Technical Note

Migrating from an existing MVI69-MNETC to MVI69E-MBTCP

Document Code: **TN-MVI69E-MBTCP_Migrating from MVI69-MNETC_01-1906**
Revision: 1

Applicable products include:

Converting from:

- **MVI69-MNETC**

Converting to:

- **MVI69E-MBTCP**

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Contents

Introduction

This document describes how to export an existing configuration from an older MVI69-MNETC and convert it so that it can be imported into a MVI69E-MBTCP to make it work the same as the older module. This document will be helpful to anyone wanting to replace an existing MVI69-MNETC with the new MVI69E-MBTCP.

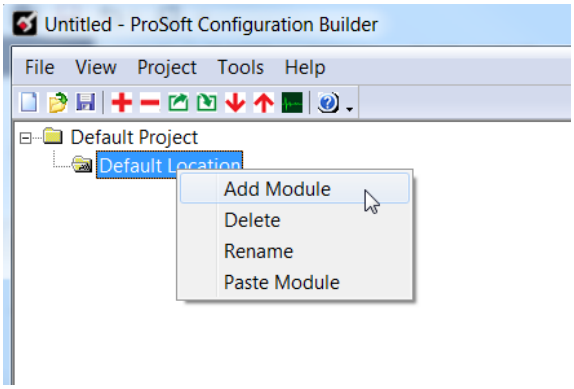
NOTE: It is highly recommend to review the MVI69E-MBTCP training video on ProSoft Technology's YouTube channel: https://www.youtube.com/watch?v=0C3H1u40Fug&t=650s

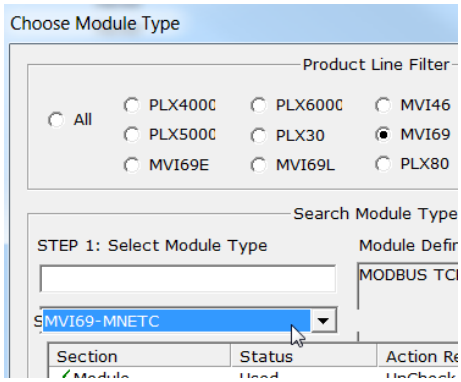
What you need to have on your Personal Computer
1.-Prosoft Configuration Builder :
https://www.prosoft-technology.com/Products/ProSoft-Software/ProSoft-Configuration-Builder
2.-A simple text editor. (Microsoft Windows Notepad, notepad ++, etc.)

If you do not have a saved backup. Backing up configuration from the MVI69-MNETC.

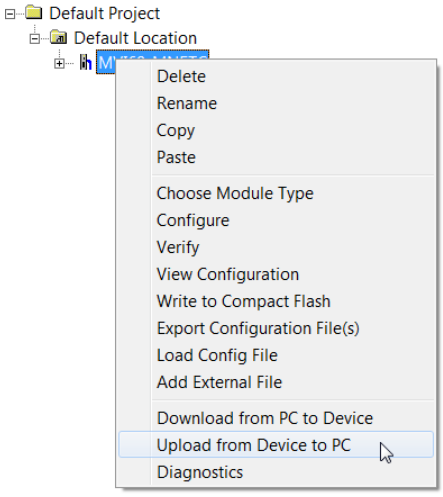
Install Prosoft Configuration Builder (optional).
Open Prosoft Configuration Builder.

Add the MVI69-MNETC Module

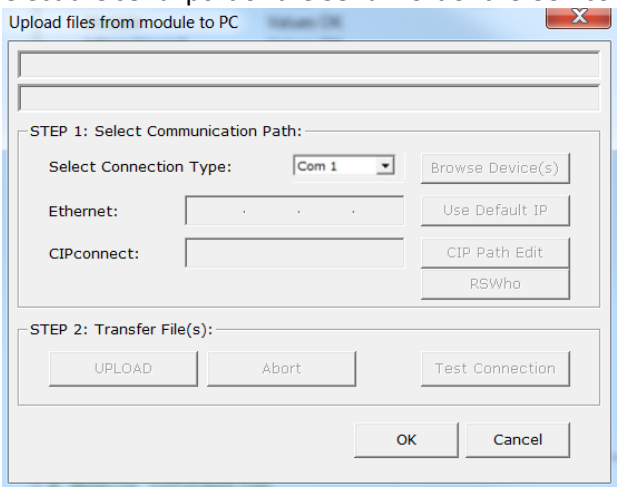




Upload From Device to PC

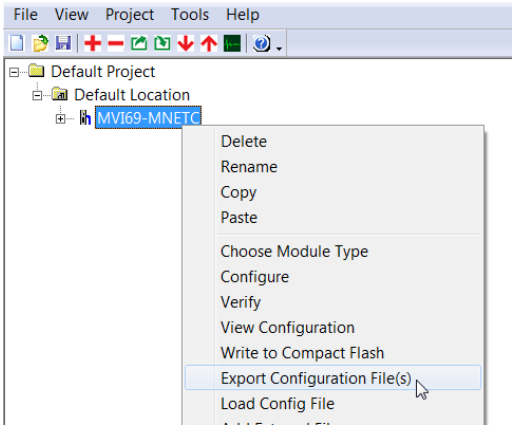


Select the serial port or the Serial Port of the USB converter, used to connect the module.



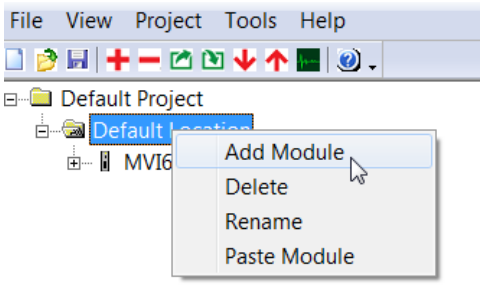
Exporting the Configuration File from MVI69-MNETC

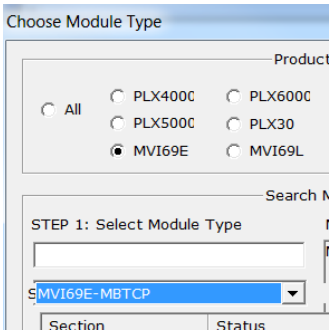
Open the project the current MVI69-MNETC module was configured in.
Export the configuration File by right clicking the module to open the shortcut window then select Export Configuration File(s).



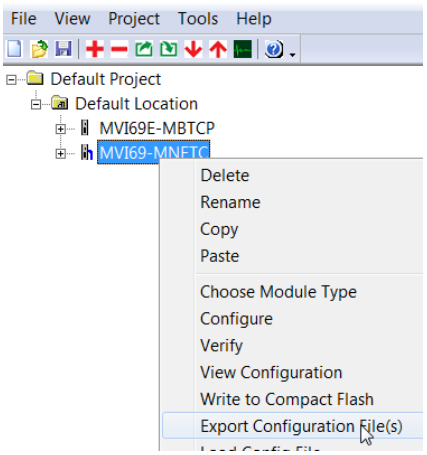
Note: A WATTCP.CFG file will also be generated, ignore this for now.

Add a MVI69E-MBTCP module



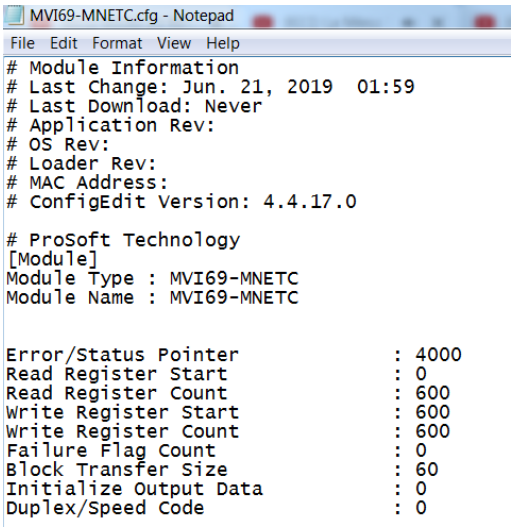


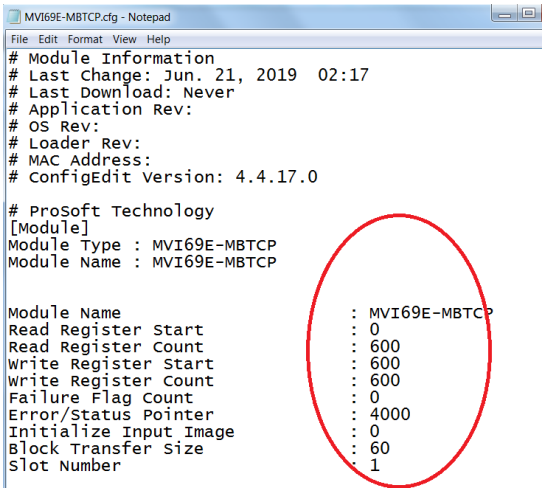
Export MVI69E-MBTCP the configuration File



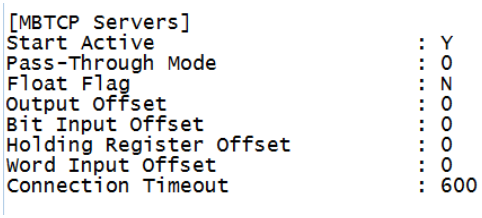
Modifying the MVI69E-MBTCP Configuration File using the MVI69-MNETC Configuration File.

Using a Text Editor, open the .cfg files were saved.
Remplace the general parameters of the MVI69E-MBTCP file using the parameters of the MVI69-MNETC.
Note: Slot Number (Slot number where the MVI69E-MBTCP inserted)





Note: MVI69-MNETC does not work as Modbus Modbus TCP Server.
Do not modify the parameters by default.



Remplace all clients parameters of the MVI69E-MBTCP file using the parameters of the MVI69-MNETC.

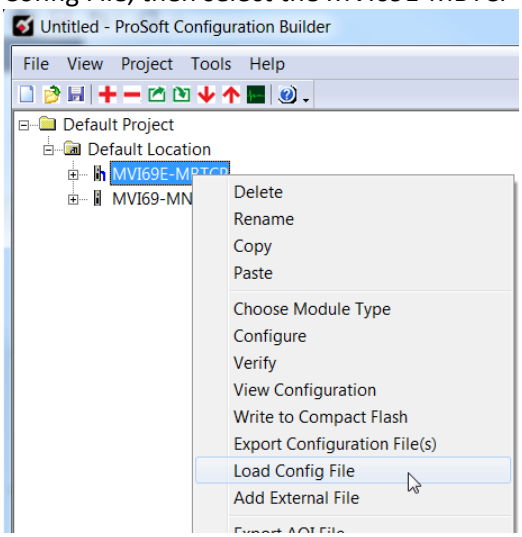
Note: The MVI69-MNETC has 30 Modbus Clients and the MVI69E-MBTCP only 19, If the application to migrate uses more than 19 clients, it is necessary to redistribute the commands in only 19 clients.

```
[MNet Client 0]
Error/Status Pointer            : -1
Command Error Pointer           : -1
Minimum Command Delay           : 0
Response Timeout                : 1000
Retry Count                     : 0
Float Flag                      : N
ARP Timeout                     : 5
Command Error Delay             : 0
MBAP Port Override              : N

[MNet Client 0 Commands]
START
#     Enable    Internal  Poll Int  Reg Coun  Swap Cod  Node IP          Serv Por  Slave Ad  ModBus F  MB Addre  Comment
      1         0         0         10         0         192.168.1.10     502       1         3         0          #
      1         10        0         10         0         192.168.1.10     502       1         3         100        #
END

[MBTCP Client 0]
Enabled                         : Y
Start Active                    : Y
Error/Status Pointer            : -1
Command Error Pointer           : -1
Minimum Command Delay           : 0
Response Timeout                : 1000
Retry Count                     : 0
Float Flag                      : N
ARP Timeout                     : 5
Command Error Delay             : 0
MBAP Port Override              : N

[MBTCP Client 0 Commands]
START
#     Enable    Internal  Poll Int  Reg Coun  Swap Cod  Node IP          Serv Por  Slave Ad  ModBus F  MB Addre  Override  Comment
      1         0         0         10         0         192.168.1.10     502       1         3         0         0         #
      1         10        0         10         0         192.168.1.10     502       1         3         100       0         #
END
```

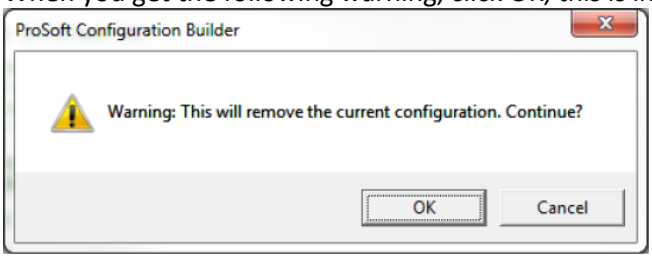
Repeat the previous step until all clients are finished and Save all the changes.

Importing the new configuration.

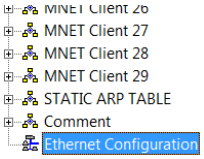
In Prosoft Configuration Builder, In the Tree View, right click MVI69E-MBTCP and select Load Config File, then select the MVI69E-MBTCP .cfg file previously edited.

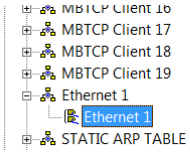


When you get the following warning, click OK, this is intended.



Click MVI69-MNETC → Ethernet Configuration and Copy the configuration to MVI69E-MBTCP → Ethernet 1.





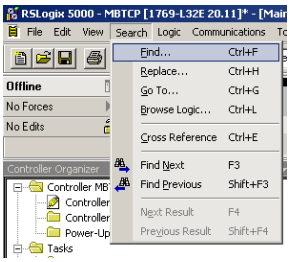
Remove the MVI69-MNETC in Logix5000

There are 2 possible ways to remove the logic of Module MVI69-MNETC from Logix500.

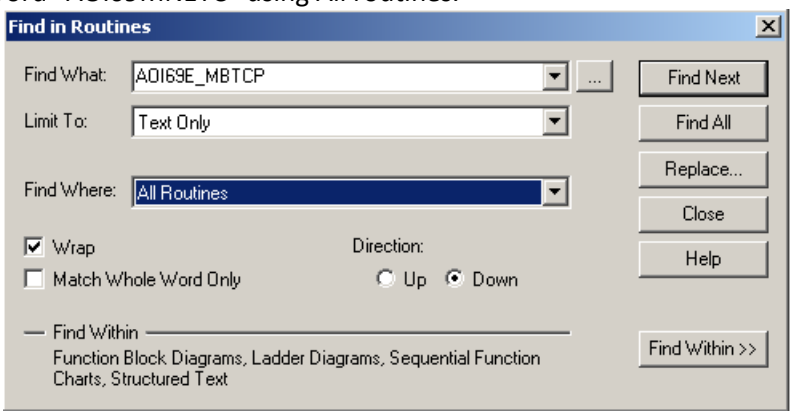
When the Module was configured using **AOI** (versions 16 or higher) and when it was configured using **Example Ladder**.

A) AOI Procedure.

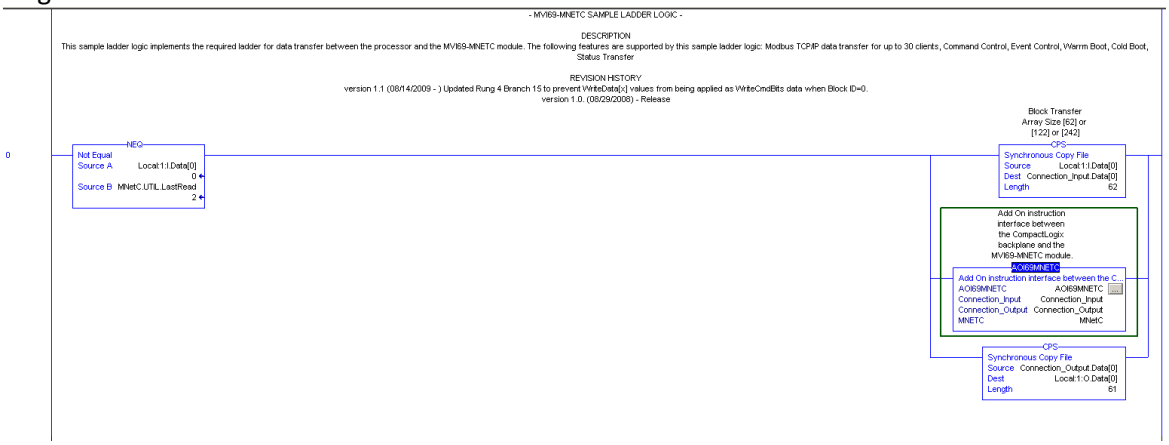
In Logix5000 Click on Search → Find



Write the Word “AOI69MNETC” using All routines.



Delete the Rung Found.

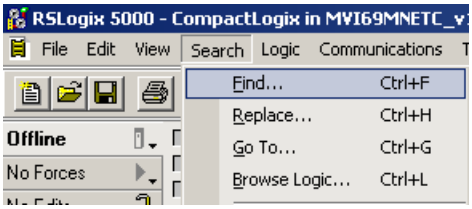


B) Example Ladder Procedure.

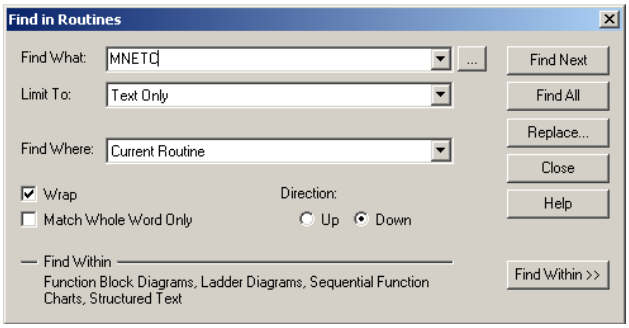
NOTE: If Logix5000 is earlier than version 16 - Contact with Prosoft-Technology Support.Open

Main Routine

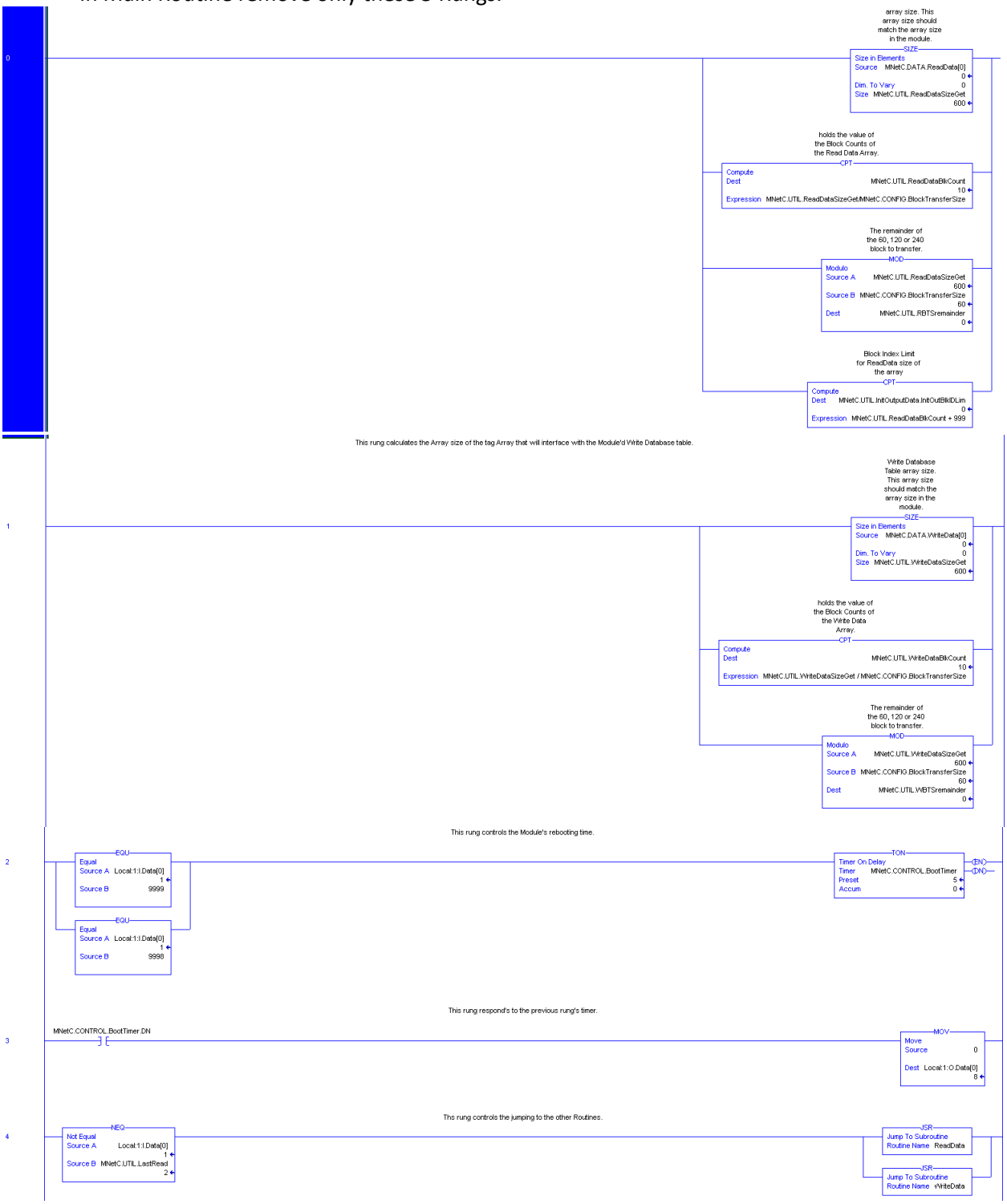
In Logix5000 Click on Search → Find



Write the word “MNETC”



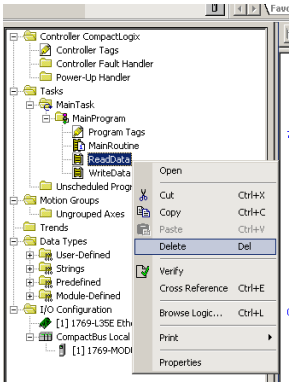
In Main Routine remove only these 5 Rungs.

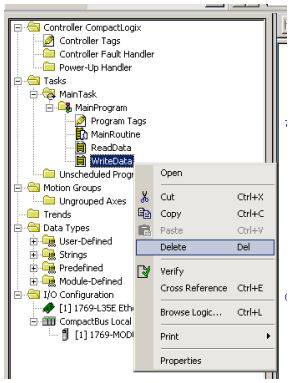


ReadData Routine should has 8 Rung and WriteData Routine should 13 Rungs if there are more than 8 and 13 rungs the routine could be enlarged or modified and it should be compared with an Example Ladder unedited to define what can be eliminated.

Example Ladder:
https://www.prosoft-technology.com/content/download/1511/10818/version/8/file/MVI69MNETC+SAMPLE+LADDERS.zip

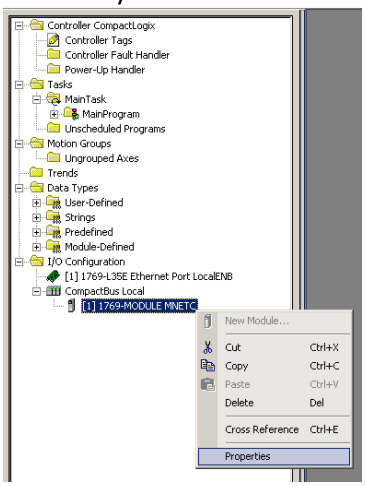
If ReadData Routine and WriteData Routine has 8 y 13 Rungs (the rung 0 is countable) remove completely the Routines.

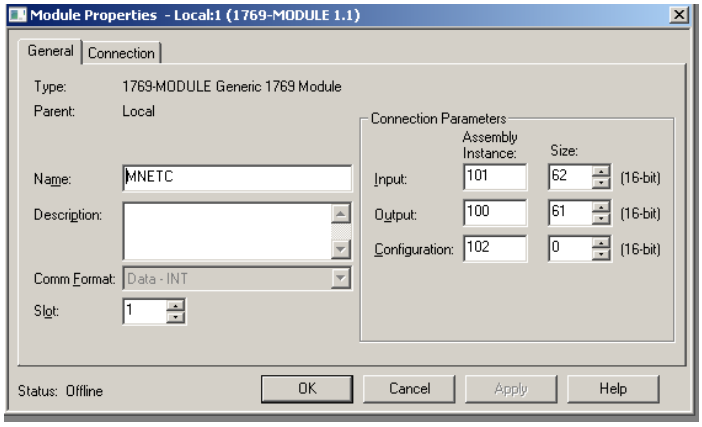




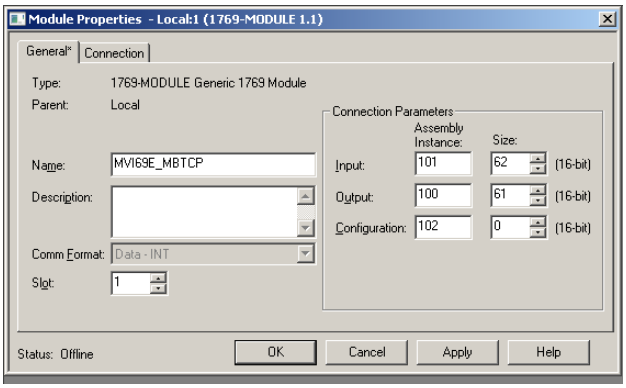
Edit Properties from MVI69-MNETC for MVI69E-MBTCP

Secondary click on the MNETC Module and Click on Properties





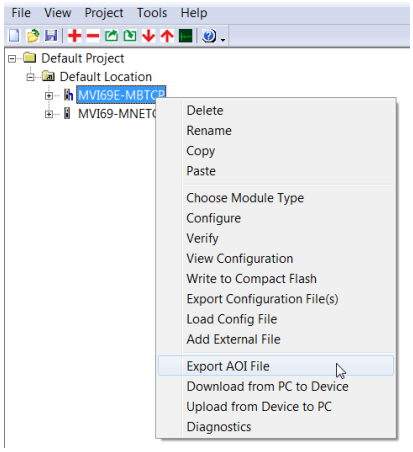
Edit only the name. Example: MVI69E_MBTCP
Please do not change the instance values or sizes. The appropriate size was configured in the section *"Modifying the MVI69E-MBTCP Configuration File using the MVI69-MNETC Configuration File".*



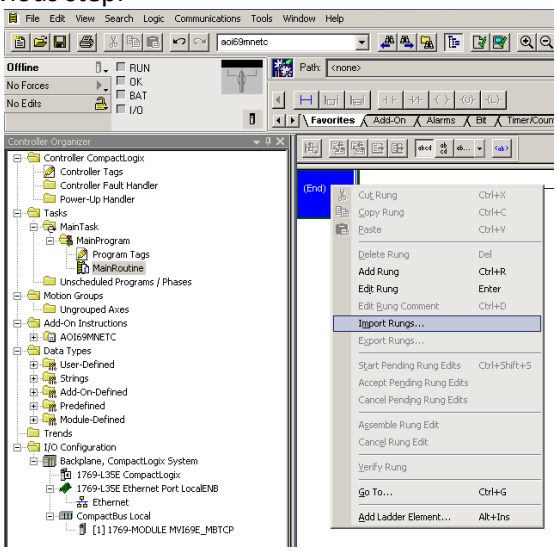
Click ok.

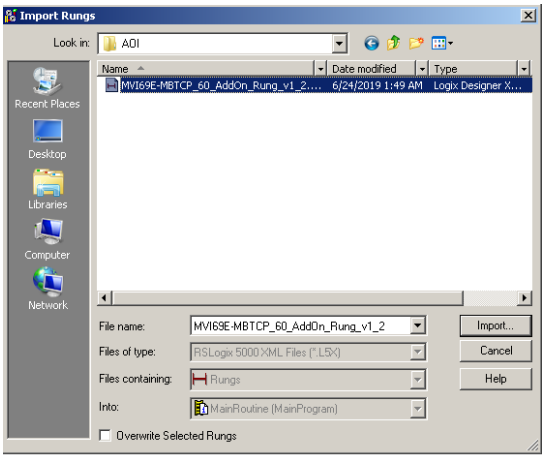
Adding the logic for the MVI69E-MBTCP

In Prosoft Configuration Builder, select the Module MVI69E-MBTCP previously configured. Right Click on the MVI69E-MBTCP module and click on export AOI File.

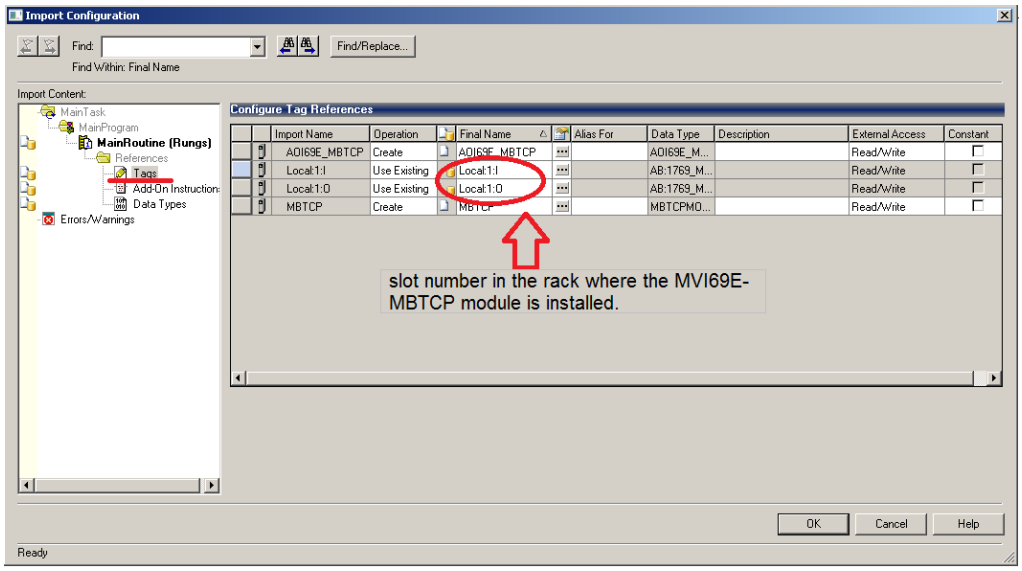


Save in the location of your preference.
Right Click on Main routine → Import Rungs → select the location of the AOI File created in the previous step.





The Slot where the MVI69E-MBTCP module is located must match.



NOTE: If Logix5000 is earlier than version 16 - Contact with Prosoft-Technology Support.

Writing and Reading Data

The module MVI69E-MNETC, reads and writes using the TAGS:
MNetC.DATA.ReadData [x]
MNetC.DATA.WriteData [x]

The module MVI69E-MBTCP, reads and writes using the TAGS:
MBTCP.DATA.ReadData [x]
MBTCP.DATA.WriteData [x]

The Reads will now arrive at MBTCP.DATA.ReadData [x] and the Writes must out from MBTCP.DATA.WriteData [x], it is necessary to generate the Cross References to order this or generate the corresponding Aliases.