



UVIX

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USER MANUAL Version: 1.4

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Introduction

The UVIX software enables the monitoring and configuration of all Camozzi IIOT devices that support connectivity with it.

Its primary goal is to meet user-specific needs through a simple and quick configuration process. This software is not just a basic parameter-setting tool; it has the ability to monitor various variables and identify any errors, ensuring constant and precise system control, as shown in Figure 1.1.

.st. uvix				Ø	🗘 Setup 🗸	👤 user 🗸	A Home	About	- 22
✓ default group	Devices group: default group		Device name: D2	2 Profinet					
D1 IO-Link Open Frame Pressure	Status information:								~
- DI Profinet		Name: D2 Profinet		Last data transmission	2024-01-11 14	1:27:02			
- PRE		Device number: 01702247990000028		Device status: 🔵					
> DI Ethernet IP		Family name: Series CX4		Operational status: N	anual				
> D1 IO-link 32 posizioni	A CONTRACTOR	Subtype: Series D Fieldbus - D2		Connection: 🔵					
V D2 Profinet SD		Firmware: 2.33							
✓ Family Valve:	Configuration	FieldBus: ProfiNet	Link status: 🔴		📕 Setup Fie	ldBus			
1 - Valve									
2 - Valve	Details:								
4 - Valve	I Variables Alarms A Commands	s							
5 - Digital Input	Name					Value			
	Temperature					73 °C			*
	Supply voltage					23.7 V			
	Supply voltage (logic)					23.7 V			
Tatel Daviesa 0									
TOTAL DEVICES, 6									
Status Devices:									
. : 0 . : 1 . : 0 . : 7									w
						_	_	1	2

Figure 1.1: Main Screen

One of its main features is its web-based architecture, which allows access through a simple web browser. You can install it on a single PC, gateway, or server and access it from any wireless-enabled device. Additionally, through the integrated MQTT protocol in UVIX, it is possible to send data to an external application.

This way, the user can customize the management of data transmitted by various devices.

Network Topology

Devices can connect to UVIX via USB , wireless or Ethernet connection, depending on the device, some connection modes may not be available.

This chapter will analyze various network topologies with particular attention to their configuration to ensure proper functioning.

2.1 USB Connection

The simplest topology is the USB connection, in this mode, it is sufficient to connect the device to the PC where UVIX is installed using a USB cable (Figure 2.1).



Figure 2.1: Example of USB Connection

Once the connection is established, launch the "Camozzi USB Gateway" software (Chapter 5), and the device will become available on the WebApp (Chapter 6).

2.2 Wireless Connection

A topology that reduces the number of cables is one that utilizes a wireless connection.

In this mode, an access point is required to generate the wireless network to which various devices will connect (the network name and password must not contain spaces).

In the devices, you will need to set the IP address to which data should be sent, the SSID, and the password of the network (for more information on how to perform this operation, refer to the device manual).



Finally, the PC on which UVIX is installed must also be connected to the access point using the same wireless network or an Ethernet cable.



Figure 2.2: Example of Wireless Connection

All devices must have an IP address within the network, and they must follow the following rules.

- UVIX PC: Must be set to static.
- Access Point: Must have a different IP address than the UVIX PC.
- UVIX Device: This is not the device's address but the address to which data should be sent. It must be identical to that of the UVIX PC.

The IP addresses of the devices are dynamic and should be assigned by a DHCP server.

The user needs to ensure that a DHCP server is installed and enabled on the access point or UVIX PC.

2.3 Ethernet Connection

A useful network topology when using devices that have Ethernet-based communication (such as Profinet, EtherCAT or EtherNet/IP) is one that uses the existing connection to establish communication between the device and UVIX as shown in figure 2.3.

A Not all Camozzi devices with Ethernet-based communication support this type of connection, for more information refer to the device manual.



Figure 2.3: Example of connection via Ethernet port

All devices must have an internal IP address to the network, and must also be static. Depending on the protocol, it is possible to have UVIX messages coexist or it is necessary to enable a specific function (if provided) in which the protocol itself takes care of the transmission. In the latter case, the function is called "Ethernet over ...", an example of this is the EtherCAT protocol and its "Ethernet over EtherCAT" function.

2.3.1 Ethernet over Ethercat (EoE)

Ethernet over EtherCAT (or "EoE") is a function of the EtherCAT protocol that allows Ethernet communications in an EtherCAT network.

Within an EtherCAT network it is not possible to transmit messages that do not belong to the protocol itself, for this reason it is necessary to enable the EoE function.

For UVIX communication a TCP/IP client-server connection has been created, in which the devices are the clients that send the data while the UVIX is the server that receives.

The following is a list of the cases provided for by EoE, based on the master and the Camozzi devices used, dedicated configurations may be necessary (for more details refer to the device manuals).

• Internal Communication via EoE: in this case the master manages both EtherCAT and Ethernet communication, figure 2.4.



Figure 2.4: Internal Communication via EoE

To use this configuration the master must have an operating system that allows installing the UVIX software, then enable EoE and configure the IP addresses with the following rules.

- Master: EoE enabled, IP address must be static and consistent with the created local network.
- Camozzi device: EoE enabled, the IP address must be static and consistent with the created local network, the gateway must be the master IP address.

Although it is the simplest configuration, it requires a master with specific characteristics, so implementation may not be possible in most cases.

• **Direct EoE Access via EtherCAT Switch Port**: in this case the UVIX is installed on a dedicated PC inserted within the EtherCAT network, figure 2.6.



Figure 2.5: Direct EoE Access via EtherCAT Switch Port

To use this configuration you need to have an EtherCAT switch, then enable EoE and configure the IP addresses with the following rules.

• Master: EoE enabled, IP address must be static and consistent with the created local network.



- PC UVIX: The IP address must be static and consistent with the local network created.
- Camozzi device: EoE enabled, the IP address must be static and consistent with the created local network, the gateway must be the IP address of the PC where the UVIX is installed.

This configuration requires an EtherCAT switch (you cannot use a normal Ethernet switch) but it is the simplest to use, for this reason it is the most recommended.

• **External EoE Communication via IP Routing**: in this case the PC with UVIX installed is in a network (in the example indicated as Ethernet LAN) different from the EtherCAT network (in the example indicated as EoE LAN), figure 2.6.

The master is connected to both networks via two separate ports and has the task of transmitting messages from one network to the other, this function is called routing.



Figure 2.6: External EoE Communication via IP Routing

To use this configuration, it is necessary to enable the routing function on the master and on the devices. In addition to configuring the IP addresses, various operations on the networks are required and must be performed by specialized personnel.

Given the complexity of the network and the operations required for commissioning, its use is not recommended.



2.4 Advanced connections

In this section we will show some advanced topologies made possible by the software structure (the latter is analyzed in detail in the chapter 3).

2.4.1 Connection via Corporate Network

A possible extension of the two types seen is to make UVIX visible to an external network, such as a corporate network, through a second network port on the UVIX PC.

In the example shown in Figure 2.7, the wireless connection topology is depicted, but the concept is analogous for the USB connection.



Figure 2.7: Example of Connection to an External Network

In this topology, one network port of the UVIX PC is used to create the Camozzi device network, while a second network port is used to make the software accessible from any device within the corporate network.

Devices within the corporate network do not need to have UVIX installed.

They can simply access the WebApp (Chapter 6) from a web browser by entering the IP address of the UVIX PC on their own network.

2.4.2 Distributed UVIX

An advanced use of UVIX software, made possible by its structure (Chapter 3), is the distributed topology.

In this topology, it is possible to divide the various components of UVIX across different PCs. An example could be having a single UVIX and wanting to connect devices via USB cables but not directly

An example could be having a single UVIX and wanting to connect devices via USB cables but not directly reachable.

By leveraging this topology, you can set up multiple PCs with only the "Camozzi USB Gateway" (Chapter 5) installed, connect them to the same wireless network as the PC with UVIX installed, and connect the desired devices to various PCs via USB cable.

By configuring the "Camozzi USB Gateway" properly, you can make the various devices, connected to different PCs, communicate with a single UVIX.

Software structure

In this chapter, we will delve into the structure of UVIX (Figure 3.1), analyzing the various components and how they are interconnected.

Understanding these elements is crucial for commissioning advanced topologies (Chapter 2) or for modifying communication ports if one or more of the predefined ones are already occupied.

3.1 UVIX Structure



Figure 3.1: UVIX Structure

The UVIX software consists of:

- USB Gateway: Manages messages between devices connected via USB and the FEP. This component must be started manually and is not used for connections other than USB.
- FEP: Manages messages between devices and the Web Service. In the case of USB communication,

data comes from the USB Gateway, otherwise directly from the device.

- Web App: The web interface visible to the user, responsible for displays data provided by the Web Service in a simple and intuitive manner.
- Database: Contains the latest data received from devices.
- Web Service: Manages the Database and data exchange with FEP and Web App.
- Fast Mode: Manages "fast" data, which requires a higher transmission frequency.
- MQTT for external application: An external component to UVIX, the Web Service implements the MQTT protocol to allow data to be sent to an external application. For more information, see Chapter 7.

3.2 Communication Parameters

Communication between the various components occurs through the establishment of a TCP socket. To work correctly, the IP address and communication port must be set.

The IP address of the component is the same as that of the PC on which it is installed.

If all components are installed on the same PC, they will have the same IP address.

Depending on the type of installation (Chapter 4), it is possible to manually specify the ports to use. Otherwise, the various components will use the default ports, which can also be modified later through the configuration files.

Table 3.1 lists all the ports used, along with the components and whether they are modifiable.

Components	Communication Port	Modifiable
Wireless Device - FEP	1555	No
USB Gateway - FEP	1555	No
USB Gateway - Camozzi Ethernet Device	55555	No
USB Gateway - Fast Mode	1883	Yes
Fast Mode - Web App	8083	Yes
FEP - Web App	12345	Yes
FEP - Web Service	5000	Yes
Web App - Web Service	5000	Yes
Web App - User	8080	Yes
Web Service - MQTT for external application	1883	Yes

During installation, rules for all used ports are automatically added to the Windows firewall. The same operation (user responsibility) must be performed if a third-party antivirus or firewall is present.

3.3 Advanced UVIX Structure

Figure 3.2 shows the advanced structure of UVIX, including all communication ports.



Figure 3.2: Advanced UVIX Structure

3.4 Modification USB Gateway - Fast Mode Communication Parameters

To modify this communication, follow these instructions:

- 1. Start USB Gateway (for more information, see Chapter 5).
- 2. Open the Tools -> Setting menu.
- 3. Modify the "Fast Mode Address" field with the desired IP address, setting the first number to 127, will set the local address.
- 4. Modify the "Fast Mode Port" with the desired port.
- 5. Open the file 'mosquitto.conf' with an editor in the Mosquitto installation path, by default C:\ProgramFiles\mosquitto.
- 6. Modify line 891 by replacing port 1883 with the desired one; the IP address automatically matches the PC where Fast Mode is installed.
- 7. Save and close the file.
- 8. Restart the service "Mosquitto Broker" or the PC.

Settings	×	885 886	# ====================================
01000000000		887 888	# =====================================
UVIX Address		889 890	allow_anonymous true
	Set as localhost	891	listener 1883
		892 803	protocol mqtt
UVIX URI	http://192.168.1.155:8080	894	listener 8083
	Set default URI	895	protocol websockets
	otracialition	896	allow_anonymous true
		000	set_tcp_nodelay true
Fast Mode Addres	s 127 . 0 . 0 . 1	090	
Fast Mode Port	1883		
	Test Fast Mode		
ОК	Cancel		

Figure 3.3: Changing the USB Gateway - Fast Mode Port

3.5 Modification Communication Parameters for Fast Mode - Web App

To modify this communication, follow the instructions below:

- 1. Open the file 'mosquitto.conf' with an editor in the Mosquitto installation path, by default C:\ProgramFiles\mosquitto.
- 2. Modify line 894 by replacing port 8083 with the desired port. The IP address will automatically be the one of the PC where Fast Mode is installed.
- 3. Save and close the file.
- 4. Open the "config.js" file in a text editor located in the Web App installation directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebApp\js.
- 5. Modify line 98 by replacing port 8083 with the desired port. The IP address will automatically be that of the PC where the Web App is installed.
- 6. Save and close the file.
- 7. Restart the service "Mosquitto Broker" or the PC.



Figure 3.4: Changing the Port for Fast Mode - Web App



3.6 Modification Communication Parameters for FEP - Web App

To modify this communication, follow the instructions below:

- 1. Open the "camozzi.config" file in a text editor located in the FEP installation directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\FEP.
- 2. Modify line 13 by replacing port 12345 with the desired port. The IP address will automatically be that of the PC where FEP is installed.
- 3. Save and close the file.
- 4. Open the "config.js" file in a text editor located in the Web App installation directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebApp\js.
- 5. Modify line 82 by replacing port 12345 with the desired port. The IP address will automatically be that of the PC where the Web App is installed.
- 6. Save and close the file.
- 7. Restart the service "CamozziFEP" or the PC.



Figure 3.5: Changing the Port for FEP - Web App

3.7 Modification Communication Parameters for FEP - Web Service and Web App - Web Service

To modify this communication, follow the instructions below:

- 1. Open the "camozzi.config" file in a text editor located in the FEP installation directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\FEP.
- 2. Modify lines 3 to 9 by replacing port 5000 with the desired port.
- 3. Modify lines 3 to 9 by replacing the IP address 127.0.0.1 with the desired IP address.
- 4. Save and close the file.
- 5. Copy the "config.xml" file to the Web Service installation directory inside the "Config" folder located in the same directory, by default

C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebService.

- 6. Open the copied "config.xml" file in a text editor.
- 7. Modify line 5 by replacing port 5000 with the desired port.
- 8. Modify line 5 by replacing the IP address 127.0.0.1 with the desired IP address.
- 9. Save and close the file.



- 10. Open the "config.js" file in a text editor located in the Web App installation directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebApp\js.
- 11. Modify line 1 by replacing *window.location.hostname* with the desired IP address enclosed in double quotes, for example, *"192.168.153.23"*.
- 12. Modify line 7 by replacing port 5000 with the desired port.
- 13. Modify line 75 by replacing port 5000 with the desired port.
- 14. Save and close the file.
- 15. Restart the service "CamozziFEP" and "CamozziWebService", or restart the PC.



Figure 3.6: Changing the Port for FEP - Web Service and Web App - Web Service

3.8 Modification Communication Parameters for Web App - User

To modify this communication, follow the instructions below:

- 1. Launch the IIS (Internet Information Services) with administrator privileges.
- 2. In the "Connections" window, open the "Sites" folder and select "WebApp Remote Control".

- 3. In the "Actions" window, click on "Bindings...".
- 4. Select the row indicating the currently used port, by default 8080, and click "Edit...".
- 5. In the "Port:" field, replace the currently used port, by default 8080, with the desired port.
- 6. Click "OK," close the "Site Bindings" window, and exit IIS.

Internet Information Services (IIS) Manager		- 0
(← →		🚥 📧 🛅 (
File View Help		
File Vew Help Concettos ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	WebApp Remote Control Home Iter: Iter: <thiter:< th=""> Iter: Iter:<</thiter:<>	Actions Explore Edit Permission Edit Permission Edit Permission Edit Permission Edit Permission Edit Permission Permission Edit Permission Edit Permission Permissi

Figure 3.7: Changing the Port for Web App - User

3.9 Modification Communication Parameters for Web Service - MQTT for External Application

For more information on this functionality, refer to chapter 7.

To modify this communication, follow the instructions below:

- 1. Copy the "config.xml" file to the Web Service installation directory inside the "Config" folder located in the same directory, by default C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebService.
- 2. Open the copied "config.xml" file in a text editor.
- 3. Modify line 19 by setting the value to 1 to enable MQTT, if it's not already enabled.
- 4. Modify line 22 by replacing *localhost* with the desired IP address.
- 5. Modify line 25 by replacing port 1883 with the desired port.
- 6. Restart the service "CamozziWebService" or the PC.

17	Mqtt
18	Flag_che indica se abilitare task Mqtt (0=disabled, 1=MqttCustomer, 2=MqttDigital, default:0)
19	<mqtton 0="" mqtton=""></mqtton>
20	
21	Host di connessione a broker Mqtt
22	<mqttconnectionhost:localhost mqttconnectionhost=""></mqttconnectionhost:localhost>
23	
24	Porta di connessione a broker Mqtt
25	<mqttconnectionport 1883="" mqttconnectionport=""></mqttconnectionport>
26	

Figure 3.8: Changing the Port for Web Service - MQTT for External Application

Installation

In this chapter, we will go through the installation procedure in detail, which includes two modes: a basic mode that sets parameters to default values and an advanced mode that allows user customization.

To start the installation, you will need administrator privileges.

After that, follow the steps described in Chapter 4.1 if you want to perform the basic installation, or follow those described in Chapter 4.2 if you prefer the advanced installation.

4.1 Basic installation

To perform the basic installation, follow these steps:

1. Ensure that the system requirements are met and click "Yes", as shown in figure 4.1.



Figure 4.1: UVIX requirements

2. Select the "Basic" mode and click "Next," as shown in Figure 4.2.



Figure 4.2: Mode selection

3. Wait for the installation to complete, as shown in Figure 4.3.

rug Setup - UVIX —	
Installing	FR
Please wait while Setup installs UVIX on your computer.	(10)
Extracting files	
C:\Program Files (x86)\CAMOZZI\UVIX\FEP\api-ms-win-crt-multibyte-l1-1-0.dll	
1	Cancel

Figure 4.3: Installation

4. Click "Ok" to confirm the installation of Fast Mode, as shown in Figure 4.4.

Setup - UVIX		
Installing Please wait while	Setup installs UVIX on your computer.	(a)
Finishing installation	on	
Setup		×
0	Mosquitto will be installed on the pc, run the installation with the default values.	'n
	ОК	
		Cancel

Figure 4.4: Fast Mode installation

5. Click "Next >" to begin the installation, as shown in Figure 4.5.



Figure 4.5: Start of Fast Mode installation

6. Click "Next >" to confirm the components you want to install, as shown in Figure 4.6.



Figure 4.6: Select Fast Mode components

7. Click "Install" to start the installation, as shown in Figure 4.7.

Choose Install Location						Gran
Choose the folder in which to install Eclipse Mosquitto.						
Setup will install Eclipse Mosquitto in the following folder	. To ins	stall in	a diffe	erenti	folder,	click
Browse and select another folder. Click Install to start the	he insta	allation	n.			
Destination Folder						
Destination Folder C:\Program Files\mosquitto]	Brow	/se	
Destination Folder C:\Program Files\mosquitto]	Brow	/se	
Destination Folder C: \Program Files\mosquitto Space required: 5.1 MB Space available: 207.4 GB]	Brow	/se	

Figure 4.7: Launch of Fast Mode installation

8. Click "Finish" to complete the installation of Fast Mode, as shown in Figure 4.8.



Figure 4.8: End of Fast Mode installation

9. Select whether you want to restart your PC immediately or at a later time and click "Finish," as shown in Figure 4.9.



Figure 4.9: Restart options

10. Click "Ok" and after the restart, remember to clear the browser cache (browsing history), as shown in Figure 4.10.



Figure 4.10: End of installation



4.2 Advanced Installation

To perform the advanced installation, follow these steps:

1. Ensure that the requirements are met and click "Yes," as shown in figure 4.11.



Figure 4.11: UVIX Requirements

2. Select the "Advanced" mode and click "Next," as shown in figure 4.12.

Setup - UVIX		
Installation mode		FR
Select installation mode		(10m)
O Basic mode		
Advanced mode		
	Next	Cancel

Figure 4.12: Mode Selection

3. If you want to change the destination folder, then click "Next" after that, as shown in figure 4.13.

Setup - UVIX		100 M	
Select Destination Location			F
Where should UVIX be installed?			HOW
Setup will install UVIX into	o the following folder.		
To continue, dick Next. If you wou	uld like to select a different	folder, click Bro	owse.
C: \Program Files (x86) \CAMOZZI	VUVIX	B	owse
At least 150.1 MB of free disk spa	ce is required.		

Figure 4.13: Select Destination Folder

4. If the folder already exists, confirm that you want to proceed by clicking "Yes," as shown in figure 4.14.



Figure 4.14: Confirm Destination Folder

5. Specify whether you want to create a shortcut and click "Next," as shown in figure 4.15.

Setup - UVIX	
Select Start Menu Folder	F
Where should Setup place the program's shortcuts?	(10)
Setup will create the program's shortcuts in the follo	wing Start Menu folder.
UVIX	Browse
Don't create a Start Menu folder	
Don't create a Start Menu folder	

Figure 4.15: Create Shortcut

6. Verify the installation settings and click "Install," as shown in figure 4.16.



Figure 4.16: Installation Settings Summary

7. Wait for the installation to complete, as shown in figure 4.17.

طع Setup - UVIX	- 0 X
Installing	FR
Please wait while Setup installs UVIX on your computer.	(10m)
Extracting files	
C:\Program Files (x86)\CAMOZZI\UVIX\WebService\refs\System.Ref	lection.Emit.dll
	Cancel

Figure 4.17: Installing

8. Specify if you want to install IIS (Internet Information Services), the Windows component responsible for managing the WebApp.

Type "y" to confirm or "n" to decline and press Enter, as shown in figure 4.18.



Figure 4.18: IIS Installation

9. If you have decided to install IIS, wait for it to finish, and press any key, as shown in figure 4.19.

C:\Program Files (x86)\CAMO	ZZI\UVIX\IIS_Gateway\IIS_Gateway	exe	
[23.3%	1	^
[24.3%		
[=====	25.3%		
[26.3%		
[27.3%		
	28.3%		
	29.3%		
	30.3%		
	31.3%		
	32.3%		
	33.3%		
[The operation completed	successfully.		
C:\Program Files (x86)\(CAMOZZI\UVIX\IIS_Gatewa	y>exit	
Press any key to continu	Je		

Figure 4.19: IIS Installation Completion

10. Specify the port for the WebApp you want to use.

Type "y" and Enter for the default port (8080), or type "n" and Enter, followed by your desired port and Enter if you want to customize it, as shown in figure 4.20.



Figure 4.20: WebApp Port Configuration

11. Wait for the configuration to finish, and press any key, as shown in figure 4.21.



Figure 4.21: WebApp Port Configuration Completion

12. Accept the terms and click "Install" to install the Microsoft Visual C++ 2019 Runtime package, as shown in figure 4.22.



Figure 4.22: Microsoft Visual C++ 2019 Runtime Installation

13. If the package is already installed, click "Close" to close the error message that appears and continue with the installation of other packages, as shown in figure 4.23.



Figure 4.23: Error Message if Already Installed

14. Wait for Windows updates to be checked, as shown in figure 4.24.



Figure 4.24: Windows Updates

15. Click "OK" to confirm the installation of Fast Mode, as shown in figure 4.25.



Figure 4.25: Fast Mode Installation

16. Click "Next >" to start the installation, as shown in figure 4.26.



Figure 4.26: Start of Fast Mode Installation

17. Click "Next >" to confirm the components you want to install, as shown in figure 4.27.

se Mosquitto you want to	o install.
nt to install and uncheck	the components you don't want to
Files Service	Description Position your mouse over a component to see its description.
	se Mosquitto you want to nt to install and uncheck

Figure 4.27: Select Fast Mode Components

18. Click "Install" to start the installation, as shown in figure 4.28.

Compse mosquitto setap					
Choose Install Location					NUM
Choose the folder in which to install Edipse Mosquitto.					4
Setup will install Eclipse Mosquitto in the following folder. To Browse and select another folder. Click Install to start the in	install Istalla	l in a di tion.	fferent	folder, i	click
Destination Folder					
Destination Folder C: \Program Files \mosquitto			Brov	se	
Destination Folder C: \Program Files\mosquitto Space required: 5.1 MB			Brov	/se	
Destination Folder C: \Program Files\mosquitto Space required: 5.1 MB Space available: 207.4 GB			Brov	/se	
Destination Folder C: \Program Files\mosquitto Space required: 5.1 MB Space available: 207.4 GB ullsoft Install System v3.03			Brov	/se	

Figure 4.28: Launch of Fast Mode Installation

19. Click "Finish" to complete the installation of Fast Mode, as shown in figure 4.29.



Figure 4.29: End of Fast Mode installation

20. Select whether you want to restart your PC immediately or at a later time and click "Finish," as shown in figure 4.30.



Figure 4.30: Restart Options

21. Click "OK" and after the restart, remember to clear the browser cache (browsing history), as shown in figure 4.31.



Figure 4.31: End of installation

Camozzi USB Gateway

In this chapter, we will take a detailed look at all the features of the Camozzi USB Gateway (Figure 5.1), a component that is responsible for managing communication between Camozzi devices connected via USB connection and the FEP (Fieldbus EtherNet/IP).

	Gateway USB			_ 🗆 X
File	Tools ?	Status		• 2
	Start Gateway	Gateway running (FEP	Address:127.0.0.1)	CAMOZZI
	Stop Gateway	Open COMs COM4:01572051990000	0020	Automation
	Open UVIX			U Vİ X
Ма	in Page Wireless Configurator	Mapping		
Virtu	ual COMs Available		Tcp Connections	
STMi	croelectronics Virtual COM Port (COM4)		COM4<=>127.0.0.1:1555	
Date	a Received from Usb Devices (Virt	ual Ports)	Data Received from FEP	
(co	M4) => \$C01572051990000020			
(col	M4) => \$V01572051990000020 M4) => \$001572051990000020			

Figure 5.1: Camozzi USB Gateway



5.1 Main Screen

	Gateway USB	_ 1	οx
1 File 2	Tools ?	3 status	
	Start Gateway	4 Open COMs	
	Stop Gateway	COM4:01572051990000020 Automation	
	Open UVIX		
6 ма	in Page 6 Wireless Configurator	Mapping	
Virt	ual COMs Available	Tcp Connections	
STM	icroelectronics Virtual COM Port (COM4)	COM4<=>127.0.0.1:1555	
Dat	a Received from Usb Devices (Vir	tual Ports) Data Received from FEP	
(co	M4) => \$C01572051990000020		
(co	M4) => \$V01572051990000020		
(co	M4) => \$001572051990000020		

Figure 5.2: Main Screen

- **1** Toolbar: for managing all the functionalities of the USB Gateway, Chapter 5.2.
- **2** USB Gateway Commands: to start or stop the USB Gateway and open the webApp, Chapter 5.3.
- **3** Status: indicates the status of the USB Gateway, Chapter 5.4.
- **Open COMs: List of devices currently communicating, Chapter 5.5.**
- **6** Main Page: status of connections managed by the USB Gateway, Chapter 5.6.
- **6** Wireless Configuration: wireless connection configuration, Chapter **5**.**7**.
- Mapping: mapping command, Chapter 5.8.

5.2 Toolbar

In the "File" dropdown menu, you will find the following commands:

• Hide: to hide the USB Gateway window while keeping it active. Once hidden, you can reopen the window by clicking on the icon in the taskbar at the bottom left of the screen.



• Exit: to exit the USB Gateway.

In the "Tools" dropdown menu, there are the following commands:

- Settings, as shown in Figure 5.3: to manage communication settings with other components.
 - FEP Address: the address of the FEP with which to establish communication.
 If it is installed on the same PC, you can automatically insert the local address using the "Set as localhost" command.
 - UVIX URI: IP address and port of the WebApp, used as the address for the "Open UVIX" command, and can be automatically set to the local address using the "Set default URI" command.
 - Fast Mode Address: the address of the Fast Mode to which the USB Gateway must send data.
 - Fast Mode Port: the port of the Fast Mode to which the USB Gateway must send data.
 - Test Fast Mode: by clicking on the command, you can check the status of communication with the Fast Mode (an indicator next to the button will be green if active, red if inactive).



 Ethernet Device Configuration, as shown in Figure 5.4: to manage and update Camozzi devices that support this functionality via an Ethernet connection.

See Chapter 5.9 for details.



Ethernet Device C	onfiguration			×
Network Adapter Realtek PCIe GbE Fo	amily Controller: 19	8.168.0.15		Ŷ
Mac Address	Ip Address	Device Name	Device Type	
Scan Ethernet Configure	ation Connectio	n Parameters Fw	Upgrade	
Ethernet Paramete				
Change Ip A	ddness 🗹 Store	Settings	Reset to Facto	y .

Figure 5.4: Ethernet Device Configuration

• Device Firmware Upgrade (USB), as shown in Figure 5.5: to manage the USB-connected Camozzi devices that support this functionality.

To determine if the device you wish to connect supports this functionality and for detailed procedures, please refer to the product's user and maintenance manual.

Devices Upgrade	×
Device Info Type: Fw Version:	Devices Running
New FW Select file Clear	Devices boot mode
Ecot mode	Refresh lists Status No device selected

Figure 5.5: Device Firmware Upgrade (USB)

• UVIX Logs, as shown in Figure 5.6: allows you to export the logs of the USB Gateway within a specific time frame, specifying the start and end dates.

This data may be requested by Camozzi Service after a request for support.

Uvix Logs	×
Select a date interval	
Start date	
15/12/2023	15
End date	
15/12/2023	15
	Create archive

Figure 5.6: UVIX Logs

In the "?" dropdown menu, there is the "About" command, as shown in Figure 5.7, which displays information about the USB Gateway.

About		×
C <	PRODUCT NAME Camozzi Gateway USB	
CAMOZZI	VERSION 3.15.0.0	
Automation	COPYRIGHT Copyright © 2019	
	COMPANY NAME Camozzi Automation	
	MANUALS	
	DESCRIPTION	
	The application manages communication via USB with specific STMicroelectronics boards. It receives protocol messages from boards and forwards them to FEP and viceversa. It is also able to get from boards their Wifi connection parameters and to set them.	

Figure 5.7: USB Gateway Information

5.3 USB Gateway Commands

Figure 5.8 displays the commands for the USB Gateway to manage its state (visible through the status bar described in Chapter 5.4) and to open the WebApp.



Figure 5.8: USB Gateway Commands

• Start Gateway: starts up the USB Gateway, allowing data transmission between devices and other components.

Stop Gateway: stops the USB Gateway, blocking data transmission between devices and other components.

• Open UVIX: opens the WebApp in the default browser. The address is configured in the "Settings" commands shown in Figure 5.3.

5.4 Status

The "Status" bar indicates whether the USB Gateway is currently managing data transmission between various devices.

Figure 5.9 shows the two possible states.



Figure 5.9: USB Gateway Status

Data transmission is active, and the address of the FEP it is communicating with is indicated.
Data transmission is blocked.

5.5 Open COMs

In the "Open COMs" window, the devices that are communicating with the USB Gateway are listed. For each of them, the COM number and the serial number of the device (the unique number assigned to each Camozzi device) are indicated.




Figure 5.10: Open COMs

5.6 Main Page

The Main Page displays information related to open communications. In Figure 5.11, an example with two connected devices is shown.

Main Page	Wireless Configurator	Mapping			
Virtual COMs	Available			2 Tcp Connections	
STMicroelectron	ics Virtual COM Port (COM	14)		COM4<=>127.0.0.1:1555	
STMicroelectron	ics Virtual COM Port (COM	142)		COM42<=>127.0.0.1:1555	
			_		
Data Receive (COM4) => \$V0	d from Usb Devices (' 1302103990000035	Virtual Ports)	^	4 Data Received from FEP => (COM42)	
Data Receive (COM4) => \$V0 (COM42) => \$0	d from Usb Devices (* 1302103990000035 01432243990000001	Virtual Ports)	Â	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$00 (COM4) => \$00	d from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035	Virtual Ports)	Â	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$00 (COM4) => \$00 (COM42) => \$V0	d from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035 01432243990000001	Virtual Ports)	Â	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$00 (COM4) => \$00 (COM42) => \$V0 (COM42) => \$V0	d from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035 01432243990000001 1302103990000035	Virtual Ports)	^	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$O0 (COM4) => \$00 (COM42) => \$V0 (COM4) => \$V0 (COM42) => \$V0	td from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035 01432243990000001 1302103990000035 01432243990000001	Virtual Ports)	^	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$O0 (COM4) => \$00 (COM42) => \$V0 (COM4) => \$V0 (COM42) => \$V0 (COM42) => \$V0	ed from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035 01432243990000001 1302103990000035 01432243990000001 01432243990000001	Virtual Ports)	^	4 Data Received from FEP => (COM42) => (COM4)	
Data Receive (COM4) => \$V0 (COM42) => \$O0 (COM42) => \$V0 (COM42) => \$V0 (COM42) => \$V0 (COM42) => \$V0 (COM42) => \$V0 (COM42) => \$V0	ed from Usb Devices (* 1302103990000035 01432243990000001 1302103990000035 01432243990000001 1302103990000035 01432243990000001 01432243990000001 1302103990000035	Virtual Ports)	~	4 Data Received from FEP => (COM42) => (COM4)	

Figure 5.11: Main Page

• Virtual COMs Available: Similarly to what was described in Chapter 5.5, the devices that are communicating with the USB Gateway are listed here.

2 TCP Connections: The connections between the USB Gateway and the FEPs that are open are listed. For each of them, the COM and the IP address with Port of the FEP it is communicating with are indicated.

• Data Received from USB Devices (Virtual Ports): This section displays messages received from the connected devices and transmitted to the FEP.

④ Data Received from FEP: Messages received from the FEP and transmitted to the devices are shown in this section.



5.7 Wireless Configuration

In the Wireless Configuration window, you can set parameters for the wireless communication of Camozzi devices in which it is present.

This window is structured with fields for displaying and entering parameters and commands, and these fields, in order to function, require you to select the device from the list of open COMs (Chapter 5.5).



Figure 5.12: Wireless Configuration

- AP SSID: The SSID of the wireless network to which the device should connect.
- **2** AP Password: The password of the wireless network to which the device should connect.
- **3** Show/Hide password: Allows you to show or hide the password of the wireless network.
- Gervice States and the set of the

S FEP Port: Indicates the port of the FEP with which the device should communicate; this field is not editable.

- **6** Clear Fields: A command to clear all editable fields.
- **v** Read Parameters: Reads the parameters of wireless communication from the selected device.
- **8** Write Parameters: Sends the wireless communication parameters entered in the fields to the device.

5.8 Mapping

In the "Mapping" section, you can send the mapping command to Camozzi modular devices.

To determine if the device you wish to connect supports this functionality and for detailed procedures, please refer to the product's user and maintenance manual.

Main Page WI-FI Configurator	Mapping	
Require Mapping		
2 Request to force a new mapping of the Necessary after adding / removing / cl After sending the command, the devic	e modules present in the device. :hanging one or more modules. :e must be turned off and on again.	

Figure 5.13: Mapping



• "Require Mapping" Command: Button for sending the mapping command. Before sending this command, you need to select the device from the list of open COMs (Chapter 5.5), and the button is active only if this functionality is supported.

2 General Information: Some general information about the mapping procedure is provided in this window.

For detailed descriptions and the procedure, please refer to the user and maintenance manual of the device.

5.9 Ethernet Device Configuration

Through this window, figure 5.14, it is possible to manage Camozzi devices that support connection to the UVIX via Ethernet.

E	thernet Device C	onfiguration			×
	Network Adapter				
Ų	Realtek PCIe GbE Fa	mily Controller: 192.16	8.0.5		ř
2	- Detected Devices -				
	Mac Address	Ip Address	Device Name	Device Type	
2					
ס	Scan Ex	ternal Scan			
G		-6	7		
	Ethernet Configure	tion Connection P	arameters Fw U	pgrade	
	Ethernet Paramete	ers			
I					
I	lp address				
I					
I	Subpot Mask				
I	Subhet Mask				
I	Change Ip Ad	dress 🗹 Store Set	tings	Reset to Factory	

Figure 5.14: Ethernet Device Configuration window

• Drop-down menu to select the network port where the device is connected.

- List of devices detected by scanning.
- **3** Command to manually start a scan.
- **4** Command to start third-party scanning software.

• Section to modify the communication parameters of a device, see chapter 5.9.1.

6 Section to manage communication with a device, see chapter **5**.**9**.**2**.

Section to manage the firmware update of a device, see chapter 5.9.3.

A The availability of scanning functions and the "Ethernet Configuration" section depends on the type of connected device, these functions may not be supported or may be only partially supported. For detailed information, refer to the manual of the specific device.

5.9.1 Ethernet Configuration

This section is the one selected by default when the window opens, as shown in the figure 5.14. The available fields are as follows:

- Ip address: New IP address value.
- Subnet Mask: New network mask value.
- Change Ip Address: Command to set the new IP address and network mask of the selected device in the "Detected Devices" window.
- Store Setting: If selected, the new parameters set are also saved in the device's memory.
- Reset to Factory: Command to reset the IP address and network mask to factory defaults for the device selected in the "Detected Devices" window.

5.9.2 Connection Parameters

Through the "Connection Parameters" section you can manage the communication between the device and UVIX, figure **5.15**.

On the left side of this section the available devices are listed, for each of them the following informations are indicated:

- Device Address: IP address of the device.
- Uvix Address: UVIX IP address.
- Uvix Port: communication port used.
- Ack Time: unused, for future use.

On the right side there is the "Uvix Address" field where you can enter the address of the UVIX and start the communication.

Ethernet Device C	onfiguration			×
Network Adapter				
Realtek PCIe GbE F	amily Controller: 192.	168.0.5		Ť
Mac Address	Ip Address	Device Name	Device Type	
Scan E	xternal Scan	Parameters Fw L	Ipgrade	
Devices			Uvix Address	
Device Address	Uvix Address Uvix	Port Ack Time	192.168.0.5	
192.168.0.10	192.168.0.5 1555	;	Start Communication	

Figure 5.15: Parameters section of the Ethernet Device Configuration

To establish communication correctly it is necessary that:

- IP addresses must be static and congruent in the same network.
- The communication port is set to 1555, as described in the chapter 3.2.

Depending on the device used, the procedure for establishing communication may differ slightly. For detailed information, refer to the manual of the specific device.

5.9.3 Fw Upgrade

Through the "Fw Upgrade" section it is possible to update the device's firmware via Ethernet connection.

To perform the update the device must communicate with the Camozzi Gateway USB and not with the UVIX (with the FEP more precisely), for this reason initially the device will not be visible in the list of available ones as shown in the figure 5.16.



Figure 5.16: "Fw Upgrade" section, page

To make the device available you need to:

- 1. Go to the "Connection Parameters" section.
- 2. Select the device you want to update.
- 3. Return to the "Fw Upgrade" section.
- 4. Under "Gateway USB Address" verify that the IP address where the Camozzi Gateway USB is present is correct and click on the "Start Communication" command.
- 5. Once the device has changed its communication parameters it will appear among the available devices, figure 5.17.



Figure 5.17: "Fw Upgrade" section, starting communication with the Camozzi Gateway USB

Once the device is available for communication:

- 1. Select it from the list of available ones.
- 2. Under "Firmware Upgrade" click on "Select file" and select the new firmware (the file must have a .bin extension).
- 3. Click on "Boot Mode".
- 4. Wait the device change state and the commands to update and restart the device reappear, figure **5.18**.



Figure 5.18: "Fw Upgrade" Section, Boot Mode

Click on the "Start Upgrade" command and wait for the procedure to finish, if it finishes successfully a confirmation pop-up will appear and under "Result" in the table of available devices "OK" will appear as shown in the figure **5.19**.



Figure 5.19: Fw Upgrade" section, firmware update and device restart

At this point it is necessary to restart the device, depending on the one used it may be necessary to send the command manually (for more details see the specific manual of the device).

In these case, send the command "Restart Devices" next to "Start Upgrade".

Once the device has rebooted the update procedure is completed but the device is still communicating with the Camozzi Gateway USB, you can verify this condition by going to the "Connection Parameters" section and noting that the communication port is set to 55555 as shown in the figure 5.20.



Figure 5.20: "Fw Upgrade" section, restoring communication with UVIX

To restore communication with the UVIX, stay in the "Connection Parameters" section and click on "Start Communication" under "Uvix Address", verifying that the IP address is correct.

Once the IP address is set correctly and the port is 1555 the communication between the device and UVIX is started correctly.

Web App

In this chapter, we will take a detailed look at the Web App, the component that allows the user to access all the tools provided by the UVIX software through a simple and intuitive interface.

6.1 Login

Through any web browser, it is possible to access the Web App by entering the IP address and port number in the address bar, by default http://127.0.0.1:8080.

Once the correct address is entered, the login page will be displayed, where login credentials will be required (Figure 6.1). Default credentials are listed in Table 6.1.



Figure 6.1: Login Page

Table 6.1:	Default	Users
------------	---------	-------

User	Username	Password	Permissions
End User	enduser	enduser	View Only
Constructor	user	customer	View and Modify

6.2 Home Page

Once the credentials are entered, it is possible to access the home page. As shown in Figure 6.2, various elements can be identified:



- Logo: In the top left corner, there are the Camozzi and UVIX logos. Clicking on either logo allows access to the Camozzi website (https://en.automation.camozzi. com/).
- Devices List: On the left side, the Camozzi devices inserted in UVIX are listed (see Chapter 6.3).
- Toolbar: In the top right corner, we find the toolbar for managing the Web App (see Chapter 6.4).
- Device Details: In the central part, information about the selected device from the list is displayed (see Chapter 6.5).



Figure 6.2: Home Page

6.3 Device List

In this section, all the devices inserted into UVIX are listed, and each device is associated with a color based on its status (see Table 6.2).

Symbol	Color	Status	Description
	Gray	Not Connected	Device is not connected
	Green	Operational	Device is connected and has no alarms or warnings
	Orange	Alarm	Device is connected and has at least one alarm
	Red	Error	Device is connected, has at least one error, and may
			also have one or more warnings

The devices are grouped into user-definable groups.

On initial startup, a default group named "default group" is available.

The total number of devices and their status is indicated at the bottom of the window.

✓ default group	Total Devices: 4
> DI IO-Link SD	
– Open Frame Pressure 📀	Status Devices:
- DI Profinet	• :1 •:0 •:1 •:2
- Open Frame Flow OF	

Figure 6.3: Example of some devices in the default group and summary box

6.4 Toolbar

In this section, all the tools for managing the Web App are presented.

- 🔄: Symbol for adding new devices.
- Setup: Menu for managing users, groups, devices, and checking the status of connections.
- User: Menu for managing the user who has logged in, see Chapter 6.4.8.
- Home: Command to return to the Web App's home screen.
- About: General information about UVIX, see Chapter 6.4.9.

6.4.1 Adding a New Device

Once a new device is successfully connected, as illustrated in Chapter 2, a number will appear in the upper right corner of the symbol for adding new devices (Figure 6.4).

This number indicates the devices detected by the software that have not yet been assigned. Clicking on the symbol will open a window listing the serial numbers of the detected devices, and hovering over them with the pointer will display their family.





Clicking on the serial number of the device you wish to add will open the window shown in Figure 6.5, which will request the following information:

- Name: The name of the device, to be entered as desired.
- Device group: The group to which the device should be assigned. Clicking on the editable field will display a list of available groups.
- Visible/Hide: UVIX software does not allow you to delete an already inserted device, but it allows you to hide it.

Through this field, you can set whether the device will be visible in the device list.



Device Number:	Family name:	
01572051990000020	Series CX4	
Name:	* Devices group:	
Visible/Hide:		
Visible	~	

Figure 6.5: Adding a new device

After making the necessary changes, click the "Save" button to complete the operation or the "Close" button to cancel it.

6.4.2 User Management

Through the "Users" command accessible from the "Setup" menu, you can open the user management interface.

It will display the user who has logged in and those with equal or lower permissions.

Within the UVIX software, users are differentiated based on their profile (Table 6.3) and permissions (Table 6.4).

The profile regulates the ability to make changes to the parameters of connected devices, while permissions determine the ability to modify UVIX software functionalities.

Table 6.3: Profiles		
Name	Description	
End User	View device parameters only	
Installer	View and modify device parameters	
Table 6.4: Permissions		
Name	Description	

Manage registries	Allows managing users, devices, and groups
Manage command	Allows sending commands to devices
Manage setup parameter	Allows access to device configuration menus

If you have logged in with the default profile "user" and have not created other users, you will see those shown in Figure 6.6.

with UVIX						ø <mark>l</mark>	🕏 Setup 🚽	👤 user 🗸	A Home	O About	×
> default group	Setup Users:	– Add de	vice								
	+										
	Username	No	ame	Surname	Email	Profile		Di	sabled -		
								F	alse 🗸 🗙		
	enduser	er	nd user		enduser@camozzi.it	User			False	0/F	ē.
	user	us	er		user@camozzi.it	Customer			False	011	
						Ma		vofil			
						ма	nage p	οΓΟΤΙΙ	e		
	J										
Total Devices: 6											
Status Devices:	1										
. : 0 . : 0 . : 0 . : 5											

Figure 6.6: User Management Window

Using the button 土, you can create a new user.

Assignable permissions cannot be higher than those with which you logged in.

The profiles are listed in a table, with each column representing a characteristic.

Below the name, there is a field that allows applying a filter, and in the last column, there are buttons to manage the profile.

By clicking on , you can view the profile as shown in Figure 6.7. After viewing, click the "Close" command.

- Name: User's first name.
- Surname: User's last name.
- Username: User's login name.
- Email: User's email address.
- Profile: Assigned profile from those listed in Table 6.3.
- Disable: User's status, "True" if disabled or "False" if enabled.
- Permissions: Assigned permissions from those listed in Table 6.4.

1007		sumame:	
user			
Username:		Email:	
user		user@camozzi.it	
Profile:		* Disabled:	
Customer	~	False	
ermissions:	3 sel	ected	

Figure 6.7: Profile View

By clicking on $\boxed{}$, you can edit the profile as shown in Figure 6.8.

Characteristics with the "*" symbol are mandatory.

After making changes, click the "Save" command to save them or "Close" to cancel them.

- Name: User's first name.
- Surname: User's last name.
- Username: User's login name.
- Email: User's email address.
- Profile: Assigned profile from those listed in Table 6.3.
- Disable: User's status, "True" if disabled or "False" if enabled.
- Permissions: Assigned permissions from those listed in Table 6.4.
- Password: Password to be used during login.

Figure 6.8: Profile Modification

By clicking on \swarrow , you can edit the unit of measure preferences, as shown in Figure 6.9. After making changes, click the "Save" command to save them or "Cancel" to cancel them.

Pressure:	
○ Bar (bar)	
KiloPascal (kPa)	
○ Pounds per square inch (psi)	
Temperature:	
Degree Celsius (°C)	
○ Degree Fahrenheit (°F)	

Figure 6.9: Modifica delle unità di misura

6.4.3 Device Group Management

Through the "Device Groups" command accessible from the "Setup" menu, you can manage device groups that can be defined by the user.

At the first launch, there is a single group named "default group".

Accessing the device group management menu will display the window shown in Figure 6.10. Each column represents a characteristic, and below the name, there is a field to apply a filter.

In the last column, there are buttons to manage the profile.

		Ø	🕏 Setup 🚽	👤 user 🗸	ft Home	About	×
default group D1 IO-Link	Setup Devices Groups:						
Open Frame Pressure DI Profinet				Hide/ Visit	Visible •	×	
PRE DI Ethernet IP	default group				Visible	•/	^
		Manage d	levices	qrou	p		
	<	5		5	•		
	r i i i i i i i i i i i i i i i i i i i						
Total Devices: 6							
Status Devices: . 0 . 0 . 0 . 0 . 6						•	*

Figure 6.10: Device Group Management Window

Clicking the command in the upper left allows you to open the window to add a new group, as shown in Figure 6.11. The required information includes:

- Name: The name of the group, which can be defined as desired.
- Visible/Hide: As with devices, groups cannot be deleted, but they can be hidden. Select "Visible" to make the group visible or "Hide" to hide it.

After making the necessary changes, click the "Save" command to save them or the "Close" command to cancel them.

* Name:	* Visible/Liido	
	Visible	, ,
		Close Save

Figure 6.11: Adding a New Device Group

By using the command, you can view the information of a device group, as shown in Figure 6.12. After viewing, click the "Close" command.



Name:	* Visible/Hide:	
default group	Visible	
delouit group	VISIDIA	

Figure 6.12: View Device Group Information

Using the command allows you to modify the information of a device group, as shown in Figure 6.13. After making the necessary changes, click the "Save" command to save them or the "Close" command to cancel them.

Update default group		
* Name:	* Visible/Hide:	
default group	Visible	
derduit group	VISIDIe	
		Close Save

Figure 6.13: Edit Device Group Information

6.4.4 Device Management

Through the "Devices" command accessible from the "Setup" menu, you can manage the devices inserted into the UVIX, as shown in Figure 6.14.

Each column represents a characteristic, and below the name, there is a field to apply a filter. In the last column, there are buttons to manage the devices.

≝ u vi x					Ø 1	🕽 Setup 👻 👤 user 👻 🏦 Hon	ne 😯 About
default group		Setup Devices:					
DI IO-Link	- 1	🗉 🔶 Imp	ort device				
Open Frame Pressure	- 1	Device Number		Name	Devices Group	Hide/Visible -	
Di Profinet	- 1					Visible V	×
Open Frame Flow	- 1	01302103990000035	Series CX4	D1 IO-Link	default group	Visible	O/H
DI Ethans at ID		01432350990000001	OpenFrame Controller	Open Frame Pressure	default group	Visible	O/H
Dietnemet IP	- 1	01702306990000005	Series CX4	D1 Profinet	default group	Visible	0 / H
		01432243990000001	OpenFrame Controller	Open Frame Flow	default group	Visible	0 / H
	- 1	01182220757100001	Series PRE	PRE	default group	Visible	0 / K
	- 4	01572051990000020	Series CX4	D1 Ethernet IP	default group	Visible	O / H
I Devices: 6							
al Devices: 6 us Devices:		4					

Figure 6.14: Device Management Window

By clicking the to button, you can import a new device from an external file. Clicking it opens the window shown in Figure 6.15, where you can select the desired file.

Import device from	file	
Select File	No file choosed	
		Close

Figure 6.15: Importing a Device from an External File

Using the command allows you to view the information of a device, as shown in Figure 6.16. After viewing, click the "Close" command.

The information includes:

- Device Number: Serial number of the device.
- Family name: Device family.
- Name: User-assigned name of the device.
- Devices group: Group of devices to which the device belongs.
- Visible/Hide: "Visible" if the device is visible or "Hide" if it is hidden.

Device Number:	Family name:	
01302103990000035	Series CX4	
* Name:	* Devices group:	
D1 IO-Link	default group	•
* Visible/Hide:		
Visible	~	

Figure 6.16: View Device Information

Using the command allows you to modify the information of a device, as shown in Figure 6.17. After making the necessary changes, click the "Save" command to save them or the "Close" command to cancel them.

The editable information includes:

- Name: User-assigned name of the device.
- Devices group: Group of devices to which the device belongs.
- Visible/Hide: "Visible" to make the device visible or "Hide" to hide it.



evice Number:	Family name:	
01302103990000035	Series CX4	
Name:	* Devices group:	
DI IO-Link	default group	
Visible/Hide:		
Visible	~	

Figure 6.17: Edit Device Information

Using the 📕 command allows you to save a desired device to an external file.

Clicking it opens the window shown in Figure 6.18, where you can give a name to the configuration (the system suggests a default one), and then click "Export" to finish the export or "Close" to cancel the operation.

Export Device	×
File name:	
	Close Export

Figure 6.18: Export Device Configuration to an External File

Using the save and import feature available in this menu, you can transfer a device from one UVIX to another without it ever being physically connected.

The Export/Import functionality described in section 6.8 allows the transfer of a configuration to then be loaded onto another device already inserted into the UVIX.

6.4.5 Slave Management

Through the "Slaves" command accessible from the "Setup" menu, you can view Slaves, which are subdevices that, together with the master or command device, make up a modular system (for example, a valve island), as shown in Figure 6.14.

Each column represents a characteristic, and below the name, there is a field that allows you to apply a filter.

The available characteristics are:

- Devices Group: The group of devices to which the Slave belongs.
- Device: The command device to which the Slave is connected.
- Position: The connection position of the Slave.



- Slave Family: The family of the Slave.
- Name: The name of the Slave, an editable field. With a double click and if it is empty, the family name is taken.

	Devices Group	Device	Position	Slave Family	Name	
1 - Valve	Devices Group	Device	Posicion	Sidve Farriny	Nume	
2 - Valve	default aroup	D1 IO-Link (01302103990000035)	1	Valve		
Open Frame Pressure	default group	D1 IO-Link (01302103990000035)	2	Valve		
DI Profinet	default group	D1 Ethernet IP (01572051990000020)	1	Valve		
open Frame Flow	default group	DI Ethernet IP (01572051990000020)	2	Valve		
CE CONTRACTOR CONTRACTOR	default group	DI Ethernet IP (01572051990000020)	3	Valve		
Ethernet IP	default group	DI Ethernet IP (01572051990000020)	4	Valve		
Family valve:	default group	DI Ethernet IP (01572051990000020)	5	Valve		
Family Digital Input:	default group	DI Ethernet IP (01572051990000020)	6	Valve		
7 - Digital Input	< default group	DI Ethernet IP (01572051990000020)	7	Digital Input		
8 - Digital Input	default group	DI Ethernet IP (01572051990000020)	8	Digital Input		
Family Digital Output:	default group	DI Ethernet IP (01572051990000020)	9	Digital Output		
Family Analog Input:	default group	DI Ethernet IP (01572051990000020)	10	Digital Output		
- Analog Output	default group	DI Ethernet IP (01572051990000020)	11	Analog Input		
	default group	DI Ethernet IP (01572051990000020)	12	Analog Input		
	default group	DI Ethernet IP (01572051990000020)	13	Analog Input		
	default group	D1 Ethernet IP (01572051990000020)	14	Analog Input		
	default aroup	DI Ethernet IP (01572051990000020)	15	Analog Output		

Figure 6.19: Window for Viewing Slaves

6.4.6 Management of Exported Configurations

Through the "Configurations" command accessible from the "Setup" menu, you can manage the configurations saved within UVIX, as shown in Figure 6.20.

This window is part of the tools for managing the "Export/Import" feature.

For more information, please refer to Chapter 6.8.

U <i>Vİ</i> X					🥝 🌣 Setup 🗸 💄 us	er 🗸 🏦 Home 🛛 About 🔀
✓ default group	Configurations:	nport configura	ation			
✓ DI IO-Link	+					
1 - Valve	Name	Description	Family Name	Sub Type	Firmware	
- Open Frame Pressure	PRE		Series PRE	Size 1	03.06	●/R
	D1 Ethernet IP		Series CX4	Series D Fieldbus - D1	1.25	•/R î
 PRE DI Ethernet IP Family Valve: Family Valve: Family Digital Input Olgital Input Olgital Input Family Digital Output Family Digital Output Family Analog Input: 15 - Analog Output 	¢			Manage	configuratior	1
TOTOL DEVICES, 0						
Status Devices:	4					* }

Figure 6.20: Window for Managing Configurations

Using the 土 button, you can import a configuration.

Clicking on it opens the window shown in Figure 6.21, where you can select the desired file, assign a name, and optionally add a description.

Import configurations		
* Name:	Description:	
Select the file to import: Select File No configuration choosed		
	Close	Save

Figure 6.21: Importing a New Configuration

By using the command, you can view the information of a configuration, as shown in Figure 6.22. After viewing, click on the "Close" command.

Details PRE					×
* Name:			Description:		
Family Name		Sub Type		Firmware	
Series PRE		Size 1		03.06	
slave ID	Family Name		Sub Type	Firmware	
					Close

Figure 6.22: Viewing Configuration Details

Through the command, you can modify the information of a configuration, as seen in Figure 6.23. In this window, you can change the name, description, and select a new configuration file to import. After making changes, click the "Save" command to save them, or "Close" to cancel.



Name:			Description:		
PRE					
elect the file to imposed on the select File	ort:				
Family Name		Sub Type		Firmware	
Series PRE		Size 1		03.06	
slave ID	Family Name		Sub Type	Firmware	

Figure 6.23: Modifying Configuration Information

By using the 🛤 command, you can save a configuration to an external file.

Clicking it opens the window shown in Figure 6.24, where you can provide a name for the configuration (the system suggests a default one), and then click "Export" to complete the export, or "Close" to cancel the operation.

Export Configuration	
File name:	
	Close Export

Figure 6.24: Exporting a Configuration

The command allows you to delete a configuration.

6.4.7 Checking the Status of Internal Connections

Through the "Connection Status" command accessible from the "Setup" menu, you can verify the status of the Web App's connections with other components of UVIX, as shown in Figure 6.25.

In the window, connections with the Web Service, FEP, and MQTT Broker (the component for Fast Mode management) are listed.

For each of them, there is a dot that turns green if the connection is active or red if it is not active.

By using the arepsilon button, you can refresh the status of the connections.

After updating, click the "Close" command to close the window.

If some components are not functioning correctly, refer to Chapter 8 for troubleshooting.



Web Servic	e: 🔵	C	
FE	P: 🔴	N.	
Broker Mq	tt : 🛛 🔴		

Figure 6.25: Status of Connections with the Web App

6.4.8 User Menu

From the "User" menu, you can access user management for the user with whom you have logged in, as shown in Figure 6.26.



Figure 6.26: User Menu

The available commands are as follows:

- Logout: Disconnects the user, exits the start screen, and returns to the login page.
- Unit of Measure Preferences: Opens a window to modify the unit of measure preference, as shown in Figure 6.9.
- Change Password: Opens a window to change the password, as shown in Figure 6.27. After entering the old password and the new one, click "Save" to confirm or "Cancel" to cancel.



Dld password	
lew password	
Repeat new password	

Figure 6.27: Window for Changing the Password

6.4.9 General Information about UVIX

By clicking on the "About" command, you can access the window with the versions of UVIX, Web App, FEP, Web Service, and Database.

Additionally, you can find the release date, a link to the website where you can find this manual, and copyright information.

	Automation	VİX
Camozzi Au	tomation Universal \	/isual Interface Solution.
	UVIX software v	ersions:
UVIX:	01.02	
Web App:	2.1.3.0	
FEP:	1.8.0.0	
Web Service:	1.14.3.5	
DataBaseSetup:	4.0.2.4	
Date of release:	2024-01-26	
Manuals:	Italiano	English
Copyright	2023 - 2024 Camo	zzi Automation
17.5		

Figure 6.28: Window with General Information about UVIX

Particularly useful may be the UVIX version and the release date, which allow you to identify the software version.

The other information may be requested by Camozzi Service in case of assistance.



6.5 Device Details

Clicking on one of the devices in the list will display the information of the selected device or slave. In Figure 6.29, you can see that the information is divided into two areas:

- Status Information: General information about the device and commands to access the configuration, as described in Chapter 6.5.1.
- Details: Variables sent by the device, any alarms, and commands that can be sent to the device, as described in Chapter 6.5.5.

				0	🕏 Setup 🚽	👤 user 🗸	A Home	About	×
✓ default group	Devices group: default group		Device name: D1	Ethernet IP					
DI IO-Link Open Frame Pressure	Status information:								×
DI Profinet Open Frame Flow		Name: DI Ethernet IP		Last data transmission	n: 2024-01-09	13:58:22			
- PRE (PR)		Device number: 01572051990000020		Device status: 🔵					
✓ DI Ethernet IP SD		Family name: Series CX4		Operational status: 0	Configuration				
> Family Valve:		Subtype: Series D Fieldbus - DI		Connection: 🔵					
> Family Digital Input:		Firmware: 1.25							
Family Digital Output:	Configuration	FieldBus: EthernetIP	Link status: 🔴		🖌 Setup Fie	ldBus	De	tails	
> Family Analog Input:	1								
15 - Analog Output 🔵	Details:								1
L L L L L L L L L L L L L L L L L L L	I Variables Alarms A Commands								
	Name					Value			
	Temperature					37 °C			*
	Supply voltage					23.6 V			
	Supply voltage (logic)					23.8 V			
4									
Total Devices: 6									
101010010									
Status Devices:								_	
. :1 . :0 . :0 . :5					Stat	us Inf	orm	ation	
	L								

Figure 6.29: Device Details

6.5.1 Status Information

In the Status Information section, as shown in Figure 6.30, the following information is provided:

• An indicative image of the selected device, and the frame color changes based on the device's status as indicated in Table 6.2.

A command to access the configuration of the selected device, as described in Chapter 6.5.2.

3 General information about the device, including:

- Name: User-assigned name of the device.
- Device number: Unique serial number of the device.
- Family name: Device family.
- Subtype: Device subtype.
- Firmware: Installed firmware version.
- Last data transmission: Date and time of the last message received from the device.
- Device status: Device status, as listed in Table 6.2.
- Operational status: Operational status, as listed in Table 6.5.
- Connection: Connection status with UVIX, green if connected, otherwise gray.
- General information about the communication protocol.

This menu is visible only if the device has a communication protocol.



- FieldBus: Name of the communication protocol.
- Link status: Communication status, green if active, red if not present.
- Setup FieldBus: Command to access the configuration of the communication protocol, as described in Chapter 6.5.4.

	8 Name: DI Ethernet IP	Last data transmission: 2024-01-09 14:29:52
	Device number: 01572051990000020	Device status: 🔵
C III	Family name: Series CX4	Operational status: Work
A CONTRACTOR	Subtype: Series D Fieldbus - D1	Connection: O
-	Firmware: 1.25	

Figure 6.30: Status Information Section

Table (6.5: C	perationa	al Status
---------	--------	-----------	-----------

Status	Description
Init	The device has just powered on and is performing internal startup oper- ations.
Configuration	The device is in the process of configuration, waiting for parameters from the controller (typically a PLC) or from its internal memory based on how it has been set up.
Work	The device is functioning correctly and receiving commands from the controller.
Manual	The device is functioning correctly, but commands are received from UVIX.
Warning	The device has at least one alarm.
Error	The device has at least one error and may also have one or more alarms.

6.5.2 Device Configuration

Through the "Configuration" command, accessible from the "Status Information" section, you can open the configuration page of the selected device.

This page is specific to the device and may vary depending on the type.

An example is shown in Figure 6.31.

For more information, refer to the product manual.



Control Decide group: Exclusion (control Control Exclusion Control Control Exclusion Control Exclusion Exclusion Control <th></th> <th></th> <th></th> <th>0</th> <th>🌣 Setup 🝷</th> <th>👤 user 🗸</th> <th>A Home</th> <th>About</th> <th>×</th>				0	🌣 Setup 🝷	👤 user 🗸	A Home	About	×
Deck servery: deck servery: deck servery: deck servery: Street: Deck servery: deck servery: deck servery:	Configuration		•						88
Devices group: default group Bet Activation mode (1-8) <td< td=""><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>			×						
	Devices group: default group	Device name: DI Ethernet IP	3	Slave: 7 - Digital Input					
	Set Activation Mode								
	O Activation mode (I-8)	2024-01-09 15:27:19							
0 0	Ch1 Ch2 Ch3	gh							
	Ch4 Ch5 Ch6	jh							
	Ch7 Ch8								
	O Minumum activation time [min:0 , max:255] :	2024-01-09 15:27:19	• Signal extension time [min:0 , max:1023] :				E	2024-01-09 15:2	219
	0		0						
									-1
	000				4	6	6		_
Reset Copy to all Save to all Save on PC Send Save on device	Reset Copy to all Save to all				Save	on PC S	end Sav	ve on device	

Figure 6.31: Configuration page of a digital input module

At the bottom of the page, there are commands for parameter management:

• Reset: Resets the device's parameters to default values, including those in the communication protocol configuration page (Chapter 6.5.4).

Copy to all: Copies the parameters of the selected slave to other slaves, provided they are connected to the same master.

For more information, see Chapter 6.7.

3 Save to all: Saves the parameters to all slaves connected to the same master.

For more information, see Chapter 6.7.

4 Save on PC: Internally saves the device's configuration within UVIX.

S Send: After making changes to certain parameters, it sends them to the device.

The changes are not permanent.

6 Save on the device: Permanently saves the previously sent changes on the device.

To prevent undesired behavior due to external commands received while modifying one or more parameters, the device must be in manual mode.

If it is not already in manual mode when accessing the configuration page or attempting to send a new parameter, a warning message will appear as shown in Figure 6.32.



Figure 6.32: Manual Mode Request Page



For some devices, the "Fast Mode" is available on this page.

This mode increases the transmission frequency of certain variables and provides commands in the same area to assist users during commissioning.

						≵Setup - 👤 user -	A Home	O About	×
Configuration									88
			\$	×					
Devices group: default group		Dev	vice name: Open F	rame Flow					
FAST MODE VARIABLES									*
II Variables II Graphs									
Name	Value	Min	Max	C	Start manual mode:			>	11
Target	0 %	0 %	0 %	° ^				_	41
Feedback	0 %	0 %	0 %	C					
Analog input raw value	0	0	1	C					
Analog output raw value	14	14	14	C					
Analog input calibrated value	-0.00 V	-0.00 V	-0.00 V	C					
Analog output calibrated value	0 V	0 V	0 V	C					
Gas flow	0 NI/min	0 NI/min	0 NI/min	C					
1°									-
INTERNAL COMUNICATION									>
1									1 -
Reset Export Import		_	_	_		Save on PC	Send	ive on device	

Figure 6.33: Fast Mode

6.5.3 Commissioning

Through the "Commissioning" command, accessible from the "Status Information" section, you can open the page for commissioning the selected device.

This page is specific to the device and may vary depending on the type.

An example is shown in Figure 6.34.

For more information, refer to the product manual.

with UNX		0	🗘 Setup 🗸	👤 user 🗸	A Home	O About
Commisioning						88
Devices group: default group	Device name: DRVI					
Servo state: Busy state: Input I: Input 2:	Haming state: Device status: Input proxy ext: Input proxy haming: Out: No	Yes			VBUS	under voltage
u Variables						
Name Value Min Max C	Mode operation None Homing Speed Absolute position Relative position Torque (current)					
PID						>
						Save on PC

Figure 6.34: Commissioning page of a DRVI



6.5.4 Communication Protocol Configuration

Through the "Setup FieldBus" command, accessible from the "Status Information" section, you can open the communication protocol configuration page.

This command is visible only if the device is equipped with a fieldbus, and the parameters vary depending on the specific fieldbus.

Configuration			88
		*	
Devices group: default group		Device name: DI Ethernet IP	
	Setup FieldBu	s: EthernetIP	
Station name [min:1]:	2024-01-10 10:36:07	Internet protocol address :	2024-01-10 10:36:07
Cx4_EIP		192168.10.2	
Mask :	2024-01-10 10:36:07	Gateway :	2024-01-10 10:36:07
255.255.255.0		0.0.0	
			-
		2_6	4
Roset		Save on PC Se	nd Save on device

Figure 6.35: Configuration page of a device with Ethernet IP protocol

At the bottom of the page, there are commands for managing the parameters:

• Reset: Resets the device's parameters to default values, including those on the device configuration page (Chapter 6.5.2).

2 Save on PC: Saves the device's configuration internally within UVIX.

Send: After making changes to some parameters, it sends them to the device; however, these changes are not permanent.

④ Save on the device: Saves the changes permanently on the device.

6.5.5 Details

In the "Details" section, these windows are present:

- Variables: Displays the variables sent by the device (Figure 6.36).
- Alarms: Displays active errors and alarms (Figure 6.37).
- Commands: Manages commands to the devices (Figure 6.38).
- Errors History: Display a list of the latest errors (Figure 6.39).
- Graph: Displays the values of the variables in a graphical mode. Only for devices that support this modality (Figure 6.40)

The variables vary depending on the connected device; for more information, consult the device's manual.



≝ ⊔ /∕X				٩	🗘 Setup 🚽	💄 user 🚽 🔺 Ho	me 🕜 About 🏅
✓ default group	Devices group: default group		Device name: Di	Ethernet IP			
DI IO-Link Open Frame Pressure	Status information:						~
- DI Profinet		Name: DI Ethernet IP		Last data transmission	n: 2024-01-10 10:4	44:23	
- PRE		Device number: 01572051990000020		Device status: 🔵			
V DI Ethernet IP SD		Family name: Series CX4		Operational status: V	Vork		
✓ Family Valve:		Subtype: Series D Fieldbus - DI		Connection:			
1 - Valve	#Configuration	Firmware: 1.25					
2 - Valve	Configuration	FieldBus: EthernetIP	Link status: 🔴		📕 Setup Field	IBus	
3 - Valve							~
5 - Valve	Details:						
6 - Valve	II Variables 🗍 Alarms 🖪 Commands						
> Family Digital Input:	Name					Value	
> Family Digital Output:	Temperature					56 °C	
Family Analog Input:	Supply voltage					23.6 V	
15 - Analog Output 🔵	Supply voltage (logic)					23.7 V	
							_
•							
Total Devices: 6							
Status Devices: 1 :1 : 0 : 0 : 0 : 5	4						

Figure 6.36: Variables window

In the "Alarms" window, the following events are displayed:

- Info 1: An event that informs the user but does not compromise performance or functionality.
- Warnings 🛆: Events that could affect performance but not functionality.
- Errors **!** : Events that could affect functionality.

🗯 U//X			🚱 🌣 Setup 🗸	Luser - 🕈 Home 🛛 Abo	out
default group	Devices group: default group	Device name: DI Ethernet IP	Slave: 10 - Digital Outpu	it	
> D1 IO-Link 💿 - Open Frame Pressure 🕕	Status information:				,
D1 Profinet		Position: 10	Last data transmission: 2024-01-10 10:	:42:15	
Open Frame Flow		Family name: Digital Output	Status: 🔴		
		Subtype: 16 CH	Operational status: Error		
	ALL RANGE	Firmware: 1.10			
1- Valve					
2 - Valve	Configuration				
3 - Valve					-
4 - Valve	< Details:				
5 - Valve	Ju Variables Alarms				
6 - Valve	Event Name		Status	- Event Onset	
> Family Digital Input:	Under Voltage Power Supply			9 2024-01-10 10:36:55	5
 Family Digital Output: 	Communication alarm			0	
9 - Digital Output	Configuration alarm			0	
9 - Digital Output	Configuration alarm Zero Voltage Power Supply			0	
9 - Digital Output	Configuration alarm Zero Voltage Power Supply Open Load Channel 1			0 0	
9 - Digital Output	Configuration alarm Zero Voltage Power Supply Open Load Channel 1 Open Load Channel 2			0 0 0	
9 - Digital Output	Configuration alom Zero Voltage Power Supply Open Load Channel 1 Open Load Channel 2 Open Load Channel 3			0 0 0 0	
9 - Digital Output	Configuration alorm Zero Voltage Rower Supply Open Load Channel 1 Open Load Channel 2 Open Load Channel 3 Open Load Channel 4			0 0 0 0 0 0	
9 - Digital Output	Configuration alam Zero Voltoge Rower Supply Open Load Channel 1 Open Load Channel 3 Open Load Channel 4 7 Open Load Channel 5			0 0 0 0 0 0 0 0 0	
9 - Digital Output 10 - Digital Output > Family Analog Input 15 - Analog Output Devices: 6	Configuration alam Zero Votage Power Supply Open Load Channel 1 Open Load Channel 3 Open Load Channel 4 Open Load Channel 5 Open Load Channel 5			0 0 0 0 0 0 0 0 0 0 0 0	
0 - Digital Output 10 - Digital Output 10 - Digital Output 15 - Analog Output	Configuration alorm Zero Voltage Power Supply Open Load Channel 1 Open Load Channel 2 Open Load Channel 3 Open Load Channel 3 Open Load Channel 5 Open Load Channel 6 Open Load Channel 7			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
a - Digital Output b - Digital Output b - Digital Output b - Analog Output al Devices: 6 tus Devices: b - 0 = 1 = 5	Configuration alom Zero Vallage Power Supply Open Load Channel 1 Open Load Channel 2 Open Load Channel 3 Open Load Channel 5 Open Load Channel 5 Open Load Channel 5 Open Load Channel 7 Open Load Channel 8			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Figure 6.37: Alarms window

In the "Commands" window, you can view and send available commands, although some may be hidden if the device is not in manual mode.



				ø	🗘 Setup 🚽	👤 user 👻	n Home	About	2
✓ default group	Devices group: default group		Device name: Di	Ethernet IP					
DI IO-Link Open Frame Pressure	Status information:							*	1
DI Profinet Di Profinet Di Profinet		Name: DI Ethernet IP		Last data transmission	n: 2024-01-10 10):43:10			l
- PRE		Device number: 01572051990000020 Family name: Series CX4		Device status: Operational status: V	Vork				l
Family Valve:	Sector Sector	Subtype: Series D Fieldbus - D1		Connection:					l
1 - Valve	Configuration	Firmware: 1.25							l
3 - Valve		FieldBus: EthernetIP	Link status: 🔴		🖌 Setup Fiel	dBus			J
4 - Valve	< Details:							*	
6 - Valve	III Variables 🗍 Alarms 🔺 Commands								
Family Digital Input: Family Digital Output:	Ne	ew command		Last Co	mmands				l
9 - Digital Output	Start manual mode:		_					>	l
Family Analog Input:	Dire								l
15 - Analog Output 🔵	DIS.					_	_	_	l
									l
Total Devices: 6									l
Status Devices:									
. : 0 . : 0 . : 1 . : 5									
								_	8

Figure 6.38: Commands window

The "Errors History" window displays a list of the most recent errors.

Next to the window name, there is the button C to refresh the list; this list is automatically sorted in descending order with each refresh, showing the most recent errors first.

Each item in the list provides the following information:

- Event Name: name of the alarm. For more details, refer to the device's manual.
- Count Power On: number of times the device has been powered on at the moment the error occurred. This number increments with each power cycle and indicates in which cycle the error was generated.
- Error Time: the time elapsed, expressed in milliseconds, between the power cycle indicated in the previous column and the moment the error occurred.



Figure 6.39: Finestra Errors History



In the "Graph" window you can display the variables graphically. The window is available only for devices that support this function. Section 6.6

• <u>•</u>	🜣 Setup + 💄 adminCCC + 🕈 Home 🥹 About
> default group Devices group: DRVI Device name: DRVI prova UVIX	
CX4 Pw Validation Vor Drvi Status information:	~
DRVI Profinet prova ABL DRVI Prova ABL DRVI prova UVIX DRVI DRVI	ission: 2025-02-14 07:42:32
> PRE Online Solids RW Operational solid - Open Frame Subtype: DRVI Stepper, Nemo23 Connection: • > Cx4 Service Firmware: 2.07	
Cx4 Montaggio Configuration Commissioning FieldBus: PROFINET Link status:	✓ Setup FieldBus
Details: it Variables A Narms A Commands O Errors History it Graphs Graphs: Choose variables U O I O I O I O I O I O I O I O I O I O	* * *
Control Devices: 53	
Stotus Devices:	

Figure 6.40: Window Graph



6.6 Graph

In the "Graph" window (figure 6.41) of the "Details" section it is possible, for devices that support this function, to graphically process some variables.



Figure 6.41: Graph of two variables versus time

The available commands are as follows:

- **1** : Select the variables to be graphically processed.
- **2** : Start graph.
- 🕄 : Stop graph.
- **④** : Clears all data displayed up to that point.
- **5** : Adds a custom chart, see chapter **6.6.3**.
- **6**: Export the collected data to a csv file, see chapter **6.6.2**.
- **7**: Activate zoom, see chapter 6.6.1.

(B): Activate the automatic export function, once the time window size is reached the software automatically saves the collected data in a csv file.

9 : Set the Graph window to full screen.

To avoid saturating the memory of the PC on which the UVIX is installed, the number of data has been limited by giving the user the possibility to select the desired time window, the device will automatically set the data sampling time.

In figure 6.42 an example of selection of the time window and sampling time is shown, for more information on available time windows and sampling times refer to the device manual.



Graph UVIX window	2025-02-27 08:24:55
1 min (sampling 50 ms)	
• 4 min (sampling 200 ms)	
○ 20 min (sampling 1 s)	
○ 1h (sampling 3 s)	
○ 12h (sampling 36 s)	
○ 24h (sampling 72 s)	

Figure 6.42: Time window and sampling time

6.6.1 Zoom

Details: II Variables Grap 20 2 selected Actual vel Actuc l pos mn Actual no mm/ 102.4 -442.37 114.8 **10** Q

By activating the zoom via the dedicated command, the Graph window appears as in the figure 6.43.

Figure 6.43: Graph of two variables with active zoom

The commands available in this mode are the following:

• Zoom bar where you can select (by holding down and releasing the left mouse button) the area to be enlarged. Once selected, you can move it, vary its size or cancel the enlargement using the same window.

• : Activates the graph synchronization command, any enlargement operation on a graph will also be performed on all the others.

1: Moving the mouse cursor on the graph will display the time value and the variable at that point. Regardless of the selected variables, the software will always collect all the expected data, it will therefore be possible to add and display other variables even after the graphs have started.

6.6.2 Data export

Using the export command, you can save the selected variables in a csv file. If you want to add more, simply select them and repeat the export operation.

The file name is composed of the acquisition date followed by the serial number of the device, for example "202548131550_0271000000000001.csv" indicates:

- 202548: the date, in the example 08/04/2025.
- 131550: the hour, in the example 13:15 and 50 seconds.
- 027100000000001: unique serial code of the device.


As shown in figure 6.44 the device information is contained in the upper part of the file, below it the exported data.

Name;Device number;Family Name;Subty	pe;FW version
Flowmeter simul;0271000000000001;Flow	vmeter series;MX2 without filter;0.1
date-time;time(sec);Media temperature(Â	°C);Pressure (bar);Flow (l/min)
2025-4-8 13:15:20:250;0;22;0.01;0	
2025-4-8 13:15:20:450;0.2;22;0.01;0	
2025-4-8 13:15:20:650;0.4;22;0.01;0	
2025-4-8 13:15:20:850;0.6;22;0.01;0	
2025-4-8 13:15:21:50;0.8;22;0.01;0	
2025-4-8 13:15:21:250;1;22;0.01;0	
2025-4-8 13:15:21:450;1.2;22;0.01;0	
2025-4-8 13:15:21:650;1.4;22;0.01;0	
2025-4-8 13:15:21:850;1.6;22;0.01;0	
2025-4-8 13:15:22:50;1.8;22;0.01;0	
2025-4-8 13:15:22:250;2;22;0.01;0	
2025-4-8 13:15:22:450;2.2;22;0.01;0	
2025-4-8 13:15:22:650;2.4;22;0.01;0	
2025-4-8 13:15:22:850;2.6;22;0.1;0	
2025-4-8 13:15:23:50;2.8;23;3.81;0	
2025-4-8 13:15:23:250;3;23;6;0	
2025-4-8 13:15:23:450;3.2;24;6.14;0	
2025-4-8 13:15:23:650;3.4;24;6.14;0	
2025-4-8 13:15:23:850;3.6;25;6.14;0	
2025-4-8 13:15:24:50;3.8;25;6.14;0	

Figure 6.44: Example file csv

For better readability, you can import the data contained in this file into an Excel spreadsheet or process it, for example with a Python program.

6.6.3 Custom graph

Using the appropriate command it is possible to add custom graphs, the window that appears is shown in figure 6.45.

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Graph type:	* Name:	
Compare variables		
Operations with constants		
Operations between two variables		

Figure 6.45: Window for adding custom graphs

The available commands are as follows:

• Adds a custom graph that compares two or more variables (up to a maximum of four).

2 Adds a custom graph that adds or subtracts a constant value to a variable.

• Adds a custom graph that adds or subtracts two variables (they must have the same unit of measurement).

• Sets the name of the graph.

5 Closes the window, canceling creation.

6 Closes the window, adding the custom graph.

In figure 6.46 three example custom graphs are shown, one for each type.



Figure 6.46: Example of custom graphs



6.7 The "Copy to all" Function

This function allows you to copy the configuration of one slave to others that are compatible, provided they are connected to the same master.

For copying, the system checks the family and subtype of other slaves, selecting only those that are compatible, as indicated in Table 6.6.

Family	Subtype	Compatibility Rules
Monostable	10mm	Same family
Monostable	16mm	Same family
Monostable	25mm	Same family
Bistable	10mm	Same family
Bistable	16mm	Same family
Bistable	25mm	Same family
Digital Inputs	8 channels	Same family; if copied to a module with 16 inputs,
		only the first 8 are modified
Digital Inputs	16 channels	Same family; if copied to a module with 8 inputs,
		only the first 8 are copied
Digital Outputs	8 channels	Same family; if copied to a module with 16 outputs,
		only the first 8 are modified
Digital Outputs	16 channels	Same family; if copied to a module with 8 outputs,
		only the first 8 are copied
Analog Inputs	Thermocouples	Same family and subtype
Analog Inputs	Bridge	Same family and subtype
Analog Inputs	RTD	Same family and subtype
Analog Inputs	Voltage/Current	Same family and subtype
Analog Outputs	2 channels	Same family

Table 6.6: Compatibility for the "Copy to all" Function

To copy the configuration of a slave to others, follow these steps:

1. Access the configuration page of the slave you want to copy.

2. Click on the " ① Copy to all" command in the bottom-left section (Figure 6.47).



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			0	🗘 Setup -	👤 user 🗸	ft Home	O About	×
Configuration								88
₽◯■		*						
Devices group: default group	Device name: DI Ethernet IP	s	lave: 7 - Digital Input					
Set Activation Mode						_	_	
Activation mode (1-9)	2024-01-09 15:27:19							
chi Ch2 Ch3								- 1
Low High Low High Low High								
Ch4 Ch5 Ch6								
ch7 ch8								- 1
Low High								- 1
								- 1
9 Minumum activation time [min:0_mar:255]	2024-01-09 15:27:19	9 Signal extension time [min:0_mgc1023]				E	024-01-09 15:27	19
		0						
		C						_
A A								
Reset Copy to all Save to all				Save	on PC Se	nd Sav	e on device	

Figure 6.47: Example

After clicking the command, the software will automatically perform a compatibility check and display the window shown in Figure 6.48, listing the compatible slaves.

Сору	to All			×
The con	figuration will be send	at the following slaves:		
¢	Slave ID	Family Name	Sub Type	Firmware
¢	2	Valve	16 mm	1.13
D	3	Valve	16 mm	1.13
¢	4	Valve	16 mm	1.13
			1	Close Copy All
8				

Figure 6.48: Window for the "Copy to all" function

In the first column, you can select which slaves to copy the configuration to.

For each slave, the ID (a unique number to identify it within the modular device), family name, subtype, and firmware version are visible.

Once you have verified the information, click "Copy All" to perform the copy or "Close" to cancel the operation.

Finally, press the " ² Save to all" command in Figure 6.47 to save the new configurations permanently.



6.8 The "Export/Import" Function

The "Export/Import" function allows you to export the configuration of a device and then import it onto other devices.

This function differs from the device import and export function described in Chapter 6.4.4.

To access the commands for managing this functionality, open the configuration page of the device as shown in Chapter 6.5.2.

After that, for non-modular devices, the commands will be located in the bottom-left corner of the window as shown in Figure 6.49, or in the central part for modular devices as shown in Figure 6.50.

					0	🌣 Setup 🚽 💄 user 🚽	🕈 Home 🛛 😧	About 🔀
Configuration								88
			;	×				
Devices group: default group		De	vice name: Open F	rame Flow				
FAST MODE VARIABLES								*
II Variables II Graphs								
Name	Value	Min	Max	C	Start manual mode:			>
Target	0 %	0 %	0 %	° ^				
Feedback	0 %	0 %	0 %	C				
Analog input raw value	0	0	1	C				
Analog output raw value	14	14	14	C				
Analog input calibrated value	-0.00 V	-0.00 V	-0.00 V	C				
Analog output calibrated value	0 V	0 V	0 V	C				
Gas flow	0 NI/min	0 NI/min	0 NI/min	C				- 11
c				* •				
INTERNAL COMUNICATION						Save	omma	Ind
	nands					Save on PC S	iend Save or	device

Figure 6.49: Example of Export/Import commands for a non-modular device



Figure 6.50: Example of Export/Import commands for a modular device



6.8.1 Exporting a Configuration

To export a configuration, click on the "Export" command.

Once the window shown in Figure 6.51 opens, select whether you want to export the configuration internally within the software (option "UVIX") or to an external file (option "External File").

In the first case, assign a name to the configuration and optionally provide a description.

In the second case, specify the name for the file that will be generated (the system will suggest a default name).

Afterward, press "Export" to complete the operation or "Close" to cancel it.

Export Configuration		
UVIX External File		
Name:	Description:	
	Close	Export

Figure 6.51: Window for exporting a configuration

6.8.2 Importing a Configuration

To import a configuration, click on the "Import" command.

Once the window shown in Figure 6.52 opens, select whether you want to import a configuration from within the software (option "UVIX") or from an external file (option "External File").

Import Configuration		×
UVIX External File Select configuration	No configuration choosed	
		Close

Figure 6.52: Window for importing a configuration

After selecting the desired configuration, a compatibility check table will appear.

In the case of a non-modular device, the table will contain a single row.

For modular devices, there will be one row for the master and one for each slave present (Figure 6.53). The information provided includes:

- Family Name: The name of the device family.
- Sub Type: The device's subtype.

- Firmware: The device's firmware version.
- Compatibility: The compatibility result, "yes" if compatible and "no" if not.
- Slave ID: The slave's ID, a unique number for identification within the modular device.

Import Cor	nfiguration				
UVIX Exte	nfiguration DI Etherne	et IP			
Family Name	e Sub Type		Firmware	Compatibility	
Series CX4	Series D F	ieldbus - D1	1.25		
Slave ID	Family Name	Sub Type	Firmware	Compatibility	
1	Valve	10 mm	1.13		
2	Valve	10 mm	2.16		
3	Valve	10 mm	1.13		
4	Valve	10 mm	2.16		
5	Valve	10 mm	1.13		
6	Valve	10 mm	2.16		
7	Digital Input	8 CH	1.12		
8	Digital Input	16 CH	1.12		
0	Diaital Outaut	0.00	111		
				Close Check compa	tibility

Figure 6.53: Window to check compatibility of a modular device

By clicking the "Check compatibility" command, the software initiates a compatibility check according to the rules in Table 6.7.

Family	Subtype	Compatibility Rules			
Serial D Series	D1 Series	Same family and communica- tion protocol			
Serial D Series	D2 Series	Same family and communica- tion protocol			
Serial D Series	D4 Series	Same family and communica- tion protocol			
Serial D Series	D5 Series	Same family and communica- tion protocol			
Continued					

Table 6.7: Compatibili [.]	ty for the "Import"	function
-------------------------------------	---------------------	----------

Table 6.7 – Continued



Family	Subtype	2	Compatibility Rules		
Serial D Series	Standal	one Series	Same family and communica-		
			tion protocol		
PRE Proportional Cont	troller Size 1		Same family, subtype, and		
Series			control signal		
PRE Proportional Cont	troller Size 2		Same family, subtype, and		
Series			control signal		
Multipolar D Series	D1 Serie	25	Same family		
Multipolar D Series	D2 Serie	25	Same family		
Multipolar D Series	D4 Serie	25	Same family		
Multipolar D Series	D5 Serie	25	Same family		
Open Frame	2-Way C)pen Loop Flow	Same family, subtype, and		
			control signal		
Open Frame	3-Way C)pen Loop Flow	Same family, subtype, and		
			control signal		
Open Frame	2-Way C	losed Loop Flow	Same family, subtype, and		
			control signal		
Open Frame	3-Way C	losed Loop Flow	Same family, subtype, and		
			control signal		
Open Frame	High-Flo	ow 2-Way Pressure	Same family, subtype, and		
			control signal		
Open Frame	High-Flo	ow 2-Way Flow	Same family, subtype, and		
			control signal		
Open Frame	2-Way C	losed Loop Pressure	Same family, subtype, and		
			control signal		
Open Frame	3-Way C	losed Loop Pressure	Same family, subtype, and		
			control signal		
Open Frame	Single-A	Acting Non-Analog Po-	Same family, subtype, and		
	sition		control signal		
Open Frame	Double	Acting Master Position	Same family, subtype, and		
			control signal		
Open Frame	Double	Acting Slave Position	Same family, subtype, and		
			control signal		
Open Frame	Single-A	Acting Analog Head Po-	Same family, subtype, and		
	sition		control signal		
Open Frame	Single-A	Acting Analog Expan-	Same family, subtype, and		
	sion Pos	ition	control signal		
DRVI Drive	Stepper	Motor Drive	Same family and subtype		
DRVI Drive	Brushle	ss Motor Drive	Same family and subtype		

If no devices are compatible, the import is not possible, and only the "Close" command will be available to end the operation.

If one or more devices from the table are compatible, the "Import" command will be available to import the configuration to those devices.

Click the "Import" command to proceed with the import, or the "Close" command to cancel the operation.

Import Coi	nfiguration				
UVIX Exte	nfiguration DI Etherne	et IP			ĺ
Family Name	e Sub Type		Firmware	Compatibility	
Series CX4	Series D F	ieldbus - D1	1.25	Yes	
Slave ID	Family Name	Sub Type	Firmware	Compatibility	
1	Valve	10 mm	1.13	Yes	
2	Valve	10 mm	2.16	Yes	
3	Valve	10 mm	1.13	Yes	
4	Valve	10 mm	2.16	Yes	
5	Valve	10 mm	1.13	Yes	
6	Valve	10 mm	2.16	Yes	
7	Digital Input	8 CH	1.12	Yes	
8	Digital Input	16 CH	1.12	Yes	
0	Disital Outaut	0.011	111	Vee	
				Close	Import

Figure 6.54: Result of the compatibility check of a modular device

Once the configuration is imported, it is not saved automatically on the device, allowing the user to visually verify and make further changes.

At the end, click the "Save" command for modular devices (Figure 6.50), or "Save on device" (Figure 6.49) to permanently save the changes.

MQTT for External Applications

In this chapter, we will take a closer look at the implemented MQTT communication, which, if enabled, allows you to send data managed by UVIX to an external application created and customized by the user according to their needs.

The MQTT protocol is based on the publish/subscribe model, which means that the following components must be present:

- Publisher: the sender of messages that "publishes" them by creating "topics."
- Subscriber: the recipients who receive messages by subscribing to one or more "topics."
- Broker: a message handler responsible for receiving messages from the publisher and delivering them to subscribers who have subscribed.

As shown in Figure 7.1, UVIX, specifically the Web Service, acts as a publisher and creates topics in which the variables of the connected devices are contained.

To provide maximum flexibility, the choice and configuration of the broker and subscribers who will subscribe to the topics remain the responsibility of the user so that they can be customized for the application.





7.1 Communication Configuration

To configure MQTT communication, you need to copy the "config.xml" file to the installation path of the Web Service inside the "Config" folder located in the same directory. By default, the path is C:\ProgramFiles(x86)\CAMOZZI\UVIX\WebService.

5000024829 Ver 1.4



As shown in Figure 7.2, once you've copied the file, you can edit the various configuration parameters listed in Table 7.1 using a text editor.

config.xm	
1	<pre>k?xml version="1.0" encoding="utf-8"?></pre>
2 📮	<config></config>
	Generale
	UrL su cui lanciare Web Service
	<strserviceurl><u>http://0.0.0.05000</u></strserviceurl>
	Lunghezza timer di controllo connessioni dispositivi (in millisecondi)
8	<mseccheckdispconnections>10000</mseccheckdispconnections>
9	
10	Lunghezza timer di recupero timeout connessioni (in millisecondi)
11	<msecgettimeouts>600000</msecgettimeouts>
12	
13	Numero massimo di pacchetti gestiti in singola transazione
14	<pre><maxpcktsperiransaction>200</maxpcktsperiransaction></pre>
15	
17	AL Math S
18	<pre>\: right \: right \: last be indice on abilitana tach Matt (0-dischlad 1-MattCustaman 2-MattDisital dafault:0)></pre>
19	(Matton)&(Matton)
20	
21	<1Host di connessione a broker Matt>
22	<pre><mottconnectionhost>localhost</mottconnectionhost></pre>
23	
24	Porta di connessione a broker Matt
25	<mqttconnectionport>1883</mqttconnectionport>
26	
27	Client ID da usare per publish messaggi
28	<mqttclientid>CamozziWebService</mqttclientid>
29	
30	Prefisso topic su cui effettuare publish messaggi
31	<mqtttopicprefix>machine_data/</mqtttopicprefix>
32	
33	Valore da assegnare a campo ReadClock in messaggi MqttDigital (in millisecondi)
34	<mqttreadclock>1000</mqttreadclock>
35	
36	<pre>C:\Program Files (x86)\CAMOZZI\UVIX\FEP\log</pre>
3/ -	
38	

Figure 7.2: Configuration File for MQTT Communication

Parameter	Line Number	Description
MqttOn	19	Enable MQTT communication
		 0: Disabled, default value
		 1: Enabled
		• 2: Reserved
MqttConnectionHost	22	IP address where the broker is installed, keep as "lo-
		calhost" if on the same machine as the Web Server
MqttConnectionPort	25	Broker communication port, typically the default is
		1883
MqttClientId	28	Publisher's identity, keep the default value
MqttTopicPrefix	31	Prefix used to compose the topic name, see Chapter
		7.2.
MqttReadClock	34	Reserved

Table 7.1: Parameters for MQTT Communication



7.2 Topics

Topics are identifiers for types of messages.

By subscribing to one or more available topics, a subscriber can choose to receive only the messages of interest to them.

The names of topics are composed by concatenating two fields:

- Prefix: set through the "MqttTopicPrefix" parameter in the "config.xml" configuration file of the Web Service, as discussed in Chapter 7.1.
- Devices Group: the name of the devices group set within the Web App, as discussed in Chapter 6.4.3.

By constructing them in this way, a topic is available for each group of devices.

7.3 Message Structure

Once the communication is correctly configured, the Web Service publishes a message every time it receives a variable from a device.

Configuration parameters, commands, and fast variables are not transmitted.

For more information on the available variables and their IDs, please refer to the device's user manual. Below is an example of a message sent after receiving a variable with ID 6 from a "RegP" type device assigned to the "MqttTestDevGroup" device group:

{"TS": "2020-04-07T09:10:25", "DevGr": "MqttTestDevGroup", "DevSerNum": "PRE0000000000321", "DevType": "RegP", "DevName": "DevicePRE 321", "SlvId": 0, "SlvType": "RegP", "SlvName": "DevicePRE 321", "VarId": 6, "VarVal": "413" }

Observing the message, you can identify the following fields:

- TS: Date and time of the sent message.
- DevGr: Name of the device group to which the device belongs. If the device is not assigned to any group, this field will automatically be set to "Default Machine."
- DevSerNum: Serial number of the device.
- DevType: Device family.
- DevName: Device name.
- SlvId: Device ID. In the case of a slave, it will be an incrementing value starting from 1, identifying it within the modular device.

It will be 0 otherwise.

SlvType: Slave family.

If it is a master or a non-modular device, this field will have the same value as "DevType."

- SlvName: Slave name.
 If it is a master or a non-modular device, this field will have the same value as "DevName."
- VarId: Variable ID, a unique name identifying the variable.
 For the complete list, refer to the device's user manual.
- VarVal: Variable value without conversions.
 For more information, refer to the device's user manual.

Troubleshooting

In the following chapter, we will address the main issues that may arise during or after installation, along with the primary solutions that users can independently perform to resume operations as quickly as possible.

If the problem persists, please contact Camozzi support via email at service.camozzi@camozzi.com or by phone at +39 030 3792790.

8.1 USB Communication Absent

In this situation, the Camozzi device is powered, the USB cable is connected, and the Camozzi USB Gateway software is running, but the connected device is not appearing in the "Open COMs" list (Figure 8.1).

uvix	Gateway USB			_	ΠX
File	Tools ? Start Gateway	Status Gateway running (FEP Ar	ddress:127.0.0.1)	CK CAMOZZI	
	Stop Gateway	Open COMs COM4:015720519900000	20	Automation	
_	Open UVIX			UVİX	
Ма	in Page Wireless Configurator	Mapping			
Virtu STMid	ual COMs Available icroelectronics Virtual COM Port (COM4)		Tcp Connections COM4<=>127.0.0.1:1555		
Date (CON (CON	a Received from Usb Devices (Virtu M4) => \$C01572051990000020 M4) => \$V01572051990000020 M4) => \$C01572051990000020	al Ports)	Data Received from	1 FEP	

Figure 8.1: Example of USB communication absent with a device

Open the device manager and try disconnecting and reconnecting the USB cable. After that, one of the following situations may occur:

1. The window doesn't update: The system doesn't recognize any connected device, which could be



due to the cable or the USB connector on the PC or the device itself.

Try the test again with a different cable or a different USB port on the PC.

If the problem persists, contact Camozzi service.

2. The window updates, but the device isn't recognized: If the device is functioning correctly, it should appear as shown in Figure 8.2.

Porte (COM e LPT)
 STMicroelectronics Virtual COM Port (COM4)

Figure 8.2: Virtual COM if the device is functioning correctly

If it appears as shown in Figure 8.3, the device is working correctly but is in reprogramming mode. Simply complete the procedure as described in the user and maintenance manual.

Dispositivi USB (Universal Serial Bus)
 STM32 DownLoad Firmware Update

Figure 8.3: Serial if the device is in reprogramming mode

8.2 Wireless Communication Absent

If the device is equipped with a wireless module but is not communicating with UVIX, please check the following:

- 1. Ensure that the wireless network is available, as even a weak signal can cause issues.
- 2. Verify that the access credentials, SSID, and password are correctly configured on the device.
- 3. Make sure the UVIX address on the device is set correctly.
- 4. Ensure that the IP address of the machine where UVIX is installed is static.
- 5. Check for any firewalls or antivirus software that may be blocking communication ports of UVIX, as discussed in Chapter 3.2.
- Access the services window and verify that the "CamozziFEP" status is running (Figure 8.4). If it's not running, you can manually force it by accessing the same window with administrator privileges.

Chapter 8 Troubleshooting

🤹 Services					7 <u>-</u> 7	×
File Action View Help						
Services (Local)						
Select an item to view its description.	Name AssignedAccessManager Service Auto Time Zone Updater Automation License Manager Service Automation License Manager Service Back Authorization Back Disk Image Background Intelligent Transfer Service Background Network Access Client Base Filtering Engine BitLocker Drive Encryption Service	Description AssignedAcce Automatically This is Audio V B&R authoriza B&R disk ima B&R disk ima B&R Upgrade Transfers files i Windows infra Barracuda Net DE Base Filter BDESVC hosts	Status Running Running Running Running Running Running Running	Startup Type Manual (Trigg Disabled Automatic Manual (Trigg Automatic Automatic Automatic Automatic Automatic Automatic Automatic Manual (Trigg	Log On As Local Syste Local Syste	*
	Block Level Backup Engine Service Buetooth Audio Gateway Service Buetooth Support Service BranchCache CamozziFEP	The WBENGIN Service suppor The Bluetooth This service ca Camozzi Front	Running	Manual Manual (Trigg Manual (Trigg Manual Automatic (D	Local Syste Local Service Local Service Network S Local Syste	
	CamozziWebService CamozziWebService Capability Access Manager Service CaptureService_656dfd2 Cellular Time Certificate Propagation	Camozzi Web Provides facilit Enables optio This service se Copies user ce	Running Running Running	Automatic (D Manual Manual Manual (Trigg Manual (Trigg	Local Syste Local Syste Local Syste Local Service Local Syste	
	Icient License Service (ClipSVC) CmWebAdmin Code Key Isolation CodeMeter Runtime Server CODESYS Control Win V3 - x64 Version	Provides infras CmWebAdmi The CNG key i CodeMeter Ru Windows soft	Running Running Running	Manual (Trigg Automatic Manual (Trigg Automatic Manual	Local Syste Local Service Local Syste Local Syste Local Syste	
	Qi CODESYS Gateway V3 Version 3.5.19.10 Qi CODESYS ServiceControl Version 3.5.19 Qi COM+ Event System Qi COM+ System Application	Gateway Serve Service for star Supports Syste Manages the c	Running Running Running	Automatic Automatic Automatic Manual	Local Syste Local Syste Local Service Local Syste	
	Connected Devices Platform Service Connected User Experiences and Tele ConsentUX_656dfd2	This service is The Connecte Allows Conne Manages com	Running Running Running	Automatic (D Automatic Manual Automatic	Local Service Local Syste Local Syste Local Service	~
Extended Standard	- 985 AC 11 AC DA	n 11	B . 22		1 16 1	

Figure 8.4: CamozziFEP Service

8.3 Device Not Visible in the Web App

If the device does not appear in the Web App, one of the UVIX components may not be functioning correctly.

Please check the following:

1. If the device communicates via USB, check its status from the USB Gateway as shown in Figure 8.5.



Gateway USB		×
File Tools ?	1 _{Status}	
Start Gateway	Gateway running (FEP Address:127.0.0.1)	
		Automatica
Stop Gateway	COM4:01702247990000028	Automation
Open UVIX		uvix
Main Page WI-FI Configurator	Mapping	
Virtual COMs Available	3 Tcp Connection	hs
STMicroelectronics Virtual COM Port (COM4	.) COM4<=>127.0.0.1:1	555
Data Received from Usb Devices (\	(irtual Ports) Data Received (from FEP
(COM4) => \$001702247990000028 (COM4) => \$001702247990000028	=> (COM4)	
(COM4) => \$V01702247990000028		
(COM4) => \$001702247990000028		
(COM4) => \$V01702247990000028		
(COM4) => \$V01702247990000028		
(COM4) => \$001702247990000028		
(COM4) => \$V01702247990000028		
(COM4) => \$001702247990000028	×.	

Figure 8.5: Checking the USB Gateway Communication Status

If the status is not "running" (green color), click on the "Start Gateway" command next to it.
If the COM with the serial number of the desired device does not appear, the USB connection is absent.

Follow the instructions in Chapter 8.1.

If the connection in the "Tcp Connections" section is not visible, access the services window and verify that the "CamozziFEP" status is running (Figure 8.4).

If it's not running, you can manually force it by accessing the same window with administrator privileges.

2. Access the "Connections Status" window within the "Setup" menu in the Web App and check the status of connections.

If they are all functioning correctly, they should be green, as shown in Figure 8.6.

Connections Status	×
 Web Service : FEP : Broker Mqtt : 	S
	Close

Figure 8.6: Checking Communication Status via Web App

• Web Service: If the connection is not present, access the services window and verify that the "CamozziWebService" status is running (Figure 8.7).

If it's not running, you can manually force it by accessing the same window with administrator privileges.

rvices (Local)	Services (Local)						
rvices (Local)	Services (Local)						
rvices (Local)	 Services (Local) 						
			1			1	
	Select an item to view its description.	Name	Description	Status	Startup Type	Log On As	
	103 1	AssignedAccessManager Service	AssignedAcce		Manual (Trigg	Local Syste	
		🔍 Auto Time Zone Updater	Automatically		Disabled	Local Service	
		Automation License Manager Service	Automation Li	Running	Automatic	Local Syste	
		AVCTP service	This is Audio V	Running	Manual (Trigg	Local Service	
		🖏 B&R Authorization	B&R authoriza	Running	Automatic	Local Syste	
		🖏 B&R Disk Image	B&R disk ima	Running	Automatic	Local Syste	
		B&R Upgrade Service for AS412	B&R Upgrade	Running	Automatic (D	Local Service	
		🗟 Background Intelligent Transfer Service	Transfers files i		Manual	Local Syste	
		🗟 Background Tasks Infrastructure Service	Windows infra	Running	Automatic	Local Syste	
		🔍 Barracuda Network Access Client	Barracuda Net	Running	Automatic	Local Syste	
		🏟 Base Filtering Engine	The Base Filter	Running	Automatic	Local Service	
		BitLocker Drive Encryption Service	BDESVC hosts		Manual (Trigg	Local Syste	
		🌼 Block Level Backup Engine Service	The WBENGIN		Manual	Local Syste	
		🌼 Bluetooth Audio Gateway Service	Service suppor		Manual (Trigg	Local Service	
		Bluetooth Support Service	The Bluetooth		Manual (Trigg	Local Service	
		SranchCache	This service ca		Manual	Network S	
		🧟 CamozziFEP	Camozzi Front	Running	Automatic (D	Local Syste	
		CamozziWebService	Camozzi Web	Running	Automatic (D	Local Syste	
		Capability Access Manager Service	Provides facilit	Running	Manual	Local Syste	
		CaptureService_656dfd2	Enables optio		Manual	Local Syste	
		🍓 Cellular Time	This service se		Manual (Trigg	Local Service	
		Certificate Propagation	Copies user ce	Running	Manual (Trigg	Local Syste	
		Client License Service (ClipSVC)	Provides infras		Manual (Trigg	Local Syste	
		🍓 CmWebAdmin	CmWebAdmi	Running	Automatic	Local Service	
		CNG Key Isolation	The CNG key i	Running	Manual (Trigg	Local Syste	
		CodeMeter Runtime Server	CodeMeter Ru	Running	Automatic	Local Syste	
		CODESYS Control Win V3 - x64 Version	Windows soft		Manual	Local Syste	
		CODESYS Gateway V3 Version 3.5.19.10	Gateway Serve	Running	Automatic	Local Syste	
		CODESYS ServiceControl Version 3.5.19	Service for star	Running	Automatic	Local Syste	
		COM+ Event System	Supports Syste	Running	Automatic	Local Service	
		COM+ System Application	Manages the c		Manual	Local Syste	
		Connected Devices Platform Service	This service is	Running	Automatic (D	Local Service	
		Connected User Experiences and Tele	The Connecte	Running	Automatic	Local Syste	
		ConsentUX_656dfd2	Allows Conne		Manual	Local Syste	
		🔍 CoreMessaging	Manages com	Running	Automatic	Local Service	

Figure 8.7: CamozziWebService Service

2 FEP: If the connection is not present, access the services window and verify that the "CamozziFEP" status is running (Figure 8.4).



If it's not running, you can manually force it by accessing the same window with administrator privileges.

3 Fast mode: If it's not functioning correctly, you need to uninstall and reinstall UVIX.

8.4 Login Failed

In case you are unable to log in to the Web App, an error message with a description of the possible cause will appear, as shown in Figure 8.8.



Figure 8.8: Login Failed

The error messages may appear in the following cases:

 Incorrect username or password: Verify that the credentials are correct, paying attention to uppercase and lowercase letters.

Refer to Chapter 6.1 for details.

Unable to contact the login server: Access the services window and verify that the "CamozziWeb-Service" status is running, as shown in Figure 8.7.
 If it's not running, you can manually force it by accessing the same window with administrator

If it's not running, you can manually force it by accessing the same window with administrator privileges.

8.5 Web App Not Visible

In case the Web App is not visible, the causes could be one of the following:

- The address is incorrect, by default it is http://127.0.0.1:8080/.
- If an error message appears as shown in Figure 8.9, there is an issue with the access port. Follow the steps described in Chapter 3.8 to modify it.



Cannot locate document: /

* D 0 8 :

Figure 8.9: Error Accessing the Web Page

• If an error message appears as shown in Figure 8.10, open the Internet Information Services (IIS) as shown in Figure 8.11.

Open the "Sites" folder, select "WebApp Remote Control," and click the "Start" command in the "Manage Website" menu.

✓ ③ 127.0.1 × +			- a ×
← → C ଲ © 127.0.0.1 :8081			🖈 🖸 🖬 😂 🗄
	This site can't be reached		
	127.0.0.1 refused to connect.		
	Try:		
	Checking the proxy and the firewall		
	ERR_CONNECTION_REFUSED		
	Reload	Details	

Figure 8.10: Web Page Not Reachable



Figure 8.11: Internet Information Services (IIS)

8.6 Malfunction of One or More Components

Another cause of issues, but one that is more complex to identify, is the lack of necessary permissions for proper functioning.

As seen in Chapter 3, UVIX components use various communication ports, and during installation, they are automatically added to the default Windows firewall.

However, this does not happen if third-party antivirus or firewalls are present.

In such cases, the user must manually add permissions for all the necessary ports.

8.7 Not Covered in Previous Sections

If the issue is not among those previously listed, one of the UVIX components may not have been installed correctly.

Try uninstalling the software and then reinstalling it.

If the problem persists, please contact Camozzi support at the email address service.camozzi@camozzi.com or by phone at +39 030 3792790.



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Contacts

Camozzi Automation S.p.A.

Società Unipersonale REGISTERED OFFICE Via R. Rubattino, 81 20134 Milano Italy OPERATIONAL HEADQUARTERS Via Eritrea, 20/I 25126 Brescia Italy Tel. +39 030 37921 marketing@camozzi.com **Customer Service** Tel. +39 030 3792790 service@camozzi.com

Export Department Tel. +39 030 3792253 sales@camozzi.com