

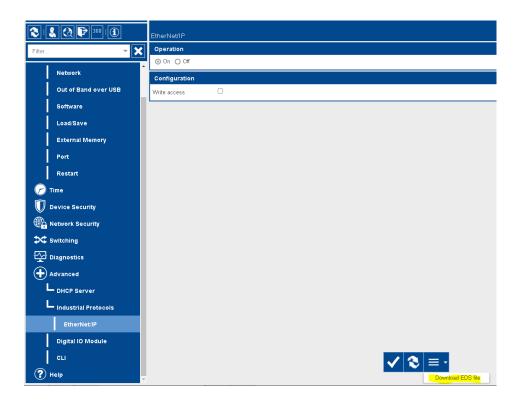
HiOS: Importing and Configuring the EthernetIP AOI John M - 2021-01-26 - HiOS

This guide is designed to assist in the importing and the configuration of the AOI for HiOS switches in Studio 5000.

Switch Configuration and EDS file

- <complex-block>
- 1. Login to the switch

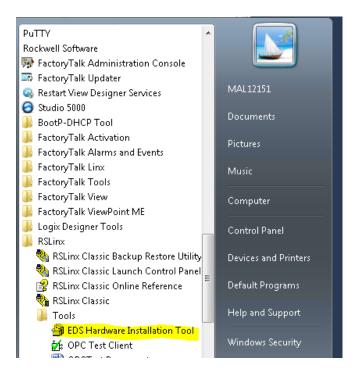
2. Go to the "Advanced" menu, turn on ENIP operation, click the check mark to write the change. Click on the hamburger button at the bottom of the page and click to download the EDS file. This will need to be done for the different models of switches being monitored.



Rockwell Software configuration

1. Use the RSlinx EDS hardware Installation tool and add the EDS file downloaded from the switch(es).

Note: If needed there is a how to guide to assist with adding the EDS file



2. In the Studio 5000 PLC program, go to "File", "Import Component", and "Add-on

Instruction"

FILE	EDIT	VIEW	SEARCH	LOGIC	COMMUNICA	TION	5 TOOLS	WINE	woo	HELP
*o	New				Ctrl+N	0]		•	•, •,	, 🍺 🛛
6	Open				Ctrl+O					
	Close									
•	Save				Ctrl+S		🕨 🍋 No I	Edits		🔒 s
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	1 AOI_h	ow_to.A	CD			\sim	Trend			
	2 AOI84	.ACD								
	3 AOI_te	est.ACD								
	4 EIP v3	0 test.A	D							

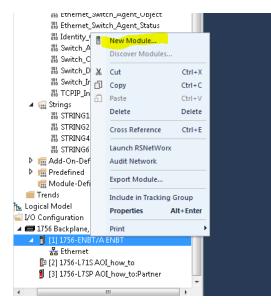
3. Browse to the AOI file (see related content), click to highlight it and click the "Open" button

Look in:	🕌 HIOS 8	- G 👂 📂 🛄-		
Æ	Name	Date modified	Туре	Size
	🗄 HIOS_RO_Studio_Designer.L5X	10/2/2020 8:37 AM	Logix Designer X	110 k
Recent Places	🗄 Hirschmann_Switch_HIOSV8_RO.L	5X 4/20/2020 4:16 PM	Logix Designer X	88 k
	📲 Hirschmann_Switch_HIOSV8_RO_L	.ogixV24.L 8/5/2020 2:43 PM	Logix Designer X	254 k
	📲 Hirschmann_Switch_HIOSV8_RO_V	/2_073020 8/3/2020 11:36 AM	Logix Designer X	254 k
Desktop				
Cibraries				
Computer				
(în l				
Network				
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	•	III		,
	File name: HIOS_RO_Studio_Des	signer.L5X	-	Open
	Files of type: Logix Designer XML Fi	les (*.L5X)	•	Cancel
				Help

4. Click OK

💷 I	mport	t Configuration - HIOS_RO_Studi	o_Designer.L5X			x
¥.	<u>ж</u>	Find: Find Within: Final Name	→ ▲ ▲	Find/Replace		
Imp	oort Co	ontent:				
		Add-On Instructions The second studie in the second secon	Configure Add-On	Instruction Properties		
		Parameters and Local Tags	Import Name:	HIOS_RO_Studio_Designer		
		Routines	Operation:	Create] 🗅	
₹.		101 Data Types		(i) References will be imported as configured in the References folders		
	·· 👩	Errors/Warnings*	Final Name:	HIOS_RO_Studio_Designer 🗸	Properties	
			Description:	Read Data from Hirschmann HIOS Switches. This AOL will work with version 24 and higher.		
			Class:	Standard		
			Revision:	v4.0		
			Revision Note:	1. Changed to Read Only - set module		
			Vendor:			
		4				
-					OK Cancel Help	
_					OK Cancel Help	
Re	ady					1

5. Right-click on the comm module and select "New Module"



6. Find the Switch that needs to be monitored and click "Create"

Select Module Type	8					
BRS		Clear Filte	'S		Hide Filters	*
Module Type Category Filter Analog CIP Motion Converter Communication Communications	s		Module Type Ve Advanced Energ Cognex Corporati Dialight Endress+Hauser	y Industries, Inc.		*
-	Description Hirschmann BRS50-0012-25	6		Vendor Hirschmann, a B	Category Managed Ethe	ernet S(
1 of 560 Module Types Found					Add to Fav	Porites
Close on Create				Create	Close	Help

7. Name the module and assign an IP address

New Module General*	General				
 Connection" Module Info" Internet Protocol" Port Configuration" 	Type: Vendor: Parent: Name: Description:	BRS50-0012-25 Hirschmann BRS50-0012-25 Hirschmann, a Belden brand ENBT BRS50	A	Ethernet Address Private Network: IP Address: Host Name:	192.168.1. 98

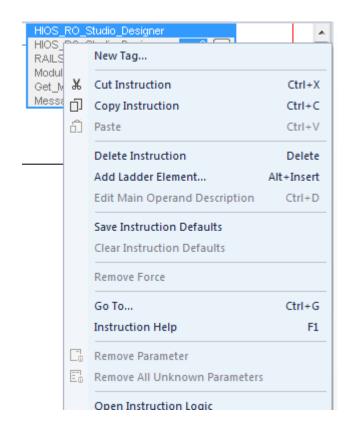
8. Click the change button, change to "Input only" and "DINT", click OK, and OK again

🔜 Module Definition*					
Revision: 2 🔹 002 🛬					
Electronic Keying: Compatible Module -					
Connections:					
Name	Size				
Input Only Connection	Input: 8	INT			
Input Only Connection	Output: 0				
ОК	Cancel	Help			

9. Open the main routine, go to "Add-On" and click on the "HIOS RO add-on"

RUN Path: snone> Charge Storage UD Offline	1 LoEats よう、Autory Unicode 12 (・) Twotter Add Ami Amme Bt Time/Conter Input/Oxput Compare Compute/Mith MoreLogical Fieldford: FieldFird Sequence 1
Controller Organizer 🔷 🔻 🗙	🗄 MainProgram - MainRoutine* 🗙 🦸 Controller Tags - ADL how, to(controller) 👻
et 12	
Parameters and Local Tags MainReutine SysteyTask SysteyTask Unscheduled Motion Groups Motion Groups Urgrouped Axes	0 0

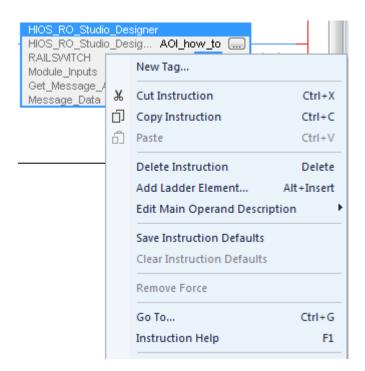
10. Right-click on the "HIOS_RO_Studio_Designer", and select "New tag"



11. Name the tag and click "Create"

				HIOS_RO_Studio_Designer	
1	New Tag		—	HIOS_RO_Studio_Desig RAILSWITCH	? ?
	Name:	A01_how_to	Create 🗸 🗸	Module_Inputs Get_Message_All Message_Data	? ?
	Description:		Cancel		
_			Help		
		-			
	Usage:	<controller></controller>			
	Туре:	Base Connection			
	Alias For:	· · · · · · · · · · · · · · · · · · ·			
	Data Type:	HIOS_RO_Studio_Designer			
	Parameter Connection:				
	Scope:	ADI_how_to 👻			
	Class:	Standard 👻			
	Eutomol	- ·· ··		1	

12. Right-click on the Railswitch and select "New tag"



13. Name the tag and click "create"

-	New Tag		— ×	HIOS_RO_Studio_Designer HIOS_RO_Studio_Desig AOI_how_to
	Name:	BRS_AOI	Create 🛛 🔻	RAILSWITCH ? Module_Inputs ? Get_Message_All ?
	Description:		Cancel	Message_Data ?
			Help	
		.		
	Usage:	<controller></controller>		
	Туре:	Base		
	Alias For:			
	Data Type:	Switch_All_HIOS		
	Parameter Connection:			
	Scope:	AOI_how_to		
	CI			

14. For the Module_inputs select the I.Data from the switch created in previous step

	Hirschmann_Switch_HIOSV Hirschmann_Switch_HI RAILSWITCH Module_Inputs BRS50:I.Da	BRS_How_To
Τ.	Enter Name Filter 🚽 S	ihow: All Tags 🗸 🗸
	Name	💼 Data Type 🔺
•	AOI_BRS	Switch_All_HIOS
Ē	BRS_How_To	Hirschmann_Switch_HI
Ē	⊿ BRS50:1	_027A:BRS50_0012_2;
	BRS50:1.ConnectionFaulter	BOOL
	BRS50:I.Data	DINT[8]
V 9	Show controller tags	📝 Show standard tags
V 9	Show MainProgram tags	📝 Show safety tags
Sho	w parameters from other program:	
<nc< th=""><td>one></td><td>▼</td></nc<>	one>	▼

15. Right-click on the "Get Message All ?" and select "New tag"

HIOS_RO_Studio_Designer HIOS_RO_Studio_Desig AOI_how_to RAILSWITCH BRS_AOI (ER)— Module_Inputs BRS50:I.Data Get_Message_A				
Message_Data		New Tag		
	ж	Cut Instruction	Ctrl+X	
	ŋ	Copy Instruction	Ctrl+C	
	đ	Paste	CtrI+V	
		Delete Instruction	Delete	
		Add Ladder Element	Alt+Insert	
		Edit Main Operand Descrip	otion 🕨 🕨	
		Save Instruction Defaults		
Clear Instruc		Clear Instruction Defaults		
		Remove Force		
		Colto	Ctal. C	

16. Name the tag and click "Create"

New Tag		×	HIOS_RO_Studio_Designer HIOS_RO_Studio_Desig AOI_how_to RAILSWITCH BRS_AOI
Name:	BRS_A0I_getmsg	Create 🗸 🔻	RAILSWITCH BRS_AOI Module_Inputs BRS50:I.Data Get_Message_All ?
Description:	*	Cancel	Message_Data ?
		Help	
	Ŧ		
Usage:	<controller></controller>		
Туре:	Base Connection		
Alias For:			
Data Type:	MESSAGE		
Parameter Connection:			
Scope:	A0I_how_to 🗸		
Class:	Standard 🔹		
External	Read/Write		

17. Right-click on the Message_data ?" and select "New tag"

u

HIOS_RO_Studie HIOS_RO_Studie RAILSWITCH Module_Inputs Get_Message_A Message_Data	o_De:	sig AOI_how_to BRS_AOI -(ER) BRS50:1.Data BRS_AOI_getmsg	
		New Tag	
	ж	Cut Instruction	CtrI+X
	ŋ	Copy Instruction	Ctrl+C
	Ô	Paste	Ctrl+V
		Delete Instruction	Delete
		Add Ladder Element	Alt+Insert
		Edit Main Operand Descripti	ion 🕨 🕨
		Save Instruction Defaults	
		Clear Instruction Defaults	
		Remove Force	
		Go To	Ctrl+G
		Instruction Help	F1
		Remove Parameter	

18. Name and click "Create"

New Tag		×	HIOS_RO_Studio_Designer HIOS_RO_Studio_Desig AOI_how_to
Name:	BRS_AOI_msgdata	Create 🗸 🔻	RAILSWITCH BRS_AOI Module_Inputs BRS50:I.Data Get_Message_All BRS_AOI_getmsg
Description:		Cancel Help	Message_Data ?
	-		
Usage:	<controller></controller>		
Туре:	Base Connection		
Alias For:	•		
Data Type:	SINT[300]		
Parameter Connection:	.		
Scope:	AOI_how_to 🗸		

19. Click on the "Get_Message_all" config box and set the service code, class, Instance, and attribute to 1. Also set the Source element to the "msgdata[0] tag" created in a previous step. The "source length" is set to 2 and the "Destination element" is the msgdata[2]

Message Configuration - BRS_AOI_getm	nsg	×		HIOS_RO_Studio_Designer
Configuration [*] Communication Tag Message Type: CIP Generic	•			RAILS/WTCH BRS_AOI Module_Inputs BRS50:I.Data Get_Message_All BRS_AOI_msg Message_Data BRS_AOI_msgdata
Service Custom Type: Service 1 (Hex) Class: 1 Code: 1 Attribute: 1	Source Element: Source Length: (Hex) Destination Element:	RS_AOI_msgdata[0] 2 (Bytes) RS_AOI_msgdata[2] New Tag		

20. Go to the "Communications" tab, set the path to the switch and click OK

Message Configuration - BRS_AOI_getmsg	HIOS_RO_Studio_Designer HIOS_RO_Studio_Desig AOI_how_to RAILSWITCH BRS_AOI Module_Inputs BRS50:I.Data Get_Message_All BRS_AOI_getmsg
Path: BRS50 Browse	Message_Data BRS_AOI_msgdata
BRS50 Broadcast:	
Communication Method	
Source ID Source Link C Sextination Hodes. Clearly	
◯Enable ◯Enable Waiting ◯Start ◯Done Done Length: 0	
⊖ Error Code: Extended Error Code:	
Error Path: Error Text:	
OK Cancel Apply Help	

21. Make sure the tags are populated and the configuration is now complete.