Mitsubishi Electric Automation, Inc.
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An ISO9001 Certified Company

Technical Bulletin

How to use the EDS file of MR-J4-TM Ethernet/IP Servo Amplifier in the RSLogix5000/ Studio 5000 platform

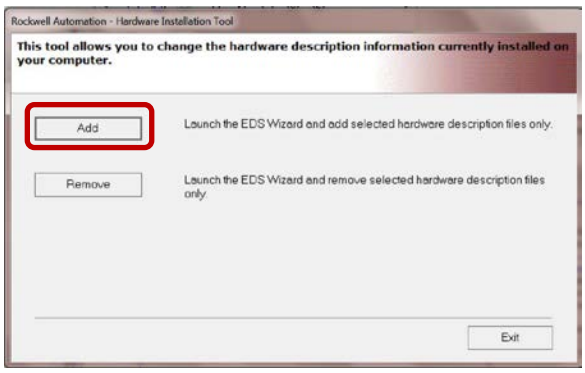
This document explains the step by step procedure to install EDS file in the RSLogix 5000// Studio 5000 software and how to utilize the eds file with AOI project. Assumed the user has experienced with RSLogix 5000/ Studio 5000 software.

Requirement:

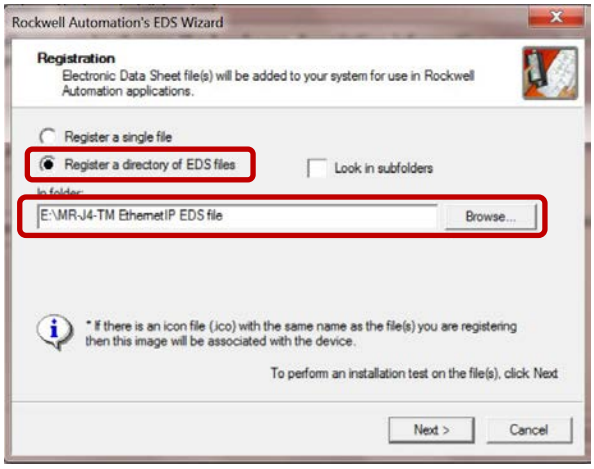
1) RSLogix 5000 software version V20.01 or later
2) EDS file of MR-J4-TM Ethernet/IP Servo Amplifier from US.mitsubishielectric.com (Links)

Installation the EDS file

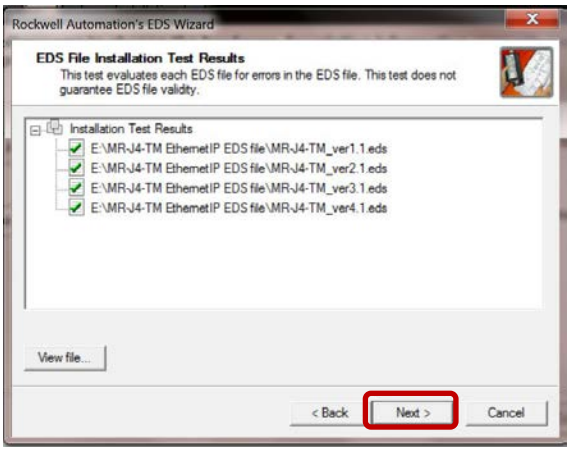
1) Download EDS file from Mitsubishis Website(links)
2) Open the "Rockwell Automation's EDS Wizard "from All Programs → Rockwell Software → RSLinx → Tools→EDS Hardware Installation Tools and click on **Add** Tab.

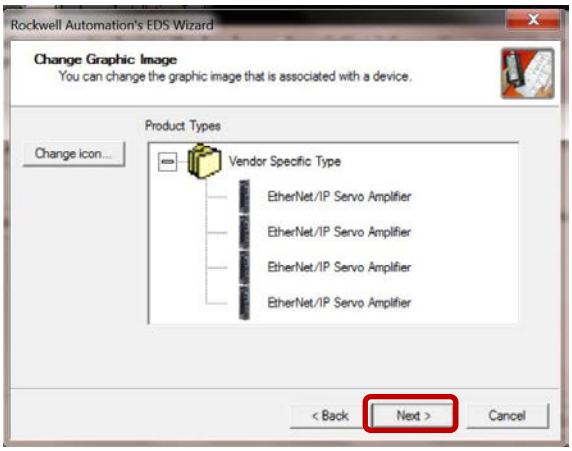


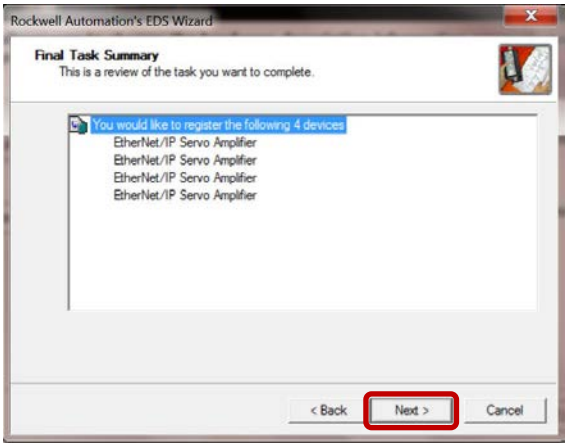
3) Check the [Register a directory of EDS] and then click the **Browse** button and choose the source of EDS file folder and click **Next**

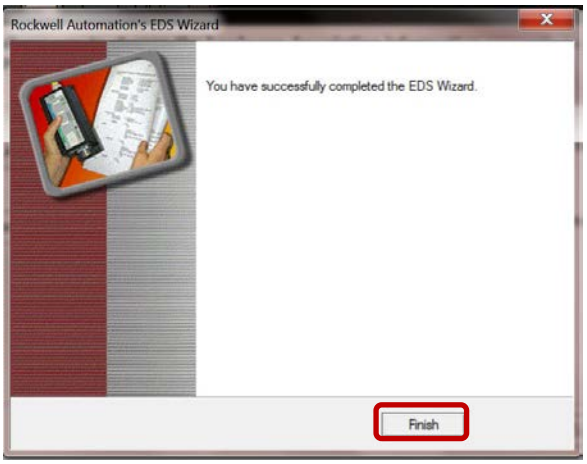

Rockwell Automation's EDS Wizard
Registration
Electronic Data Sheet file(s) will be added to your system for use in Rockwell Automation applications.
Register a single file
Register a directory of EDS files
Look in subfolders
In folder:
E:\MR-J4-TM EtherNetIP EDS file
Browse...
* If there is an icon file (.ico) with the same name as the file(s) you are registering then this image will be associated with the device.
To perform an installation test on the file(s), click Next
Next >
Cancel

4) Multiple version of EDS file will be installed and click Next button until pop up the message shown [**You have successfully Completed the EDS Wizard**] window.







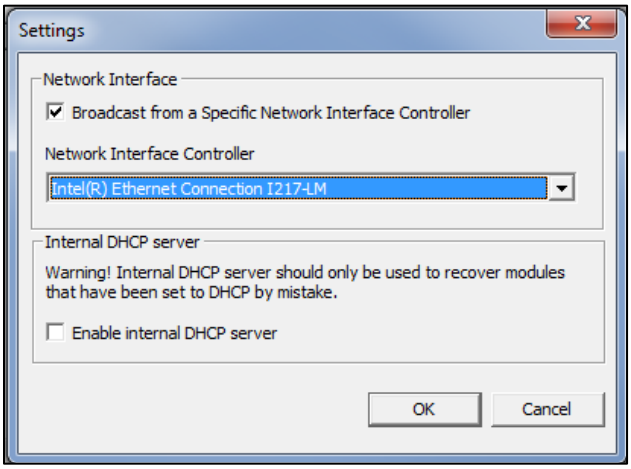


5) Now EDS file is installed and can be used in the RSLogix 5000 project.

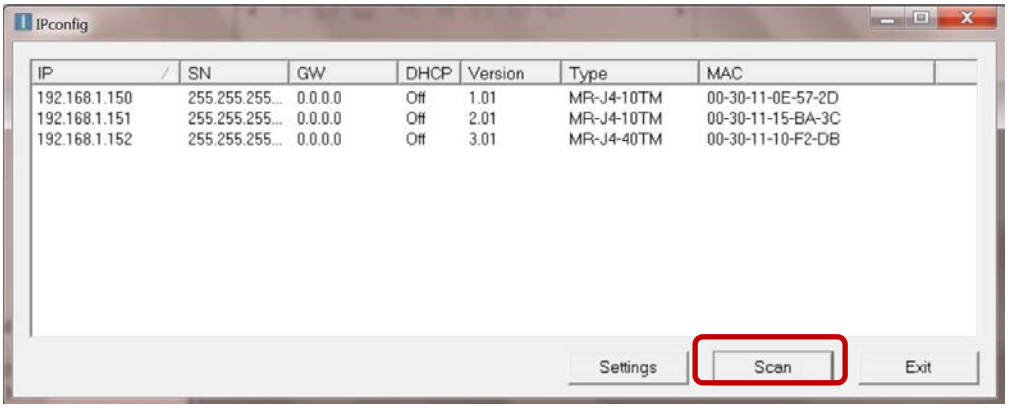
How to find the Amplifier revision number:

To find the revision number or change the IP address of the servo amplifier, use IPConfig tools from HMS Anybus IP configuration tools [Links:IpConfig setup].

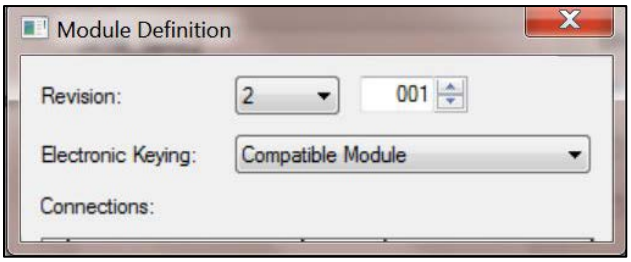
1) Launch the IPConfig Tools and Click on settings and make sure you are not wireless



2) Click on [Scan] button to find the connected servo amplifier in the network



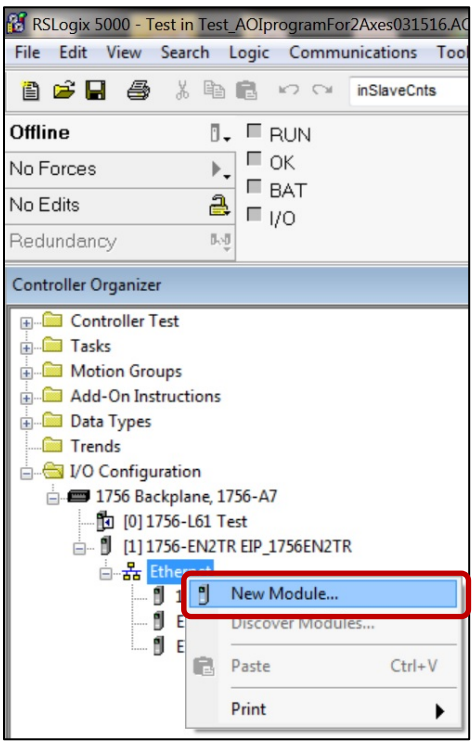
In this example, three MR-J4-TM amplifiers are connected in the network. Every amplifier has different version revision number. You have to match the revision level with amplifier revision in the Module Definition in RSLogix 5000 project when the EDS file is used for the I/O configuration. The example below is for 2nd amplifier which has revision version 2.1.



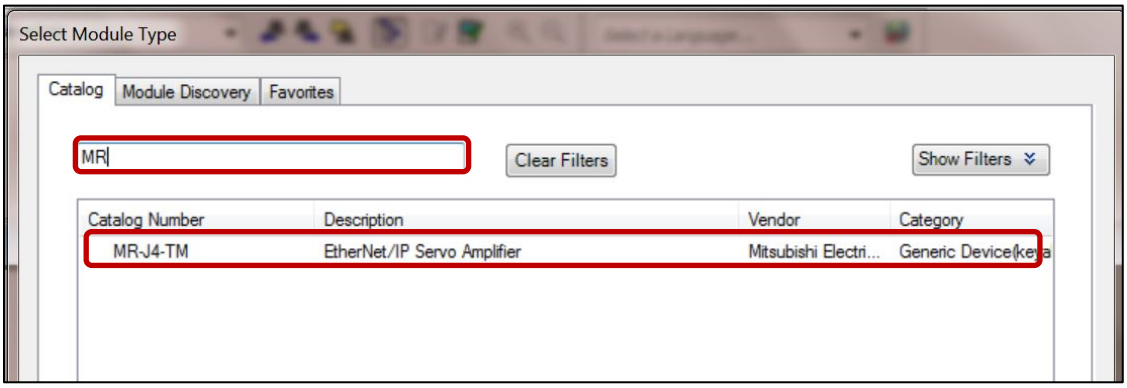
Bring MR-J4-TM Amplifier in the RSLogix 5000

The configuration steps of a Control Logix project are described in this section. These steps are used to communicate with a servo amplifier. It is assumed that the user has basic knowledge in using RSLogix5000 software to perform the basic configuration steps:

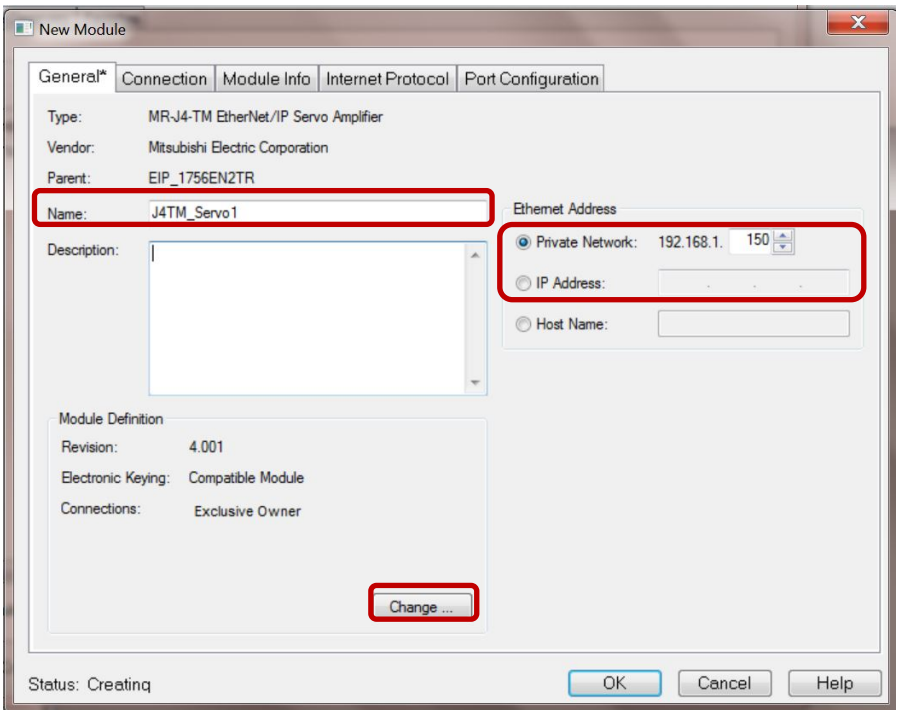
1) Create a new project in the RSLogix 5000 using the proper revision level as the ControlLogix controller. In this example, the controller revision is 20.19 and used 1776- EN2TR Ethernet/IP module
2) Under I/O configuration right click on the 1756 EN2TR and Ethernet icon and choose “New Module…”



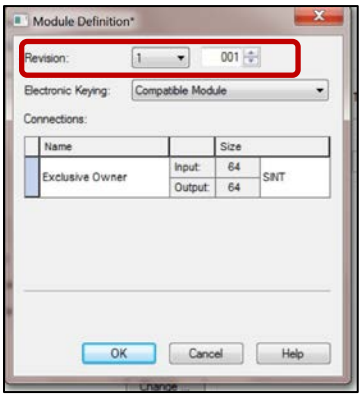
3) In the “Select Module” pop-up window, enter the “MR” in the Catalog tab and then select "MR-J4-TM" and double click on it.


Select Module Type
Catalog
Module Discovery
Favorites
MR
Clear Filters
Show Filters
Catalog Number
Description
Vendor
Category
MR-J4-TM
EtherNet/IP Servo Amplifier
Mitsubishi Electri...
Generic Device(keyi

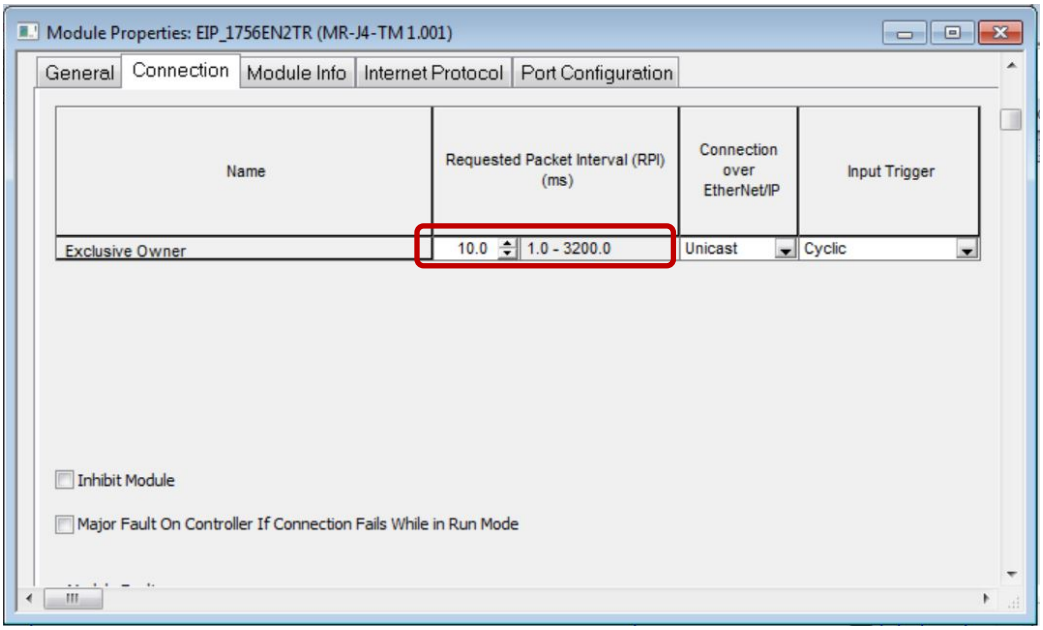
4) Enter the proper Name and IP Address and then click the **Change** button to select right revision number of MR-J4-TM drive.



5) Choose revision of MR-J4-TM amplifier or Choose the [**Disable Keying**] on the Electronic Keying option if you don't know revision number of MR-J4-TM amplifier . in this example shows the MR-J4-TM amplifier which revision number is 1.1.

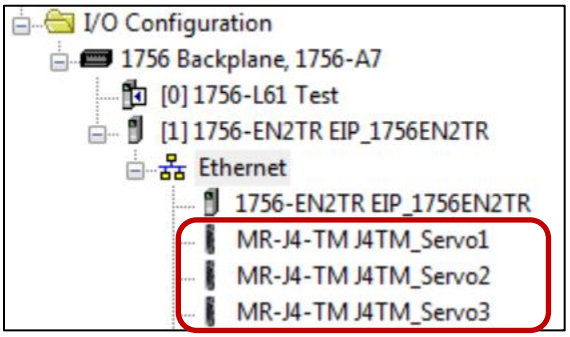


6) Click OK and then Click on connection tab to set the RPI interval between 1.0 – 100.0 ms



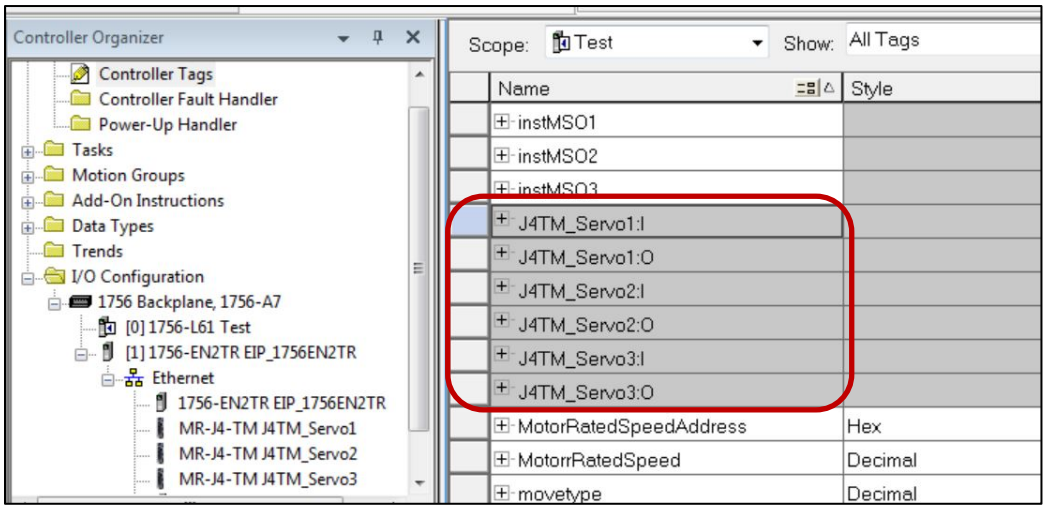
7) Then Click OK button. Now MR-j4-TM amplifier is added in the project.

In this example shows three MR-J4-TM is added under I/O configuration.



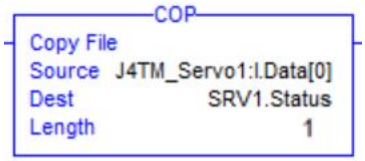
Establish link between AOI program and MR-J4-TM I/O drives:

In the project we have added 3 MR-J4-TM Ethernet/IP drives which is added I/O data tag in the control Tag.

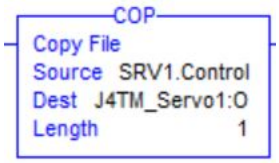


You have to establish link between the control tag of MR-J4-TM Ethernet/IP drive and the program in where AOIs are used. At the top of the program file use the COP instruction the controller I/O tags J4TM_Servo1 :I.Data [0] as the source and put into the SVR1.Status [MITSUBISHI_SERVO UDT] in the field **Status**. In this example:

The MR-J4-TM Ethernet/IP module is ***J4TM_*Servo1** and user defined MITSUBISHI_SERVO UDT is **Srv1** and you must have **Servo1.Status**



At the bottom of the program file, put the COP (write to < J4_TM_Servo1:O>) instruction. Use the MITSUBISHI_SERVO U DT field Control and write it to the MR-J4-TM Ethernet/IP module



For this example:

The MR-J4-TM Ethernet/IP module **is J4_TM_Servo1**

The Mitsubishi servo UDT is **SRV1** and you must have **SRV1.Control**