Pixsys Portal for PL600 and PL700 devices

The PixsysPortal service allows the secure connection, via VPN, of the PL600 and PL700 PLCs from any computer with Windows 8.1, 10, 11 (if you use Windows 7, you must first install the MS PowerShell 5.1 available from the "*PowerShell Win7.zip*" file in the download area of the Pixsys site).

PRE-REQUISITES:

The PixsysPortal service provides that the devices are connected, and properly configured, to a LAN with Internet connection. The ports used by the PixsysPortal service are: 443 in TCP/UDP, 500 and 8005 (outgoing). For the service Webserver, port 8080 is also used.

The service includes a "demo" mode that allows a connection, lasting 15 minutes, every 2 hours. After disconnecting, you will then need to wait at least 2 hours before you can make a new connection with the device.
If the PLC is not equipped with the PixsysPortal service already active, ask your sales representative or vendite@pixsys.net a PixsysPortal license cod. ***2400.38.002***

A. INSTALLING THE PixsysPortal SERVICE

The PixsysPortal service is already pre-installed in all PL600 and PL700 devices from the factory, no manual installation is required (only activation is required if it has not been ordered at the same time as the PLC).
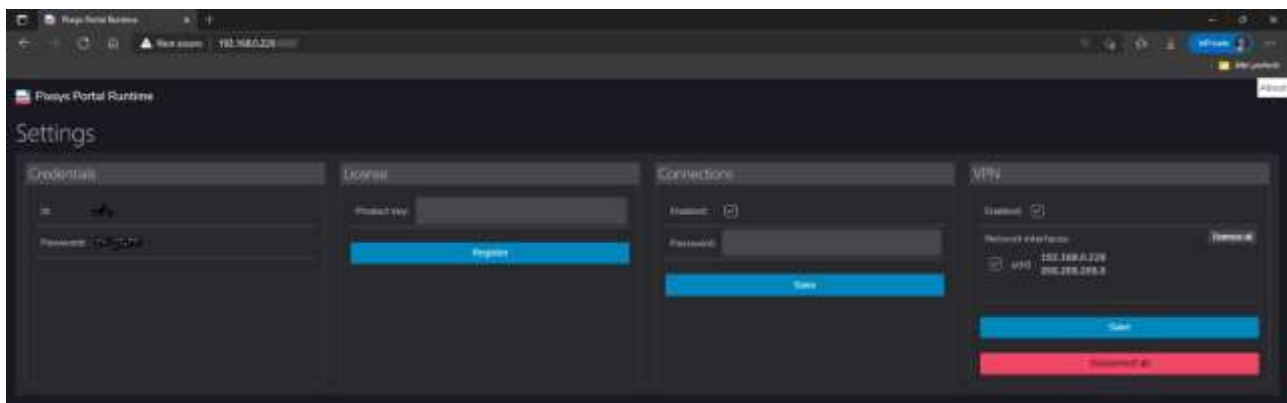
B. SERVICE ACTIVATION

- Rask your sales representative or sales@pixsys.net a PixsysPortal license for Linux devices cod. **2400.38.002**
- Turn on the PLC and wait for the operating system services to load completely (solid green RUN LED).
- Connect the PLC to a local network with internet connection. PLCs are normally already configured in DHCP, check that the green LED is lit steadily.
- Use the DeviceFinder utility or the appropriate development tools (LogicLab for PL600 or Codesys for PL700) to identify the IP address of the PLC:
  - o In case of using the DeviceFinder utility, select the PLC from the left list and press the icon below to connect to its integrated WebServer

    o   in other cases, open a Web browser and enter in the address bar, the address of the PLC specifying port 8080, for example *192.168.099:8080*

- At this point the WebServer of the PixsysPortal service opens, from which you can activate and configure it.

C. SERVICE ACTIVATION AND CONFIGURATION

Credentials section:
This section shows the ID and password required to associate the PLC with your PixsysPortal account (refer to the next paragraph for details).
License Section:
In the "Product key" field, enter the service activation key, which you received from Pixsys.
Connections section:
Enable the "Enabled" flag to allow the PLC to connect to the service, enter (optional) a security password, which the user must enter when establishing the VPN connection from his computer (for details refer to the next paragraph).
VPN section:
Enable the "Enabled" flag to allow the PLC to connect VPN to your PC.

Enable which network adapters will be used by the PLC to be able to perform the pass-through function when the VPN connection is established. With multiple network cards enabled, in fact, it will be possible to use the PLC as a network switch to be able to remotely "reach" even the devices connected to these cards (for example, it will be possible to remotely reach a possible HMI, another PLC or inverter connected to the second network card of the PLC, while the first will be the one used to allow internet access to the PixsysPortal service).

In this screen, the *eth0* and *eth1* network ports have been enabled for the shared "pass-through" VPN connection.
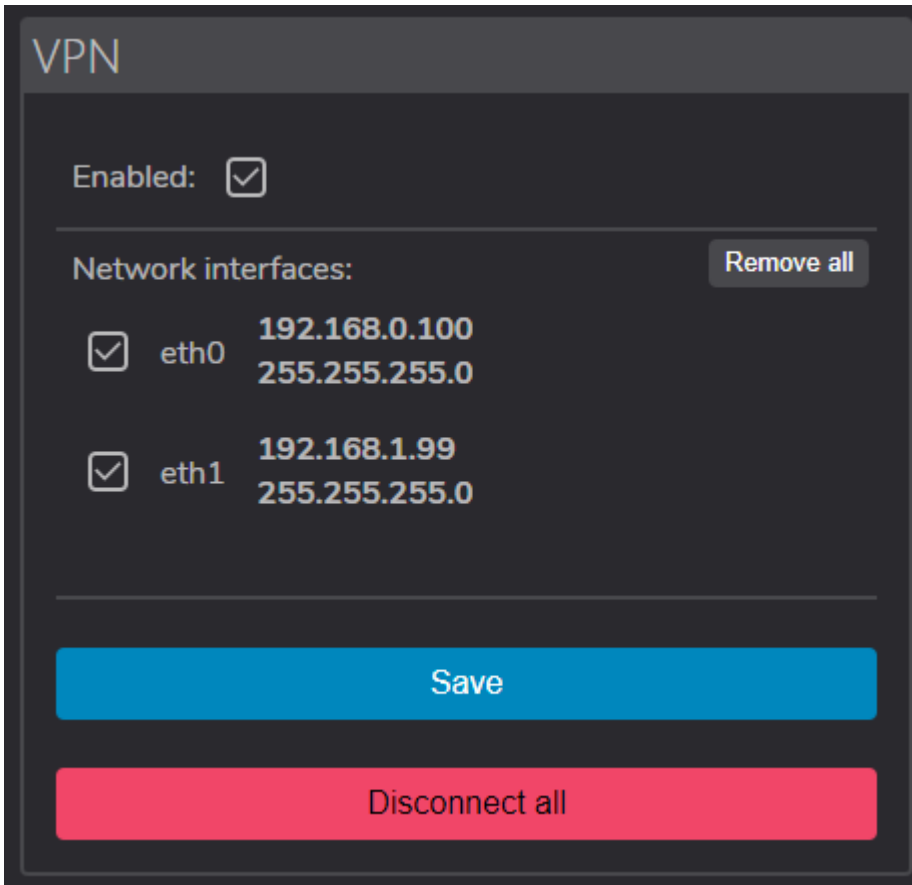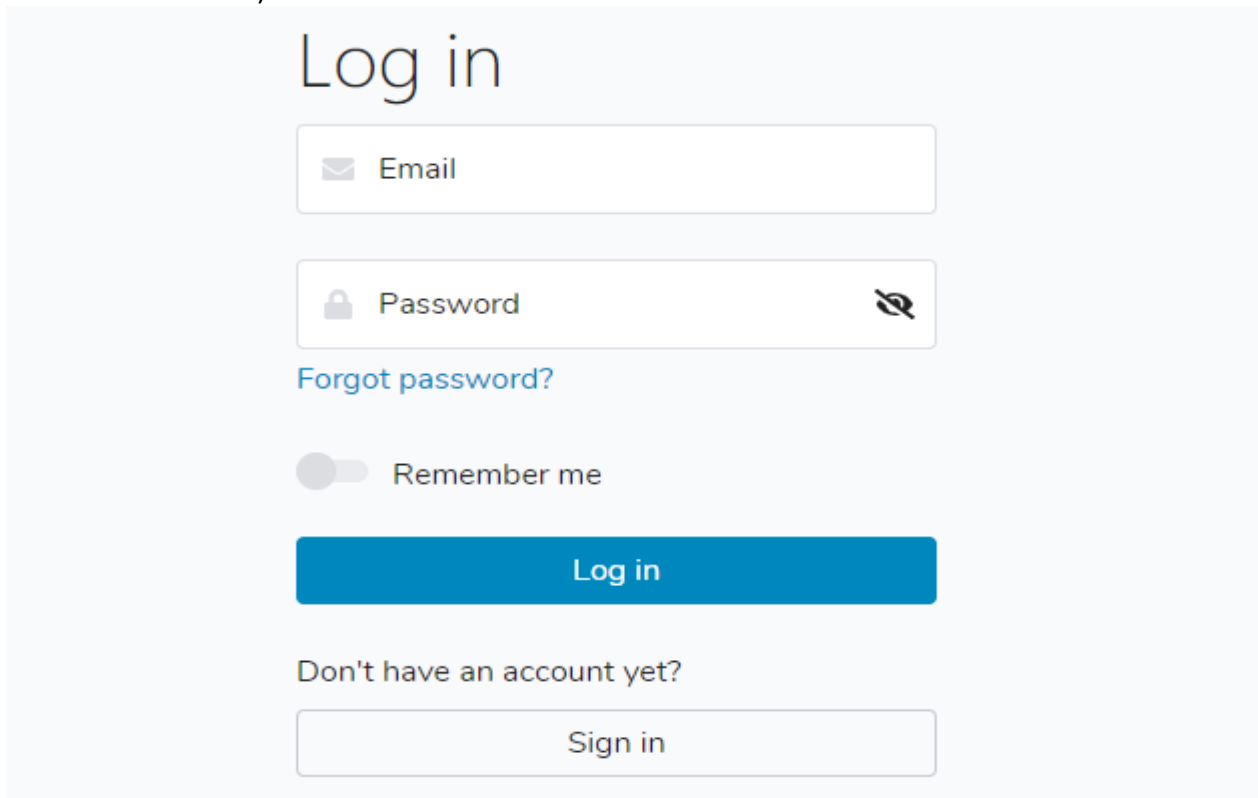
In this configuration, the PLC then responds locally on the eth0 port as 192.168.0.100 and on the *eth1* port as *192.168.1.99.* If the VPN connection is established on the eth0 port , all requests/connections from your PC to the addresses of the 192.168.1.xxx subnet (i.e. those of the eth1 network) will be automatically addressed through the VPN to the device connected to the *eth1* network. So if, for example, at address 192.168.1.25 a local HMI is available (therefore connected to the *eth1* network of the PLC), to reach it from your PC it will be sufficient to use this IP address *192.168.1.25*.

NB: it is important to press the "Save" button in each section, to ensure that the configuration you just made is saved.

D. INSTALLING THE APPLICATION ON YOUR COMPUTER AND CREATING THE PixsysPortal account

- Togo to the reserved area of www.pixsys.net and from the PixsysPortal section, download and install "*PixsysPortal Installer.exe"*

- Once started, press SIGN *IN* to create your own account and follow the instructions provided (you will have to confirm the activation of the account by clicking on the link that will be provided by the e-mail received)
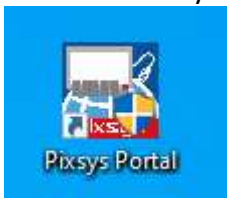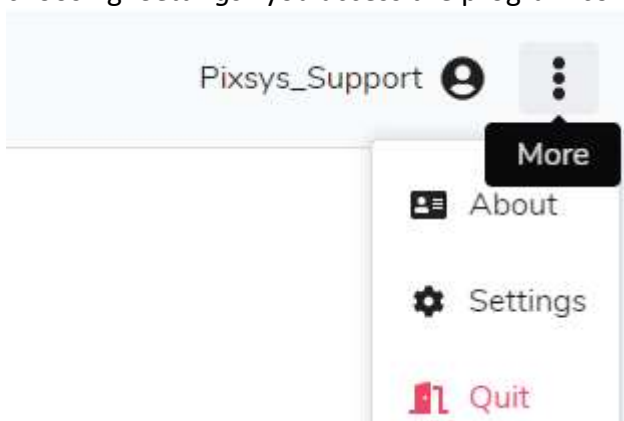

E. USING THE PixsysPortal PROGRAM

- Start the Pixsys Portal program on your computer from the desktop icon

- Then log in with the credentials chosen during account activation

- At the top right you see the name of the linked account, ppressing the three vertical dots and choosing "*Settings*" you access the program configuration page

Dto this screen you can choose the system language, the light / dark theme and other operating details that are automatically set during installation (it is not necessary to change them except in specific cases)

Settings

General

|	
Language:	🌐 English
Theme:	◉ ⚫ Light
Check for updates on startup	☑
Notification audio	🔊
VNC path:	C:\Program Files\Pixsys\Pixsys P... 📂
File transfer path:	C:\Program Files\Pixsys\Pixsys P... 📂
Date format	📅 Year / Month / Day

Save

NB: it is important to press the "Save" button in each section, to ensure that the configuration you just made is saved.
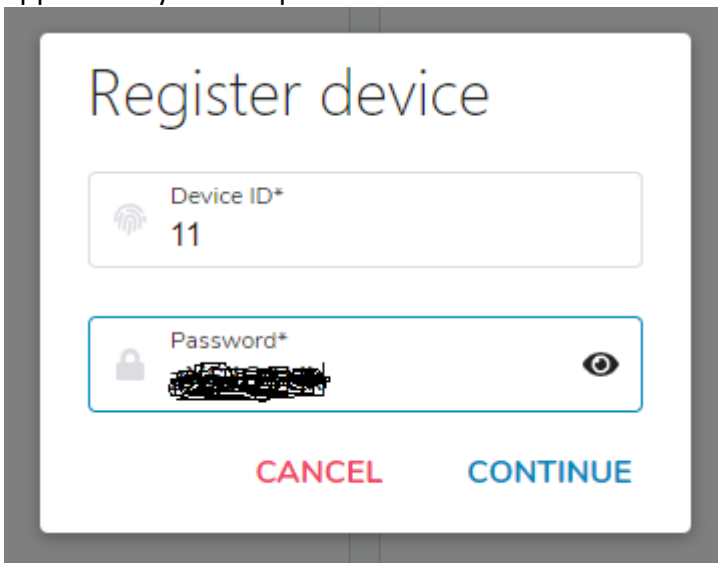
- To return to the main screen, press the Pixsys Portal logo at the top left.

F. ASSOCIATING YOUR DEVICE WITH YOUR PixsysPortal ACCOUNT

- right click on *Devices* and select *Register device*
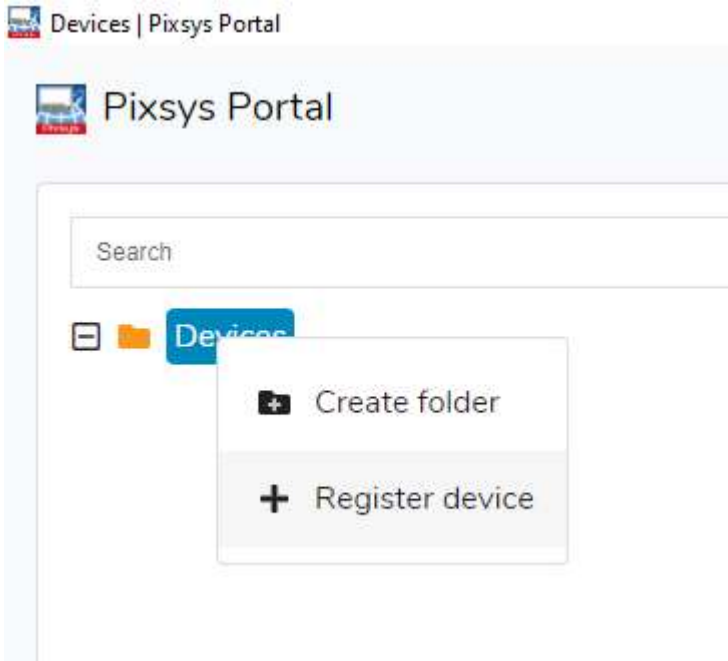
- Enter the credentials (*ID* and *Password*) indicated in the WebServer of the PLC in the window that appears on your computer and click on *CONTINUE*
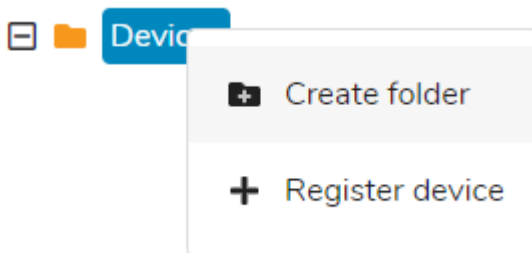
- Give a name to the device and possibly a description of it and confirm

At this point the PLC just registered to your account will appear in the list of your devices.
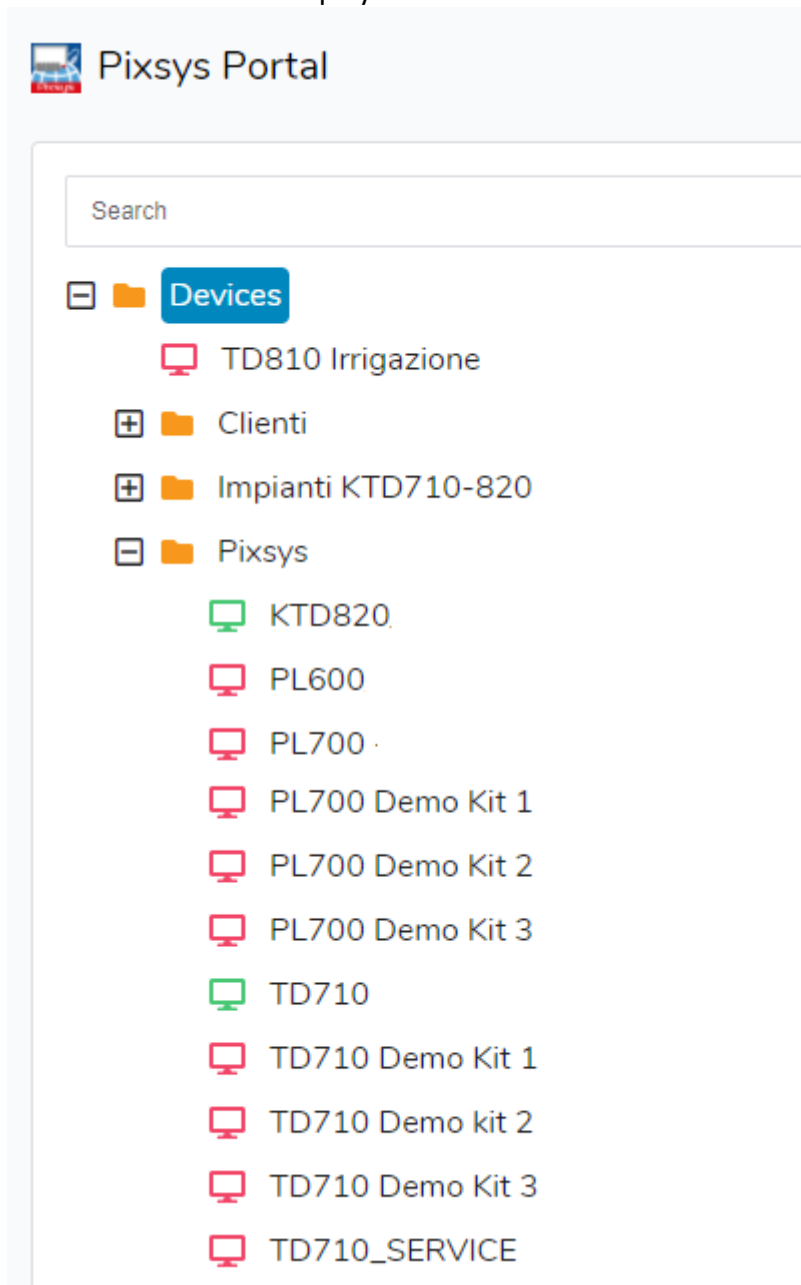
- It is also possible to group the different devices into folders, by right-clicking on the *Devices* item and selecting *Create Folder.*

After that, simply drag the desired device to the newly created folder.

G. CONNECT REMOTELY TO THE DEVICE

- once you have started the PixsysPortal application and logged in to your account, the list of associated devices is displayed.

NB: the green icon indicates that the device is reachable from the PixsysPortal servers and therefore it will be possible to make the VPN connection to this; the red icon indicates that the device is offline and therefore not reachable from the PixsysPortal servers. In this case, check the internet connection of the PLC and its network configurations, possibly turning it off and on again in case of modification of these.

- select a device from online (green icon)
- from the *VPN* menu on the right click on *Connect* and wait a while, until the status becomes "Connected" and the IP address assigned to that device is displayed.

At this point, using the IP address indicated by Pixsys Portal, you can connect to the PLC with the development software or, using the icons that appear at the top above the menus on the right:

- View its remote desktop via the *VNC* icon (if available in the PLC)
- Start a file transfer using the *File transfer* icon
- View the WebServer via the *Web* icon (if available in the PLC)

Through the *Details* menu you can check the status of the license, the date of the last access to the PixsysPortal servers and its last IP, its location, system information such as the product code and the versions of the different software installed

## H. SHARE YOUR DEVICE WITH OTHER PixsysPortal ACCOUNT

Through the *Users* menu you can share your device with other PixsysPortal users (i.e. accounts already registered with the PixsysPortal service). The device can be shared as a *simple user* or *owner*:

- *Simple user*: The account that "gets" the device can check its connection status and details, as well as make the VPN connection to it. You can NOT share your device with other users.
- *Owner*: the account that "gets" the device can perform the possible operations as a simple user but also share the device with other PixsysPortal users as well as delete a specific user from the owners of the device itself.

The PixsysPortal user who "gets" the device will receive a red dot notification on his PixsysPortal application next to his username

By clicking on your name, the drop-down menu showsandrà the same red dot also on the item *Sharing* requests, clicking on this item, a window will open showing any sharing requests received but not yet accepted
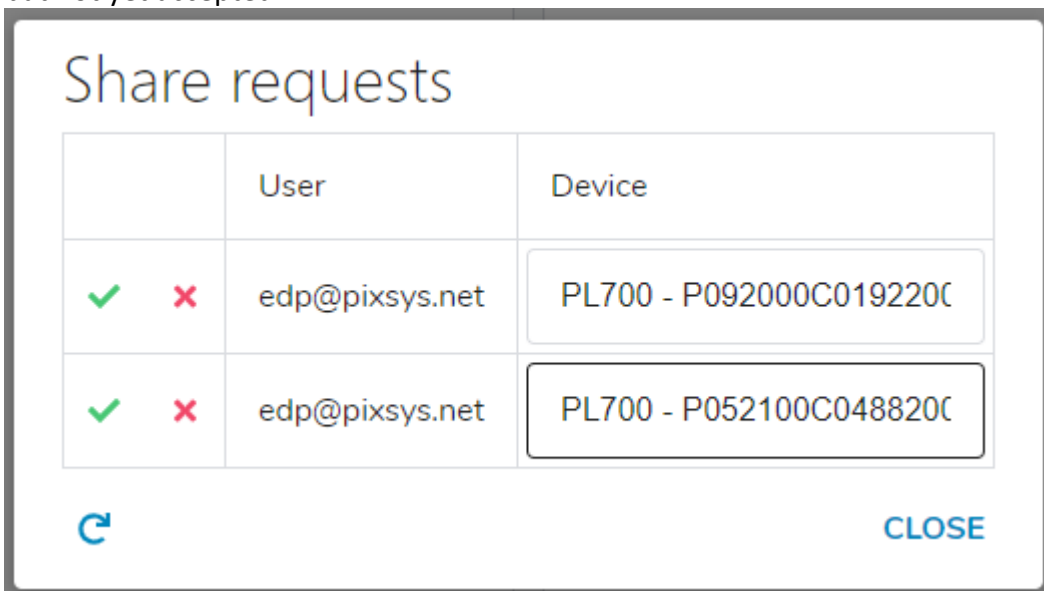
At this point, through the icons ✔ ✘ you can decide whether to accept or discard the request to share thespecific device.