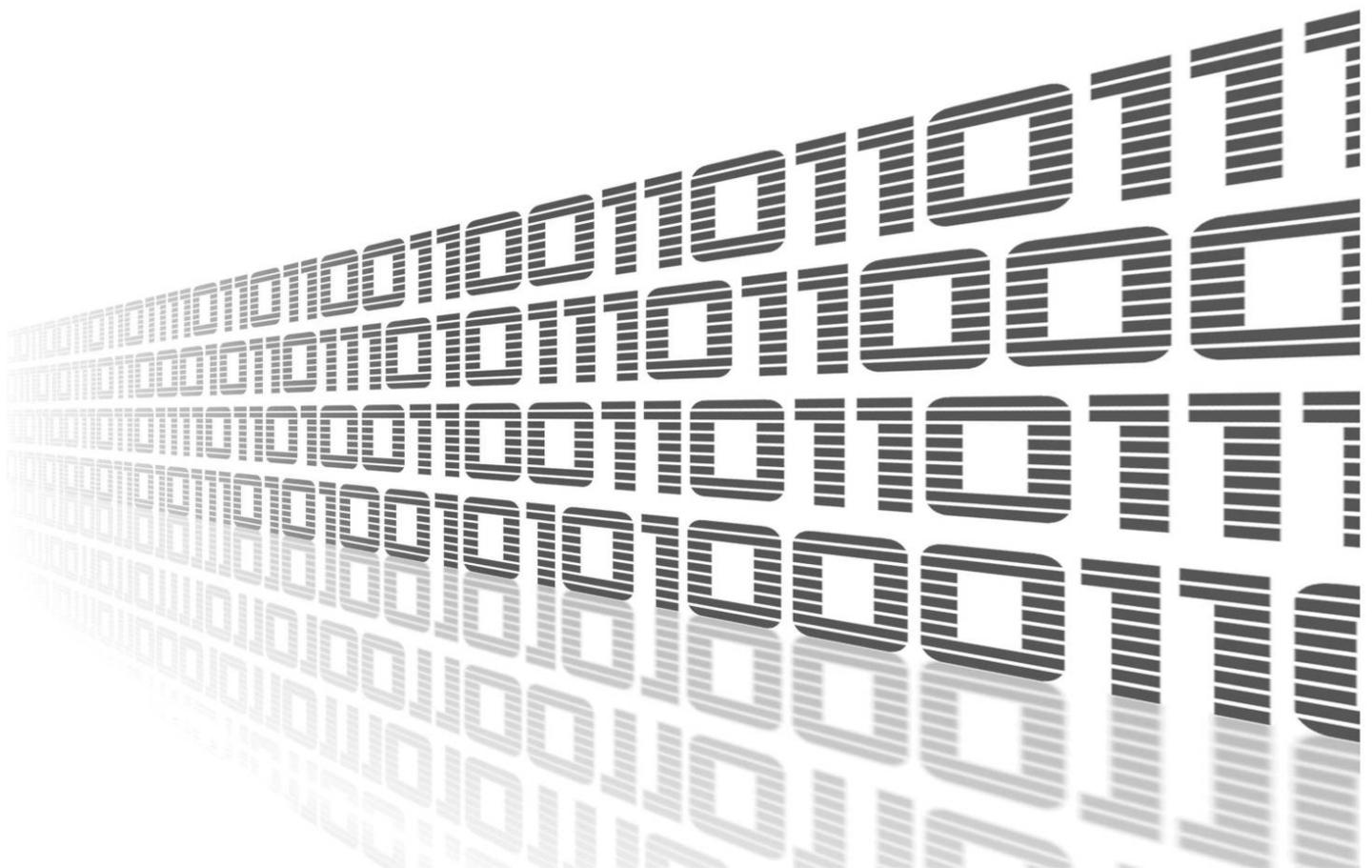


ADVANTECH



EdgeLink



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Used symbols



Danger – Information regarding user safety or potential damage to the router.



Attention – Problems that can arise in specific situations.



Information – Useful tips or information of special interest.

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1. EdgeLink Introduction

[EdgeLink](#) is a software system developed for Advantech gateways, designed to serve as a central hub in IoT architectures. In typical application scenarios, a gateway connects to various smart devices through the southbound interface and to cloud or enterprise platforms via the northbound interface. Positioned in the middle layer, the gateway handles data collection, processing, and forwarding – playing a crucial role in IoT-based business operations.

The version of the router app should be identical to the version of the EdgeLink studio.

EdgeLink is supported only on ICR-32xx-EL PNs that have a valid license. If you choose to install it on a standard ICR-32xx, you can do so, but it will run with a trial license limited to 2 hours. Support is strictly only for ICR-32xx models in v3 platform.

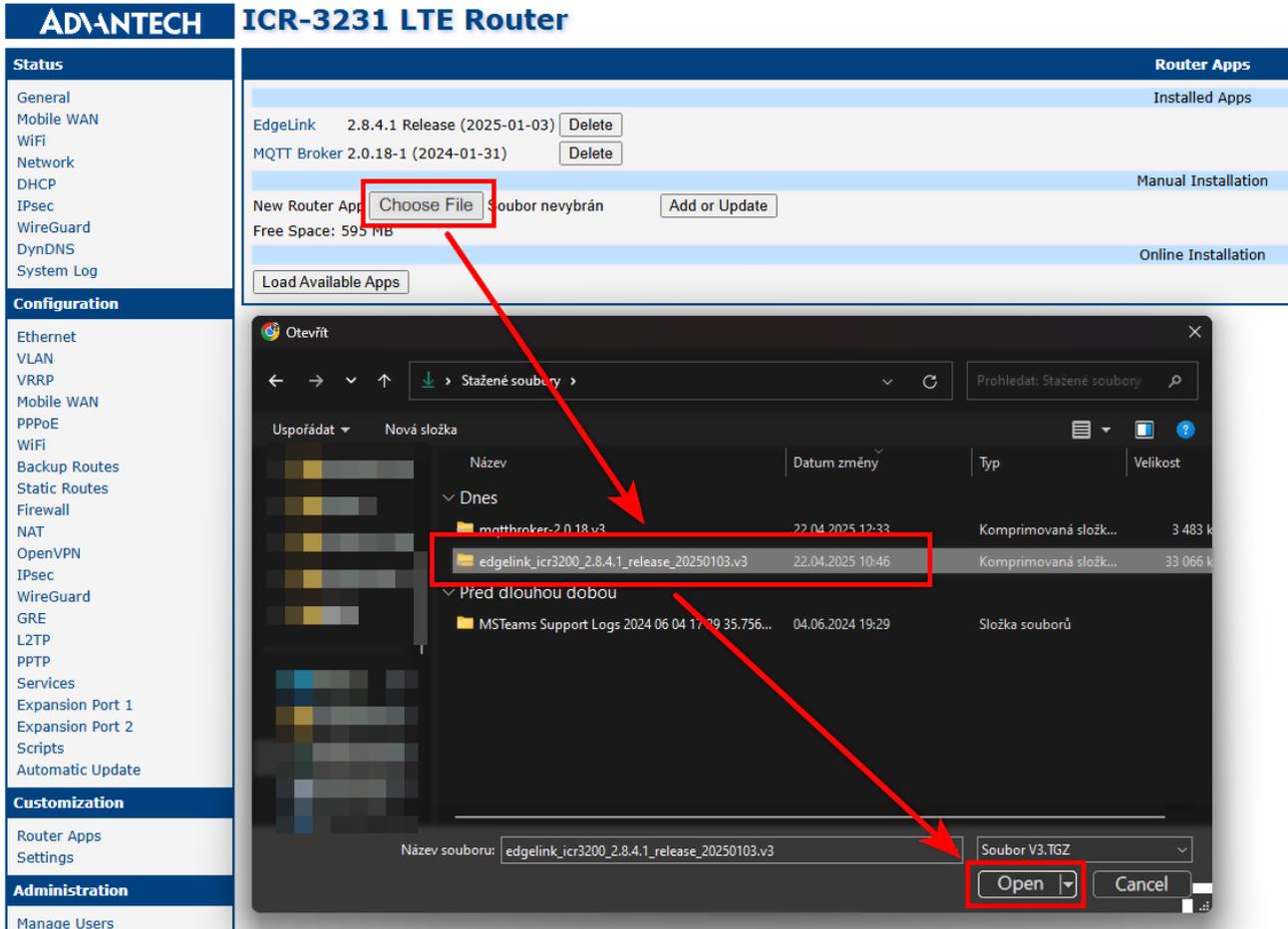
EdgeLink consists of two main components:

- **EdgeLink Studio** – an offline configuration tool for setting up communication and network interfaces supporting one-click deployment and real-time device monitoring.
- **EdgeLink Runtime** – the runtime service on the gateway that executes the configurations defined in *EdgeLink Studio*. *EdgeLink Router App* serves as the runtime itself.

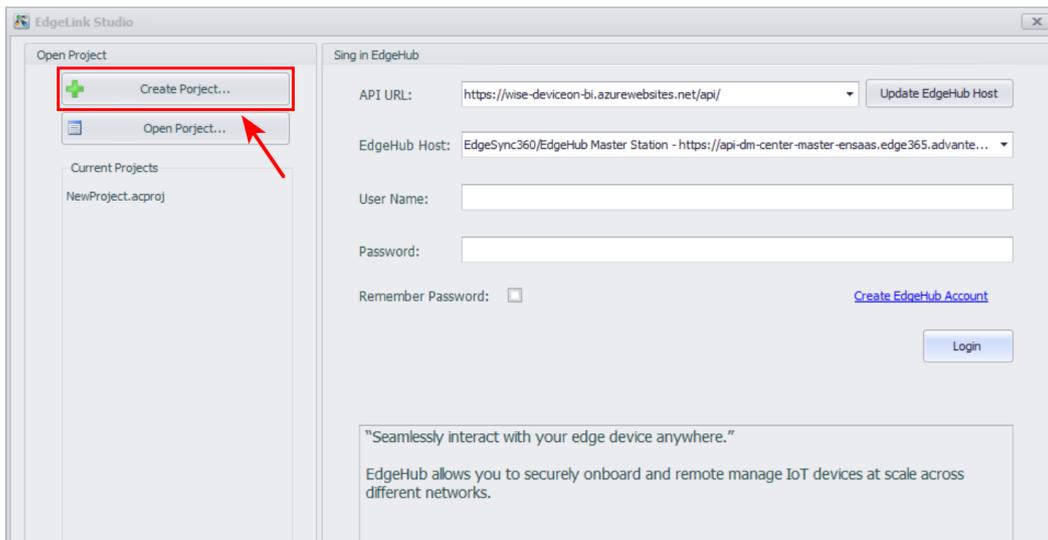
You can download the [EdgeLink Studio](#) and its corresponding [Manual](#) directly from the following links.

2. EdgeLink on ICR-3231

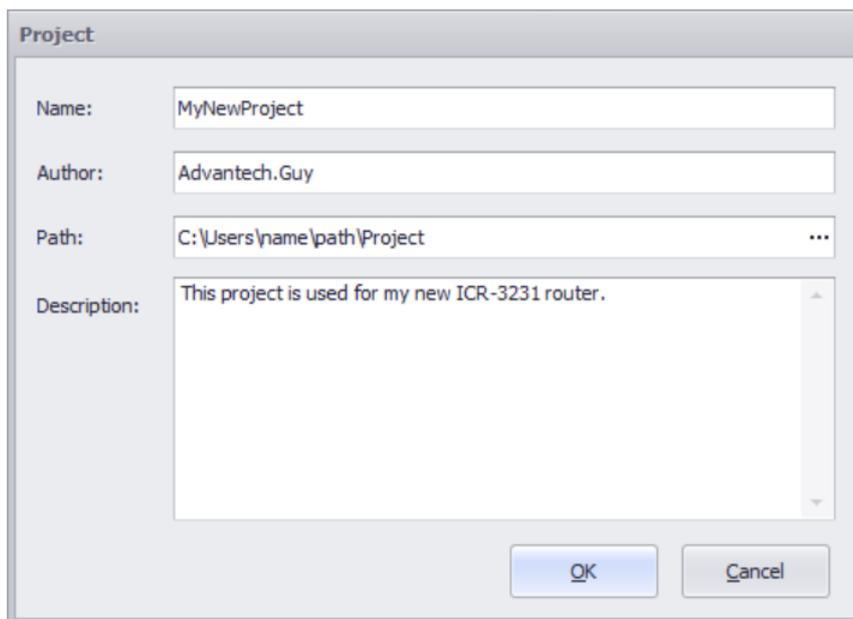
- *Edgelinek* Router App doesn't have its own GUI, so make sure you've got it downloaded and installed on your device from [Router Apps](#) page. Trial version expires after 2 hours of using.



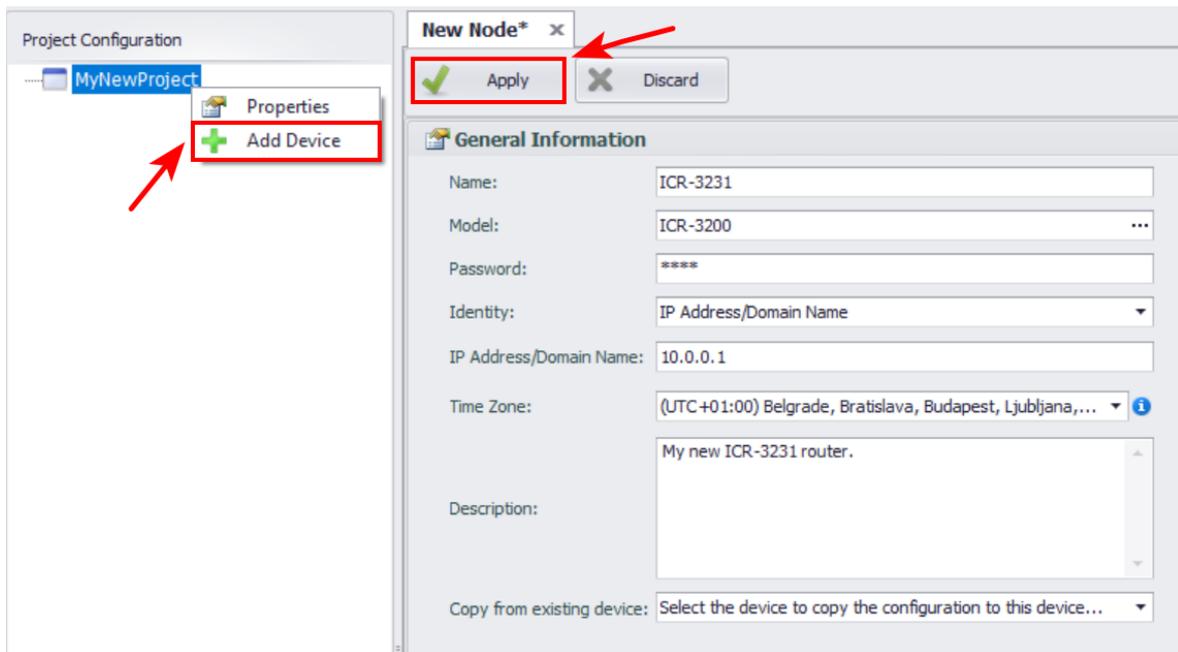
- Open Advantech EdgeLink Studio, click the "Create Project" button.



- Fill in the fields with your desired project credentials, then click **OK**.



- Right-click on your newly created project and select *Add Device*. Then fill in your devices credentials and click *Apply*. Details for each field can be found in Table 1 below.



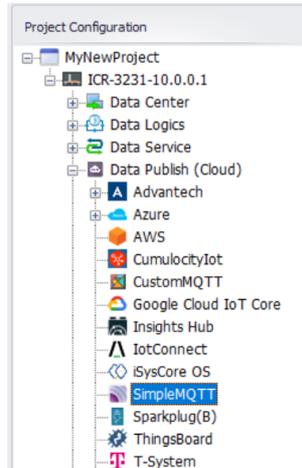
Item	Description
Name	Enter name of the device.
Model	Select the ICR-3200 series device.
Password	Enter password of the device.
Identity	You can choose between IP Address/Domain Name or Azure identity.
IP Address/Domain Name	Enter IP Address or Domain Name Address of the device.
Azure	Enter IoT Hub Connection String. Enter IoT Edge Device ID number.
Time Zone	Choose the correct time zone of the device.
Description	Write down description of the device.
Copy from existing device	Optionally you can select to copy configuration of an already existing device.

Table 1: Create Device Items Description

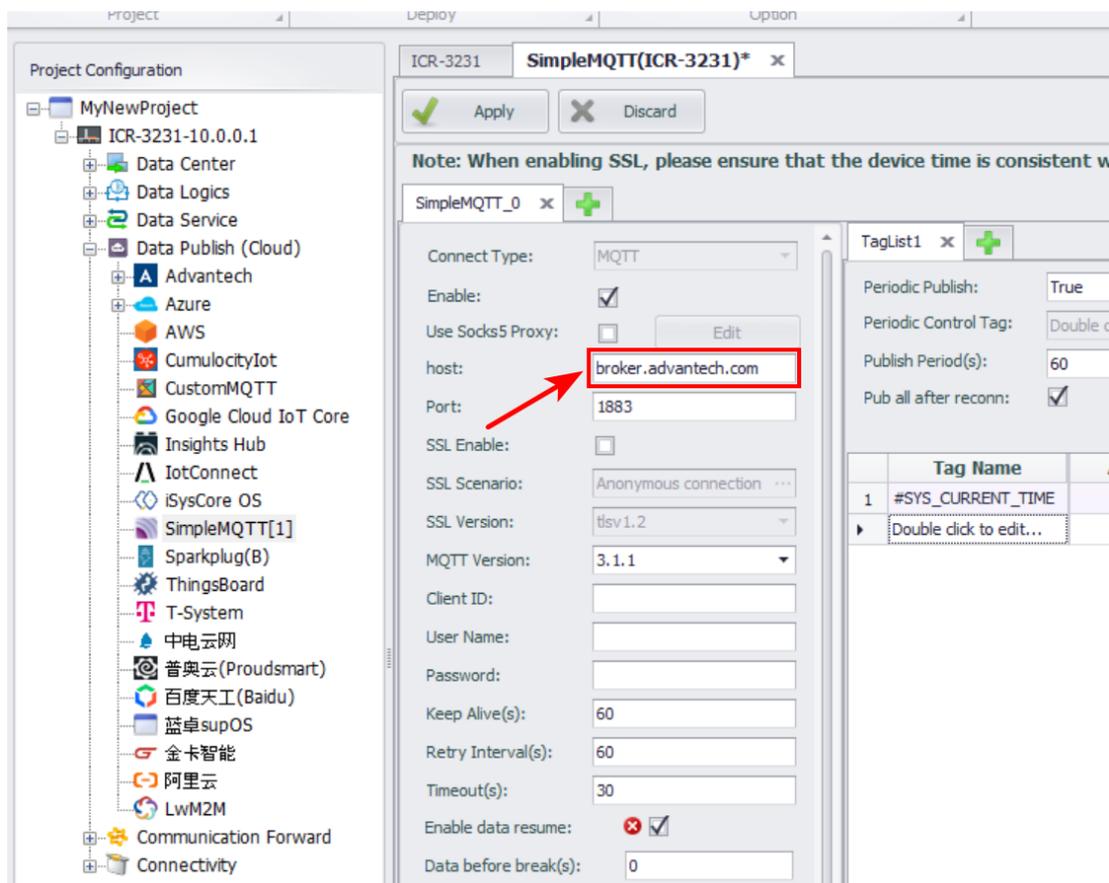
2.1 Sample Configuration

In this example, we will configure a basic setup using the *Simple MQTT* Tag List.

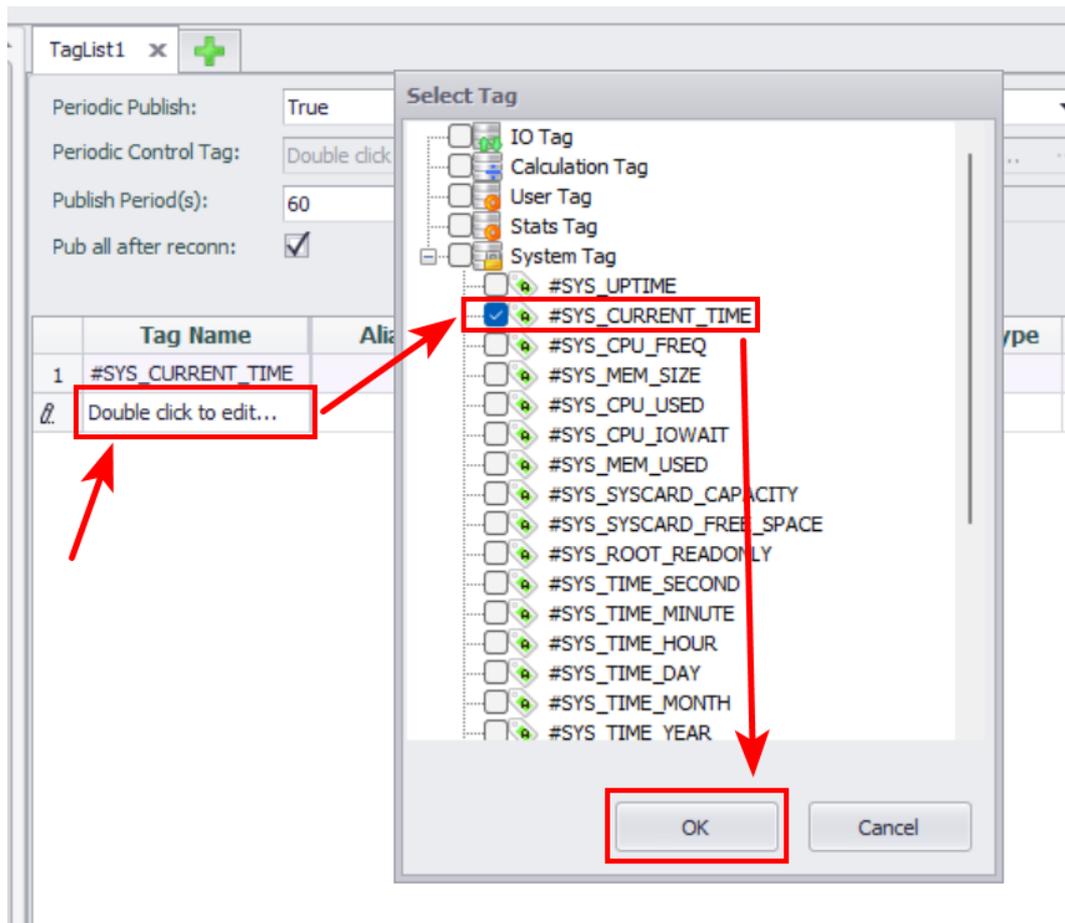
- In the Project Configuration panel, locate and uncheck the **Data Publish (Cloud)** option. Then, double-click on the *SimpleMQTT* function to configure it.



- In the Simple MQTT interface, enter the address of your MQTT broker.



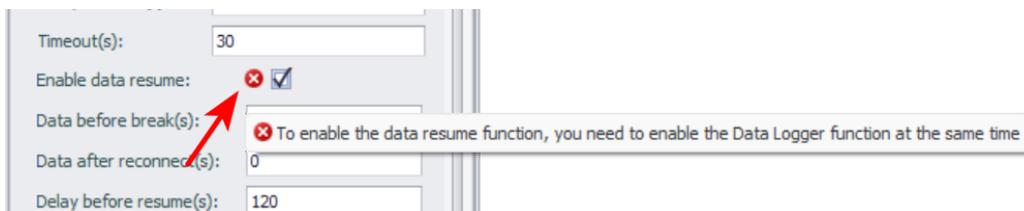
- Add one or more tags to the Tag List, such as `#SYS_CURRENT_TIME`, and then click **OK** to confirm.



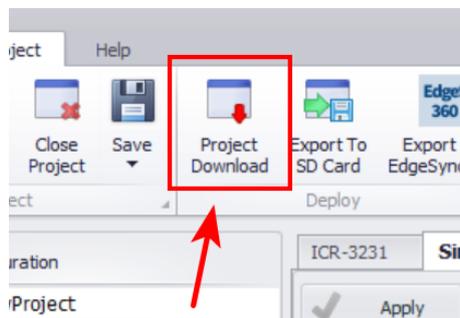
- Click *Apply* to save your changes.



- If an error message appears stating "*Some content in this page is error*", look for a red cross icon. Hovering over it will display the exact error message.



- Once the configuration is complete, click on the projects top-level node and select *Project Download* to upload the project to the device.



- Optionally, you can install the *MQTT Broker* app on the device and send data to a local broker. To subscribe to the topic and receive data, connect to the router and run the following command:

```
mosquitto_sub -L mqtt://localhost/data/device_id
```

3. Known Issues

3.1 License Loss After EdgeLink Reinstallation

If you are using a router with a valid EdgeLink license (model with -EL suffix) and you reinstall the EdgeLink application, the license may be lost during the reinstallation process.

Workaround

If the license file has been lost due to reinstallation, you can restore it manually using the following command:

```
cp /var/data/.edgelinek/.elic /opt/edgelinek/project/
```

Make sure to execute this command in the router's command line interface (CLI) after the reinstallation process is complete.

Note

This issue affects only licensed routers (-EL) and occurs only when the EdgeLink application is reinstalled without preserving the license file. It is recommended to back up the license file before performing any manual updates or reinstallations.

4. Related Documents

You can obtain product-related documents on the **Engineering Portal** at icr.advantech.com.

To access your router's documents or firmware, go to the [Router Models](#) page, locate the required model, and select the appropriate tab below.

Documents that are common to all models and describe specific functionality areas are available on the [Application Notes](#) page.

The **Router Apps** installation packages and manuals are available on the [Router Apps](#) page.

If you are interested in further options for extending router functionality, either through scripts or custom Router Apps, please see the information available on the [Development](#) page.