

Training Course

Initial Setup smartLink HW-DP



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1 **Getting Started**

This training session will guide you step-by-step through the connection setup of the smartLink HW-DP.

1.1 **Prerequisites**

- smartLink HW-DP is powered correctly
- smartLink HW-DP is connected to your PC
- a web browser (Google Chrome or Firefox) installed

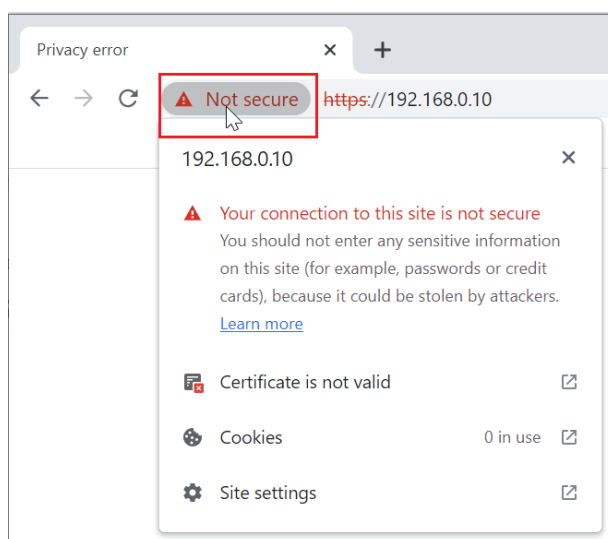
2 Logging on to the web server



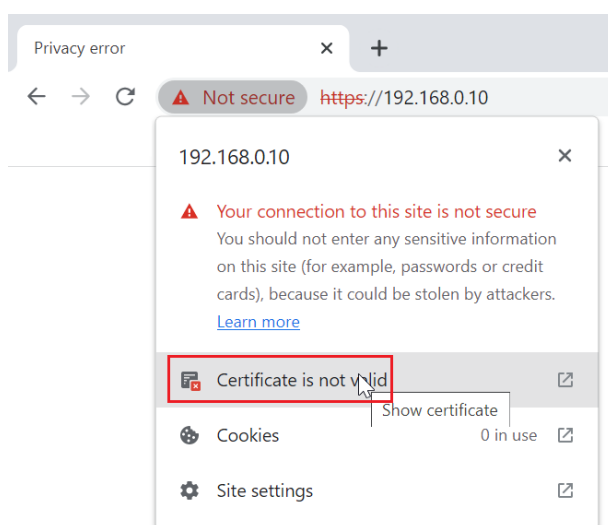
Note

A self-signed certificate assigned to the default IP address of the smartLink HW-DP is pre-installed. To avoid that credentials are sniffed we highly recommend using Hypertext Transfer Protocol Secure (**HTTPS**).

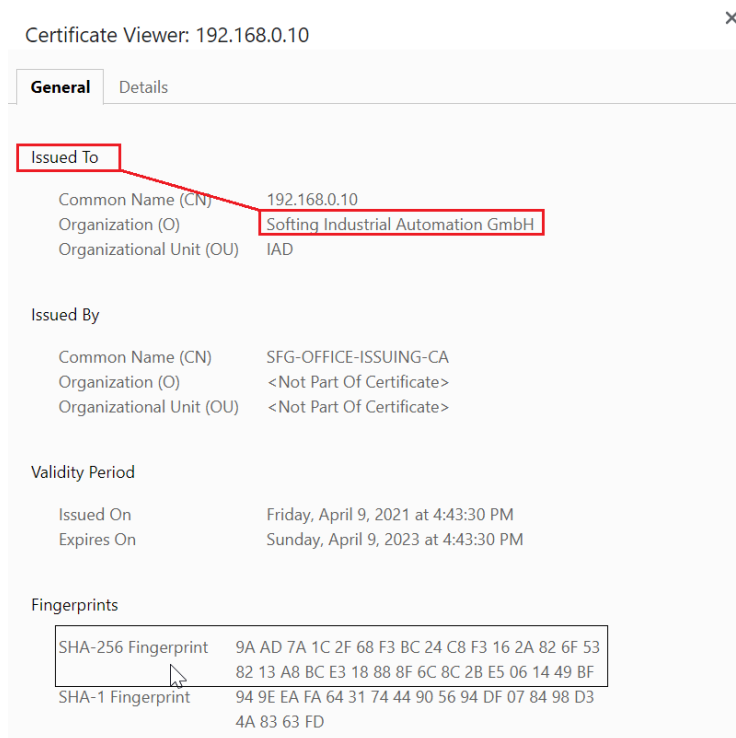
1. Open your web browser and enter **https://192.168.0.10**.
This is the default IP Address of the smartLink HW-DP.
The browser will return a connection error: **Your connection to this site is not secure.**
2. Verify the self-signed certificate.
The following example shows how this is done in the Chrome browser.
3. Click **[Not secure]** to see why this connection is not secure.



4. Click **[Certificate is not valid]** to show information of the certificate.



5. Check the fingerprint of the certificate to verify that it is the self-signed certificate of Softing and accept the certificate warning.



6. Login to web server using the following credentials:
Username: **administrator**
Password: **GEA-YN-026000<serial number>**

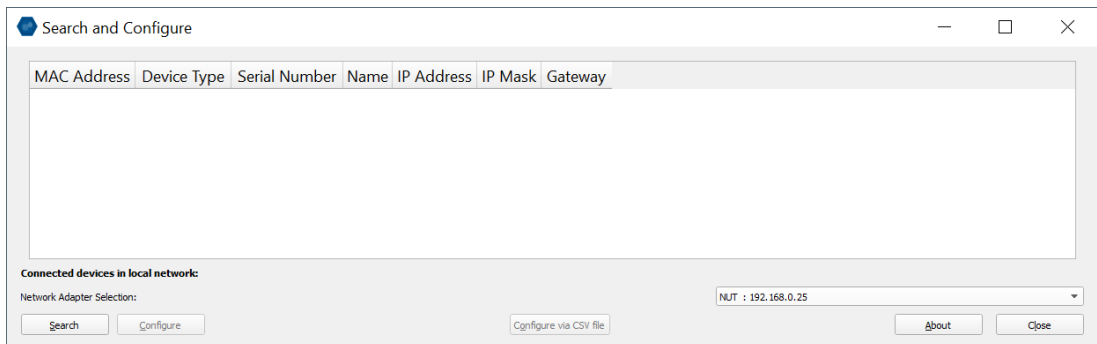


Note

The **serial number** is printed on the **label** on the side of the device. It can also be detected using the **Search And Configure** tool described in the next section.

2.1 How to find a smartLink HW-DP serial number

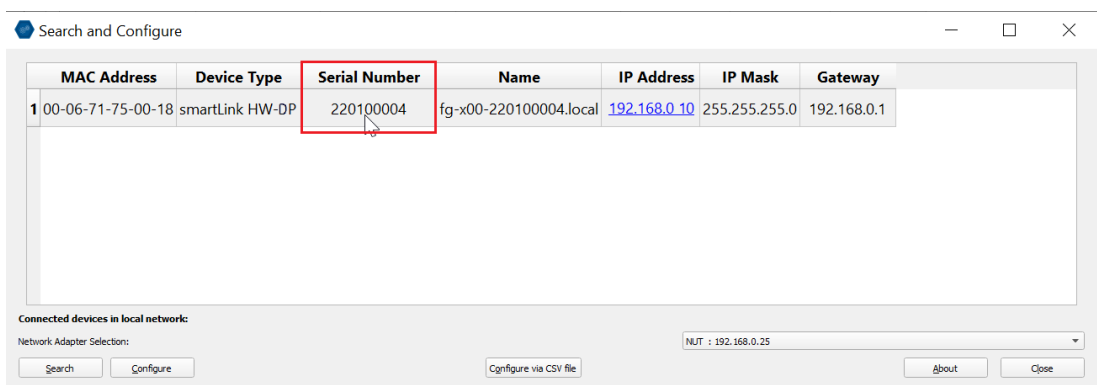
1. Download *Search And Configure* tool from product web site and install it.
2. Start the tool.



3. Click the dropdown list of the **Network Adapter Selection**. This selection menu shows all network adapters of your PC.



4. Select the network adapter which is connected to the smartLink HW-DP.
5. Click **[Search]** to start searching for connected devices. The search may take a moment.
6. The smartLink HW-DP is shown with the corresponding serial number.



3 User Management

After you are logged on you can set up the desired users.

The following table shows the users and the corresponding actions they are allowed to perform.

Permission	Administrator	Diagnostic	Maintenance	Observer
Create and delete accounts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Change all passwords	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Change own password	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Configuring gateway	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Reading configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reading diagnostics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Updating firmware	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Resetting gateway	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Installing HTTPS certificates	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

3.1 Creating an account

1. Select **Settings → User Accounts**.

The screenshot shows the smartLink web interface. The top navigation bar includes 'smartLink' and tabs for 'Information', 'Settings' (selected), 'Diagnosis', 'PROFIBUS', 'HART IP', 'OPC UA', and 'MQTT'. On the left, a sidebar lists 'Views' with options: 'Network', 'User Accounts' (highlighted), 'Firmware', 'Reset', 'HTTPS', 'Time & Date', and 'Licensing'. The main content area is titled 'User Accounts' and contains a 'Create account' section. This section has a 'User role' dropdown menu currently set to 'Administrator', and three input fields for 'User name', 'New password', and 'Confirm new password'. A blue 'Create' button is located at the bottom of the form.

2. Select a user role from the dropdown menu.
3. Assign a user name and enter a **New password** in the corresponding fields according to the password rules.
4. Retype the password in the **Confirm new password** field.
5. Click **[Create]** to save the user and password settings.

Password rules

A password must contain between eight and 128 characters, including at least 1 lower case letter, 1 upper case letter, 1 number and 1 special character: `!"#$%&'()*+,-./:;<=>?@[\]^_`{|}~`

3.2 Changing the default password / deleting the default user



Note

For security reasons we highly recommend to either change the password of the default user administrator or delete the user altogether.

1. Enter **administrator** as user name.

The screenshot shows the 'smartLink DP' interface with the 'Settings' tab selected. Under 'User Accounts', the 'Change password' option is highlighted. The form contains the following fields and buttons:

- User name:
- Old password:
- New password:
- Confirm new password:
- Change button:

2. Enter the **old password** GEA-YN-026000<serial number>.
3. Enter the **new password**.
4. Retype the password in the **Confirm new password** field.
5. Click **[Change]** to save the new password settings.

Alternatively, delete the default administrator.

1. Enter **administrator** as user name.

The screenshot shows the 'smartLink' interface with the 'Settings' tab selected. Under 'User Accounts', the 'Delete account' option is highlighted. The form contains the following fields and buttons:

- User name:
- Delete button:

2. Click **[Delete]** to erase the account settings and remove the user.

4 Setting time & date

It is recommended that you set the time and date of your smartLink HW-DP so that the systems in the network share the same time. This is necessary to verify the validity of security certificates and to analyze log files in case of errors.

You can set the time and date the following way:

1. Select **Settings** → **Time & Date**.

2. Click **[Set time from browser]** to synchronize the gateway with the PC date and time manually.

OR

3. Click **[Use time server]** and enter the IP address of your time server to synchronize date and time automatically via a time server.

The screenshot shows the 'smartLink' web interface. At the top, there are tabs: 'Information', 'Settings' (selected), 'Diagnosis', 'PROFIBUS', 'HART IP', 'OPC UA', and 'MQTT'. On the left side, there is a 'Views' sidebar with links: 'Network', 'User Accounts', 'Firmware', 'Reset', 'HTTPS', 'Time & Date' (highlighted in blue), and 'Licensing'. The main content area is titled 'Time & Date'. It contains two sections: 'Manual' and 'Time server'. The 'Manual' section has a radio button selected, with input fields for 'Browser time (UTC)' (2022-03-03 15:16:50) and 'Device time (UTC)' (2000-01-01 01:26:05), and a 'Set time from browser' button. The 'Time server' section has an unselected radio button, an 'NTP Server' input field (0.0.0.0), and a 'Use time server' button.



Note

If the smartLink HW-DP is not powered for a longer time the smartLink HW-DP will lose the set time. Therefore, we recommend synchronizing the time via a **time server**.

5 Saving a license file

If you purchased your smartLink HW-DP with installed licenses and the factory version of your device is 2.00.00.13797 or lower, download the licenses and store them in a safe location.

1. Select **Information** → **System**.
2. Check the factory version.
If it is 2.00.00.13797 or lower, continue with the following steps. Otherwise you may stop here.
3. Select **Diagnosis** → **Log File**.
4. Click **[Support Data]**.
A zip file containing the device licenses and other data is created. The licenses have the file ending **.lic*.

6 Installing a license

If you need to install additional licenses you can continue with the description. Otherwise you can skip this section.

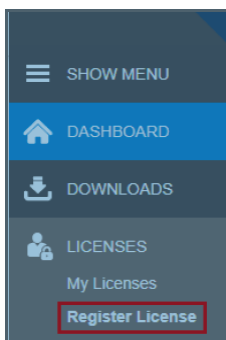


Note

First you will have to register the license to download to license file to the smartLink HW-DP.

How to register a license

1. Go to the Softing Industrial website and click the icon in the upper right corner to register yourself or select this [My Softing Portal](#) link. When you are registered and logged in you are directed to the **My Softing Dashboard**.
2. Select **Licenses** → **Register License** in the side menu.



3. Enter the license key from your License Certificate in the license key input field. You will find the license key on the certificate you have received by email.

Register License

Please enter your License Key and your Host ID. If you want to get notified in case of new releases, just check enable release info.

Activate License:

License Key

12345-ABCDE-67890-FGHIJ

Device/Host ID

☐ Enable Release Info

Register License

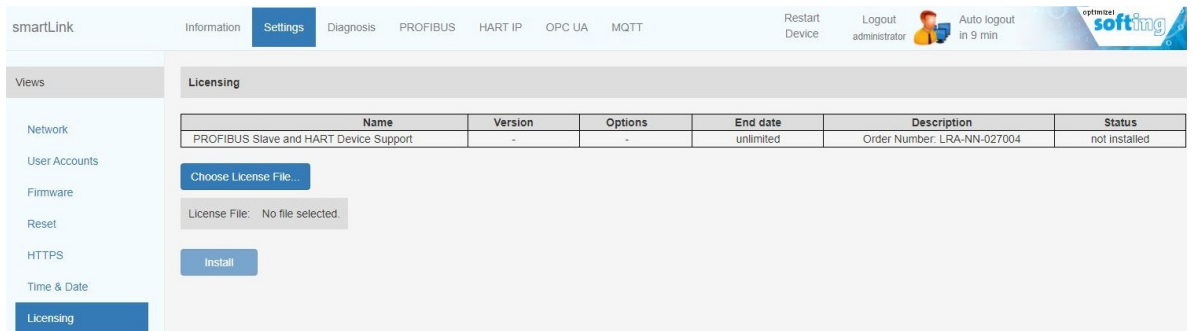
Cancel

4. Select **Information** → **System**.
5. Highlight and copy the Host ID from the Device/System table.
6. Paste the Host ID into the Device/Host ID field of the Register License form.
7. Click **[Register License]**.
A license file is generated.
8. Click **[Download]** to save the license file to your PC.

How to install a license

To install a license file follow these steps:

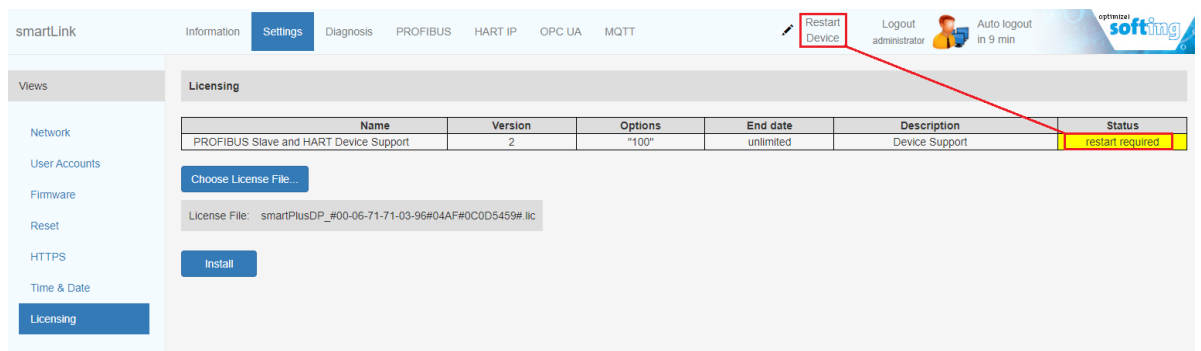
1. Select **Settings** → **Licensing**.



2. Click the **[Choose License File]** button.
Windows Explorer will open.
3. Go to the directory to which you have saved the file.
4. Select the license file and click **[Open]** in Windows Explorer.
The license file is now shown under the **[Choose License File]** button.
5. Click the **[Install]** button.
When the license has been installed, the following message appears at the bottom of the window.

Update License Info 1055: The license has been successfully updated.

In the Licensing window, the table entries for HART Device Support will have changed.



Parameter	Meaning
Version	A support number (for internal use only).
Options	Total number of supported PROFIBUS slaves and HART devices.
End Date	The date on which the license expires. Generally all licenses are unlimited.
Description	Before a license is installed, this field displays the license order number.
Status	Before a license is installed, the field displays "not installed". When a license has been installed it shows "restart required" against a yellow background. After the gateway has been restarted it shows "installed" against a green background.

6. Click **Restart Device** in the top menu of the window.
The following message will appear.

smartLink HW-DP

smartLink HW-DP will be restarted.
All applied configuration data will be used.
Continue and restart?

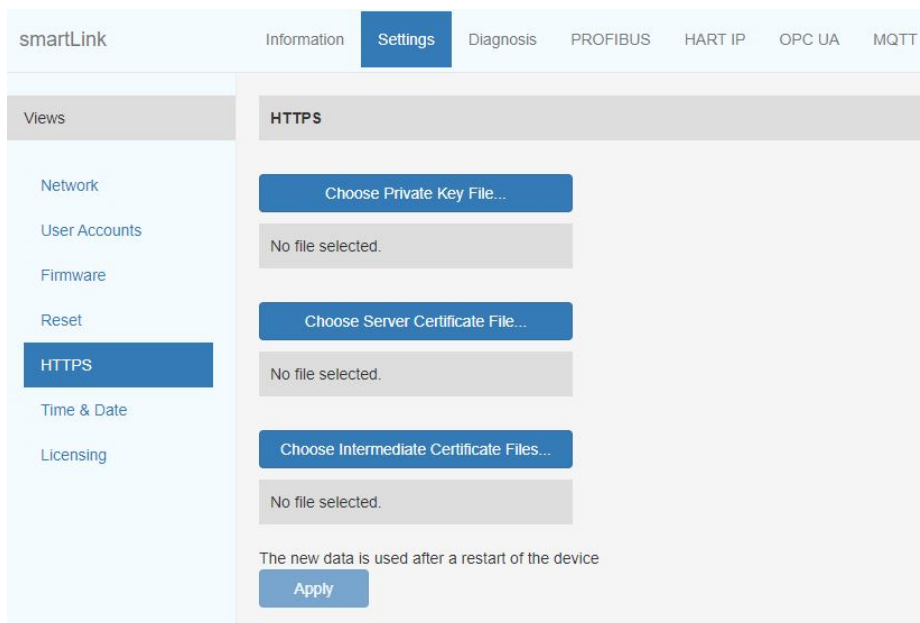
OK Cancel

7. Click **OK**.
Now the status column will show "installed" meaning the license is activated.

7 Importing an HTTPS certificate

As mentioned in section [Logging on to the web server](#)⁶ the smartLink HW-DP comes with a self-signed certificate assigned to IP address 192.168.0.10. For security reasons we highly recommend incorporating your own certificate assigned to the desired host name. It is also recommended that the DNS server of the network resolves the name of smartLink HW-DP to the corresponding IP address.

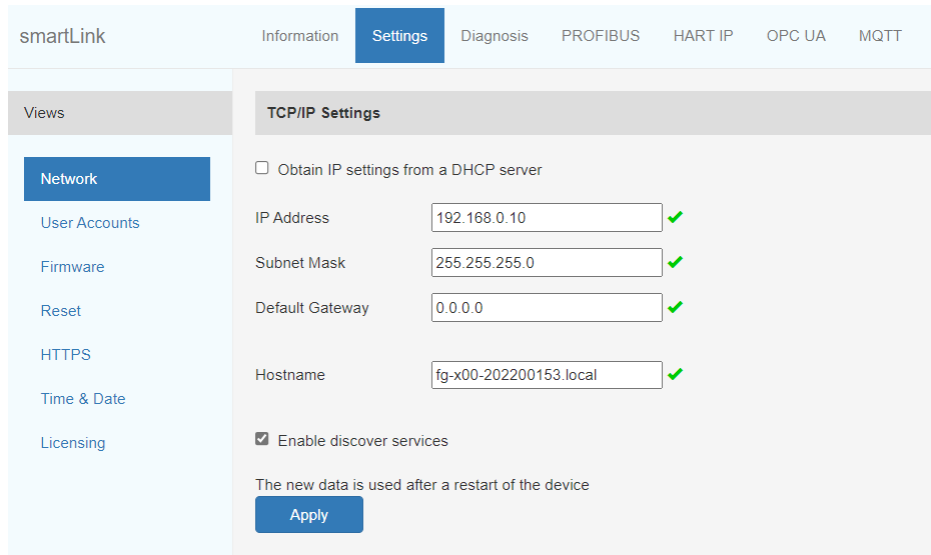
1. Select **Settings** → **HTTPS** to import your certificate.



2. Click **[Choose Private Key File...]** and select private key file.
3. Click on **[Choose Server Certificate File...]** and select server certificate file.
4. If required click **[Choose Intermediate Cert Files...]** and select intermediate certificates to be downloaded.
5. Click **[Apply]**.

8 Changing the network settings

1. Select **Settings** → **Network**.
2. Adjust the IP settings as required.
3. Adapt the host name to the one of the certificate.



The screenshot shows the smartLink web interface. The top navigation bar includes 'smartLink', 'Information', 'Settings' (selected), 'Diagnosis', 'PROFIBUS', 'HART IP', 'OPC UA', and 'MQTT'. On the left, a sidebar lists 'Views' with options: 'Network' (selected), 'User Accounts', 'Firmware', 'Reset', 'HTTPS', 'Time & Date', and 'Licensing'. The main content area is titled 'TCP/IP Settings'. It contains the following settings:

- ☐ Obtain IP settings from a DHCP server
- IP Address: 192.168.0.10 ✓
- Subnet Mask: 255.255.255.0 ✓
- Default Gateway: 0.0.0.0 ✓
- Hostname: fg-x00-202200153.local ✓
- ☒ Enable discover services

Below these settings, a note states: 'The new data is used after a restart of the device'. At the bottom of the settings area is a blue 'Apply' button.

4. Click **[Apply]**.
5. Click **[Restart Device]** at the top of the top of the window.



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