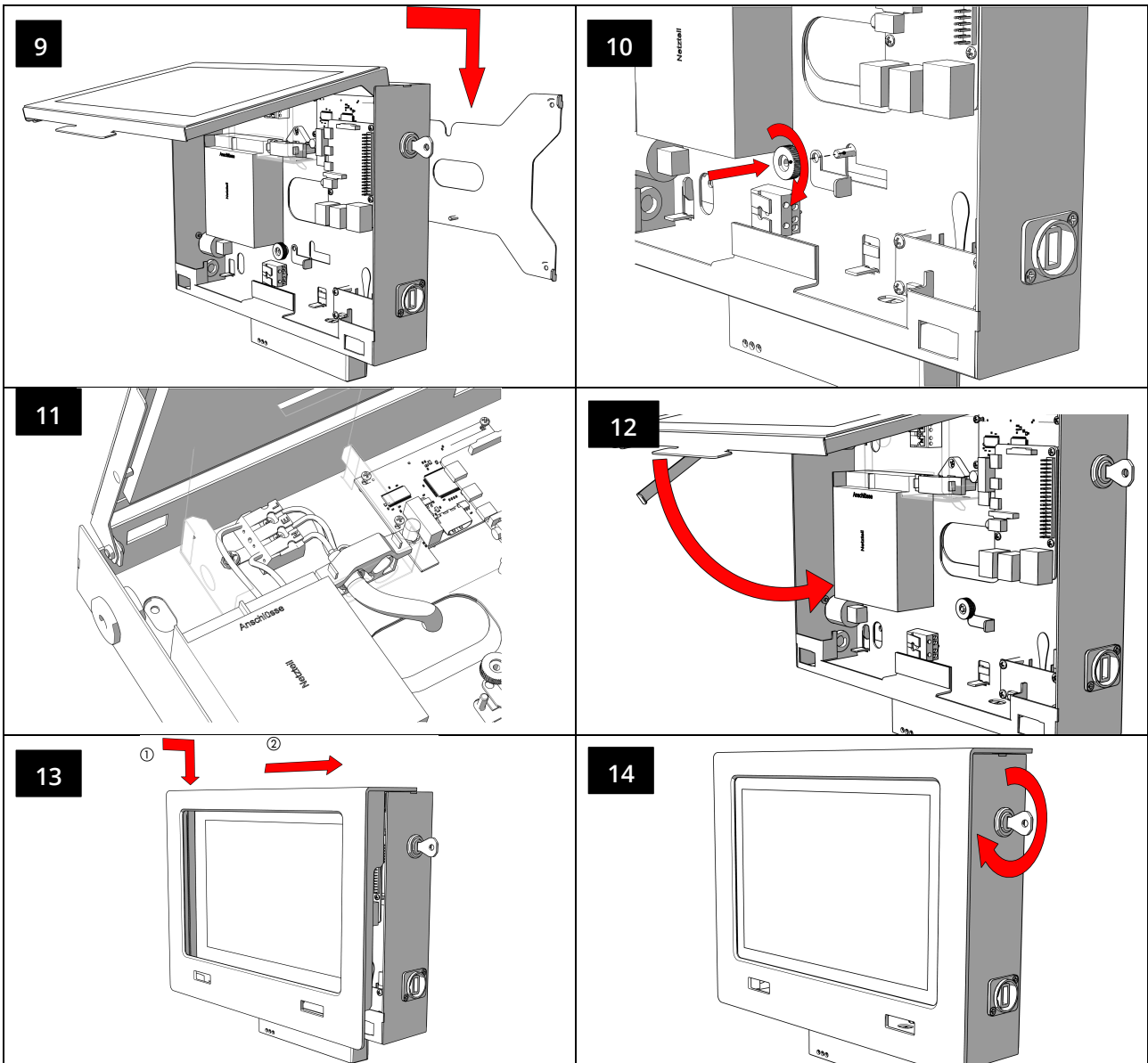
### 5 Assembly Instructions for Wireless Professional WLZent

The Wireless Professional WLZent is a device intended to be mounted on the wall.

For ergonomic reasons, we would recommend mounting at a height of 1.40m ( $\pm 0.20$ m) (centre of screen).

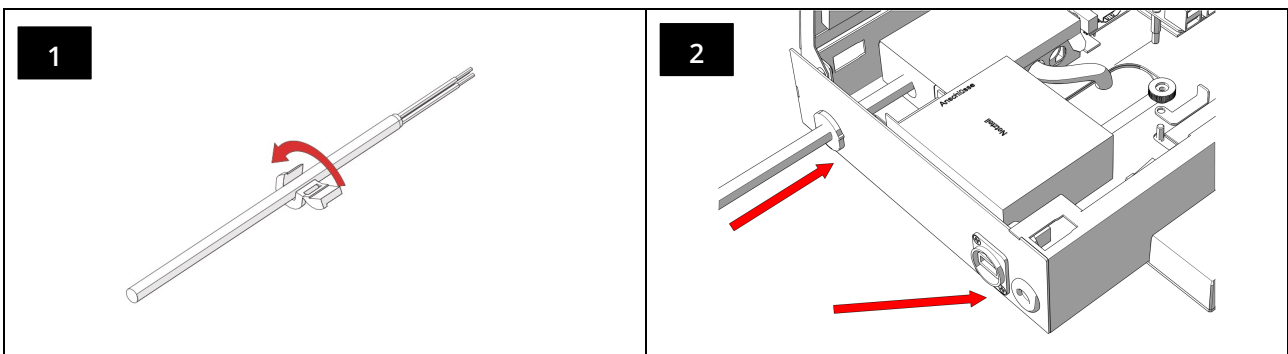






Once the device has been mounted, remove the protective film from the display.

To power the device from the optional socket on the side or for a fault indication contact, remove the blanking plug and replace with the cable bushing provided (see page 8).



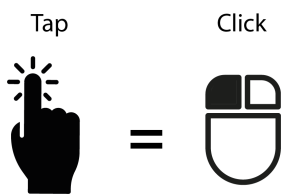
### 6 Operating the Wireless Professional WLZent

The Wireless Professional WLZent is operated using a touch display (15). The touch display can be operated directly using a finger or a pen suitable for capacitive touch displays.

An on-screen keyboard can be used to enter text.

#### 6.1 Touch operation

A tap on the touch display is the same as a left-click with a conventional mouse. Desktop icons are simply tapped to launch the programs indicated on them. No double-clicks are required in the operating system.



Drawing your finger from one point to another highlights an area. This is the same as the highlight function offered by a conventional mouse.

To perform a right-click, the touch screen has to be tapped using 2 fingers at the same time. If there is a context menu available for the icon, this is how to open it. The context menu opens near the finger which was first registered by the touch.

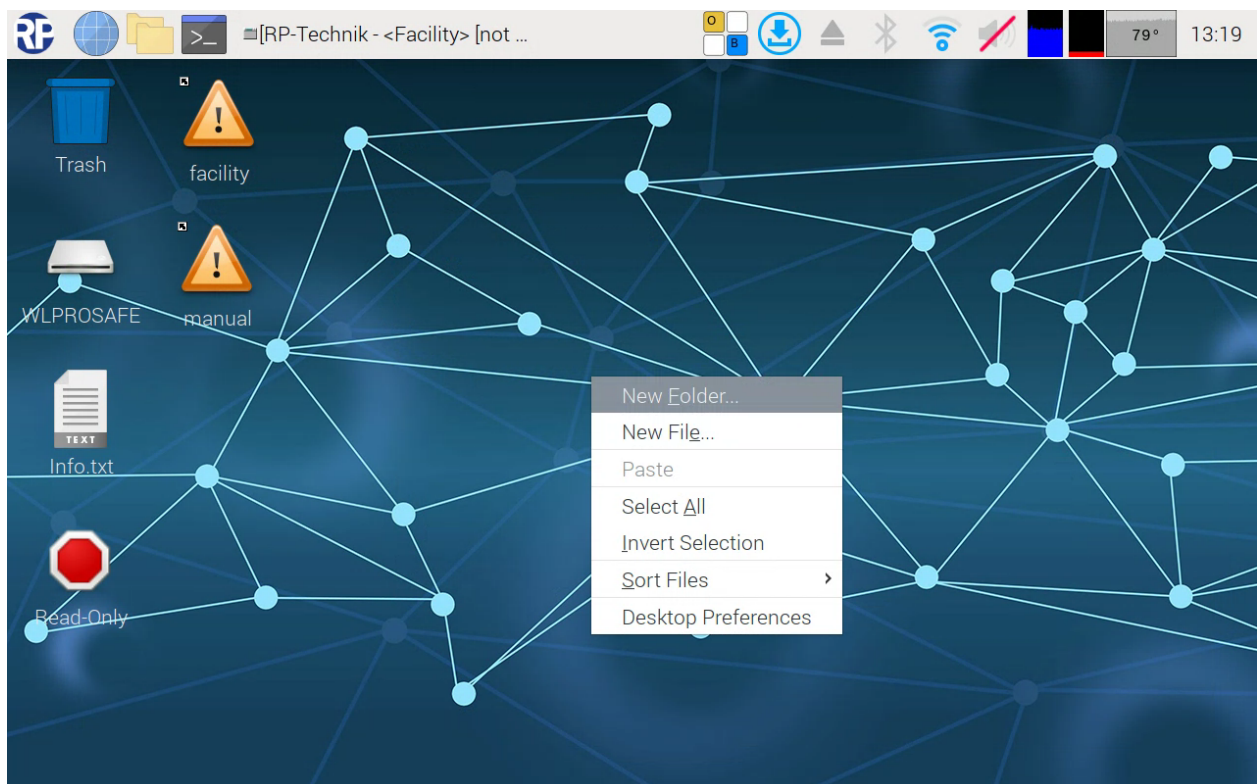
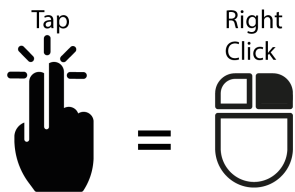
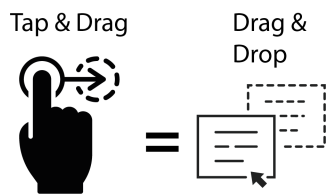
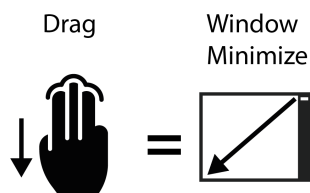


Figure 4 Wireless Professional WLZent context menu

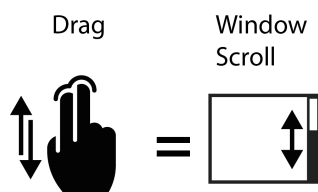
To use the drag and drop function, start by tapping on an object. It can then be moved by tapping on it and dragging it.



If 3 fingers are placed on the touch display and dragged down, the window in the foreground is minimised in the taskbar



If a window has a scroll bar, the window can be scrolled through by placing 2 fingers on the touch display and moving them to the side or up/down.



Page 14/98

### 6.2 The on-screen keyboard

The on-screen keyboard can be called up via the icon in the taskbar or the Start menu.

If a window with an input box is opened in the Wireless Professional, to enter a password for example, or if the user clicks in a text box, the on-screen keyboard is opened automatically.

If the icon in the taskbar is tapped on, a context menu opens, and the user has to select "Show Onboard" for the keyboard to be displayed.

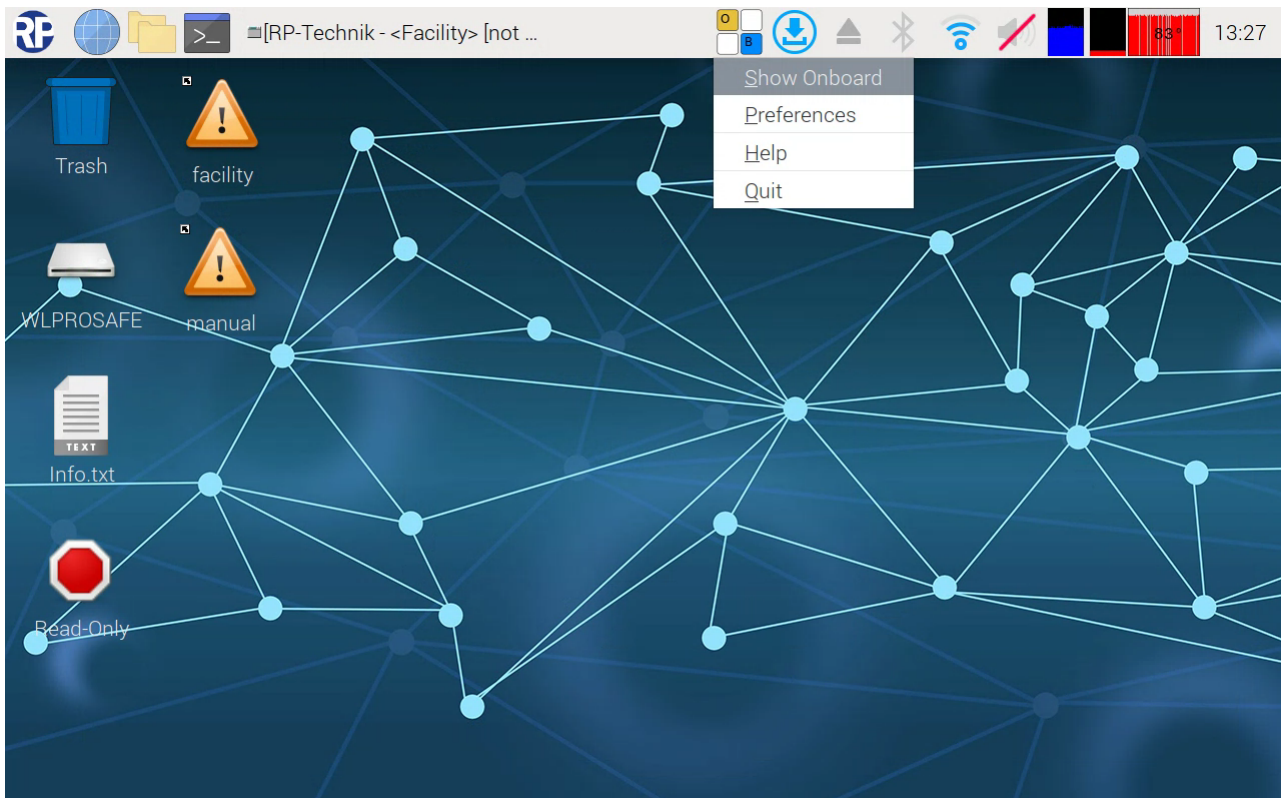


Figure 5: Onboard context menu

If the on-screen keyboard is to be opened via the Start menu, the user will need to go to Start menu->Universal Access ->Onboard.



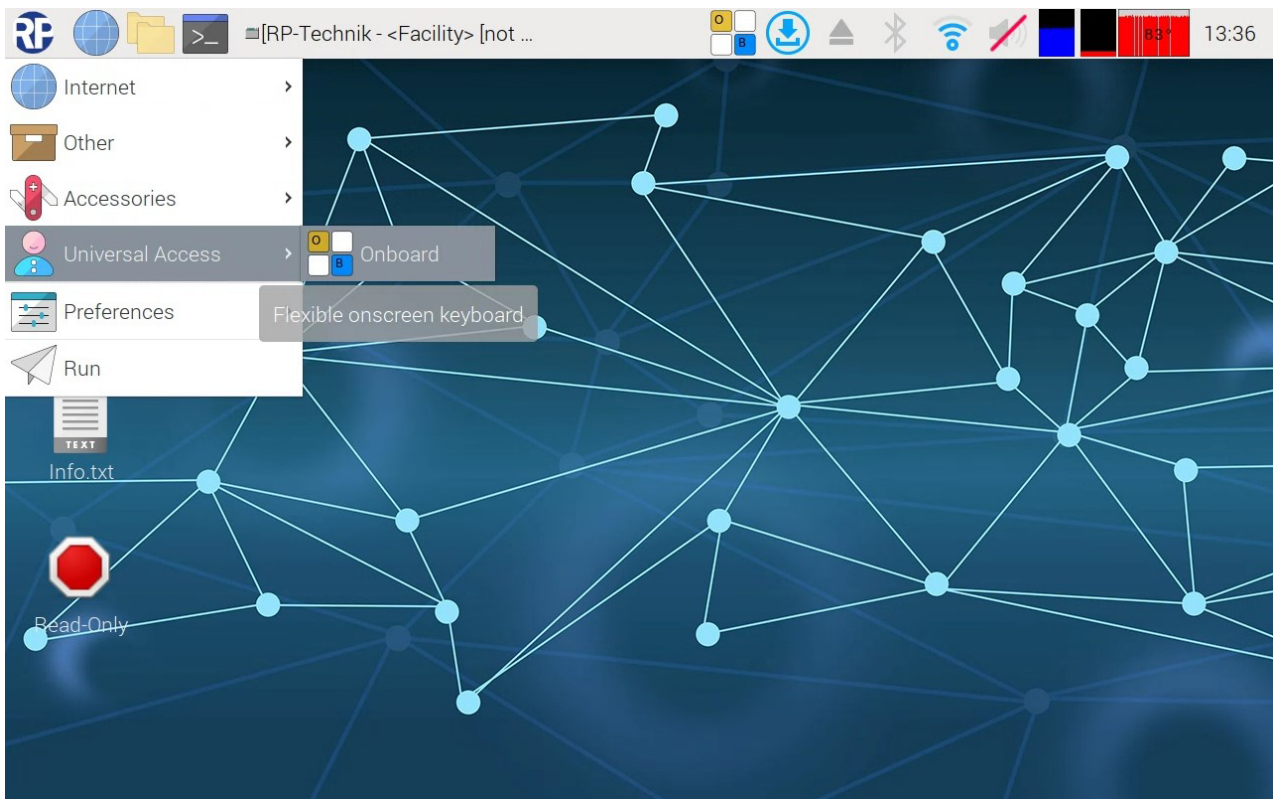


Figure 6 Onboard Start menu

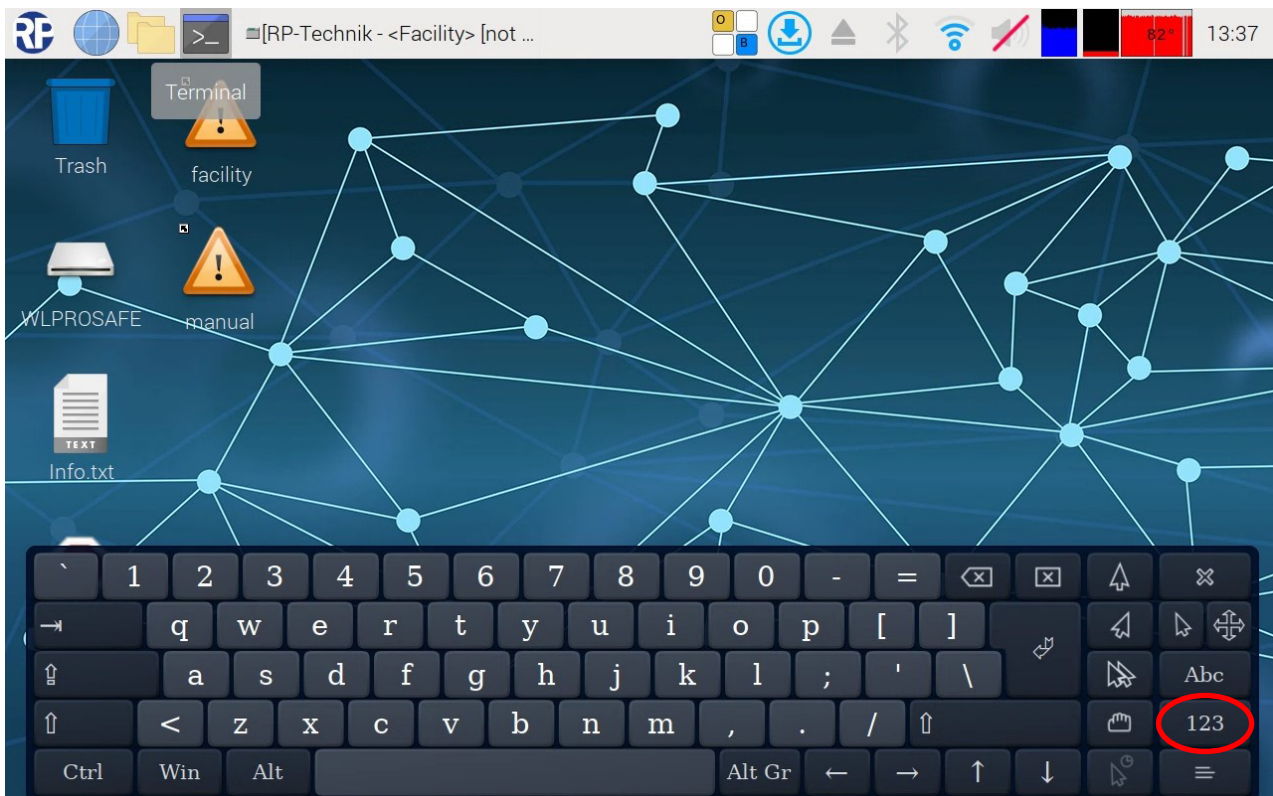


Figure 7 Wireless Professional WLZent on-screen keyboard


The keyboard has a DE German layout and does not have a numerical pad in the first view.

The view can be switched using the “123” button. The function keys are then displayed.



Figure 8 Wireless Professional WLZent on-screen keyboard function keys

Tapping the “123” button again or tapping the “Esc” button takes you back to the previous view.

The directional button  located above the “Abc” button is used to move the keyboard on the screen. This may be necessary if text input boxes are covered by the keyboard.

The “x” button above the directional button closes the on-screen keyboard.

### 6.3 Using a USB stick for storage on the Wireless Professional WLZent

USB sticks formatted in FAT format, USB card readers or input devices can be used on the USB socket (14) . Building plans can thereby be transferred to the WLZent, as can data from older WLZent/WLTouch systems or CPCs.

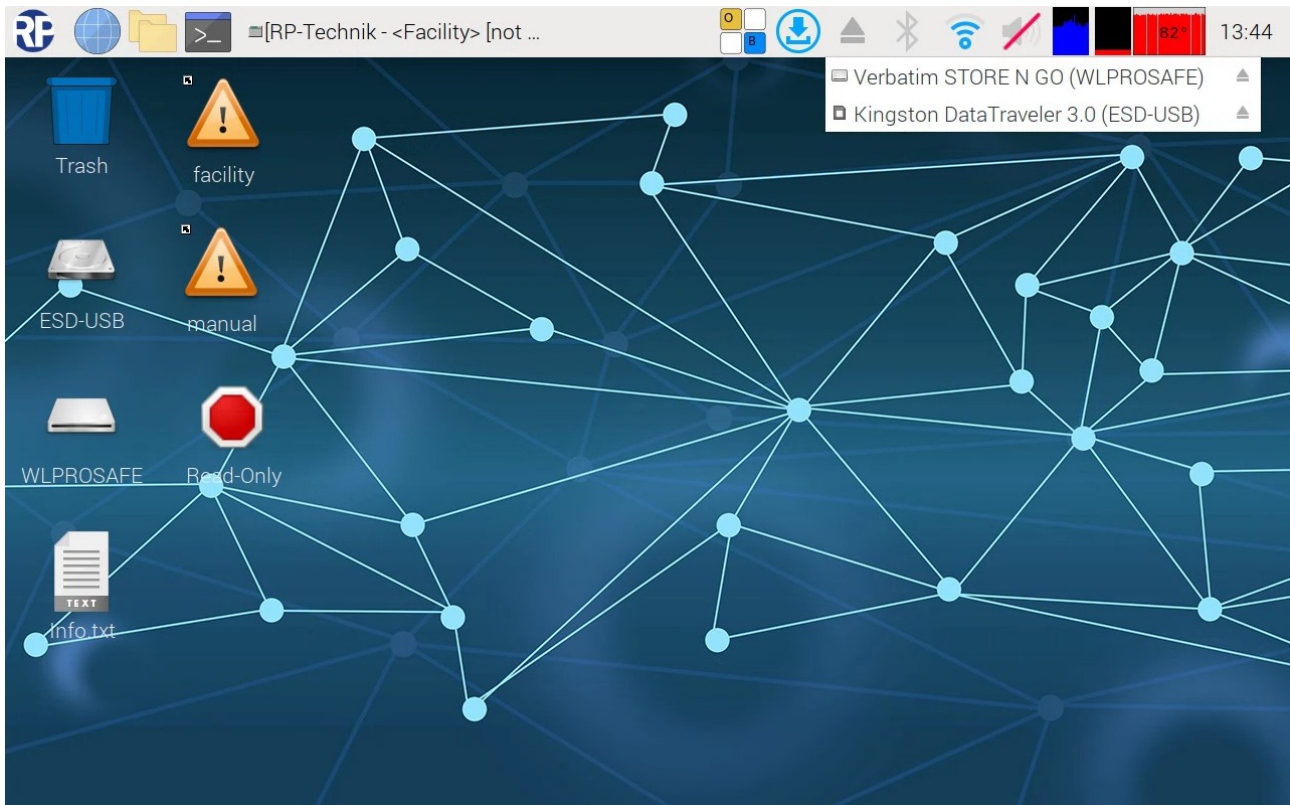


**! Warning:** Before being removed, USB sticks should always first be ejected (deactivated) by the software, otherwise data may be lost.

The USB stick has to be ejected by the software by means of a taskbar symbol or using the file manager installed on the Wireless Professional WLZent.

### 6.3.1 Ejecting via taskbar symbol

Clicking on the taskbar symbol opens a context menu, which lists all the storage media currently connected.



**Figure 9 Ejecting storage medium**

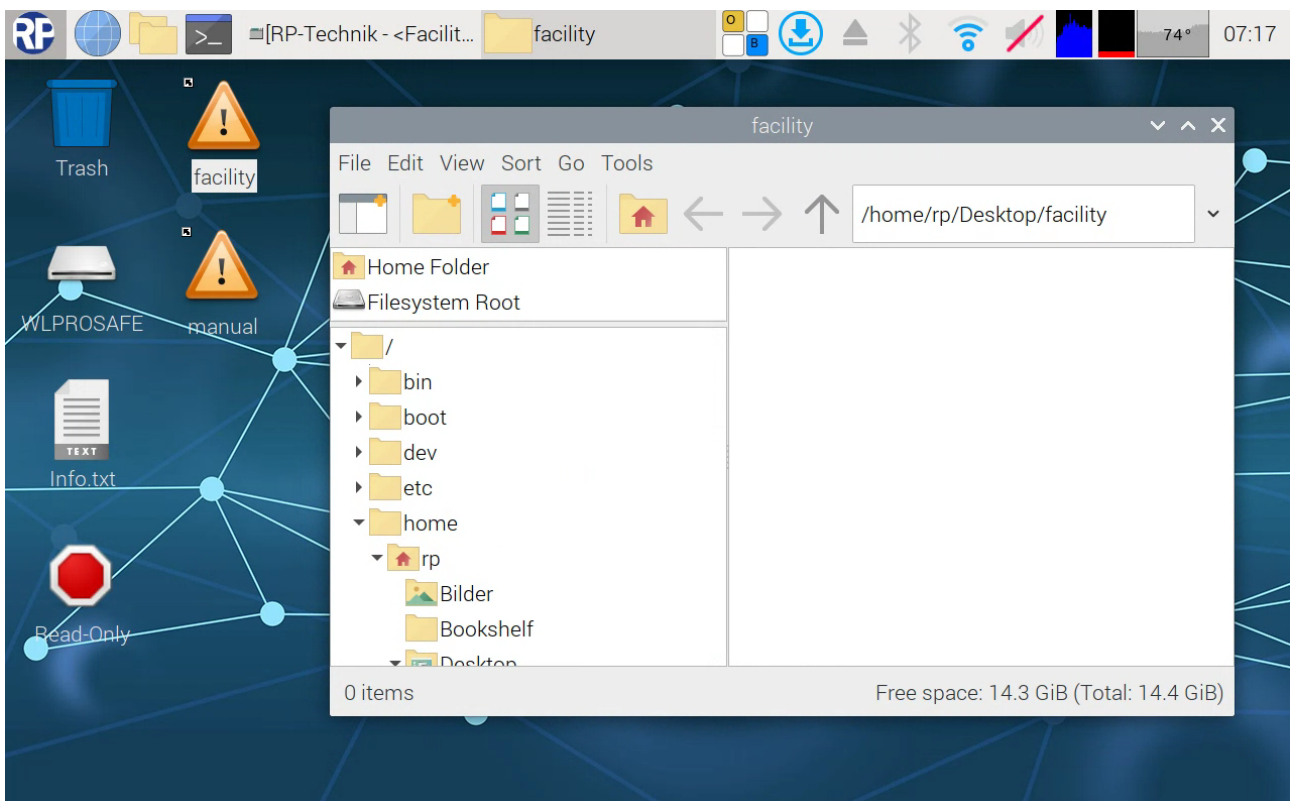
The eject symbol (red circle) is displayed after the name of the storage medium. To eject the medium, click on the eject symbol.

### 6.3.2 Storing building plans on the WLZent

The “Facility” folder is provided in the WirelessProfessional WLZent storage system for storing building plans. The “Facility” folder is located on the backup USB stick.

Building plans can be copied directly to the WLZent from a connected USB storage medium into the “Facility” folder. Alternatively, the WLZent can be shut down and the backup USB stick connected to a computer in order to copy the building plans to the backup USB stick.

Storing building plans outside the designated storage location can impair the functionality of the WirelessProfessional WLZent, as this unnecessarily occupies working memory. This can result in the WirelessProfessional software lacking the necessary working resources.





### 6.4 Meaning of signals in indicator windows

Status LEDs can be seen in the two indicator windows (10 & 11) on the left and right under the screen. These provide information about the current status of the Wireless Professional WLZent and Wireless Professional coordinator.

The coordinator's 3 signal LEDs are displayed in the coordinator indicator windows (10).

Colour	Status	Meaning
Green	Flashing	The Wireless Professional software is not running
Green	On	The Wireless Professional software has been started and is communicating with the device
Blue	Flashing	Wireless traffic indicator
Red	On	There is an error in the Wireless Professional system

3 signal LEDs are displayed in the WLZent indicator window (11). These provide information about the operating status of the WLZent processor board (6).

Colour	Status	Meaning
Green	On	The WLZent processor board is being powered
Blue	On	Device connected with the cloud
Orange	On	The backup USB stick is being accessed (read/write access)



### 7 Tamper-Proof Operating System

The Wireless Professional WLZent is equipped with an operating system, which runs in read-only mode as standard.

This means that any changes to the operating system are lost after a reboot.

To make permanent changes to the operating system, it must be switched to read-write mode.

Different icons are shown on the desktop to indicate which mode the operating system is running in at the present time.

Mode	Desktop symbol	Meaning
Read-only		Changes to the operating system are lost following a reboot
Read-write		Changes to the operating system are permanent

**Note:** Only one of the two icons is displayed at any one time.

Examples of permanent changes to the operating system include changes to the user password.

If a change is only possible in read-write mode, the operating system provides information to this effect and switches automatically into this mode. Once the change has been made, read-write mode is exited automatically.

Switching between read-write and read-only modes serves to protect the system's security of operation and protects it from being tampered with.

### 8 Maintenance Mode

In Maintenance mode, permanent settings can be configured on the operating system, such as connecting to a WLAN network.

**Note:** Maintenance mode should only be used by trained qualified personnel. An operating error in Maintenance mode may result in the Wireless Professional WLZent ceasing to function properly.

#### 8.1 Launching Maintenance mode

Maintenance mode is launched via the Start menu by selecting “Maintenance Mode” under “Other”.

Start menu->Other->Maintenance Mode

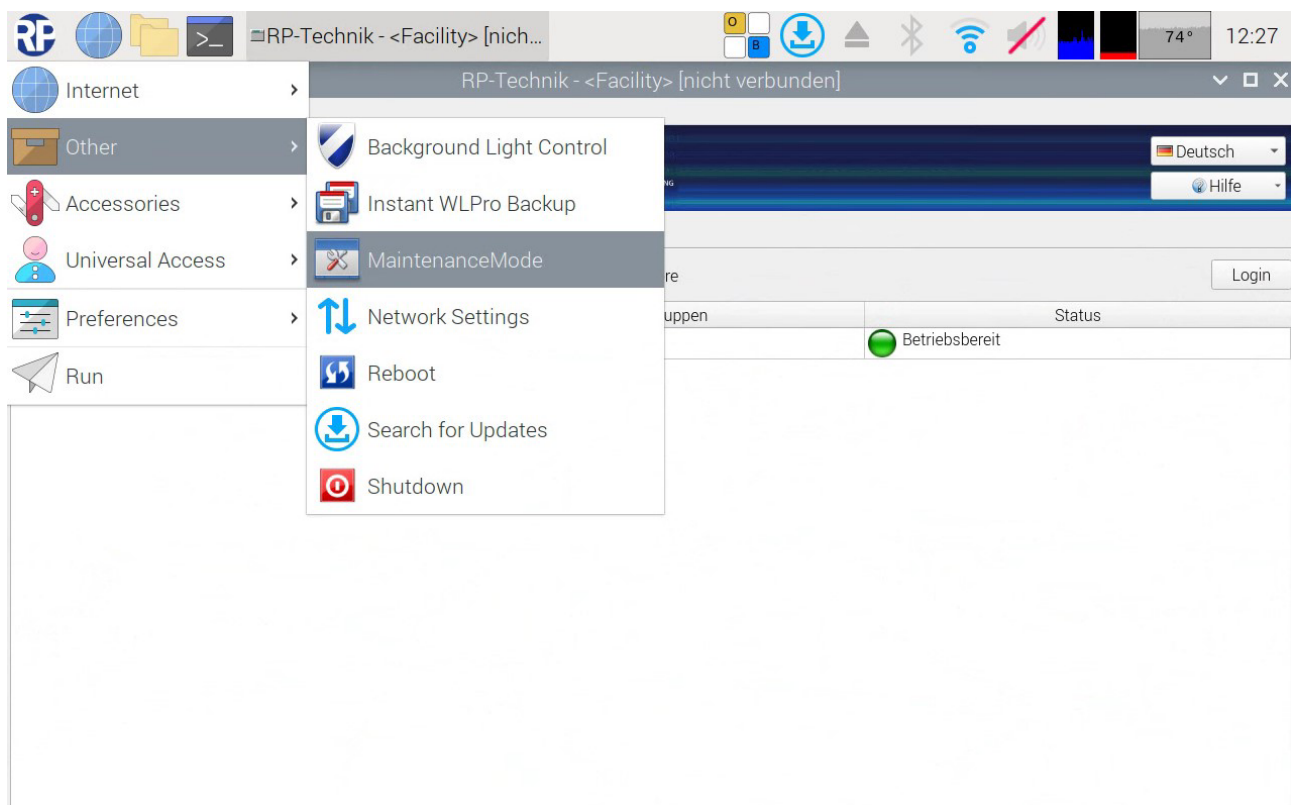
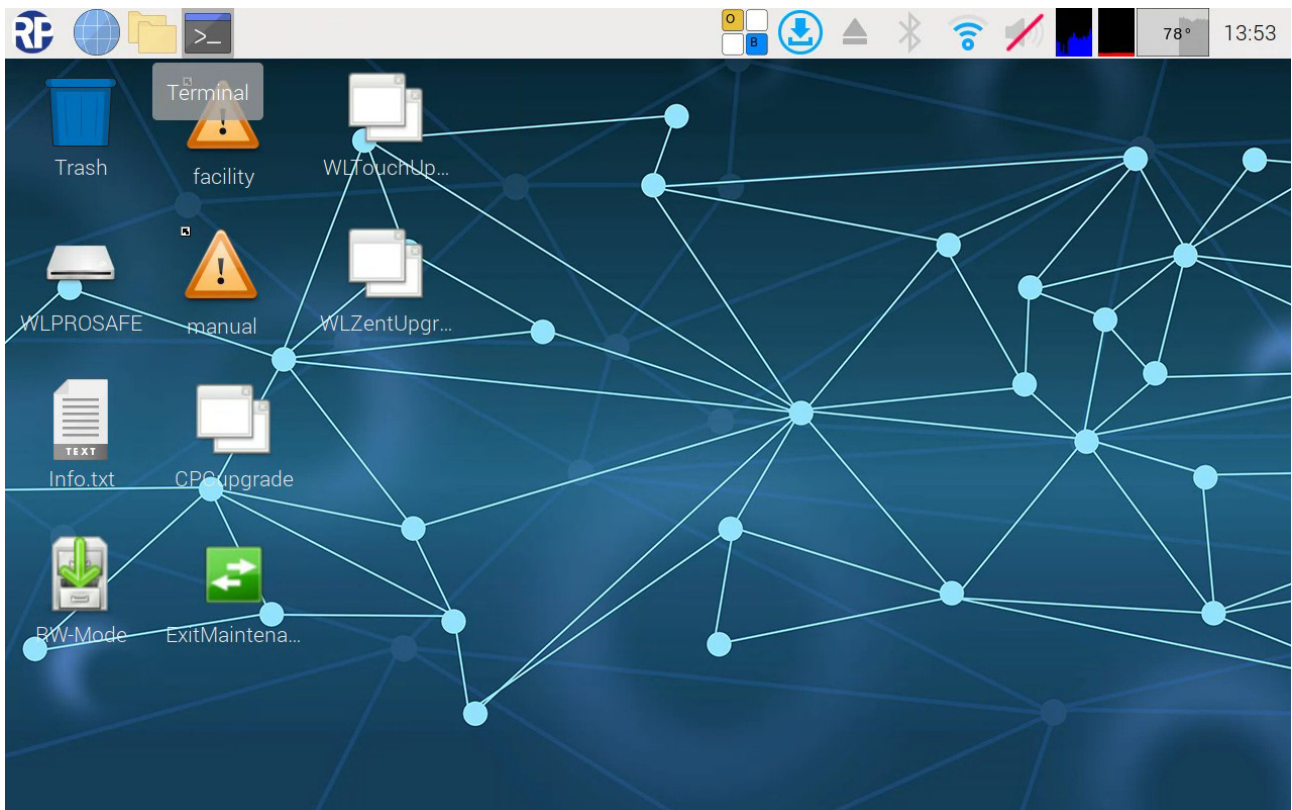


Figure 10 Launching Maintenance mode

Once this has been done, it will take around 15 seconds for the WLZent to start to perform a reboot. The remote connection may be lost during this time.

As soon as the WLZent has powered back up again, the WLZent operating system will be in read-write mode (see Chapter 7).



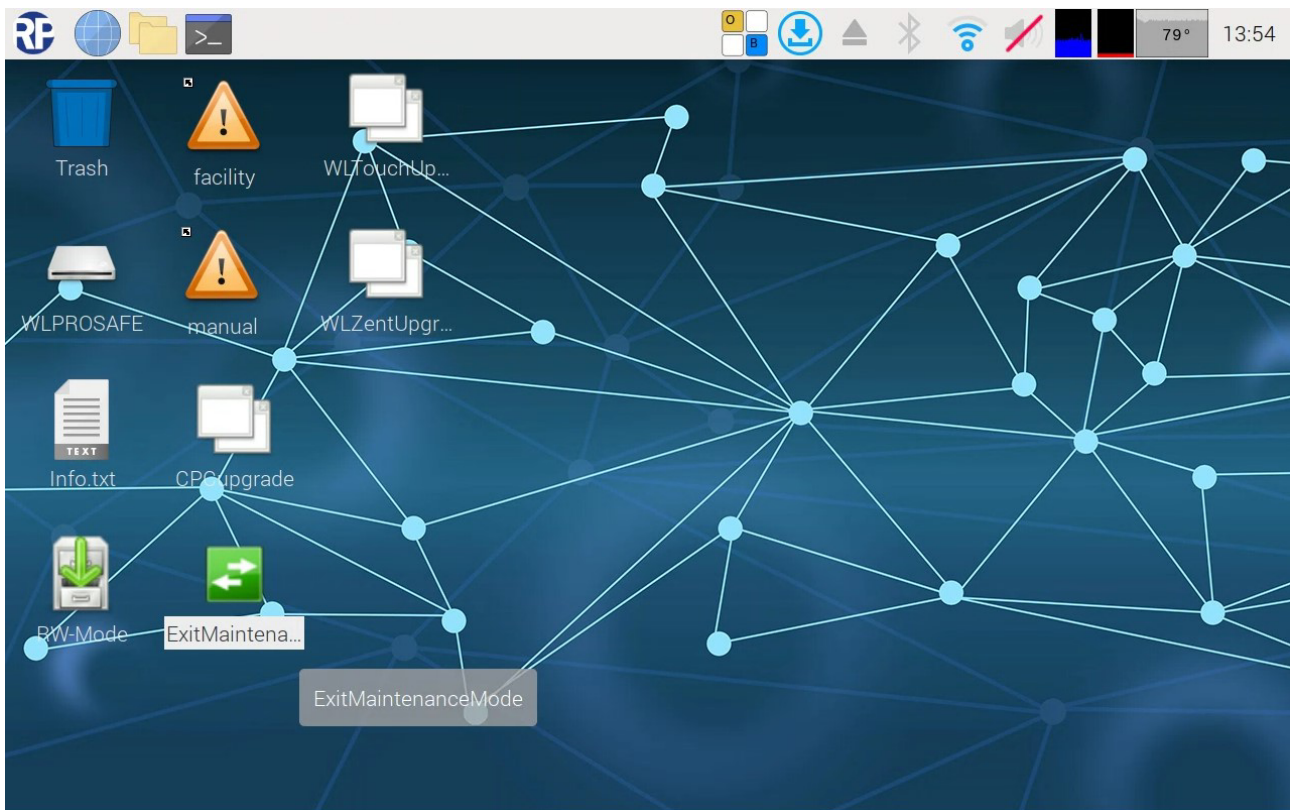
**Figure 11 Desktop in Maintenance mode**

The Wireless Professional software is not started in Maintenance mode. Various scripts are also provided on the desktop in Maintenance mode.

### 8.2 Exiting Maintenance mode

Maintenance mode can only be exited via the “ExitMaintenanceMode” script on the desktop. If a reboot is performed as described in Section 9.4 or the device is shut down as described in Section 9.5, the Wireless Professional WLZent reboots in Maintenance mode.

Maintenance mode should be exited by double-clicking on the “ExitMaintenanceMode” link on the desktop.



**Figure 12** exit maintenance mode

Once this has been done, the “Execute file” window is reopened. The “Execute in Terminal” button should be selected. The Wireless Professional WLZent now performs a reboot of its own accord.

Once this button has been clicked on, it will take around 20 to 30 seconds before the Wireless Professional WLZent performs a reboot triggered by the script. After the reboot, the WLZent will again be in read-only mode and the Wireless Professional software is restarted.

### 9 Commissioning the Wireless Professional WLZent

#### 9.1 Switching on for the first time

The Wireless Professional WLZent can be connected directly to the sub-distribution using a permanent 3-wire connection cable or to a socket using the mains connection cable supplied. Lead the cable into the WLZent housing and connect the cable inside the electrical connection (5) box on the 3-pin terminal connector (3). Close the electrical connection box afterwards (see chapter 5).



**Warning:** The cable should be guided through one of the strain reliefs provided (4, 9).

As soon as the Wireless Professional WLZent has been supplied with power, the Wireless Professional WLZent boots up and automatically starts the Wireless Professional software.

You can see that the Wireless Professional WLZent is active from the fact that the green LED lights up permanently in the right-hand indicator window (11). As soon as the Wireless Professional software has been started, the green LED in the left-hand indicator window (10) also lights up permanently.

The device is now operational, and the Wireless Professional software interface appears in full-screen mode on the touch display.

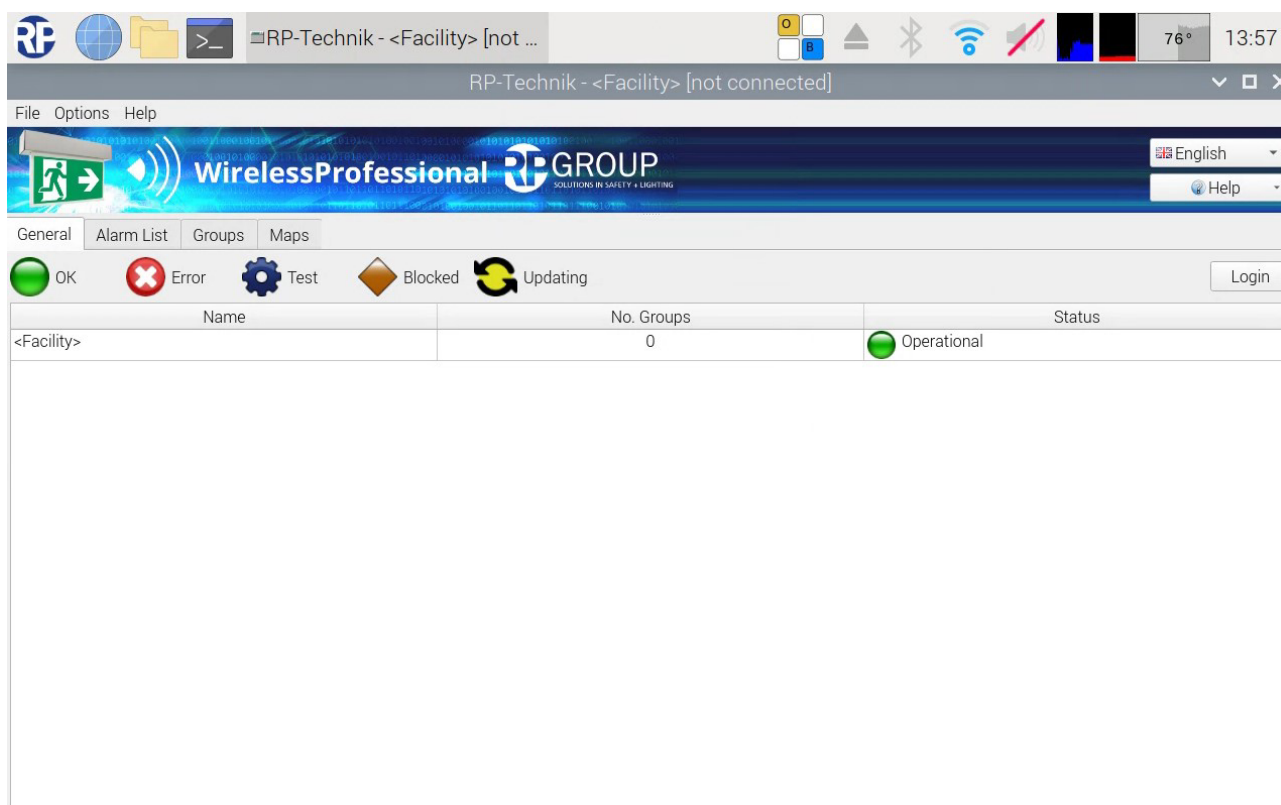


Figure 13 Wireless Professional software in full-screen mode

The wireless professional system must be commissioned in accordance with the software manual.



**Important!** Commissioning must be completed by restarting the Wireless Professional WLZENT03, see section 9.4 Rebooting the Wireless Professional WLZent. We also recommend carrying out a manual backup to an external storage medium after commissioning.

### 9.2 How the WLZent responds to a power supply failure

The Wireless Professional WLZent does not have a battery to maintain operation should the power supply to the Wireless Professional WLZent fail. The Wireless Professional WLZent is therefore switched off. The monitoring functions, control options and automatic checks are also not active in such cases.

### 9.3 How the WLZent responds to power being restored

When power is restored, the Wireless Professional WLZent is rebooted, and the Wireless Professional software starts automatically. There is no need to boot the Wireless Professional WLZent manually.

### 9.4 Rebooting the Wireless Professional WLZent

Should you need to reboot the Wireless Professional WLZent, you can do this via both the software and hardware.

#### 9.4.1 Software restart

The operating system of the Wireless Professional WLZent can be rebooted via the graphic interface. To reboot, go to Start menu->Other->Reboot.



**Warning:** The Wireless Professional software should be closed before rebooting to avoid data being lost. This point is no longer relevant if using Wireless Professional version 3.0 or higher.

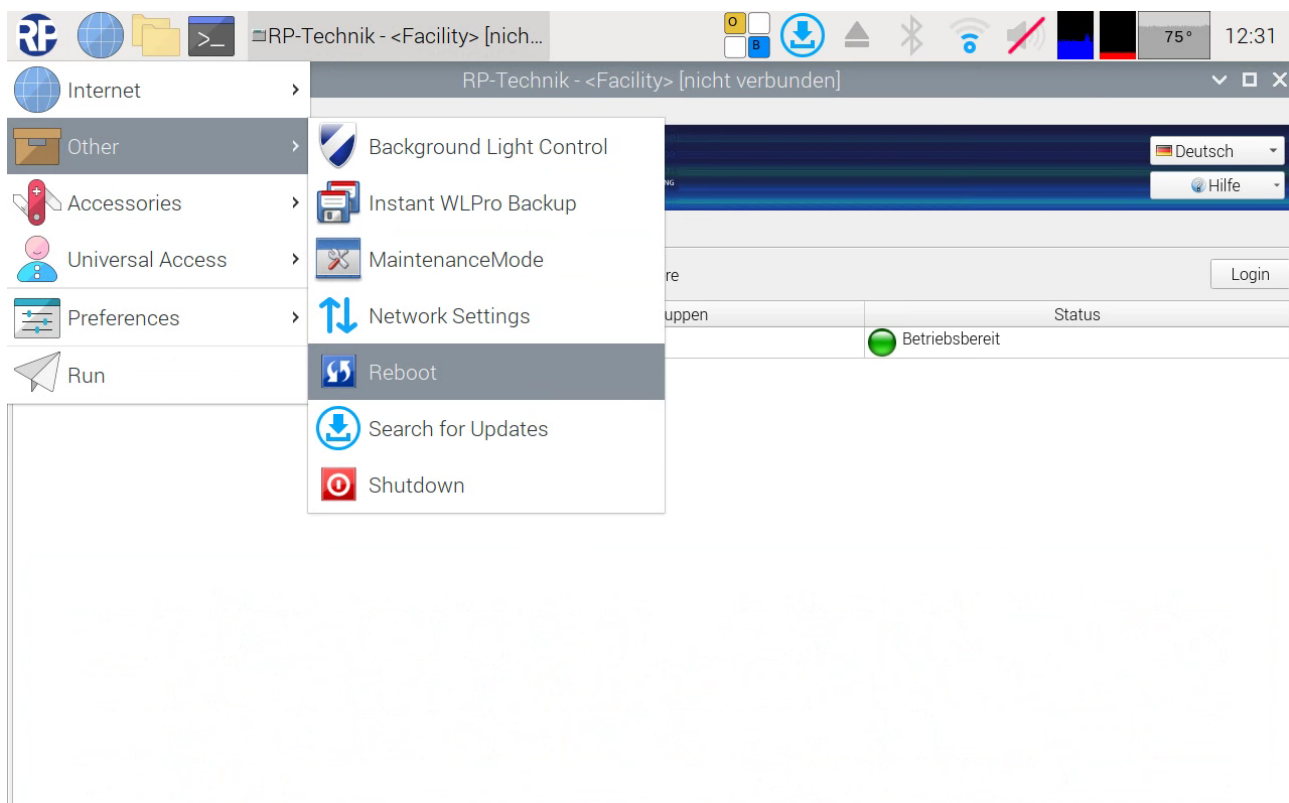


Figure 14 Wireless Professional WLZent Start menu Other Reboot

If the Start menu is not displayed (see Figure 9), the Wireless Professional software runs in full-screen mode. The Alt + Enter key combination or the Help menu in the top right can be used to switch between full-screen mode and the Wireless Professional software's window mode.



**Warning:** a password has to be entered in order to exit full-screen mode.



### 9.4.2 Hardware reboot

Should you not be able to reboot the operating system, you can also perform a hard reset. This is done by pressing the Reset button. The Reset button is not accessible if the casing is closed. The casing must be opened in order to press the Reset button.

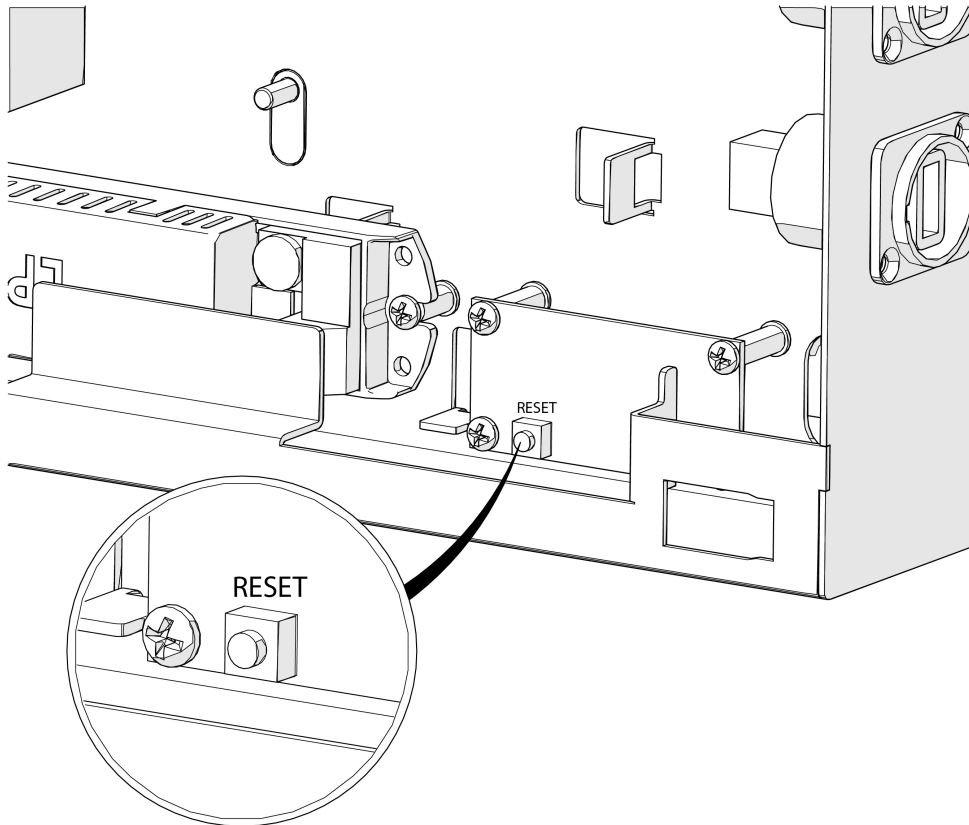


Figure 15 Position of the Reset button

### 9.5 Switching off the Wireless Professional WLZent

To ensure that no data is lost when switching off the Wireless Professional WLZent, the operating system must be shut down correctly.

Before powering down, data from the Wireless Professional software should be backed up by pressing the “Save System Data” button or by closing the Wireless Professional software. This step is not necessary with Wireless Professional software version 3.0 and higher.



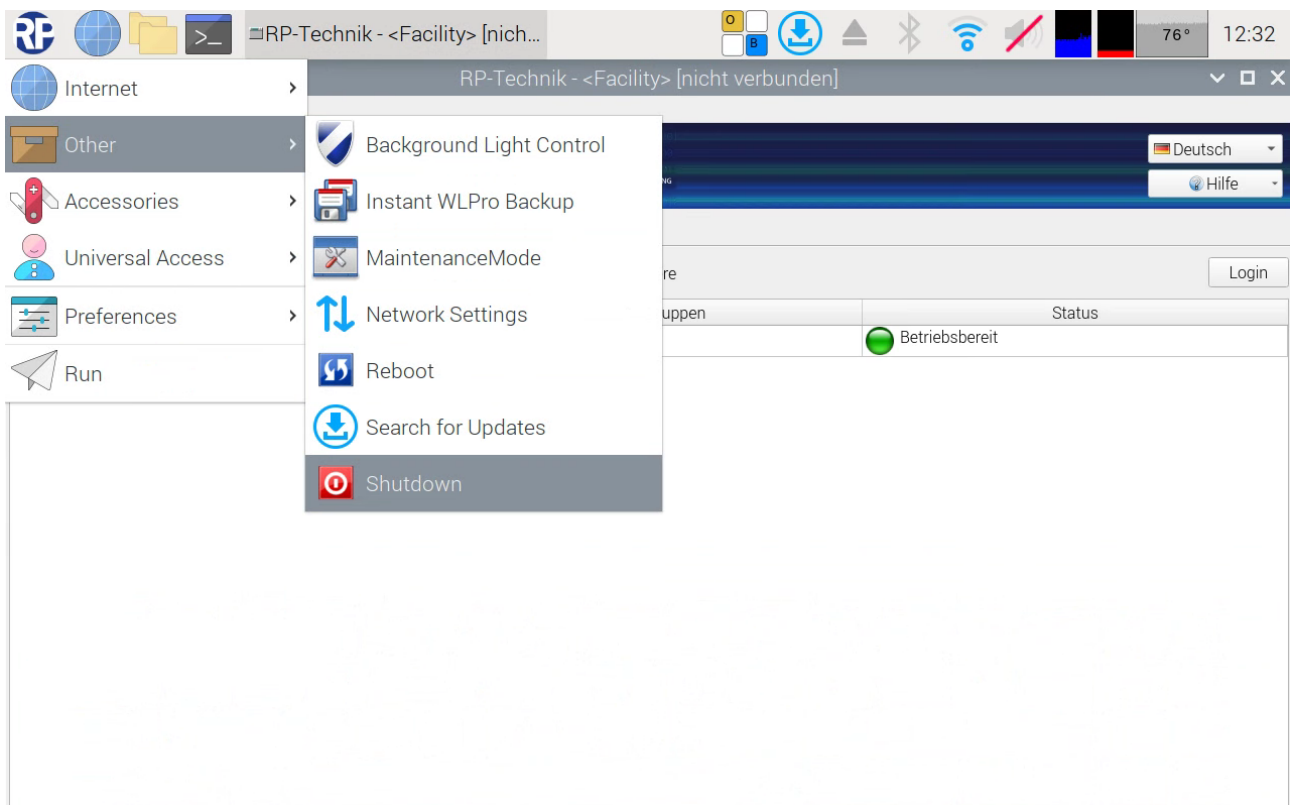


Figure 16 WLZent Start menu Other Shutdown

The device is shut down by going to Start menu->Other->Shutdown. This closes the Wireless Professional software, and the last version of the data is transferred to the backup USB stick. 5 seconds after the green LED in the indicator window for WLZent processor board (11) has gone out, the Wireless Professional WLZent can be disconnected from the power supply.

### 10 Setting Date and Time

Upon delivery, the date and time are set to the time zone "Berlin, Paris, etc... (GMT+2)". The real time clock used with battery buffer allows the time to continue to run even if there is a power cut or the WLZent is switched off.

There are no means of setting the date and time manually.

If the time or date displayed by the WLZent differs from the actual time, the WLZent must be connected to the Internet. Once a connection to the Internet has been established, it will take around 1 minute for the WLZent to automatically receive the date and time from the online time server.

After the WLZent has been rebooted, you can tell that the RTC battery is flat because a modification to the time is documented in the Wireless Professional log file once the application is launched.

If this happens, the WLZent's RTC battery should be changed.

The steps required to change the battery can be found in the maintenance schedule. This is stored as a PDF document in the folder

`/home/rp/Desktop/manual/Wartungsplan_WLProfessional.pdf`.

Once the WLZent's RTC battery has been changed, the WLZent must be connected to the Internet for the internal clock to be reset correctly.

### **11 Screensaver**

There is a screensaver program installed on the Wireless Professional WLZent. The screensaver is initial configured so that the background lighting of the touch display (15) is deactivated if the user hasn't entered anything on the device for 2 minutes.

If the user enters something via the touch display (15) the background lighting for the touch display (15) is reactivated. Inputs via an input device connected to the USB-Port (14) or an input device connected via Bluetooth do not switch the backlight back on.

Screensaver settings can be changed using WLX Settings Tool see 13.1.1 Screensaver Settings.

The signal LEDs displayed in the status indicator areas (10, 11) remain active even if the screen saver is active.

### 12 Setting Background Lighting

The brightness of the touch display's background lighting is set to 50% of max. brightness upon delivery. If necessary, the background lighting's brightness can be increased or decreased.

To set the background lighting brightness, go to Start menu->Other->Background Light Control.

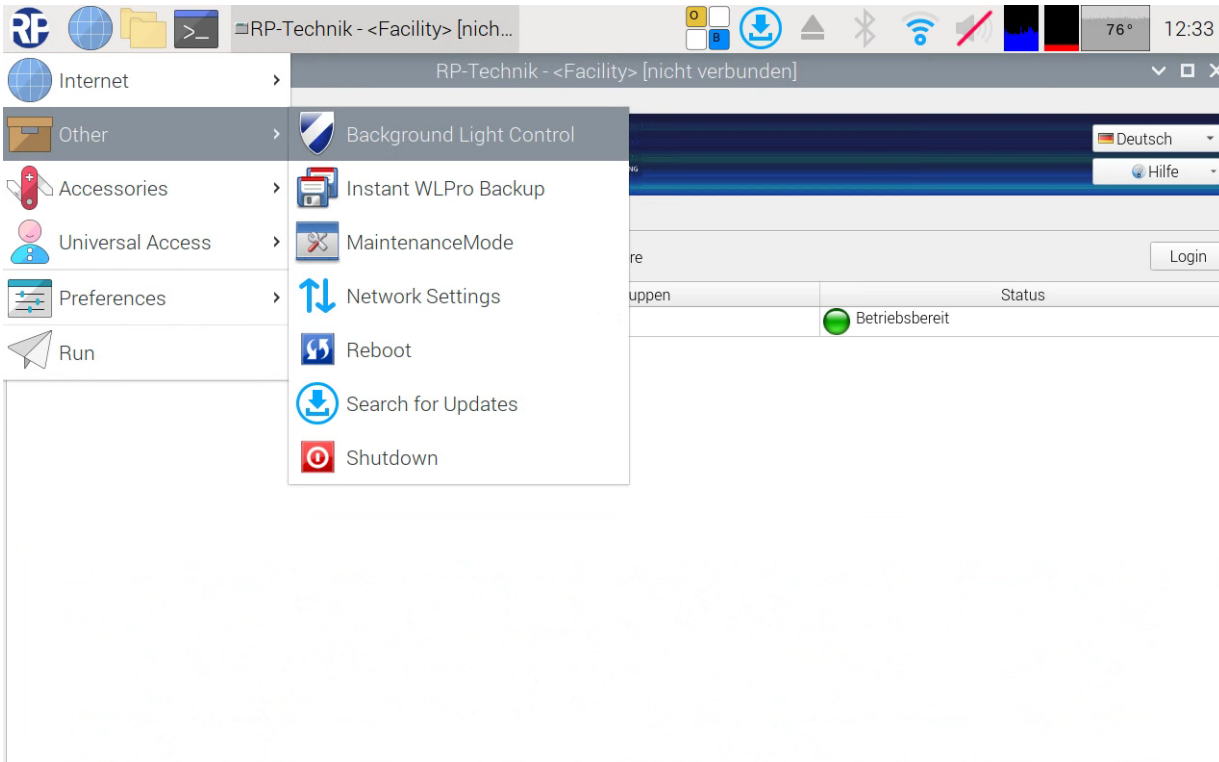
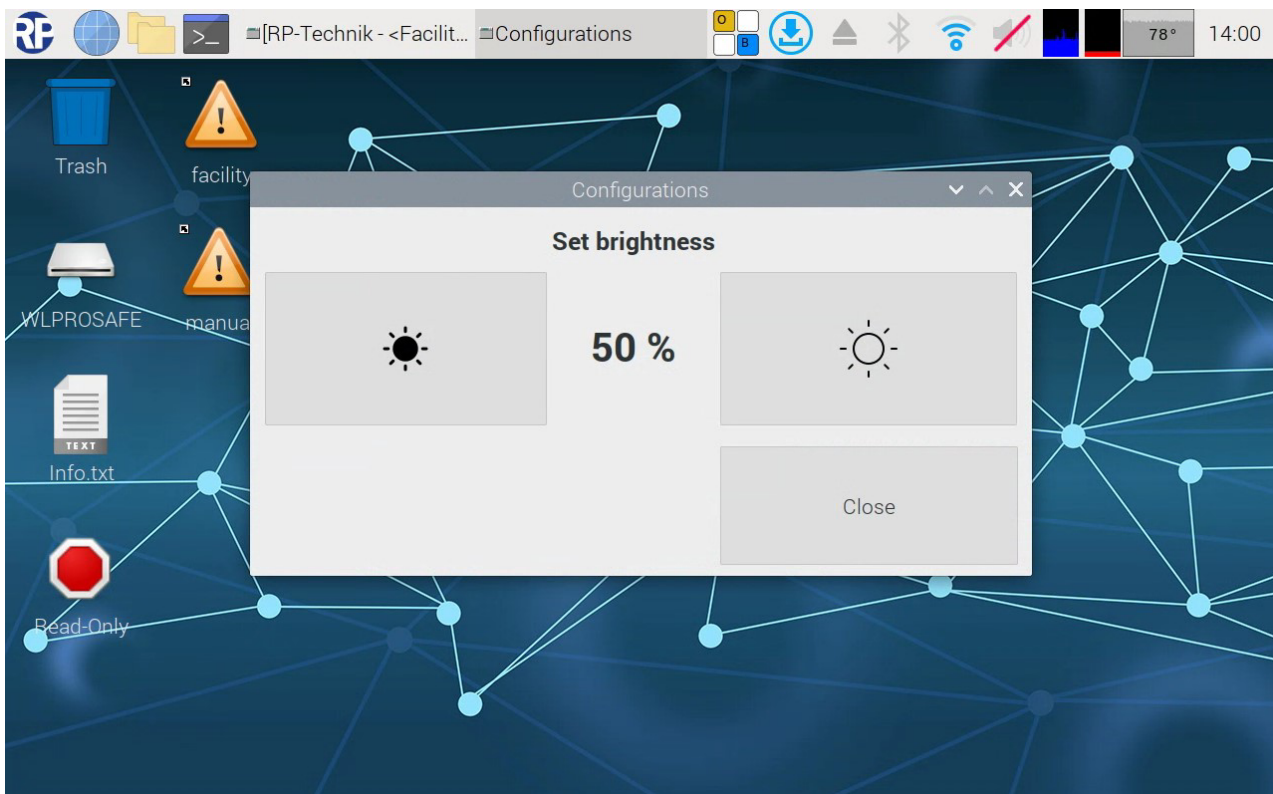


Figure 17 WLZent Start menu Other Background Light Control

The "Configurations" window opens.



**Figure 18 "Configurations" screen brightness**

The level of background lighting brightness currently set is displayed as a percentage. The button to the left of the percentage figure reduces the brightness by 10%. The button to the right of the percentage figure increases the brightness by 10%. To apply the value set, close the window using the "Close" button.

### 13 WLX Settings Tool

The WLX Settings Tool is used to configurate the WLZent.

The WLX Settings Tool is only available during maintenance Mode and can be started by start menu->Other->WLX Settings.

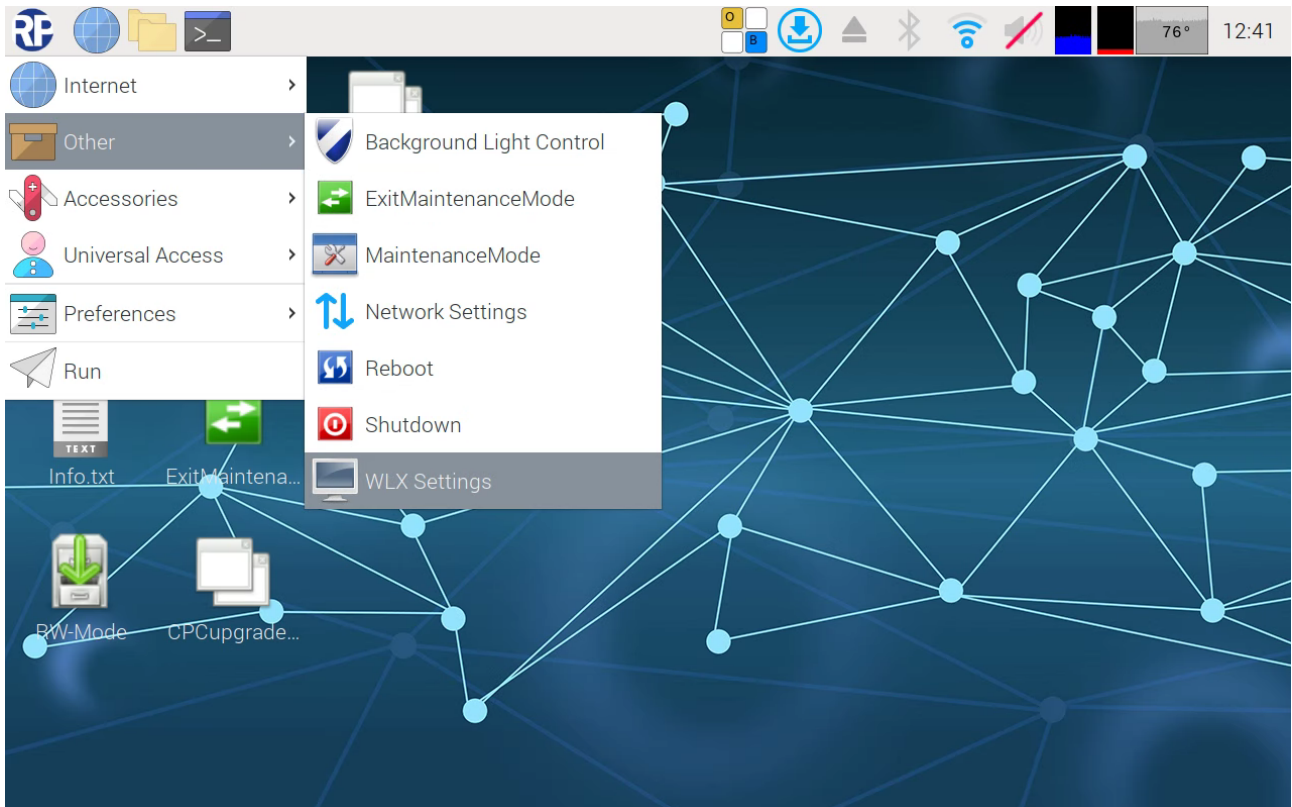


Figure 19 WLX Settings Tool in the start menu.

The WLX Settings Tool is a comfortable option to change the settings on some components of the WLZent.

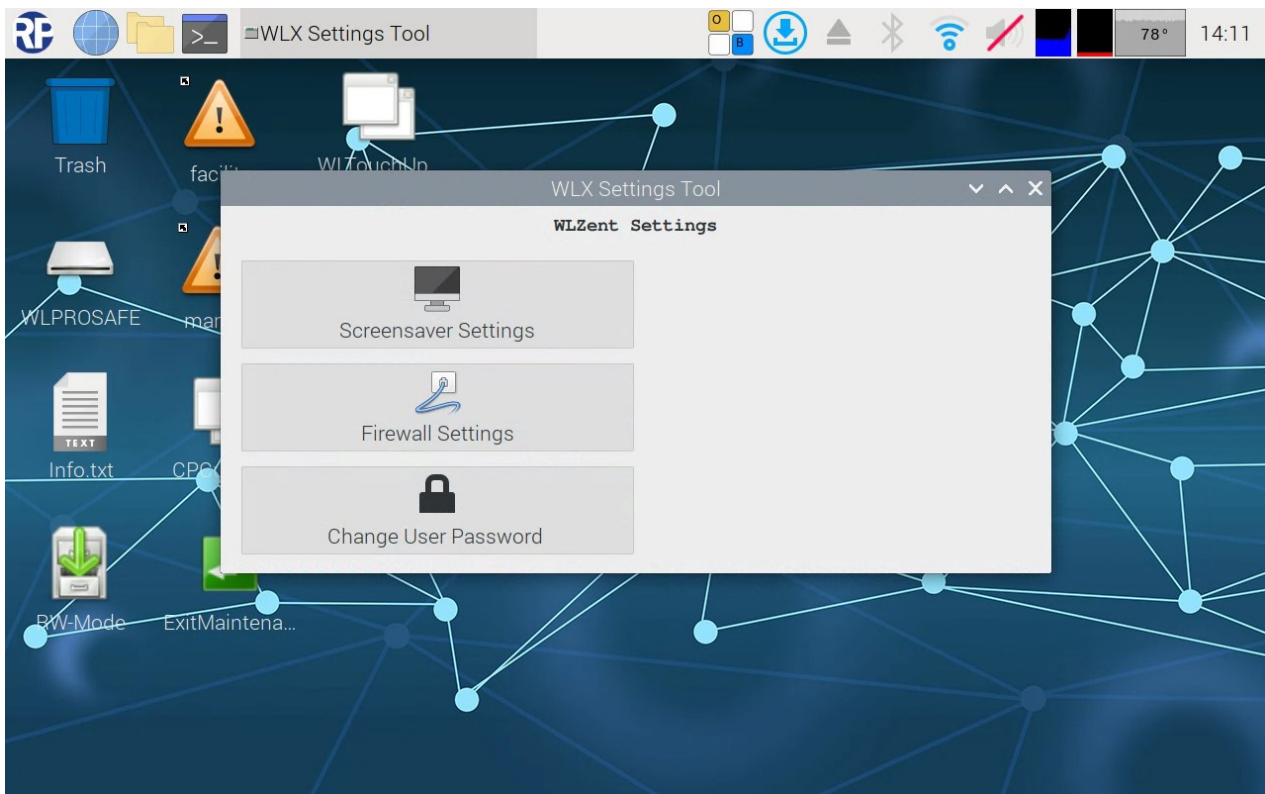


Figure 20 WLX Settings Tool

### 13.1.1 Screensaver Settings

The settings for the screen saver can be modified with the menu item.

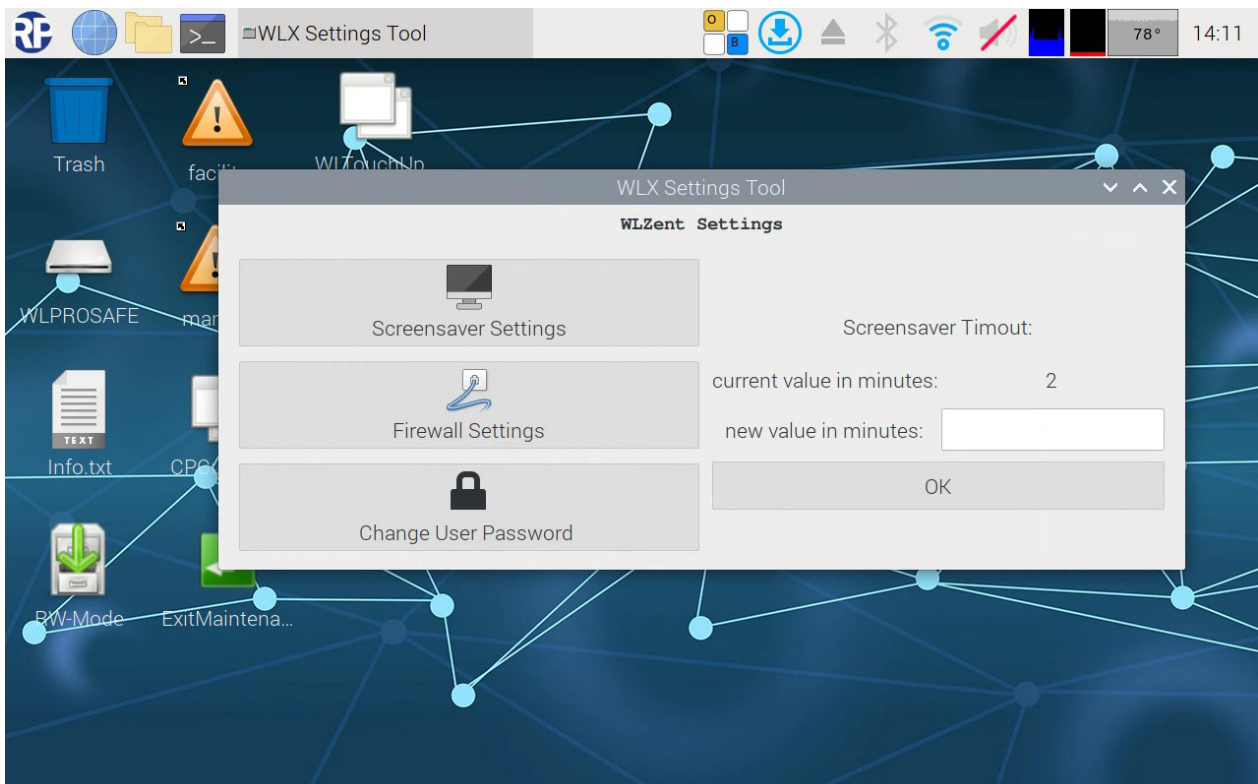


Figure 21 WLC Settings Tool: Screen saver settings.



With the textbox „new value in minutes:“ it is possible to set a new time until the backlight of the display turned off. The new value will be saved by tapping the bottom “ok”.

### 13.1.2 Firewall Settings

This menu item starts the Firewall settings.

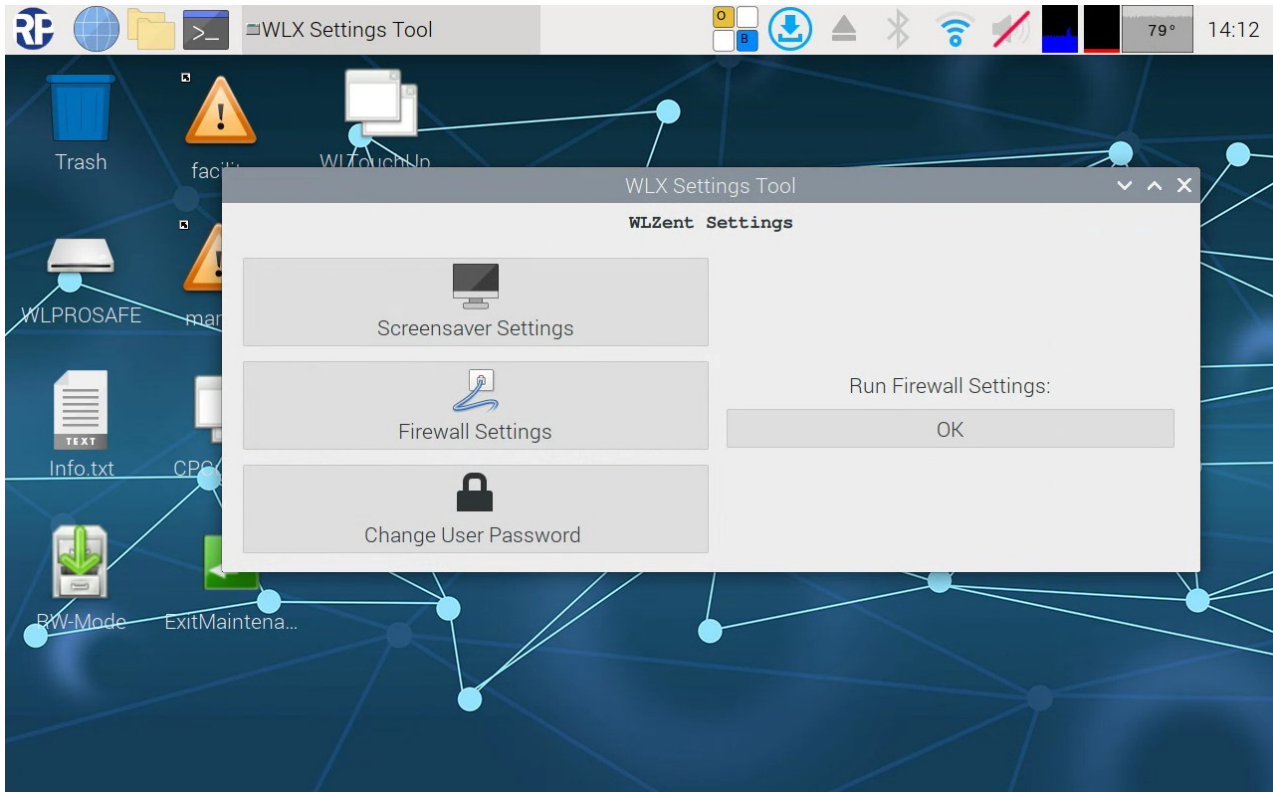


Figure 22 WLC Settings Tool: start Firewall Settings

By tapping the button „OK“, the user password request window will be opened. The user password is taken of the Info.txt from the desktop.



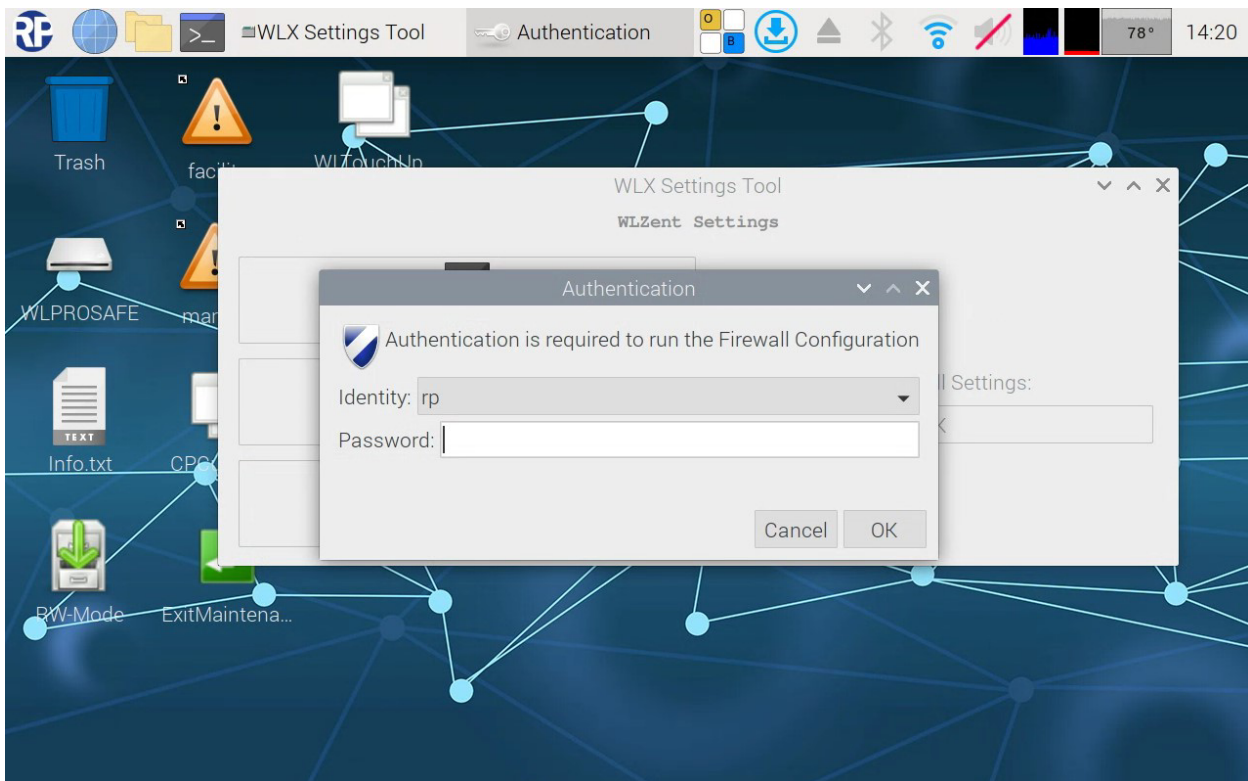


Figure 23 WLC Settings Tool: User Authentication for firewall settings.

After successfully authentication the „Firewall“ window is shown on the display.

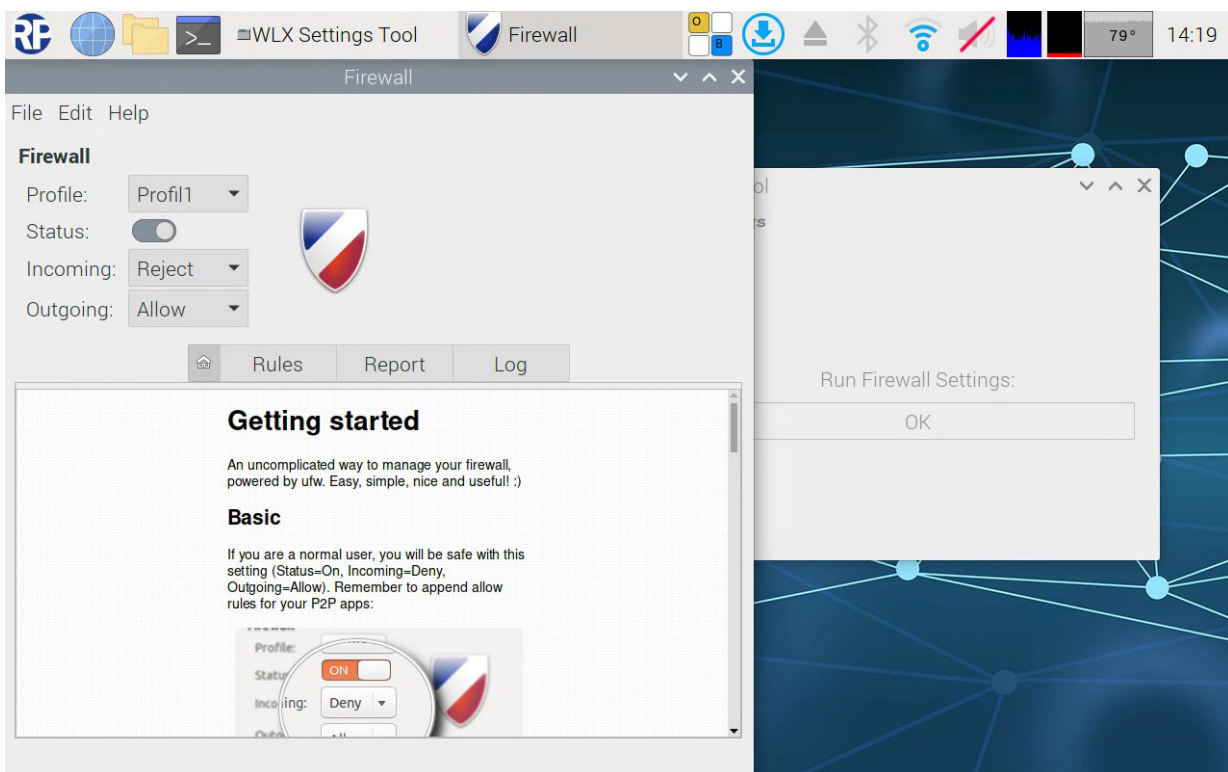
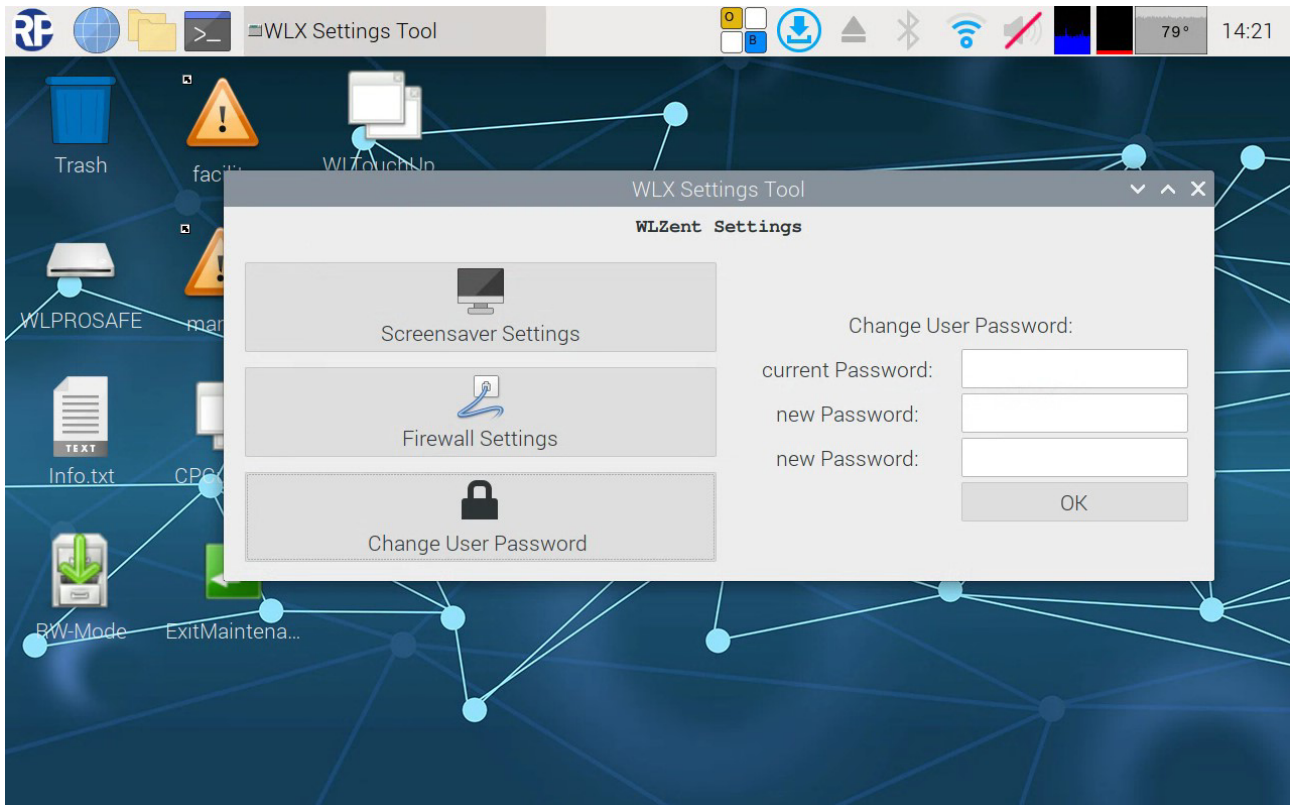


Figure 24 Firewall settings

### 13.1.3 Change User Password

The user password can be changed with the menu item.

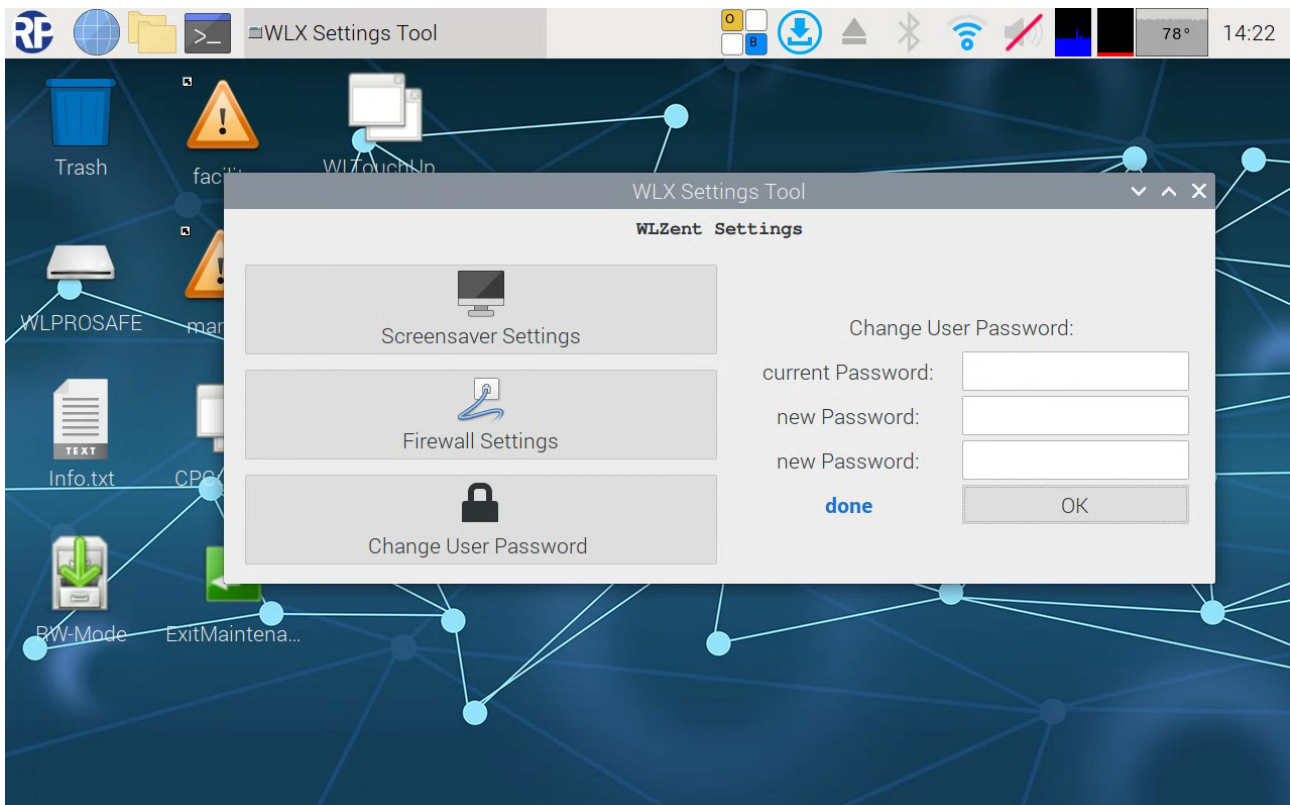


**Figure 25 WLC Settings Tool: User Password change.**

The current user password must be written into the textbox „current Password:“.

Enter the new password into the two boxes labeled „new Password:“.

By tapping the bottom „ok“ the new password will be saved.



**Figure 26** WLC Settings Tool: User password change done.

Is the new password successfully saved, a “done” will be showed into the „WLX Settings Tool“ window.

**Note:** password changed need to be documented properly.

### 14 Network Configuration

The Wireless Professional WLZent has an RJ-45 socket (LAN connection) (13), which can be accessed externally, as well as a WLAN interface, which can be used to integrate the Wireless Professional WLZent into a network.

**Note:** If both the Ethernet socket and the WLAN interface are being used, Internet access for the WLZent must be provided via the Ethernet socket.

#### 14.1 Connecting with a cable network

The Wireless Professional WLZent is set to DHCP upon delivery. As soon as a network cable with a DHCP server is plugged in, the WLZent is automatically assigned an IP address.



Figure 27 Taskbar with connected Ethernet

Once a connection has been established, this is indicated in the taskbar by means of the Up/Down arrow.

If there is no connection to a cable network, the Up/Down arrow is displayed with a red cross over it.



Figure 28 Taskbar with no connected Ethernet

**Note:** If the WLZent is connected to a WLAN network at the same time, the arrow symbol is not shown.

##### 14.1.1 Static IP address

To issue a static IP address, the network settings must be called up from the Start menu by going to “Start menu->Sonstige->Netzwerk Einstellungen”.

**Note:** If a static IP address is to be permanently issued, it must be entered in Maintenance mode. (see Chapter 8 Maintenance Mode)

**Note:** The procedure for setting a static IP address for the WLAN interface is identical to that for the LAN interface; “wlan0” simply has to be selected in place of “eth0”.



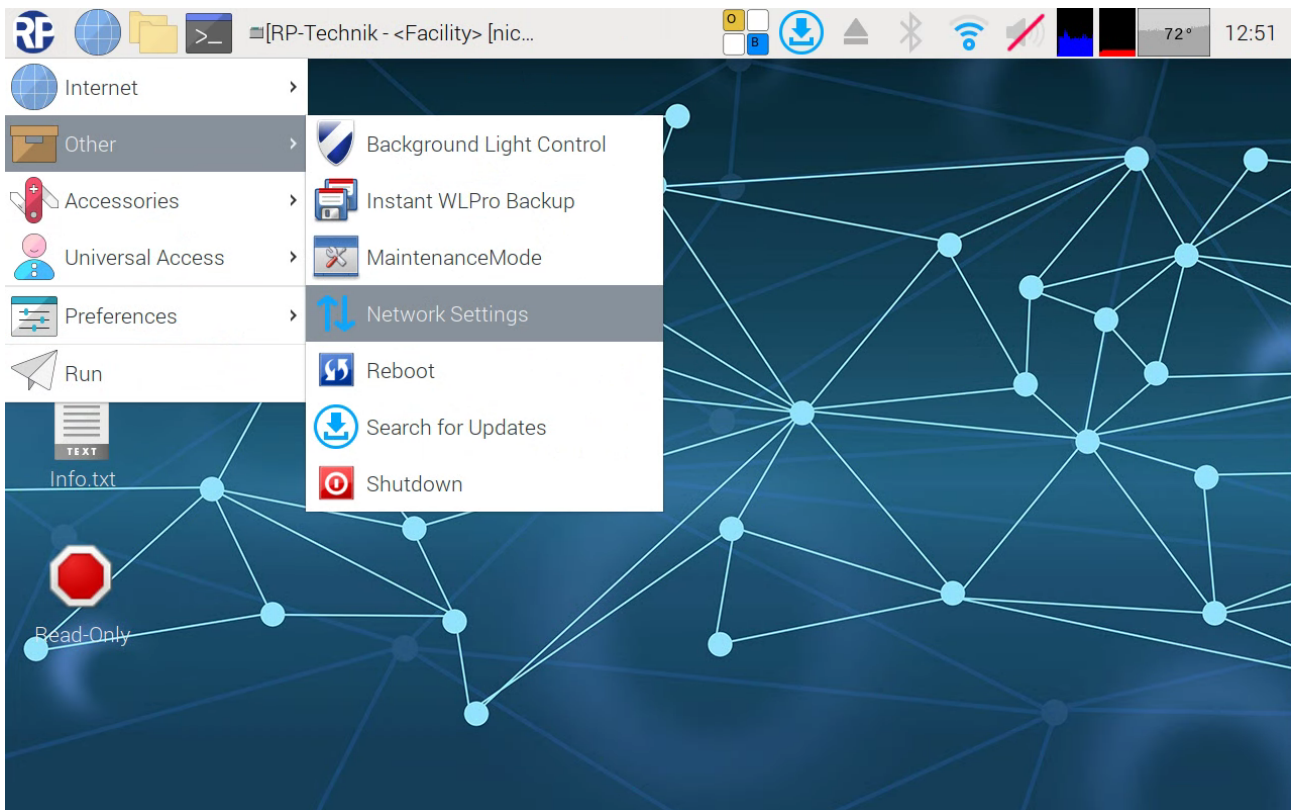


Figure 29 Network settings in the start menu

The “Network Preferences” window then opens.

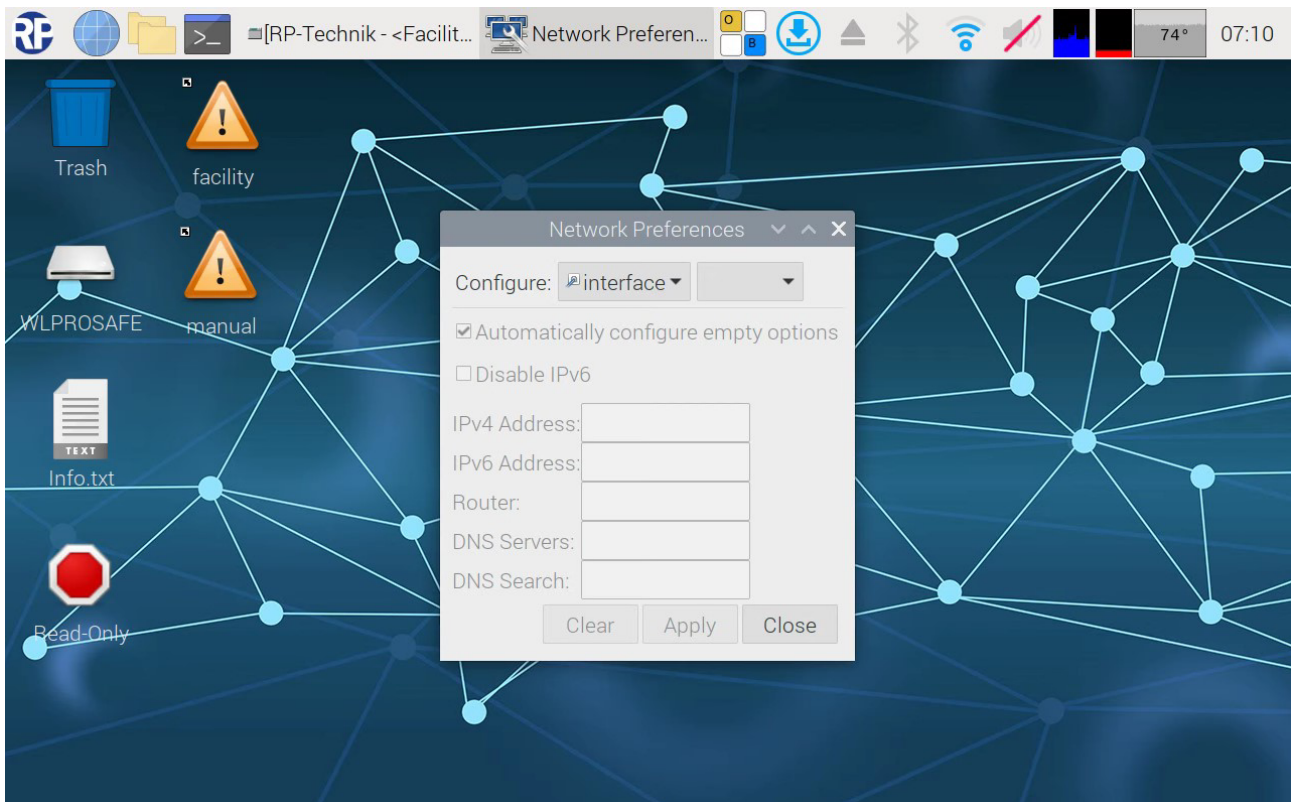


Figure 30 Network Preferences

The interface for which a static IP is being set is selected from the drop-down box to the right of the drop-down box containing the word "interface". The drop-down box is tapped on and the "eth0" interface (wired network, RJ45 socket) is there by selected.

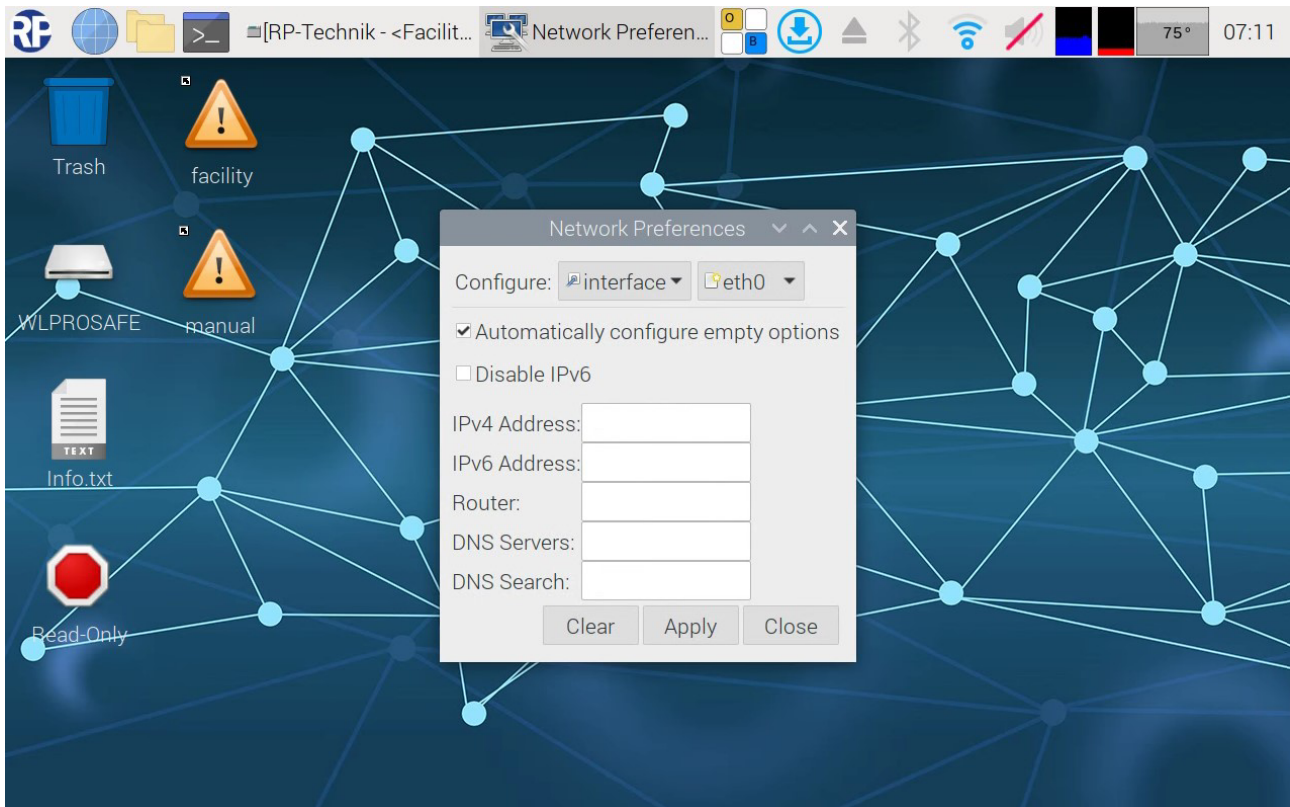


Figure 31 Network preferences for eth0

**Note:** There are limitations on selecting a different interface via the WLZent touch display which is why we recommend using the arrow keys on the on-screen keyboard to select an interface.

Once the interface has been selected, the boxes have to be completed. Tapping in a text box automatically opens the on-screen keyboard.

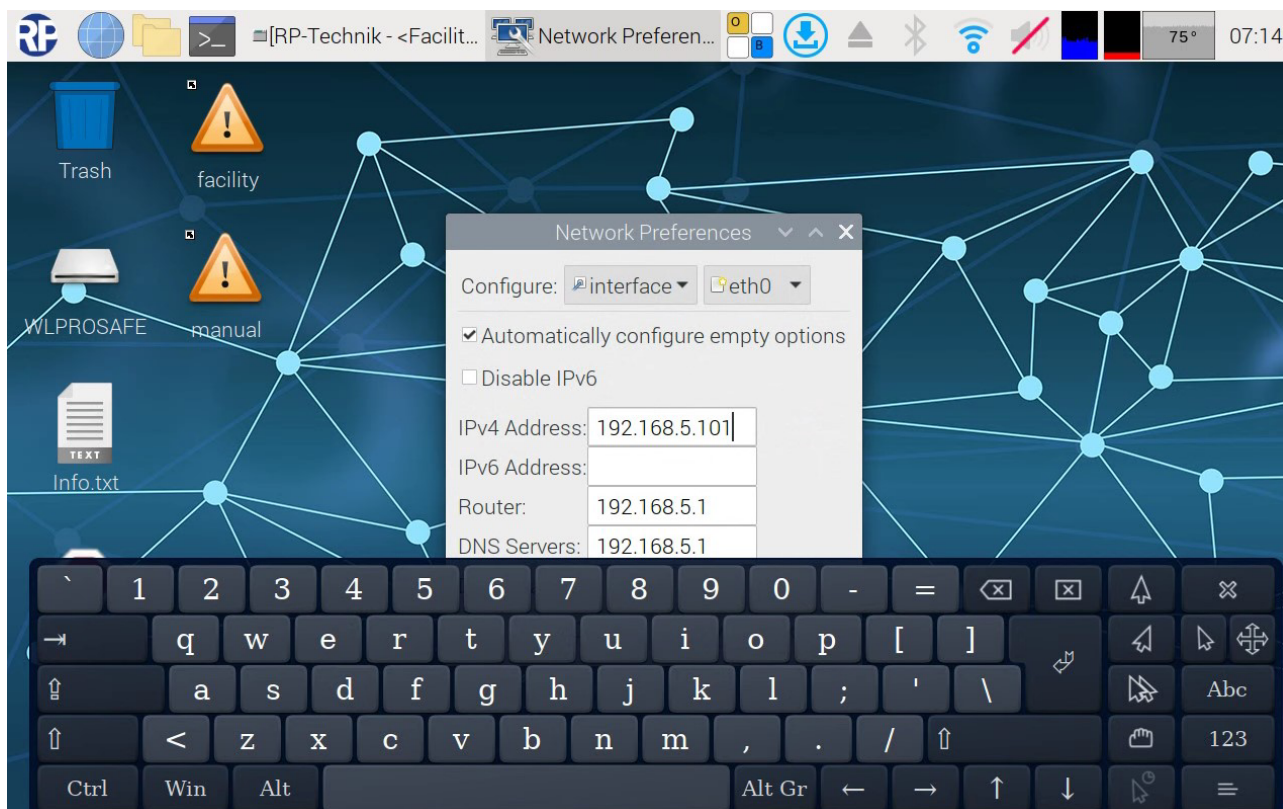


Figure 32 static IP address for eth0

Box name	Meaning
IPv4 Address	4-byte IP address
IPv6 Address	6-byte IP address
Router	IP address of the router/gateway
DNS Servers	IP address of the domain name server
DNS Search	Domain of a name server

The IP address is entered as shown in the example also, the address of the router/gateway and a DNS (Domain Name Server).

The subnet mask is set to 255.255.255.0 as standard.

A sub-mask suffix can be entered after the IP address if needed.

The box for the DNS Search can be left empty if a DNS server is specified.

If no IPv6 is assigned, a tick should be placed in the “Disable IPv6” checkbox.

The “Automatically configure empty options” checkbox must not be selected.

**Note:** Instances may arise where the static IP address is only applied by the network adapter once the network cable has been disconnected and plugged back in again.

Once the corresponding boxes are completed, the settings are applied by clicking on the “Apply” button. The window can then be closed by clicking on the “Close” button.



### 14.2 Connecting to a wireless network

When the Wireless Professional WLZent is delivered, the WLAN interface is enabled. For the connection data to be permanently stored in the WLZent, the WLZent must be switched to Maintenance mode (see Section 8). Any wireless networks in range are displayed when the arrow symbol in the taskbar is tapped.

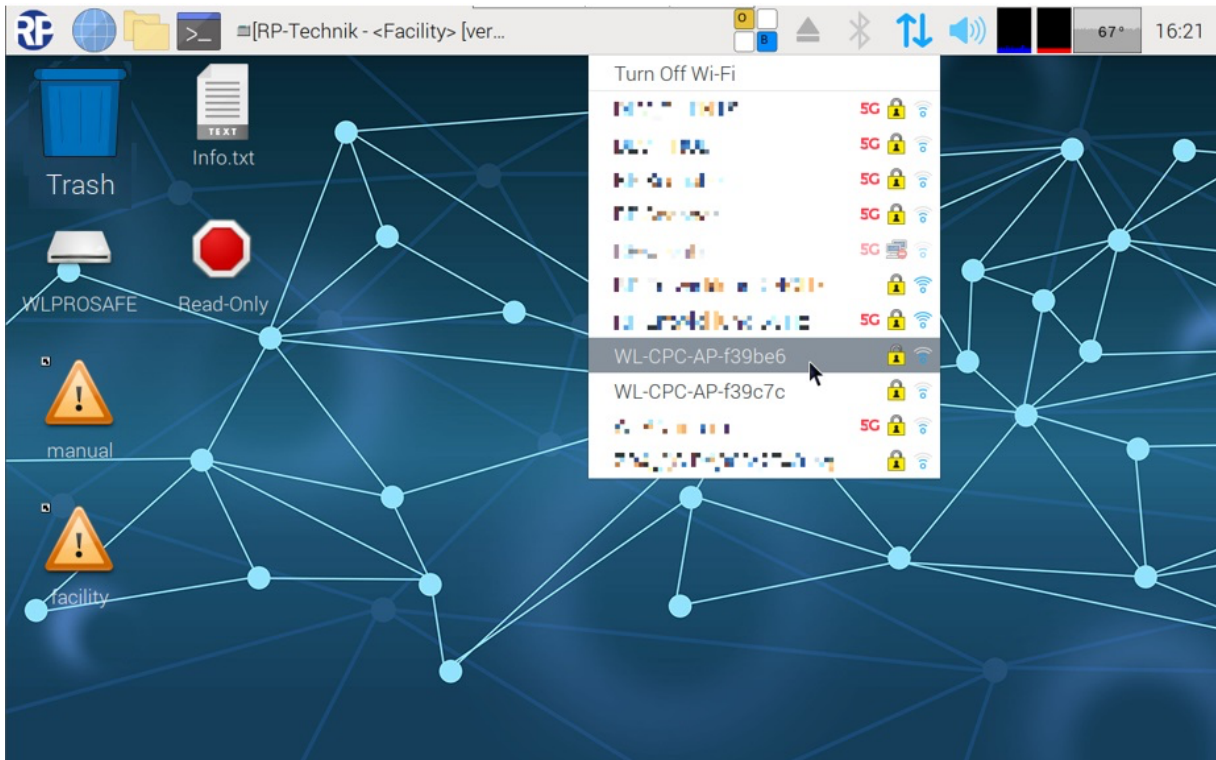


Figure 33 Available WLAN networks.

Tap on the wireless network that is to be connected to the WLZent. If the network is encrypted, a window with the name of the selected wireless network as its title opens.



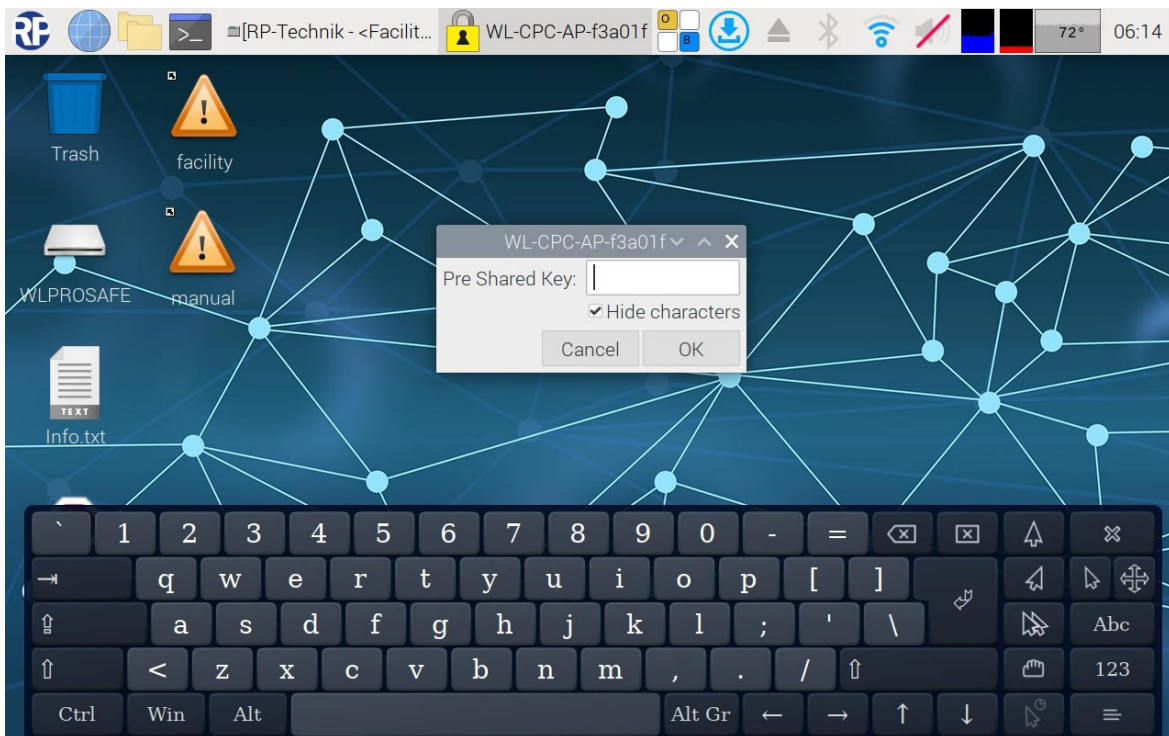


Figure 34 Entering WLAN code

The network code for the wireless network must be entered and confirmed with OK.

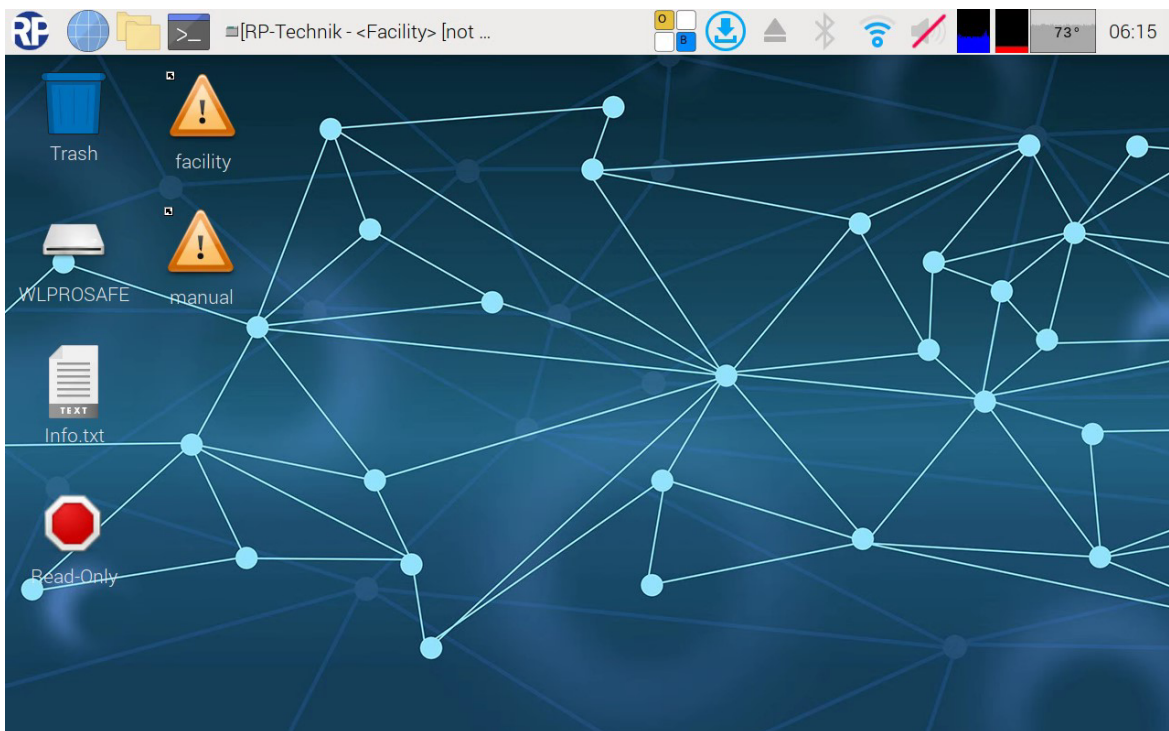


Figure 35 WLZent with connected WLAN

Once the connection has been successfully established, the arrow symbol disappears from the taskbar and is replaced with another. The Wireless Professional WLZent is now connected to the wireless network.

Maintenance mode should now be exited. After the reboot, the Wireless Professional WLZent is connected to the wireless network.

### Displaying connection information

Tap on the arrow symbol to find the IP address issued by the DHCP server. A context menu containing all WLAN networks within range opens. Around 2 seconds later, a window appears in front of the WLAN networks. This contains the IP addresses of the network interfaces. In this case, the IP address of the Ethernet socket is 10.0.144.14/21

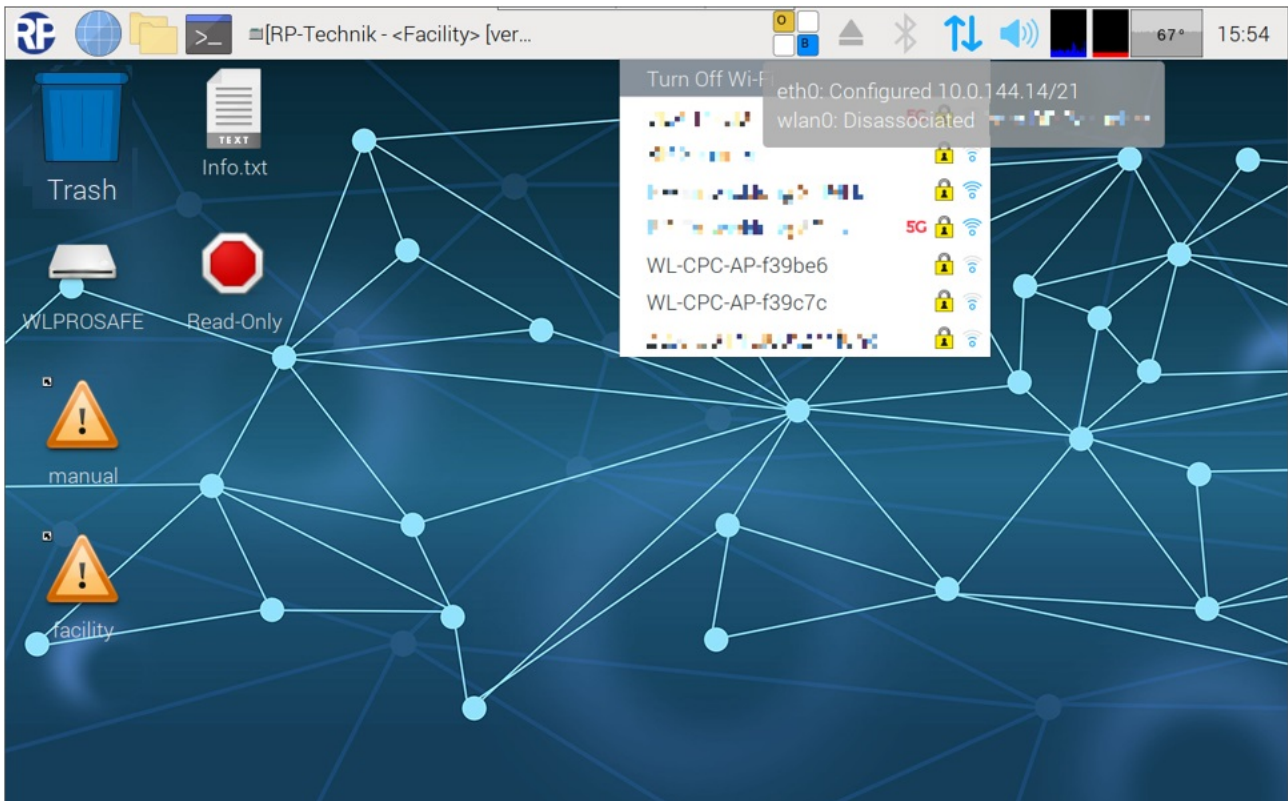


Figure 36 WLZent connection information

### 15 Bluetooth

The Wireless Professional WLZent has a Bluetooth interface, which can be used to wirelessly connect input devices, such as keyboards, to the WLZent. The Bluetooth interface is not enabled upon delivery.

For a permanent connection, the Wireless Professional WLZent must be switched to Maintenance mode (see Section 8)

#### 15.1 Enabling Bluetooth

To enable the Bluetooth interface, tap on the Bluetooth symbol in the taskbar.

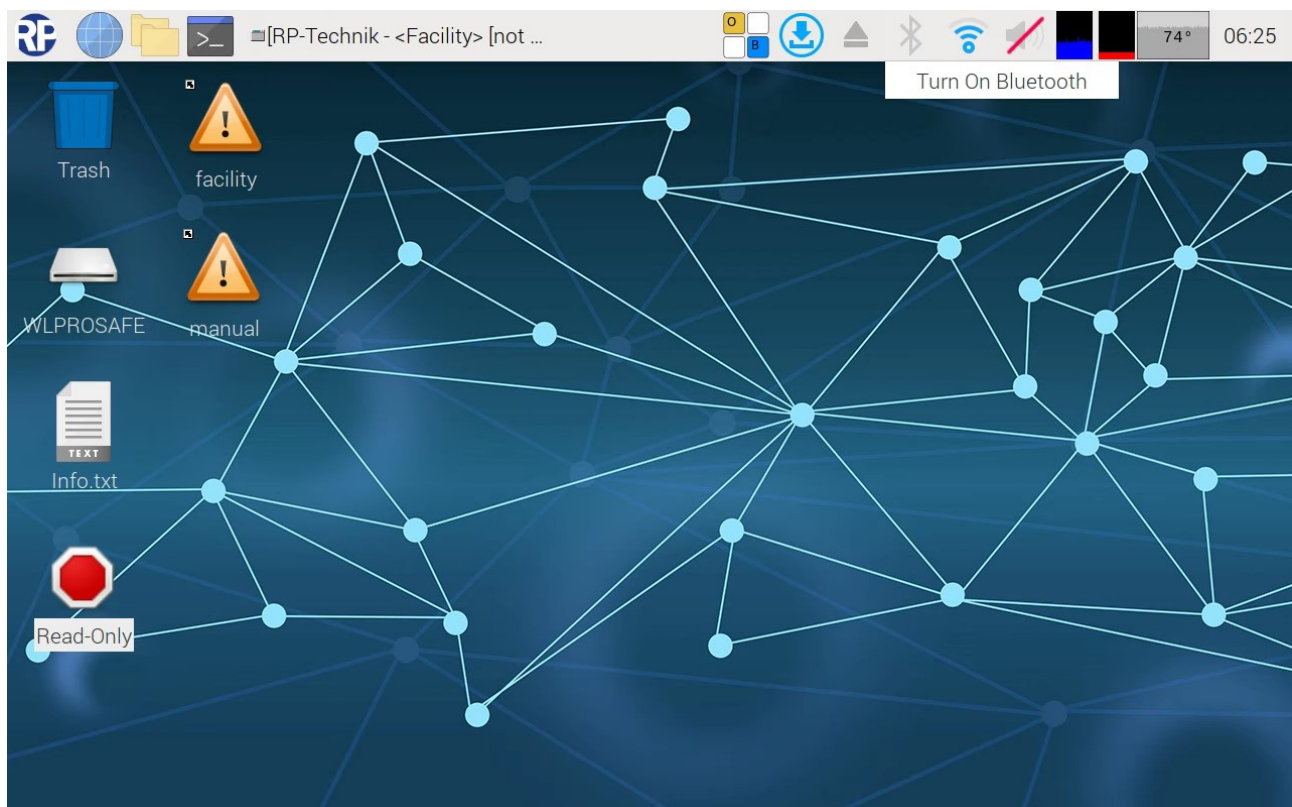


Figure 37 Enabling Bluetooth

The context menu for enabling the Bluetooth interface appears. Tap on the "Turn On Bluetooth" button.

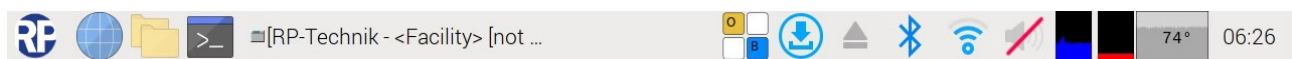


Figure 38 Bluetooth taskbar enabled

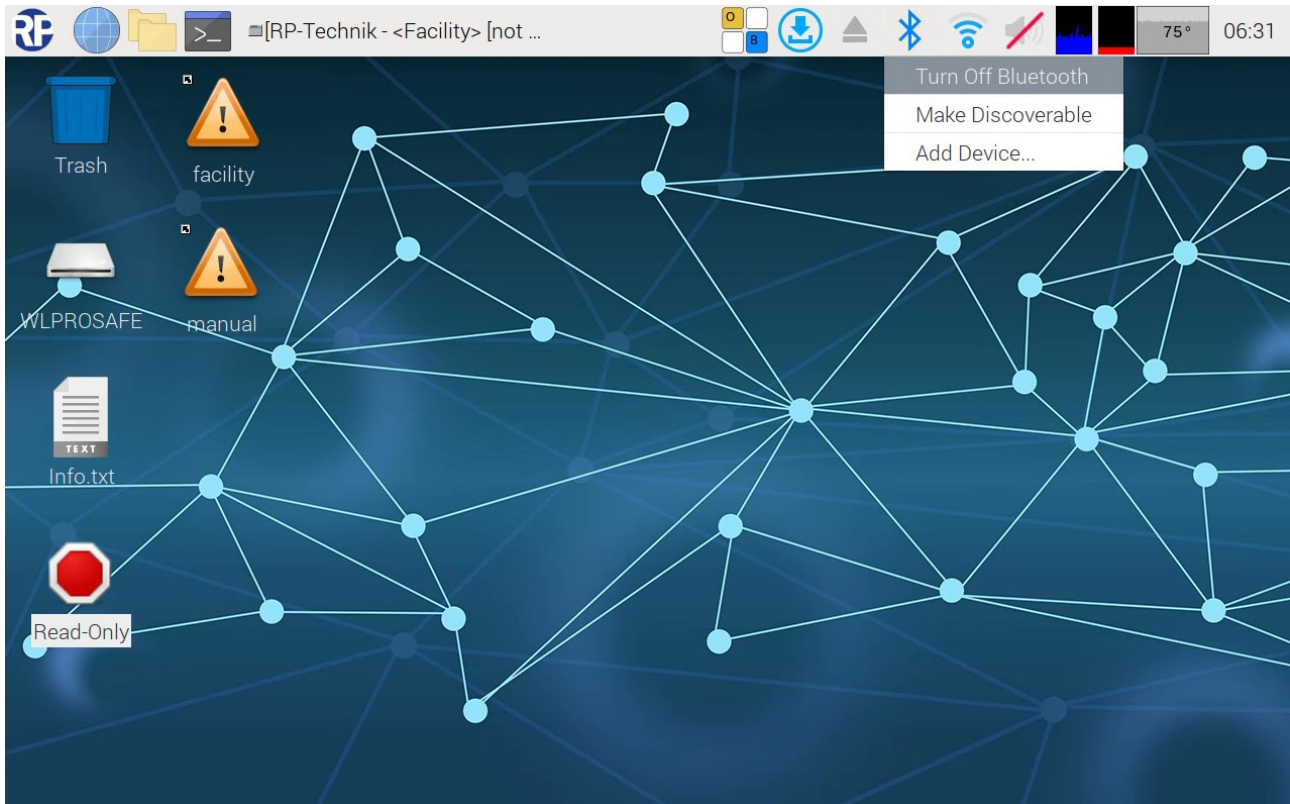
When the Bluetooth interface has been enabled, the Bluetooth symbol is displayed in blue.



Page 46/98

### 15.2 Disabling Bluetooth

If the Bluetooth interface is to be disabled, tap on the Bluetooth symbol in the taskbar.



**Figure 39 Disabling Bluetooth**

The context menu appears, tap on the “Turn Off Bluetooth” button.

When the Bluetooth interface has been disabled, the Bluetooth symbol is again displayed as shown in Figure 37 Enabling Bluetooth

### 15.3 Pairing a device via Bluetooth

To pair a Bluetooth device with the Wireless Professional WLZent, the Bluetooth interface on the WLZent must be enabled. Once this has been done, tap on the Bluetooth symbol in the taskbar and in the context menu, tap on “Add Device...” (see Figure 39 Disabling Bluetooth).

The “Add New Device” window opens and shows all devices within range and in pairing mode.

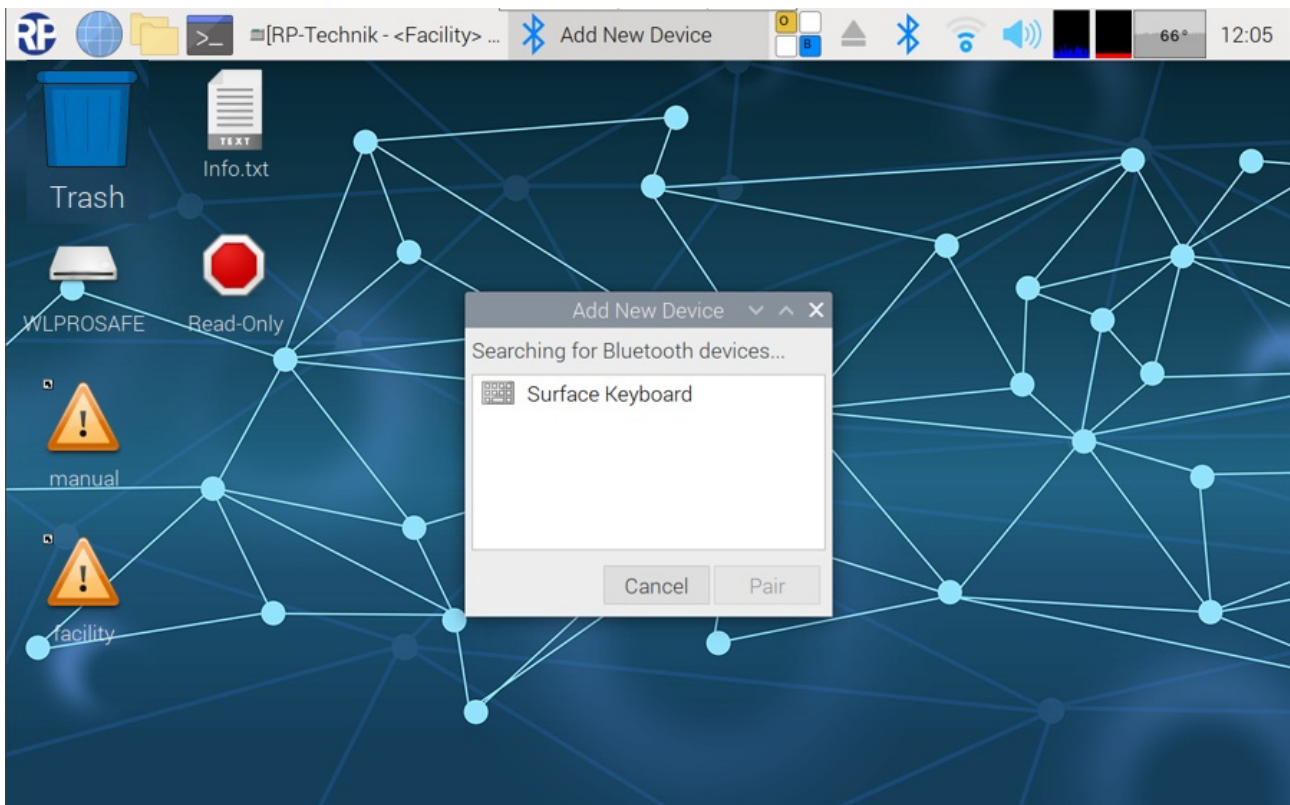


Figure 40 Bluetooth keyboard within range

In this example, there is a Bluetooth keyboard within range. Tap on the desired device. The “Pair” button then appears. Tap on this button to pair the devices.

Follow the instructions on the WLZent touch display.

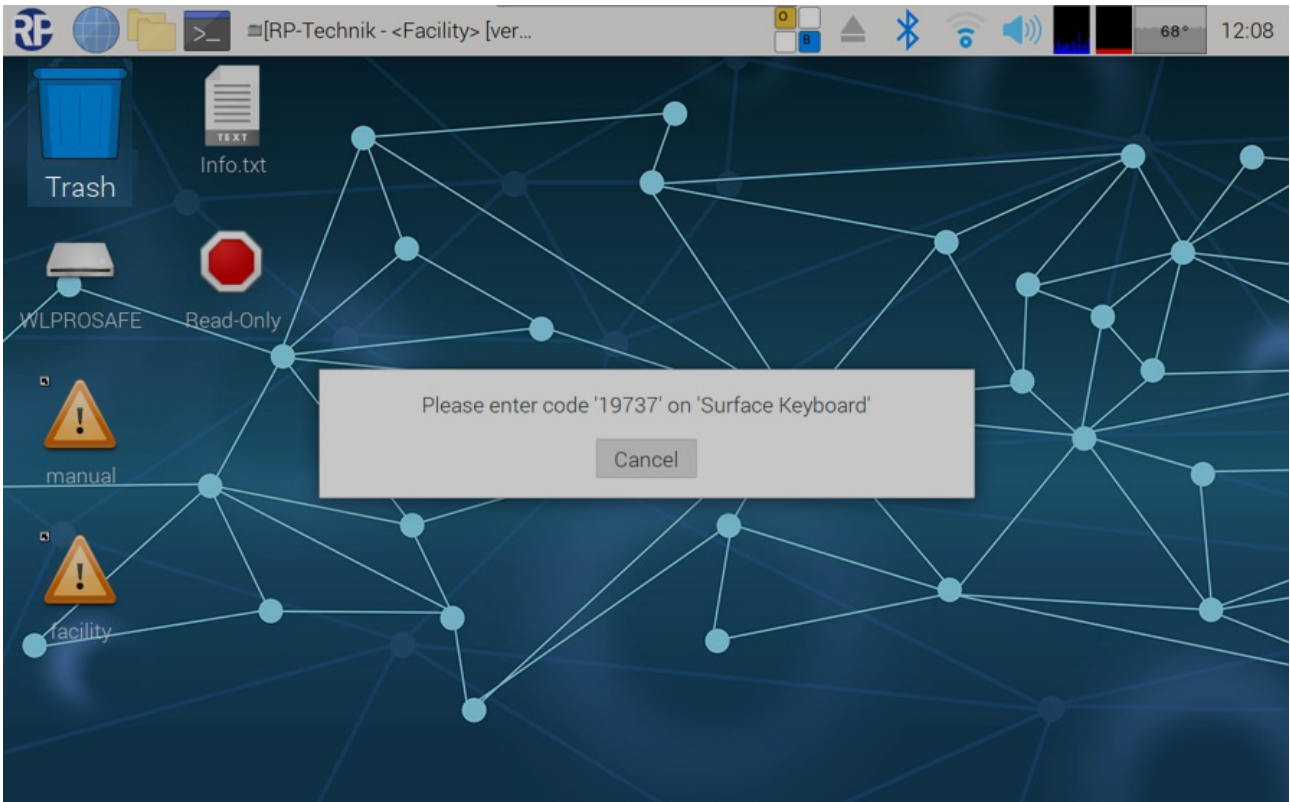


Figure 41 Verification code

This is shown when devices have been successfully paired.

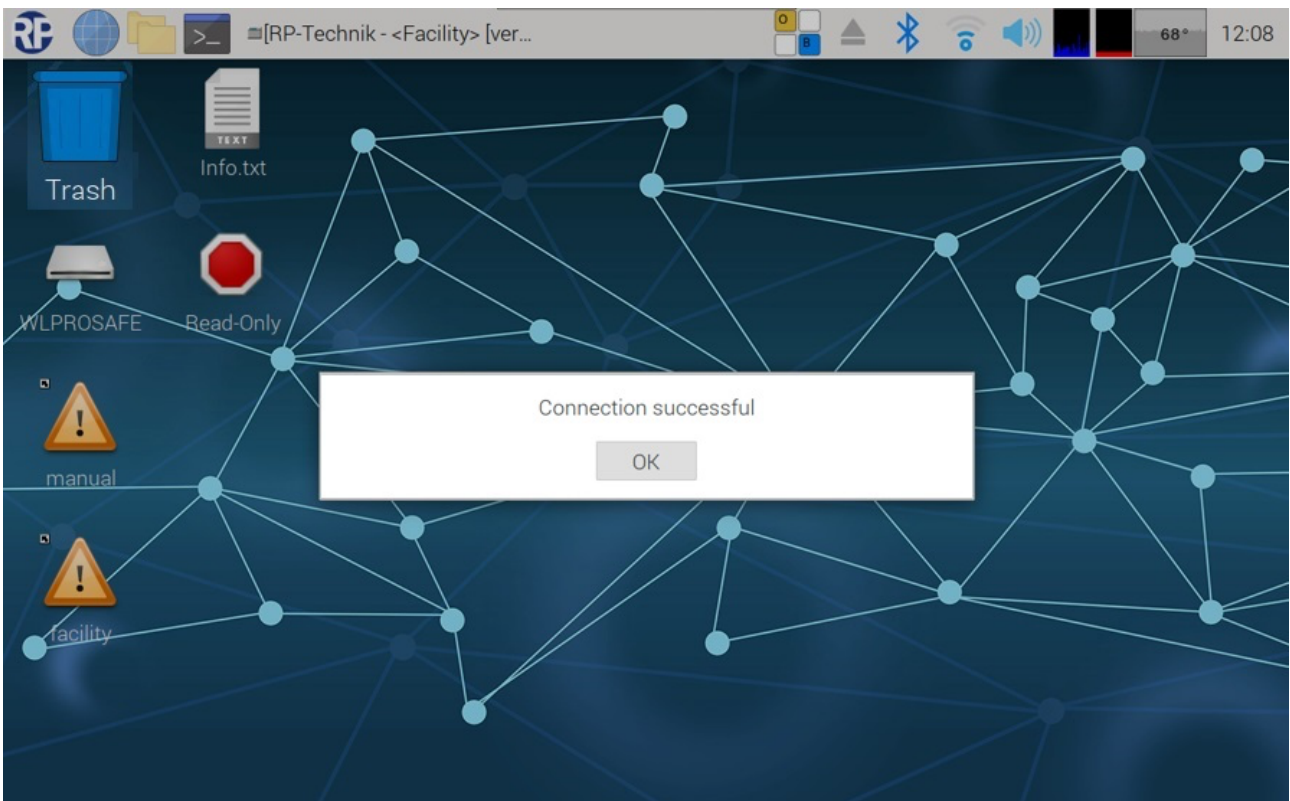


Figure 42 Pairing successful

Tapping on the Bluetooth symbol in the taskbar adds the paired device to the list in the context menu.

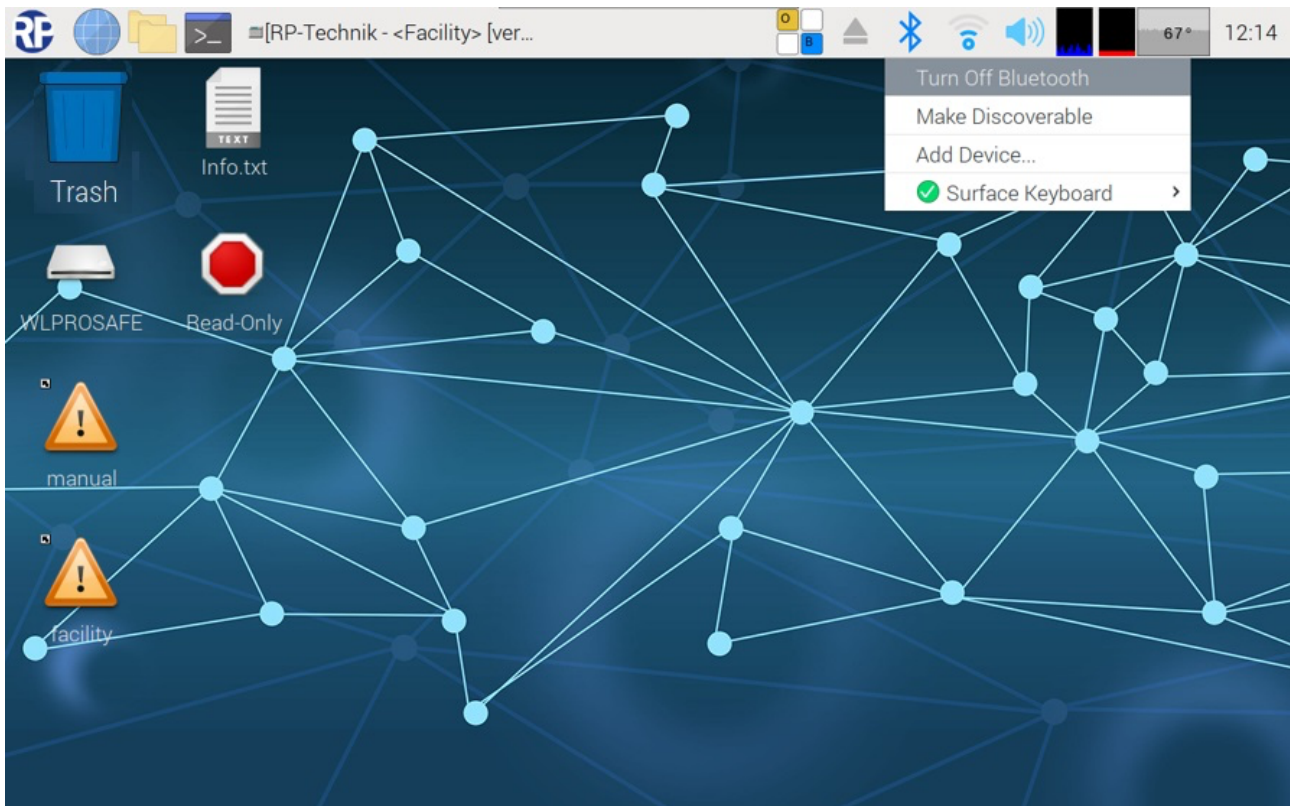
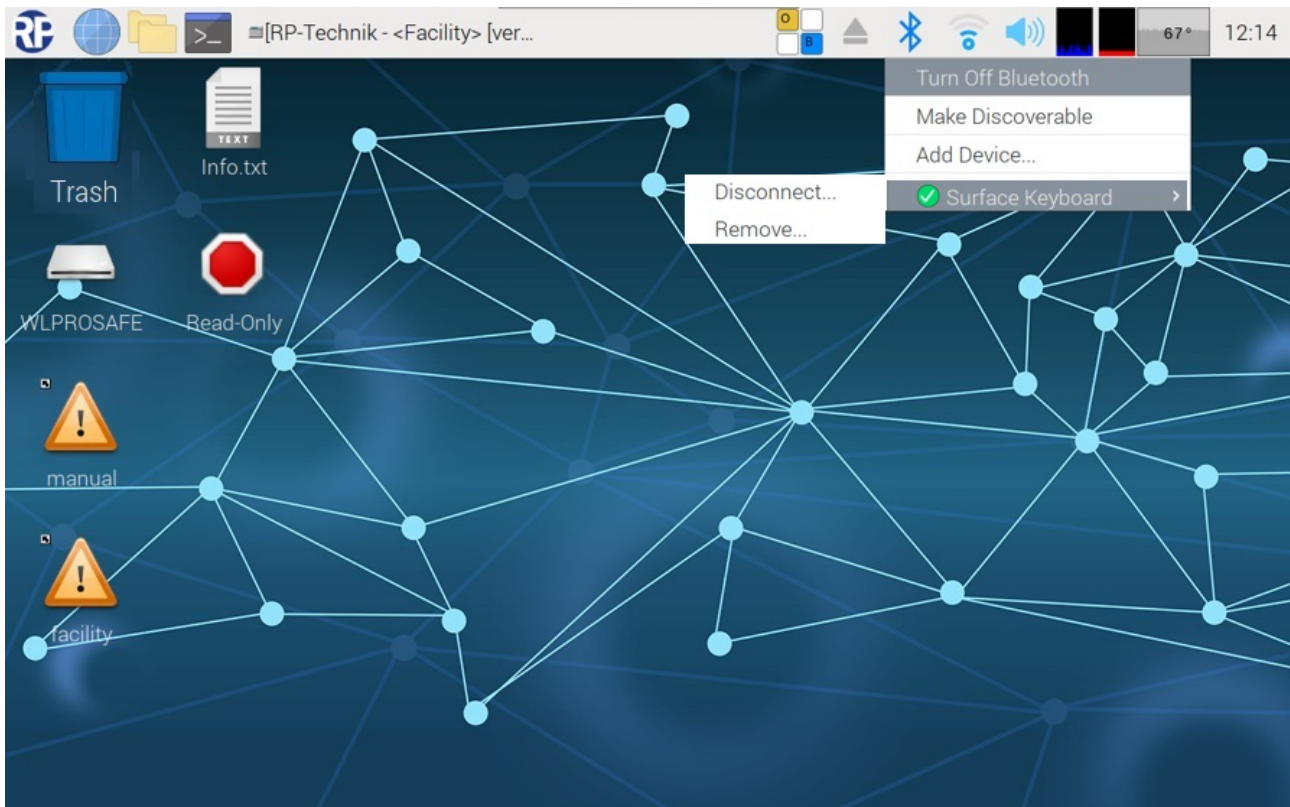


Figure 43 WLZent with paired Bluetooth device



### 15.4 Disconnecting a paired device

If a device paired with the Wireless Professional WLZent via Bluetooth is to be disconnected, tap on the Bluetooth symbol in the taskbar. Tap on the Bluetooth device in question in the context menu



**Figure 44 Disconnecting/removing WLZent Bluetooth device**

The “Disconnect...” button disconnects the Bluetooth device from the WLZent. The WLZent does however retain the connection information, meaning that it can be connected again without having to access Pairing mode.

The “Remove...” button disconnects the Bluetooth device from the WLZent. The connection data is deleted in this instance. If the device is to be connected again at a later date, it will have to be paired again.



### 16 Remote Access via RustDesk

The RustDesk remote access software is installed on the Wireless Professional WLZent.

#### 16.1 Establishing connection

In order for a remote connection via RustDesk to be established, the Wireless Professional WLZent must be connected to the Internet.

RustDesk should be started on the device with which the connection to the WLZent is to be established.

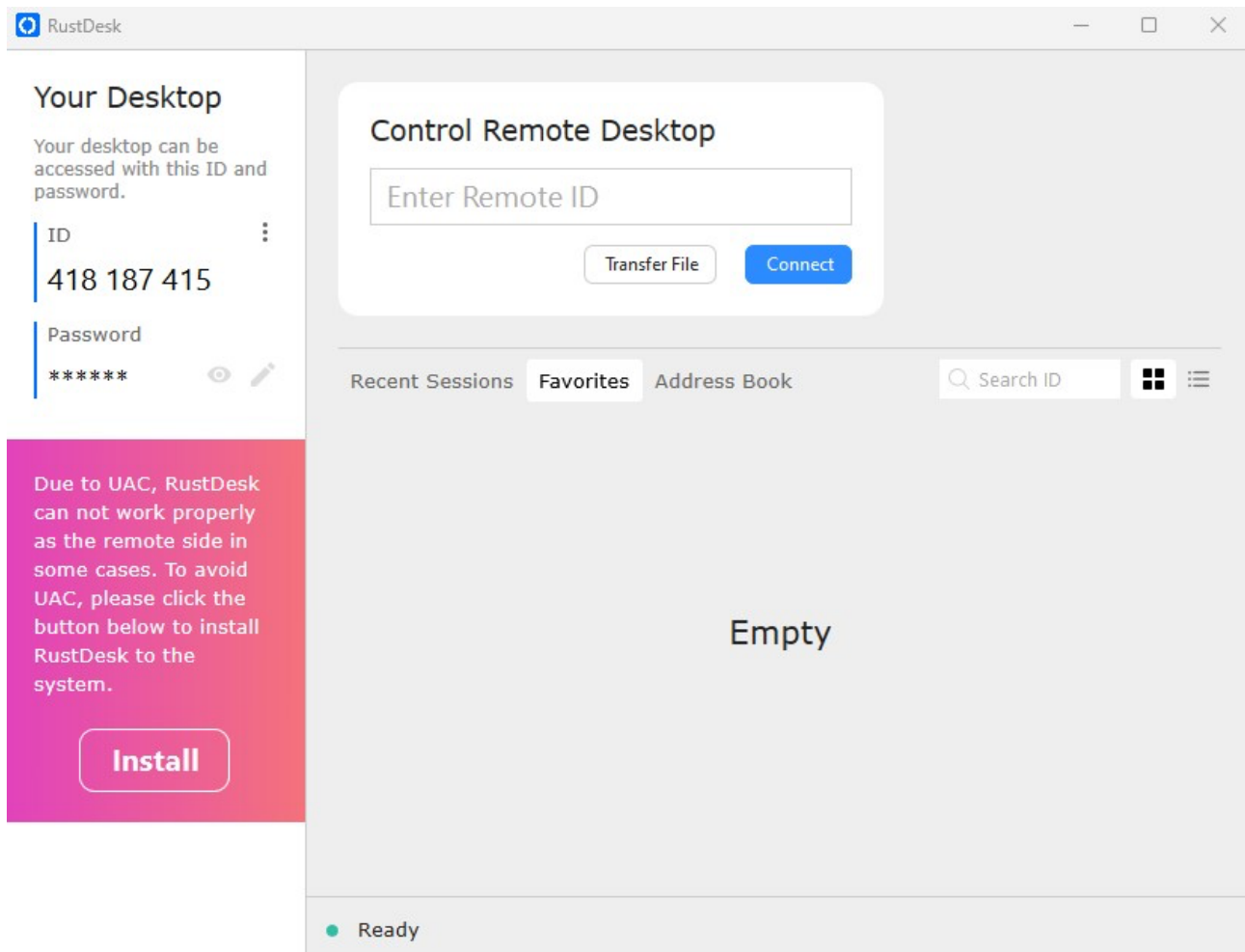


Figure 45 RustDesk surface

The RustDesk ID is unique to each WLZent and is noted on the accompanying WLZent info sheet along with the password.

**WL CPC Infoblatt / Info Sheet**

**ACHTUNG!** Wichtige Informationen zu Ihrem WL-CPC!  
Dieses Blatt enthält Passwörter und weitere Informationen, die Sie während der Inbetriebnahme Ihres WL-CPC benötigen. Bewahren Sie diese Informationen daher sorgfältig auf.

**CAUTION!** Important Information regarding your WL-CPC!  
This sheet contains passwords and other information you will need during the commissioning of your WL-CPC. Store this information therefore carefully.

Auftragsnr./Order no. 1234567890

Access Point:  
SSID: rp-cpc-ap  
Encryption: WPA2  
Password: rp-ed:b5:70

Access Point Settings:  
http://localhost or http://device-IP-adress

User: admin  
Password: rp-ed:b5:70

Local User: rp  
Password: rp-ed:b5:70

VNC Password: rp-ed:b5:70

Rustdesk ID: 1640745618  
Password: mpm33e

WL-CPC InfoSheet 1234567890 (09.08.2023).pdf WL CPC3 Infosheet V1.0.0

Figure 46 Info sheet

The screenshot shows the RustDesk application window. On the left, there is a sidebar with the title "Your Desktop" and the text "Your desktop can be accessed with this ID and password." Below this, the ID is displayed as "418 187 415" and the password is masked with "\*\*\*\*\*". A pink warning box is overlaid on the sidebar, stating: "Due to UAC, RustDesk can not work properly as the remote side in some cases. To avoid UAC, please click the button below to install RustDesk to the system." with an "Install" button. The main area of the window is titled "Control Remote Desktop" and shows a text input field containing the ID "1 130 692 645". Below the input field are "Transfer File" and "Connect" buttons. At the bottom of the main area, it says "Empty". The status bar at the very bottom shows a green dot and the word "Ready".

Figure 47 RustDesk with connection data

After entering the ID, click on the “Connect” button. The connection to the WLZent is then established. You are asked to enter the password

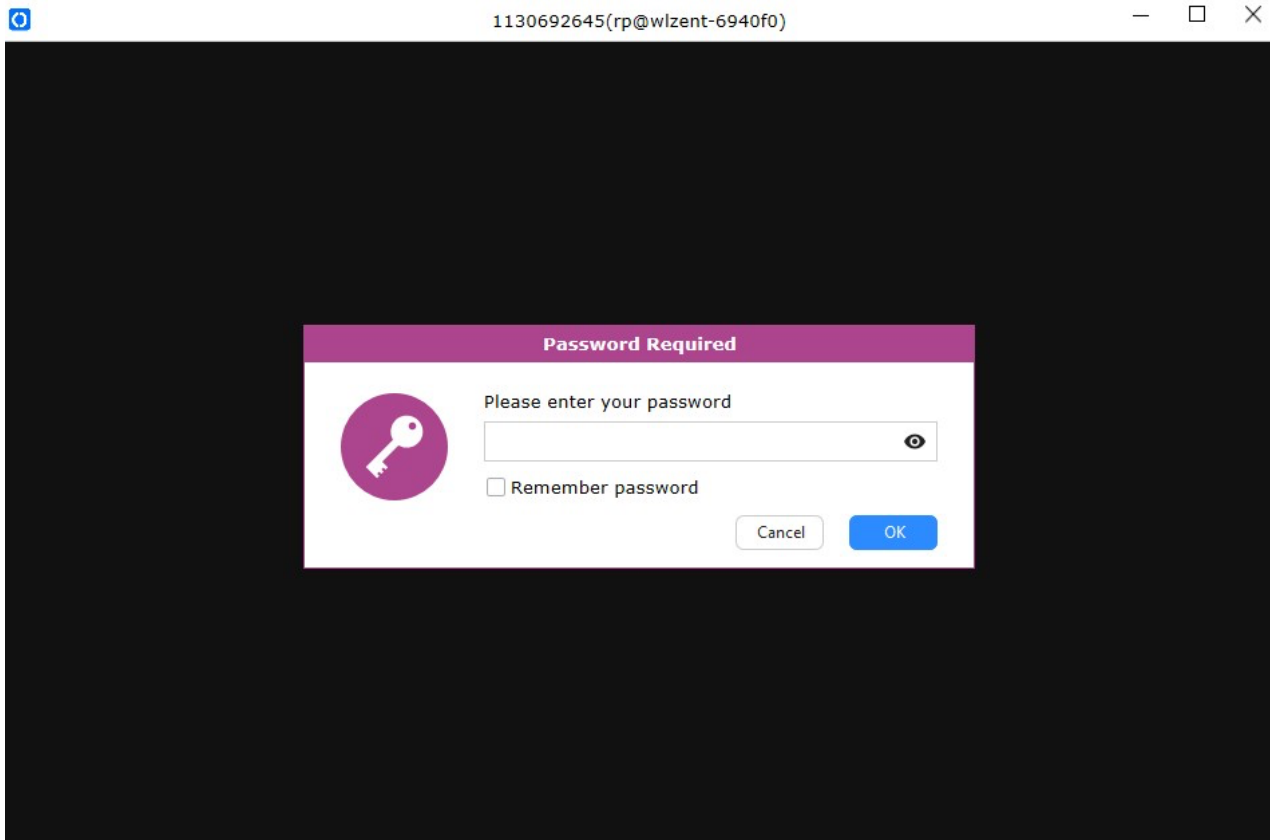


Figure 48 RustDesk password input

Once this has been entered, the WLZent's display is shown.

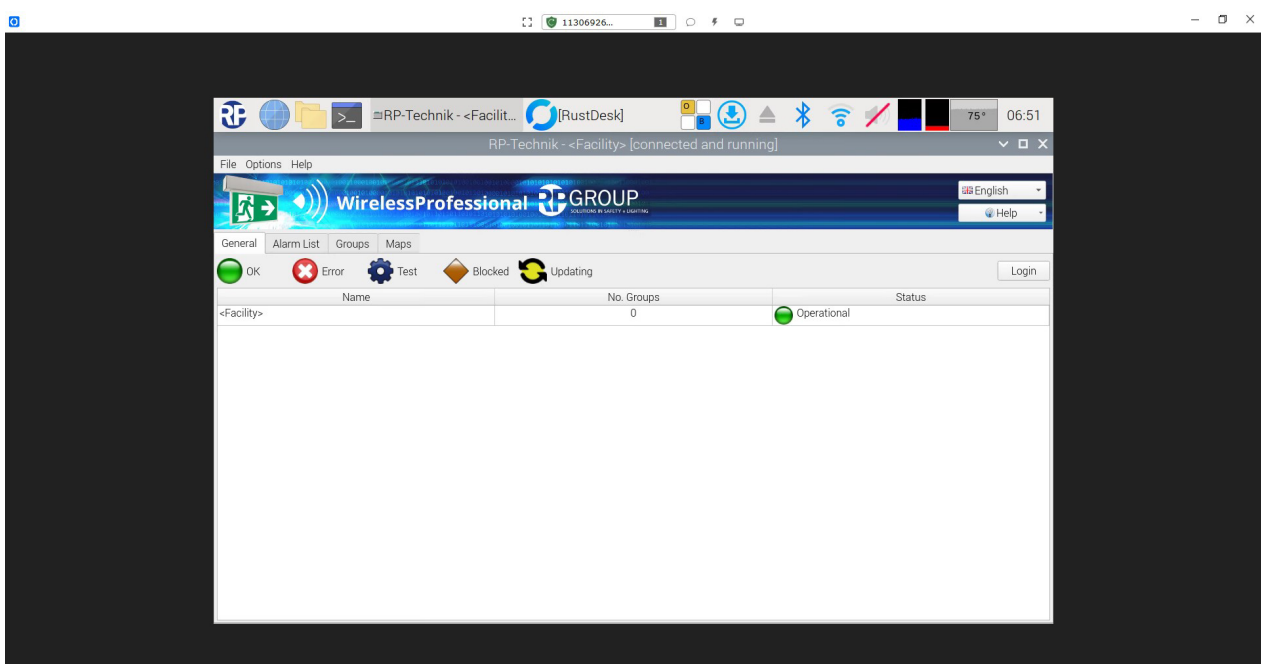


Figure 49 RustDesk remote connection

### 16.2 Terminating connection

To terminate the remote connection, the RustDesk window should be closed.

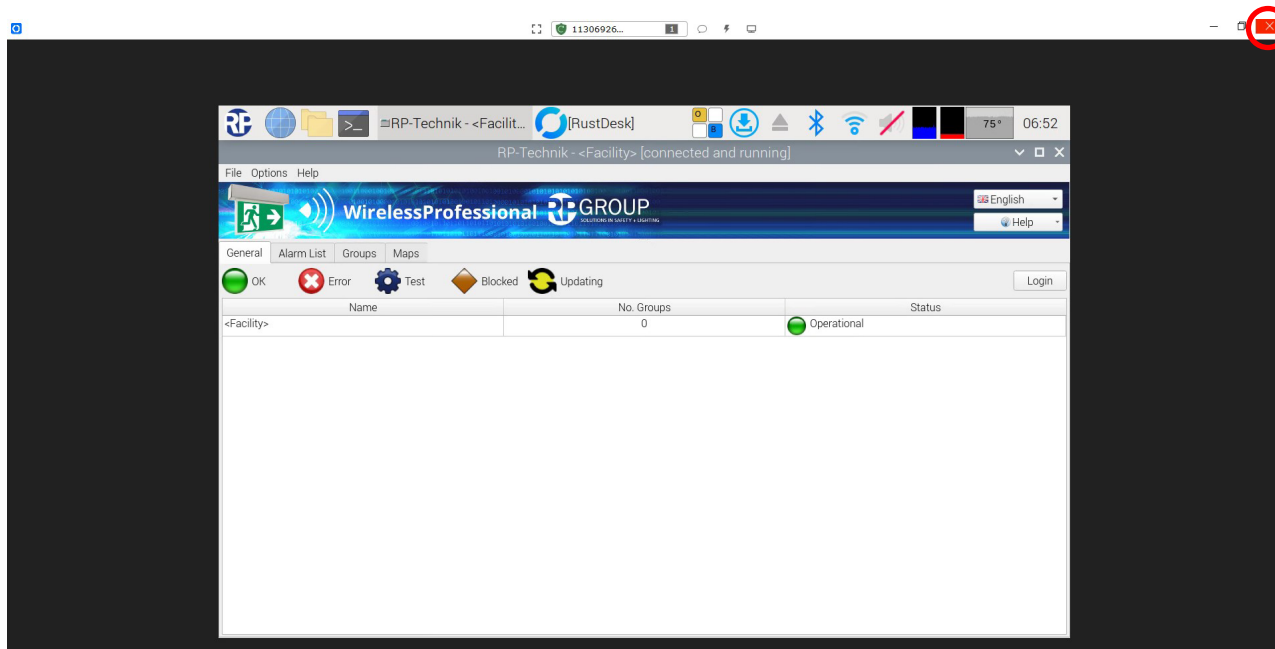


Figure 50 Disconnect RustDesk connection

RustDesk notes the last connections used so that the ID does not have to be entered again for the next session.

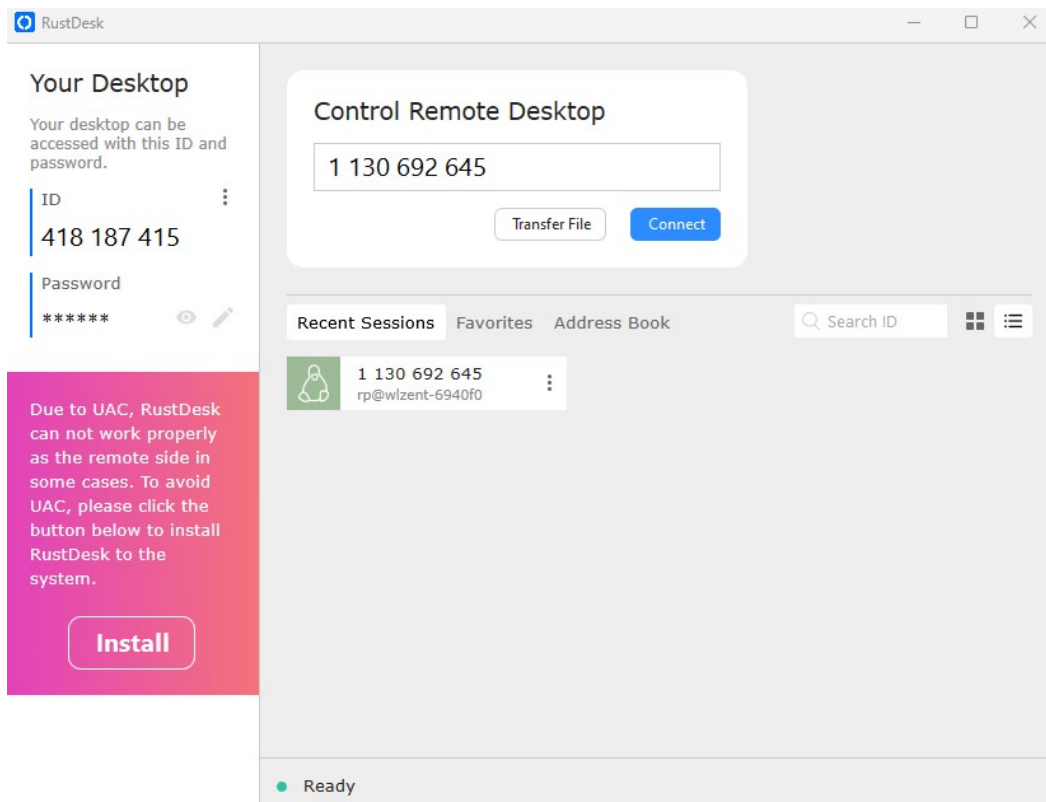


Figure 51 RustDesk window with last used connections

### 16.3 Changing RustDesk connection password

The RustDesk connection password for the WLZent cannot be changed.

### 16.4 RustDesk connections from the WLZent to other devices

If a RustDesk remote connection is to be established from the WLZent to another device, please note that RustDesk must not be put into full-screen mode because there is no way of exiting this option without connecting an external mouse.

### 17 VNC Remote Connection

Just like WLTouch, the Wireless Professional WLZent is able to monitor one or more Wireless Professional control centres (WLTouch, WLCPC or WLZent) located in the local network and to control them using remote access. Instances may arise where the VNC Viewer is changed when the WLZent is updated.

#### 17.1 VNC Viewer

There is a VNC Viewer installed on the WLZent. This can be launched by going to Start menu->Internet->VNC Viewer. The Wireless Professional software can also launch the VNC Viewer.

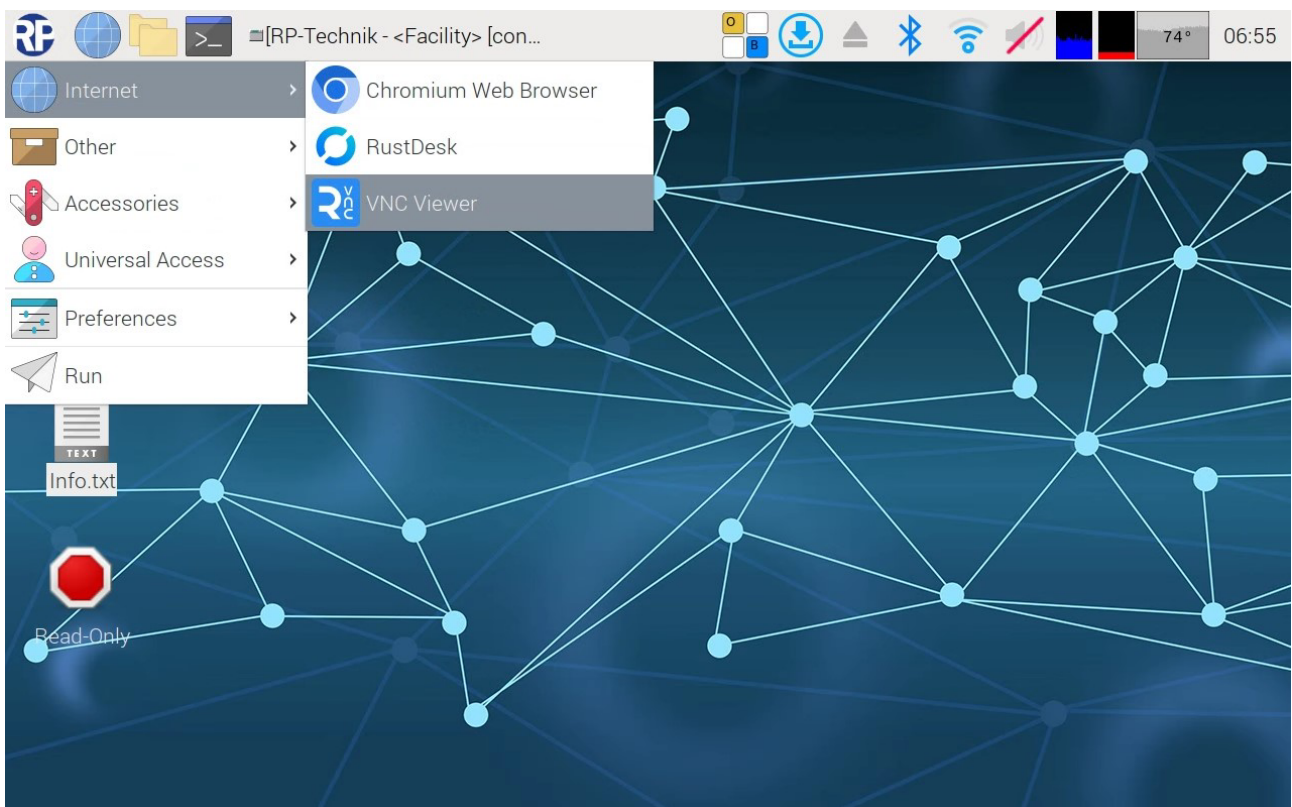


Figure 52 Wireless Professional WLZent Start menu Internet

The “RealVNC Viewer” window opens.

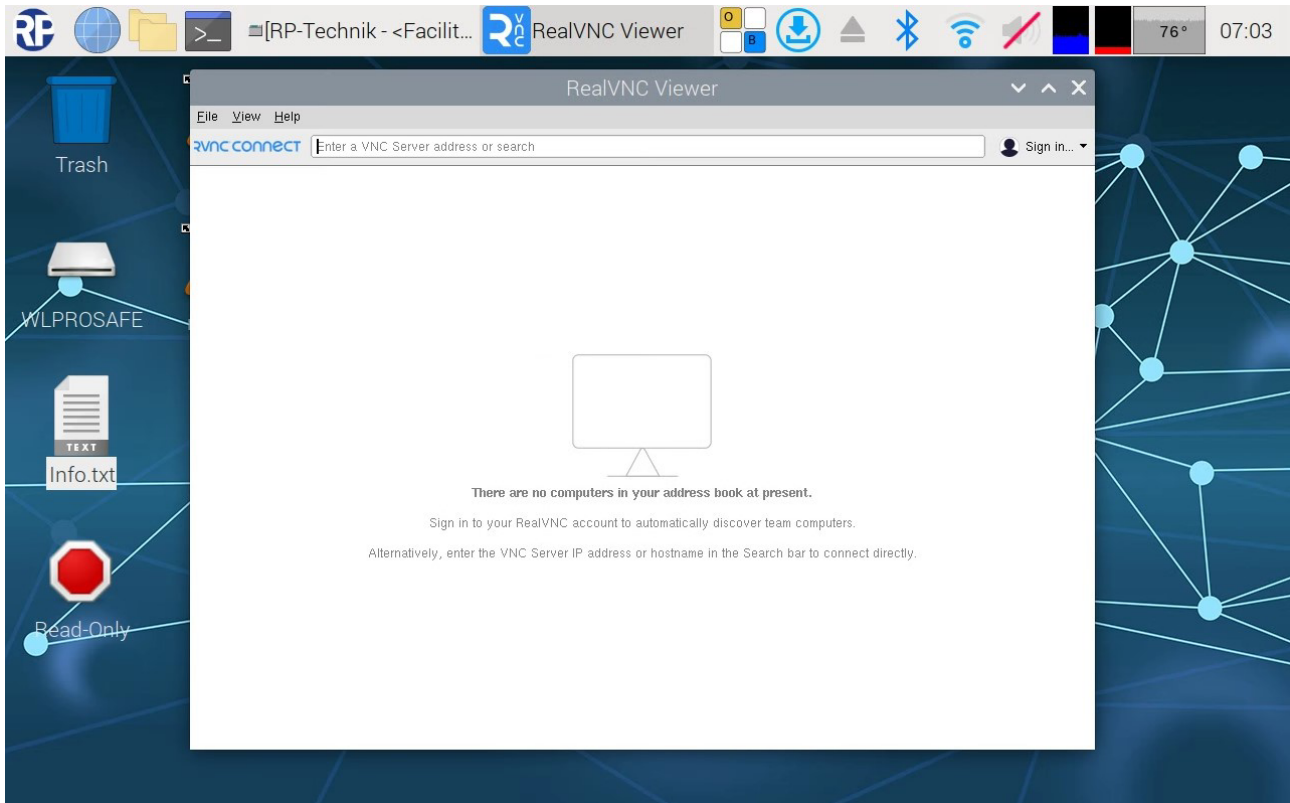


Figure 53 Remote desktop viewer

Page 58/98

### 17.1.1 Establishing VNC connection to a device

To establish a VNC connection, the IP address of the connection destination is entered in the text box and confirmed with Enter.

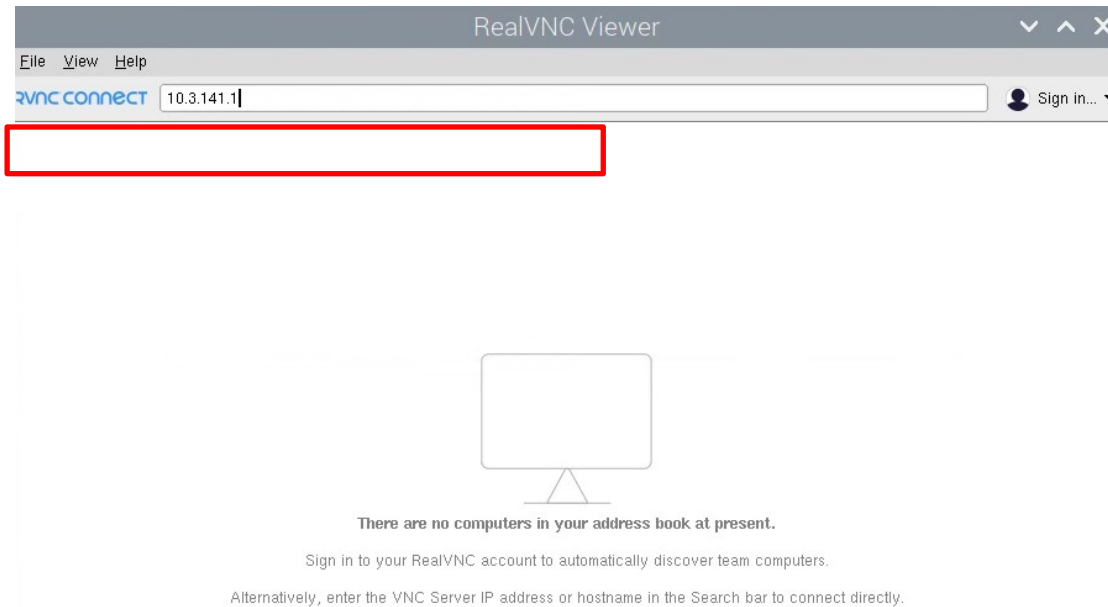


Figure 54 Remote desktop viewer window, Connect window

**Note:** A port may have to be specified along with the IP address. With Wireless Professional version 2.4 and higher, VNC port 5900 is used. Port 5901 must be used with older devices. To do this, the port, e.g. 10.3.141.1:5901, must be written after the IP address.

As soon as the address has been confirmed by clicking on “Enter”, the connection is established.



Figure 55 VNC Connection setup



When the VNC Viewer is run on the device for the first time, the message is displayed via an unencrypted connection. The VNC connection password is transferred securely.

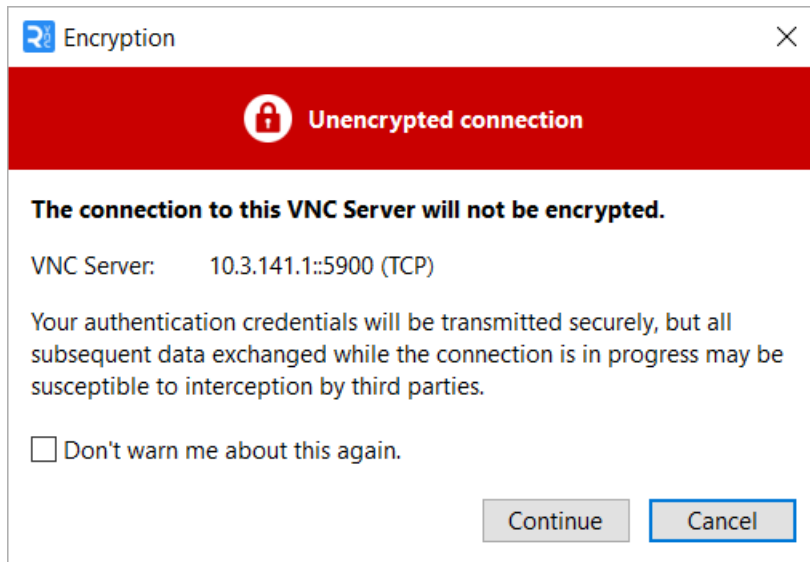


Figure 56 VNC Connection encryption

If the “Continue” button is clicked on, the input window for the VNC connection password opens.

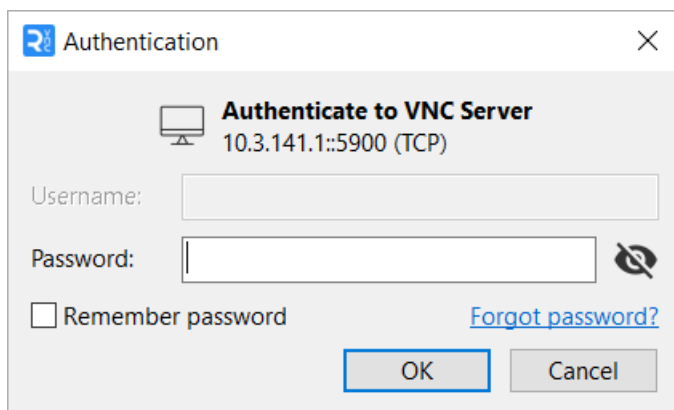


Figure 57 VNC password input

The VNC connection password can be found in the accompanying info sheet.

Once the password has been entered correctly and confirmed by clicking on the “OK” button, the destination device’s monitor is displayed.

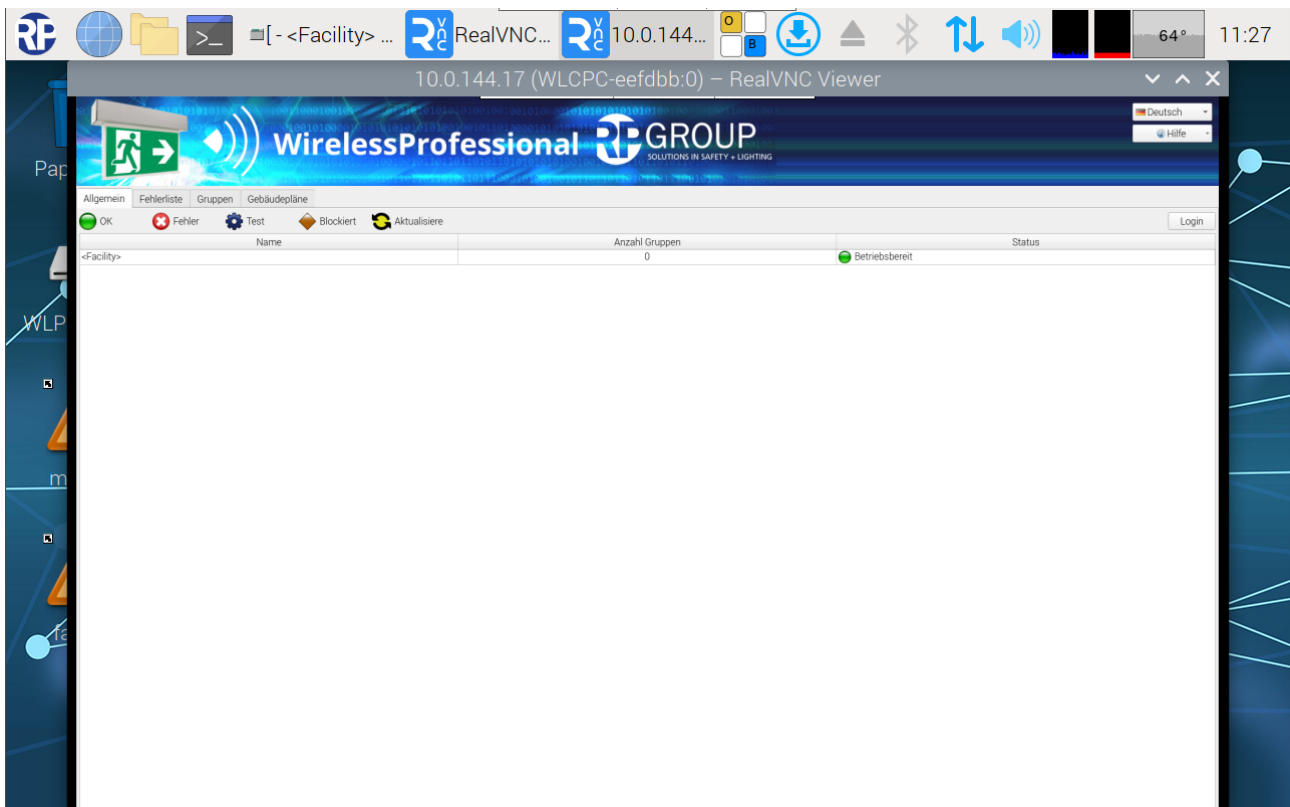


Figure 58 Remote desktop viewer window with enabled connection

### 17.1.2 Terminating VNC connection to a device

The VNC connection is terminated by tapping on the "x" button in the top right. This does not close the VNC Viewer.

### 17.1.3 Closing VNC Viewer

To close the VNC Viewer, the session window and the actual VNC Viewer window need to be closed. Both windows are closed using the "x" in the top right corner.

### 17.1.4 Scaling view

Screen scaling is enabled as standard. However, this may cause problems when using the touch display. To cancel screen scaling or to re-enable it, the on-screen keyboard must be displayed, and its view switched to include the function keys (see Section 6.2)

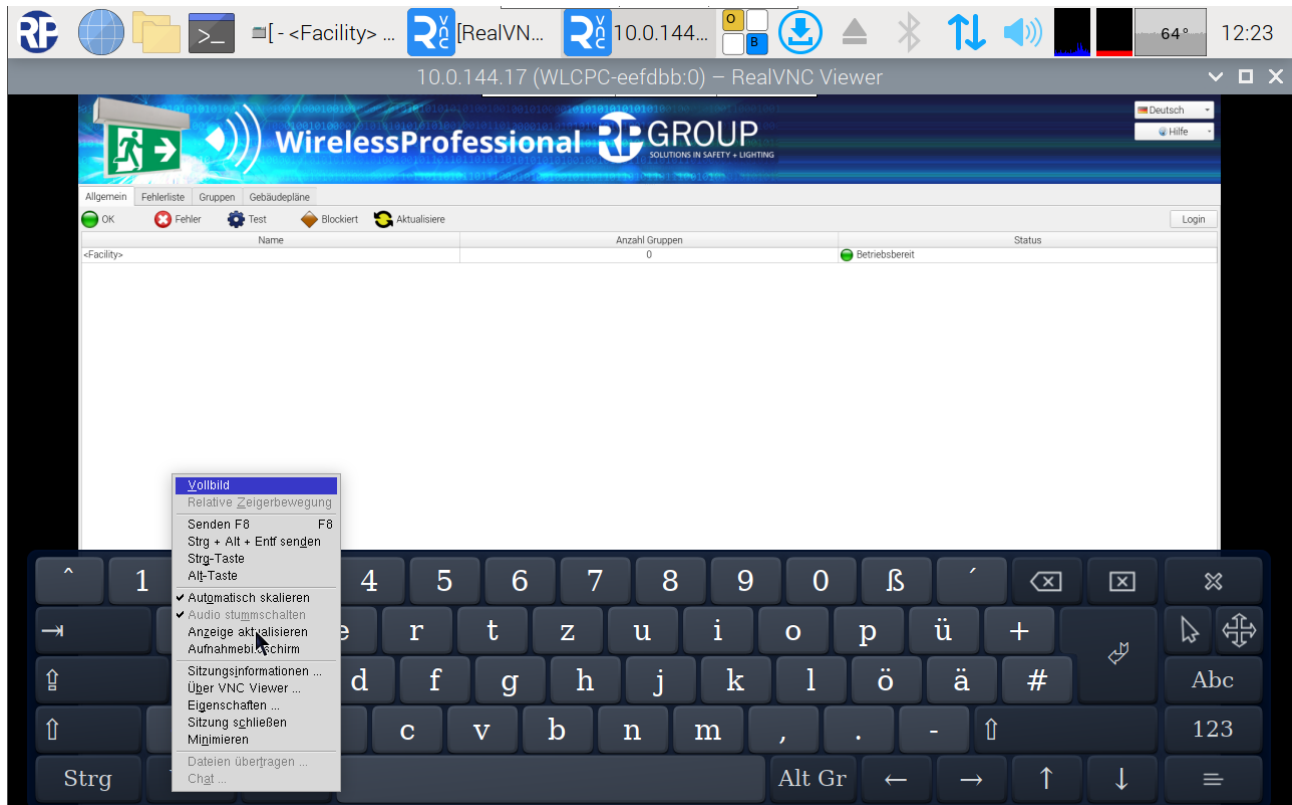


Figure 59 Scaling view

A context menu is opened by pressing the “F8” function key. The tick next to “Automatic scaling” should be removed by tapping on it.

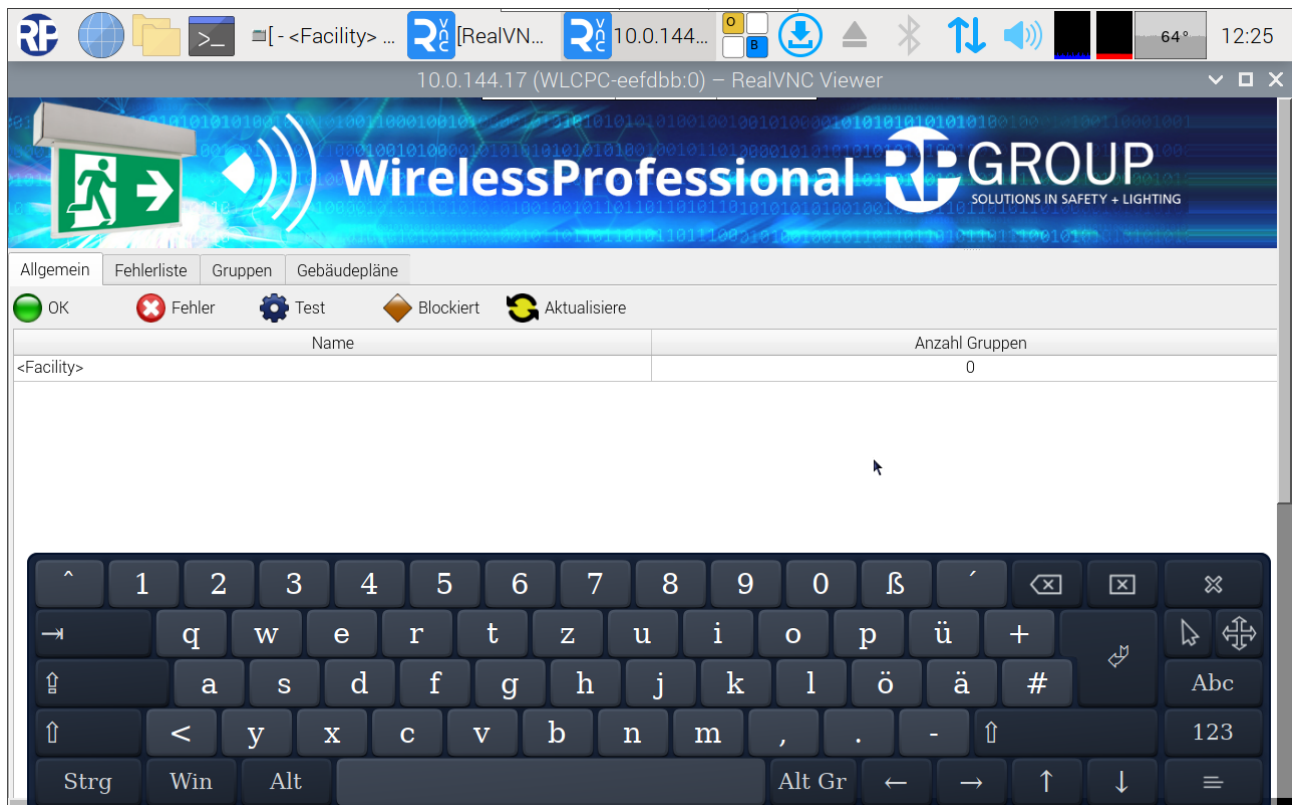


Figure 60 VNC session window

The VNC session window with scroll bars is then displayed.

To re-enable scaling, the tick next to “Automatic scaling” must be selected again.

### 17.2 VNC-Server

For security reasons, there is no VNC Server available on the Wireless Professional WLZent.

### 18 Moving Systems onto the WLZent

In order for data to be imported to the Wireless Professional WLZent without any version issues, the version of the Wireless Professional software on the WLZent must be the same as or higher than the version from where the data originates.

#### 18.1 Moving Wireless Professional from CPC to WLZent

##### 18.1.1 CPC with Wireless Professional version 2.4 and newer

If working with a CPC with Wireless Professional software version 2.4 or newer, the CPC should be shut down and then disconnected from the power supply.

The backup USB stick should be removed from the CPC. The backup USB stick should be inserted into the WLZent.

The WLZent should be connected to the power supply. When powered up, the data is automatically loaded from the backup USB stick. Once powered up, the Wireless Professional software is available as usual.

##### 18.1.2 CPC with Wireless Professional version 2.2 and older

If the Wireless Professional system is to move from a Wireless Professional CPC to a Wireless Professional WLZent, the following are needed:

- USB card reader
- CPC3 transfer script (<https://rptechnik.freshdesk.com/de/support/home>)
- FTP and remote connection on "old" CPC
- Remote connection on CPC

##### 18.1.2.1 Preparing the CPC3 for the move

###### 18.1.2.1.1 Copying script

The "CPC3\_prepare\_transfer.sh" script must be copied to the CPC and run there. A file transfer connection, e.g. using WinSCP, must be established in order to transfer the script.

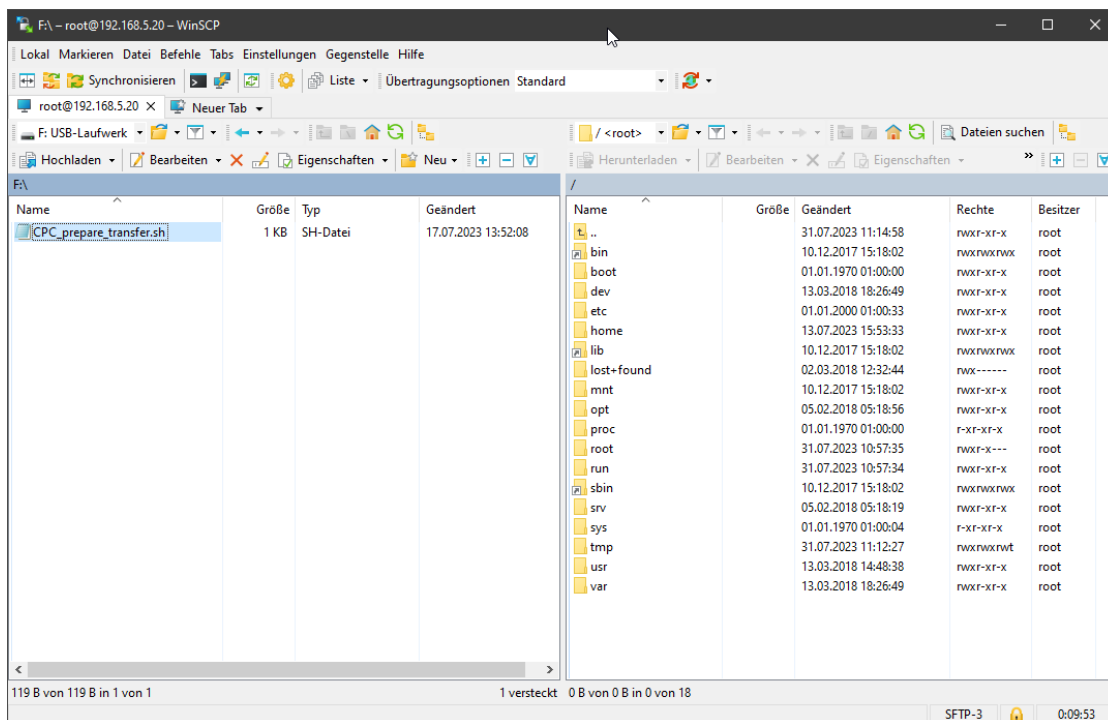


Figure 61 File transfer to CPC1/2

Page 64/98

The “CPC3\_prepare\_transfer.sh” script is copied directly into the root directory of the CPC.

**Note:** A backup copy of the “wireless” folder should also be produced.

**Warning:** Log files (system, communication & inspection) are not included in the transfer.

Once the script has been copied onto the CPC, a remote connection with the CPC should be established.

### 18.1.2.1.2 Running script

Once the remote connection has been established, the Wireless Professional software should be closed and the LXTerminal launched



Figure 62 Start terminal on CPC1/2

The ‘`chmod + x CPC3_prepare_transfer.sh`’ command should be entered in the terminal window and confirmed with Enter.

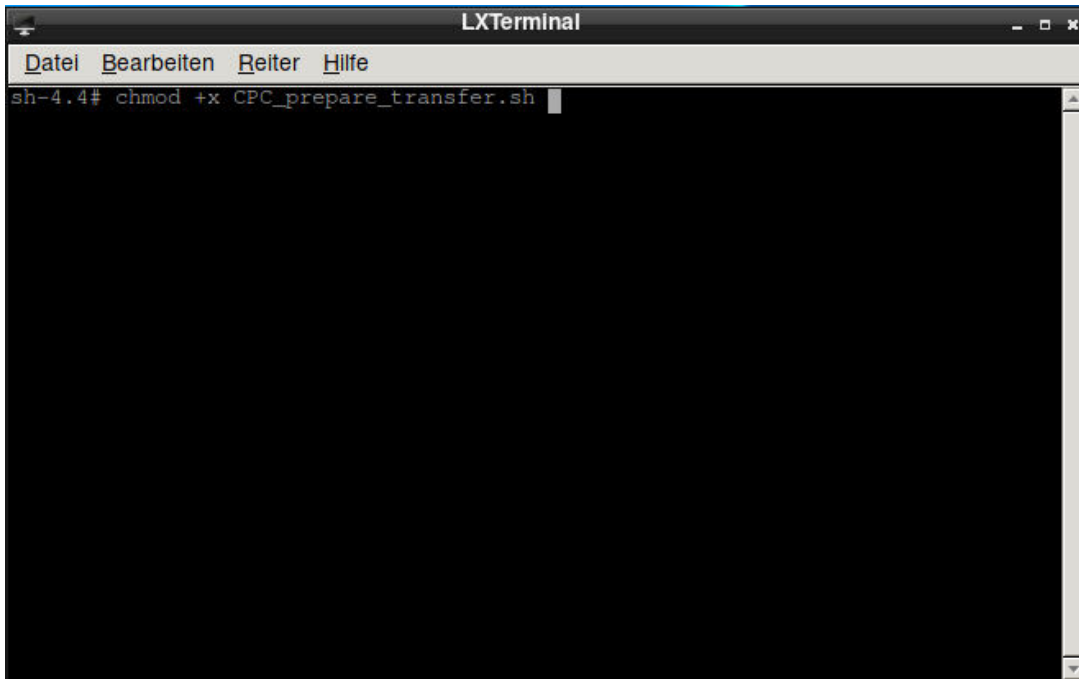


Figure 63 Make CPC1/2 transfer script executable.

The command has been run when the terminal prompt sh-4.4# appears again.

Then the script must be run by entering the command './ CPC3\_prepare\_transfer.sh' and confirming with Enter

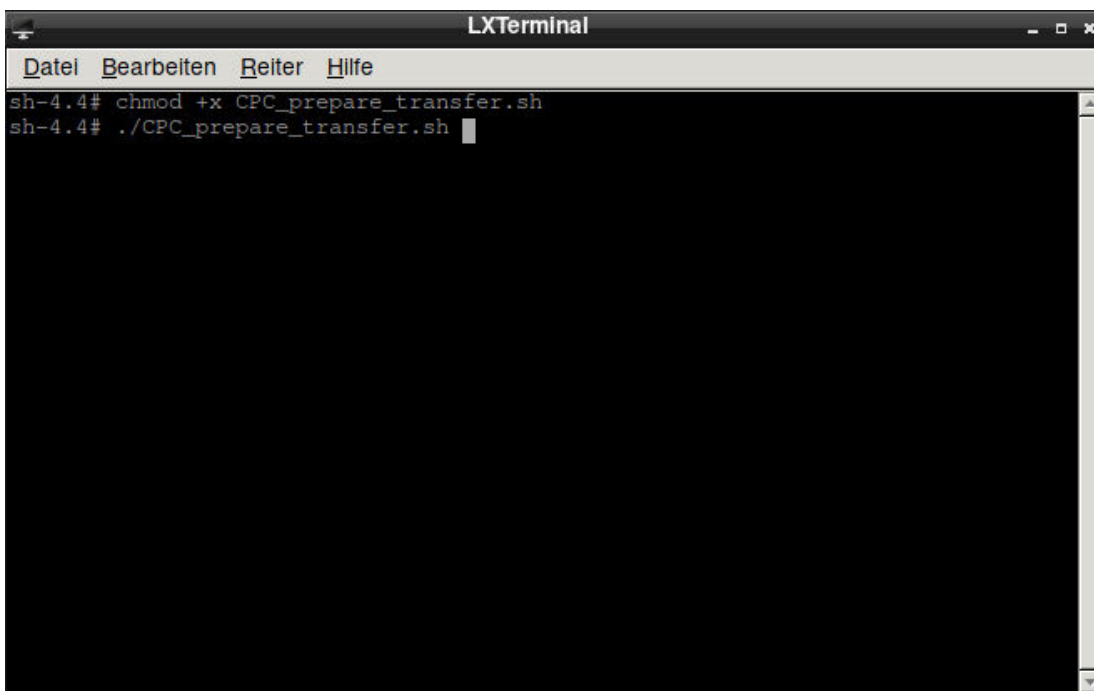


Figure 64 CPC1/2 execute transfer script.

After around 5 seconds, the script will have been run and the CPC can be shut down.



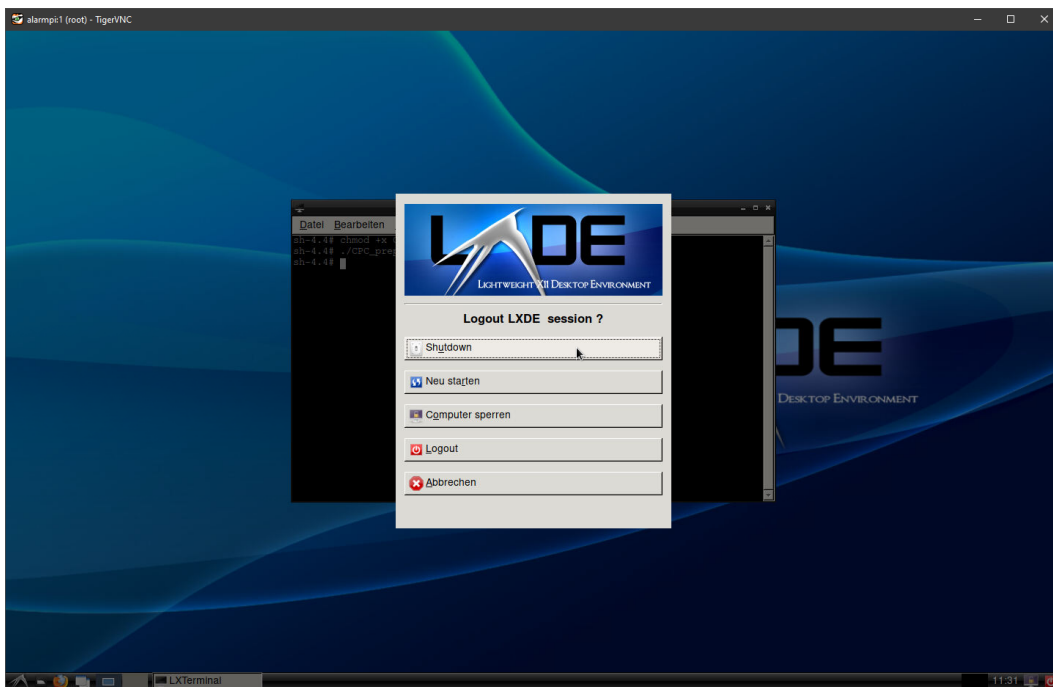


Figure 65 CPC1/2 Shut down CPC1/2

Once the device has been shut down, it can be disconnected from the power supply. The SD card is removed from the device. The SD card is still needed.

### 18.1.3 Transferring data to CPC3

The WLZent should be started by connecting to the power supply. Once the WLZent has been powered up, it is switched into Maintenance mode (see Section 8.1).

The SD card of the CPC is now inserted into the USB card reader and plugged into the WLZent.

As soon as the operating system has recognised the SD card, the “Wechseldatenträger” window is displayed twice. This is correct behaviour because the SD card has 2 partitions.

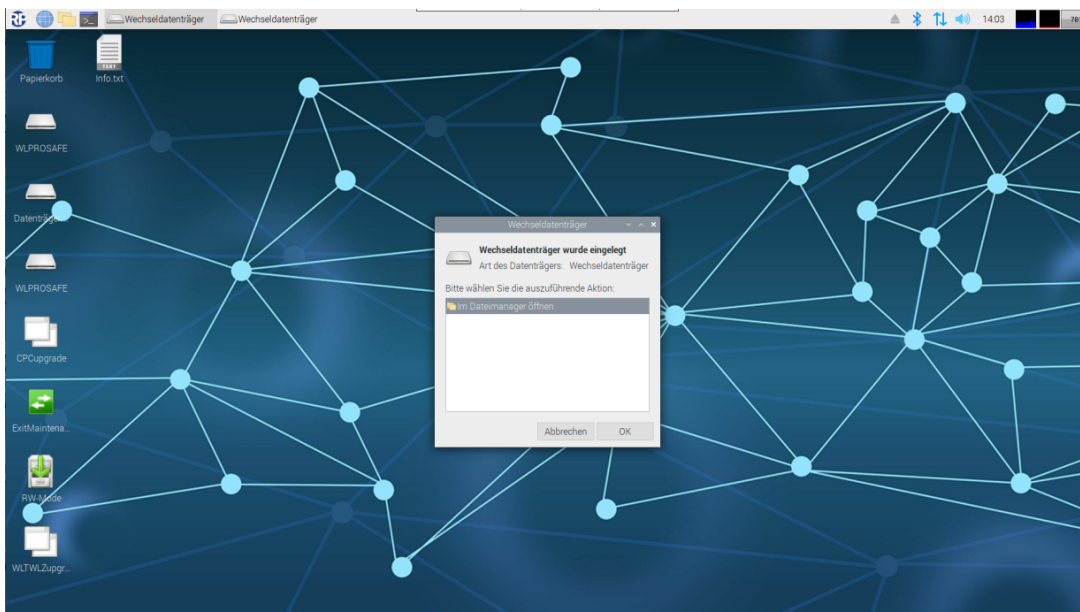


Figure 66 WLZent3 Desktop after connecting the USB card reader.

The two “Wechseldatenträger” windows are closed by clicking on the “Abbrechen” button.

The “CPCupgrade” script is now run by tapping on the desktop link twice.

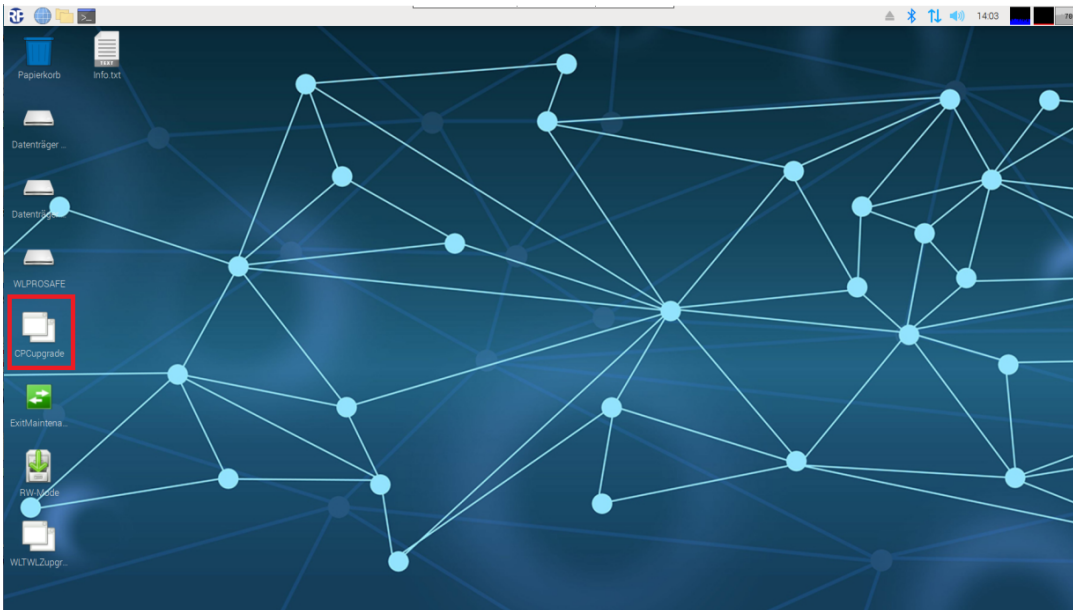


Figure 67 WLZent import script of CPC1/2 data.

The “Datei ausführen” window is opened. The “im Terminal ausführen” button in this window should be selected.

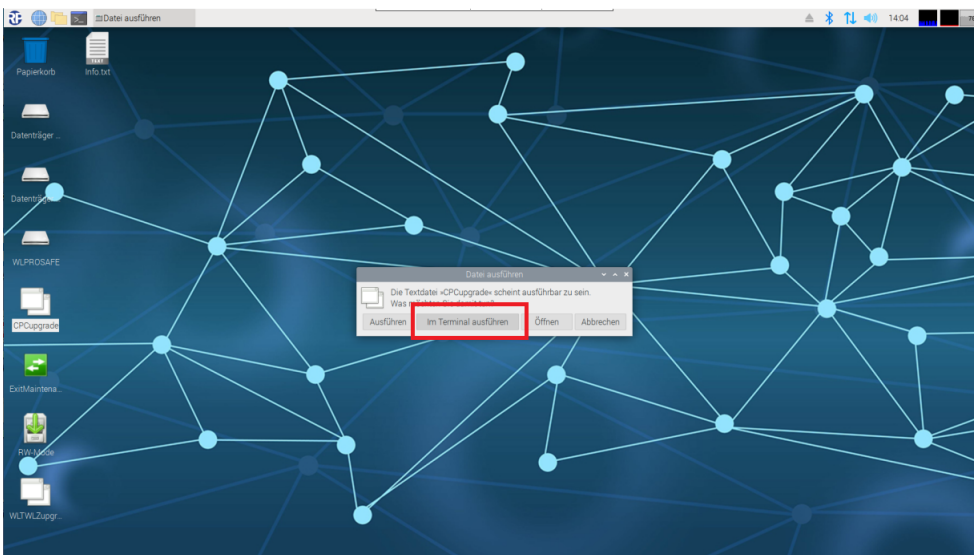
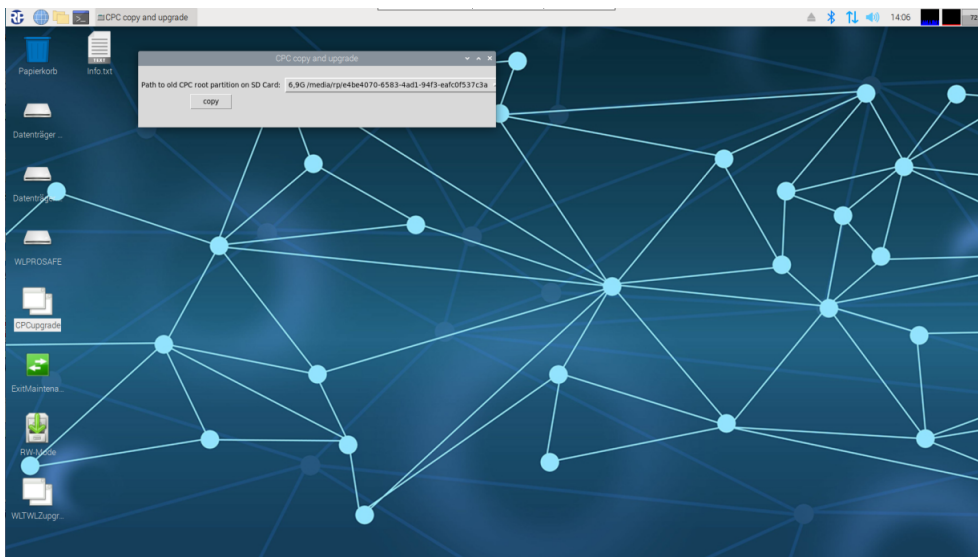


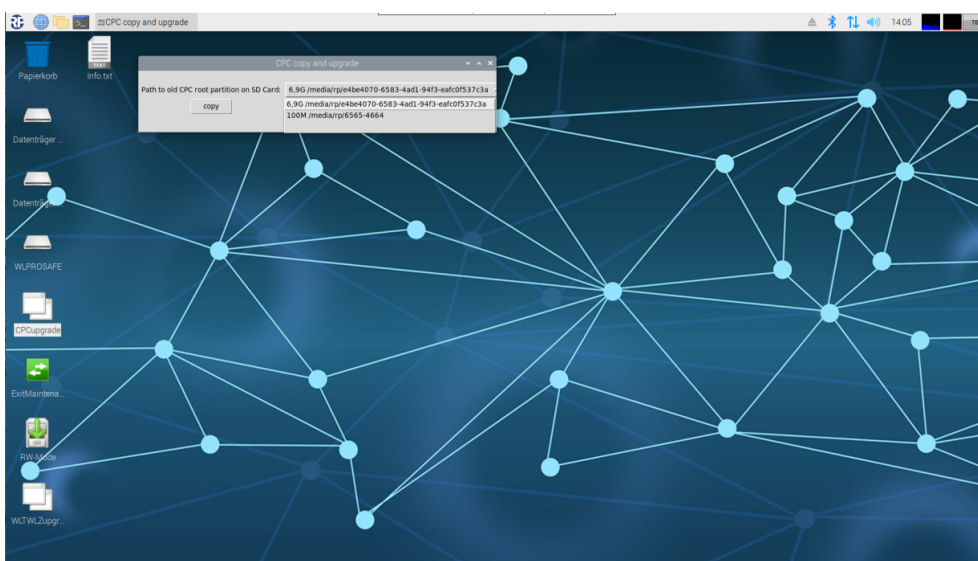
Figure 68 Execute WLZent Script

Once the button has been clicked on, the “CPC3 copy and upgrade” window opens.



**Figure 69** WLZent Copy and Upgrade window

The partition on the SD card containing the root directory of the CPC must be selected from the drop-down list of the “Path to old root partition on SD Card” box.



**Figure 70** WLZent Copy and Upgrade window: Select Partition

The first partition is typically 100MB in size and the second 6.9GB. The root directory is in the 6.9GB partition. Select this. Once the right partition has been selected, the import process is started by clicking on the “copy” button.

As soon as the process is complete, the “–Task Done –” message appears.

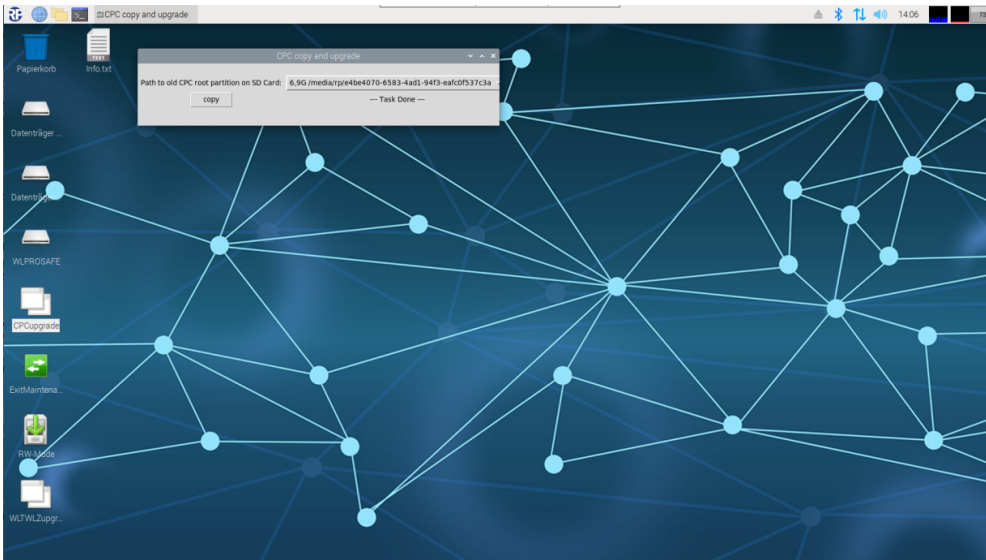


Figure 71 WLZent Copy and Upgrade window: import successful.

Should an error have occurred during the import, “–Error –” appears.

After the import, the “CPC3 copy and upgrade” window is closed by clicking on the “x” in the top right.

The SD card is now ejected (see Section 6.3).

Once the SD card reader has been ejected, Maintenance mode should be exited (see Section 8.2). Once the WLZent has been fully rebooted, the data is transferred into the Wireless Professional software.

**Note:** The coordinator’s serial port has to be selected again because it will have a different name on the CPC3 to that on the “old” CPC3.

**Note:** If the coordinator is also to be changed along with the CPC3, once the data has been imported, the coordinator will have to be changed as described in the Wireless Professional manual in order to establish the wireless connection between the devices and new coordinator.

## 18.2 Import data from WLZentx/WLTouchx

To transfer data to the Wireless Professional WLZent3, a USB stick formatted in FAT32 format is required.

### 18.2.1 Preparing WLZent1/WLZent2 for the migration

The USB stick is plugged into the WLZent1/2. If the Wireless Professional software is currently active, the user must close it.

The file explorer is opened via the “WLZent” desktop icon.

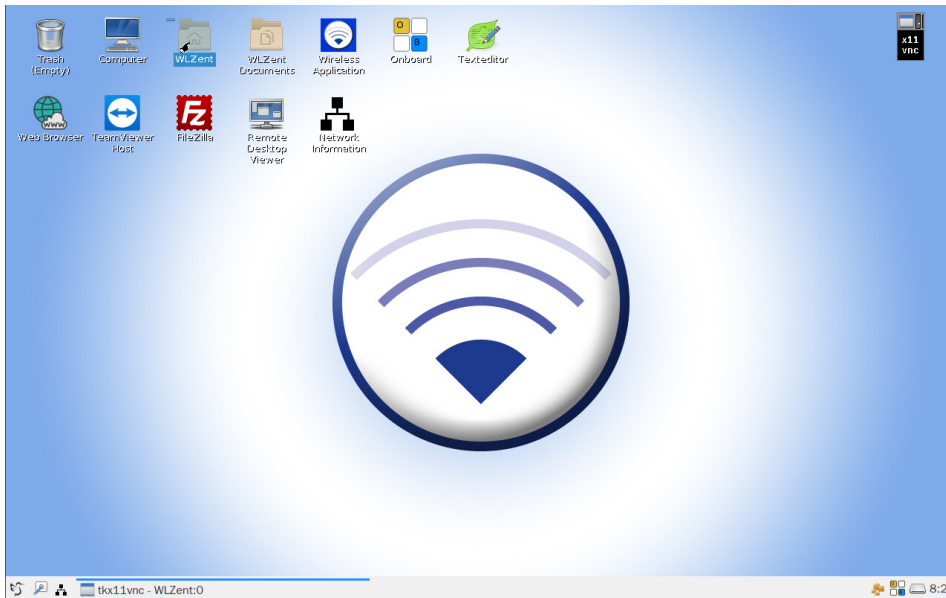


Figure 72 WLZent1/2 Desktop

The folder “wireless” is selected and copied to the clipboard via the menu bar “Edit->copy”, the key combination “Ctrl + c” or by right-clicking and selecting the context menu item “Copy”.

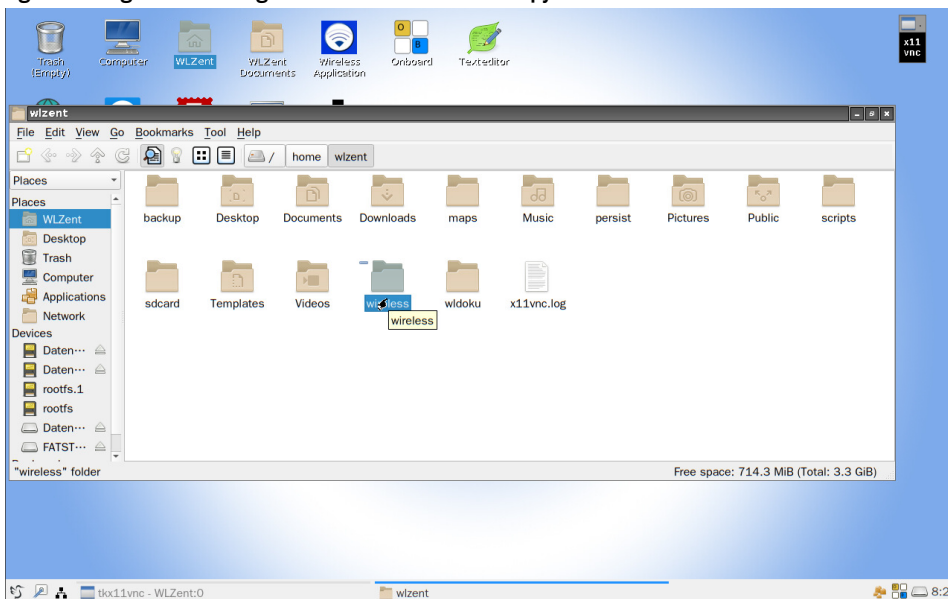


Figure 73 WLZent1/2 File explorer

Then the inserted USB stick, in this example the USB stick is called FATSTICK, is selected by clicking on it.

The “wireless” folder is now copied to the USB stick using the “Edit->Paste” menu bar.

After the copying process is complete, the USB stick is ejected using the symbol behind the name.

**Caution:** if the USB stick is removed immediately, data may be lost.

**Note:** the folder must not be renamed or placed in a subfolder, otherwise the data import will not work.



### 18.2.2 Preparing WLTouch for the migration

The USB stick is plugged into the WLTouch. If the Wireless Professional software is currently active, the user must close it.

The file explorer is opened and the c:\ drive is selected.

The "WirelessProfessional" folder is selected on the drive and copied to the clipboard using the key combination "Ctrl + C", the menu bar item "Edit->Copy" or by right-clicking and the context menu item "Copy".

The USB stick is then selected and the "WirelessProfessional" folder is copied to the USB stick using the menu bar item "Edit->Paste".

After the copying process is complete, right-click on the USB stick and select the menu item "Eject". The USB stick can then be removed from the device.

**Caution:** if the USB stick is removed immediately, data loss may occur.

**Note:** the folder must not be renamed or placed in a subfolder, otherwise the data import will not work.

### 18.2.3 Transferring data to the WLZent3

The WLZent3 is started by connecting it to the power supply.

After the boot process switch to maintenance mode as described in section 8.1 Launching Maintenance mode.

As soon as the WLZent3 has booted up again, the USB stick is plugged into the USB Port (14) of the WLZent.

As soon as the operating system has recognized the USB stick, the "Removable Disk" window is displayed.

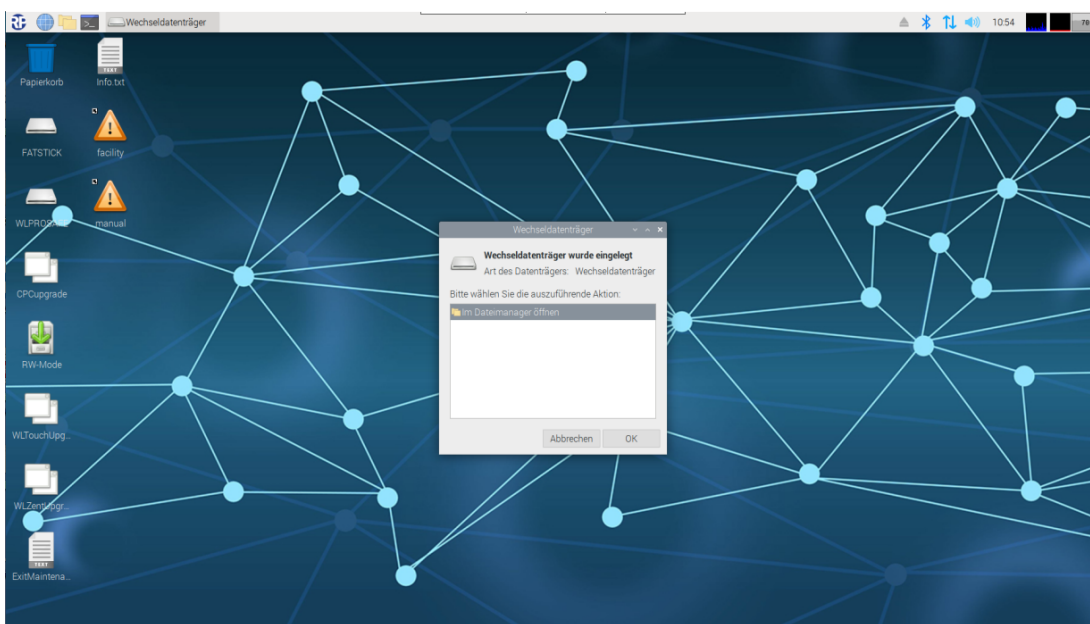


Figure 74 WLZent USB drive recognized.

The "Removable Disk" window is closed by clicking on the "Cancel" button.

The "WLTouchUpgrade" script is used to import the data of a WLTouch to the WLZent3. The "WLZentUpgrade" script is used to import the data of a WLZent1/2 to the WLZent3. The corresponding script is executed by double-clicking the desktop shortcut.

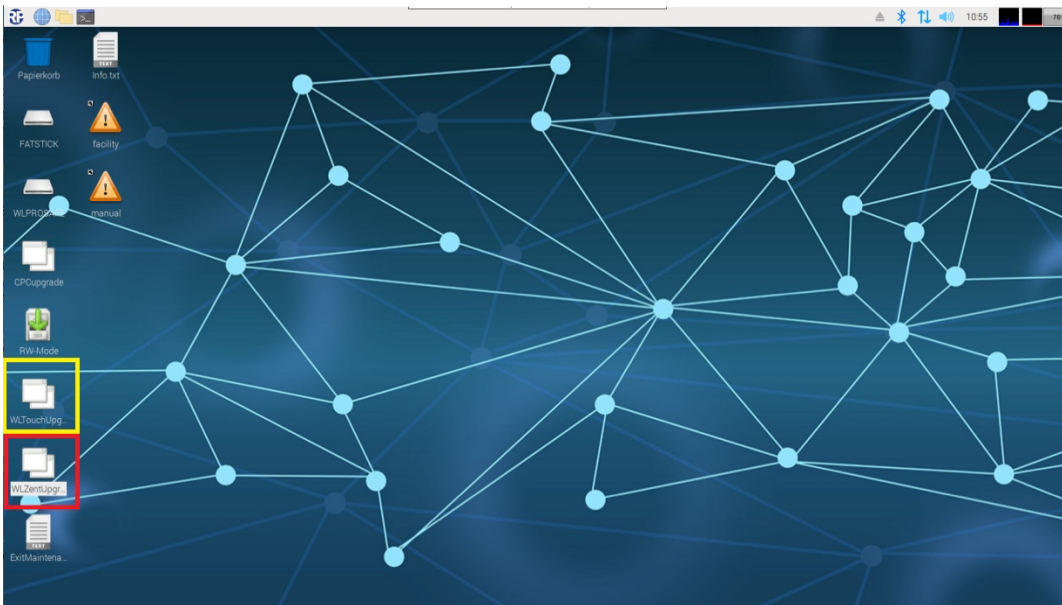


Figure 75 WLZent: Scripts for importing WLZent1/2 or WLTouchX data.

The import is explained below using WLZent1/2 data. The steps are identical for importing data from a WLTouch.

The "Run file" window opens. In this window, select the "Run in terminal" button.

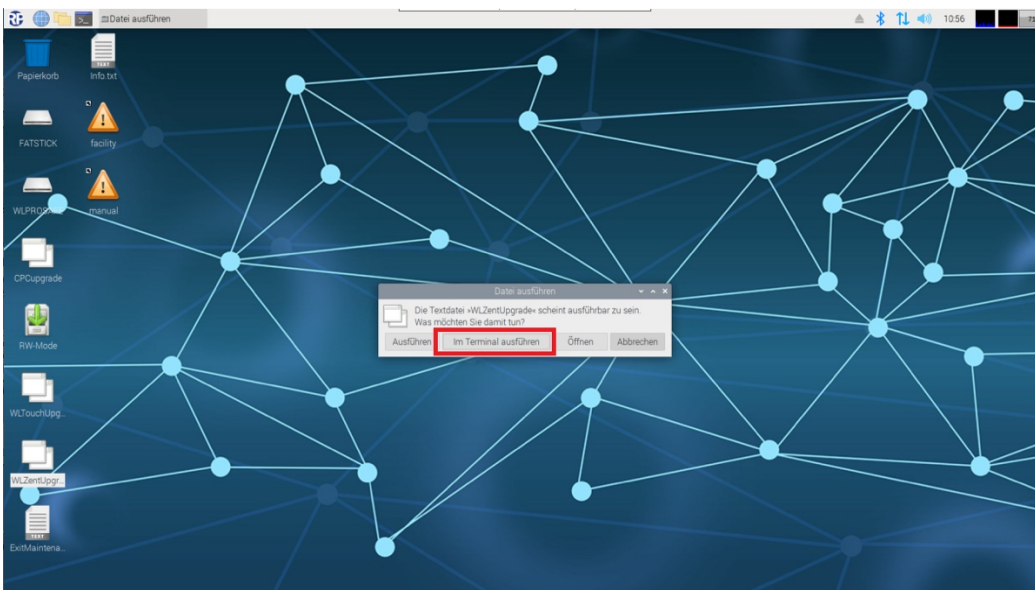


Figure 76 Execute WLZent Script

After clicking the button, the "WLZent copy and upgrade to CPC3" window opens.

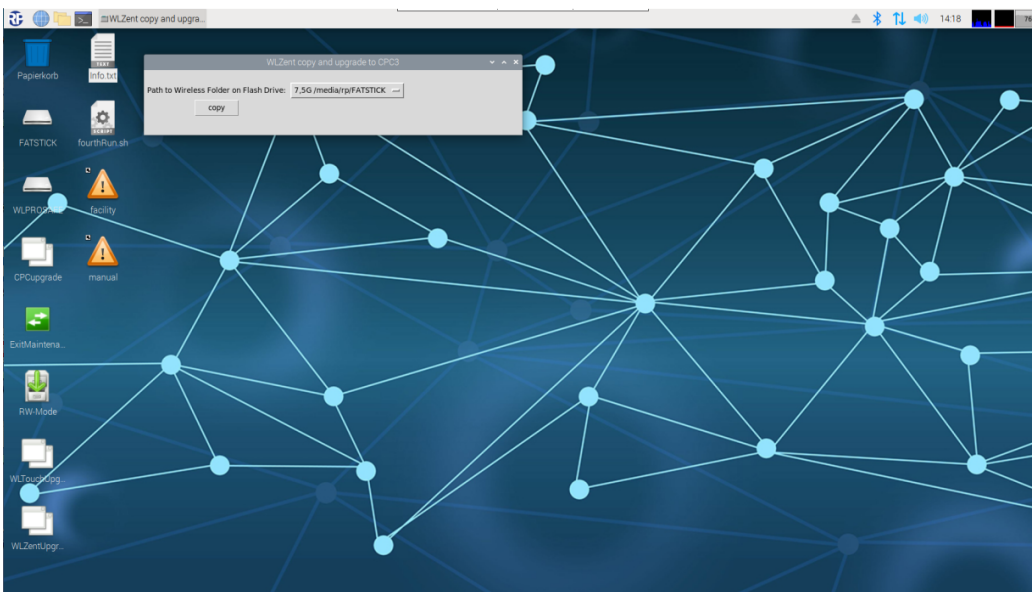


Figure 77 Copy and upgrade window

In the dropdown list of the "Path to Wireless Folder on Flash Drive" field, select the USB stick on which the "wireless" folder is located.

Once the USB stick is selected, the import process is started using the "copy" button.

Once the process is complete, the message "—Done—" is displayed.

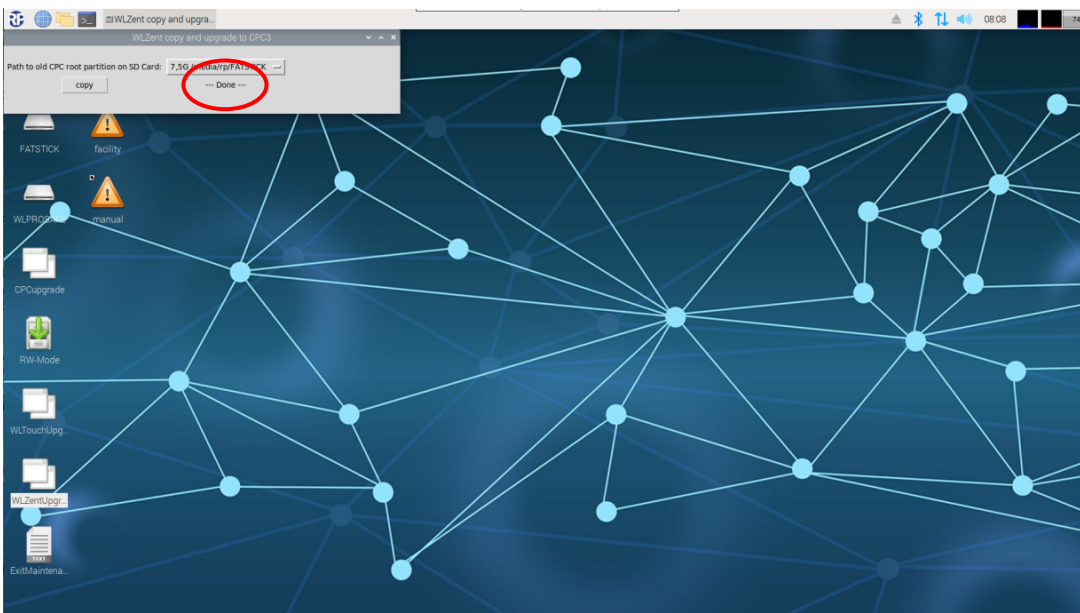


Figure 78 Data import successfully completed.

If there is an error during import, "—Error -" is displayed instead.

The "WLZent copy and upgrade to CPC3" window is closed after the import using the "x" in the top right.

The USB stick must now be removed from the system as described in section 6.3.1.

**Important:** The USB stick must only be removed from the WLZent3 after unmounting.



Leave the maintenance mode as described in section 8.2 Exiting Maintenance mode.

The WLZent3 now starts up in read-only mode. When the Wireless Professional software starts, the data imported from the WLZent/WLTouch is used and converted to the current format. This can take some time, depending on the amount of data. Once this is completed, the WLZent3 takes over the monitoring function of the associated devices.

**Note:** It is necessary to reselect the serial interface of the coordinator, as it is named differently on the WLZent3 than in the previous system.

**Note:** If the coordinator is changed with the WLZent3, it is necessary to carry out a coordinator change according to the Wireless Professional manual after the data import so that the wireless connection of the devices to the new coordinator is established correctly.

### 19 Web Browser

There is a web browser installed on the Wireless Professional WLZent. The web browser is present to allow you to access central battery systems with a web server, such as multiControl plus. Instances may arise where the web browser is changed when the WLZent is updated.

#### 19.1 Launching web browser

The web browser can be launched using the taskbar symbol or by going to “Start menu->Internet->Chromium-Webbrowser”.

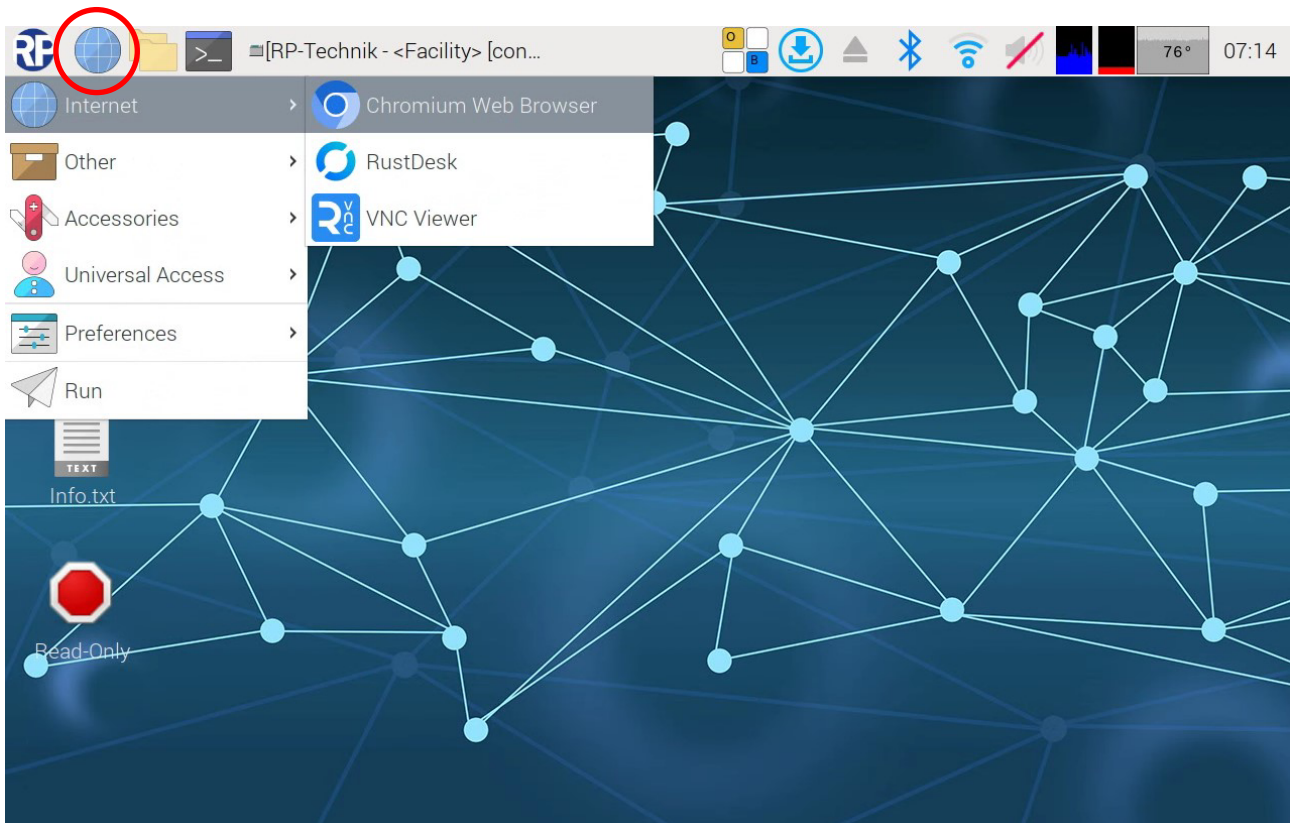


Figure 79 Wireless Professional WLZent Start menu Internet

In this version of the Wireless Professional WLZent, Chromium is installed as the web browser.

**Note:** The web browser may take around 10 seconds to launch.

If assistance is needed when using the web browser, consult the Help menu for the web browser.

### 20 Text editor

There is a text editor installed on the Wireless Professional WLZent. It can be used to store Wireless Professional logs as plain text.

#### 20.1 Launching text editor

The text editor can be launched by going to “Start menu->Accessories->Text Editor”.

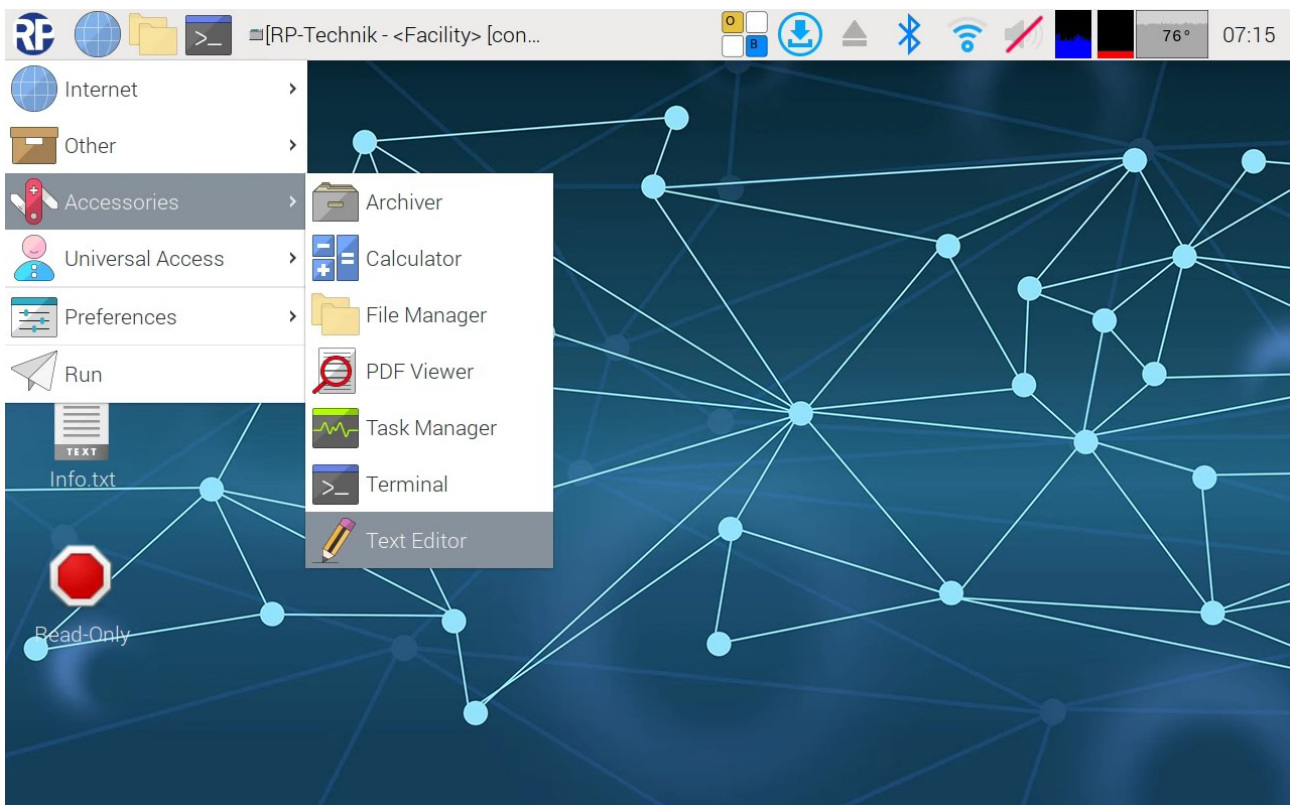


Figure 80 Launching text editor

#### 20.2 Inserting text

To insert a text from the clipboard into the editor, the “Strg”/”Ctrl” and “V” buttons are tapped one after another on the on-screen keyboard that opens automatically. Once “Strg”/”Ctrl” has been tapped, the button background changes to grey. Alternatively, the user can go to Edit->Paste.

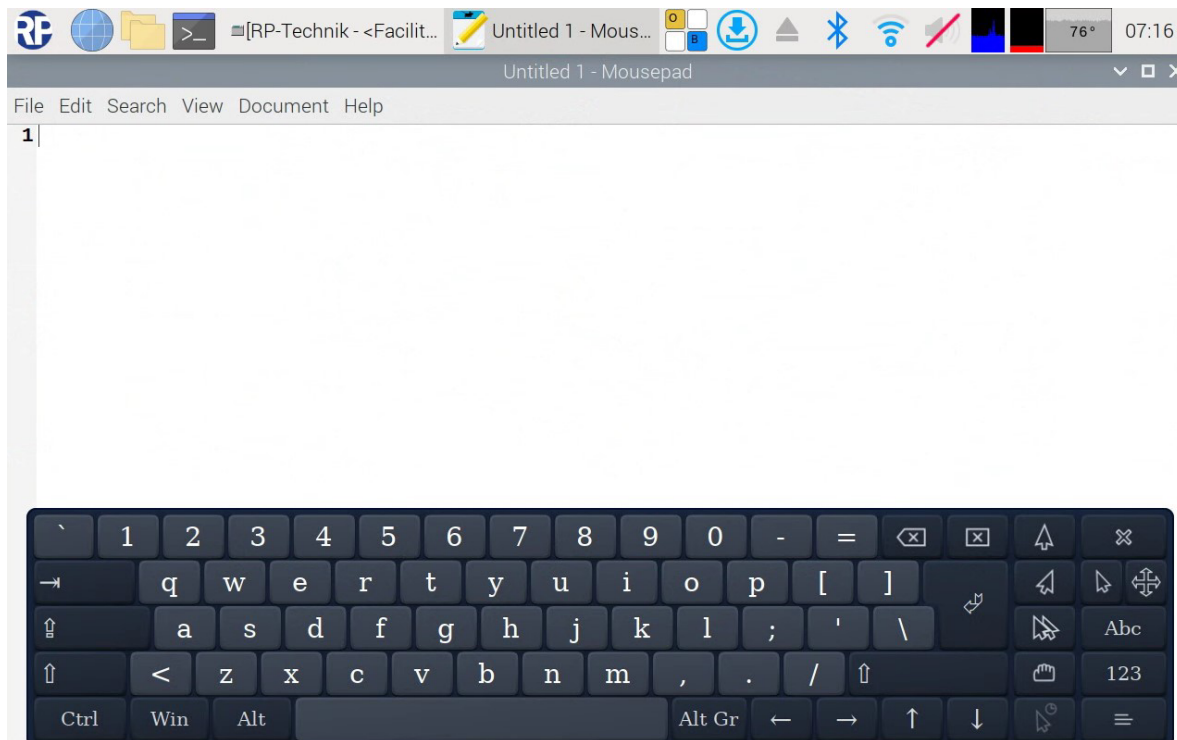


Figure 81 Text editor

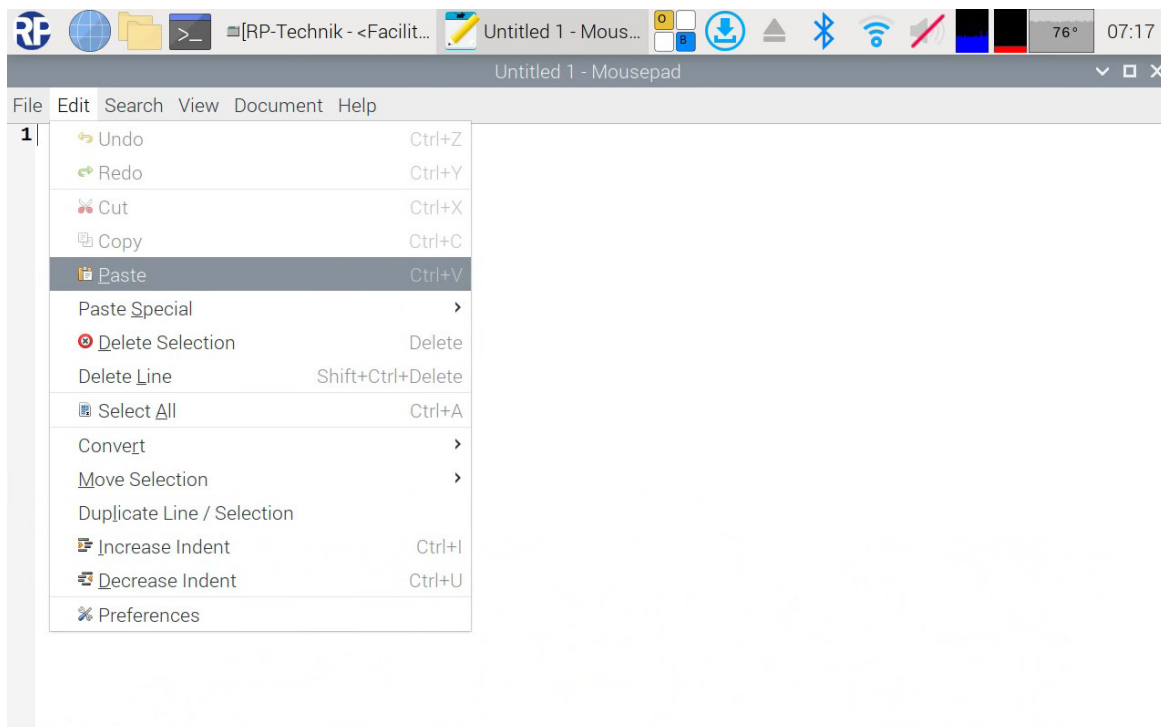


Figure 82 Text editor, Edit menu

### 20.3 Saving file

Go to File->Save As to save the document.

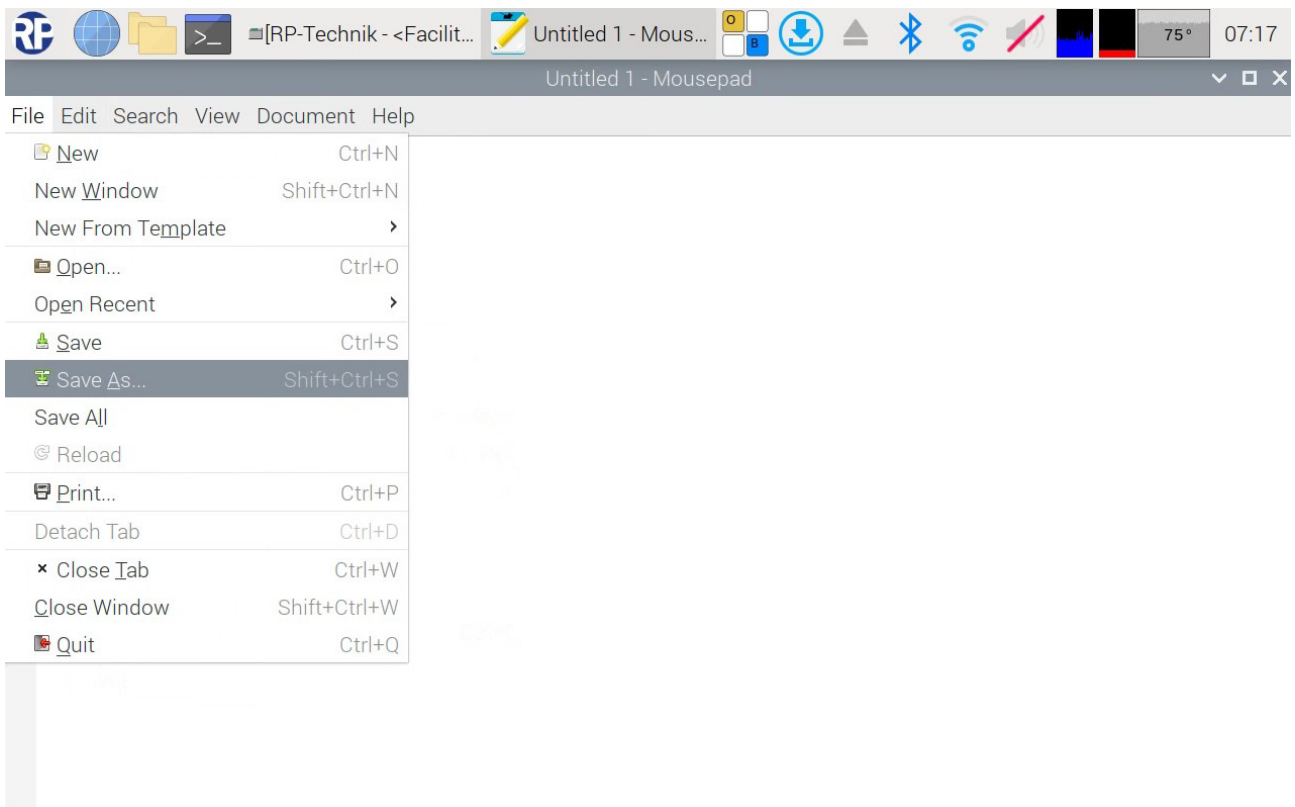


Figure 83 Text editor, saving file

Another window then opens, in which the storage location can be selected, and a file name assigned.

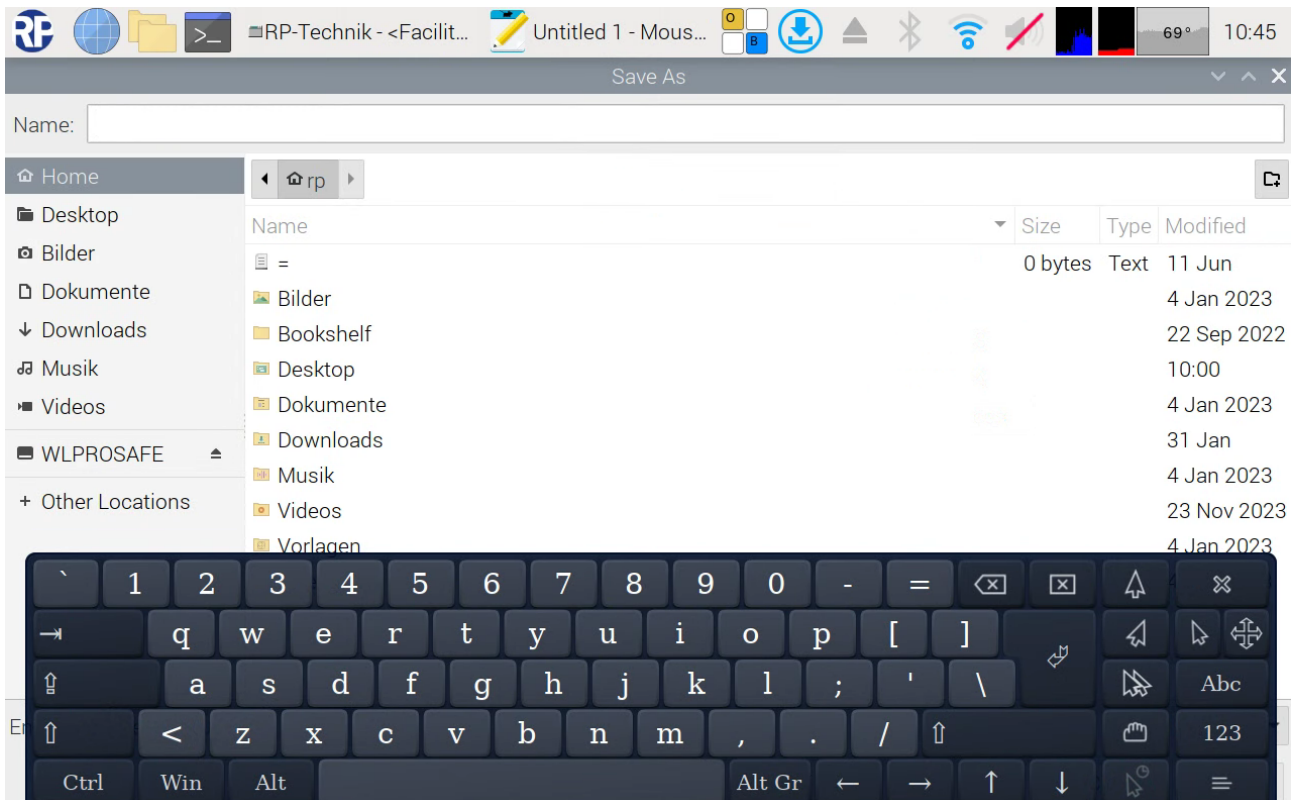


Figure 84 Text editor, Save dialogue

Note: Plain text log files should not be stored in the WLZent file system. These files will be lost in the event of a reboot.

### 20.4 Closing program

To close the program, go to File->Quit. (See Figure 83 Text editor, saving file)

If the text document has not yet been saved, the program will ask whether it is to be saved or not.

### **21 Firewall**

The Wireless Professional WLZent has a firewall, which blocks incoming and outgoing connections to and from the device provided they are not needed for operation. Changes to the firewall configuration are not recommended and are undertaken at the user's own risk.

**Note:** Before changing the firewall settings, a manual backup should be performed (see 23.2 Manual backup) because otherwise the Wireless Pro database is not transferred to the backup stick and data may be lost.

**Note:** There are limitations on using drop-down menus via the WLZent touch display which is why we recommend using the arrow keys on the on-screen keyboard to make a selection from a drop-down menu.

### 22 Operating System and Wireless Professional Updates

The Wireless Professional WLZent regularly checks for updates to the operating system and the Wireless Professional software. The WLZent needs an Internet connection for this check. Once a week (Sundays at midnight), the WLZent automatically looks for updates, downloads these of its own accord and installs them.

This update process requires no manual intervention. There is however an option for manually starting the process of looking for and installing updates at any time regardless of the weekly pattern described above. To do this, click on the “Search for Updates” command in the Start menu.

**Note:** Your IT administrator may need to release the update server in the firewall.

**Important:** From time to time, the operating system will itself indicate by means of an icon in the bar on the top edge of the screen that there is an update available. Click on this to install the update (see image below). However, for technical reasons, an update installed in this way will be lost during a system reboot. **Updates should NOT therefore generally be performed via the icon, instead ONLY use the “Search for Updates” command in the Start menu.**

**Note:** Instances may arise where individual operating system updates are not installed. If this happens, the Update icon remains in place or appears again. This is not a malfunction but is intentional. In such cases, ignore the Update icon.

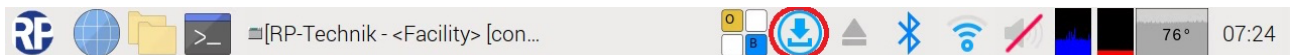


Figure 85 WLZent taskbar: Update Available

**Note:** There are no means of updating the operating system offline or reinstalling software on the device, e.g. via a USB stick.



### 23 Backing up Wireless Professional WLZent Data

#### 23.1 Automatic backup

Every 4 hours, the Wireless Professional WLZent copies relevant data from the main memory to the backup USB stick fitted in the WLZent. This ensures that data is backed up onto an external storage medium.

**Warning:** The backup USB stick must not be removed during operation otherwise there is a risk of data loss.

**Note:** The backup USB stick and device form one unit. The backup USB stick cannot be changed for another USB stick or replaced. If the backup USB stick is lost, a new one must be ordered as a spare part.

#### 23.2 Manual backup

Manual backup means that the user triggers the process of copying the relevant data from the main memory to the backup USB stick fitted in the WLZent.

The user can trigger the copying process by rebooting the WLZent (see 9.4.) Alternatively, the copying process can be triggered during commissioning, for instance, by going to “Start menu->Other->Instant WLPro Backup”.

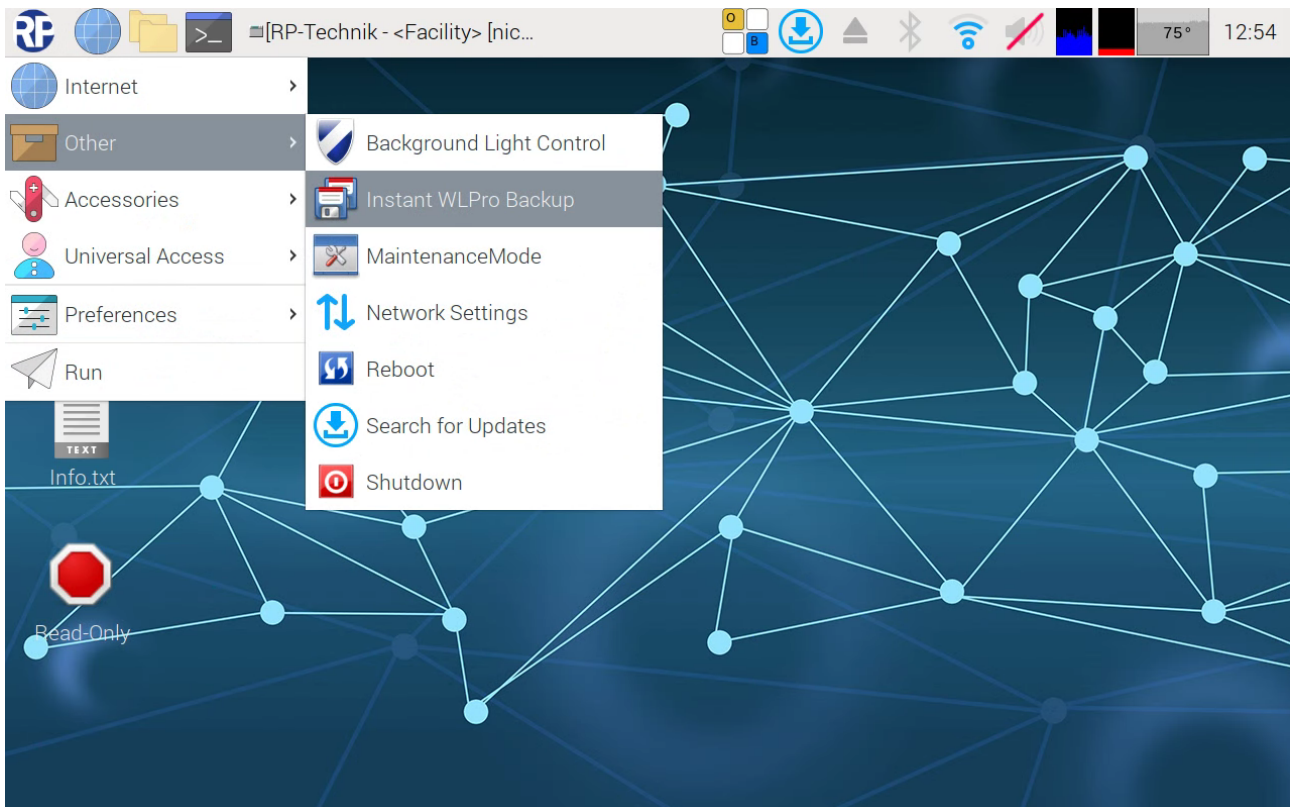


Figure 86 WLZent Start menu: Instant WLPro Backup

Once selected, the “WLPro instant backup” window opens.

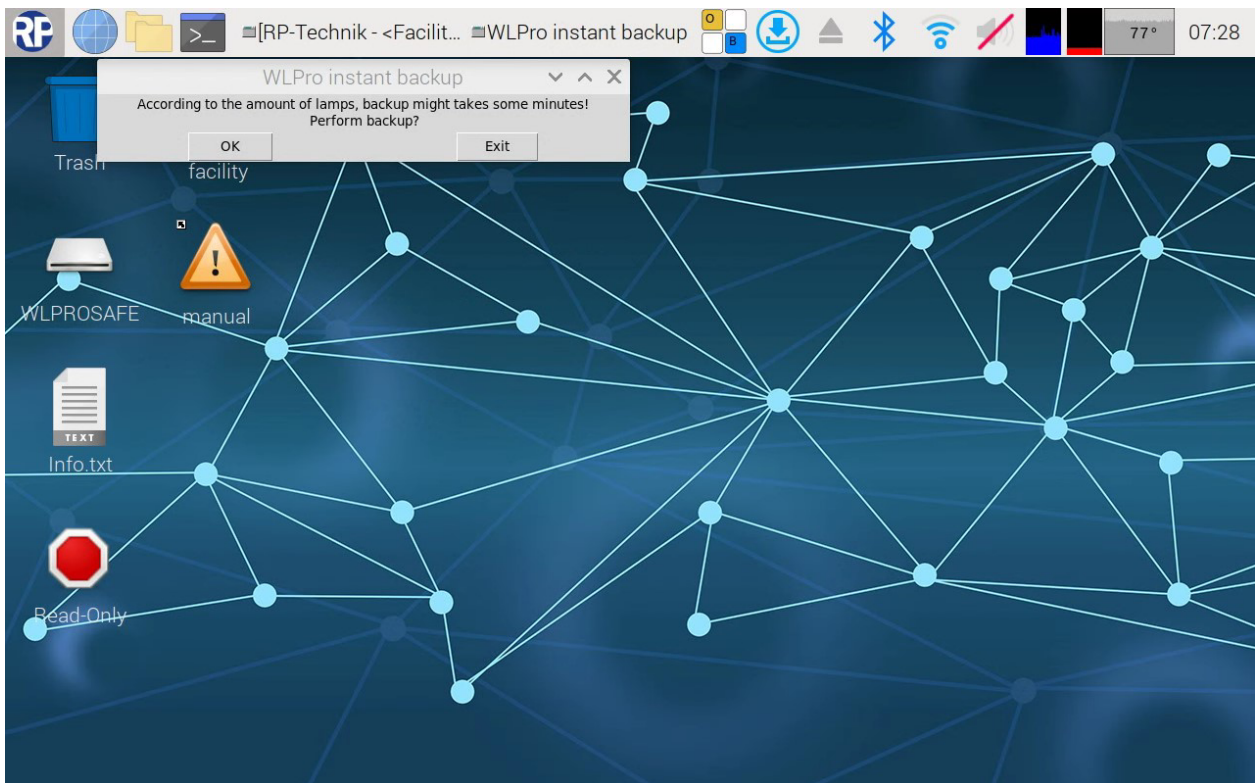


Figure 87 WLPro instant backup window

Tapping on the "OK" button starts the backup process. As soon as the backup is complete, the "WLPro instant backup" window contains the text "Backup done". The window is closed by clicking on the "Exit" button.

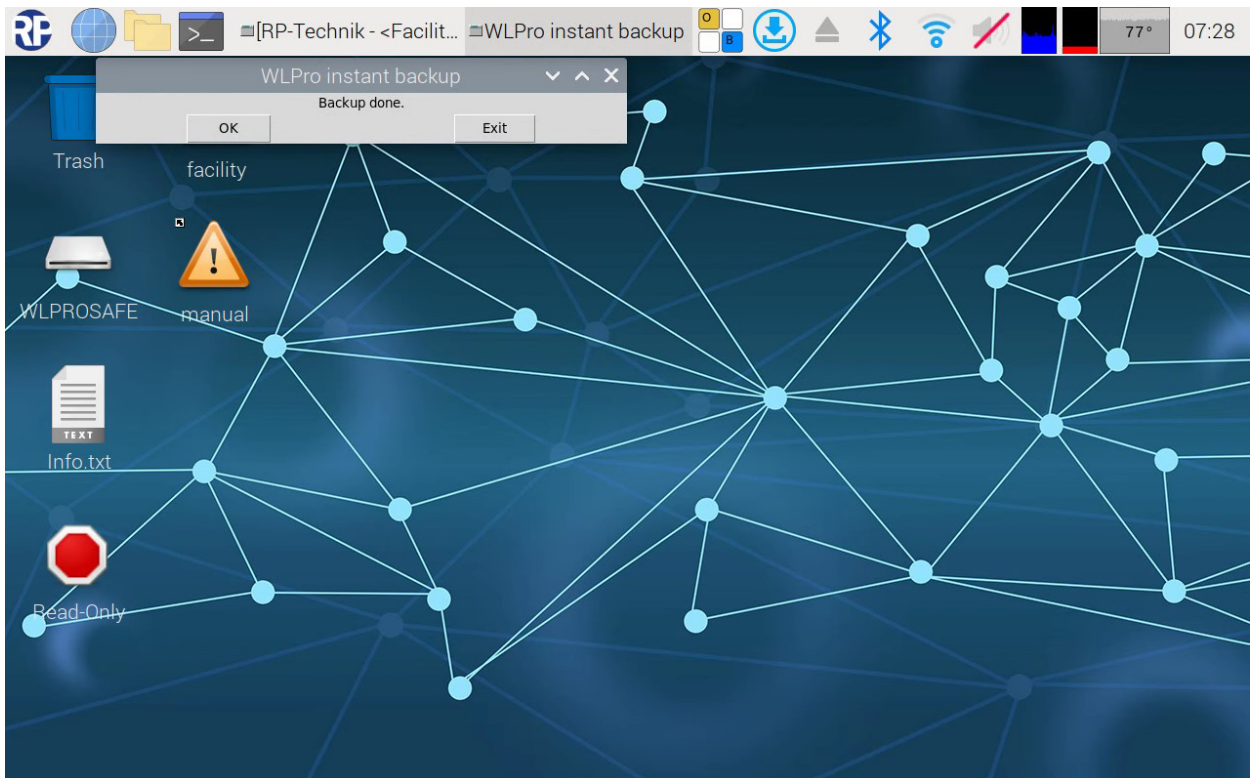


Figure 88 WLPro instant backup done

### 23.3 Copying backup files to another device

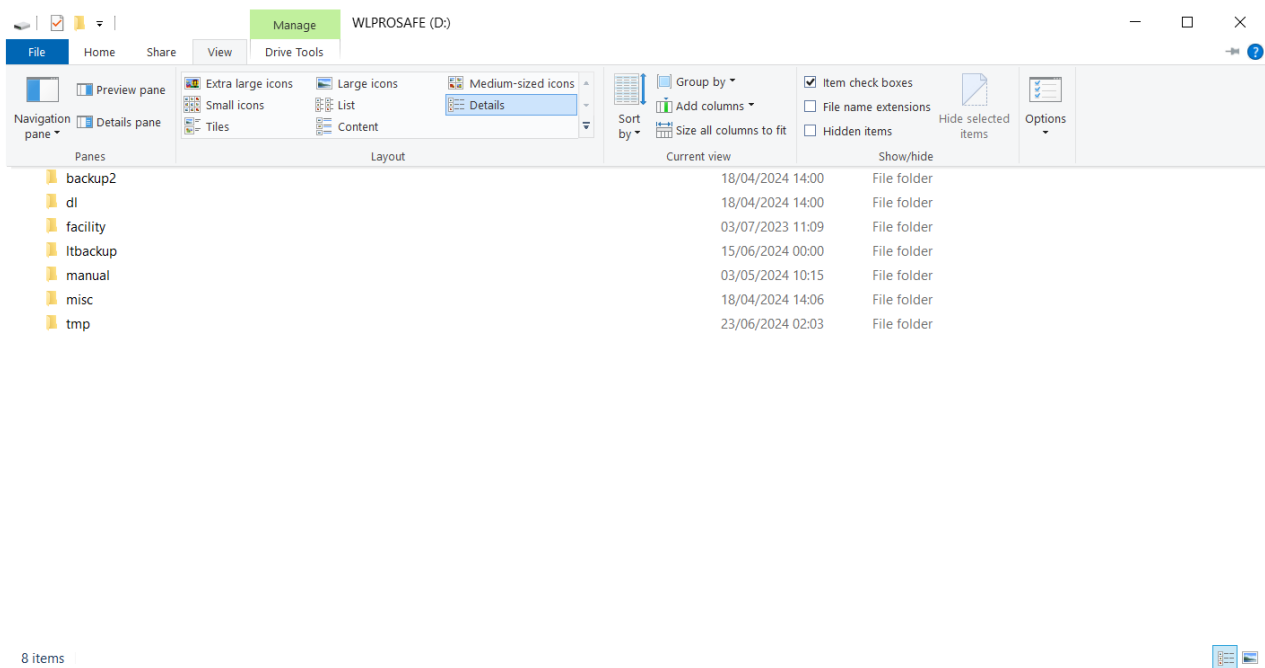
The Wireless Professional data can only be copied manually from the backup USB stick fitted in the WLZent.

#### 22.3.1 Connecting the backup USB stick to the PC

**Warning:** The backup USB stick must not be removed during operation otherwise there is a risk of data loss.

To copy data from the backup USB stick, first shut down the WLZent. Once the device has been shut down and disconnected from the power supply, the backup USB stick can be removed.

The backup USB stick can be read by a computer. The backup USB stick is displayed as “WLPROSAFE” as a drive on the computer.



**Figure 89 Backup USB stick on a Windows device**

The drive has a folder structure where the WLZent data is stored. Copying the “backup” folder, copies all the Wireless Professional software data. This can then be stored as a backup.

Once copying is complete, the backup USB stick should be inserted back into the WLZent slot from which it was removed.

The WLZent should be reconnected to the supply voltage. The WLZent is booted as normal and runs the Wireless Professional software for emergency light monitoring.

### 22.3.2 Transfer data from WLZent Backup Stick to an external USB drive

Minimize the Wireless Professional Software window to get access to the desktop before connecting the USB Stick to the WLZent.

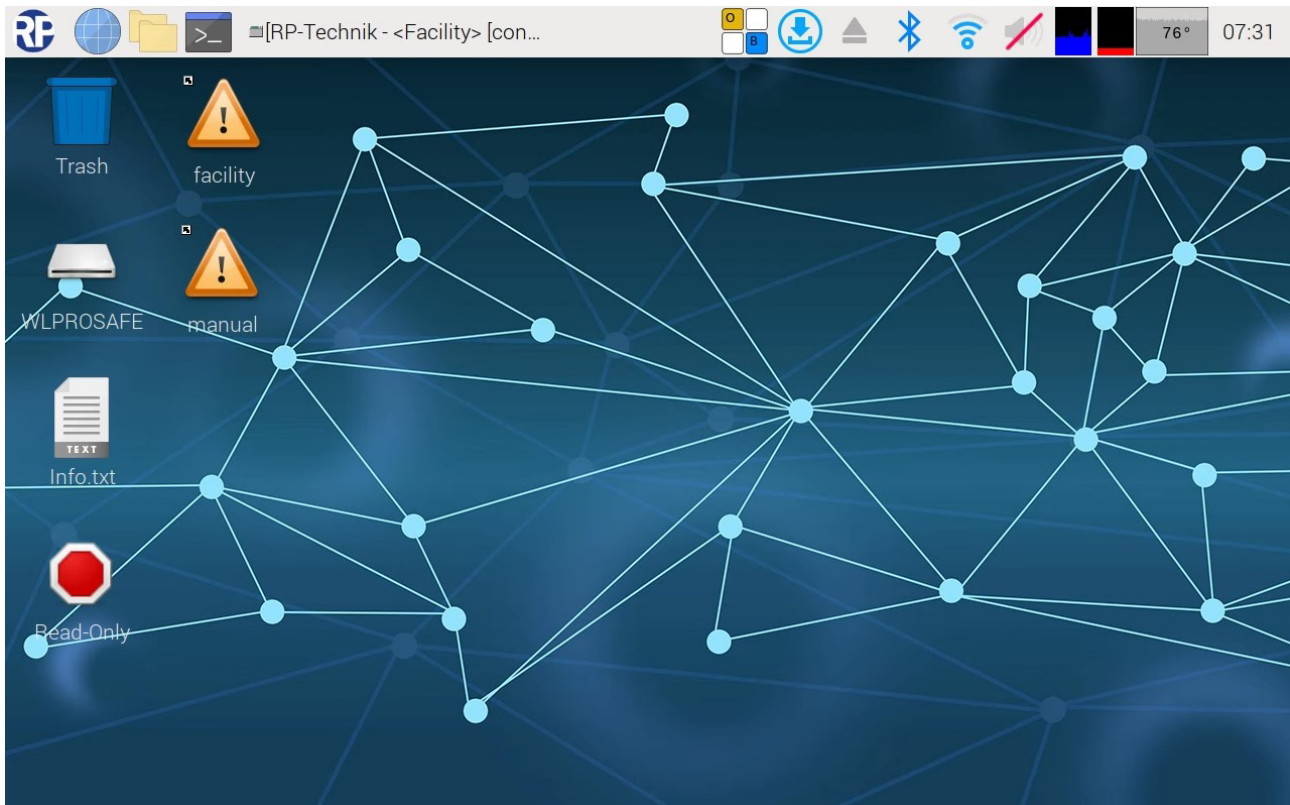


Figure 90 WLZent3 Desktop

Tap the desktop icon the USB Backup stick drive to open the drive into the file explorer. The drive is named as “WLPROSAFE”.



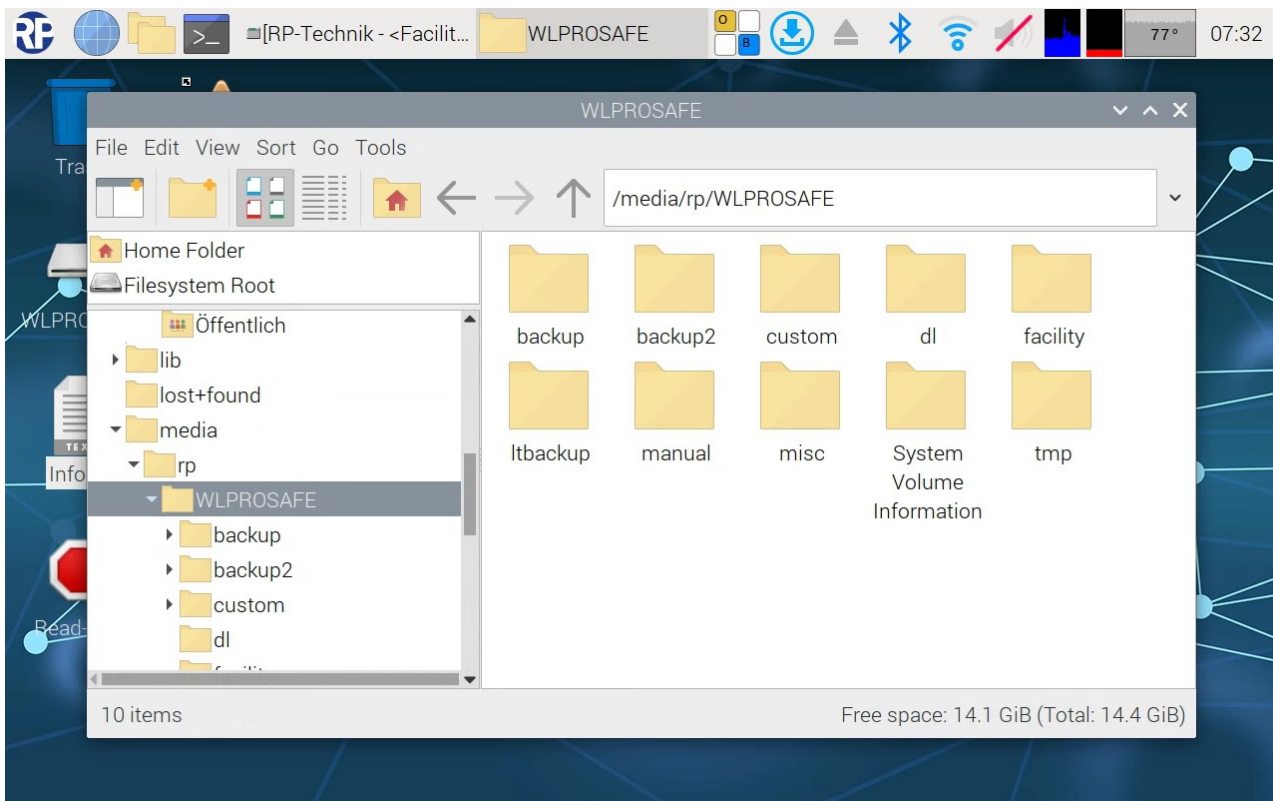


Figure 91 File explorer of the Backup USB-Stick

Connect the USB Stick to the WLZent now. The “Removable medium is inserted” window will be showed, after the Linux had detected the drive.

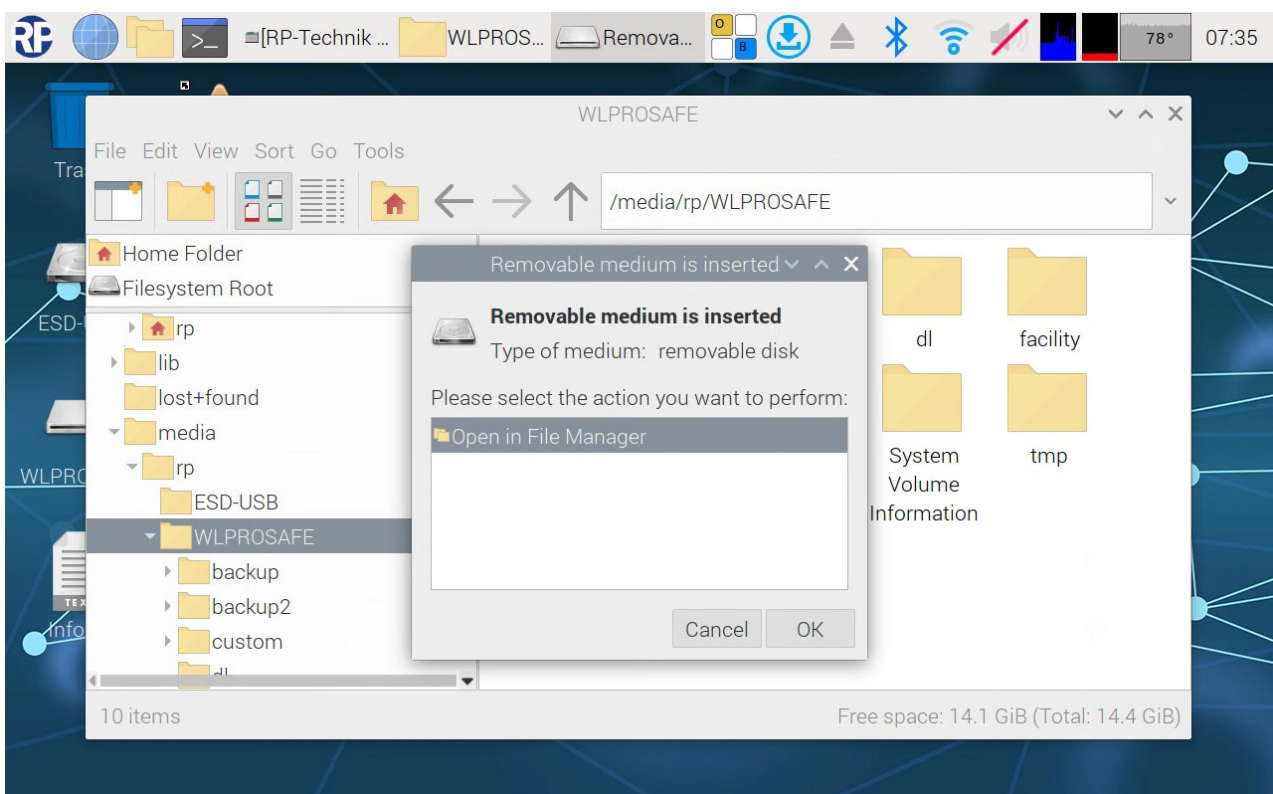


Figure 92 WLZent removable medium is inserted.

Tap the „Ok“ button to open a second file explorer window with the contend of the USB Stick.

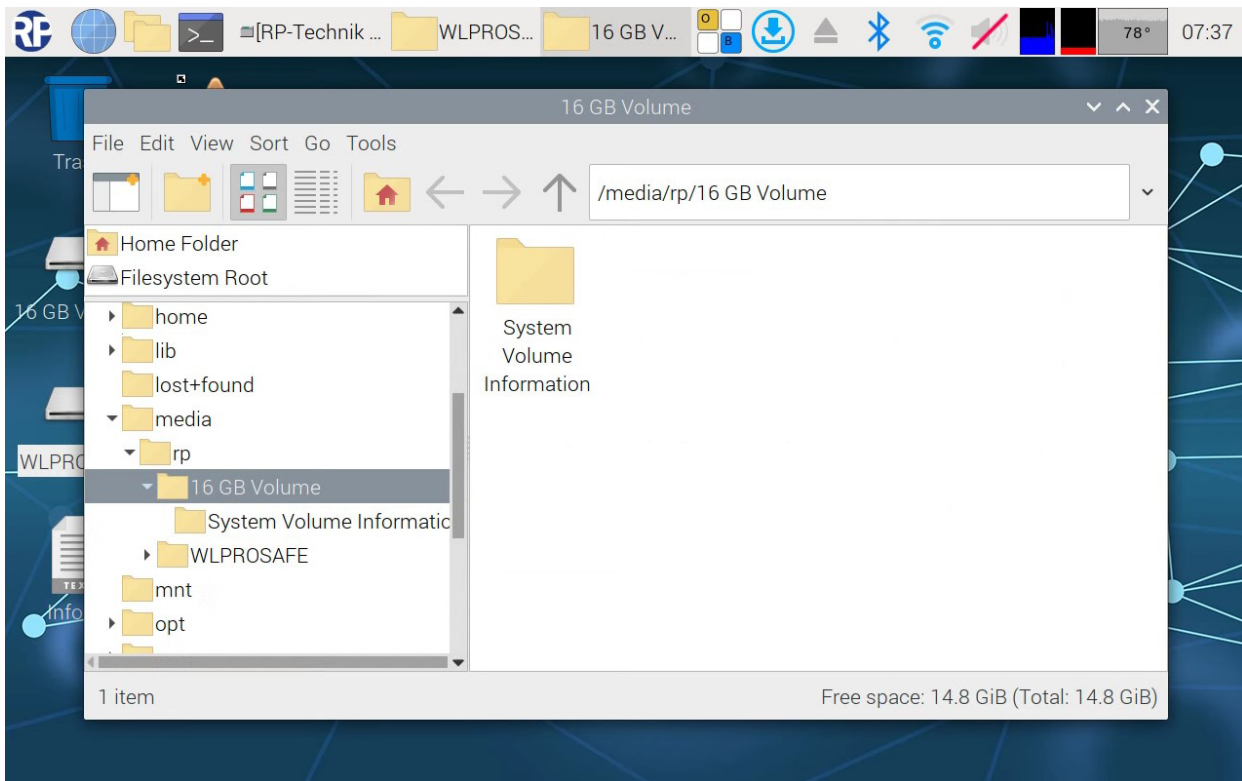


Figure 93 WLZent File explorer of an empty USB stick.

In this example is an empty USB Stick used. Both file explorer windows need to be moved to the right and left side of the screen.

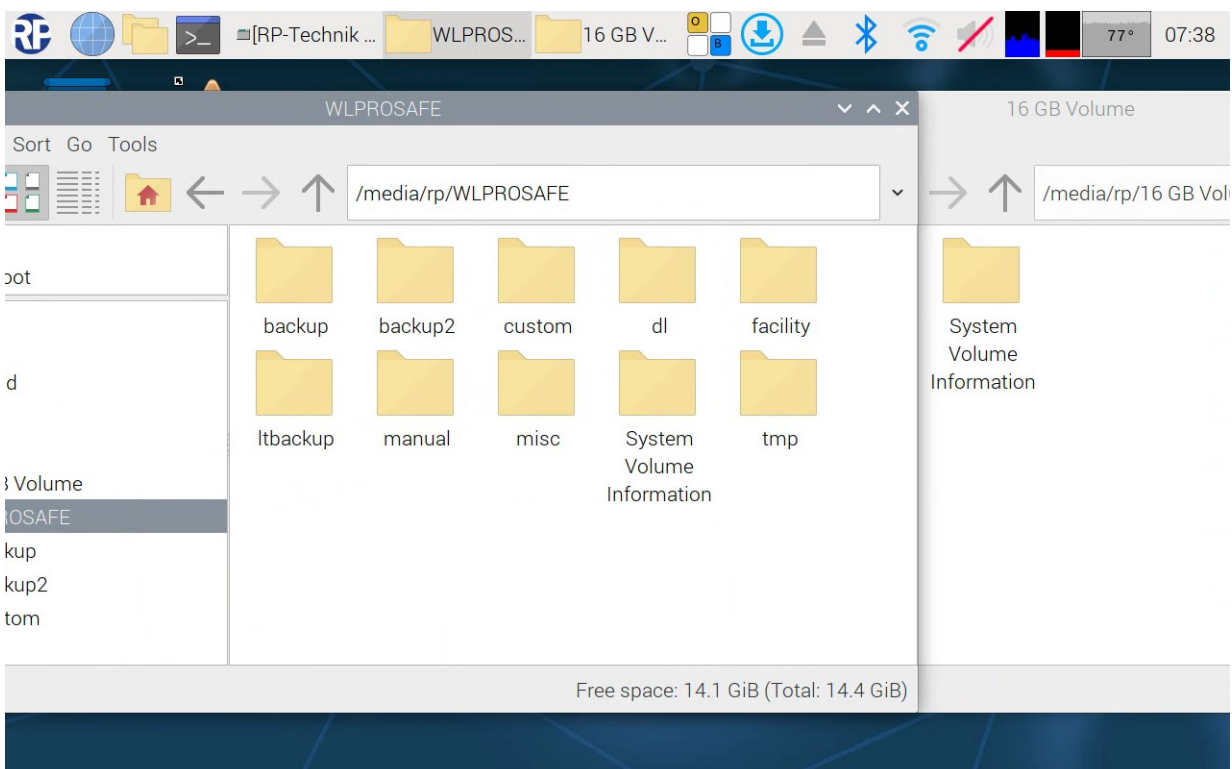


Figure 94 2 file explorer windows with vertical offset.

Tap the folder “backup” from WLZent backup USB stick and copy the folder via Drag&Drop to the connected USB stick.

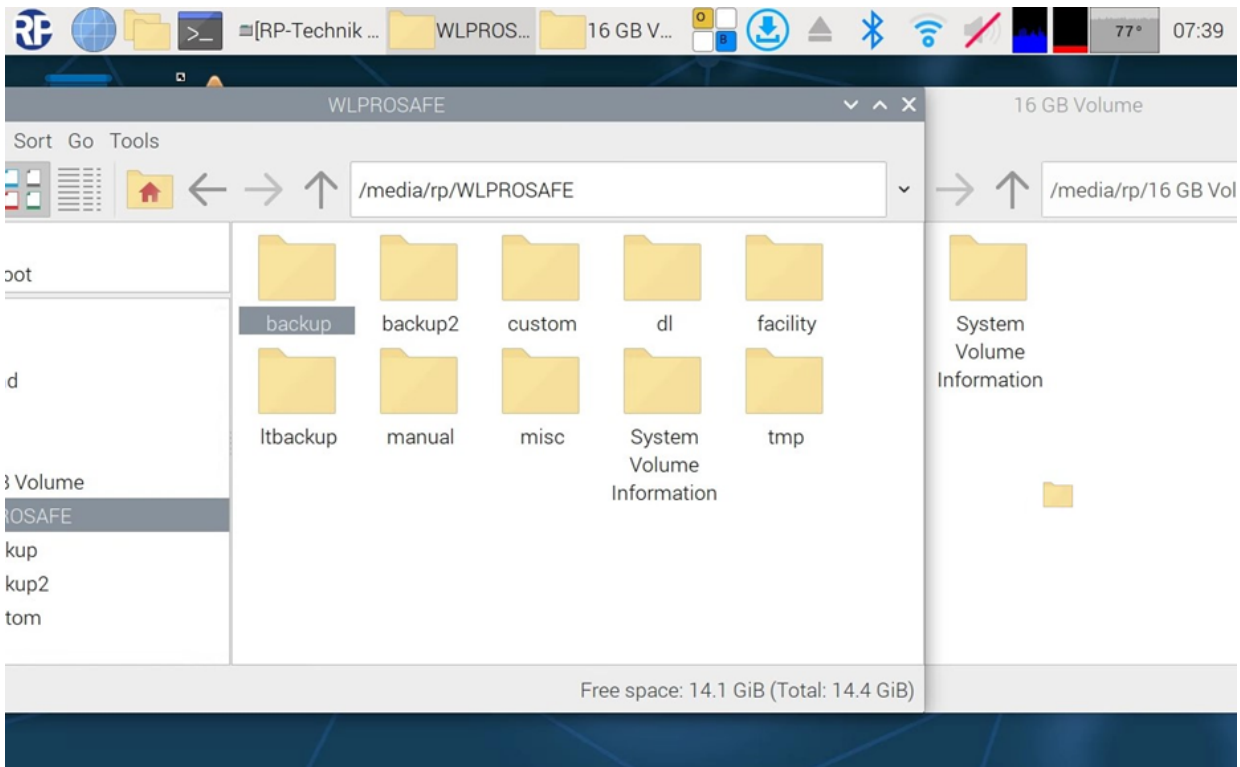


Figure 95 Drag&Drop operation at the backup folder.

By dropping the folder, the copy progress will be started.

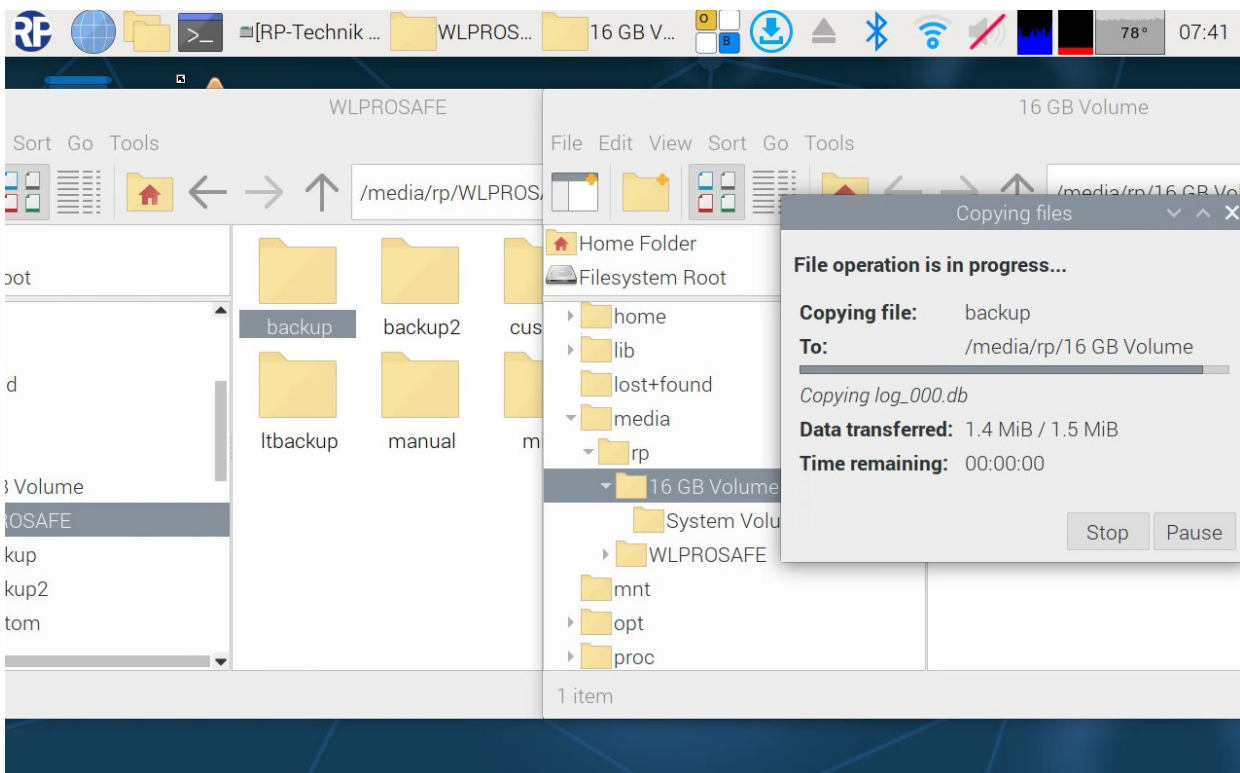


Figure 96 Copy process of the backup folder.





Page 90/98

Is the copy process is completed, the USB stick need to be unmounted before it can be removed from the WLZent (see 6.3.1 Ejecting via taskbar symbol).

The file explorer window of the “WLPROSAFE” can be closed.

**Note:** Before the „backup“ folder contents are copied from the backup USB stick, in the Wireless Professional Software should be taped the button “save System”. Also the instant backup (see 23.2 Manual backup) should be performed, to get the current data from the Wireless Professional Software into the backup folder. If the version of the Wireless Professional Software is 3.0 or higher the instant backup is not necessary anymore.

### 23.4 Restore from Backup data

The restoring of the Wireless Professional Software from backup file may performed only by qualified and authorized personnel.

Only backup data from this WLZent are allowed to use for a restore process. Backup data from other devices like WLTouch must be imported by using the import scrips see chapter 18.2 Import data from WLZentx/WLTouchx.

Backup files can be only copied to the WLZent in maintenance mode, so first step change to maintenance mode see chapter 8.1 Launching Maintenance mode

Tap the desktop icon „WLPROSAFE” to open the file explorer, after the WLZent is booted up in maintenance mode.

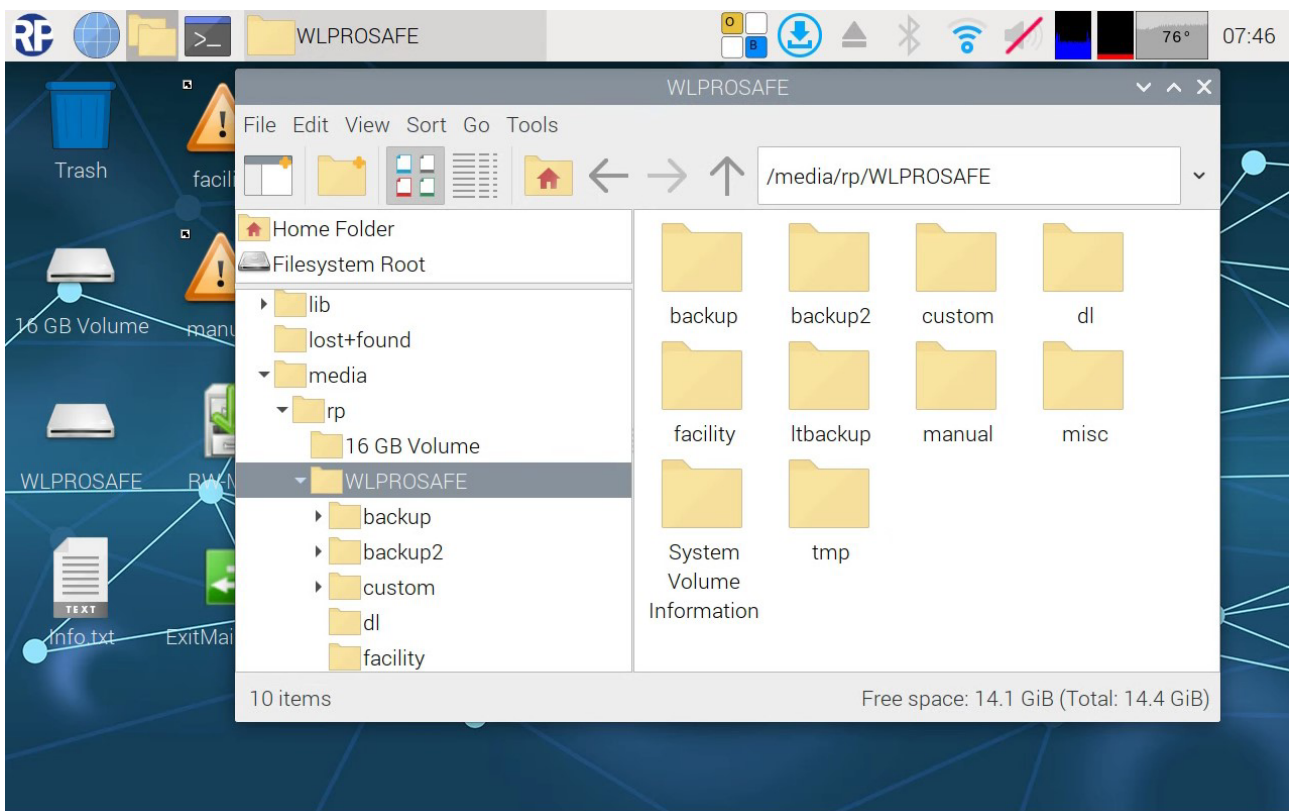


Figure 97 file explorer with content of WLPROSAFE.

Move the explorer window to the right side of the screen, to simplify the drag&drop.

Put the USB stick with the backup data into the USB connector of the WLZent. The USB stick will be mounted and the “Removable medium is inserted” window will popup. Tap the “ok” button to open the file explorer.

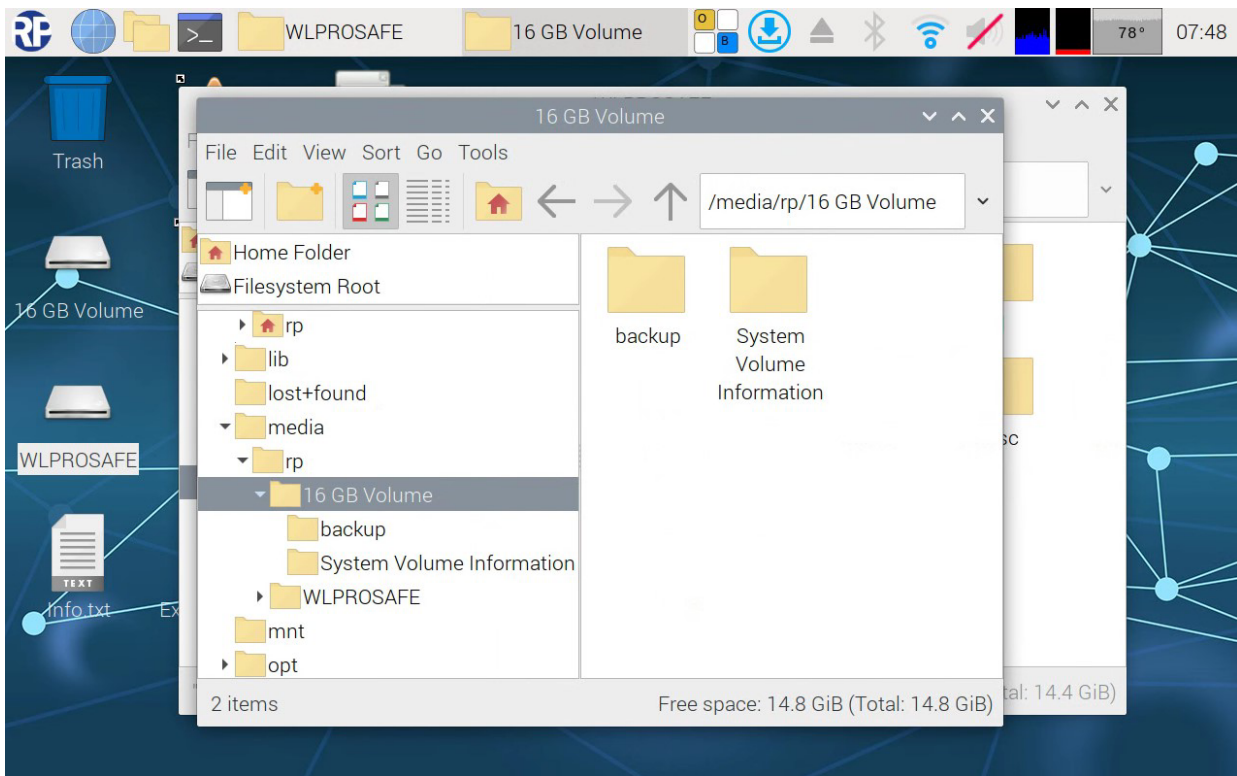


Figure 98 File explorer: USB stick with backup data.

In this example there are only one backup folder in the main path of the USB Stick.

Move the File explorer window via drag&drop to the left until the file explorer window of the "WLPROSAFE" drive is visible.

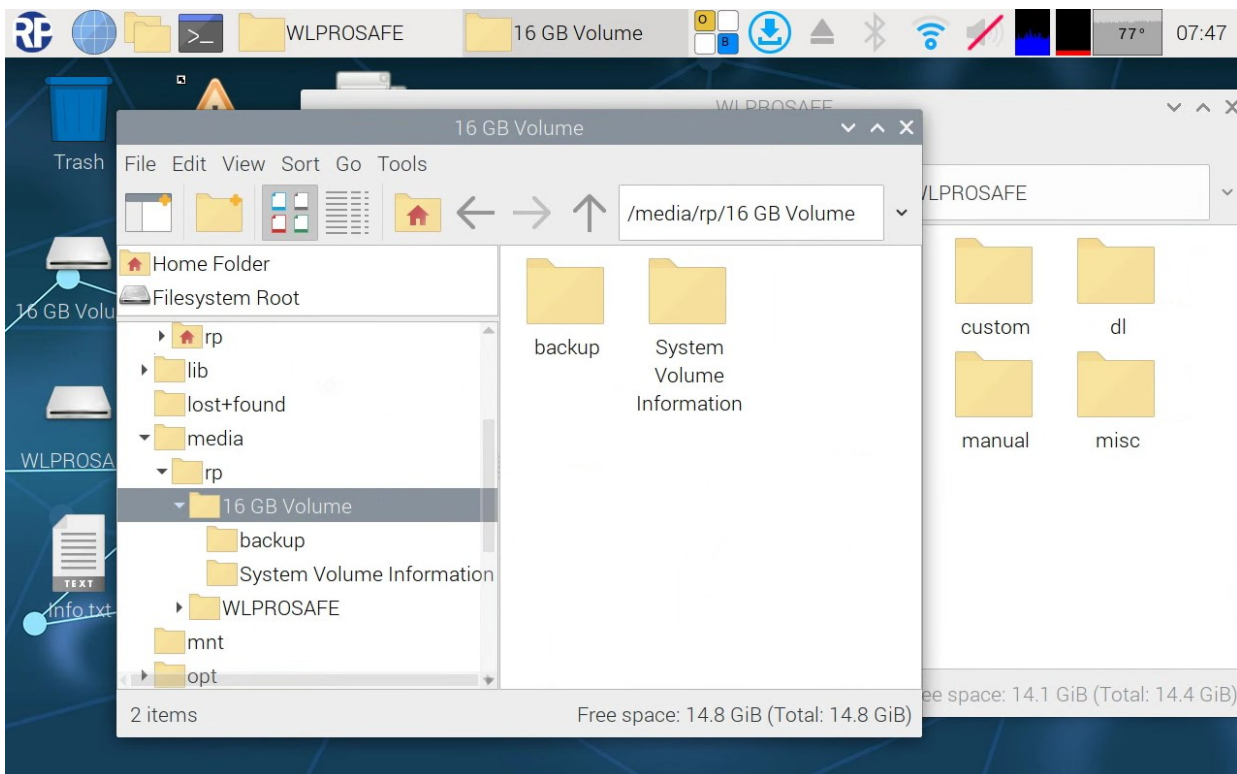


Figure 99 File explorer windows moved relative to each other.

From the left file explorer window move the “backup” folder via Drag&Drop to the file explorer windows in the right side and release the folder there.

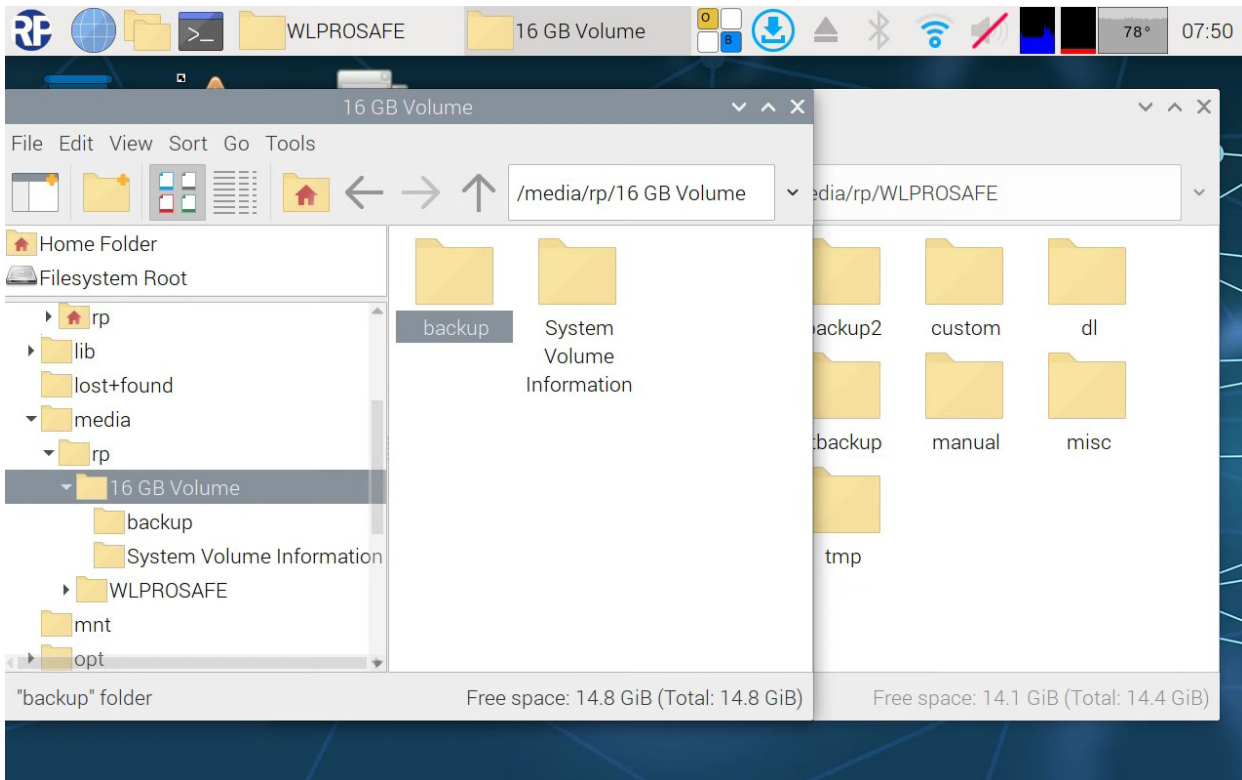
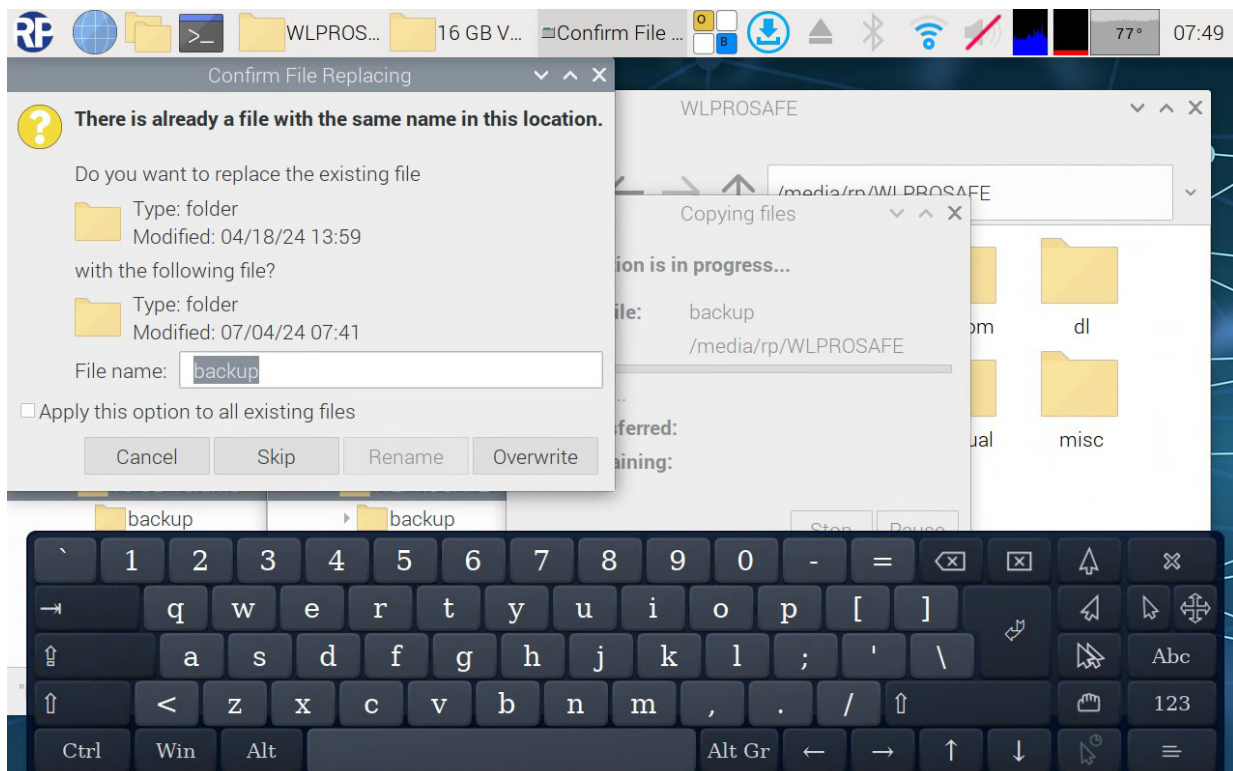


Figure 100 Drag&Drop of the folder.

Release the folder to start the copy process. The “Confirm File Replacing” window will appear.



**Figure 101 Confirm Replacing**

Tap the checkbox „Apply this option to all existing files” than tap the button “Overwrite”.

Remove the connected USB-Stick as described in chapter 6.3.1 Ejecting via taskbar symbol. Remove the USB-Stick once the ejection is complete.

Leave the Maintenance Mode as described in chapter 8.2 Exiting Maintenance mode.

After the reboot of the WLZent is finished, the Wireless Professional Software is started with the restored backup data.

### **24 Long-Term Backup**

The Wireless Professional WLZent regularly stores a backup copy of the reference data and log files in a special folder on the backup USB stick.

These long-term backups are produced automatically on the 1st and 16th of each month. No more than 24 backups are held in the folder for backups. This is the equivalent of 12 months of backups. The oldest backup is then overwritten each time.

The backups are named in the folder with the date on which they were produced.

The backups can be used to restore a former status.



### **25 Reinstalling Language Files**

The Wireless Professional software is supplied with various languages pre-installed.

Additional or more recent language files for the Wireless Professional software will be loaded with the automatic software updates as soon as they are available.

## 26 FAQ

### 26.1 What devices can be connected to the USB socket?

Hubs, USB storage media and external input devices, such as a keyboard or mouse.

### 26.2 Can additional software be installed on the device?

Further software can be installed but requires detailed knowledge of Linux. As a rule, only software approved for this purpose by the manufacturer may be installed on the device.



**Warning:** If third-party software or software not approved by the manufacturer is operated on the WLZent, it will not be covered by the warranty. The manufacturer does not assume liability for data loss or damages resulting from malfunction if third-party software or software not approved by the manufacturer is operated on the system. What's more, the manufacturer does not provide support of any kind for installing and running third-party software.

### 26.3 Are software updates automatically downloaded from the Internet?

Yes.

### 26.4 Is a backup to a network drive possible?

Yes. A manual backup can also be saved to network drives.

### 26.5 Why does the Wireless Professional application keep restarting?

To ensure continuous monitoring of the self-contained emergency luminaires, the Wireless Professional software must be active at all times. The WLZent3 has a so-called WatchDog mechanism, which checks every 30 seconds whether the Wireless Professional application is running. If this is not the case, the Wireless Professional software is restarted.

### 27 Revision History

Wireless Professional WLZent – Operating Instructions		
Date	Version / Revision	Comments/Important changes compared to the previous version
01/12/2020	1.0	Creation
07/09/2021	1.1	Change to additional cable entry for fault indication contact
15/02/2023	1.2	Wireless connection added, text editor added
29/01/2024	1.3	Change for new OS
15/08/2024	1.4	

### 28 Contact Information

