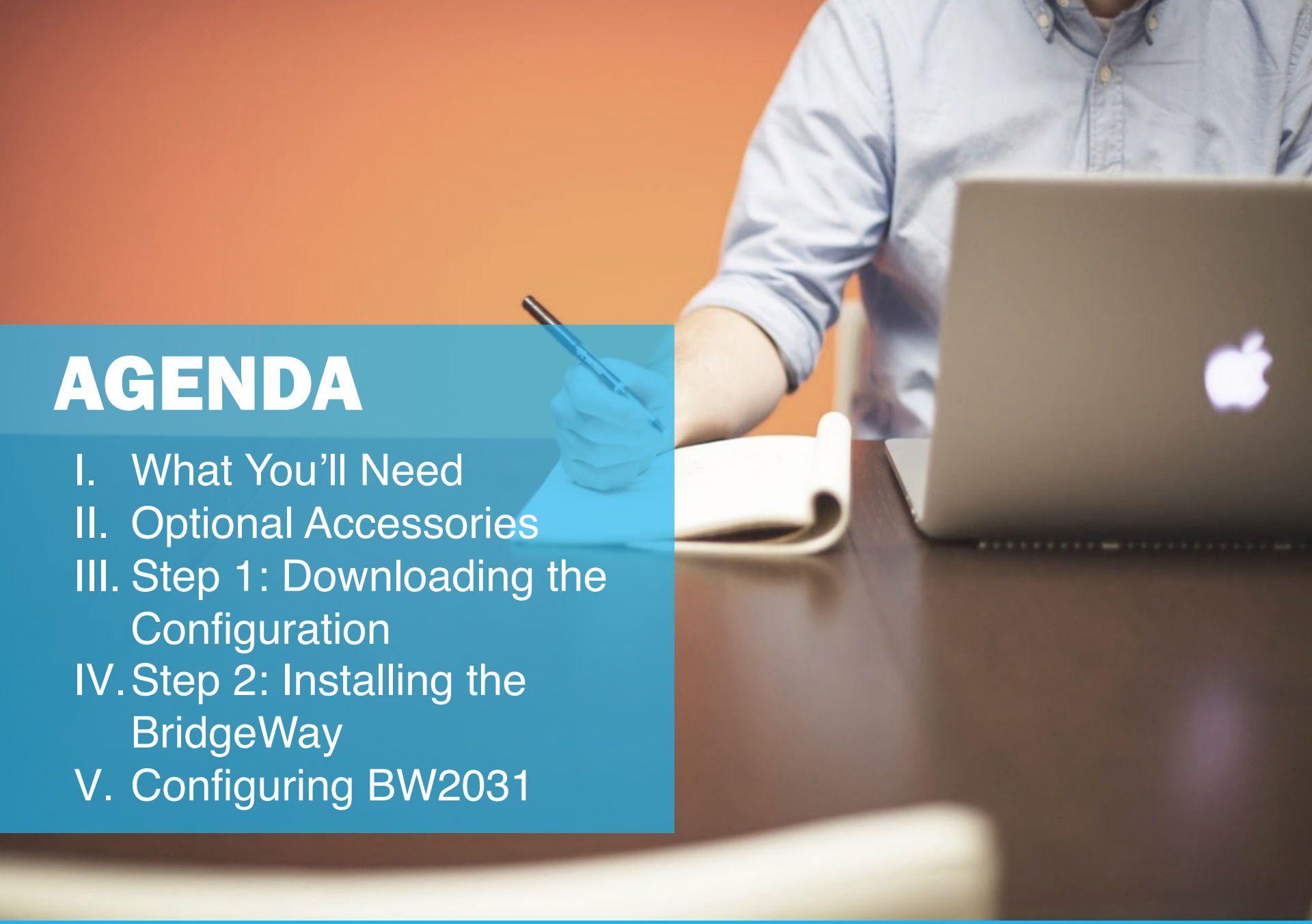
MIGRATION TUTORIAL

BRIDGEWAY AB7606 TO BW2031
J1939 TO MODBUS INTERFACE



AGENDA

I. What You'll Need
II. Optional Accessories
III. Step 1: Downloading the Configuration
IV. Step 2: Installing the BridgeWay
V. Configuring BW2031

WHAT YOU'LL NEED

- ✓ BW2031 J1939 to Modbus Interface*
- ✓ BWConfig 2.0 software – free download here
- ✓ Valid AB7606 configuration file
- ✓ USB configuration cable**
- ✓ Migration Plug-n-Play Harness* (Part No. BW2031-MH)

*-BW2031 and Migration Harness also available in "AB7606 to BW2031 Migration Package" (Part No. BW2031-MP). Package is shipped with harness already connected to the BW2031 as seen in the photo on the right.

**-Available with optional BW2031 Configuration Kit (Part No. BW2031-CFG)

Contact Pyramid Solutions for pricing and info.

OPTIONAL

If you need to retrieve your configuration from a previously-installed AB7606, you will need the following:

- ✓ BWConfig 1.0 -free download here
- ✓ Null modem serial cable for configuration*
- ✓ USB to RS232 adapter (if using a PC that does not have a serial port) set from COM1-COM8

*-Available with optional AB7606 Configuration Kit (Part No. AB7606-CFG). Contact Pyramid Solutions for pricing and info.

GETTING STARTED

STEP 1

Downloading Configuration From Existing AB7606 J1939 to Modbus Interface

BEFORE STARTING

- If you have the file already saved to your PC, skip to Step #2.
- If you do not have an archived copy of the AB7606 configuration file, you will need to retrieve it from an installed AB7606.

1.1

INSTALL BWCONFIG 1.0

Download the software for free here.

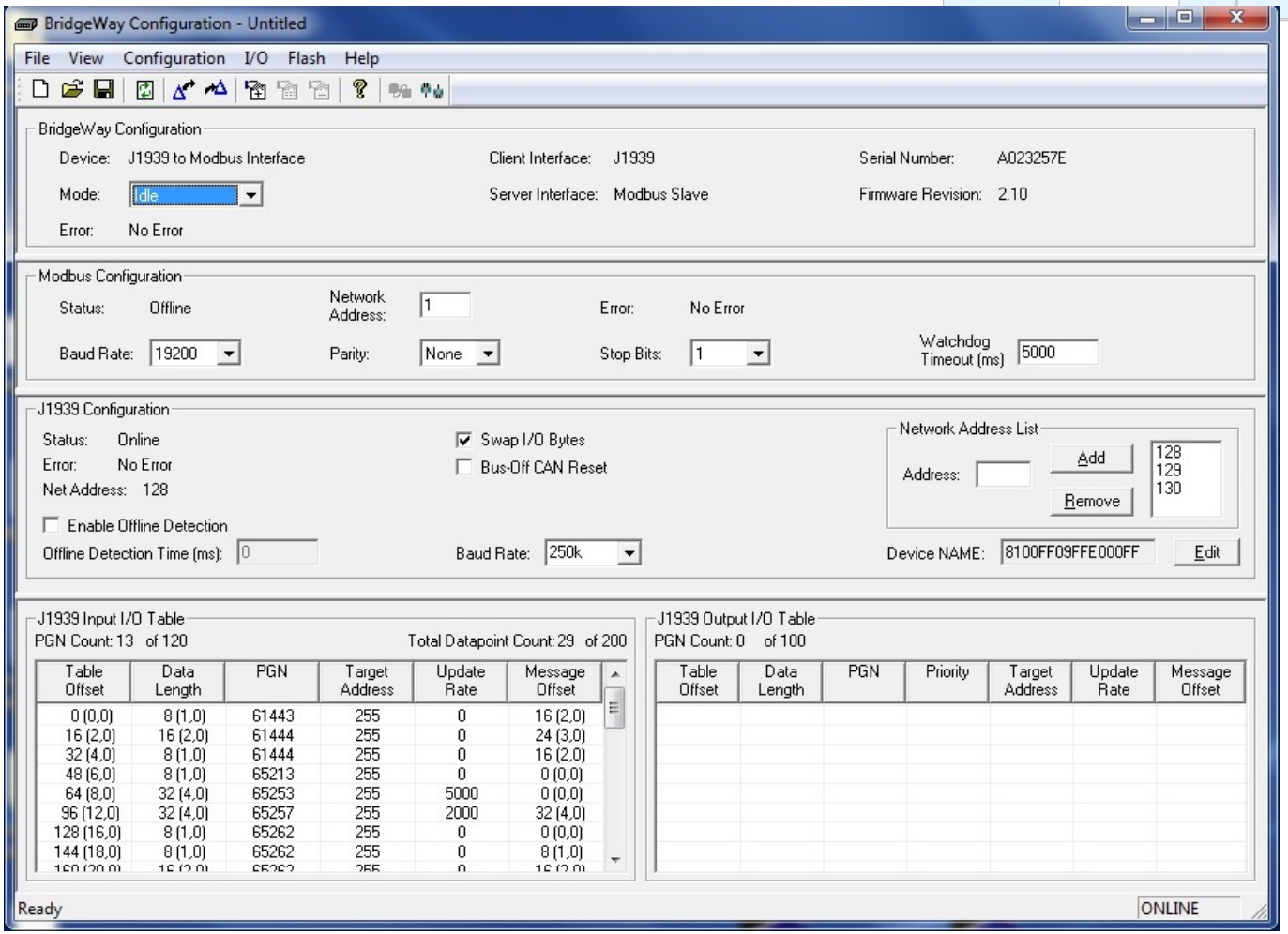
1.2

CONNECT SERIAL CONFIGURATION

Connect the serial configuration cable from your PC (or USB to RS232 adapter connected to PC) to the AB7606.

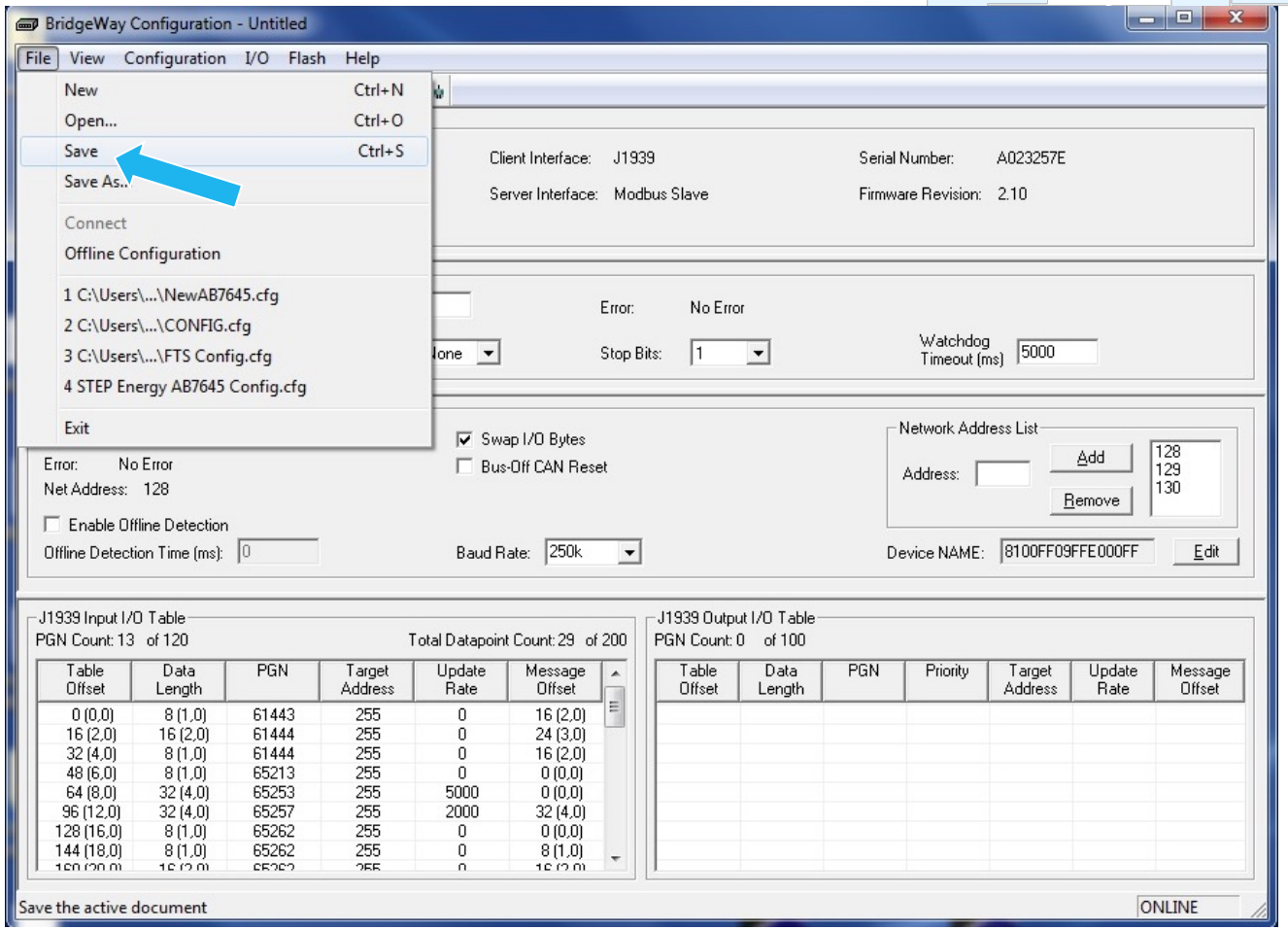
STEP 1.3
OPEN BWCONFIG 1.0

BWConfig 1.0 should automatically detect the AB7606 and display the configuration in the module.



STEP 1.4
SAVE THE CONFIGURATION

1. Click on *File.*
2. Click *Save* in the drop-down menu (e.g. CONFIG.cfg)



STEP 2
BW2031 INSTALLATION

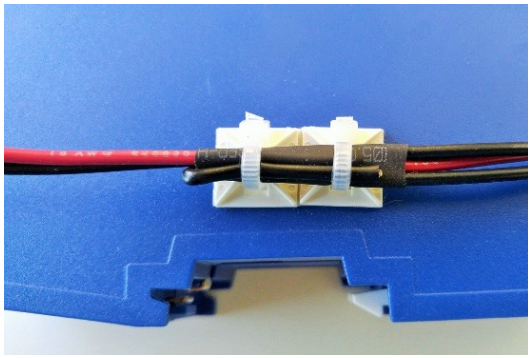
PLEASE NOTE: If you purchased the BW2031 to AB7606 Migration Package (Part No. **BW2031-MP**), please skip to Step 2.2.

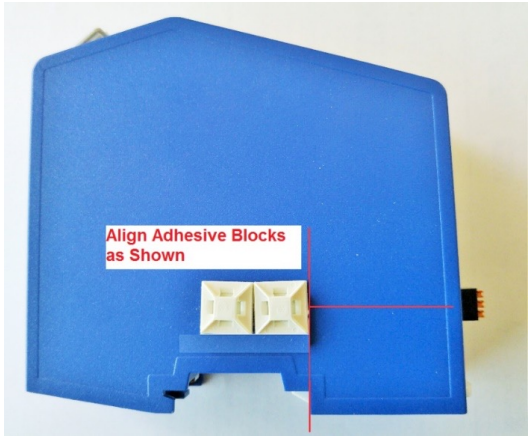
The BW2031 unit in the Migration Package is shipped with the Migration Harness (Part No. BW2031) already installed and ready to plug into an existing 15-Pin D-Sub connector meant for the AB7606.

ALSO NOTE: If you are interested in eliminating the 15-Pin D-Sub Connector for the AB7606 and wiring directly to the BW2031's terminal block connectors, please refer to our guide for standard installation of that device. Then skip to step 3 in this guide.

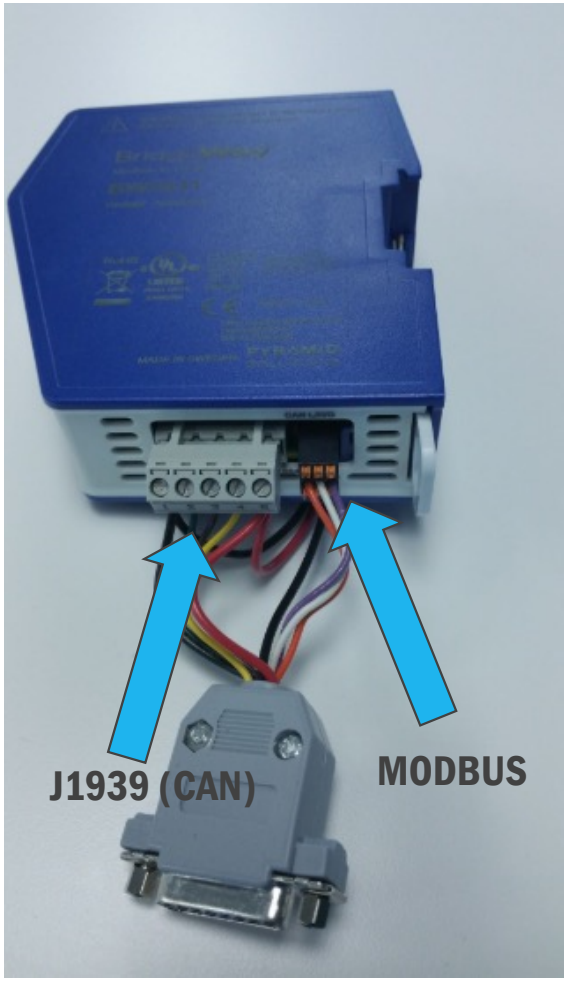
STEP 2
INSTALLING THE MIGRATION HARNESS

2.1 Connect the Plug-n-Play harness to the BW2031.





Secure wire harness and strain relief positioned as shown. Remove plastic strip from adhesive pads and press firmly into place.



STEP 2 Cont.

Important Notes about Power and Ground

DC Power must be applied to the 5-pin connector to power the module CAN circuitry and to the 3-pin connector to supply module power.

The module will not operate properly without both connections.

Please refer to the BW2031 User Manual regarding Earth Grounding, which is essential for the module protection circuitry to work properly. The BW2031 can be damaged if not properly wired.

STEP 2 Cont.

Installing the BridgeWay 2.0 BW2031

2.2

MOUNTING

Mount the BW2031 on the DIN rail.

2.3

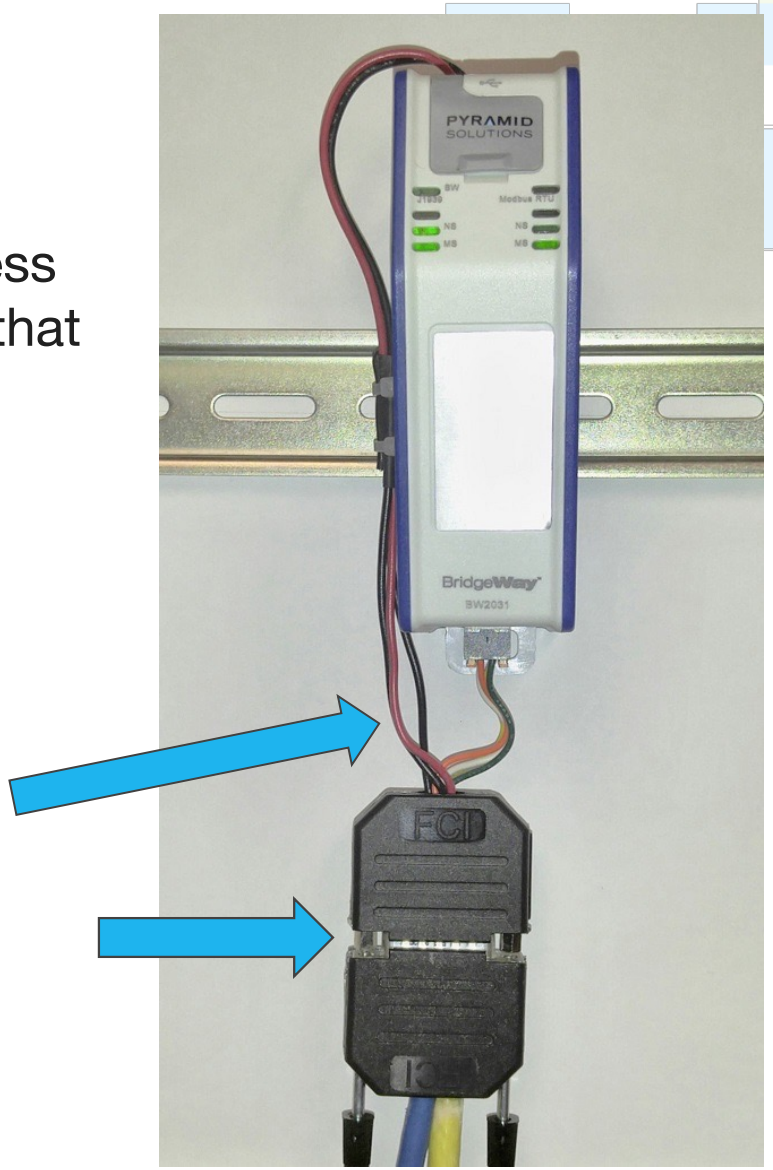
LOCK DEVICE

Once on the rail, push up on the mounting tab to lock the device in place.

Tab in down position

STEP 2.4
CONNECT THE HARNESS

Connect the BW2031 Plug-n-Play Harness to your existing wire harness connector that you used for the AB7606.



Note: When installed correctly, the Plug-n-Play Harness strain relief line prevents stress on the power and signal wires. You must also ensure that your existing wiring harness is secured and not exerting directional force on the Plug-n-Play harness.

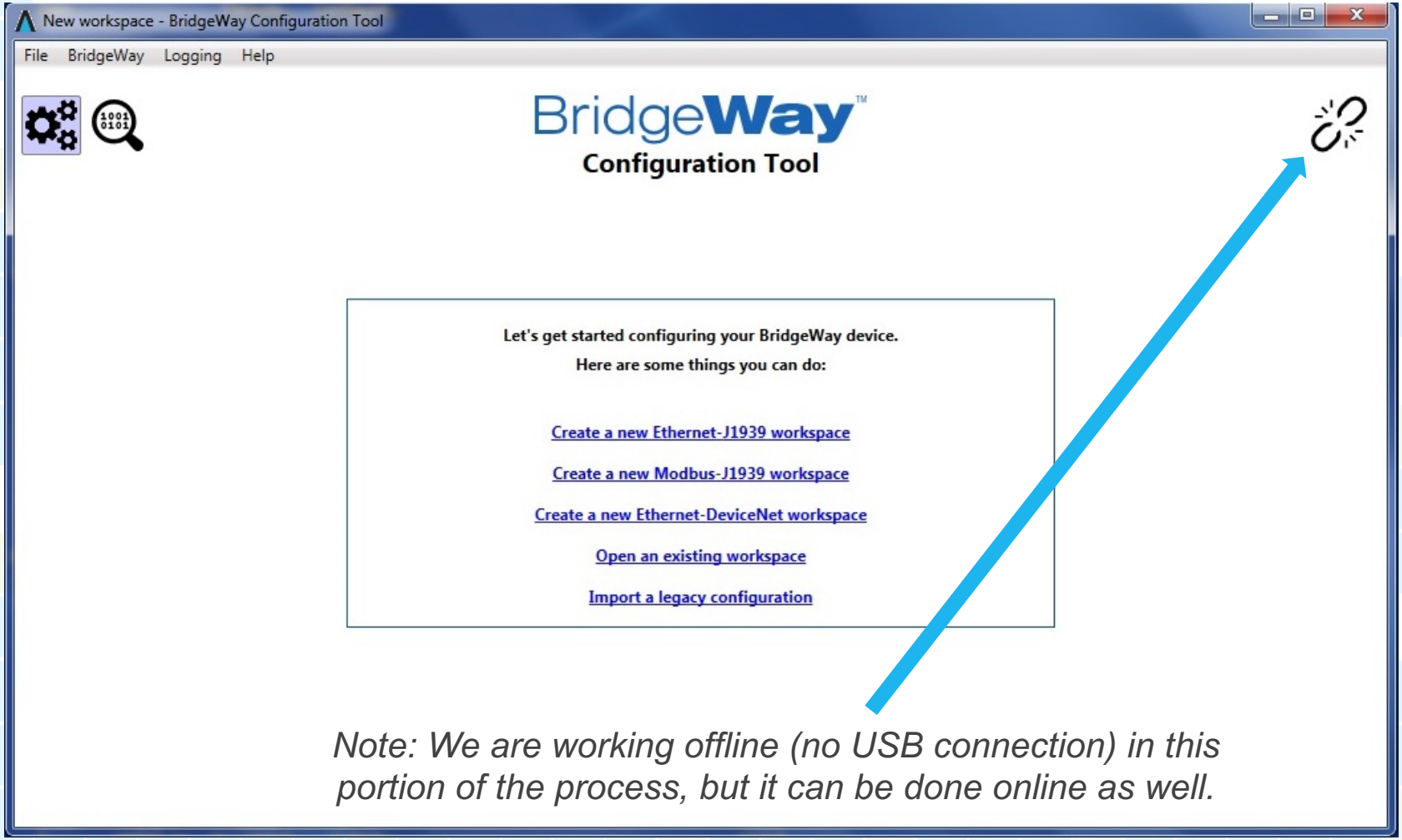
BW2031 CONFIGURATION

STEP 3.1
CONNECT THE USB

Connect the USB configuration cable from your PC or laptop to the BW2031.

STEP 3.2

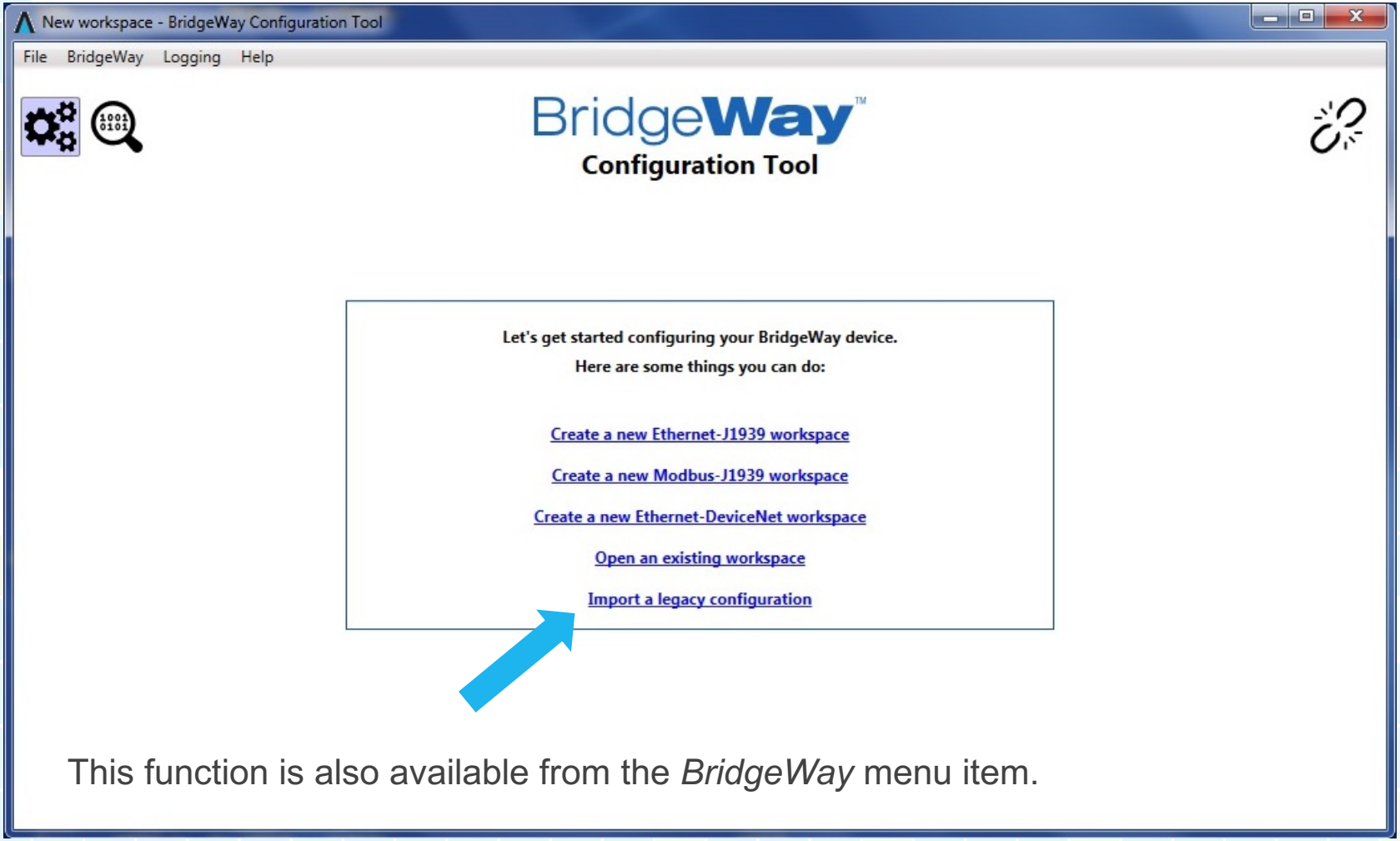
Open the BWConfig 2.0 Configuration Tool for the BW2031.



Note: We are working offline (no USB connection) in this portion of the process, but it can be done online as well.

STEP 3.3

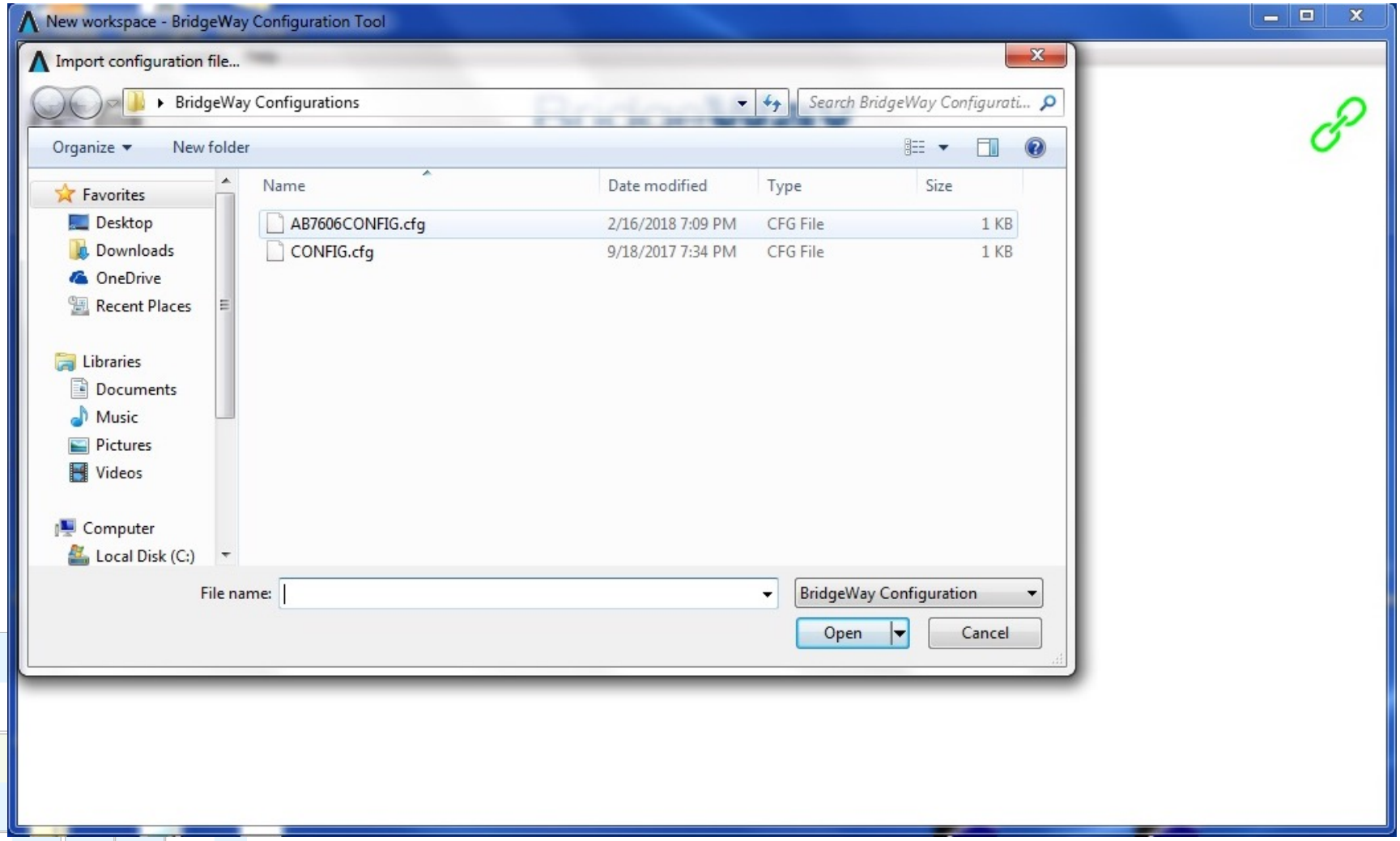
To convert your existing AB7606 configuration, select Import a legacy configuration.

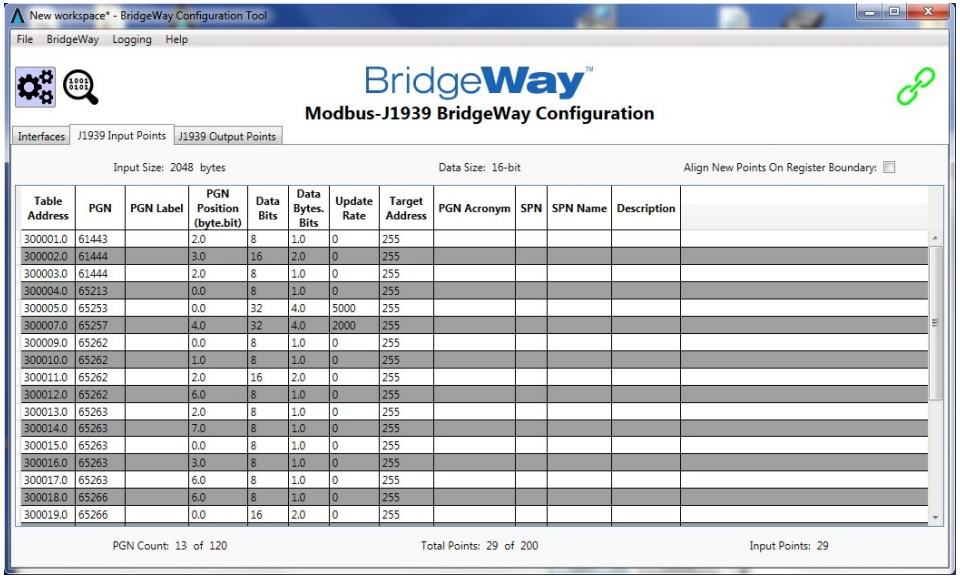


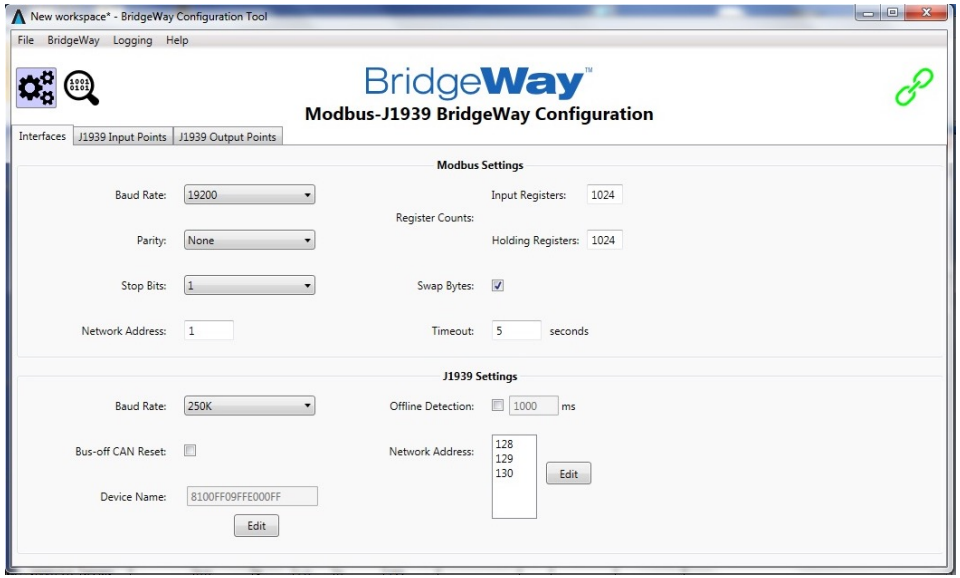
This function is also available from the *BridgeWay* menu item.

STEP 3.4

Open the AB7606 configuration file you wish to import.





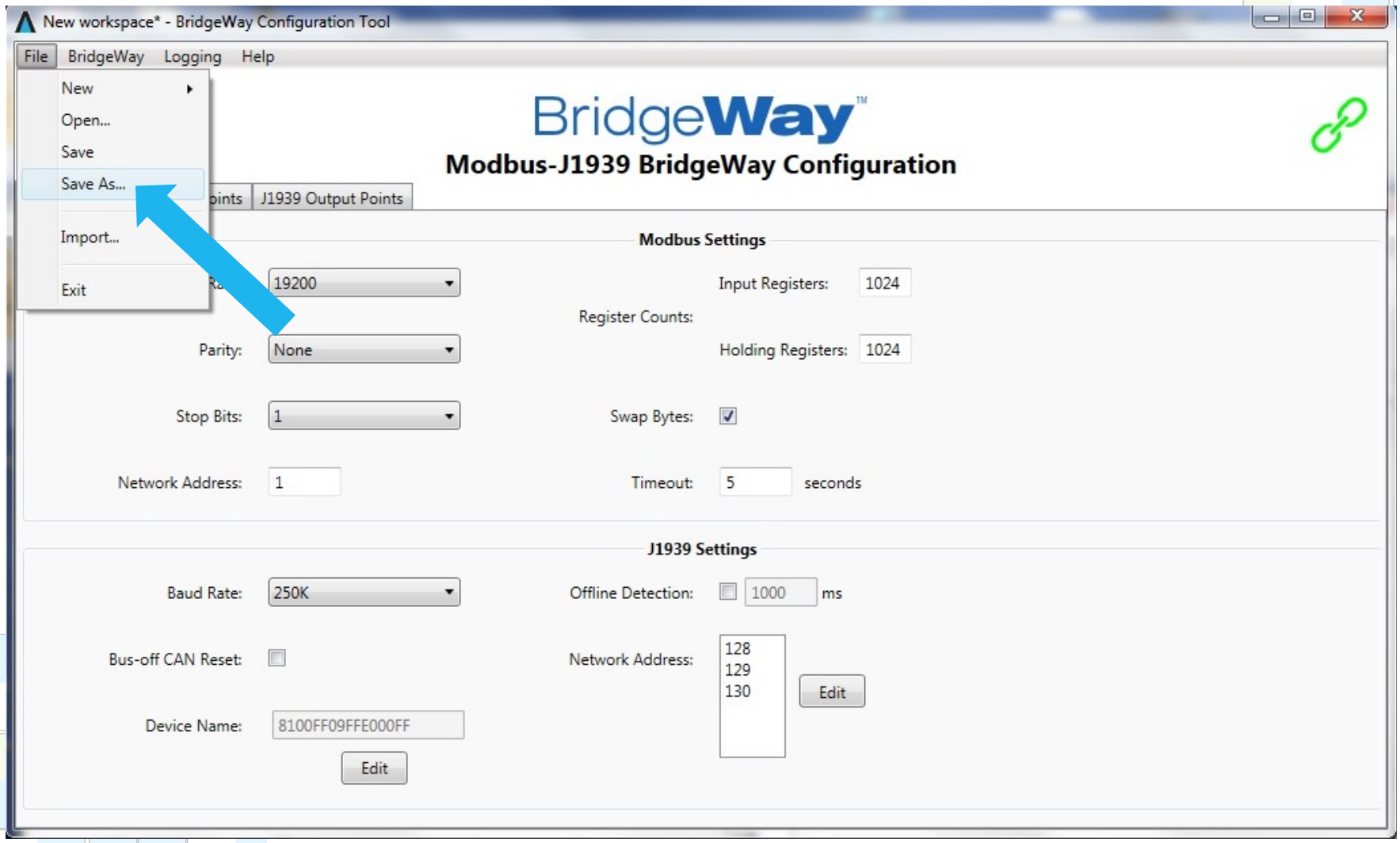


CONFIGURATION READY

Your AB7606 configuration is converted and ready to be downloaded to your BW2031.

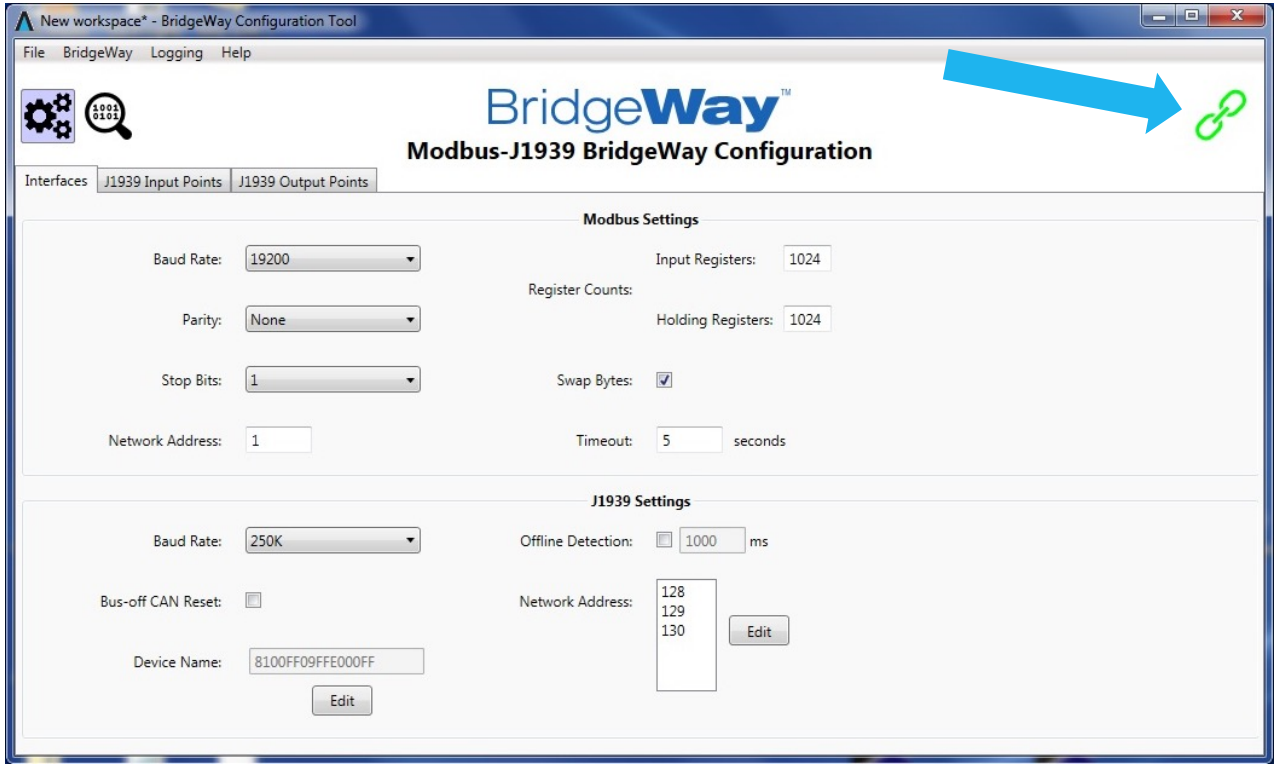
STEP 3.5

Save your converted “workspace” as your BW2031 configuration file.



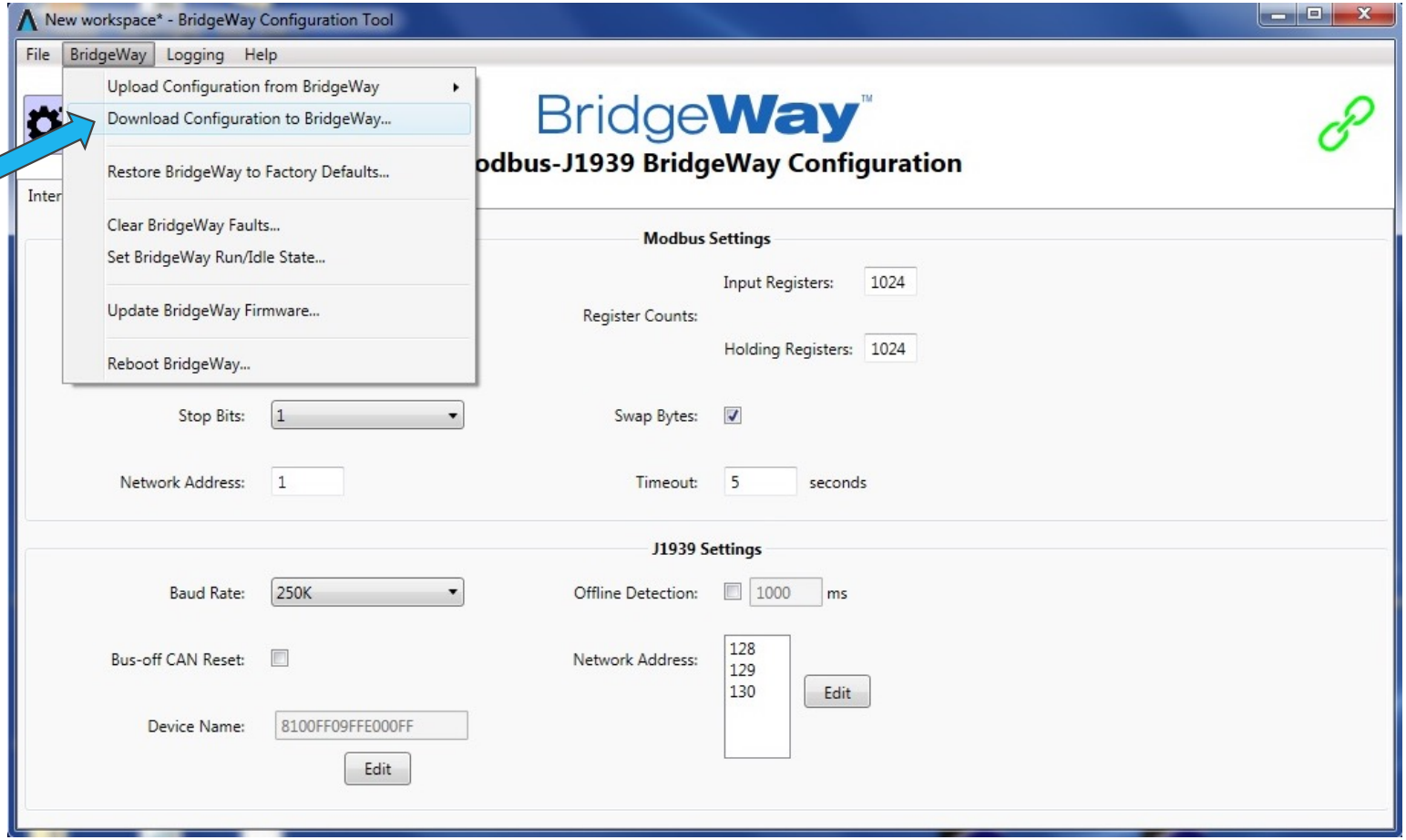
ENSURE CONNECTIVITY

- Ensure the BW2031 is powered on and the USB configuration cable is connected from the gateway to your PC.
- The chain link in the top right corner is green when connected.



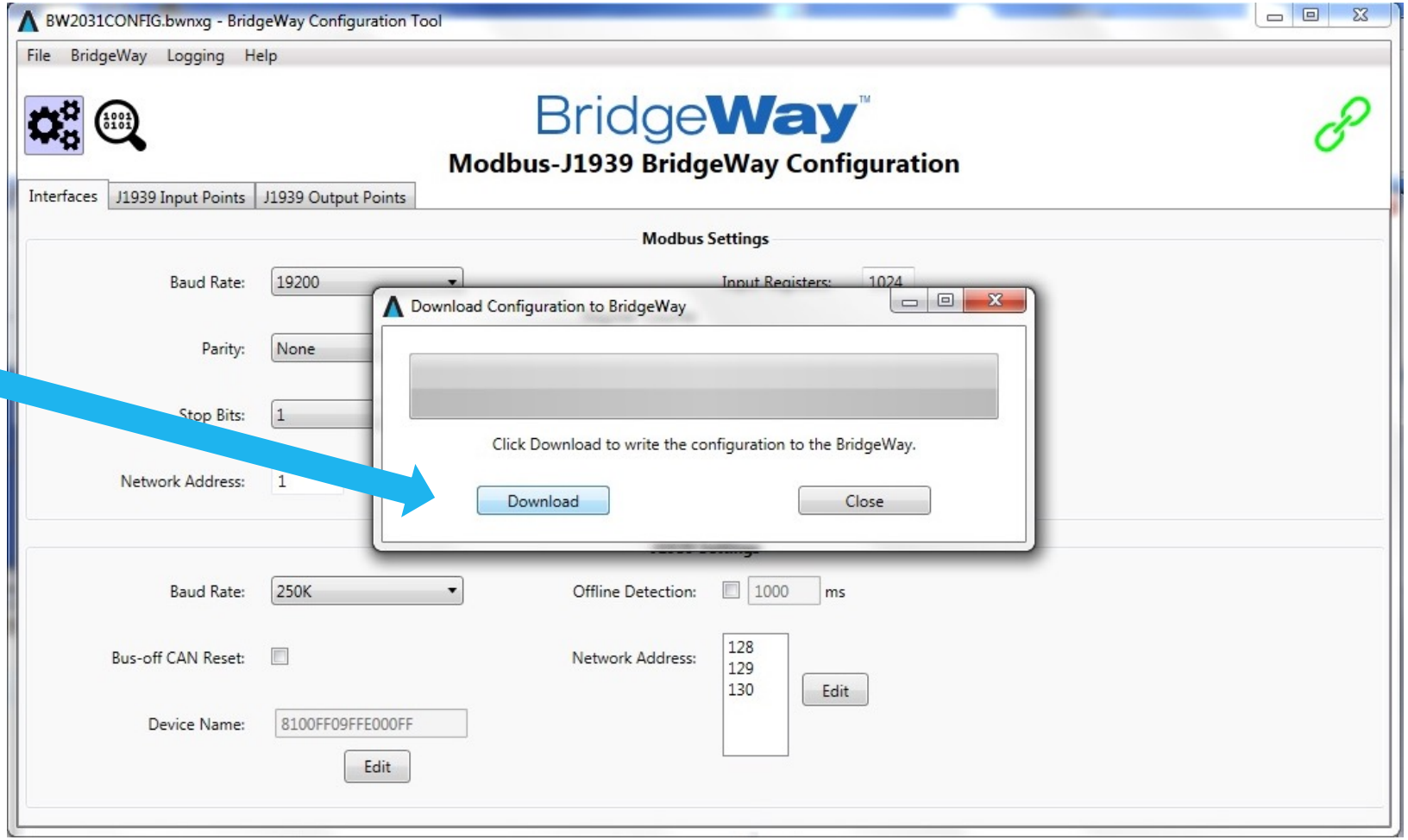
STEP 3.6
DOWNLOAD CONFIG

1. Click *BridgeWay* in the menu.
2. Select *Download Configuration to Bridgeway.*



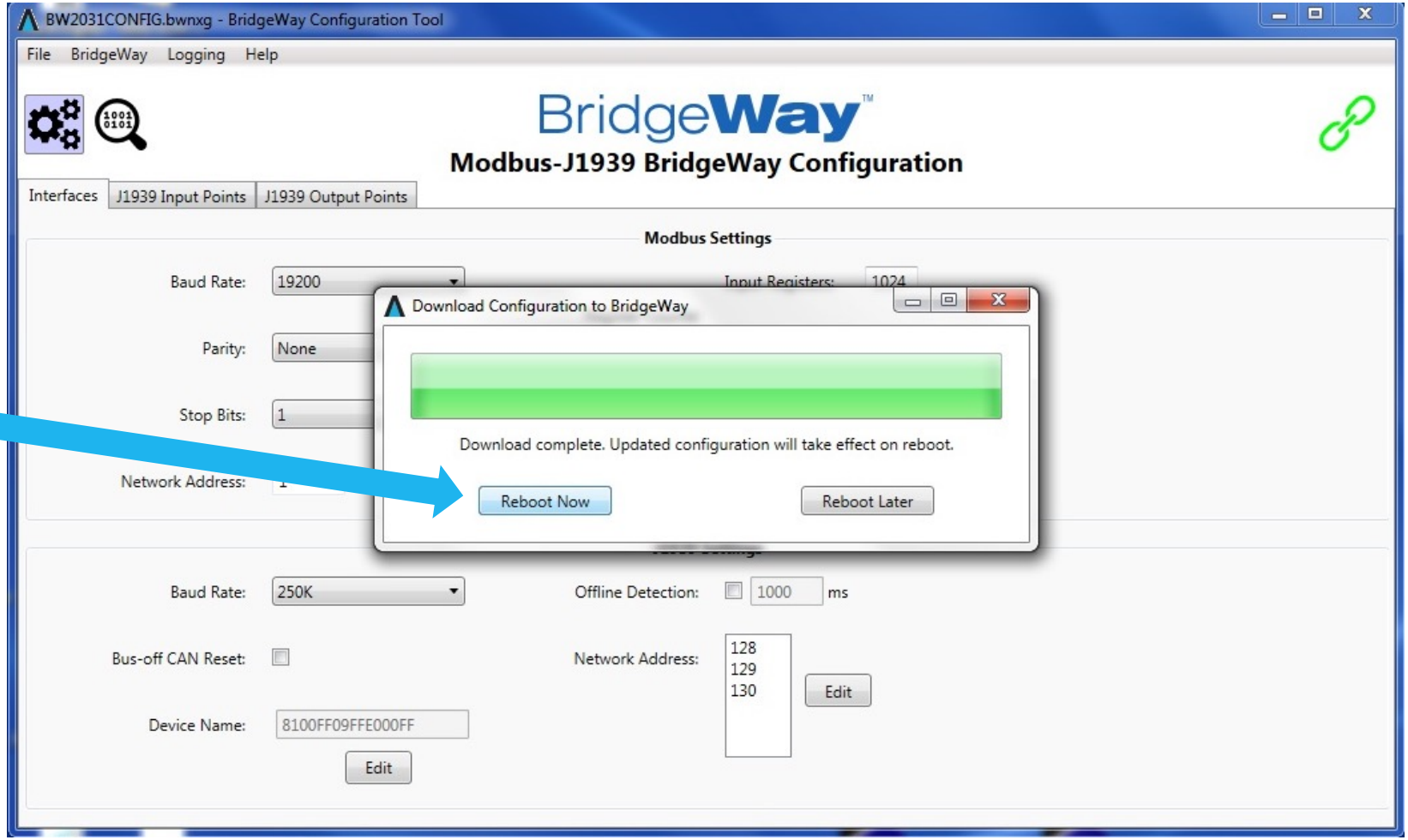
STEP 3.7
DOWNLOAD CONFIG CONT.

When prompted, click *Download.*



STEP 3.8
RESET THE BW2031

On the next prompt, click *Reboot Now* to reset the BW2031.



YOUR BW2031 IS NOW READY TO USE IN YOUR APPLICATION

IMPORTANT

You will need to validate the operation of the BW2031 in your application before putting it in production.

Contact Pyramid Solutions for additional support questions.