

WirelessProfessional WLZent

Operating Instructions



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1 General Information

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/`.

2 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

3 Structure

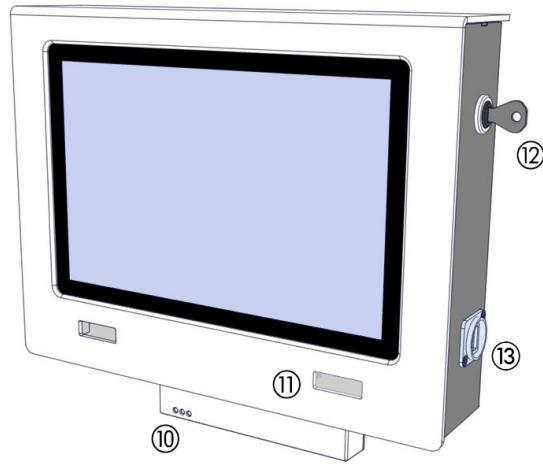


Figure 1 View of WLZent from left

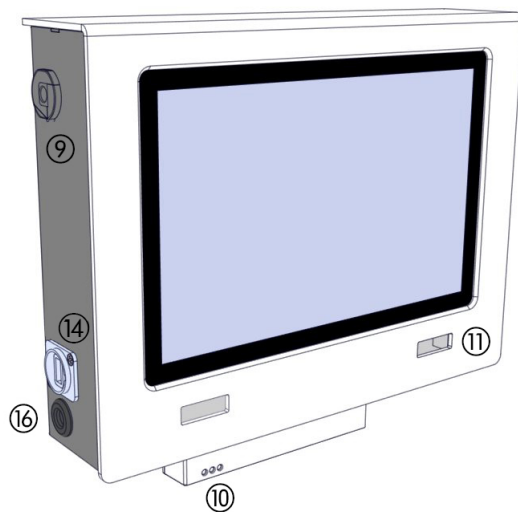


Figure 2 View of WLZent from right

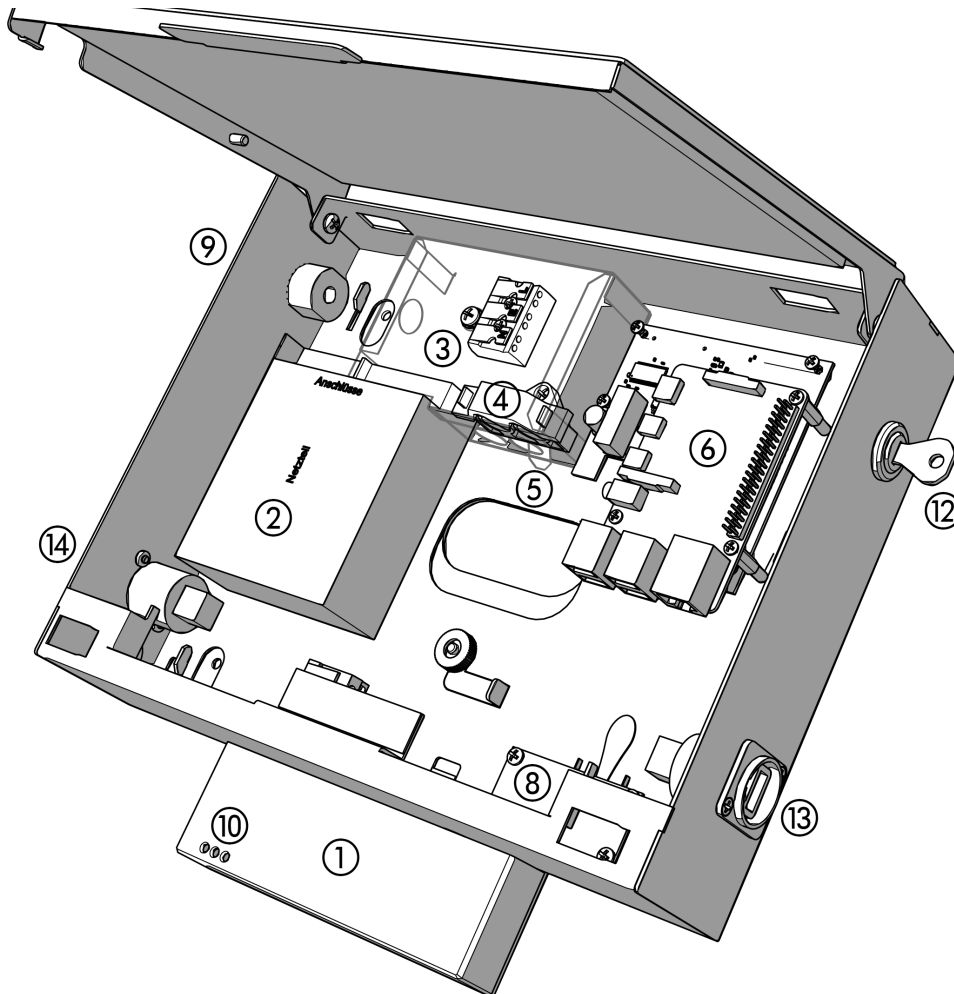


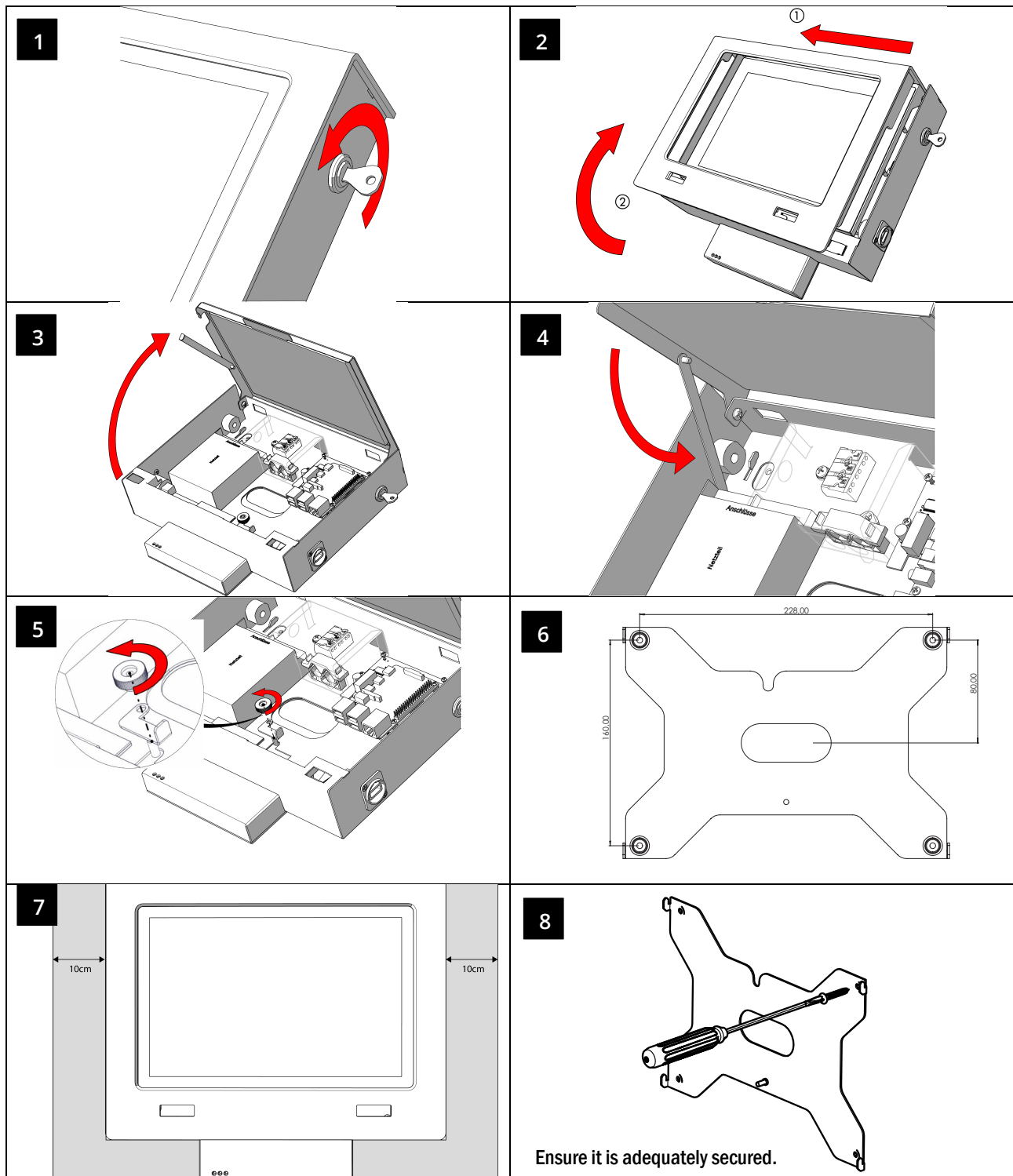
Figure 3 WLZent internal components

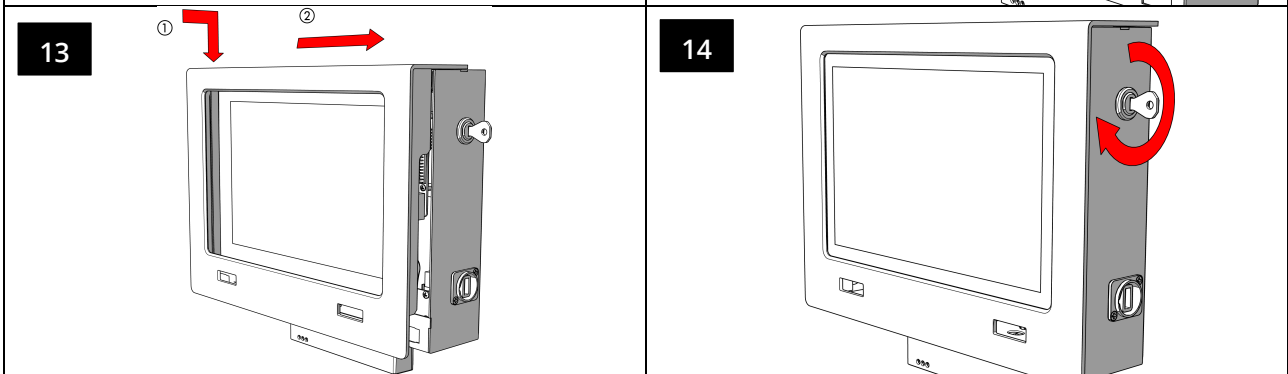
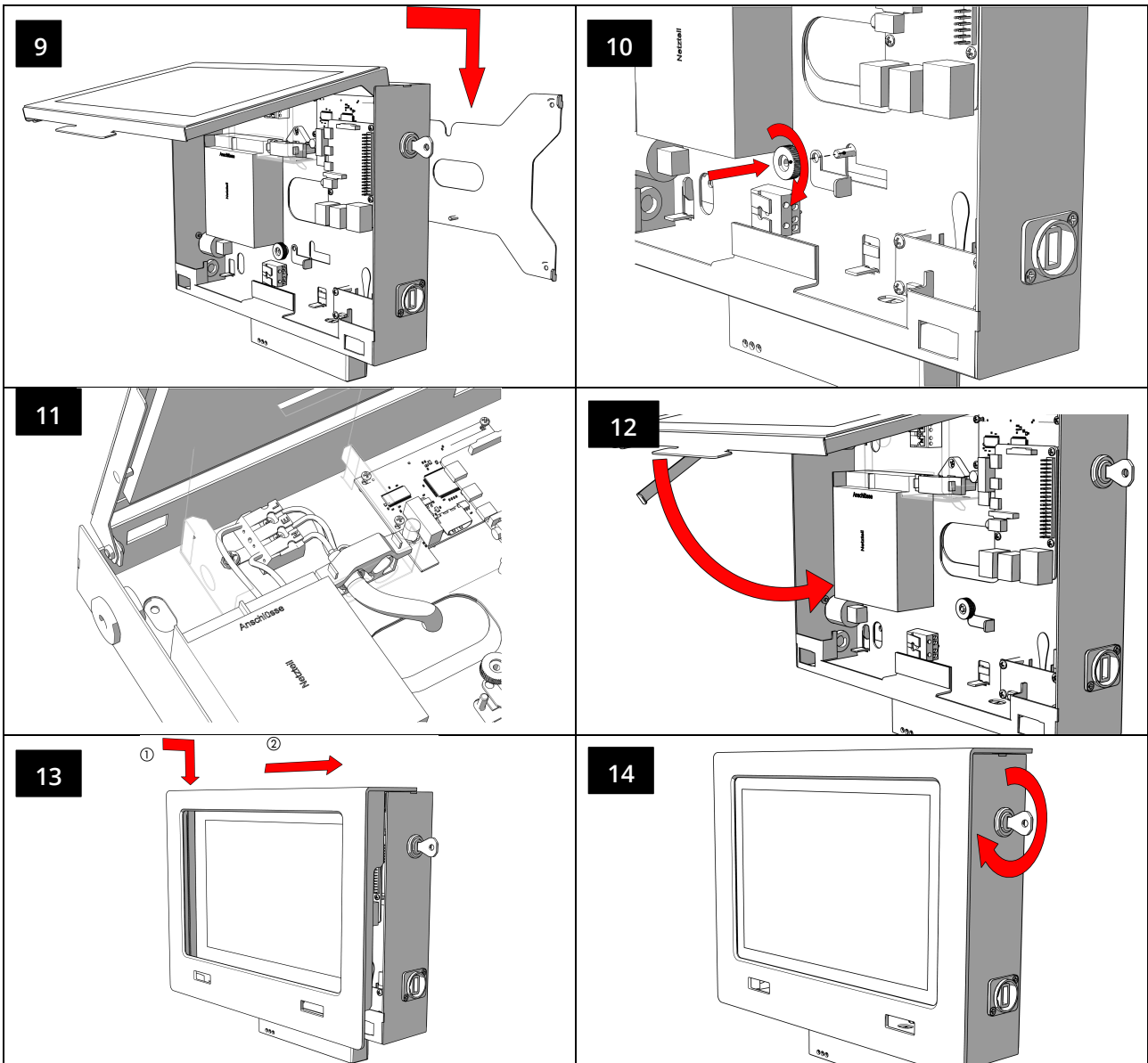
1	Wireless coordinator	9	Optional cable entry point on side with strain relief Or blanking plug
2	Power supply	10	Indicator window for coordinator
3	Mains supply terminal	11	Indicator window for WLZent processor board
4	Internal strain relief	12	Casing lock
5	Junction box	13	Network socket
6	WLZent processor 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

4 Assembly Instructions for Wireless Professional WLZent

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

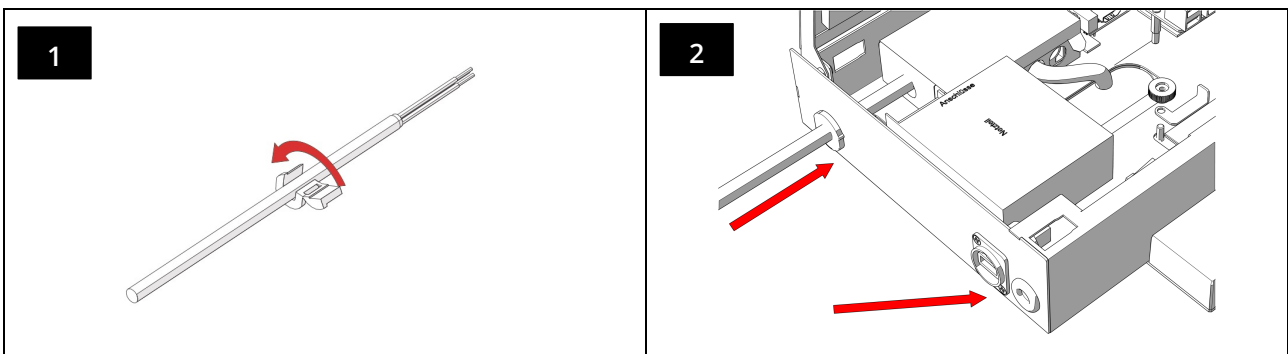
For ergonomic reasons, we would recommend mounting at a height of 1.40m (± 0.20 m) (centre of screen).





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).



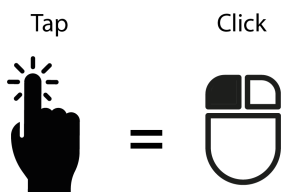
5 Operating the Wireless Professional WLZent

The Wireless Professional WLZent is operated using a Touchdisplay (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.

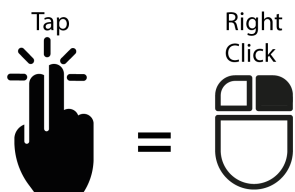
5.1 Touch operation

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.



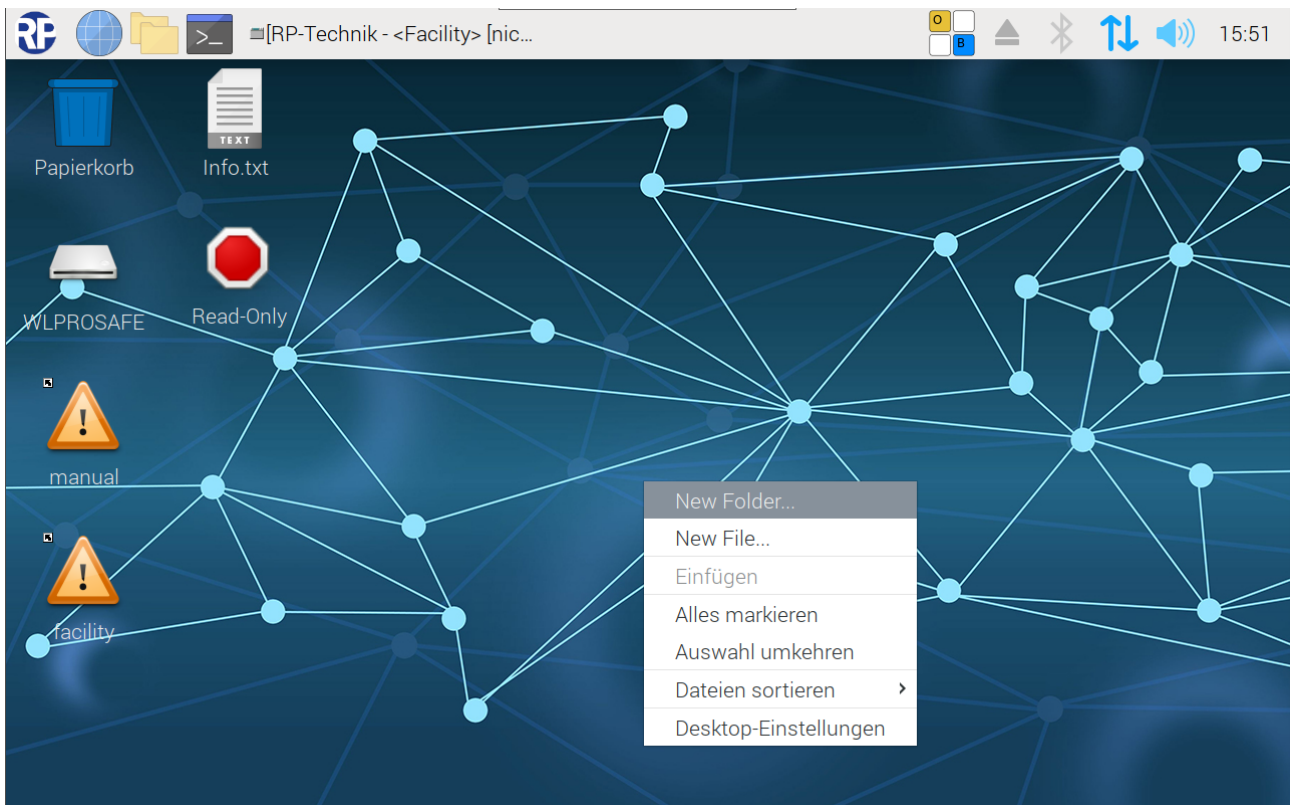
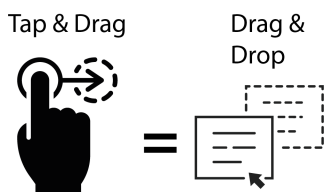
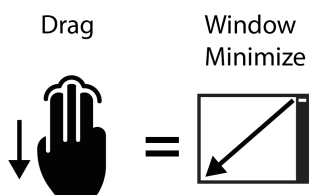


Figure 4 Wireless Professional WLZent context menu

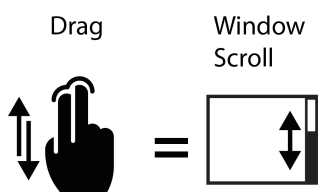
To use the drag and drop function, start by tapping on an object. It can then be moved by tapping on it and dragging it.



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



5.2 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 “Onboard anzeigen” for the keyboard to be displayed.

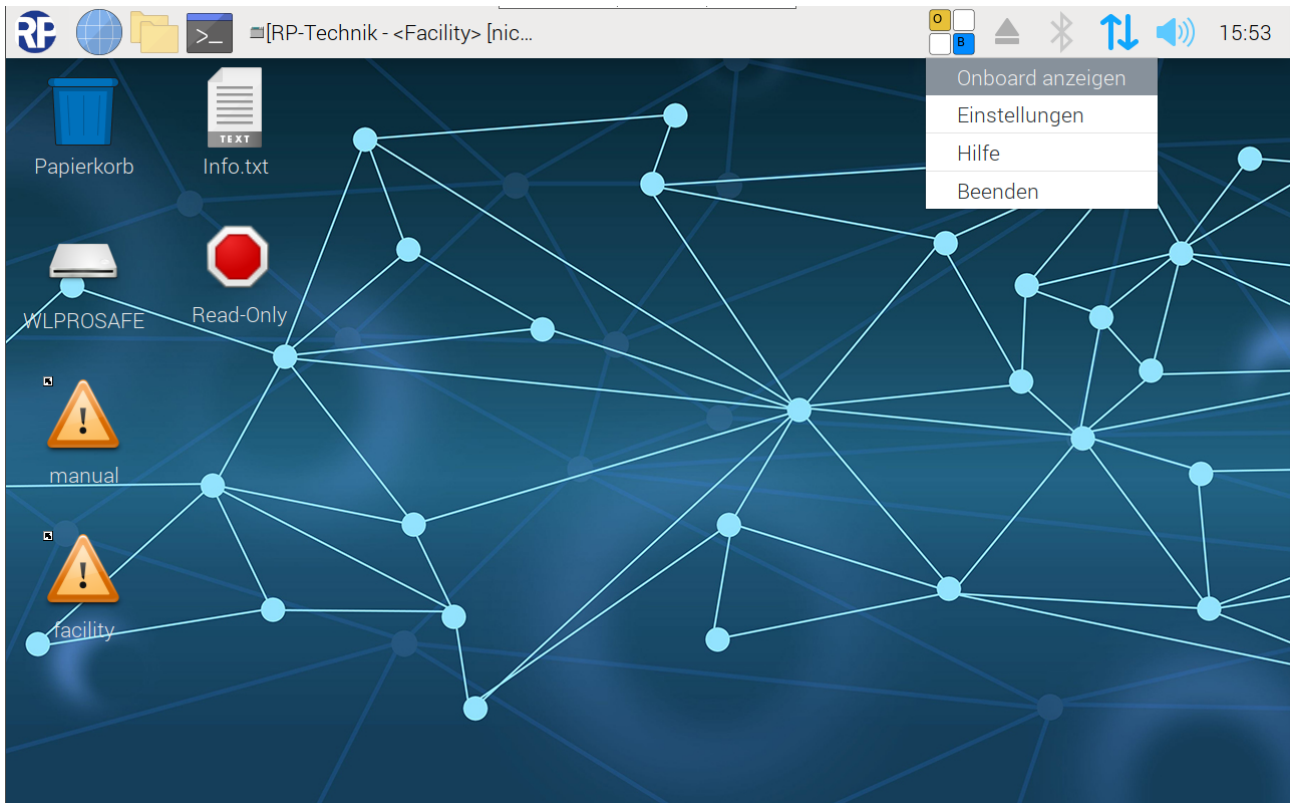


Figure 5: Onboard context menu

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

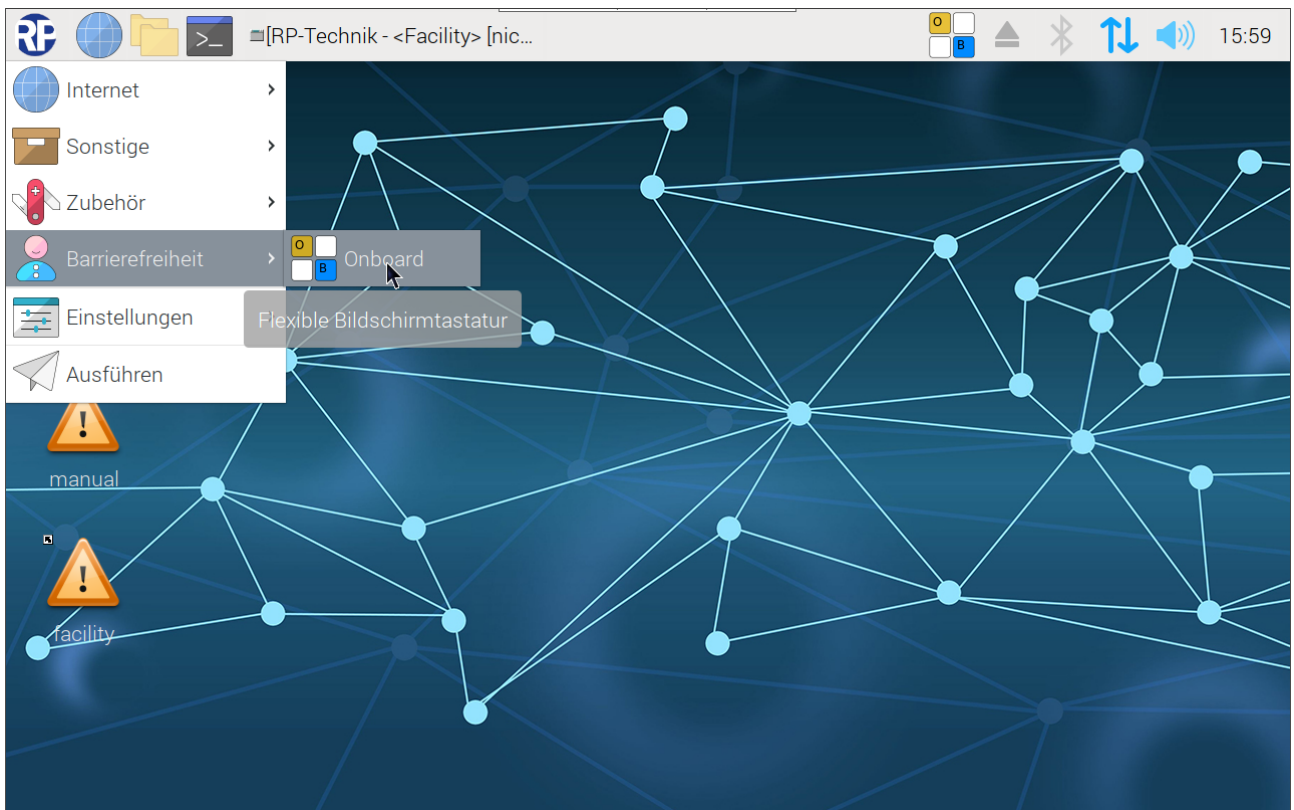


Figure 6 Onboard Start menu

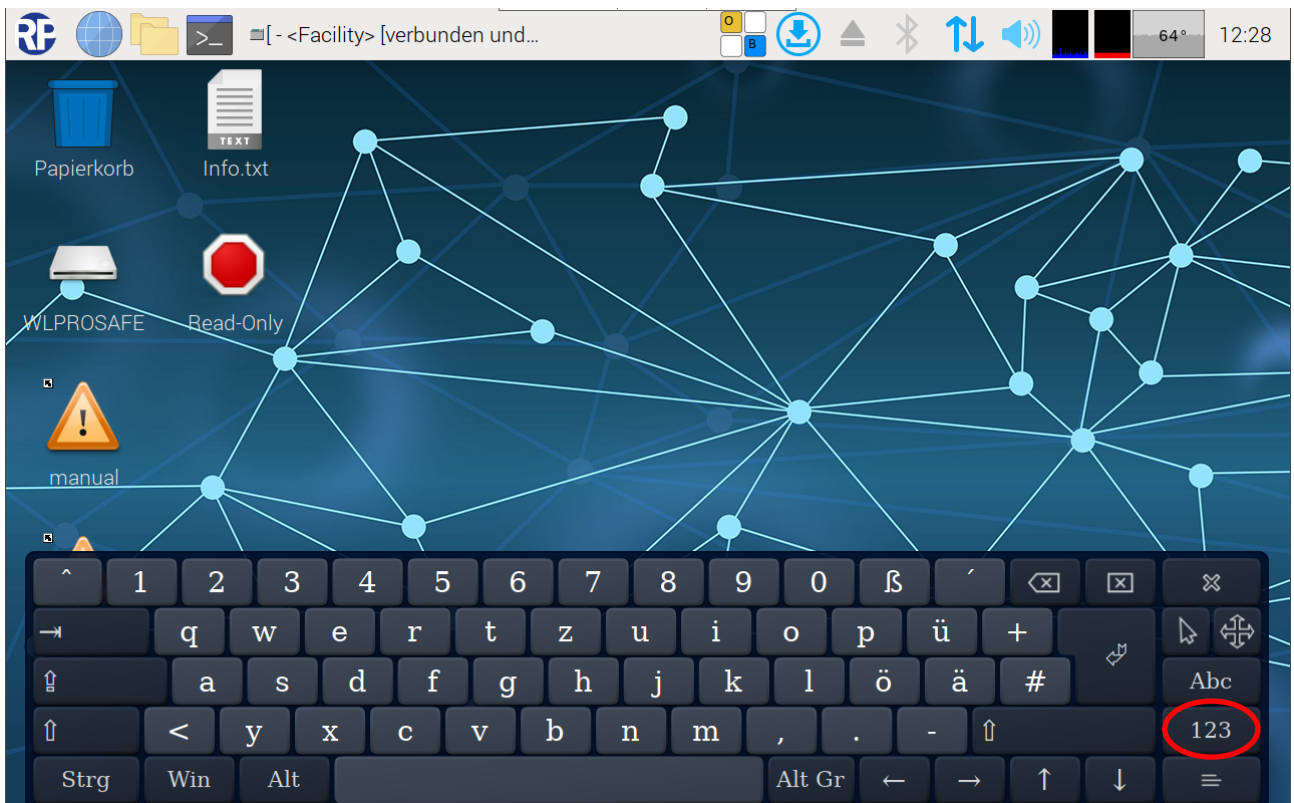


Figure 7 Wireless Professional WLZent on-screen keyboard


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.

5.3 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-Buchse (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.

5.3.1 Ejecting via taskbar symbol

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

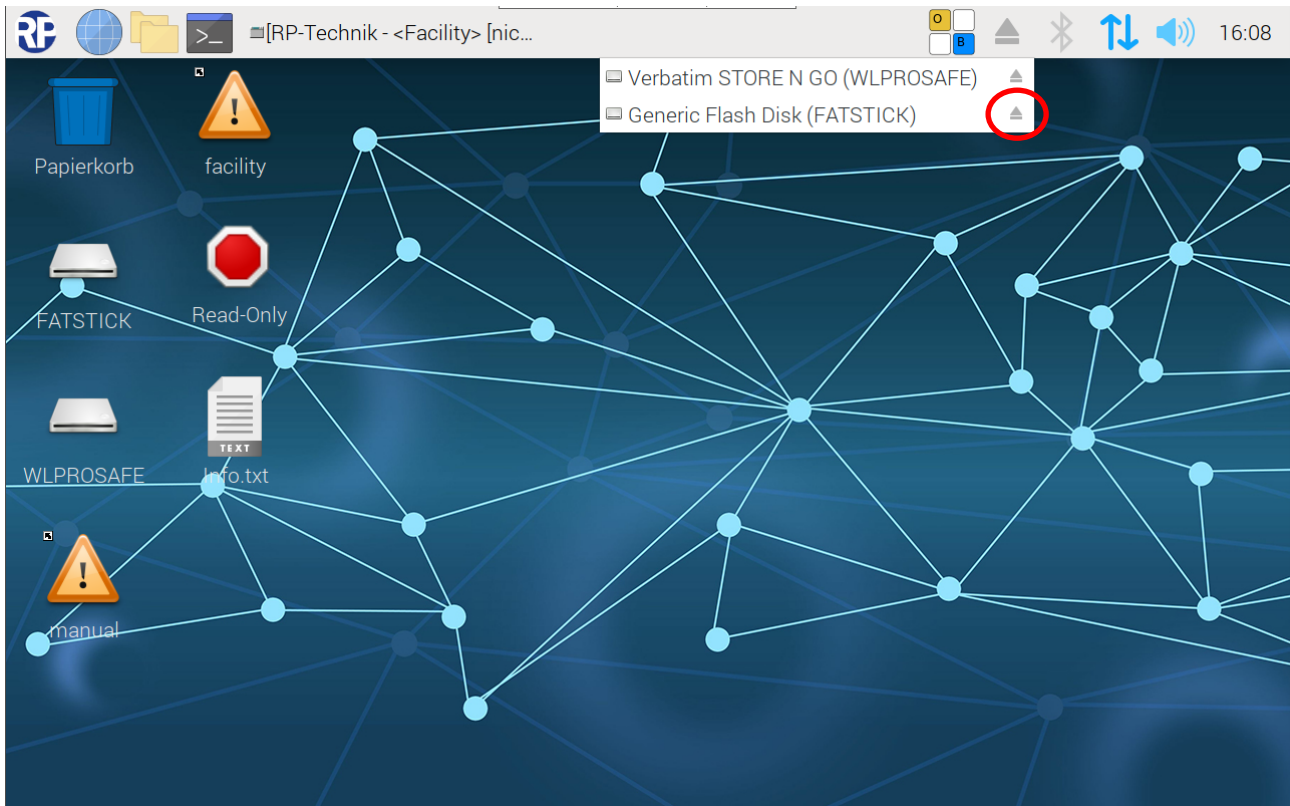


Figure 9 Ejecting storage medium

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

5.4 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)



6 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 persistent 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 persistent 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.

7 Maintenance Mode

In Maintenance mode, persistent 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.

7.1 Launching Maintenance mode

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

Start menu->Sonstige->Maintenance Mode

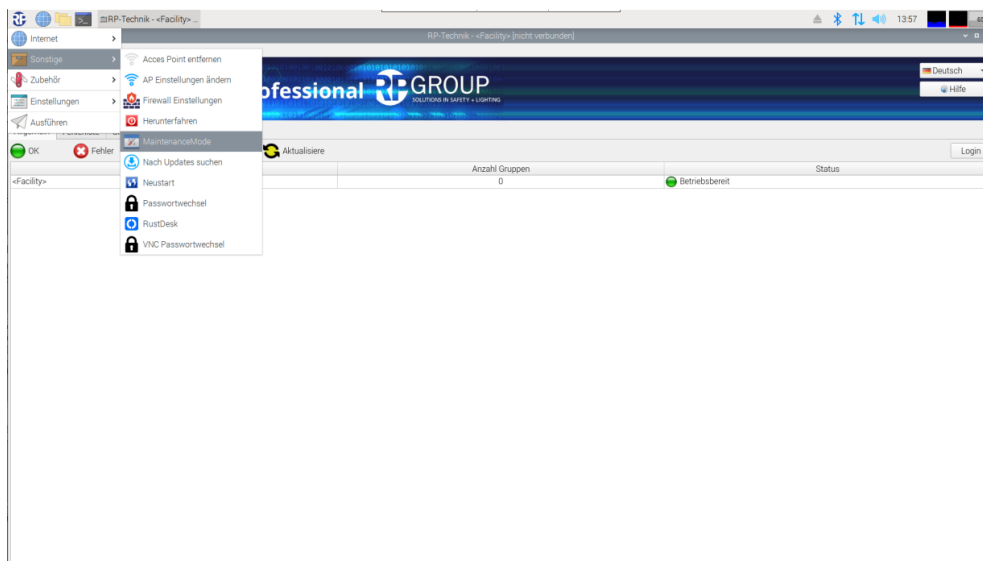


Figure 10 Launching Maintenance mode

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 6).

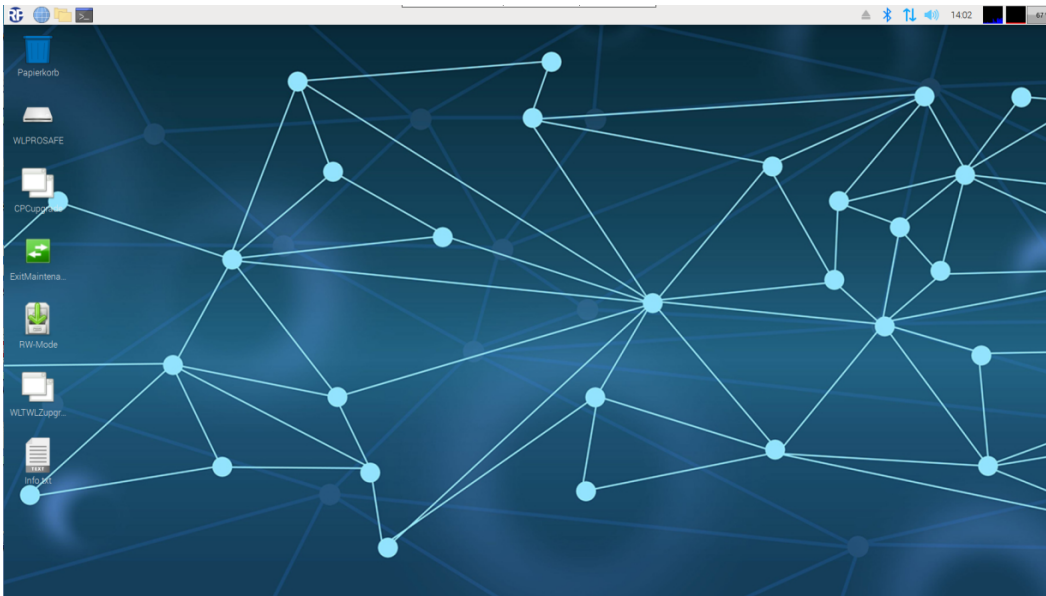


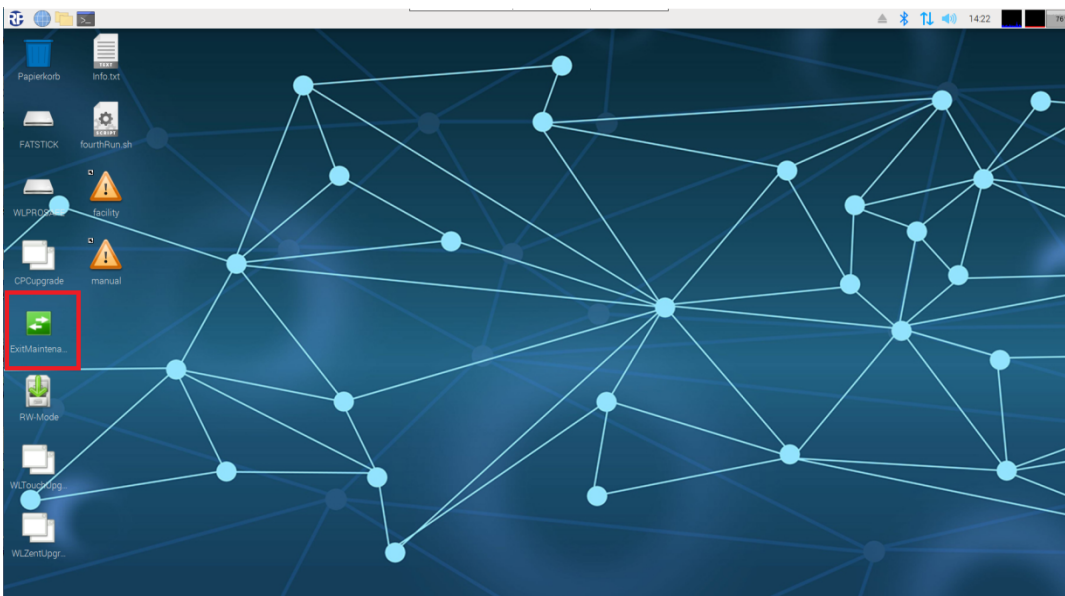
Figure 11 Desktop in Maintenance mode

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

7.2 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 8.4 or the device is shut down as described in Section 8.5, the Wireless Professional WLZent reboots in Maintenance mode.

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



Once this has been done, the “Datei ausführen” window is reopened. The “Ausführen im 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.

8 Commissioning the Wireless Professional WLZent

8.1 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. Hierzu die Leitung in das Gehäuse führen und dort in der Anschlussbox (5) auf die 3 polige Klemme (3) auflegen. Nach dem Anschluss der Leitung ist die Anschlussbox zu schließen (siehe Kapitel 4).



!Warning: The cable should be guided through one of the strain reliefs present (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.

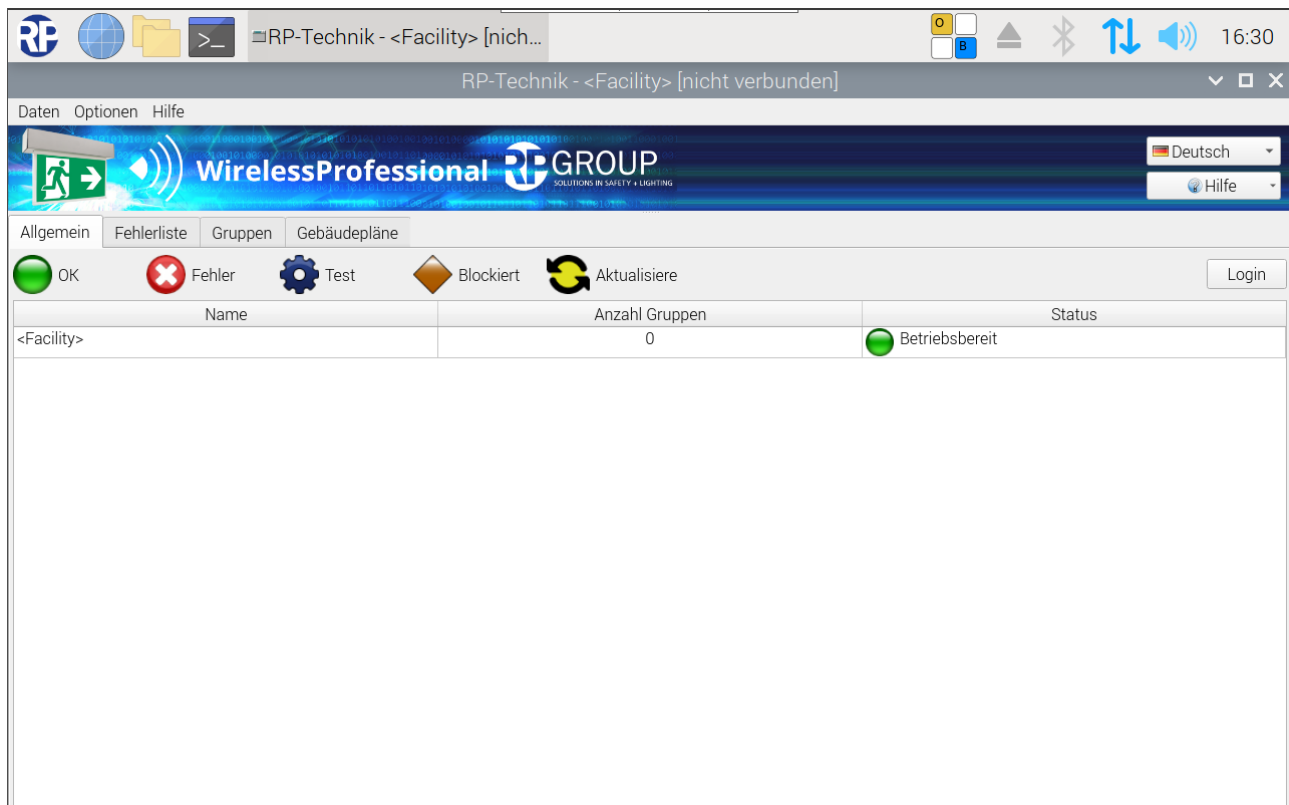


Figure 12 Wireless Professional software in full-screen mode

The software manual explains how to operate the Wireless Professional PC software.

8.2 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.

8.3 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.

8.4 Rebooting the Wireless Professional WLZent

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

8.4.1 Software restart

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



!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.

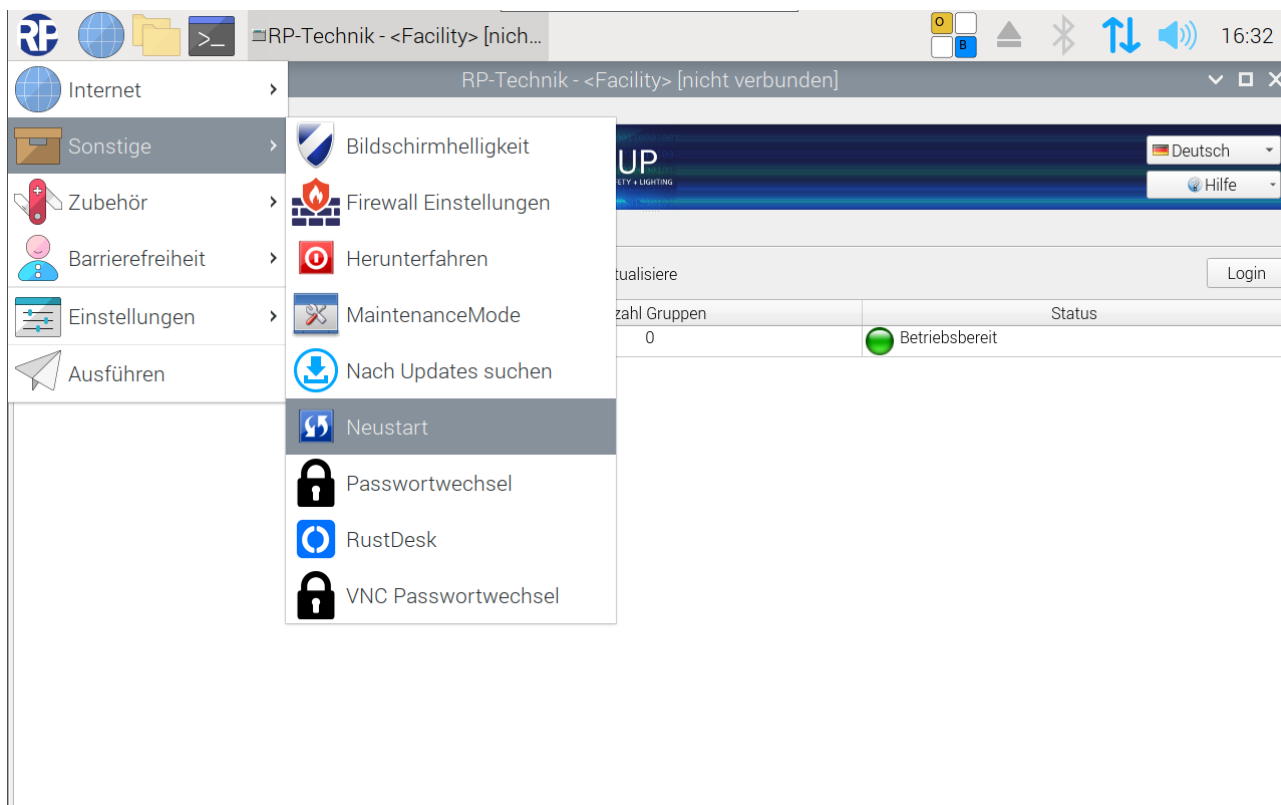


Figure 13 Wireless Professional WLZent Start menu Sonstiges Neustart

If the Start menu is not displayed (siehe Abb. 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.

8.4.2 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.

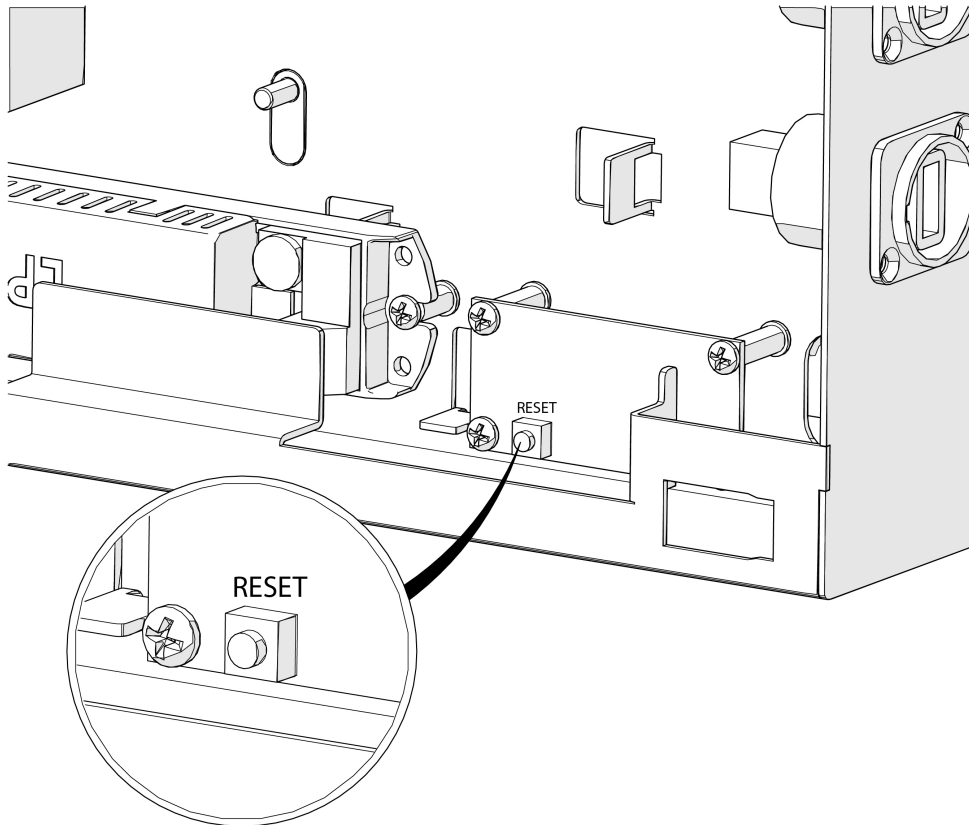


Figure 14 Position of the Reset button

8.5 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 “Anlage Speichern” button or by closing the Wireless Professional software. This step is not necessary with Wireless Professional software version 3.0 and higher.

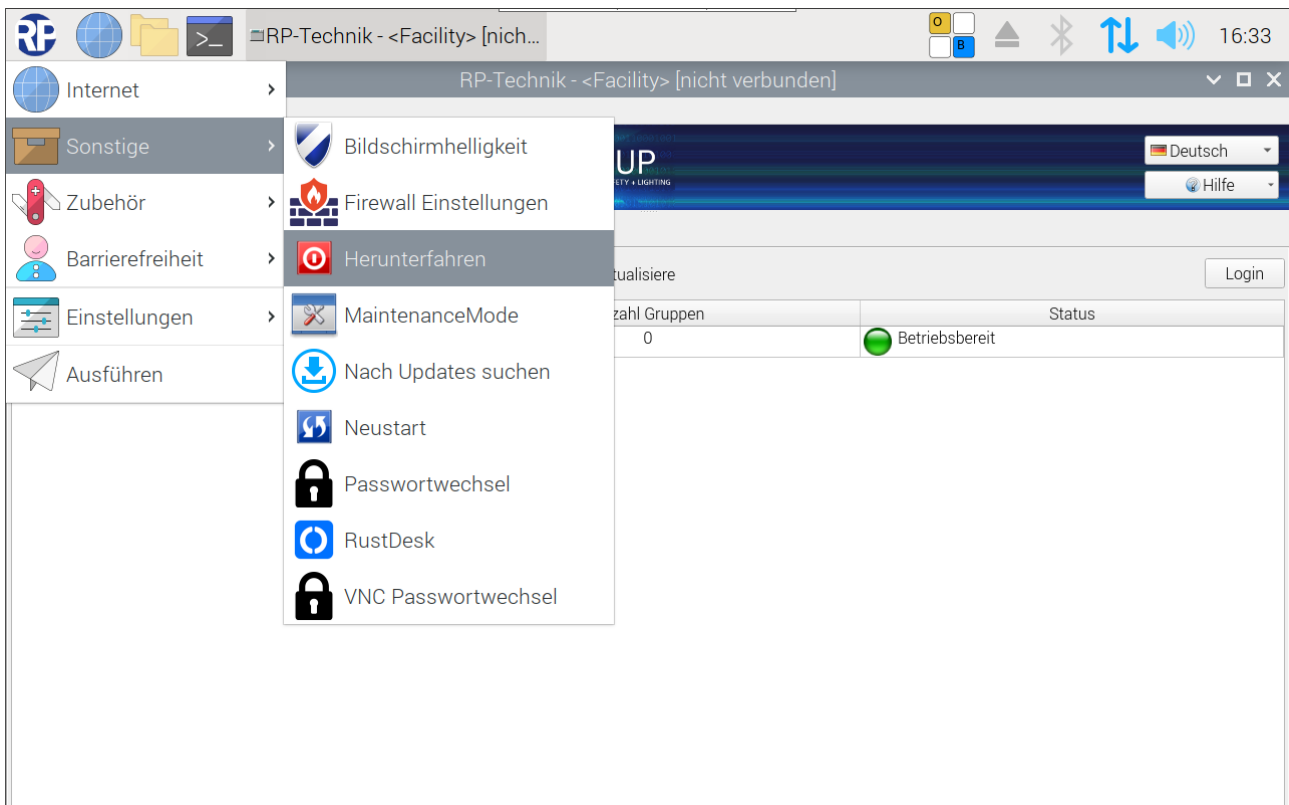


Figure 15 WLZent Start menu Sonstiges Herunterfahren

The device is shut down by going to Start menu->Sonstiges->Herunterfahren. 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.

9 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.

10 Screensaver

There is a screensaver program installed on the Wireless Professional WLZent. The screensaver is 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.

There are presently no options for the end user to change the screensaver settings.

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

11 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->Sonstiges->Bildschirmhelligkeit.

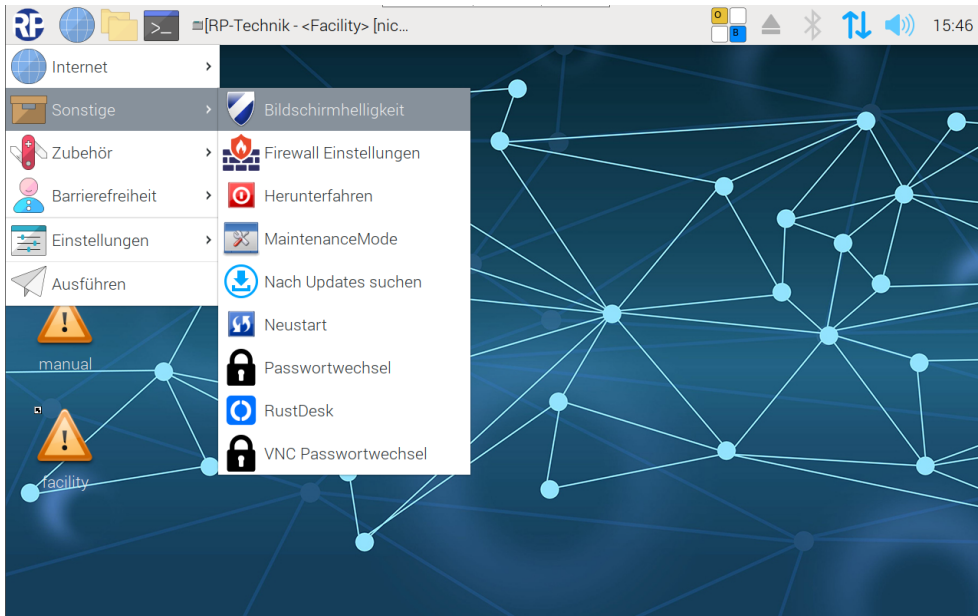


Figure 16 WLZent Start menu Sonstiges Bildschirmhelligkeit

The "Configurations" window opens.

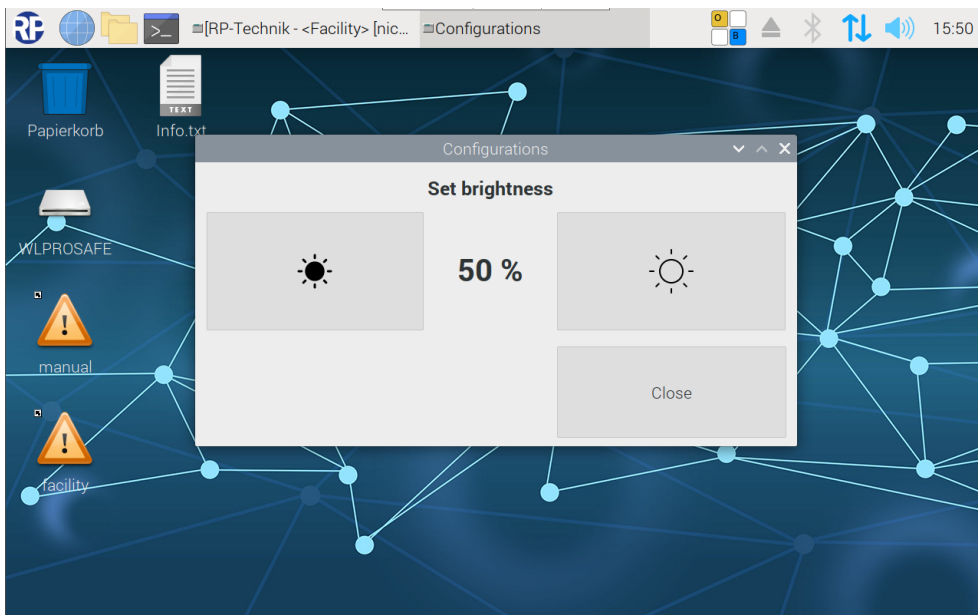


Figure 17 "Configurations" screen brightness

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.

12 Changing WLZent Passwords

The WLZent passwords issued upon delivery are noted in the accompanying info sheet and in the Info file on the WLZent desktop.

Note: We would recommend changing the passwords when commissioning the WLZent.



!Warning: The WLZent passwords may only be changed using the methods described here.

The passwords must not be changed via the terminal or in any other way as this may upset the WLZent operating process. If this is done, the warranty will cease to apply.

Note: Password changes should be adequately documented

Note: Before changing a password, a manual backup should be performed (see 22.2 Manual backup) because otherwise the Wireless Pro database is not transferred to the backup stick and data may be lost.

12.1 Changing WLZent user password

The WLZent user password is changed by going to the Start menu and selecting “Sonstige”. Start menu->Sonstige->Passwortwechsel

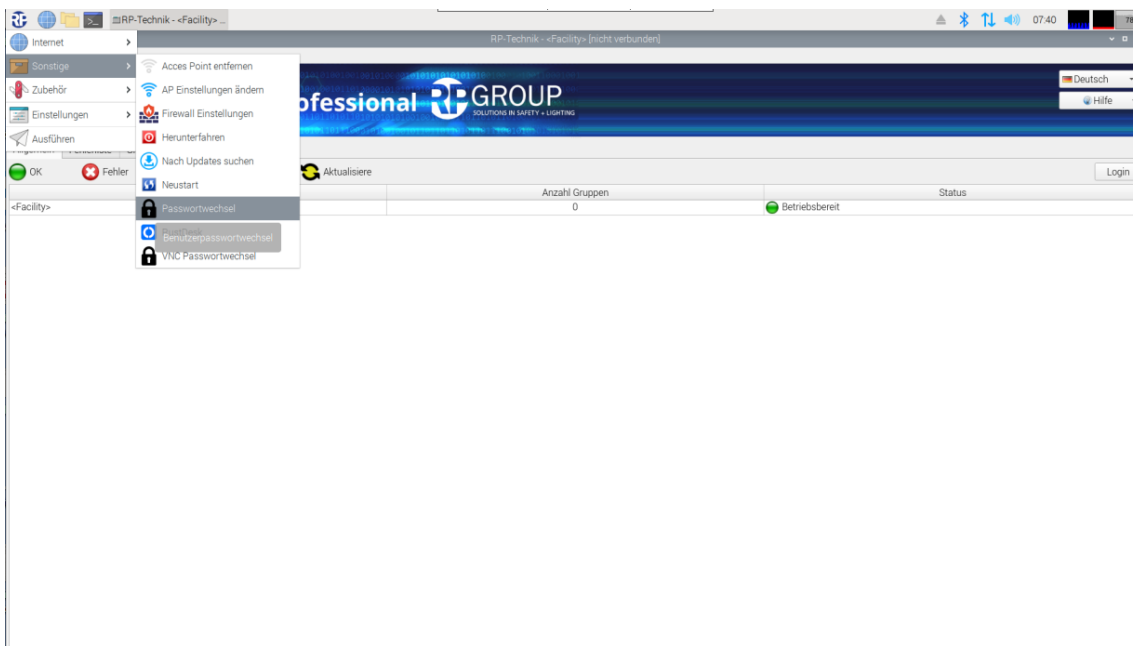


Figure 18 Changing password

Once “Passwortwechsel” has been selected, the “User Password Change” window appears.

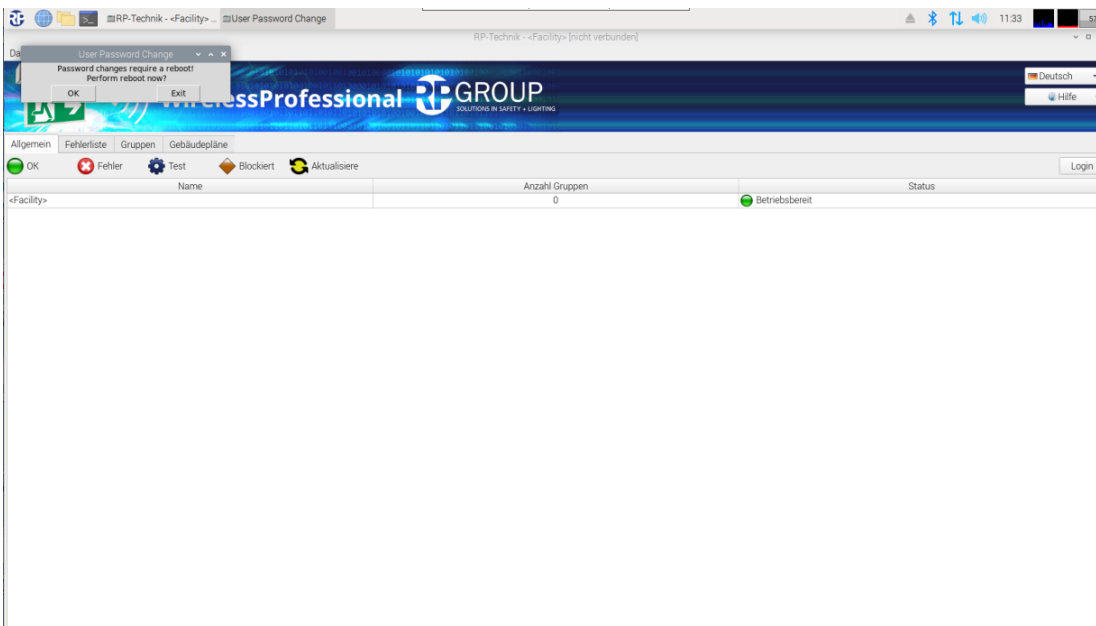


Figure 19 Changing password

The "User Password Change" window should be confirmed by clicking on OK.

Note: To avoid Wireless Professional software data from being lost, the software should be saved or closed before changing passwords.

The WLZent performs a reboot and changes from read-only mode to read-write mode.

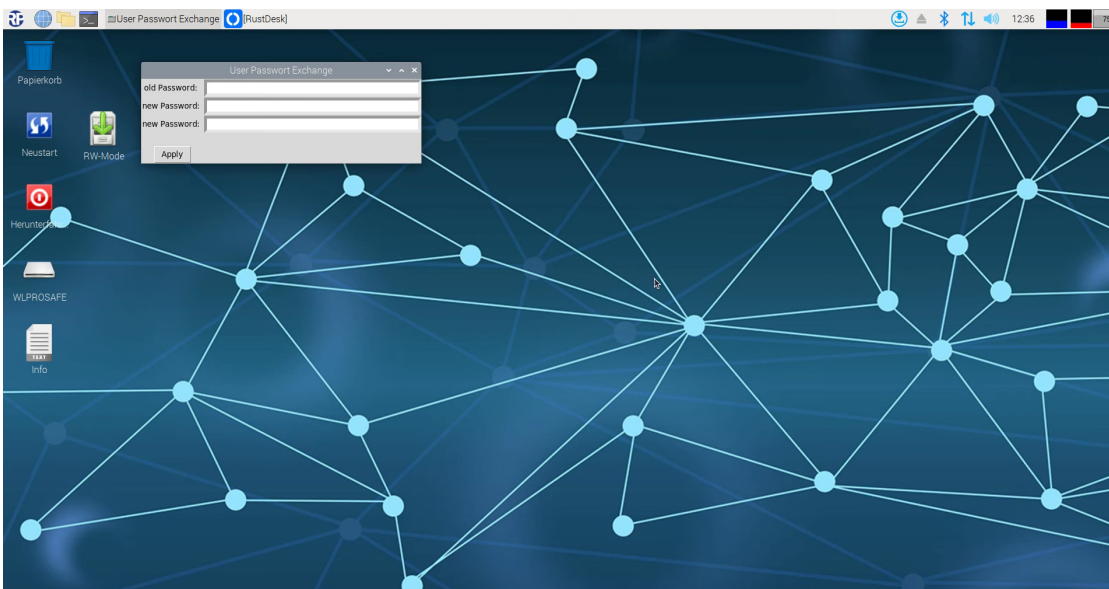


Figure 20 Entering a new password

Once the operating system has been powered up in read-write mode, the input screen for changing the user password is displayed.

Box	Meaning
Old Password	Current password
New Password	New password
New Password	Confirmation of new password

To change the password, the “Apply” button should be clicked on. To abort the process, the window should be closed using the “x” in the top right.

In both cases, the “User Password Change” window closes and the “update1reboot.png” window is displayed.

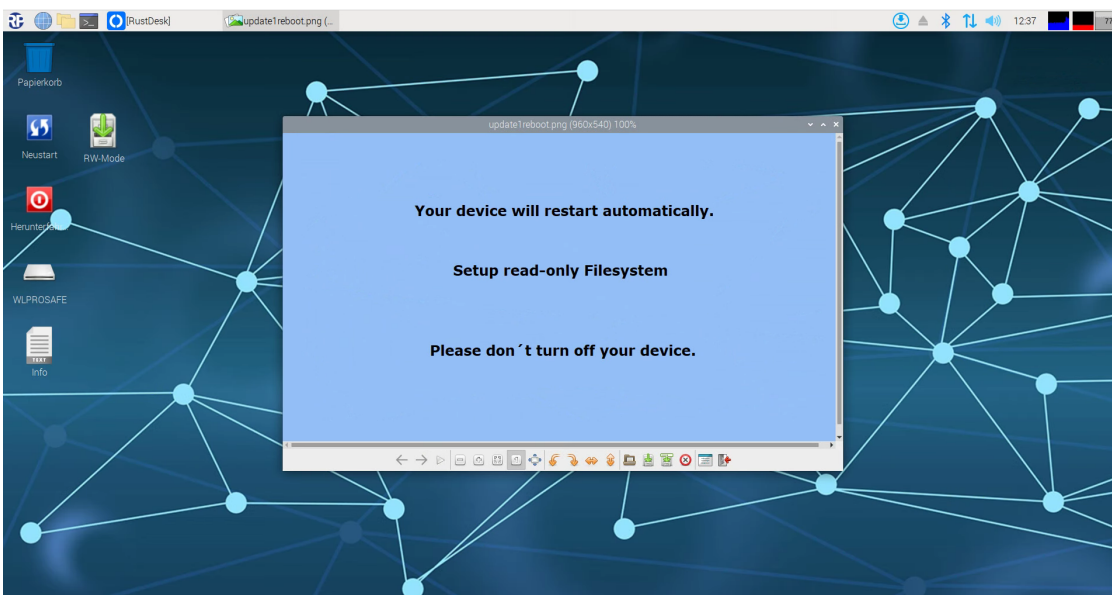


Figure 21 Reboot after a password change

Around 20 seconds after the “update1reboot.png” window appears, the operating system performs a reboot. After the reboot, the operating system is again in read-only mode.

The process for changing the password is complete.

13 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.

13.1 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 22 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 23 Taskbar with no connected Ethernet

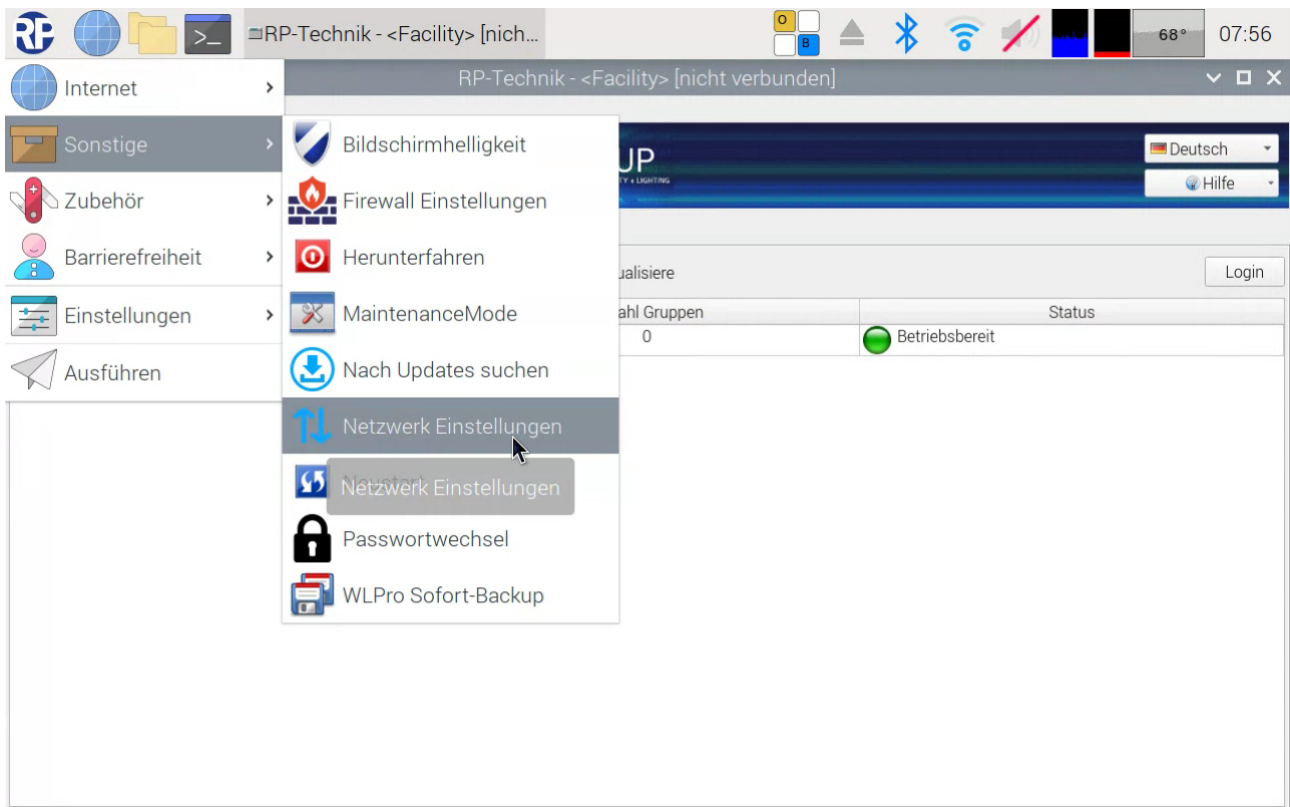
Note: If the WLZent is connected to a WLAN network at the same time, the arrow symbol is not shown.

13.1.1 Static IP address

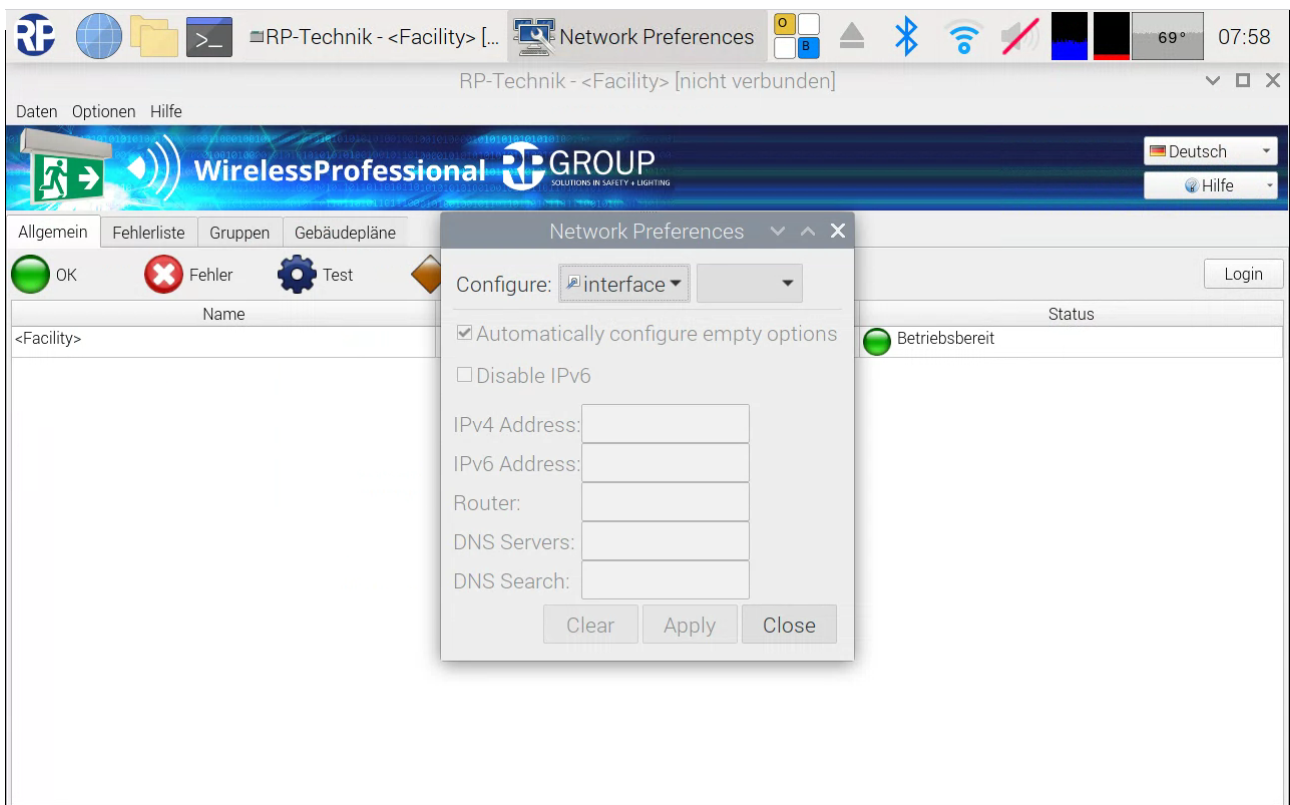
To issue a static IP address, the network settings have to be called up from the Start menu by going to “Start menu->Sonstige->Netzwerk Einstellungen”.

Note: If a static IP address is to be permanently issued, it must be entered in Maintenance mode. (see Chapter 7 Maintenance Mode)

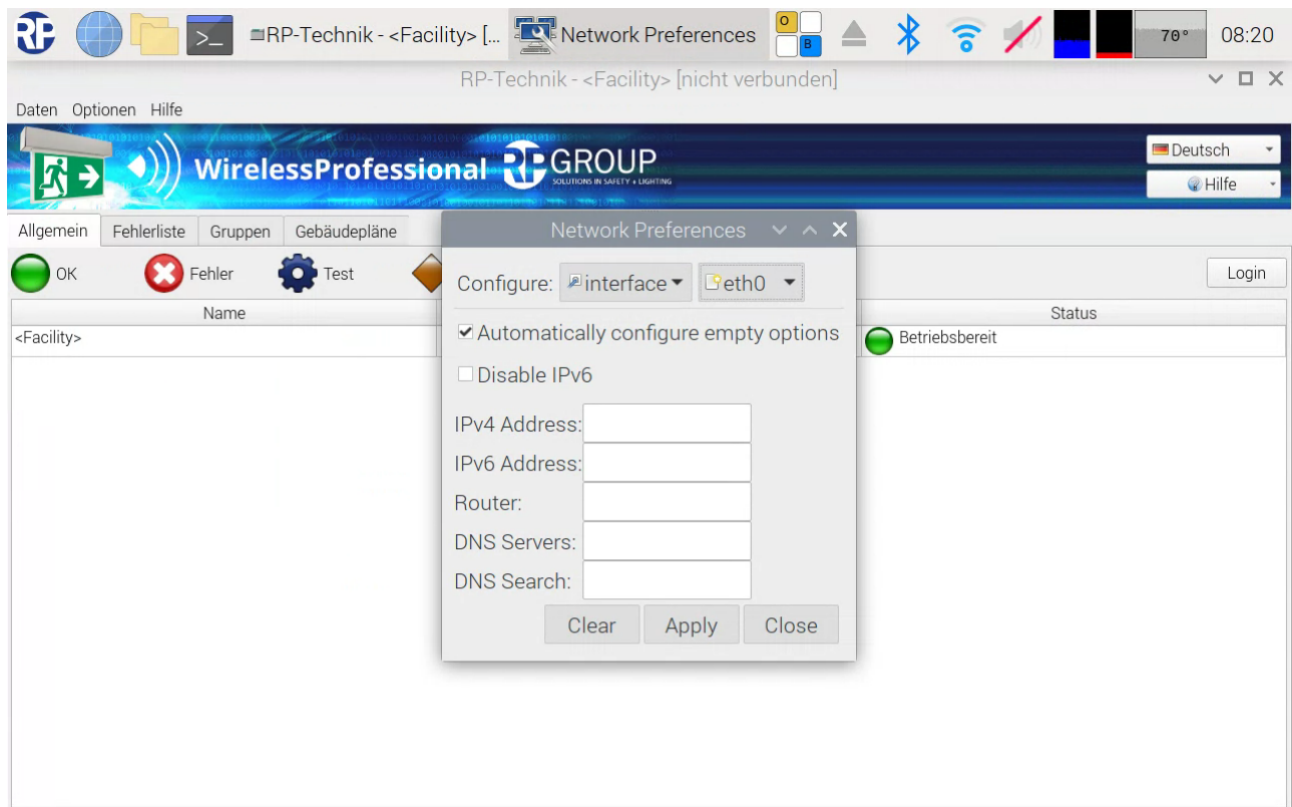
Note: The procedure for setting a static IP address for the WLAN interface is identical to that for the LAN interface; “wlan0” simply has to be selected in place of “eth0”.



The "Network Preferences" window then opens.

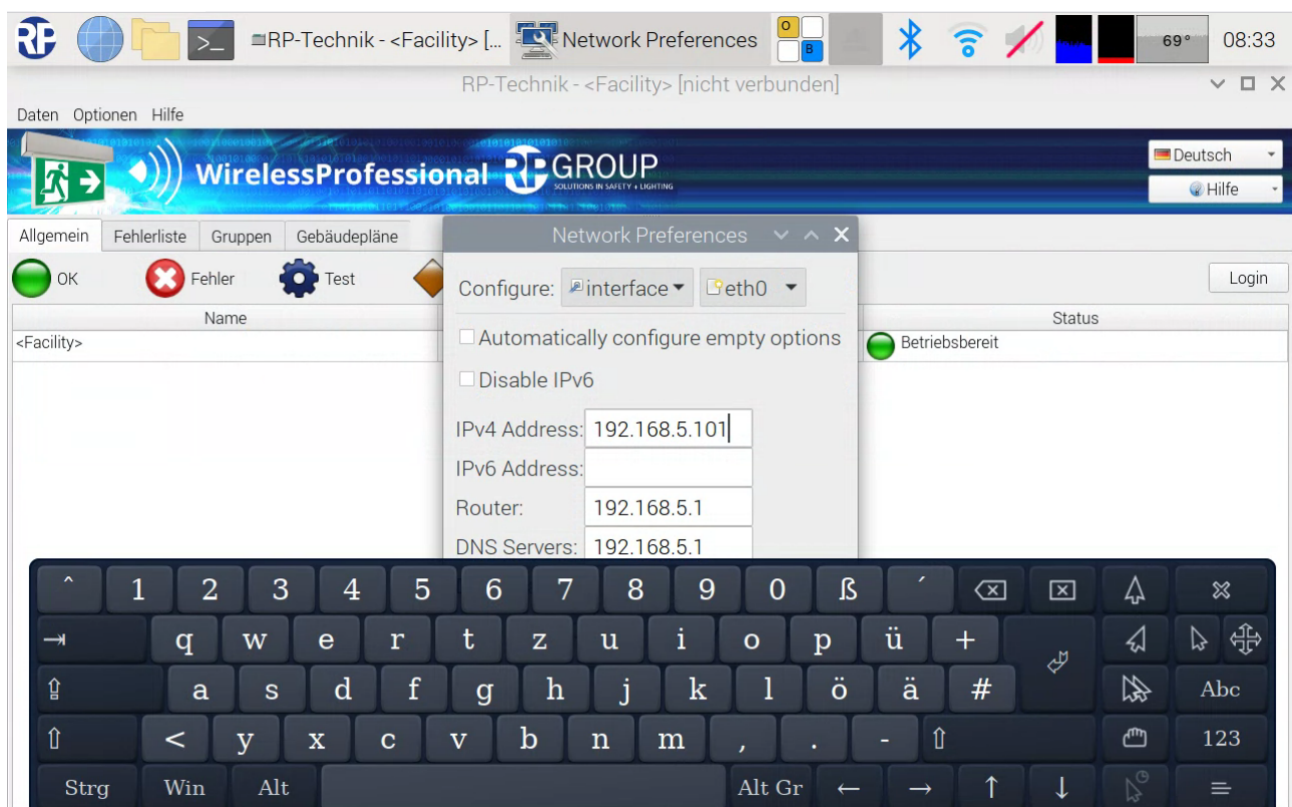


The interface for which a static IP is being set is selected from the drop-down box to the right of the drop-down box containing the word "interface". The drop down box is tapped on and the "eth0" interface (wired network, RJ45 socket) is thereby selected.



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.



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; as is the address of the router/gateway and that of 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.

13.2 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 7). Any wireless networks in range are displayed when the arrow symbol in the taskbar is tapped.

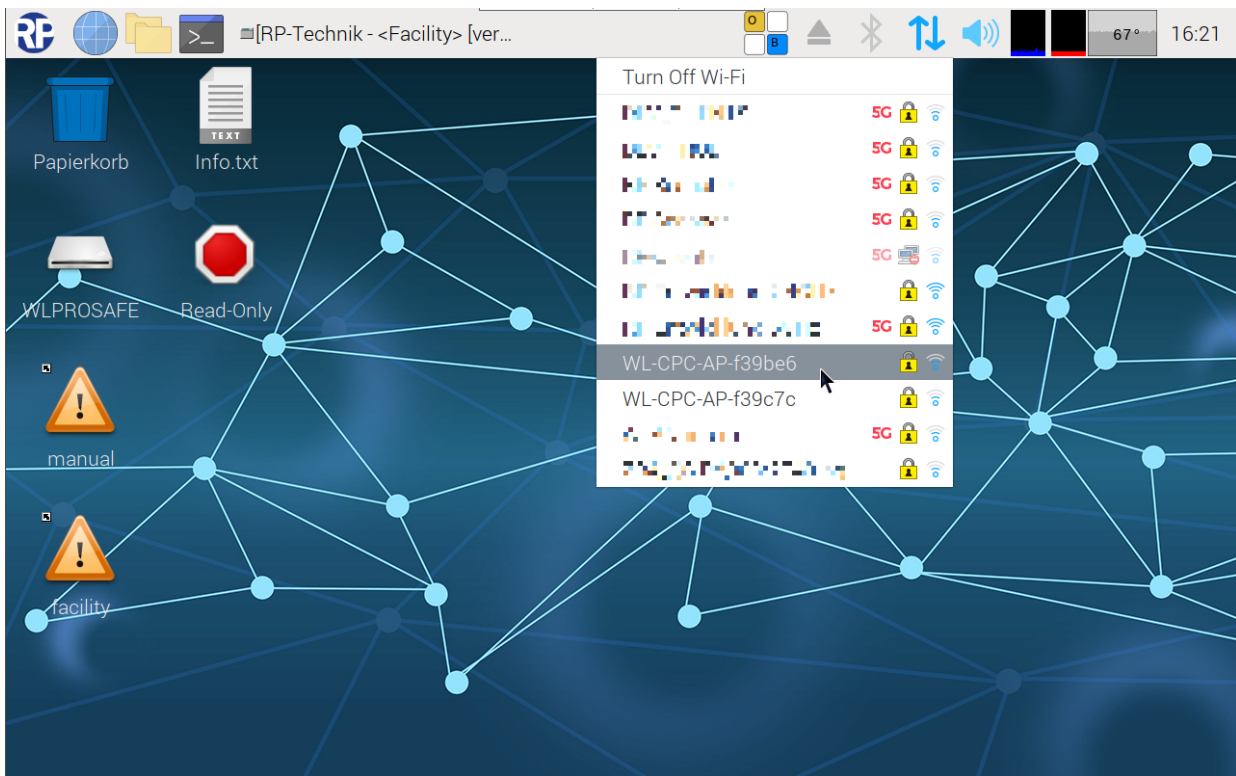


Figure 24 Available WLAN networks

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.

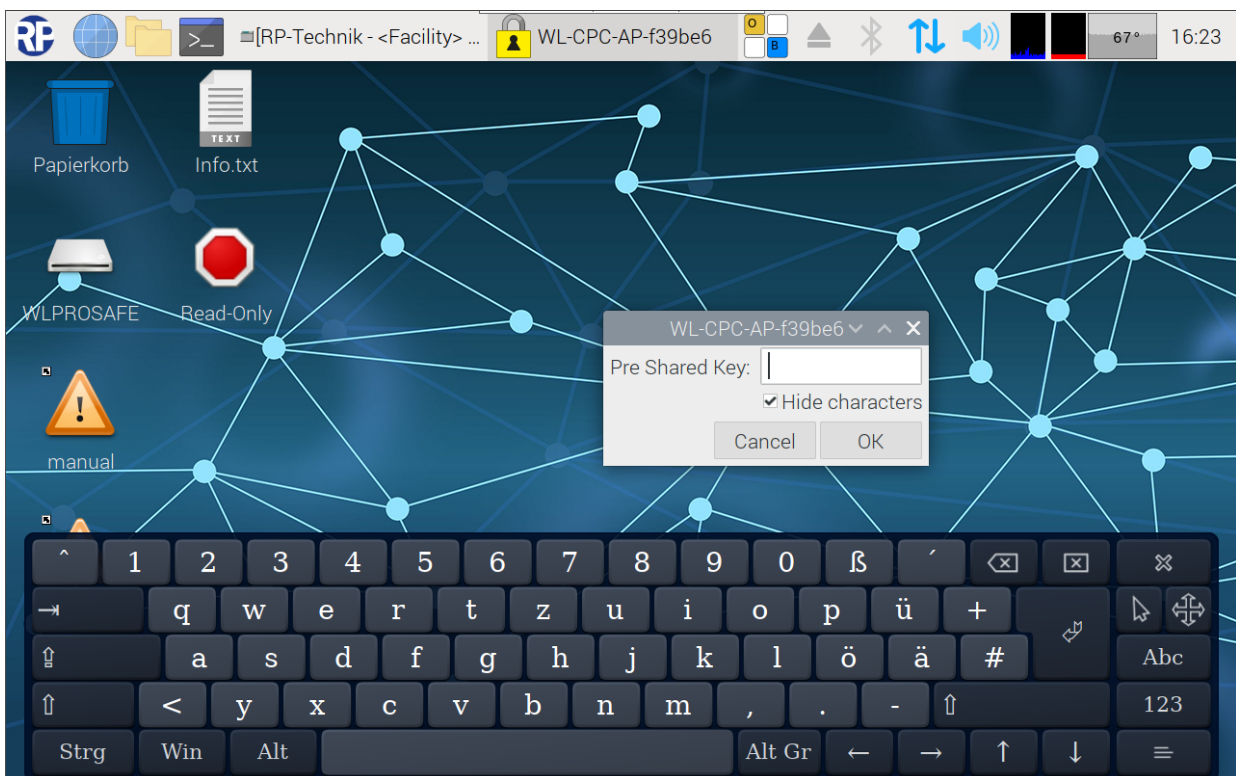


Figure 25 Entering WLAN code

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

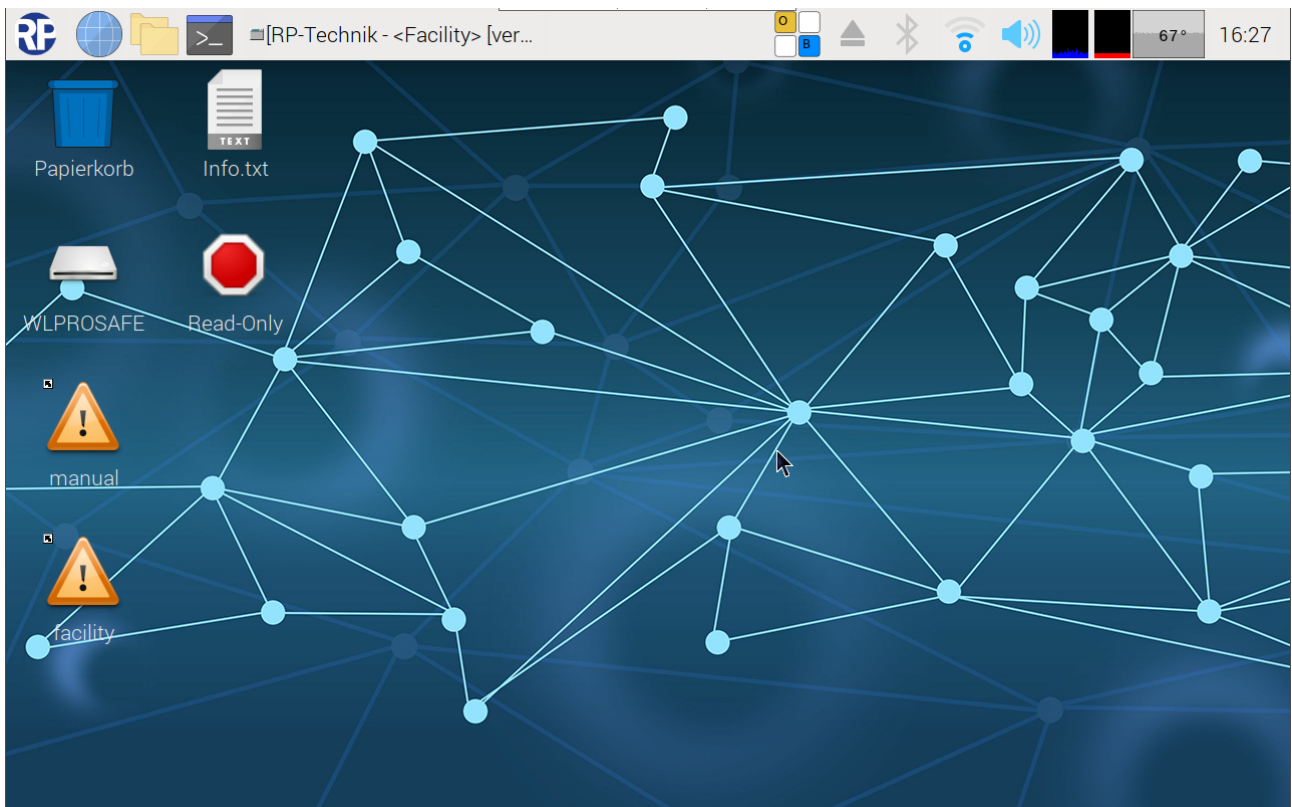


Figure 26 WLZent with connected WLAN

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.

13.3 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

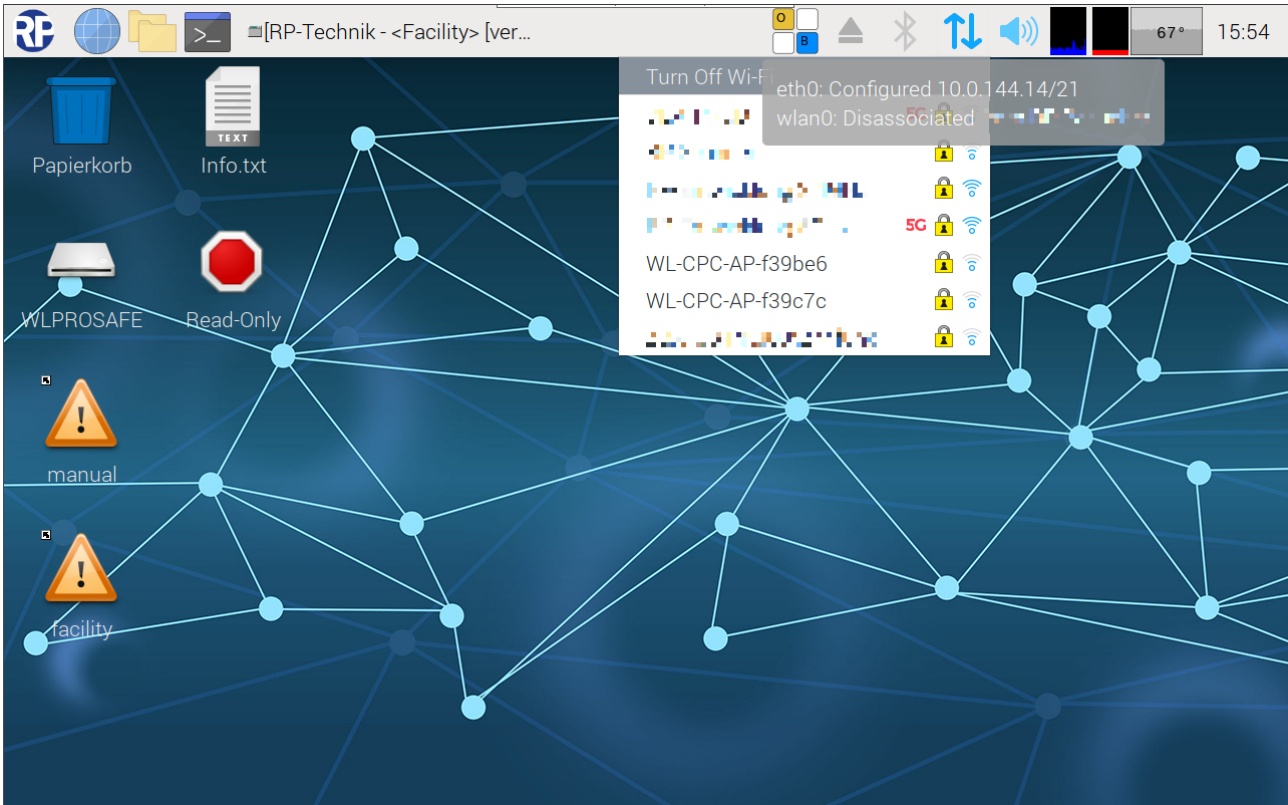


Figure 27 WLZent connection information

14 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 persistent connection, the Wireless Professional WLZent must be switched to Maintenance mode (see Section 7)

14.1 Enabling Bluetooth

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

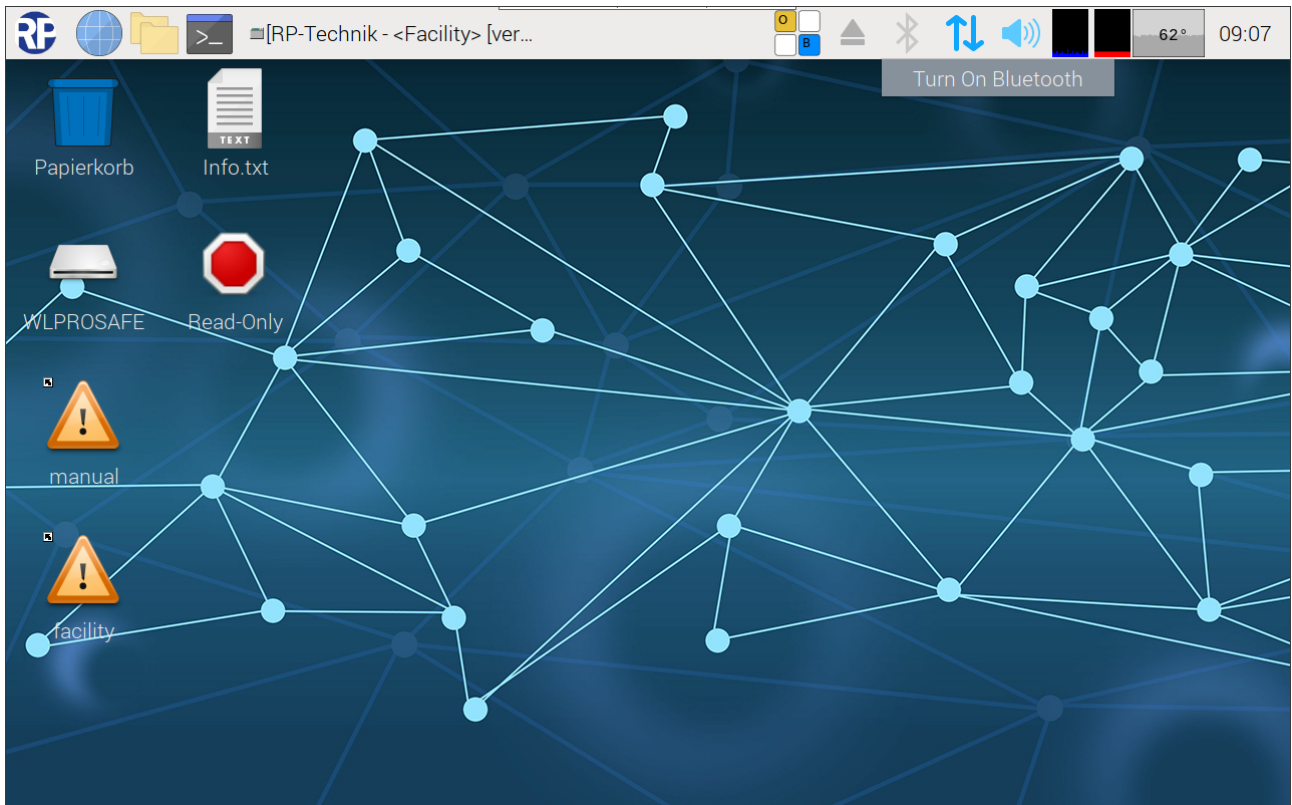


Figure 28 Enabling Bluetooth

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



Figure 29 Bluetooth taskbar enabled

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

14.2 Disabling Bluetooth

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

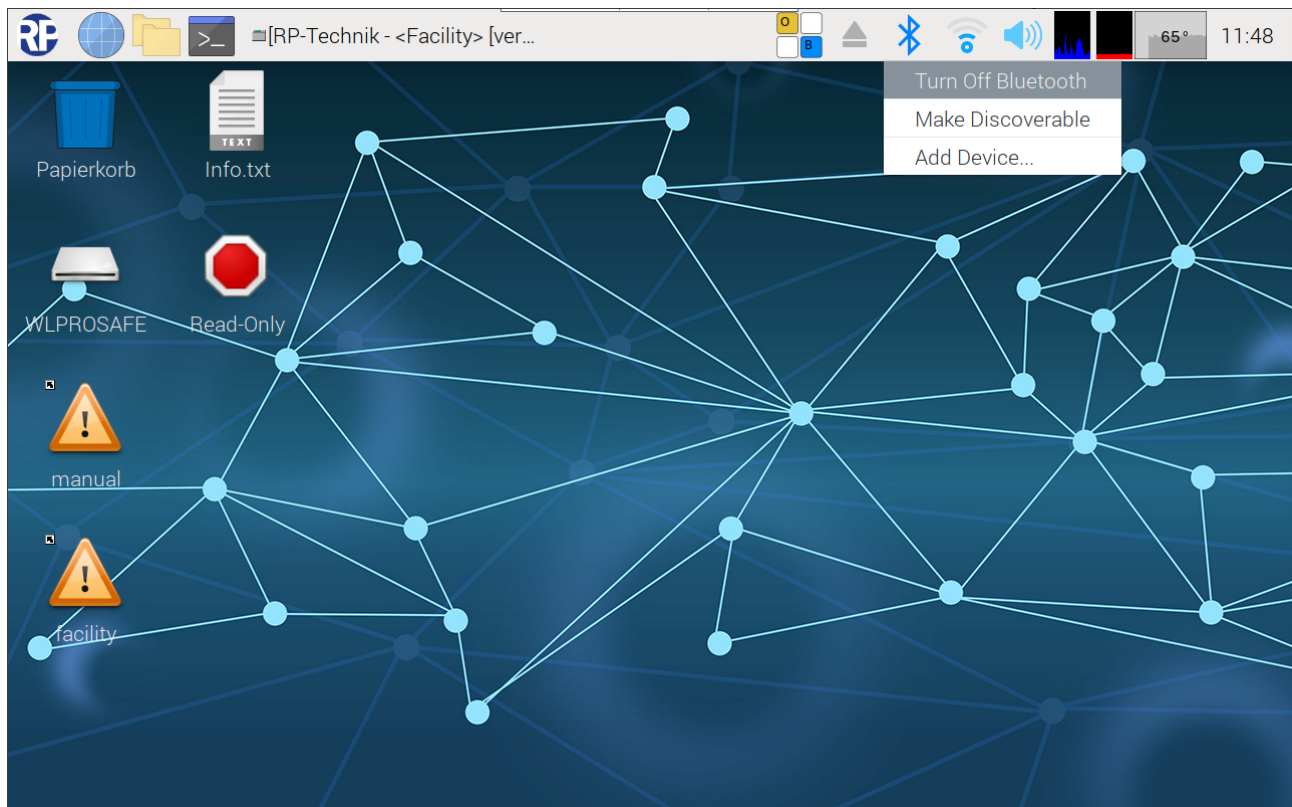


Figure 30 Disabling Bluetooth

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 28 Enabling Bluetooth

14.3 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 30 Disabling Bluetooth).

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

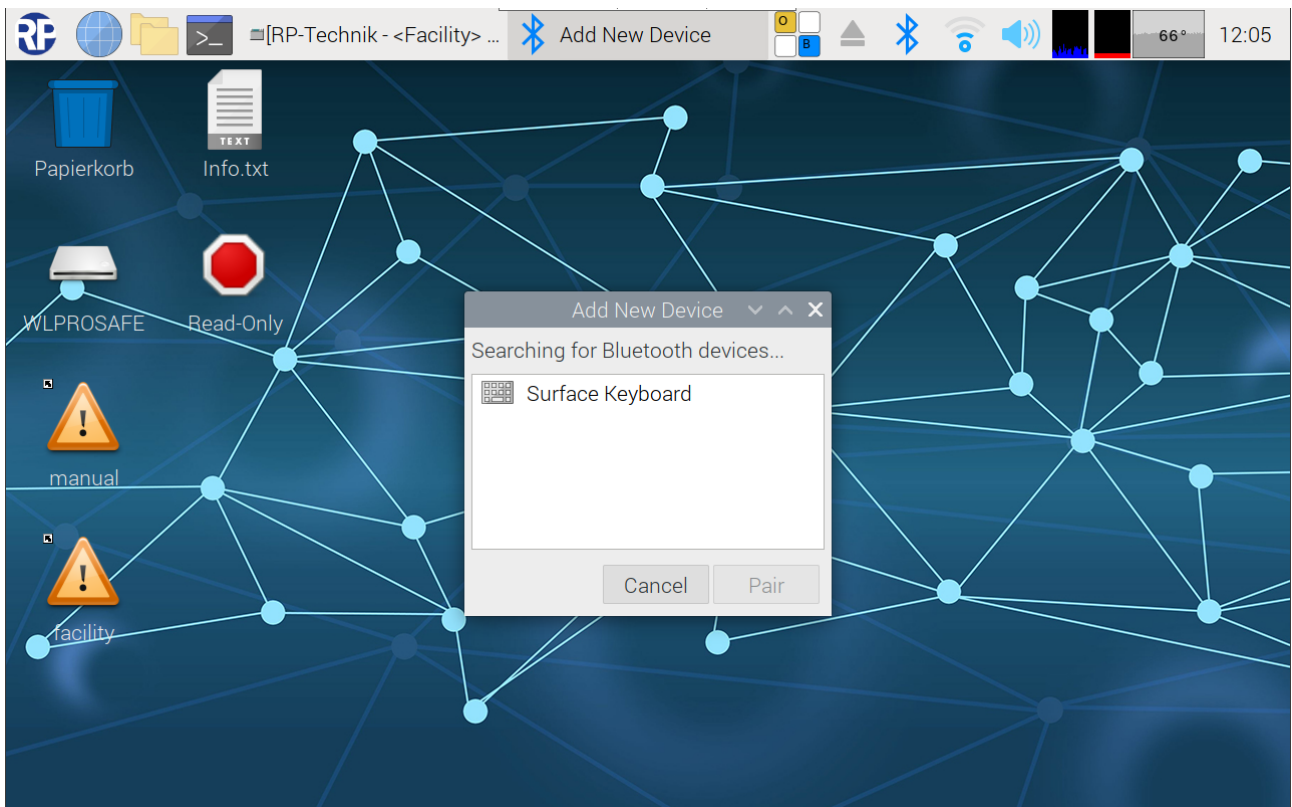


Figure 31 Bluetooth keyboard within range

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.

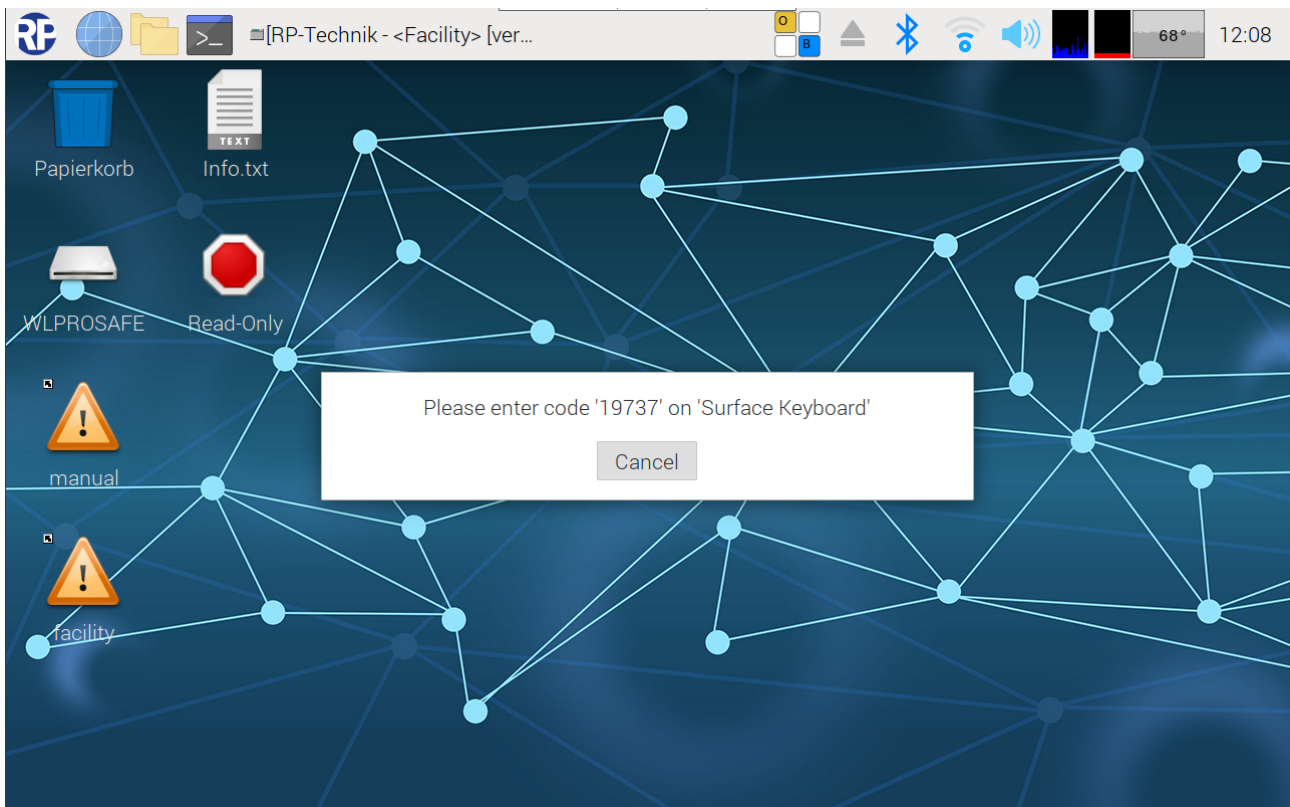


Figure 32 Verification code

This is shown when devices have been successfully paired.

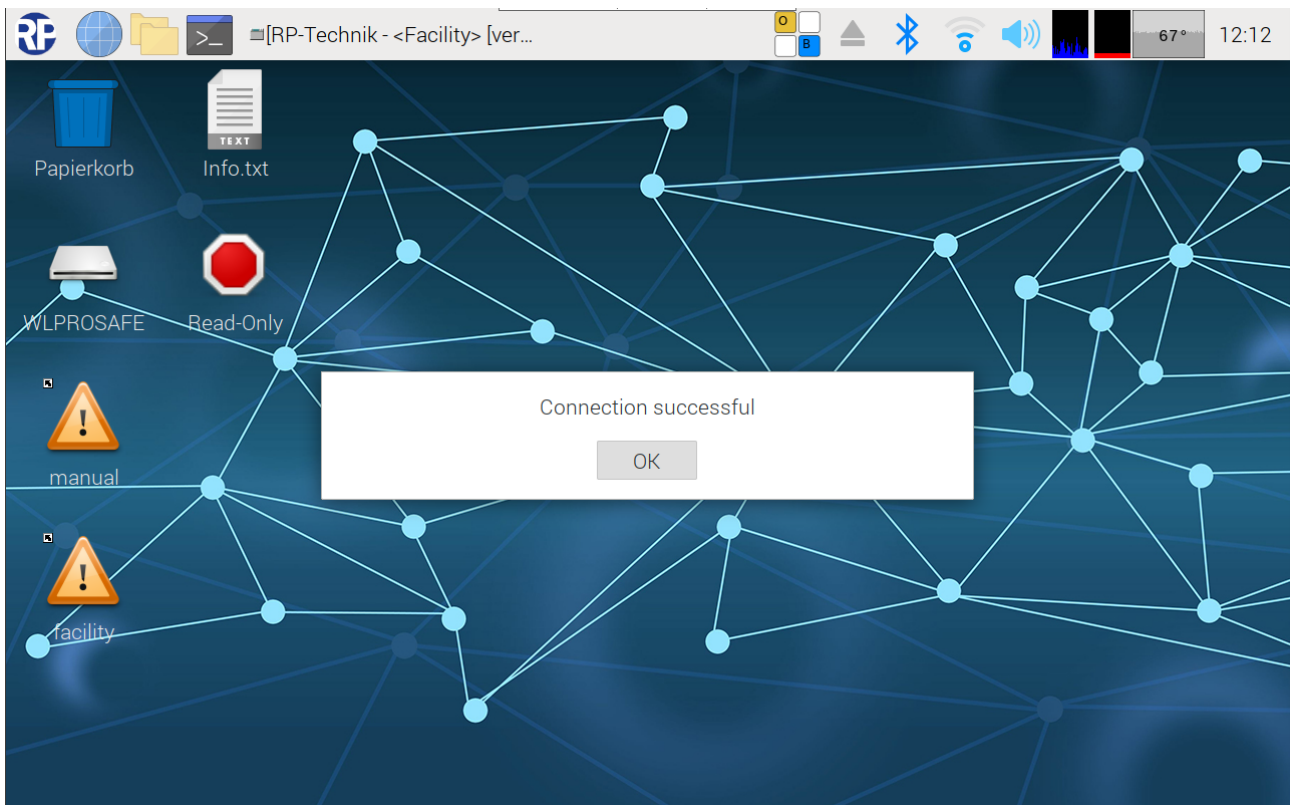


Figure 33 Pairing successful

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

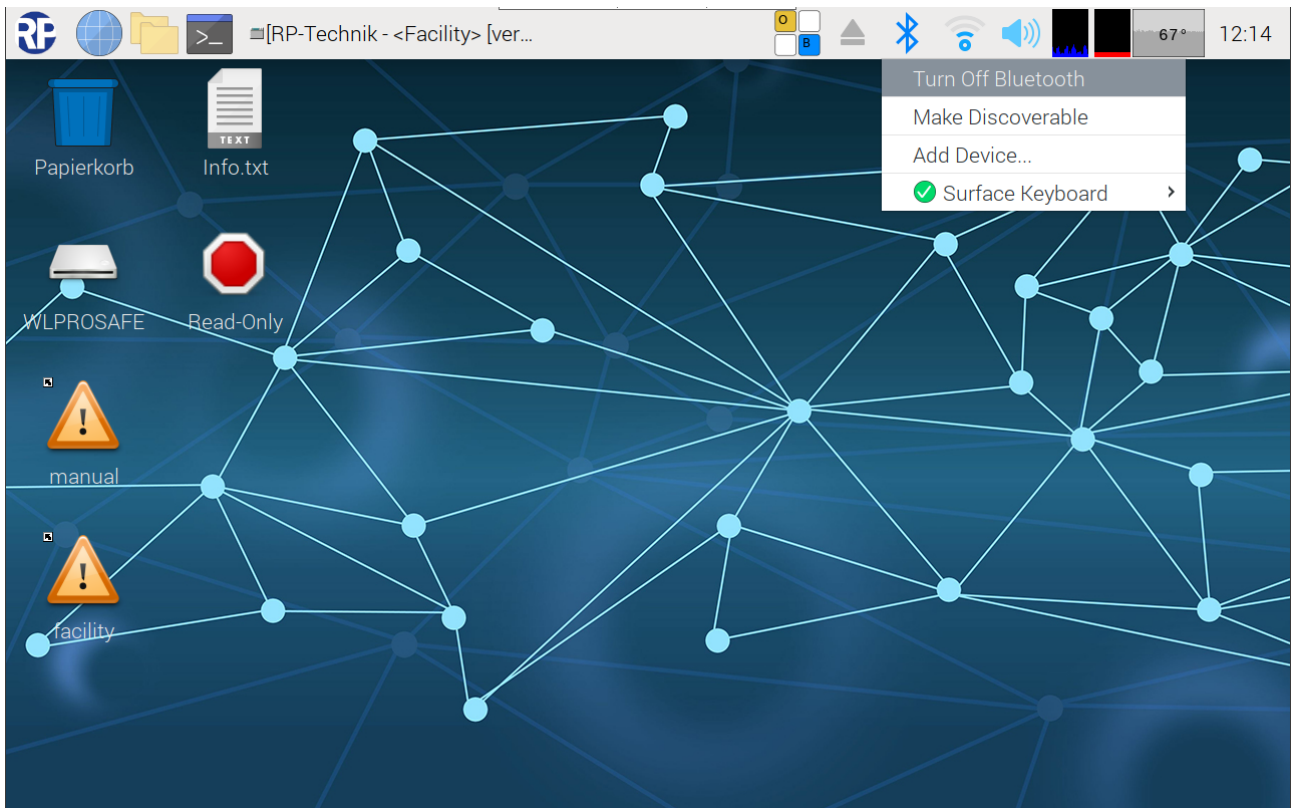


Figure 34 WLZent with paired Bluetooth device

14.4 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

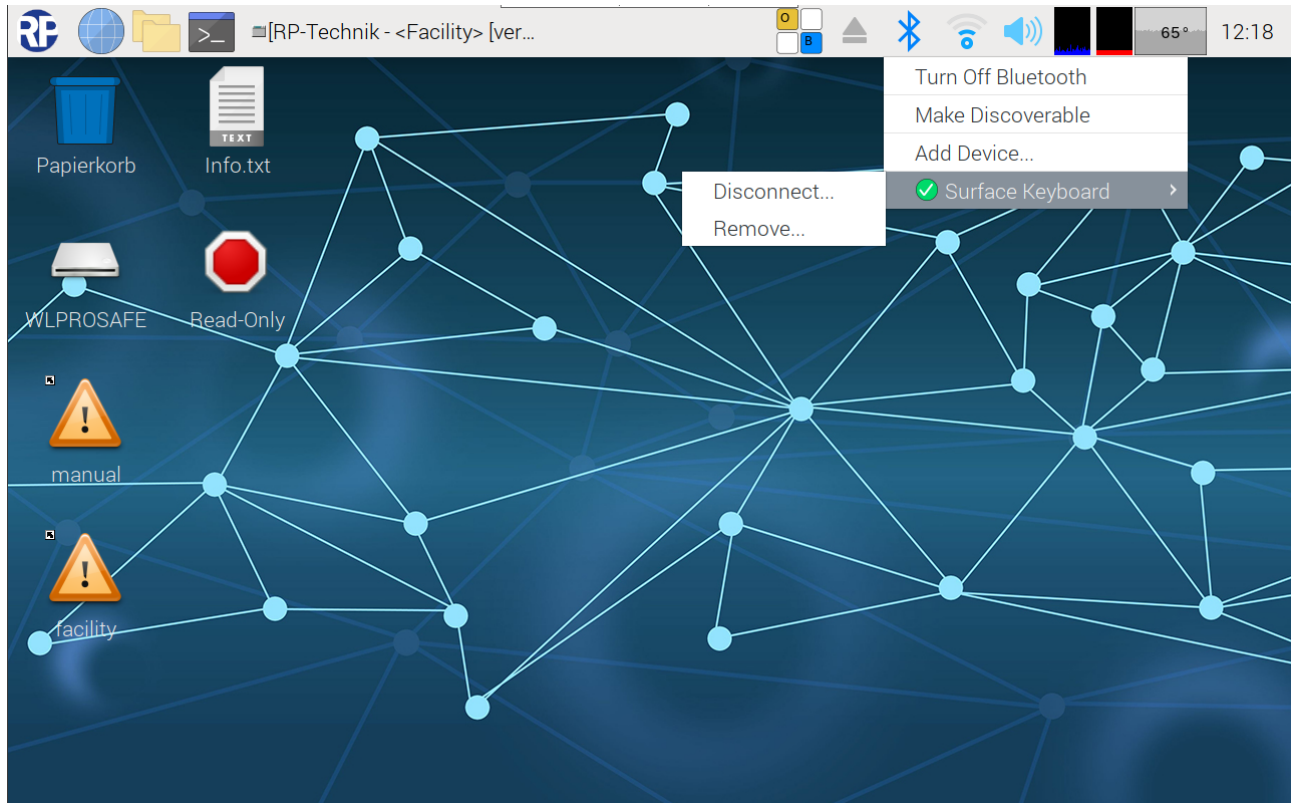


Figure 35 Disconnecting/removing WLZent Bluetooth device

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.

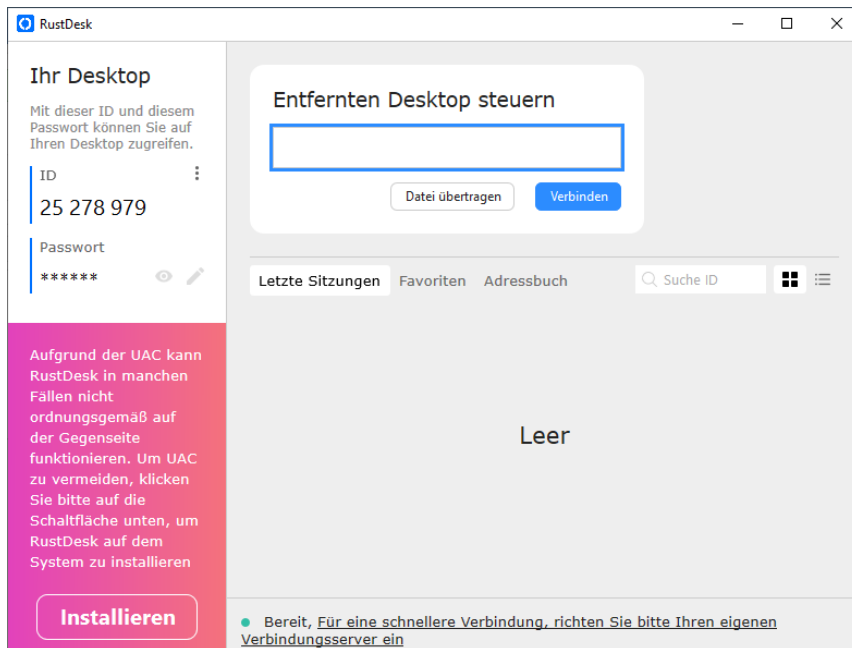
15 Remote Access via RustDesk

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

15.1 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.



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

Ihr Desktop
Mit dieser ID und diesem Passwort können Sie auf Ihren Desktop zugreifen.

ID
25 278 979

Passwort

Aufgrund der UAC kann RustDesk in manchen Fällen nicht ordnungsgemäß auf der Gegenseite funktionieren. Um UAC zu vermeiden, klicken Sie bitte auf die Schaltfläche unten, um RustDesk auf dem System zu installieren

Installieren

Entfernten Desktop steuern

1 559 184 916

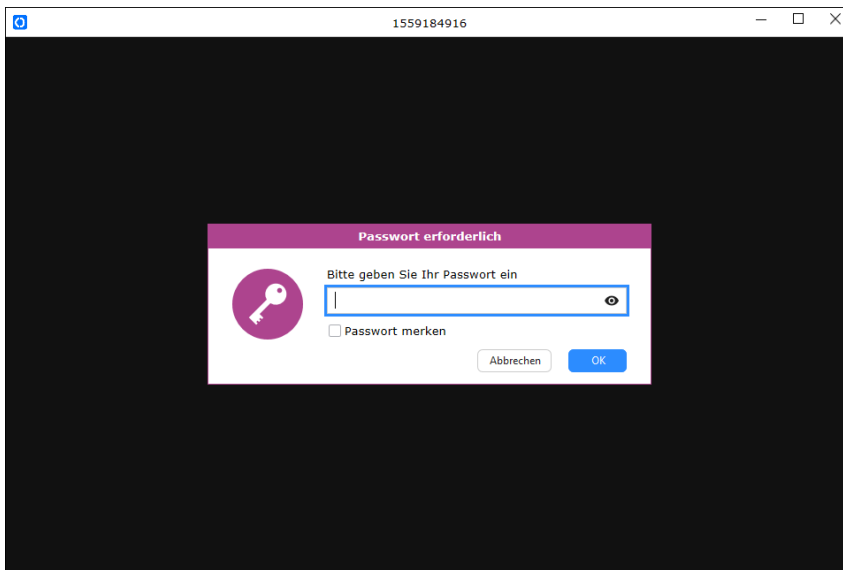
Datei übertragen Verbinden

Letzte Sitzungen Favoriten Adressbuch Suche ID

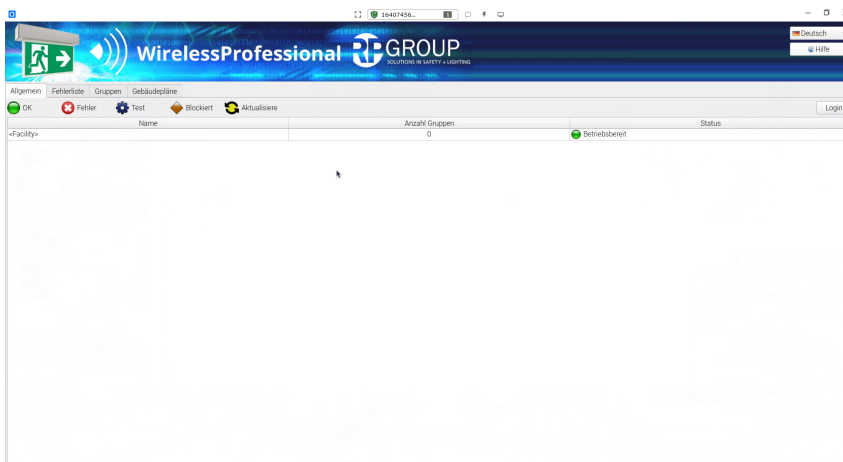
Leer

Bereit, für eine schnellere Verbindung, richten Sie bitte Ihren eigenen Verbindungsserver ein

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

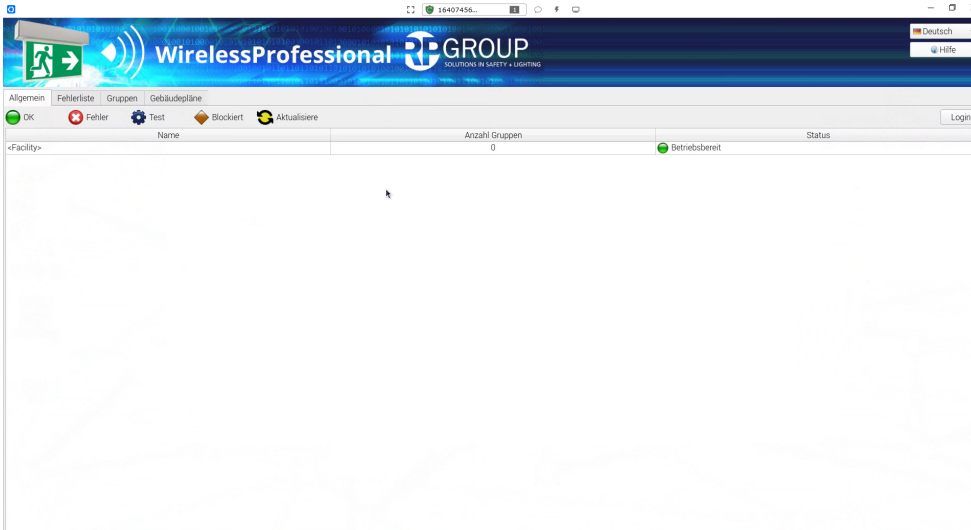


Once this has been entered, the WLZent's display is shown.

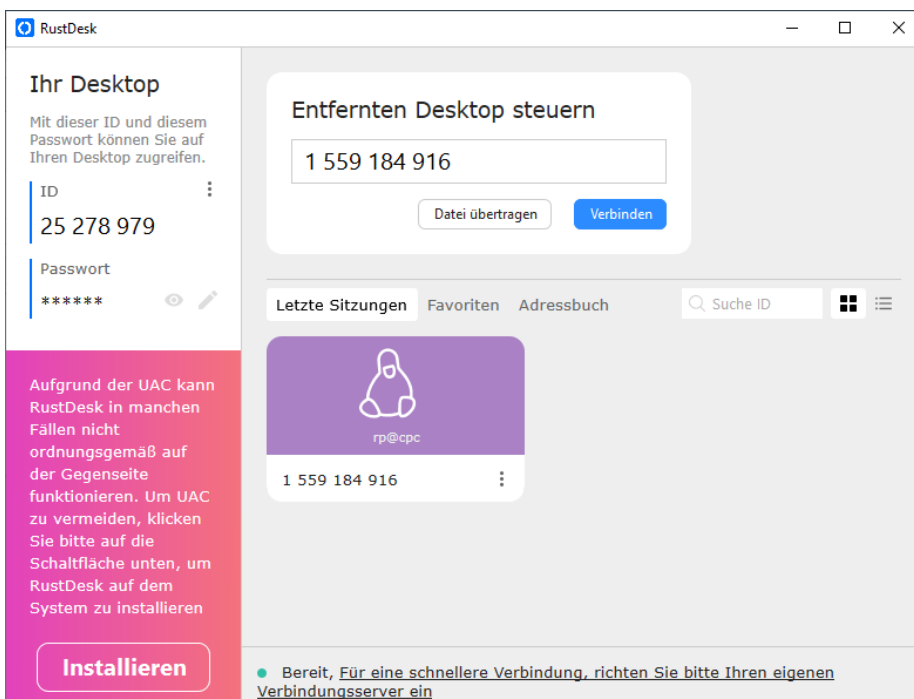


15.2 Terminating connection

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



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



15.3 Changing RustDesk connection password

The RustDesk connection password for the WLZent cannot be changed.

15.4 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.

16 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.

16.1 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.

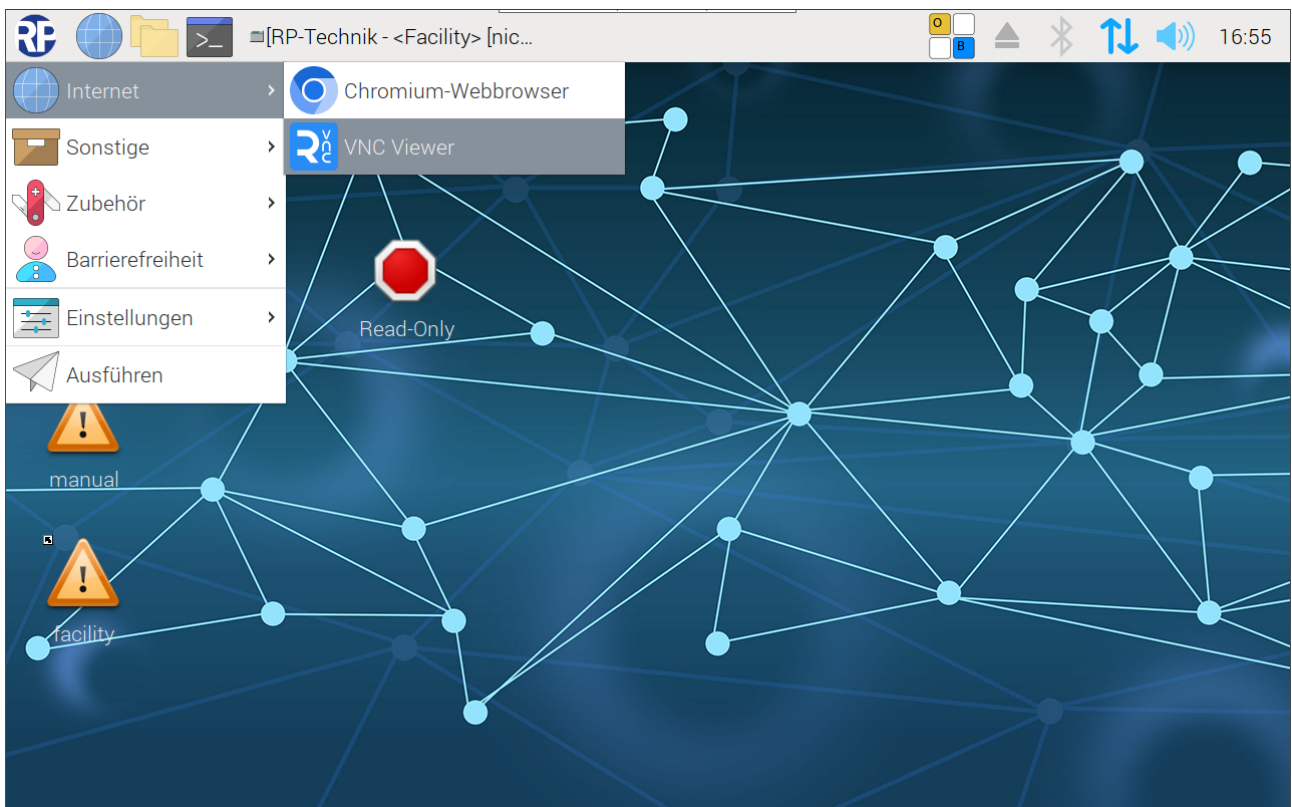


Figure 36 Wireless Professional WLZent Start menu Internet

The “RealVNC Viewer” window opens.

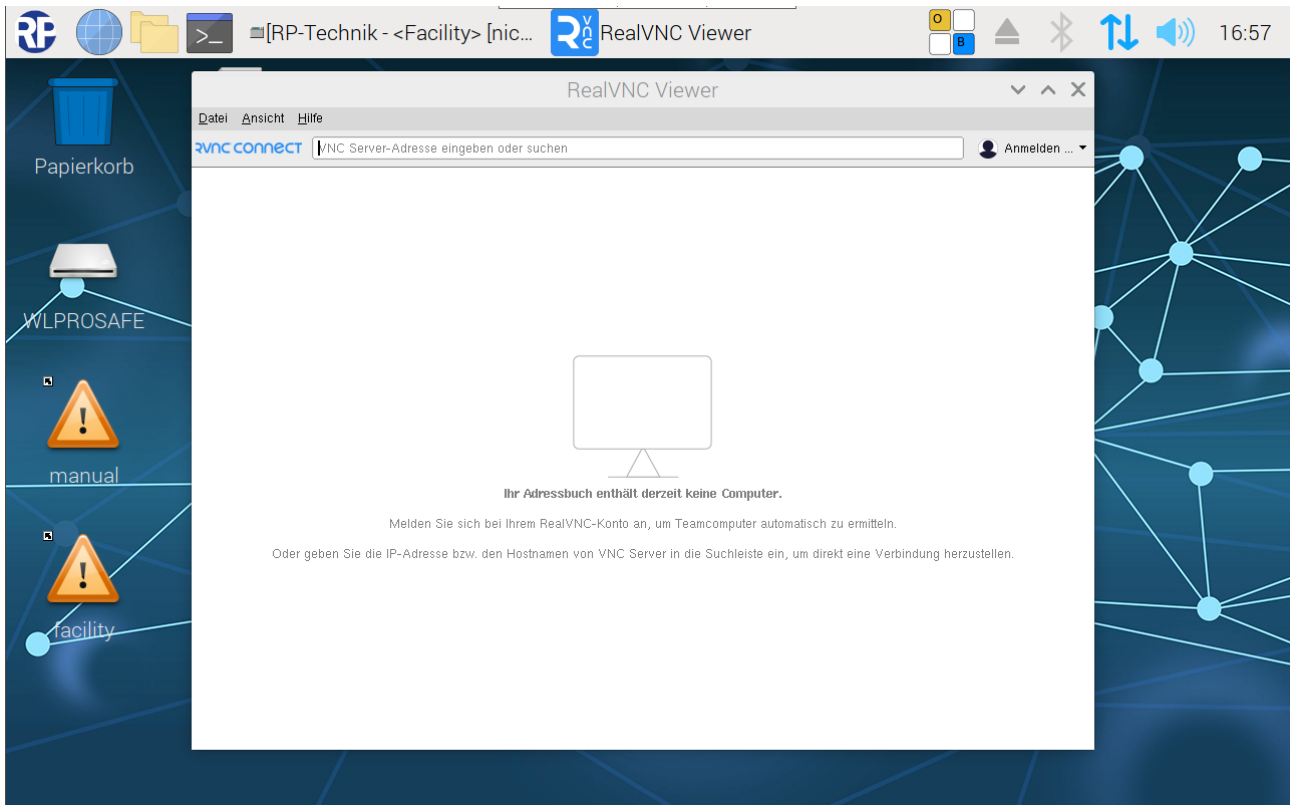


Figure 37 Remote desktop viewer

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16.1.1 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.

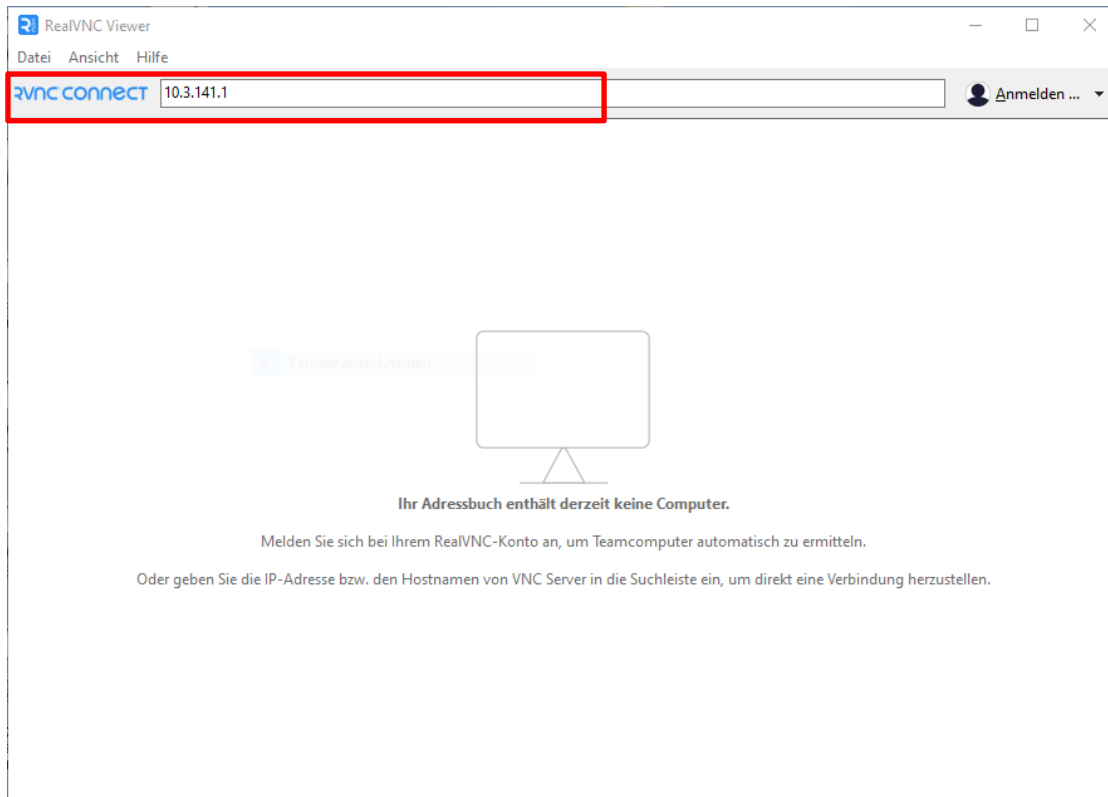
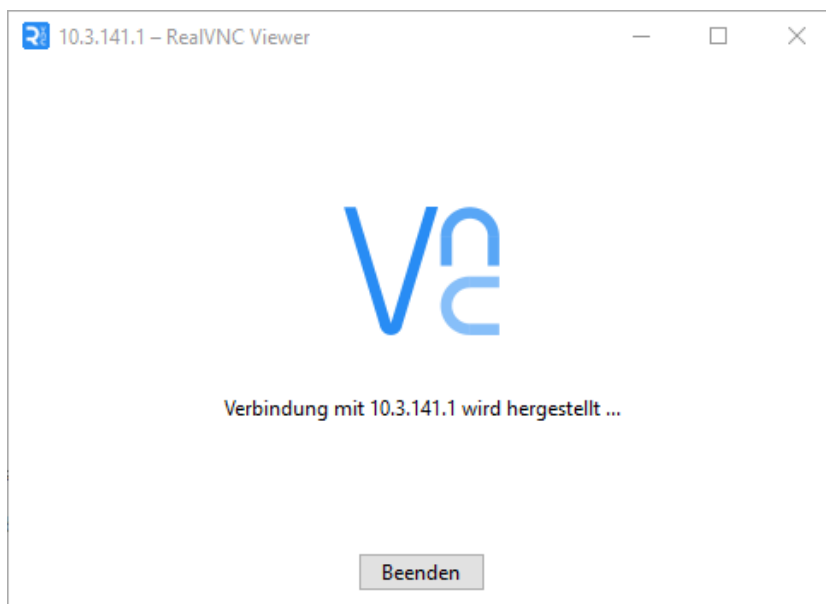


Figure 38 Remote desktop viewer window, Connect window

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.

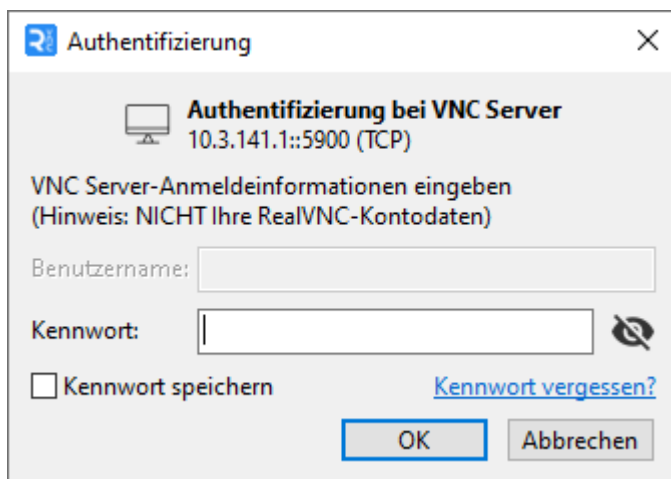
As soon as the entered address has been confirmed by clicking on “Enter”, the connection is established.



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.



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



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.

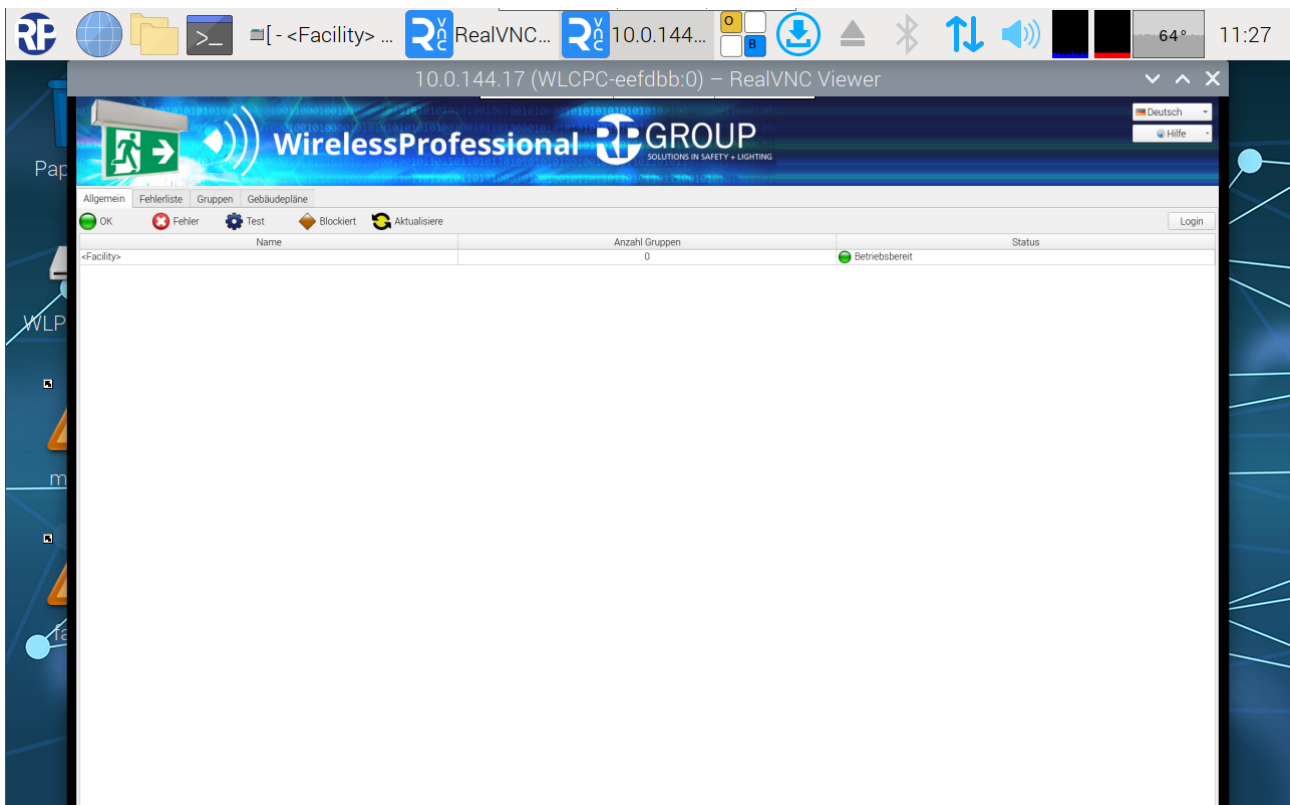


Figure 39 Remote desktop viewer window with enabled connection

16.1.2 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.

16.1.3 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.

16.1.4 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 5.2)

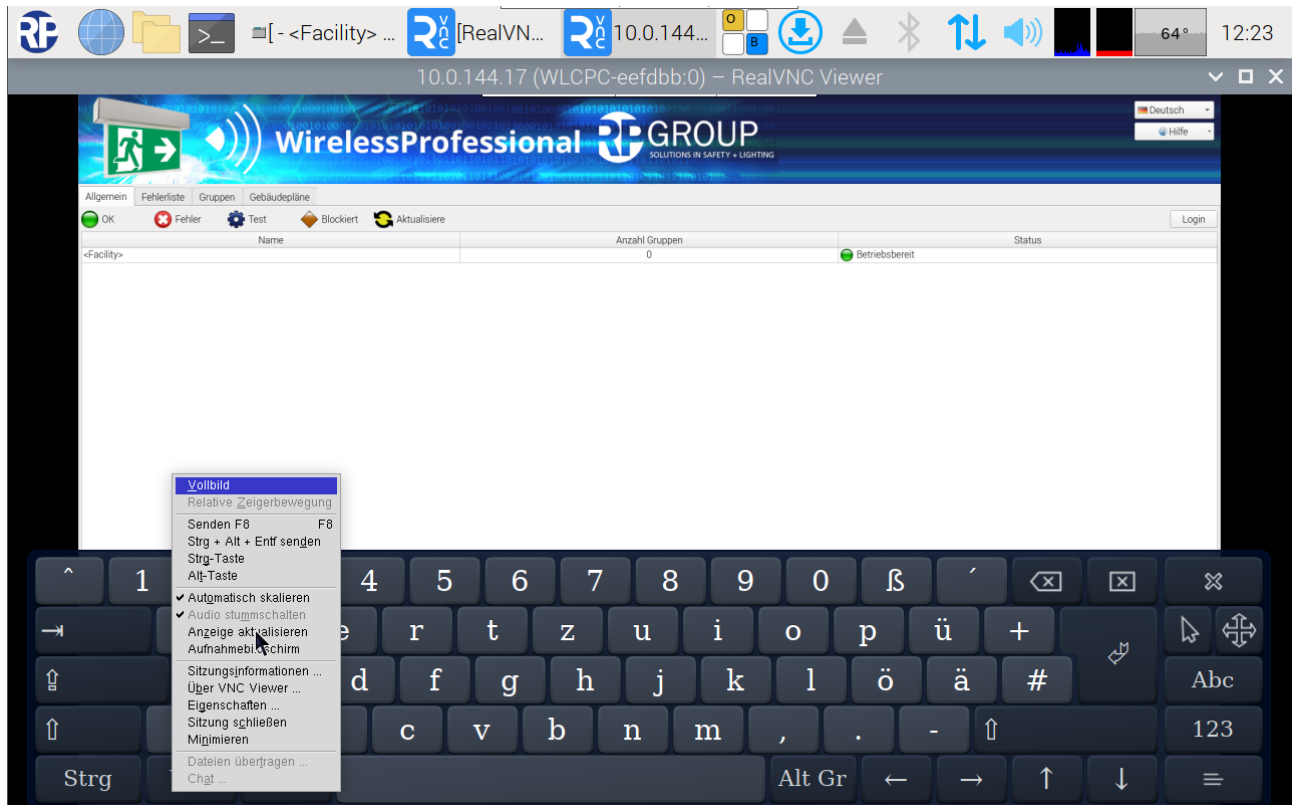


Figure 40 Scaling view

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

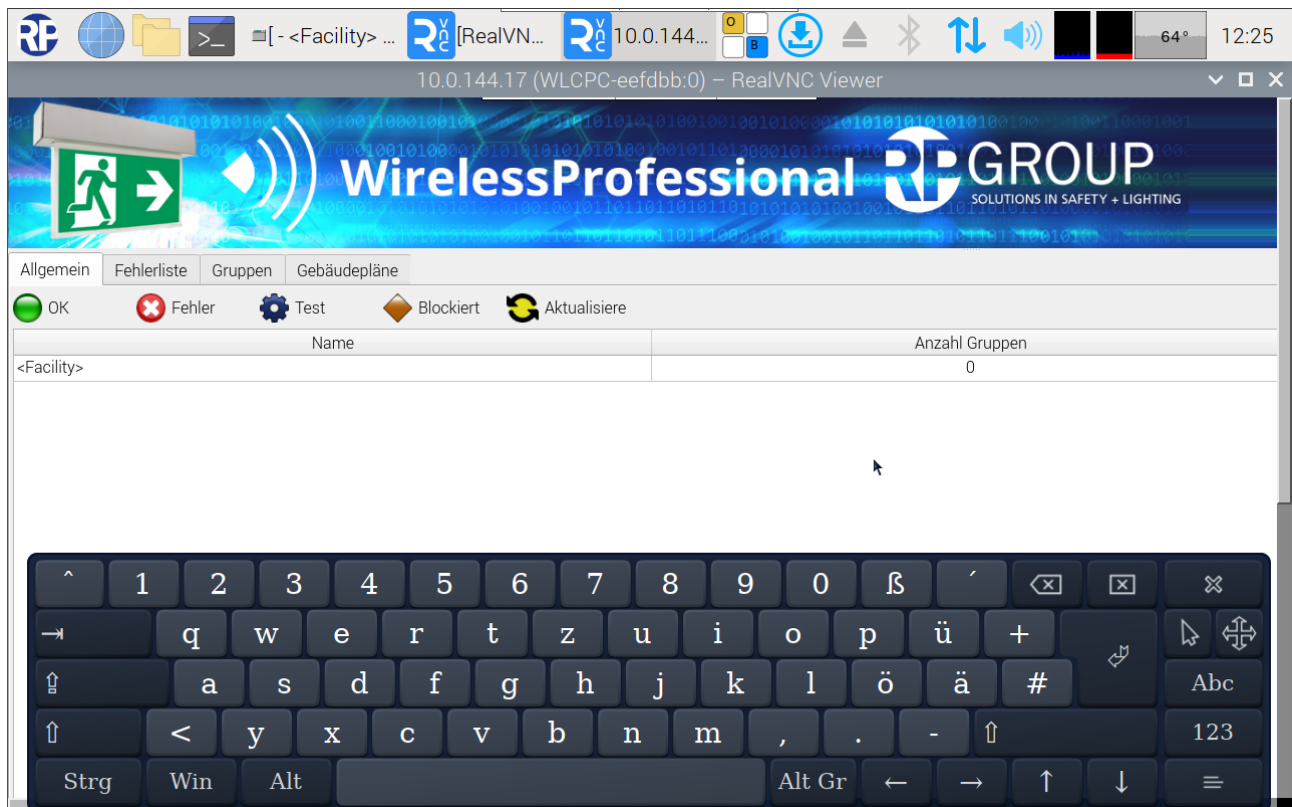


Figure 41 VNC session window

The VNC session window with scroll bars is then displayed.

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

16.2 VNC-Server

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

17 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.

17.1 Moving Wireless Professional from CPC to WLZent

17.1.1 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.

17.1.2 CPC with Wireless Professional version 2.2 and older

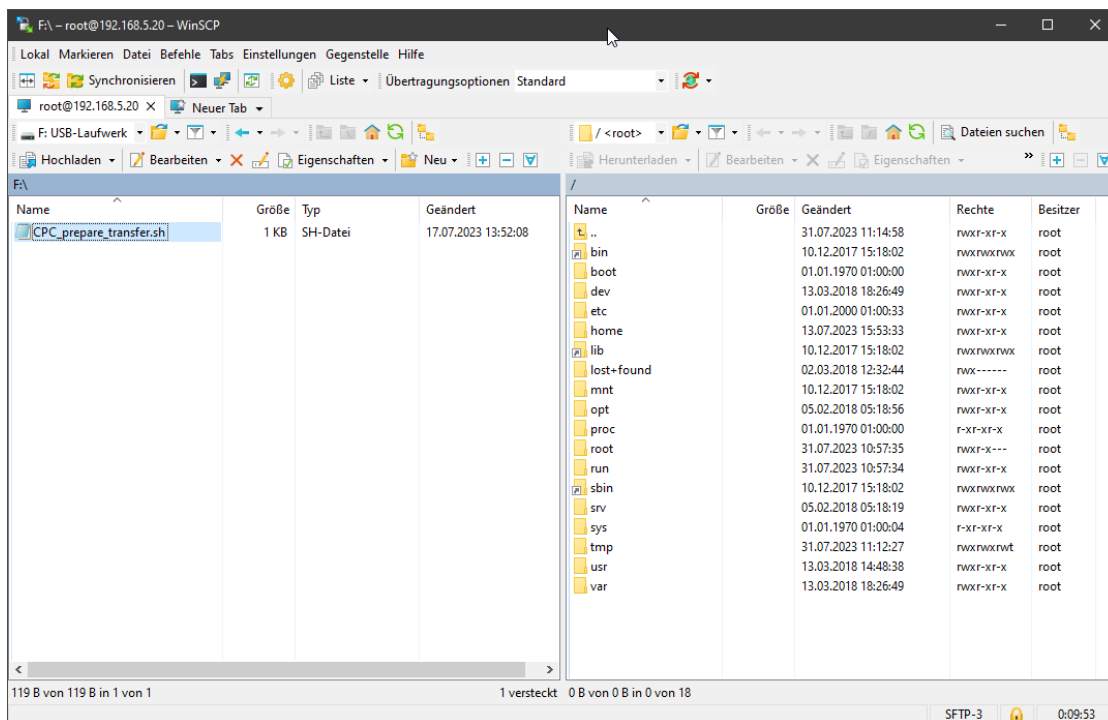
If the Wireless Professional system is to move from a Wireless Professional CPC to a Wireless Professional WLZent, the following are needed:

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

17.1.2.1 Preparing the CPC3 for the move

17.1.2.1.1 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.



The "CPC3_prepare_transfer.sh" script is copied directly into the root directory of the CPC.

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

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

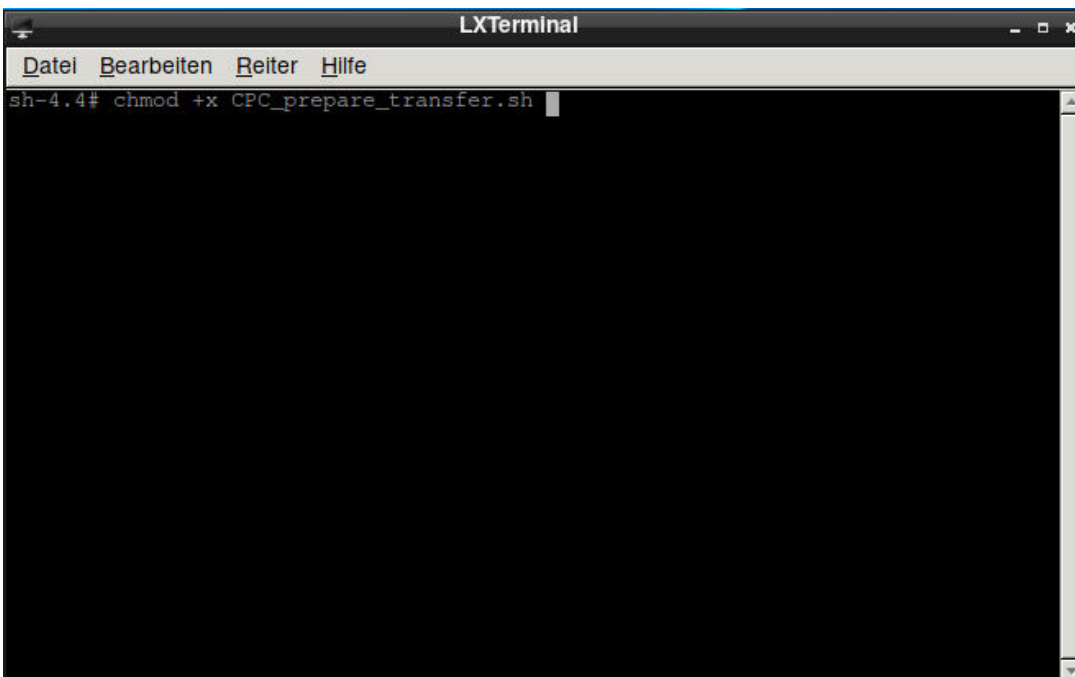
Once the script has been copied onto the CPC, a remote connection with the CPC should be established.

17.1.2.1.2 Running script

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

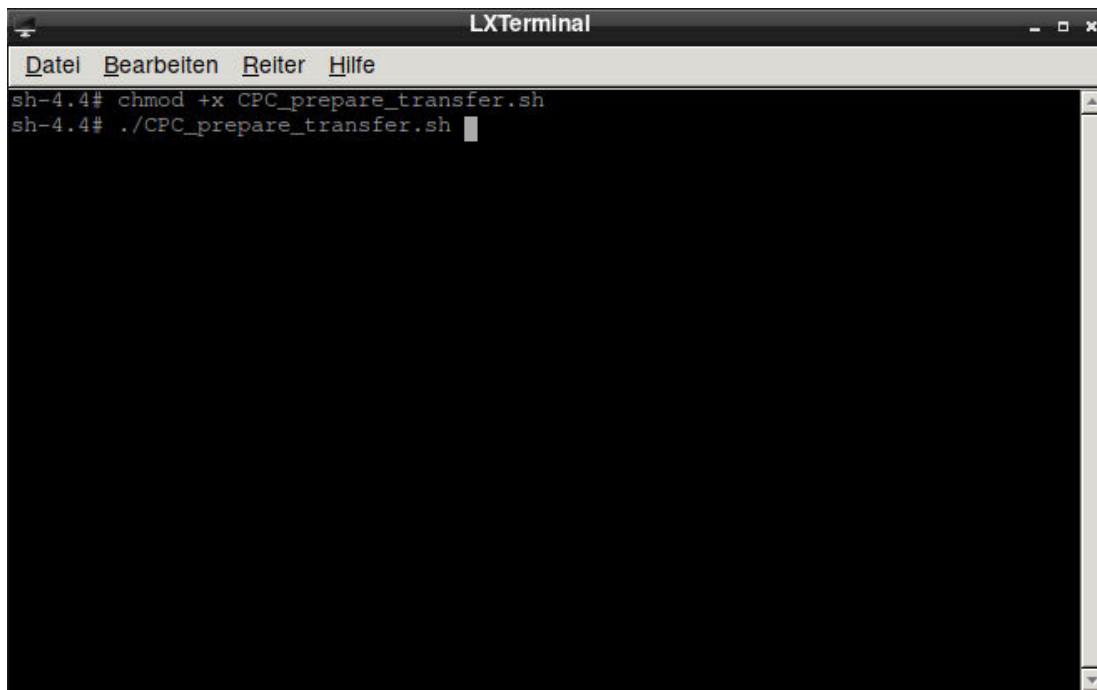


The 'chmod + x CPC_prepare_transfer.sh' command should be entered in the terminal window and confirmed with Enter.



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



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



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.

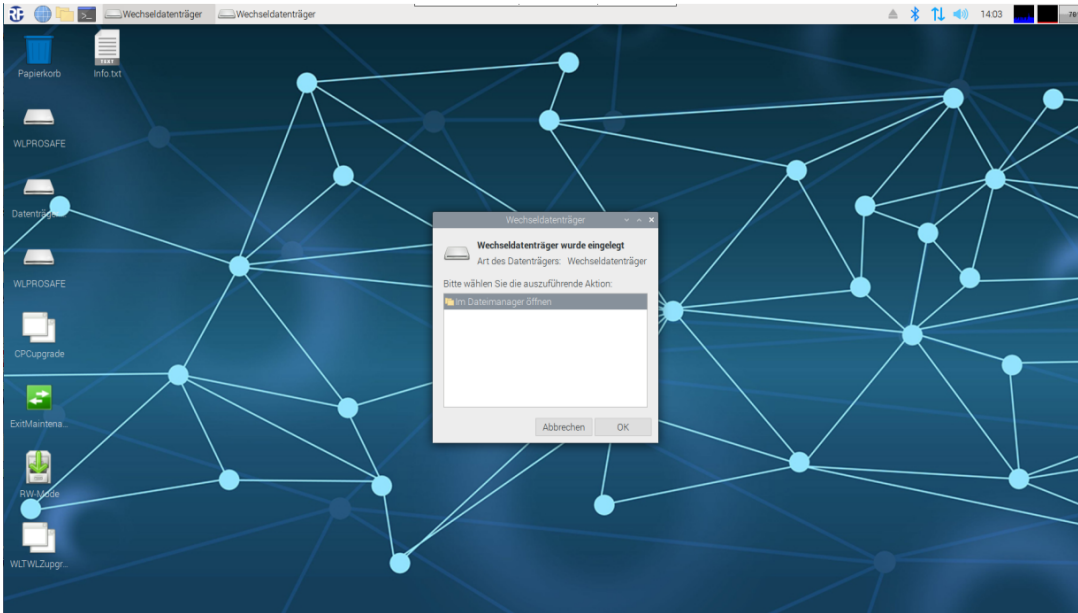
17.1.3 Transferring data to CPC3

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 7.1).

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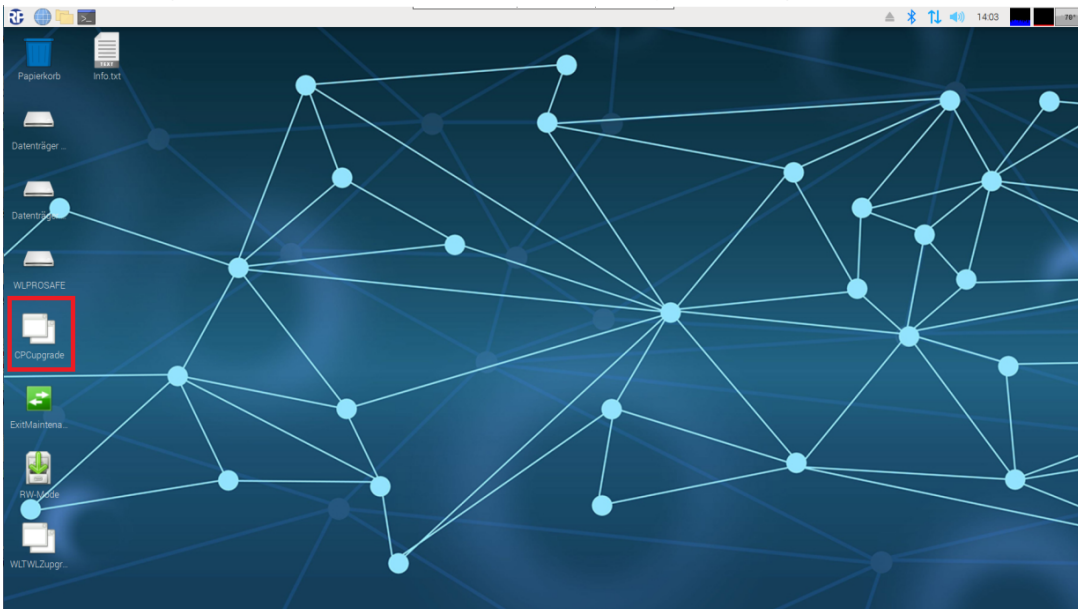
The SD card of the CPC is now inserted into the USB card reader and plugged into the WLZent.

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

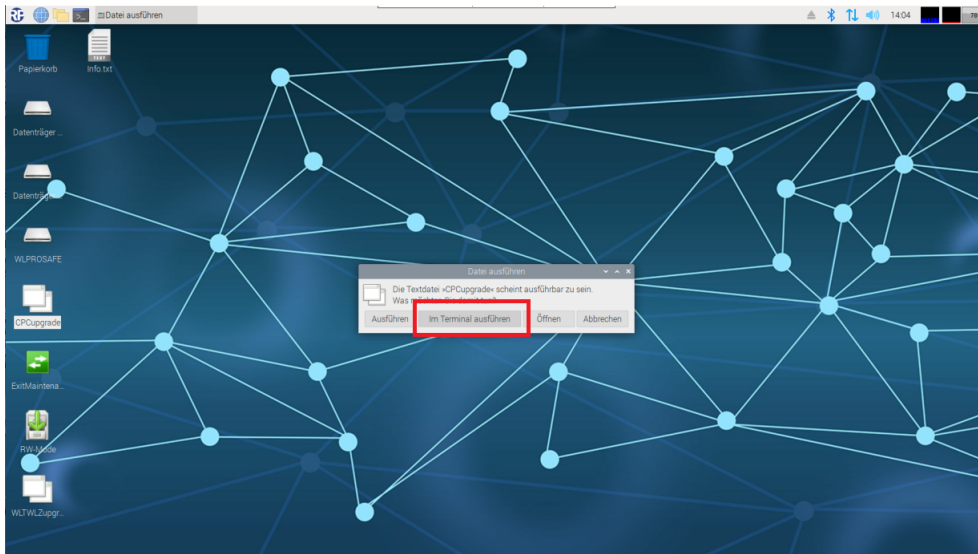


The two “Wechseldatenträger” windows are closed by clicking on the “Abbrechen” button.

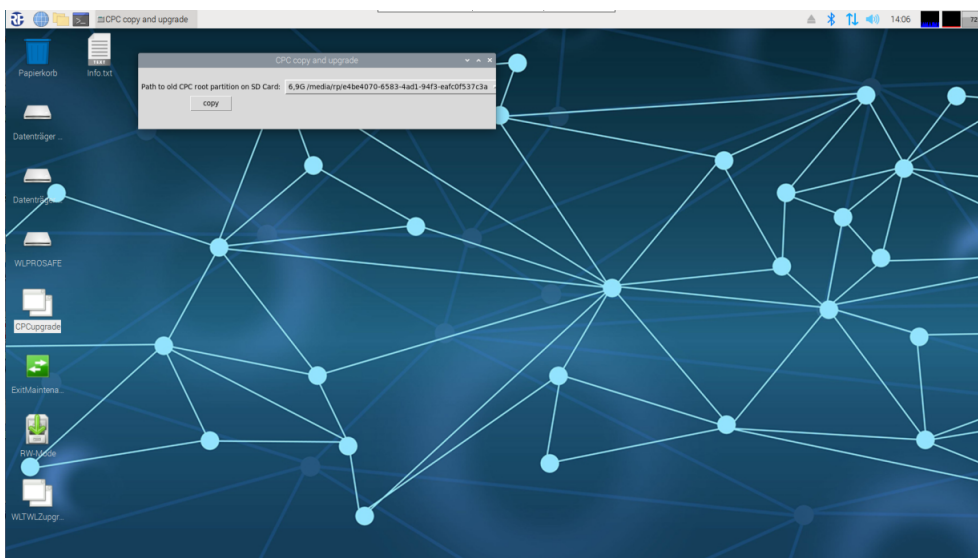
The “CPCUpgrade” script is now run by tapping on the desktop link twice.



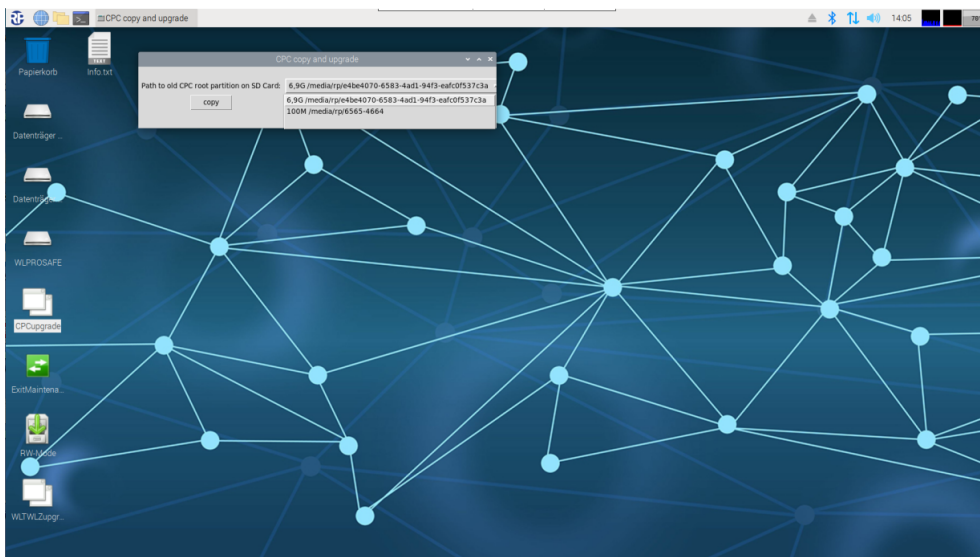
The “Datei ausführen” window is opened. The “im Terminal ausführen” button in this window should be selected.



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

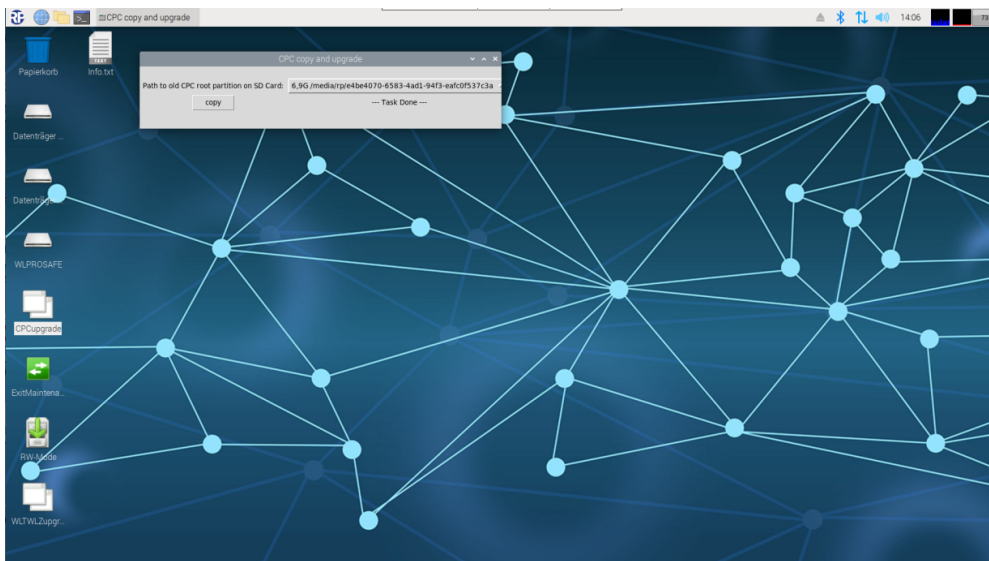


The partition on the SD card containing the root directory of the CPC must be selected from the drop-down list of the “Path to old root partition on SD Card” box.



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.



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 5.3).

Once the SD card reader has been ejected, Maintenance mode should be exited (see Section 7.2). 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.

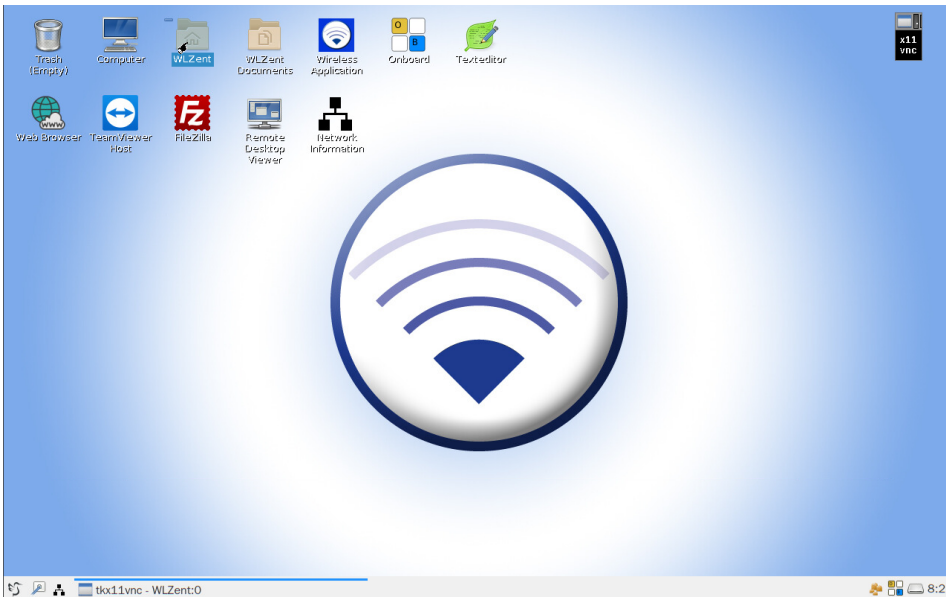
17.2 Import data from WLZentx/WLTouchx

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

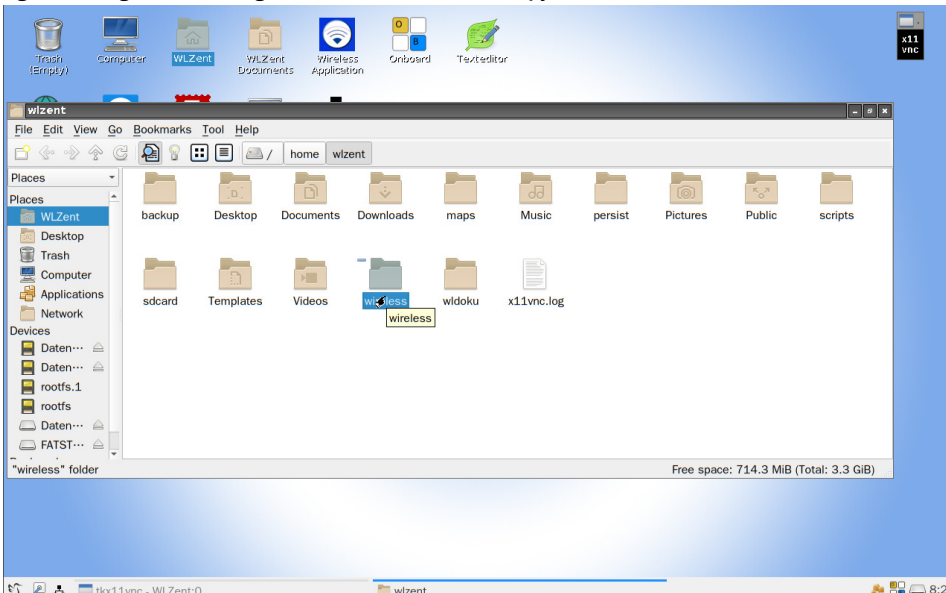
17.2.1 Preparing WLZent1/WLZent2 for the migration

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.



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”.



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.

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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.

17.2.2 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.

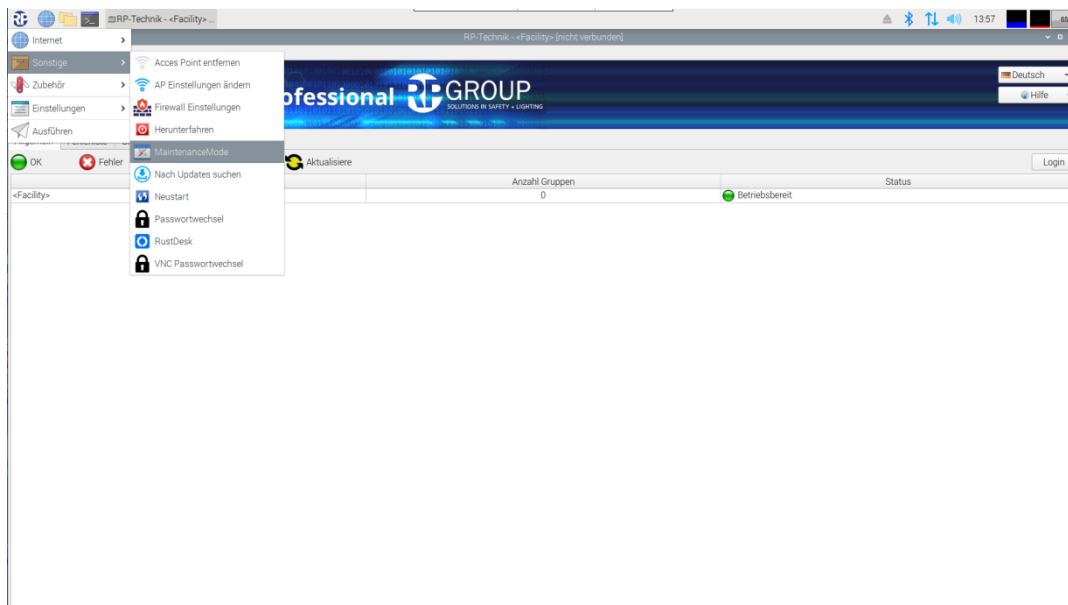
Note: the folder must not be renamed or placed in a subfolder, otherwise the data import will not work.

17.2.3 Transferring data to the WLZent3

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

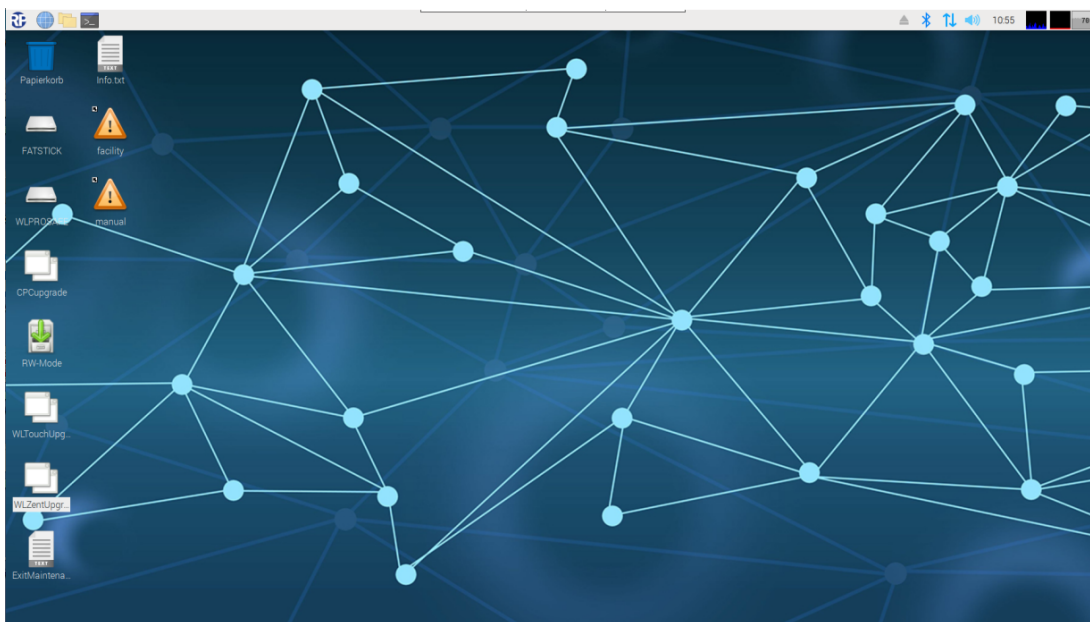
In the start menu, select the sub-item "MaintenanceMode" under "Other".

Start menu->Other->MaintenanceMode



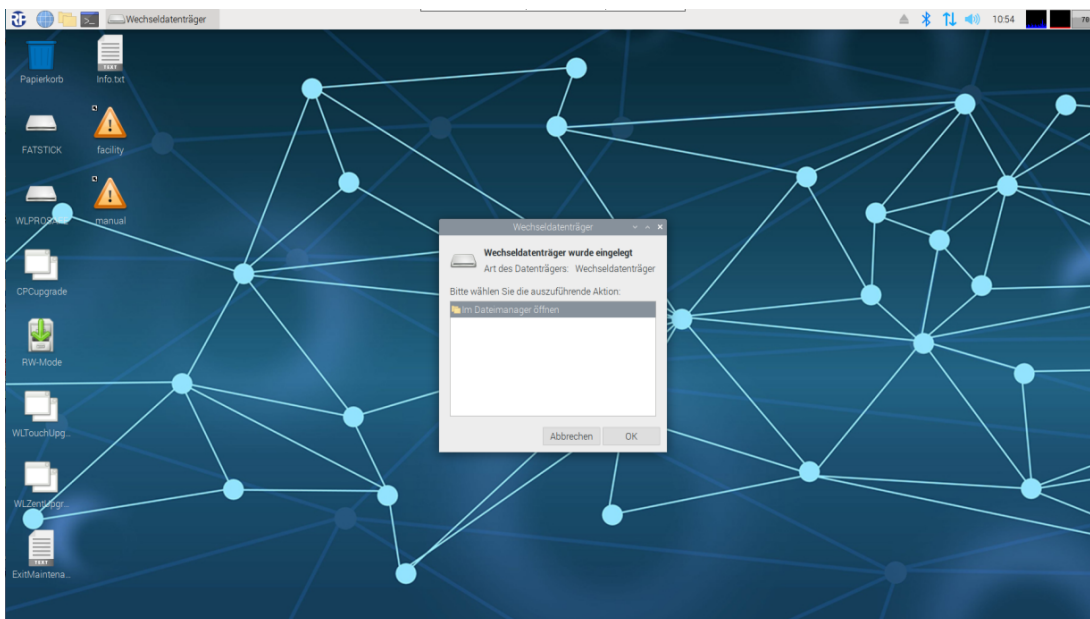
After the menu item has been selected, it takes about 15 seconds for the WLZent3 to begin rebooting. A remote connection may be lost in the process.

As soon as the WLZent3 has booted up again, the WLZent3 operating system is in write mode (see chapter 7)



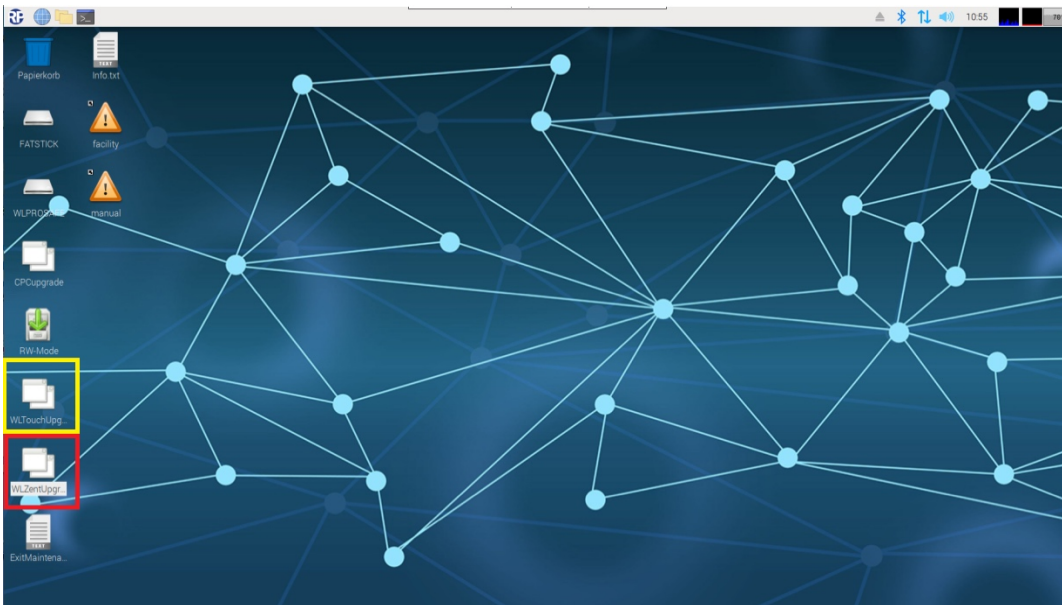
The USB stick is now plugged into the USB port (14) of the WLZent3.

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



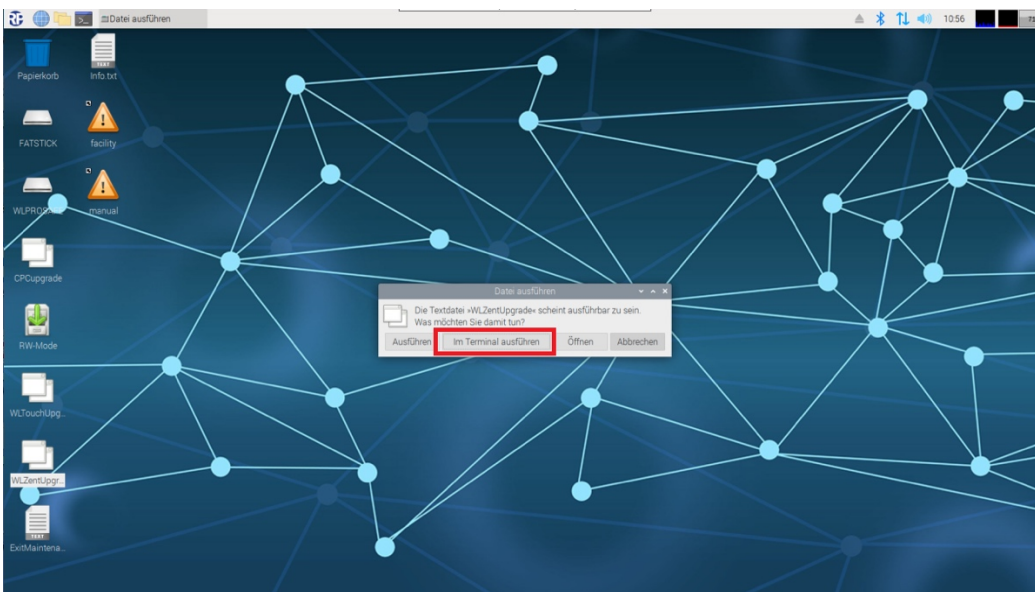
The "Removable Disk" window is closed by clicking on the "Cancel" button.

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.

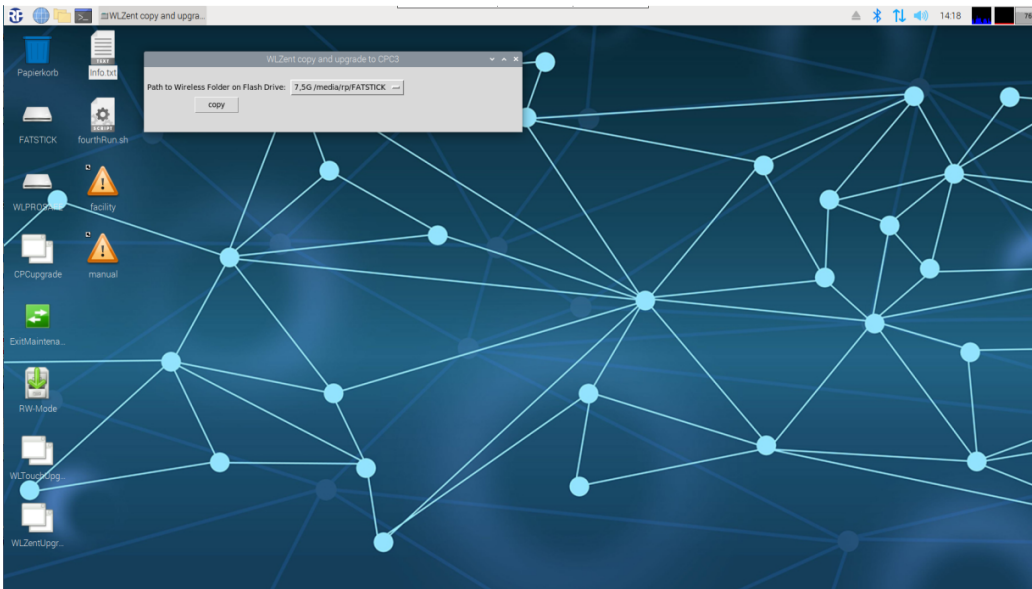


The import is explained below using WLZent1/2 data. The steps are identical for importing data from a WLTouch.

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



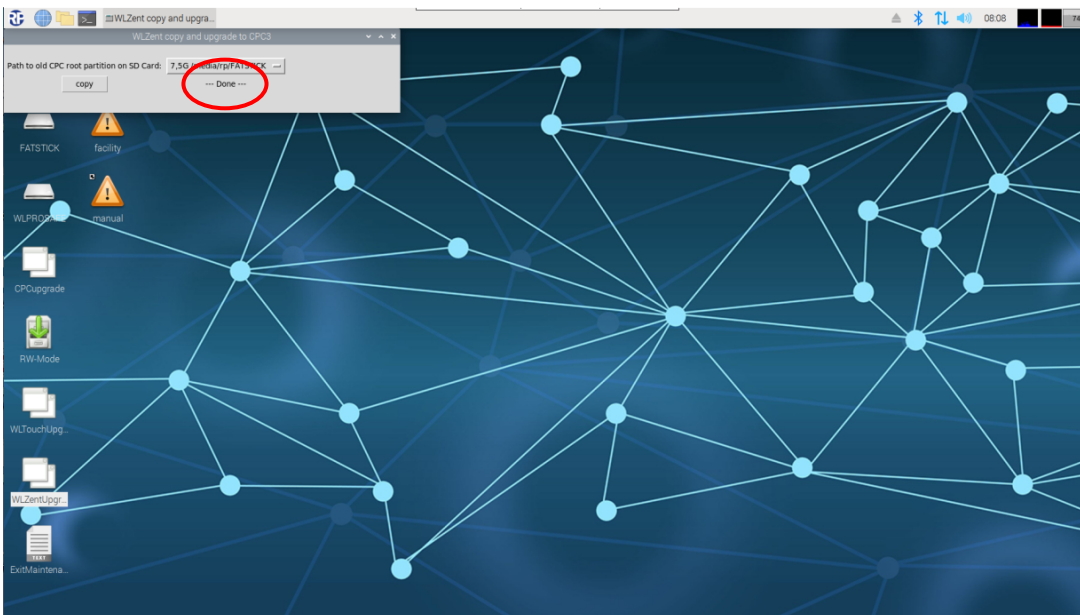
After clicking the button, the "WLZent copy and upgrade to CPC3" window opens.



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.



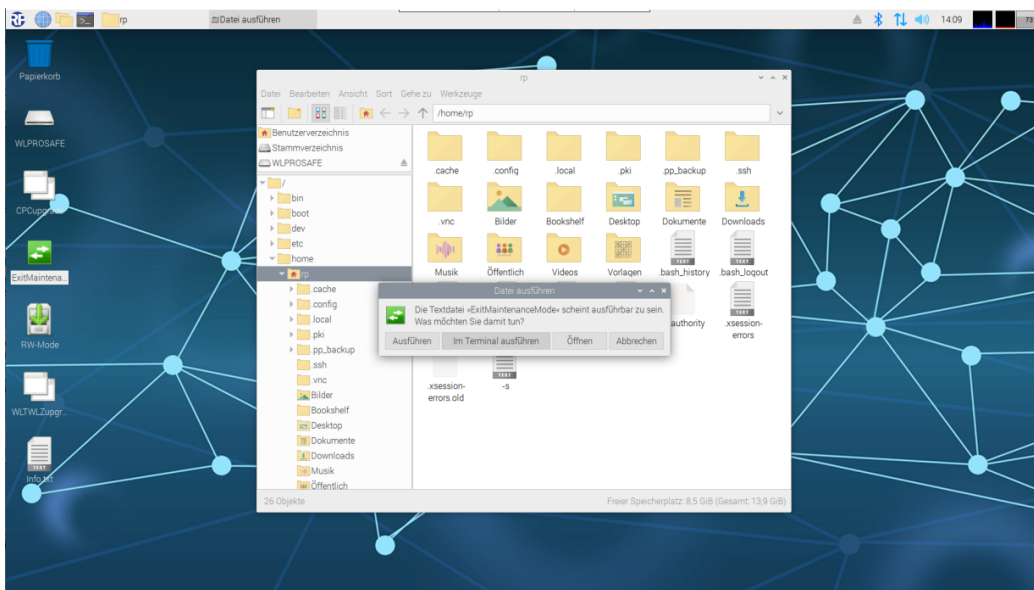
If there is an error during import, "—Error -" is displayed instead.

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 5.3.1.

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

The desktop shortcut "ExitMaintenanceMode" is then tapped.



The "Run file" window opens. The "Run in terminal" button is clicked and the script begins its work.

After clicking, it takes about 20 to 30 seconds, then the WLZent3 carries out a restart triggered by the script.

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.

18 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.

18.1 Launching web browser

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

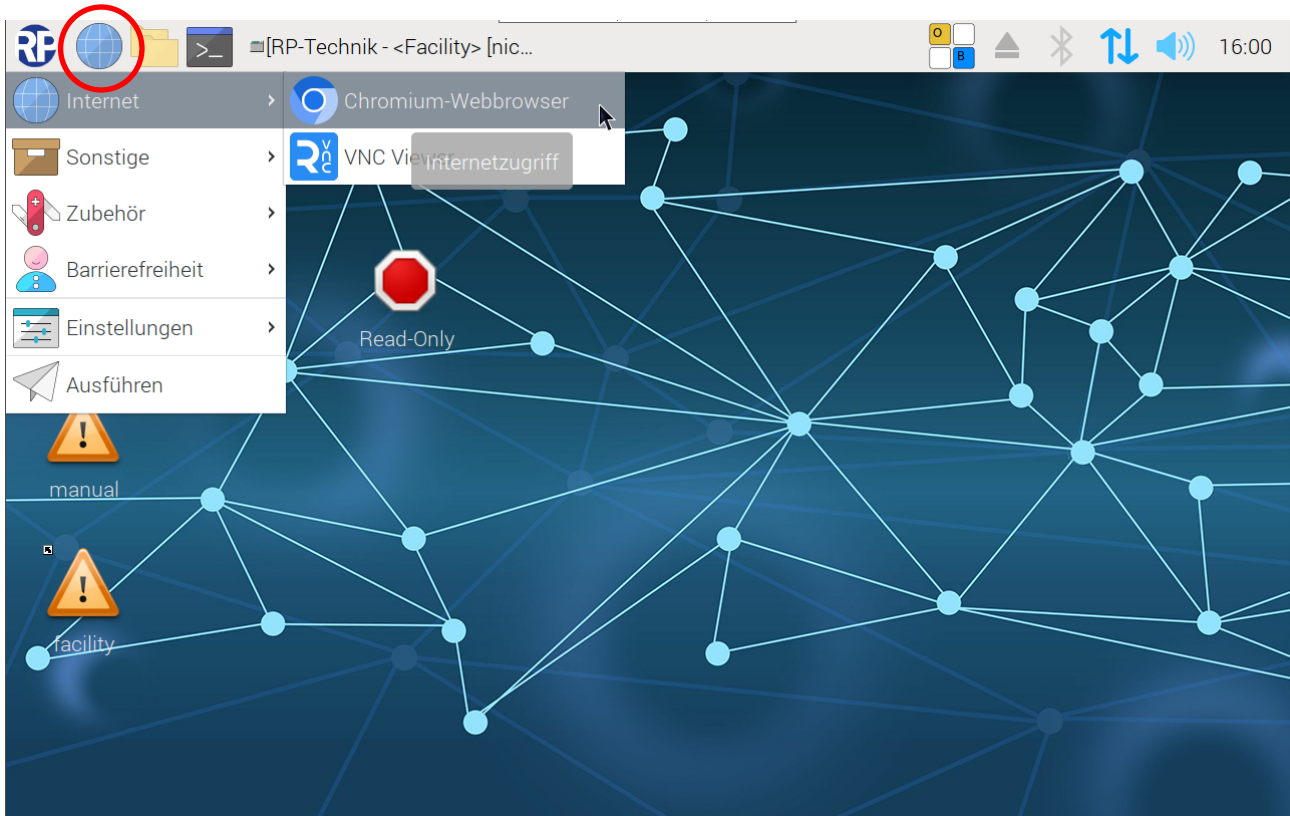


Figure 42 Wireless Professional WLZent Start menu Internet

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.

19 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.

19.1 Launching text editor

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

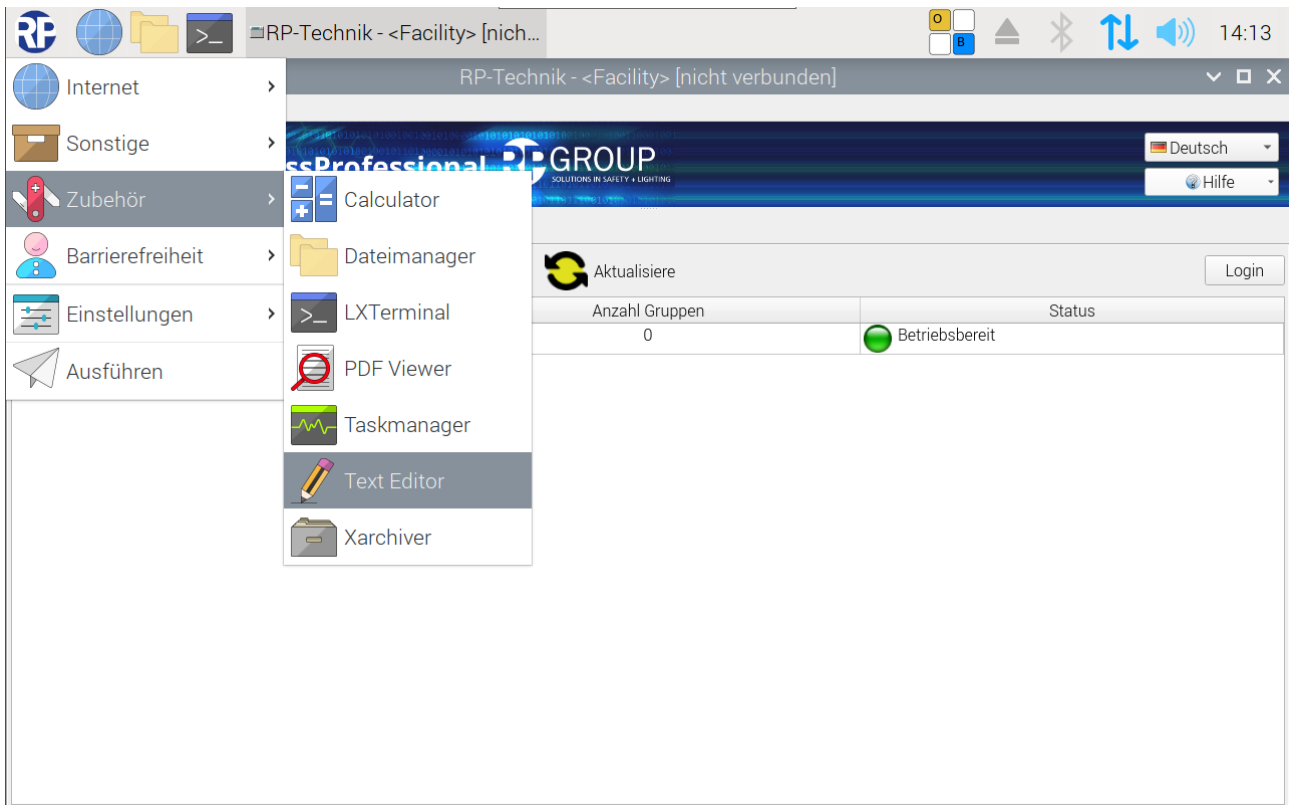


Figure 43 Launching text editor

19.2 Inserting text

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

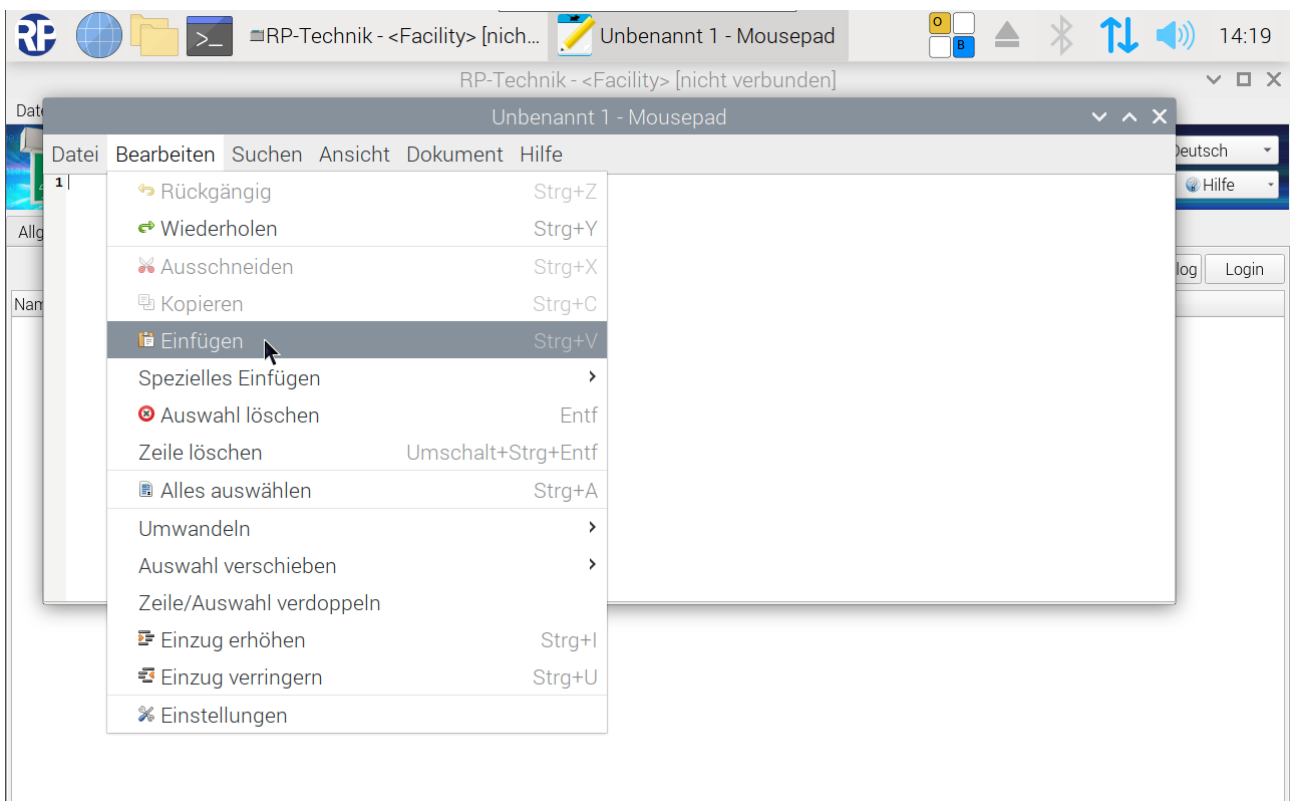
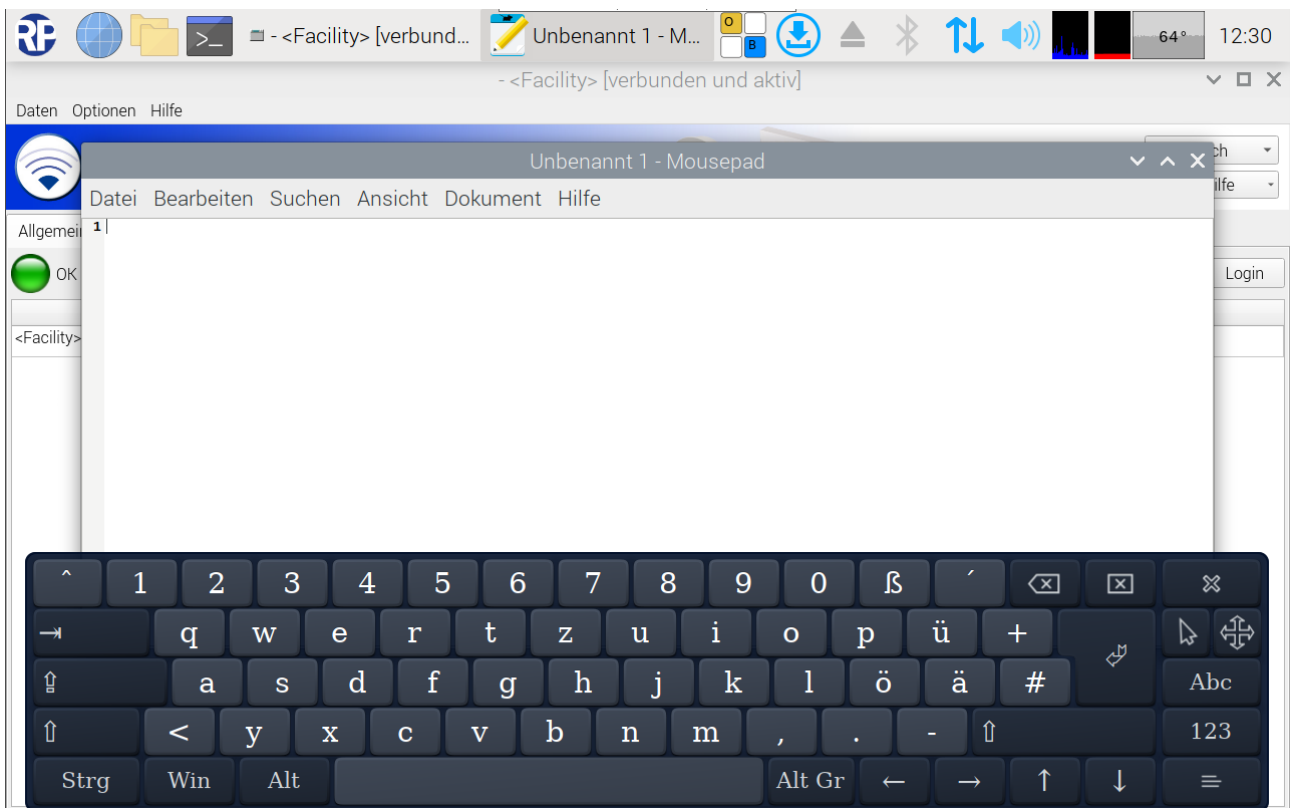


Figure 44 Text editor, Bearbeiten menu

19.3 Saving file

Go to Datei->Speichern unter to save the document.

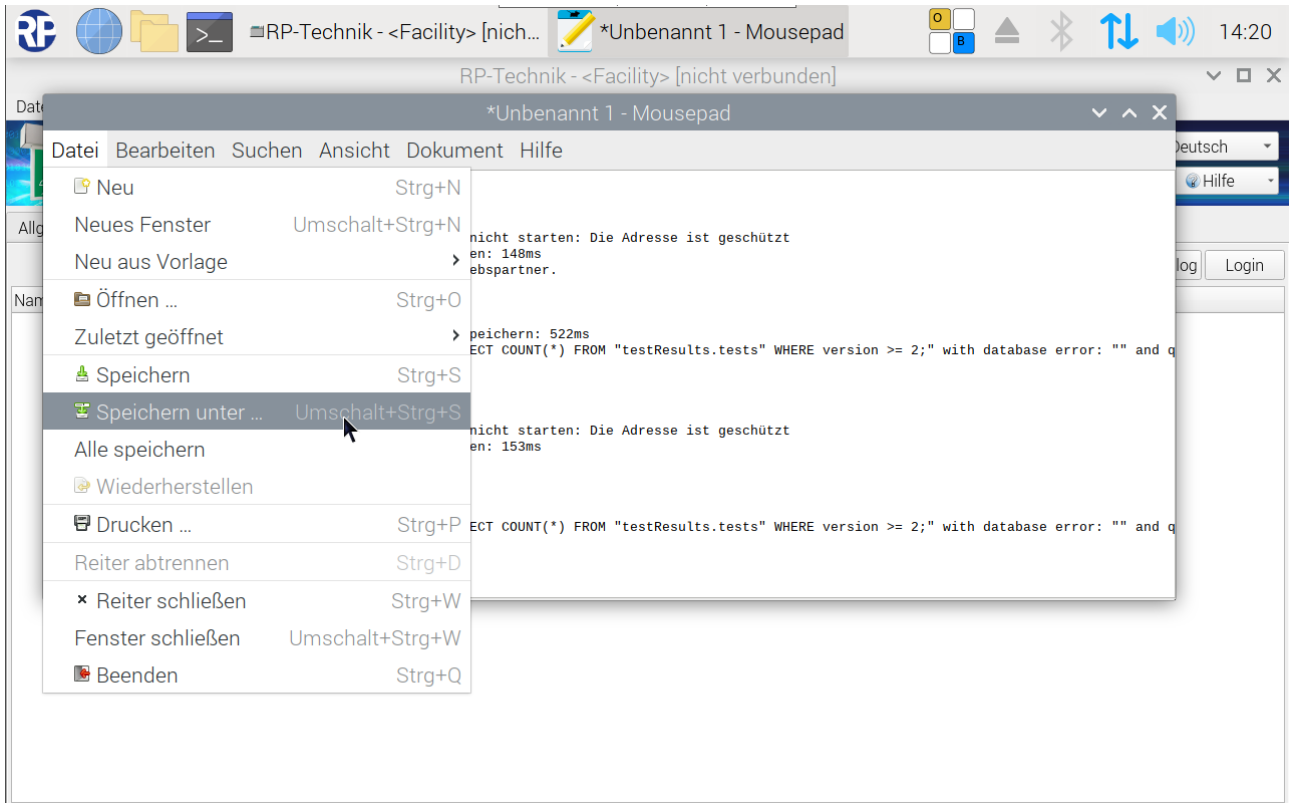


Figure 45 Text editor, saving file

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

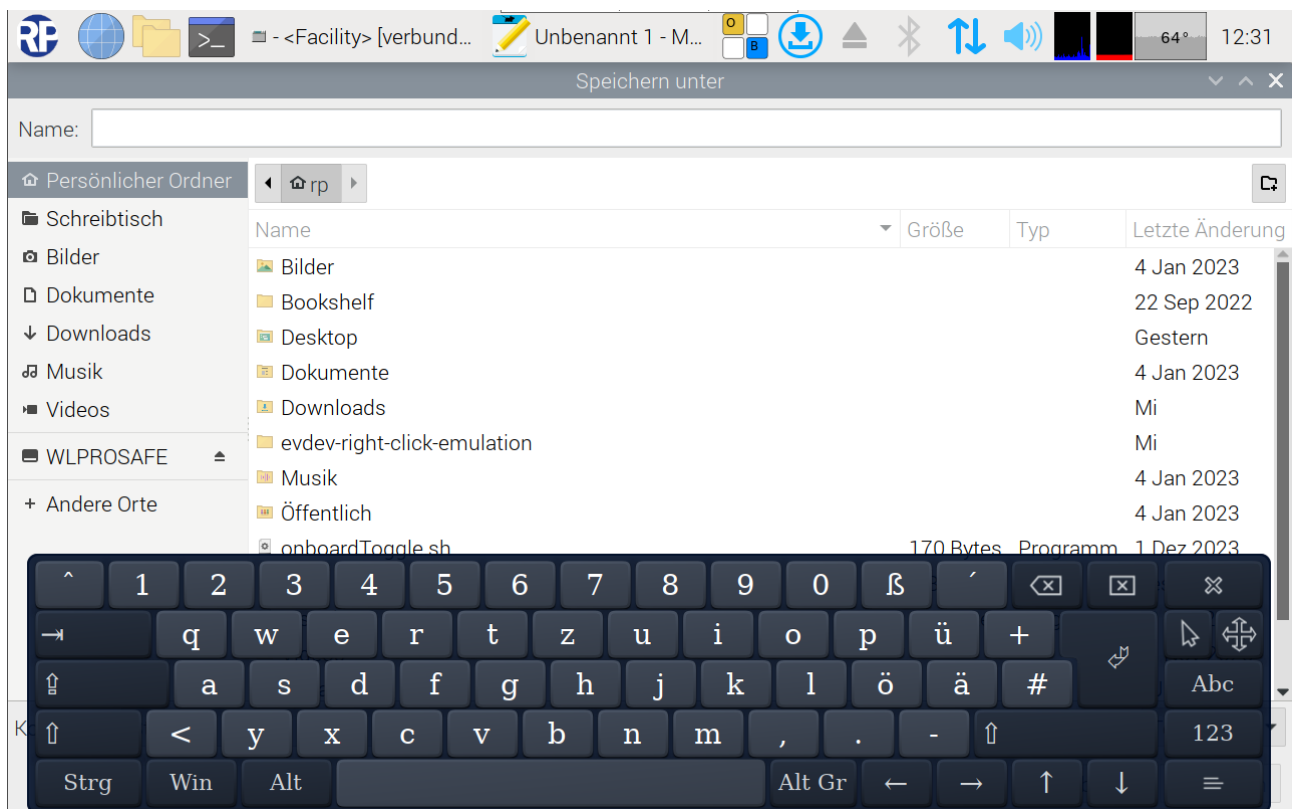


Figure 46 Text editor, Save dialogue

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.

19.4 Closing program

To close the program, go to Datei->Beenden. (See Figure 45 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.

20 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 22.2 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.

21 Operating System and Wireless Professional Updates

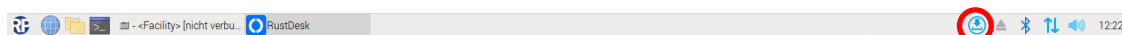
The Wireless Professional WLZent regularly checks for updates to the operating system and the Wireless Professional software. The WLZent needs an Internet connection for this check. Once a week (Sundays at midnight), the WLZent automatically looks for updates, downloads these of its own accord and installs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



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

22 Backing up Wireless Professional WLZent Data

22.1 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.

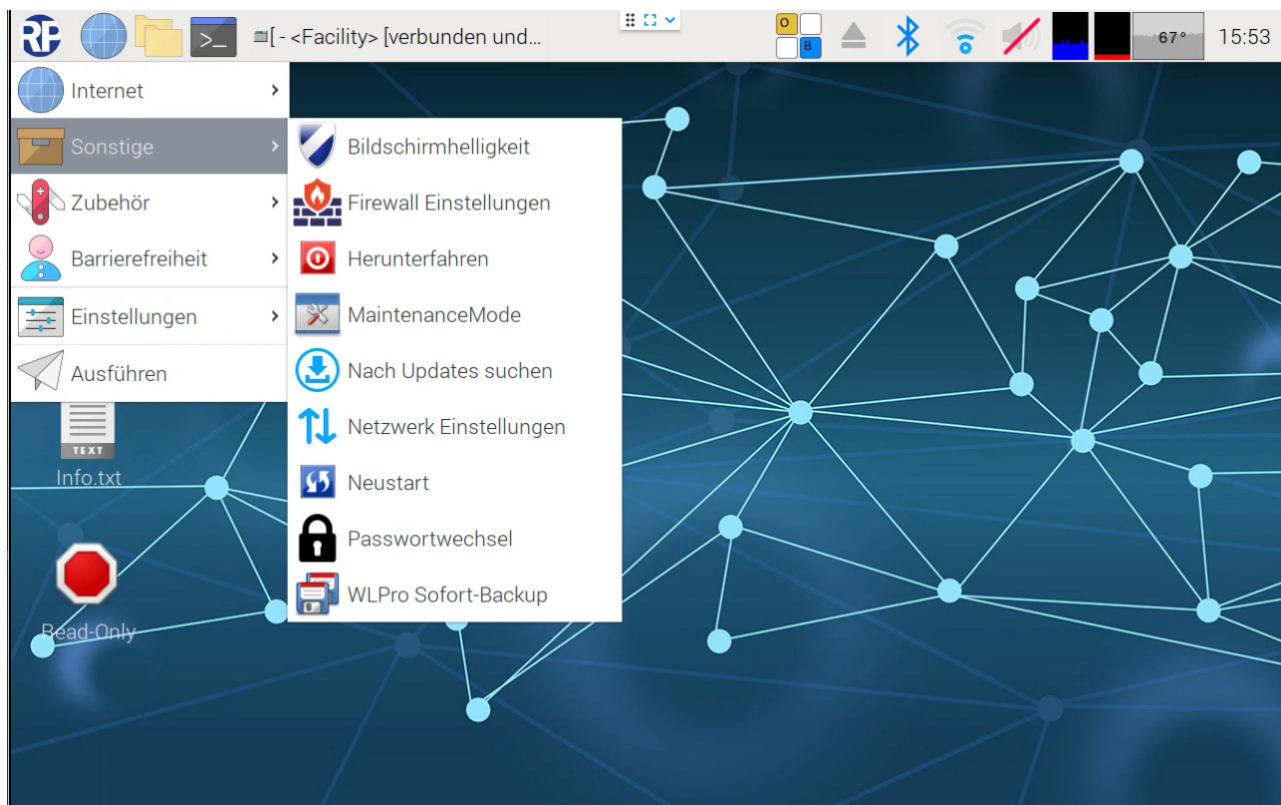
Warning: The backup USB stick must not be removed during operation otherwise there is a risk of data loss.

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.

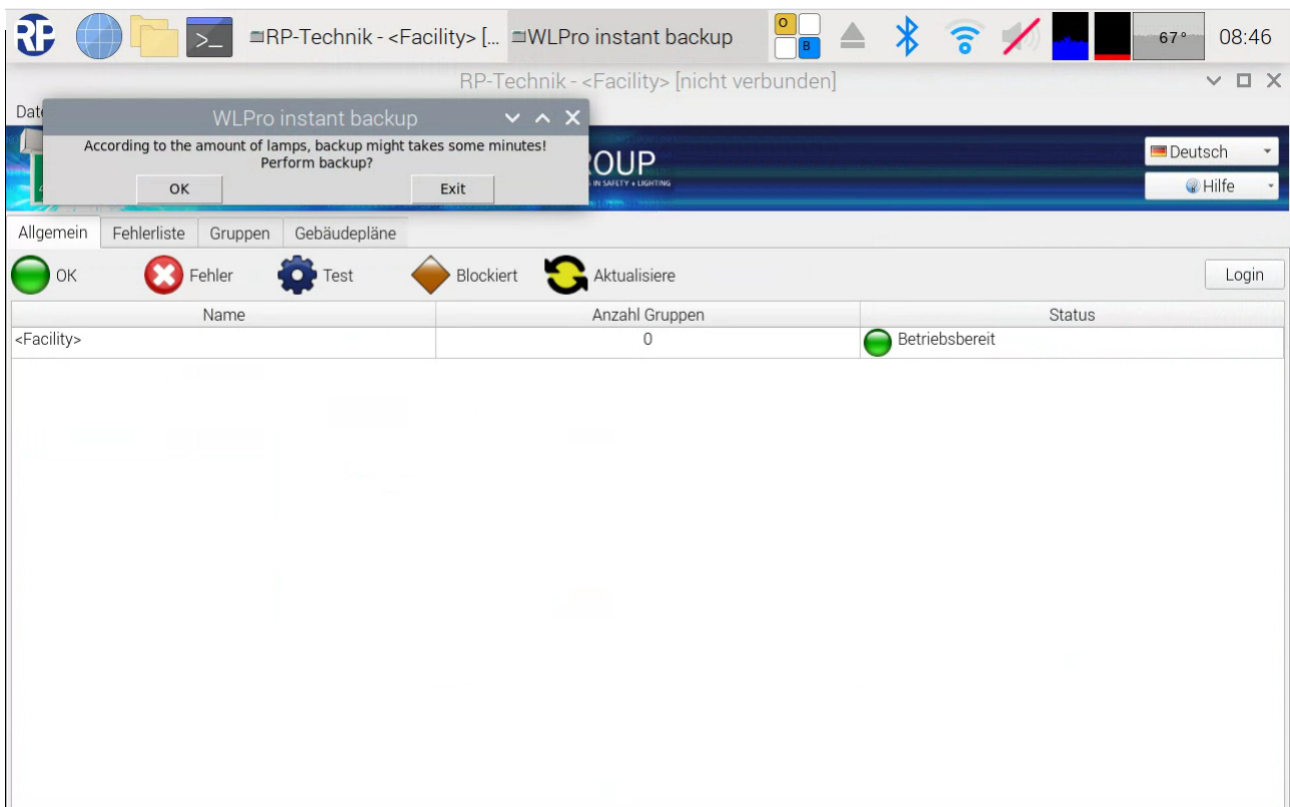
22.2 Manual backup

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.

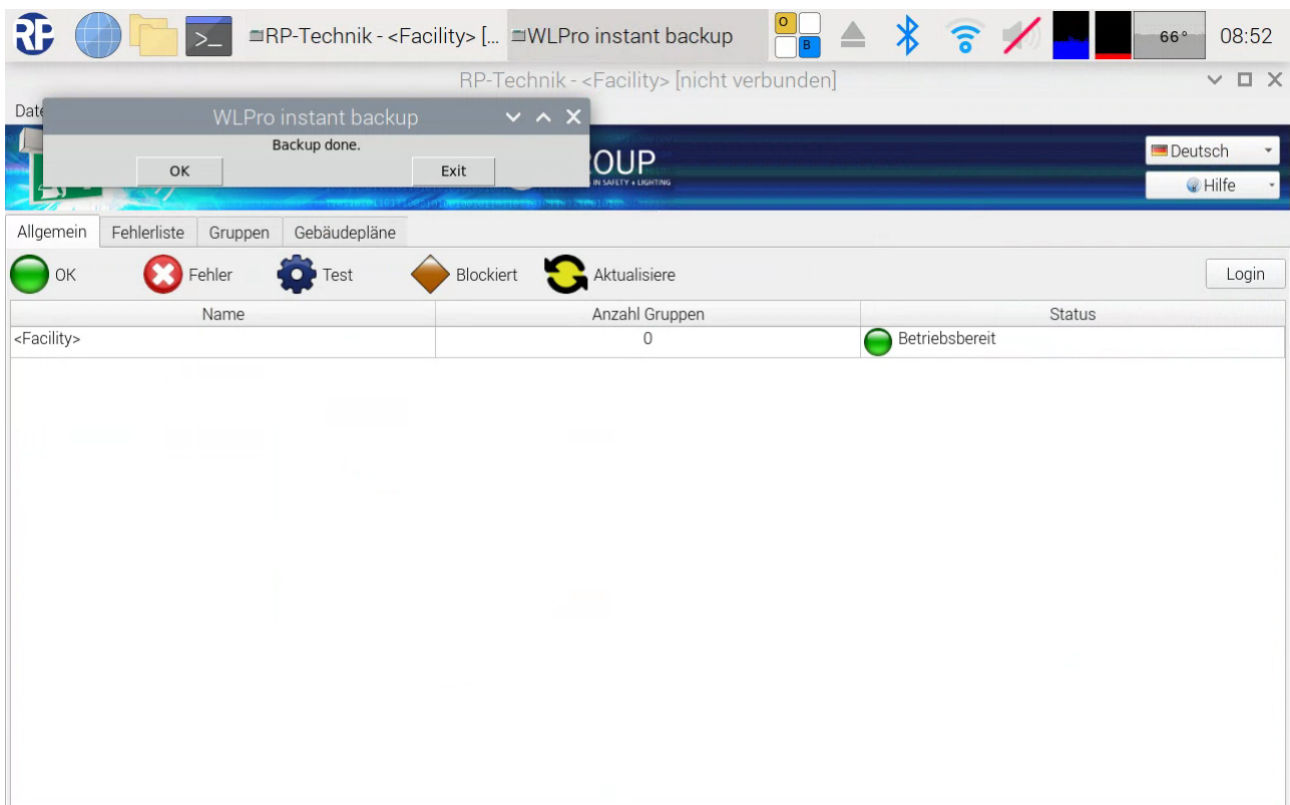
The user can trigger the copying process by rebooting the WLZent (see 8.4.) Alternatively, the copying process can be triggered during commissioning, for instance, by going to “Start menu->Sonstige->WLPro Sofort-Backup”.



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



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.



22.3 Copying backup files to another device

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

!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.

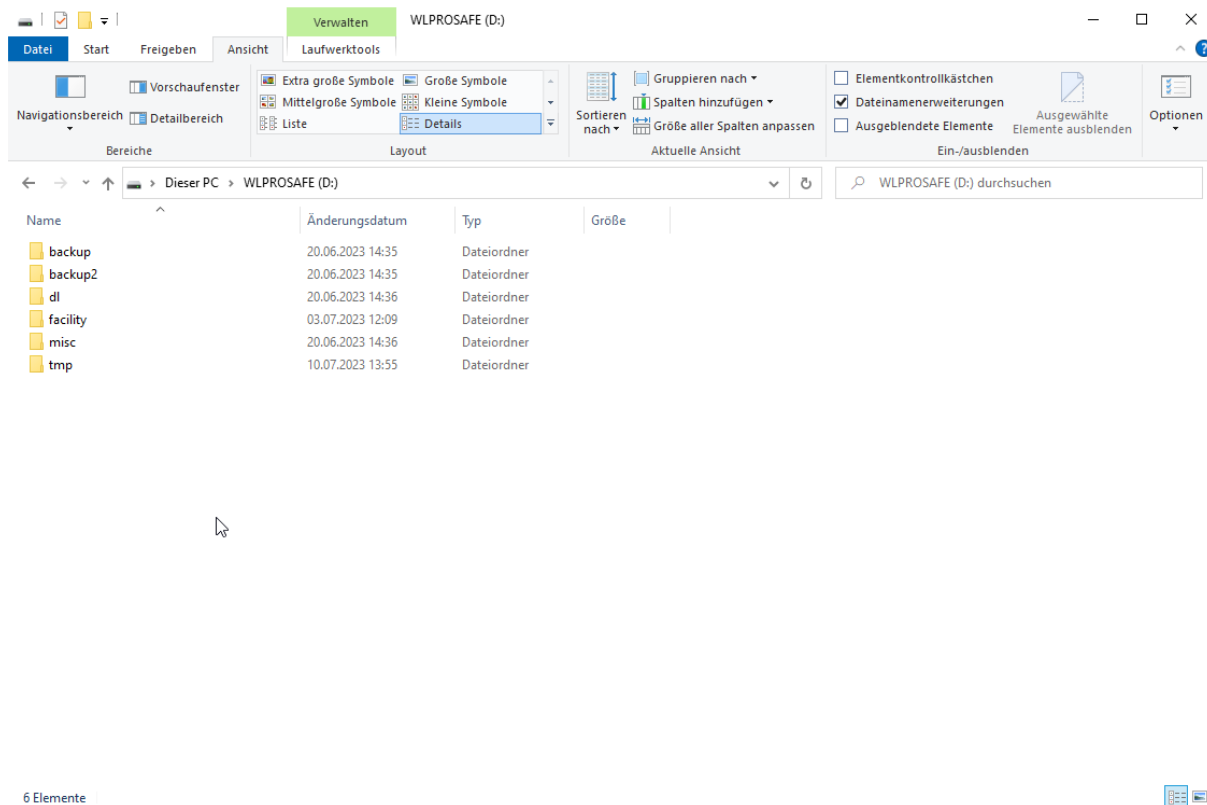


Figure 47 Backup USB stick on a Windows device

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.

23 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.

24 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 are loaded with the automatic software updates as soon as they are available.

25 FAQ

25.1 What devices can be connected to the USB socket?

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

25.2 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.

25.3 Are software updates automatically downloaded from the Internet?

Yes.

25.4 Is a backup to a network drive possible?

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

25.5 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.

26 Revision History

WirelessControl - Installation and Software Operation		
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

27 Contact Information



Identification number: 190424

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