

DEMO – Rockwell Logix Series with Blue Open Studio using AB CIP Driver.

Basics.

BOS Windows Runtime. V2023

Allen-Bradley 1756-L81E used for testing any logix CPU can be used.

Rockwell Studio 5000 V34

Blue Open Studio Application

MAIN Screen

Project Name -

1 Main Driver sheet Disable 1 = Disable, enter 0 to Run driver, Startup script sets to 1

192.168.2.203 PLC IP Address

- Station field — Specify the IP Address of the device and the slot number, using the following syntax:  
For Contrologix <IP Address> : <optSlotNumber>

Example — 10.168.23.77:0

Program Scoped Tags

15888 One ms timer in PLC

	Tag Name	Station	I/O Address
111	Filter text	Filter text	Filter text
222	1 bosTag_intTIMER	{STATION_ID}	INT:PROGRAM:MAINPROGRAM.TIMER2.ACC
	2 bosTag_intProgramTag_INT[0]	{STATION_ID}	INT:PROGRAM:MAINPROGRAM.LOCAL_INTINT000
	3 bosTag_intProgramTag_INT[1]	{STATION_ID}	INT:PROGRAM:MAINPROGRAM.LOCAL_INTINT001
333	4 bosTag_intProgramTag_INT[2]	{STATION_ID}	INT:PROGRAM:MAINPROGRAM.LOCAL_INTINT002

111 Indexed Value bosTag\_intProgramTag\_INT[bosTag\_INDEX]

0 Index Value 0 - 2

Controller Tags

60000	5 bosTag_boolTag	{STATION_ID}	BOOL:TAGBOOL
	6 bosTag_dintTag	{STATION_ID}	DINT:TAGDINT
	7 bosTag_floatTag	{STATION_ID}	REAL:TAGFLOAT
1.000000	8 bosTag_intTag	{STATION_ID}	INT:TAGINT
	9 bosTag_stringTag	{STATION_ID}	STRING:TAGSTRING

753 The Quick Brown fox jumper over the lazy dogs back

TAG INTEGRATION SCREEN

Exit

A. Enable / Disable for Main Driver Sheet.

Uses <bosTag\_DisableDriverSheet>

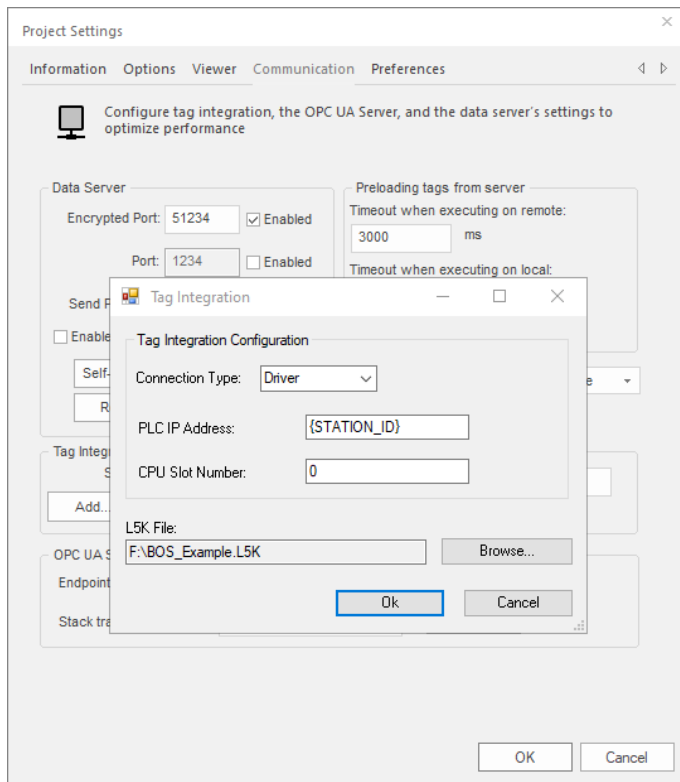
1 = Disable, driver doesn't run, 0 = Enable driver runs

Startup Script sets this to 1 to disable when starting

- B. PLC IP Address. Uses tag<STATION\_ID>  
{var name} allows String Variable to be used in place of hard coded Station ID.
- C. Programmed Scoped Tags
  - One ms timer in PLC to check performance
  - Programmed Scoped Integer tags
- D. Program scoped tags index
  - bstag\_INDEX is used within an array value to index the value
- E. Controller Scoped Tags. Some Controller Scoped tags in different formats.
- F. Navigate to Tag Integration Screen
- G. EXIT BOS runtime

## TAG INTEGRATION SCREEN

L5K file exported from Studio 5000 Logix Designer. Imported into BOS Tag Integration.



Project Name -

## TAG INTEGRATION

192.168.2.203

### PLC IP Address

- **Station field** — Specify the IP Address of the device and the slot number, using the following syntax:  
For Contrologix <IP Address> ; <optSlotNumber>

Example — 10.168.23.77:0

### Three Dimesion Array in PLC

777

DEV.threeDimINT\_0\_0[0]

1212

DEV.threeDimINT\_0\_1[0]

200

DEV.threeDimINT\_0\_2[0]

1111

DEV.threeDimINT\_0\_0[1]

222

DEV.threeDimINT\_0\_1[1]

201

DEV.threeDimINT\_0\_2[1]

3333

DEV.threeDimINT\_0\_0[2]

555

DEV.threeDimINT\_0\_1[2]

2020

DEV.threeDimINT\_0\_2[2]

BACK

Files included: BOS\_Example.ACD file from Studio 5000 V34

BOS\_Example.L5K Exported L5K file from Studio 5000 for Blue Open Studio Tag Integration.

BOS to Logix Example.zip Blue Open Studio V2023 archived project file