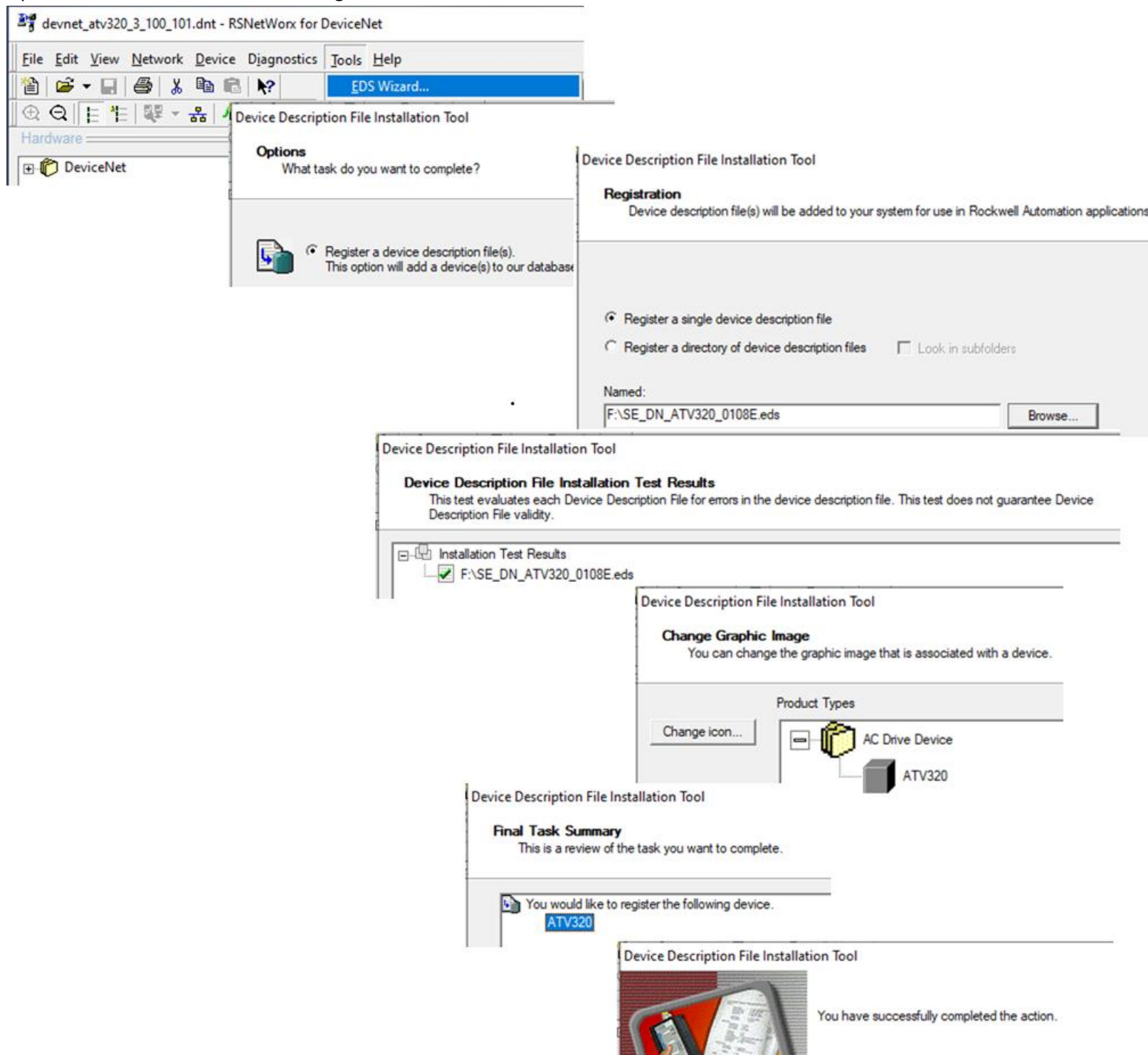


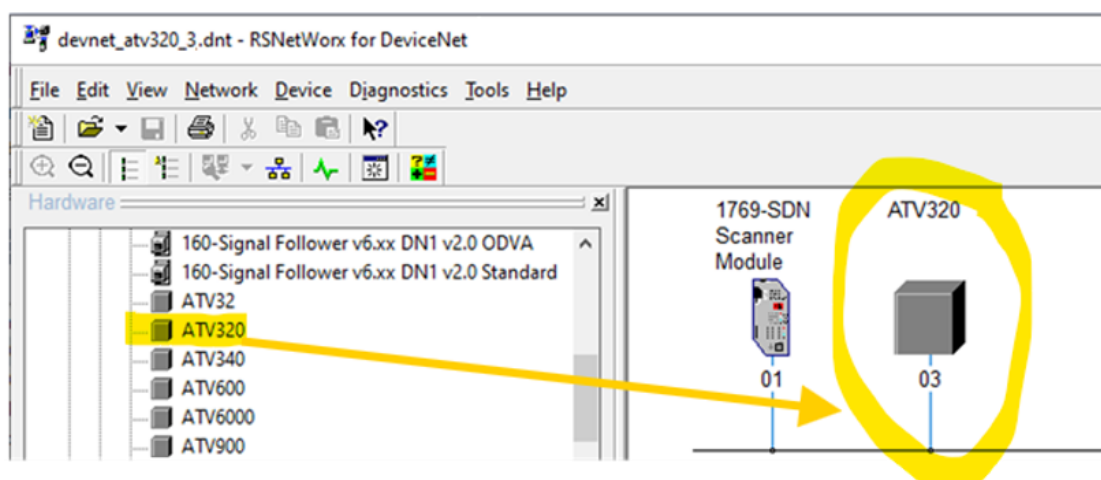
Aug 2026

Goal: To control ATV320 by 100/101 assemblies.

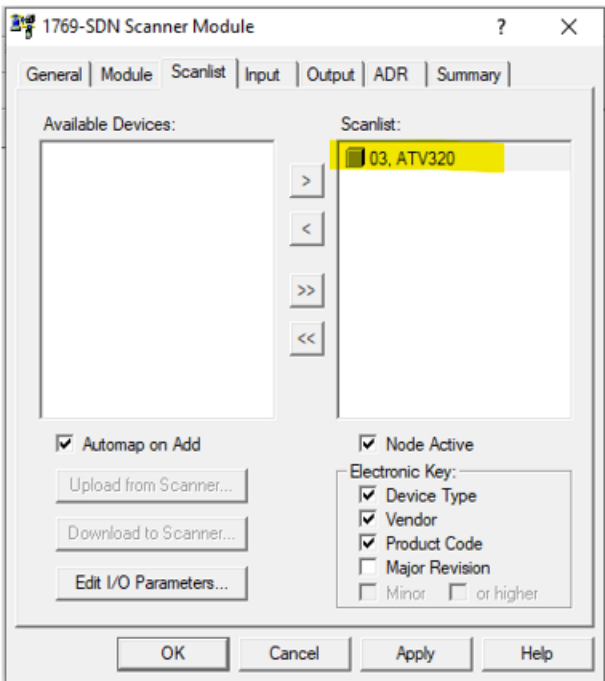
- 1) Configure your DeviceNet optional card by SoMove, or HMI terminal, set the:
ADRC = ATV320's address on DeviceNet (par ex. : 3)
CIOA = 100/101
FR1 = Comm module
Then, **power-cycle** the ATV320.
- 2) Connect ATV6xx to the DeviceNet managed by AB PLC.
- 3) Open RXNetWorx for Devicenet and register the latest EDS file for WV3A3609 DeviceNet card



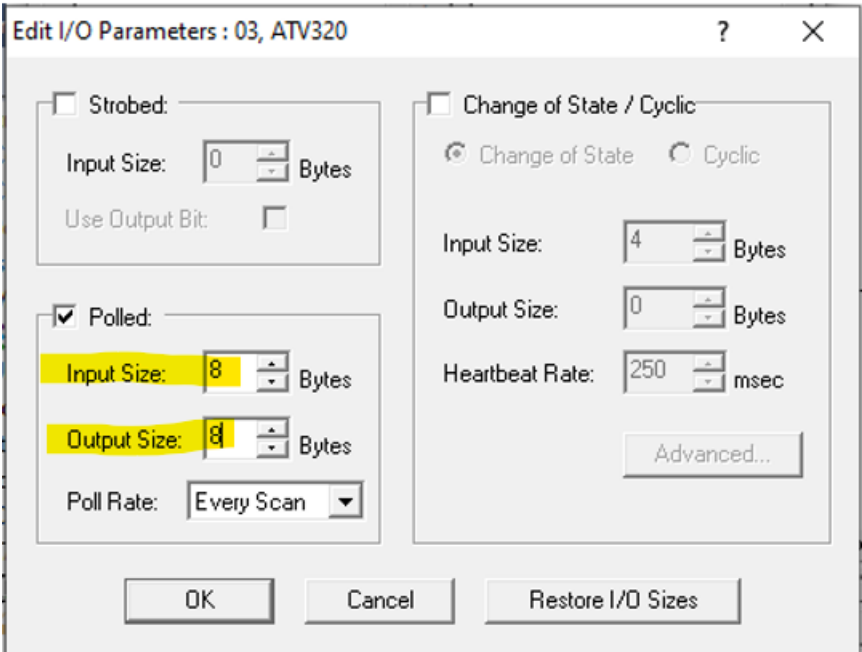
- 4) Create the DeviceNet network



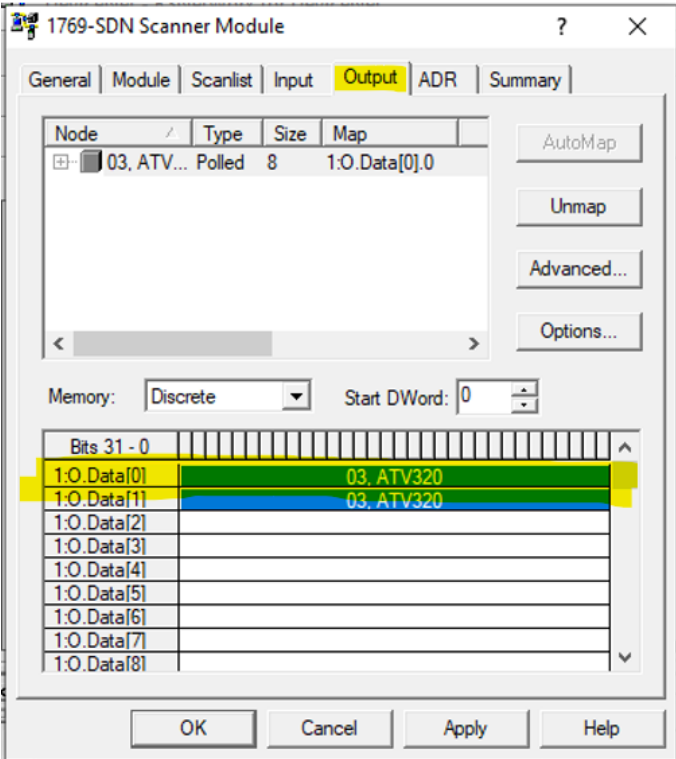
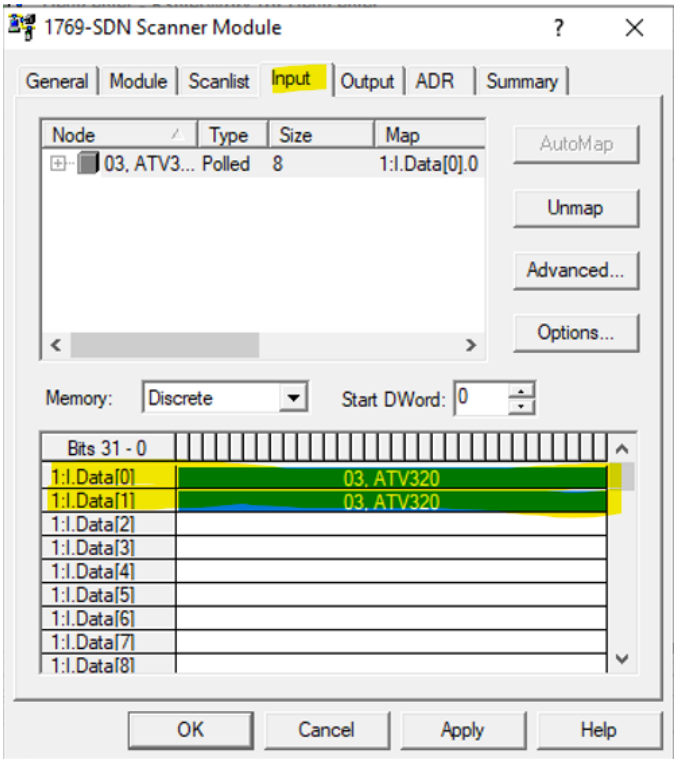
R-click on the scanner module and add ATV320 to the **Scanlist**:



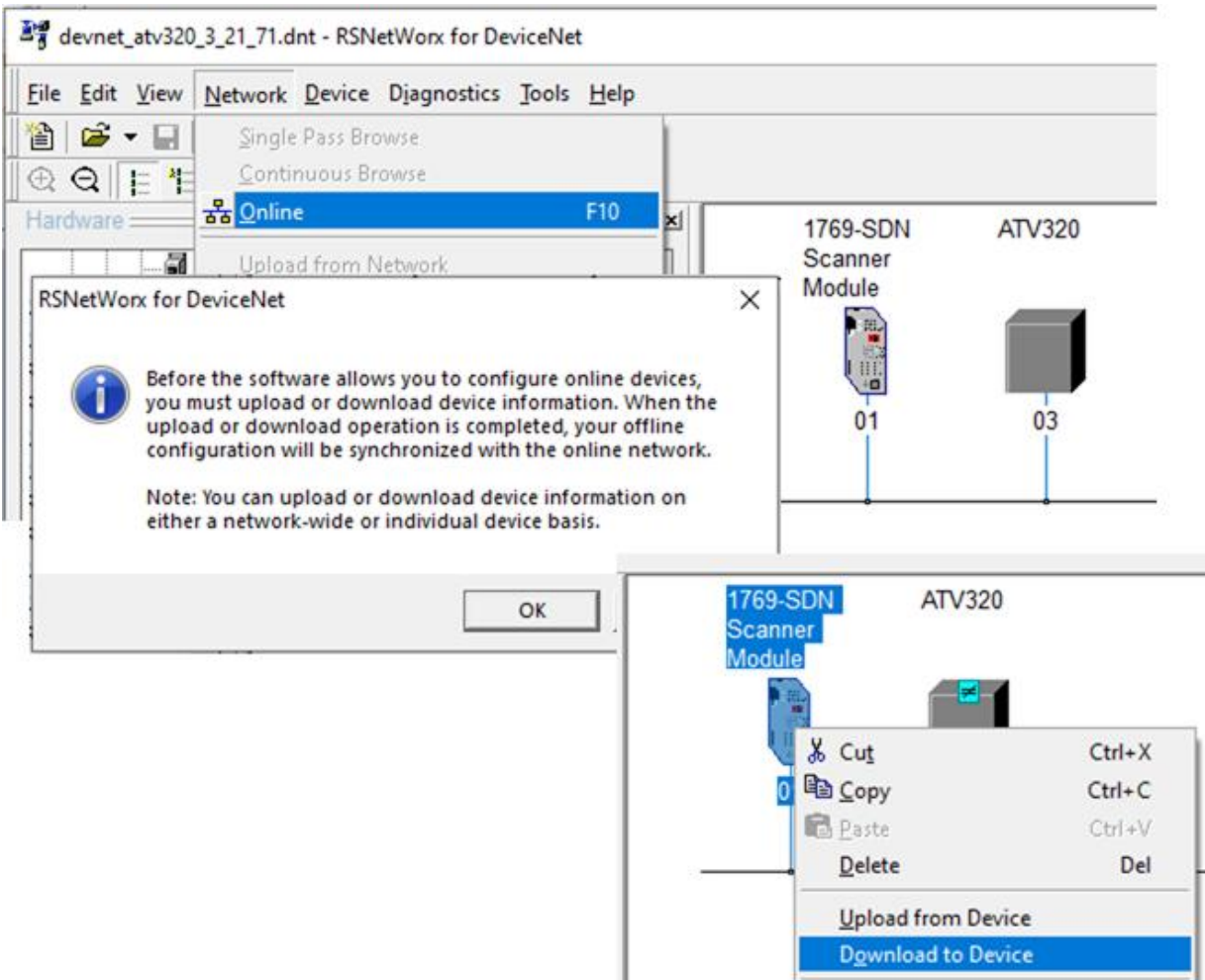
Adjust the **Polled Input/Output size** – 8 bytes IN/8 bytes OUT needed for 100/101 assemblies:



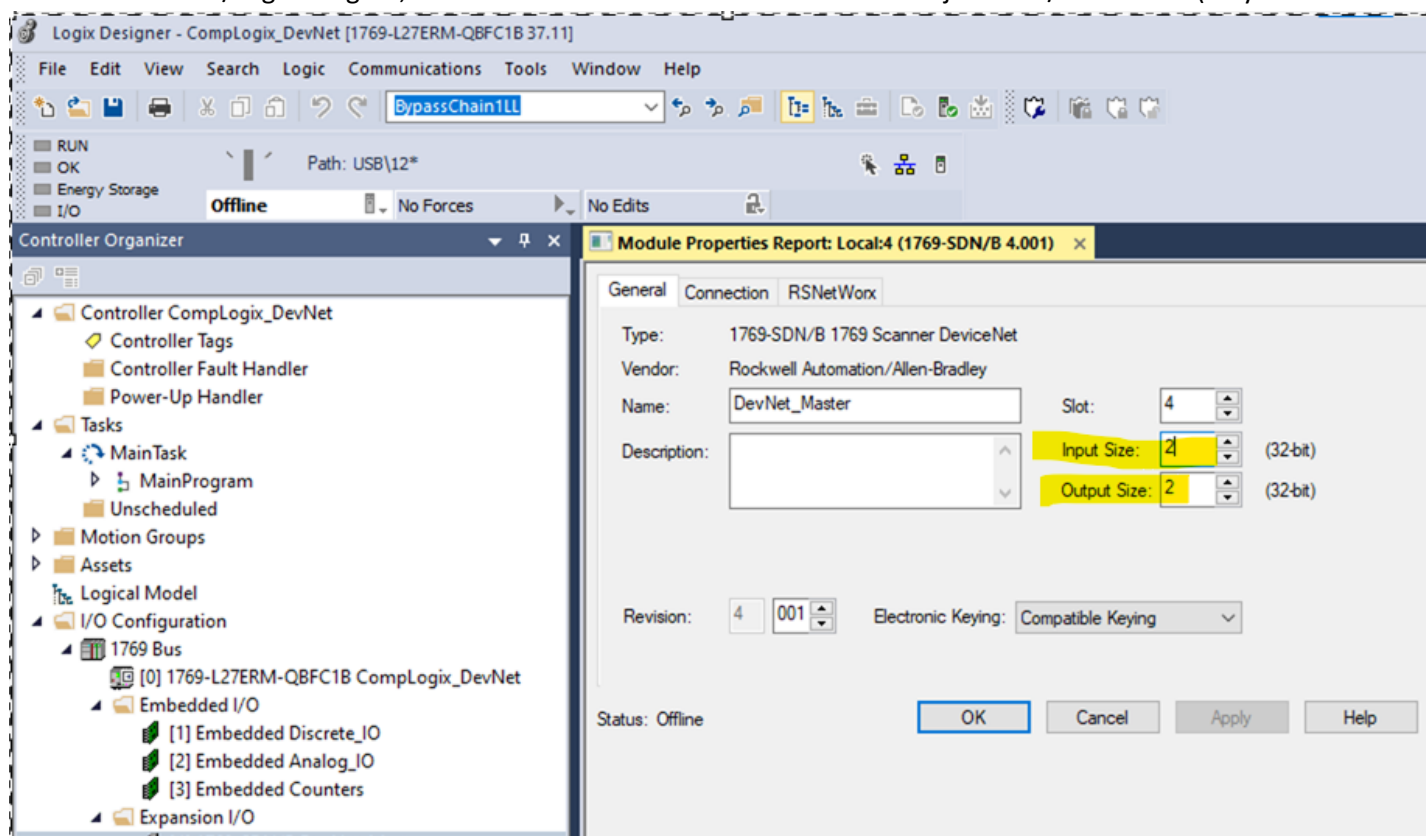
Check if the correct Data mapping was done for Input/Output (4bytes/4bytes) :



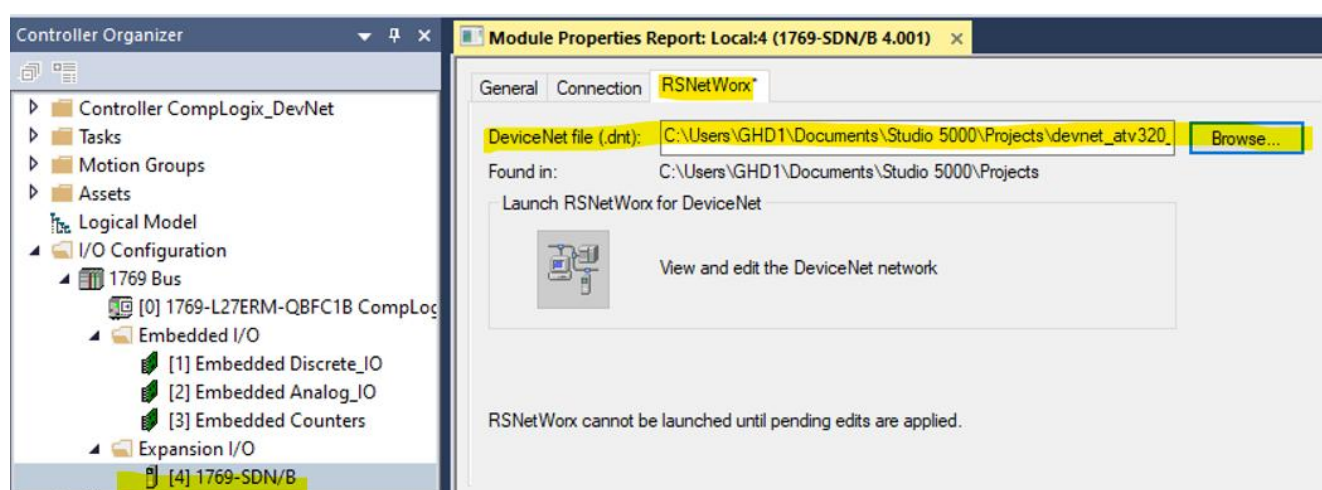
- 5) **SAVE** the RXNetWorx configuration file for Devicenet
- 6) Go online with RXNetWorx and **Download** the configuration to the Scanner Module:



- 7) Inside Studio5000/LogixDesigner, insert the DeviceNet scanner module and adjust the I/O area size (8 bytes = 2x 32bit word)



- 8) Assign the already created by RXNetWorx configuration (.dnt file) to the DeviceNet scanner module:



- 9) Connect & Download to the PLC

- 10) RUN the PLC

- 11) Check the application:

To run the drive:

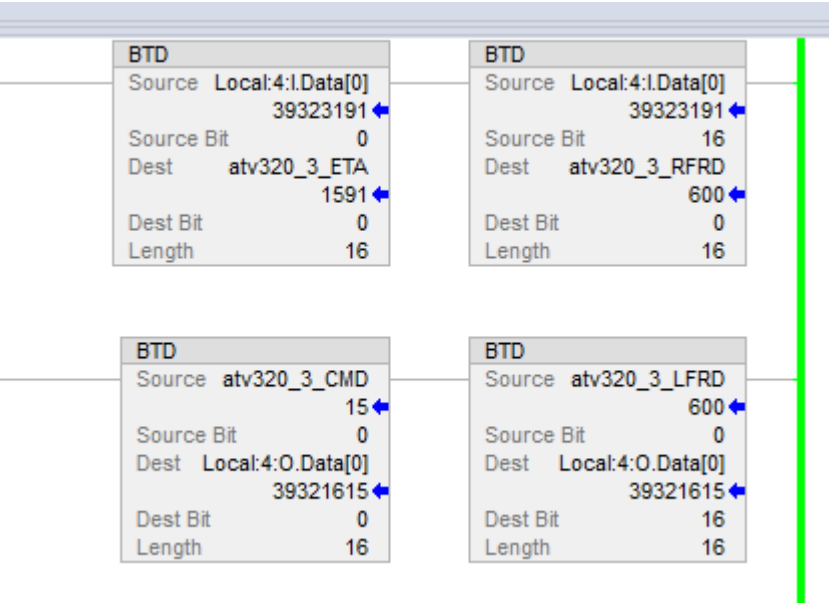
CommandRegister.Run = 1

CMD – set values in sequence: 6 -> 7 -> 15

LFRD – setup speed

Name	Value	Force Mask	Style	Data Type
Local:2:O	{...}	{...}		AB:Embedded_AnalogIO1:O:0
Local:3:C	{...}	{...}		AB:Embedded_HSC1:C:0
Local:3:I	{...}	{...}		AB:Embedded_HSC1:I:0
Local:3:O	{...}	{...}		AB:Embedded_HSC1:O:0
Local:4:I	{...}	{...}		AB:1769_SDN_144Bytes:I:0
Local:4:I.Fault	0		Decimal	DINT
Local:4:I.Status	{...}	{...}		AB:1769_SDN_Status_Struct:I:0
Local:4:I.StatusRegister	{...}	{...}		AB:1769_SDN_StatusRegister:I:0
Local:4:I.Data	{...}	{...}	Decimal	DINT[2]
Local:4:I.Data[0]	16#05dc 1637		Hex	DINT
Local:4:I.Data[1]	16#0000_0000		Hex	DINT
Local:4:O	{...}	Forced		AB:1769_SDN_12Bytes:O:0
Local:4:O.CommandRegister	{...}	{...}		AB:1769_SDN_CommandRegister:O:0
Local:4:O.CommandRegister.Run	1		1 Decimal	BOOL
Local:4:O.CommandRegister.Fault	0		Decimal	BOOL
Local:4:O.CommandRegister.DisableNetwork	0		Decimal	BOOL
Local:4:O.CommandRegister.HaltScanner	0		Decimal	BOOL
Local:4:O.CommandRegister.Reset	0		Decimal	BOOL
Local:4:O.Data	{...}	{...}	Decimal	DINT[2]
Local:4:O.Data[0]	16#05dc 16#0000_0000		Hex	DINT
Local:4:O.Data[1]	16#0000_0000		Hex	DINT

You can create INT (16bit) variables for CMD, LFRD, ETA, RFRD and extract/embed them from/to 32bit Data words on DeviceNet.



So, after that you can operate using INT parameters:

▶ atv320_3_ETA	16#0637		Hex	INT
▶ atv320_3_RFRD	600		Decimal	INT
▶ atv320_3_CMD	15		Decimal	INT
▶ atv320_3_LFRD	600		Decimal	INT