# Technical Note

## ILX69-PBM with Siemens DP/PA Coupler Setup

### PROFIBUS DPV1 Master for CompactLogix

**Document Code: TN01-ILX69PBM-17**

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## Document Information

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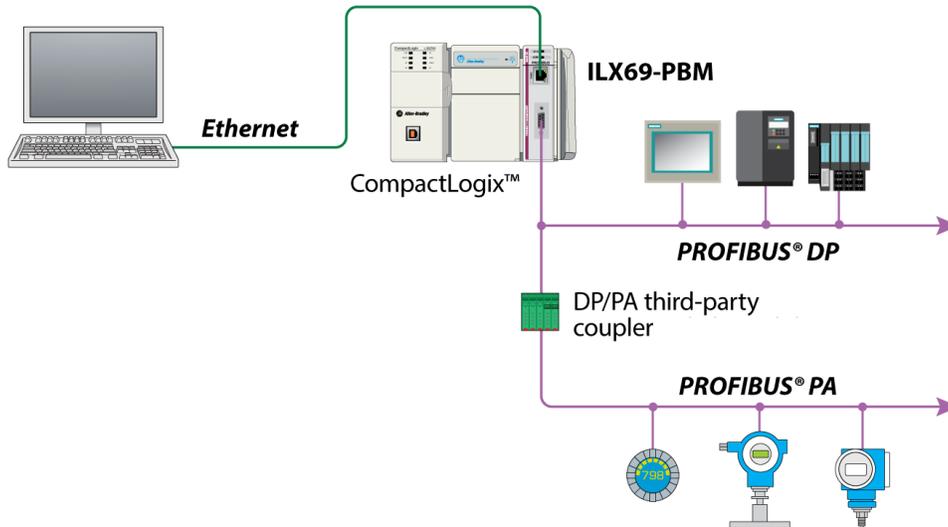Languages spoken include: Portuguese, English

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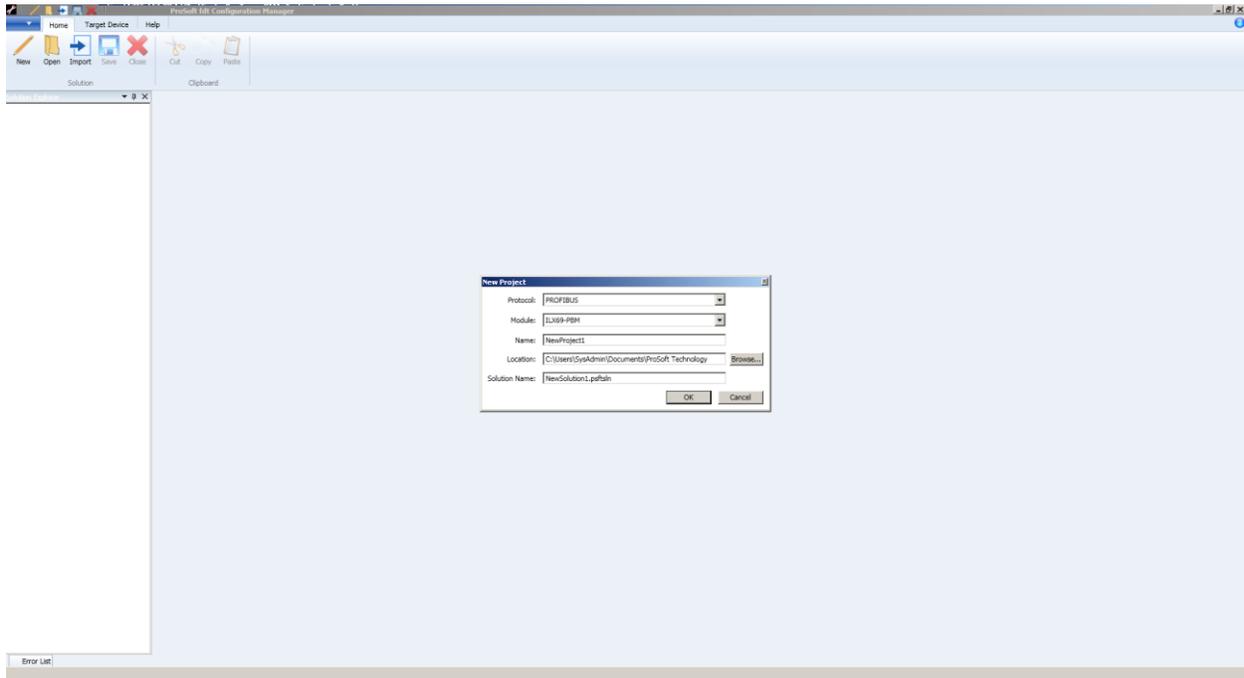# ILX69-PBM using SIEMENS DP/PA Coupler

## Overview

This document was created to detail the setup process when using the ILX69-PBM with a SIEMENS DP/PA Coupler that allows our PROFIBUS DP master device to communicate with a PROFIBUS PA network.
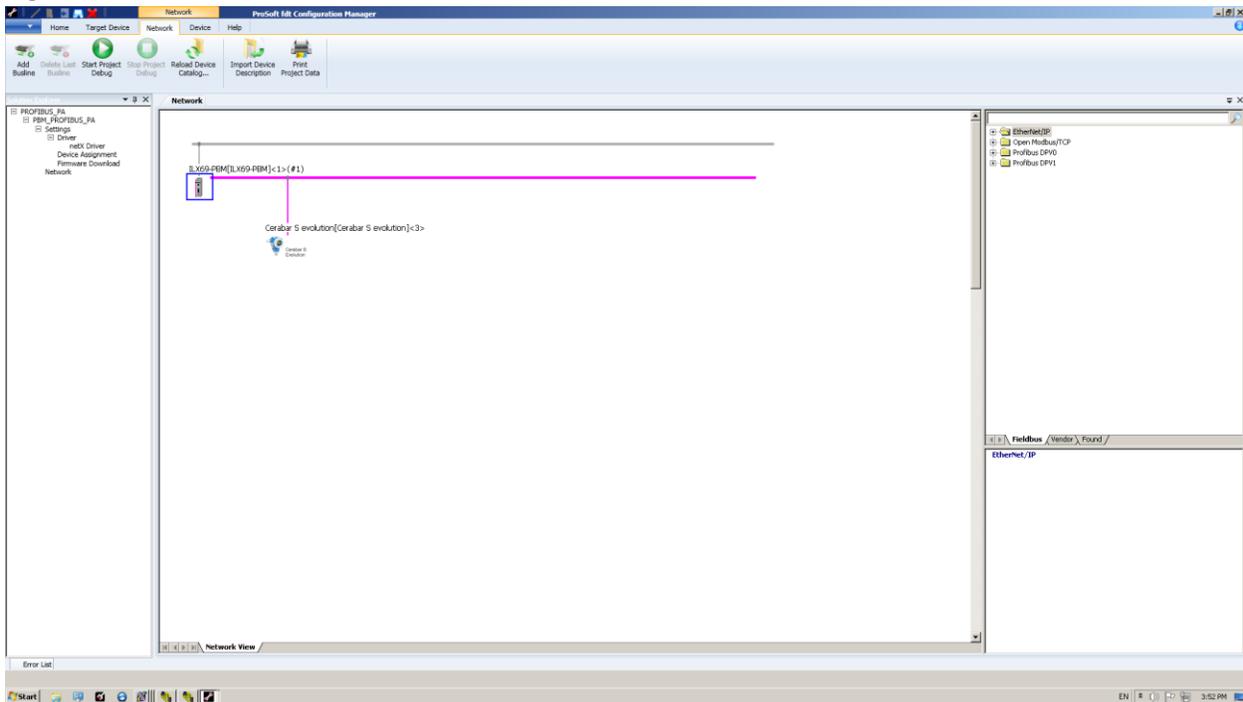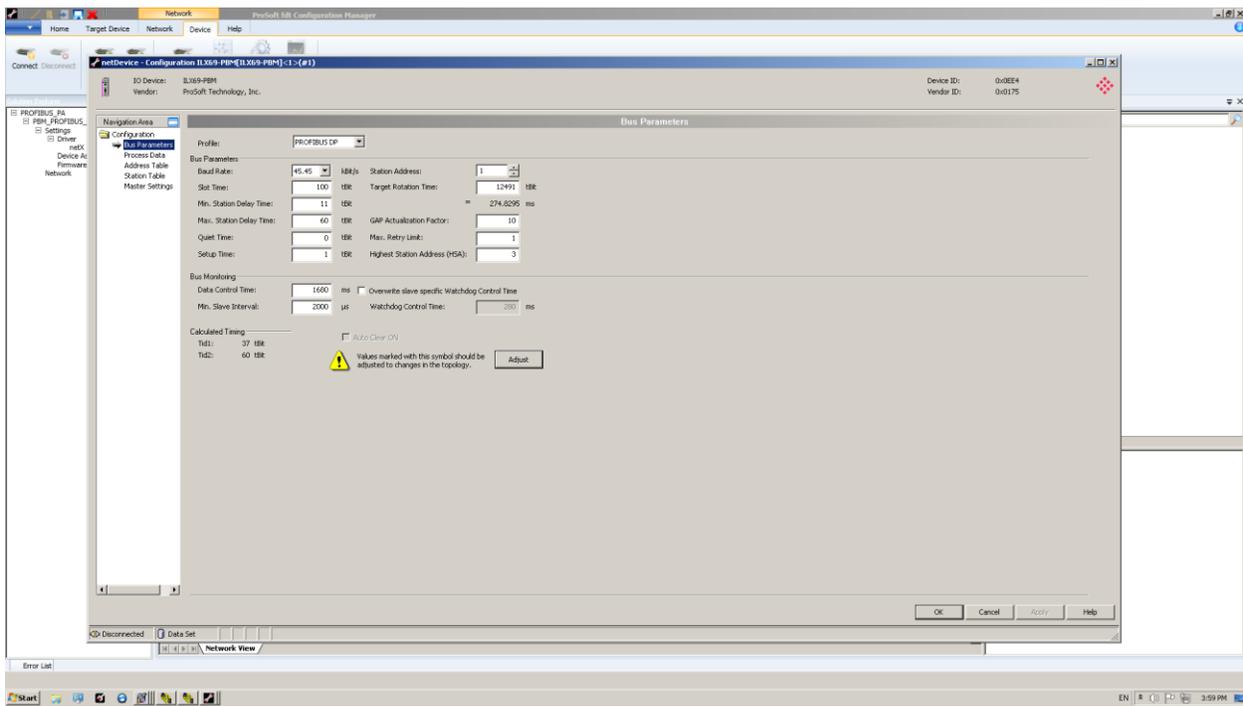
## Test Setup



## Procedure

Open ProSoft fdt Configuration and start a new Project, follow the prompt to begin configuring your PBM device.
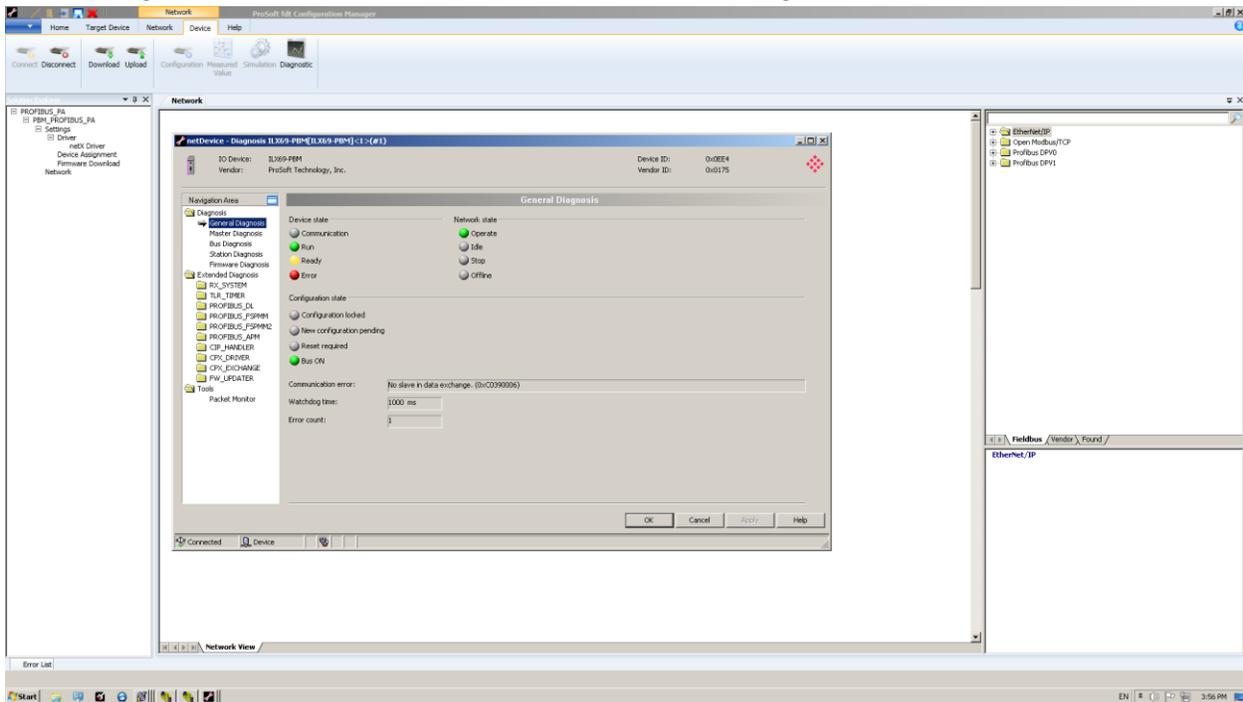
After setting the IP address and selecting the device, configure your slave within the project by installing necessary GSD files (if required).
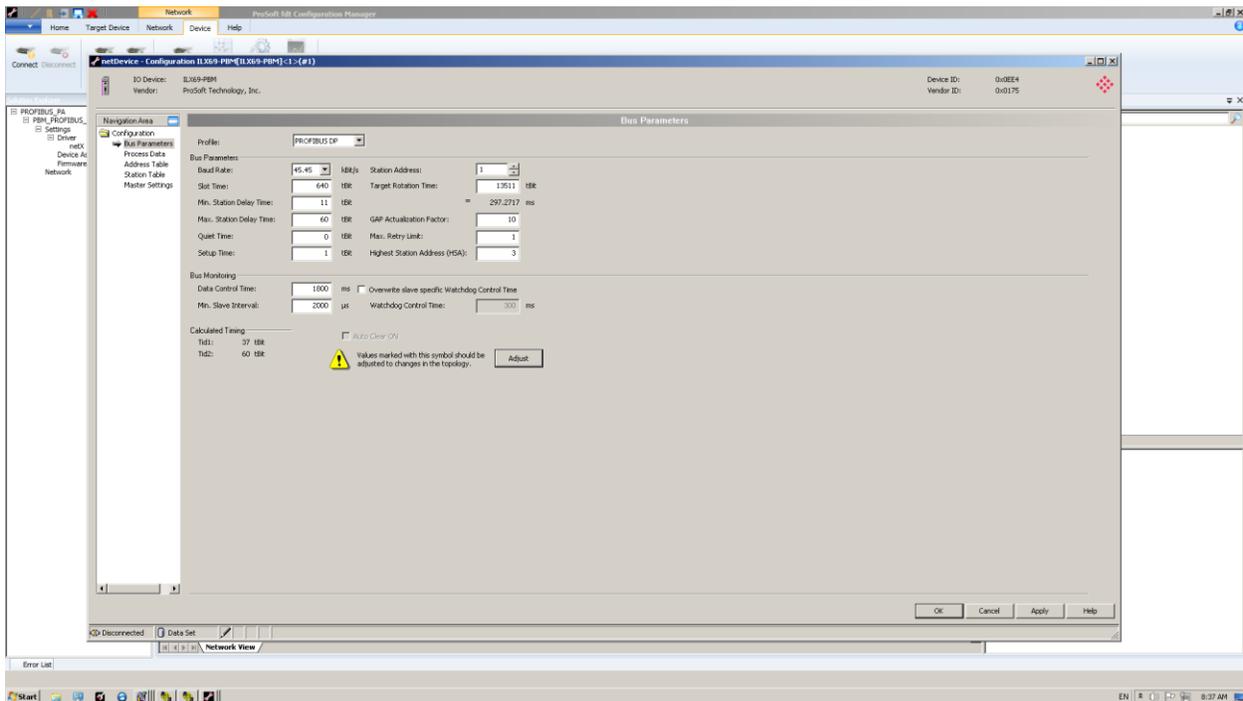


*Note that the SIEMENS DP/PA Coupler is a transparent device when setting up the network. This means that there is no configuration necessary for the coupler and does not have to be added to the bus network. The default baud rate instructed by SIEMENS for their coupler is 45.45 kBits/s [set the PBM to this baud rate under the bus parameters].

Download project to PBM. Connect to device and open diagnostics. Double-clicking on the master, user can determine if PBM is communicating with PA Slave device. Notice that the PBM is not communicating with the PA Slave.
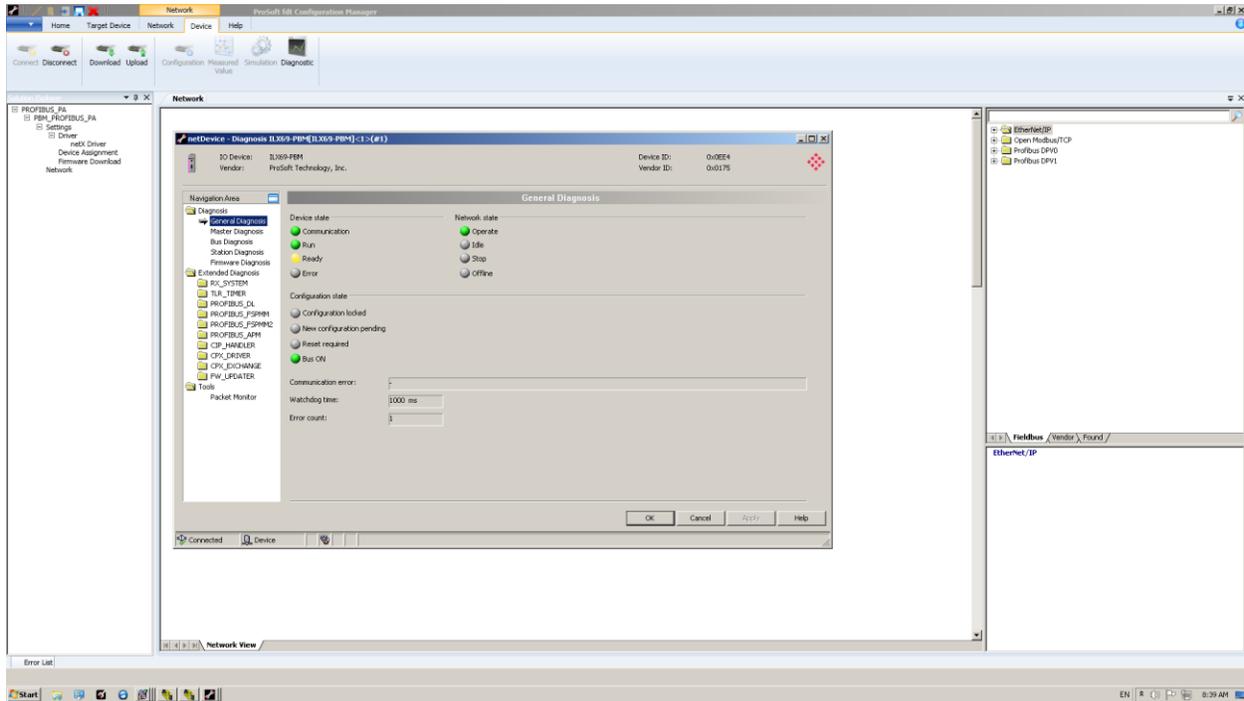


After testing this set up, it was determined that the value of the Slot time was not high enough to allow communication between the PBM and target slave device. The initial default of 100 tBit was not enough time for the DP to wait for a response from the slave.
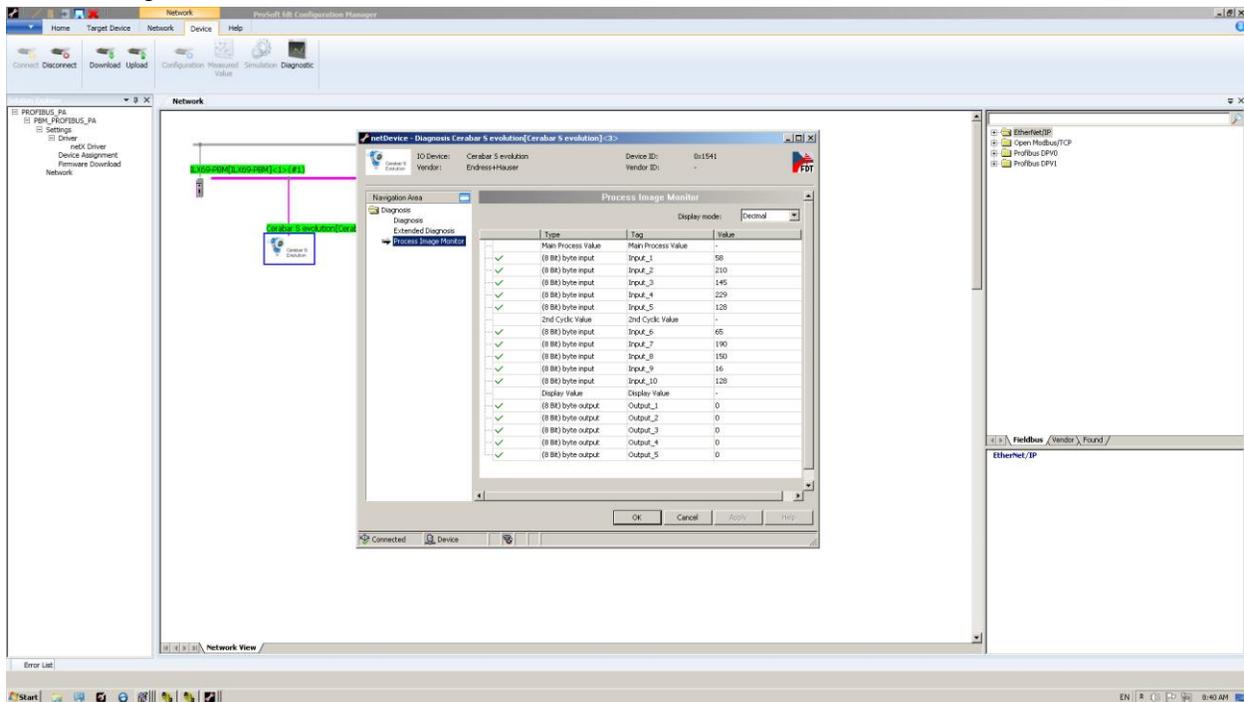


Increase the Slot time to a higher value (tested time of 640 tBit on the 1 slave network) and download to PBM.

After downloading the new Slot Time, the PBM and PA slave start communicating.
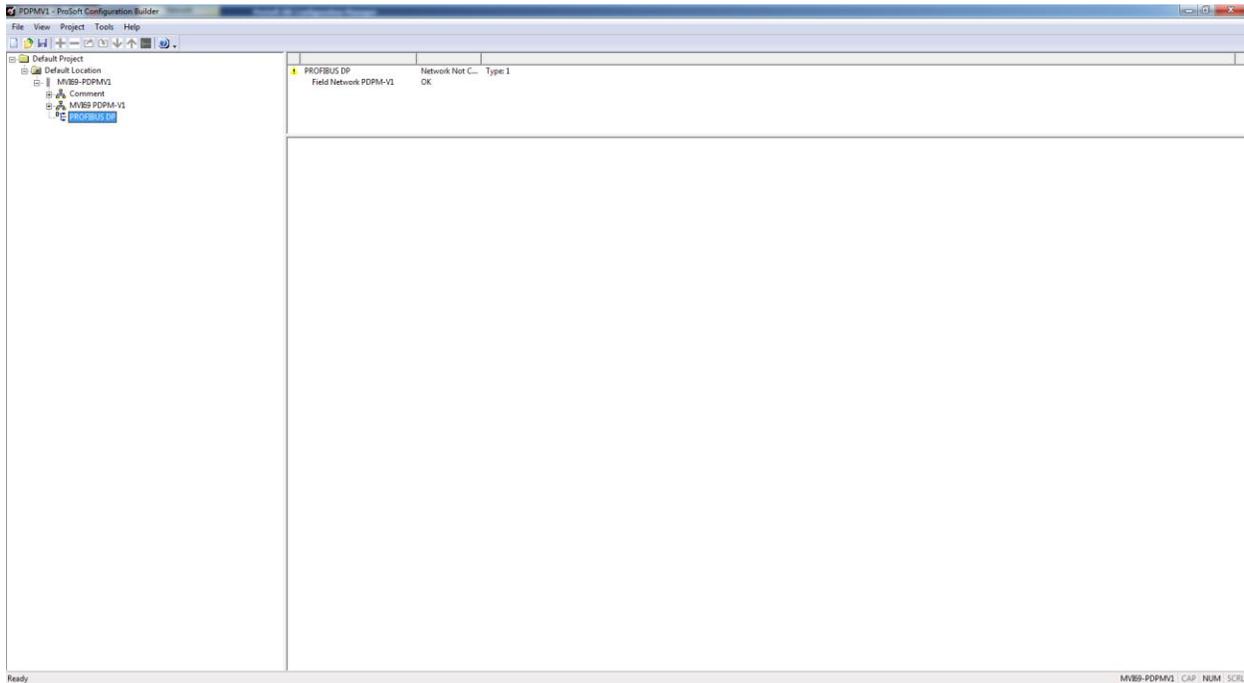
[PBM Diagnosis window]
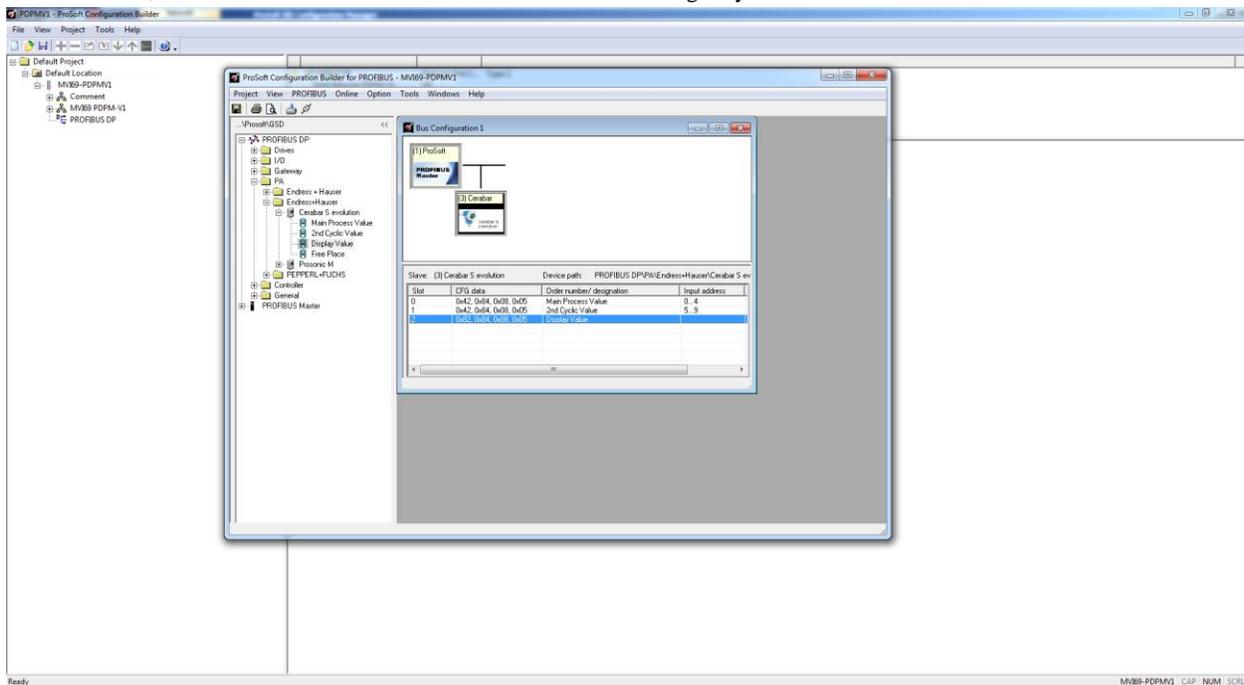


[PA Slave Diagnosis window]

## Reference

If user has a large network to configure (multiple PA Slaves) and the slot time is unknown for the project or if user is unsure of the Slot time value, user can use ProSoft Configuration Builder (PCB) to configure their network and have the program calculate the bus parameters is communication issue occur.
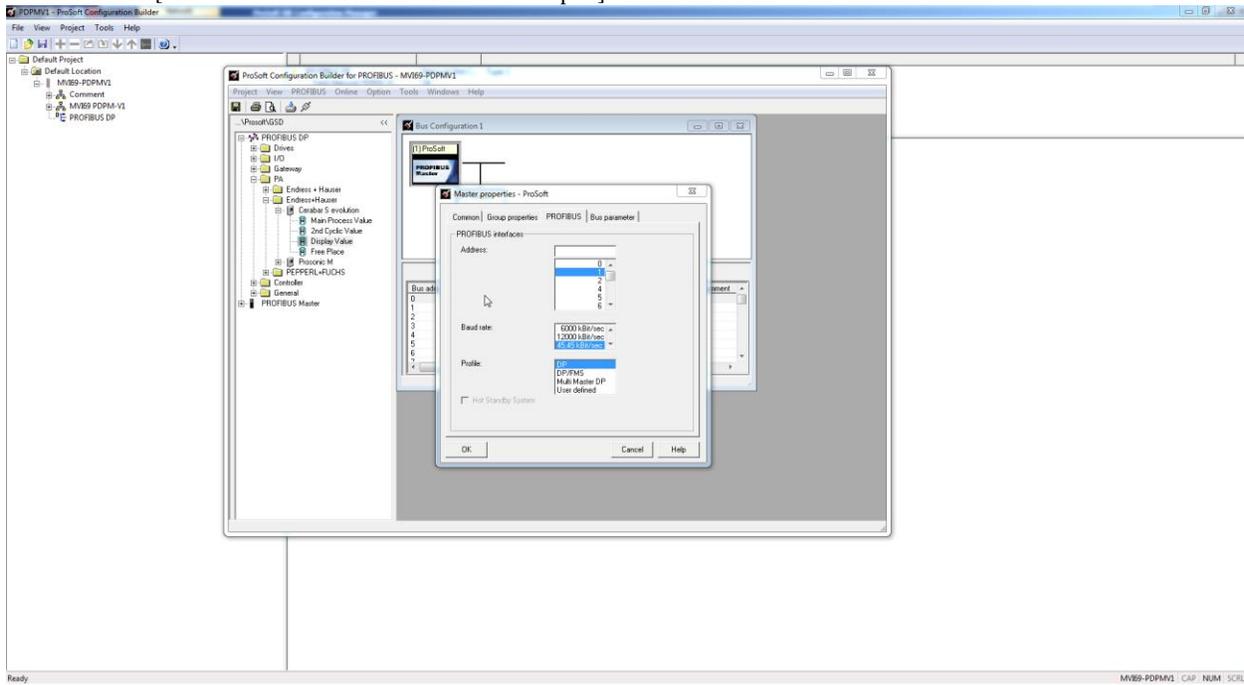
Start PCB and add the MVI69-PDPMV1 module to the project.



Launch the PROFIBUS DP Master Setup tool [highlighted in blue above] and click 'Configure PROFIBUS'

In this window, install the GSD files for the slaves to be used and configure your Bus network.

After installing your slaves, double-click on the PROFIBUS Master and look under the PROFIBUS tab and select the Baud Rate of 45.45 kBit/s [as detailed for the SIEMENS DP/PA Coupler] and the DP Profile.



Finally, look under the Bus Parameter tab and note the values predefined in this section. Using these values, manually configure the Bus parameters in the ProSoft fdt Configuration Manager and follow the download instructions.