

CN_PDA_PDA Configuration 无法选择变量的问题

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. 问题表现

问题

现场反馈 APROL 系统和 AS 编程的控制器之间需要进行通讯,通过 ControllerManager 连接上该控制器 后,可以监控到任务里面的变量,如下图所示。



但是通过 PDA Configuration 连接上后,在相应的 PDA variable composition 窗口里面不能显示相应的变量,如下图所示,无法选择需要通讯的变量的问题。



· 解决方法

方法

通过远程连接上去查看,打开 ControllerManager 去连上控制器,点击 CPU 名称右键,选择 PDA Configuration,如下图所示(注,以下图片非实际项目图片)。

*		Ctrl12(Ctr	12) - ControllerManager (engin@cube03)
le <u>C</u> onnection <u>L</u> ogin <u>H</u> elp			
👋 懮 🕵 🅎 Connection history 🛛 🔶	- Engineered co	ntrollers 🔸 🔸	
& 😼 😣 🚄 🚔 🎦 🏹 🗫 🦛 🕷	e Ø Ø O	🔵 🧙 🔉 💡 🐐	
	R R R		
	Version	Target memory	Size Ib tes]
Ctrl12 (Ctrl12	AD D0452	largermemory	Size [bytes]
E- Stask class	Ctrl+I		
TOTOTOTI APROL Info		USERROM	256492
	Ctrl+R	USERROM	281912
	view	USERROM	43252
ApDrvE Get table of contents		USERROM	55604
CT01/ System Diagnostics Manas	ior	USERROM	93228
System Diagnostics Manag	lei	USERROW	15599
CTOSOC Download module	`	USERROM	1102184
CT0182 Reset	•	USERROM	41676
Task class 🕵 Erase Memory	1000		
ApStan 🖉 Change AR Operating Syst	em	USERROM	16776
	•	USERROM	1341952
CT1100		USERROM	3629928
		USERROM	15588
CT3100 View System Properties		USERROM	386592
CT4000 Ethernet	•	USERROM	15588
PV-Watch	•	LICEPDOM	
Start link node watch		USERROM	2/0/88
CT0400 Start AuditTrail		USERROM	325276
CT0500		USERROM	1650572
Task class			
ApSyst O Refresh		USERROM	78796
	Alt++	USERROM	205344
	Alt+-	USERROM	22384
ApDrvA Expand branch	+	USERROM	27696
Task class			

在弹出的 PDA variable composition 弹窗,如下图所示说明首先双击选择需要通讯的变量所在的任务等级 进行读取。

Jame	ΔH	IEC-Type	HW-I/O	Connection I/O	F
CPU HW-I/O (0/182) Global variables (0/0) (incomp Task class 1 CT0201 CT0201 CT0401 CT0185	lete)				
□ Task class 2 □ Task class 3 □ W击变量所在 1 任务级别	9 -		Select van:	ables - ControllerManager (engin@cube03) V ^ 😣	
Task class 4 Apstandard CT1000 CT10100 CT2100 CT2100 CT3100		At least o You may or select	ne task wa select vari variables (Selec	as not read! ables of read tasks of ALL tasks. t read variables Select ALL variables Cancel	
		建议在这	这个弹	窗点击这个按钮!因为点击Select	
□ C14000 □ Task class 5 □ CT0200 □ CT0300 □ CT0400 □ CT0500 □ Task class 6 □ Task class 7 □ Task class 8 □ Task class 8 □ ApSysMon		建议在3 ALL varia 的高负行	这个弹(able)按 句,可f	圈点击这个按钮!因为点击Select 田的话,会对连接的 CPU 产生瞬时 能会导致 CPU 宕机,请注意!	
C 14000 C TO200 C TO200 C CT0200 C CT0300 C CT0400 C CT0500 C Task class 6 Task class 7 Task class 8 ApSvsMon Status	Filte	建议在就 ALL varia 的高负行	这个弹(able)按 句,可f	窗点击这个按钮!因为点击Select 钮的话,会对连接的 CPU 产生瞬时 能会导致 CPU 宕机,请注意!	

接下来如下图所示说明继续双击选择需要通讯的变量所在的任务名后,进行变量的读取。

2000	Λ.	H IEC Tupe	HW/J/O	Connection I/O			(a)
							-
□ Global variables (0 □ □ Task cla好材)/0) (incomplete) 一次的操作	后。这里	就被勾				
- CT04 - CT04 - CT04 - CT01 - CT01	可以进行后	续的动作	了。				
□ Task class 2 □ Task class 3							
- CT 177 - CT 0189 - CT 012113	9	Read	variable lis	st - ControllerManag	er (engin@cube03)	\sim \sim \otimes	
- D CT0900 CT0182		The variables	of this tas	k are not read!			
➡ Task class 4 F	(1)	Press 'Read v Note: Reading	ariables' to the task's	o read the task's var s variables may take	iables. a while.		
1 继续双击这	企 面(R	ead variat	oles Read and se	elect variables	Cancel	
的变量所在	的	2	在新	出现的弹窗同]样选择"Read va	riables 🖔	
□ Tark class 8	<u></u>						
F ApSysMon							
itatus		Filter		Composition		Configuration	
		Clear filter		Load	Save	Export	Close

*		PDA variable compos	tion		? ~ ^
Name	ΔH	IEC-Type	HW-I/O	Connection I/O	
□ CPU ● □ Global variables (0/8672) (incomplete) ● □ Task class 1 □ CT0201 □ CT0401 □ CT0185 □ Task class 2 ● □ Task class 3 □ Task class 4 □ CT1000 (0/41641) □ CT1000 (0/01 □ CT2100 (0/0) □ CT3100 □ Task class 5 □ Task class 7 ● □ Task class 8		同时,在Glob 数字,显示目 个数。 <mark>经过上两边的</mark> 出现勾选,并 字,显示包含	al variables这里 前Global variab 操作后 <mark>。</mark> 这个 目任务名字后比 的变量个数。	也出现了 les的变量 玉务名称前 出现了数	
Status		Composition		Configuration	
			1		

此后就可以进行实际要通讯的变量的勾选,勾选完成后执行相应配置的导出工作。

		T DA Vallable con	position				
ame	ΔH	ІЕС-Туре		HW-I/O	Connection I/O		P
바니 HW-I/U (0/182) 요 명 Global variables (8/8672) (indomplete)			_				
CfcInst0103 NI0010 ACfa A Out		WIEIKIN	1 IH Rt	可以占		isblac	
CfcInst0103 NI0010 ACtg_0_04		WORD	UTOHO O	-Juk m		ables/be	
Cfc.nst0103_NI0010_AMo_A_Out		WORD	开然	后逐—	去勾洗需要	甬讯的	
CfcInst0103_NI0010_AMo_C_Out		WORD	00 000	-			
CfcInst0103_NI0010_AR1	_	TIME	变量。				
Cfclast0103 N0010 ACM/ C Ala		ROOL					
RI Utchst0103 NI0010 ASW P Out		BOOL					
CfcInst0103 NI0010 ASig A Out		WORD					
TICfcInst0103 NI0010 ASig C Out		WORD					
CfcInst0103 NI0010 B2W1		WORD					
CfcInst0103_NI0010_B2W2		WORD					
CfcInst0103_NI0010_L1_BtnLtchRes		BOOL					
 CfcInst0103_NI0010_L2C_FbRtmTm0 		TIME					
CfcInst0103_NI0010_L2C_FbRtmTm1		TIME					
CfcInst0103_NI0010_L_ILck		WORD					
Cicinsi0103_NI0010_L_ILCKVal		WORD					
- CfcInst0103_N0010_E_valkaw		BYTE					
- CfcInst0103_NI0010_3		BOOL					
CfcInst0103 NI0010 ValRaw		BOOL					
CfcInst0103_NI0010_f_TmEIOff		TIME					
CfcInst0103_NI0010_f_TmEIOn		TIME					
CfcInst0103_NI0010_k_Ala		BOOL					
CfcInst0103_NI0010_q		BYTE					
CfcInst0103_NI0010_w		BAIF			(勾洗完毕后	: 古击
F CTCINST0104 H0030 ACTO A OUT		WORD	-			-SREET CITI	- Comment
Status		Composition				t进行配置	的导出
Clea	r filter	Load	Sa	ave	Export		lose

系统会默认给出导出配置保存的路径和文件名,当然也可以自己去修改,最后点击 Save 保存。

	PD.	A variable composition			? ~	~ 8
Name ■ CPU ■ HW-I/O (0/182) ■ Clobal variables (8/8672) (incompl ■ CfcInst0103_NI0010_ACfg_C_C ■ CfcInst0103_NI0010_ACfg_C_C ■ CfcInst0103_NI0010_AMo_A_O ■ CfcInst0103_NI0010_AMo_A_O	H IEC-	Type 配置导出时会出 名称然后点击保 的 ControllerManager Engin	现下面的弹 存,也可以(径等,后缀 ^(1) ube03)	萄 ^m , 条统默 多改这个导 为imp,不要	认给出一个 出交件的名 更修改。 × ^ ⊗	
	Directory: 📄 /home/engin/E	ENGIN/EXCHANGE	• •	💌 🐚 🗃		
Pavorites EXCHANGE	Name DemoFremdankopplung. export_libParts_IEC6113 export_libParts_IEC6113 export_libParts_PAL_202 export_libParts_PAL_202 export_libParts_PB_Bas_ export_libParts_PB_Rass File name: DemoProject_Ct	imp 1_3_1.imp 1 1_3_20230426_131707.imp 1 230725_Energy.imp _20230426_151317.imp .radinbox.imp rt12_PDA_20231103_1107.ii	4.00 k3Directory 657 8 File 18.02 kB file 98.02 kB file 98.02 kB file 53.96 kB File 6.18 kB File	9/3/23 12:32 PI 10/30/18 10:17 4/26/23 1:22 PI 4/26/23 1:17 PI 7/25/23 2:15 PI 4/26/23 3:13 PI 4/26/23 3:13 PI 4/26/23 3:13 PI	Murre PM rw- Murw- Murw- Murw- Murw- Murw-	
Help - Cfcinst0103_NI0010_k_Ala - Cfcinst0103_NI0010_w - Cfcinst0103_NI0010_w - Cfcinst0104_H0030_ACfg_A_O	Filter: BOO BYTE BYTE WOF	L E E RD	Save		Cancel	
Connection I/O status	-FilterCo	omposition	Cor	nfiguration		
Total: 50313 - 100 - Not set: 50313	Ciear filter	Lood S:	we	Export	Close	

保存时还会弹出下面的窗口来对这个配置定义一个 Connection name,一般默认即可,这样就完成了 PDA Configuration 的工作,可以关闭 ControllerManager 了。



然后可以在 CaeManager 里面如下图所示步骤,将上面导出的配置选择进行导入。

1 ×									
le Edit Build View Extras Tools Login Reports Inform	ation <u>H</u> elp							B&R Internal Co	mpany License
3 3 3 6 4 3 4 2 1 7 8 7	🔭 🛅 🖸 🚮 🌆 🖸 🗔								
🍠 🔗 👲 🗸 V0.0.9 🗸 🖓 🥔 🖉 DemoProject/C	000_General/wtrolComputer/Ru	ntime/CC01 🛶 🔫 🔁 All	•						
Main navigation - CaeManager (engin@cube03)				1.000					
	DL system: [CC01			Instance:	CC01				
Status	Configuration		A 40	·		004			
Type / Name	CC01	·□□ Δ Δ Δ ♥			ontext:	PUA			
DemoProject (V0.1.48+)	CC tasks	Connections (CC)		Relevance:	0				
B 0000_General	Monitoring	O Device-Free Connection		I Connection	Importan	Decouverd	Recom	Contin file	неірти
O000_GlobaModules	System services	Compatibility Connection		I Connection	Operator	Password	I Driver	Coring, nie	
B ControlComputer	System monitoring	O PDA	📑 New (Conner	ction) Ctrl+N					
Runtime	APROL connections	O HPC	New sub-entr	у - *					
CC01 (default)	- 2 onfiguration	O Simatic S5/S7 O APROL MOTT Client Confi	X Cu	Ctri+X					
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st		O 3964R	& Conflicts	,					
-V0.0.4		O Dispatcher	B Delete	Del					
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P		Ctrl13 O RK512	🏟 PV Substituti						
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B-@ training (V0.1.0+)			Collapse Al	-					
Apro/	Config Configuration		📲 Expand Bran	ich					
	2 Import		📲 Collapse Bra	nch					
				No entry					

在导入的窗口选择需要导入的配置所在的路径以及文件名,点击 Open。

avorites	Name		Size	Type	Date	// Typ:	PDA connecti
EXCHANGE	A .		4.00	BDirector	9/3/2	// Date:	2023.11.03 1
	DemoF	remdankopplung.imp	657	BFile	10/30	// System: engin@c // Release: APROL F	engin@cube03
	DemoP	roject Ctrl12 PDA 20231103 1107.imp	1 1.44	BFile	11/3/		APROL R 4.2-
	export	libParts IEC61131 3 1.imp	108.02	BFile	4/26/	Context:	OT\ED/GW\gwC
	export	libParts IEC61131_3_20230426_131707.imp	108.02	BFile	4/26/	// Attentio	n:
	export	libParts_PAL_20230725_Energy.imp	11.74 N	1BFile	7/25/	<pre>// The 'tb_structu </pre>	structure' att
	export	libParts_PB_Bas_20230426_151317.imp	63.96	BFile	4/26/		
	export	libParts_PB_Bas_radiobox.imp	56.18	BFile	4/27/	\IMPORT\gwC	C\InaPda/PDA1
	evnort	libParts Puthon 20230426 161131 imn	22 73	RFile	4/26/	tb_struc	ture = "R 4.0-
	File name:	["DemoProject_Ctrl12PDA_20231103_110)7.imp"				
	Filter:	*.imp			-	File Ty PROL	import file
	J					4	
20100			-			0000	Cancal

接下来在下面的导入弹窗,先点击 Connection name,然后点击 Import 导入。

Connection import

Choose an appropriate structure element (source node) for the target node and press the [Import] button in order to carry out a complete import.

Individual or several variables can also be imported to the desired target node via drag-and-drop.

Note:

An import without loss of data can only be performed with couplings of the same type. This means that the type of the source coupling from which you exported must be the same as the type of the target coupling. If this condition is not met, structure information or variables are not imported since they cannot be uniquely assigned.



导入后就变成下图的状态,接下来去选择相应的 Driver ,一般选择 ANSL ,然后再对导入的变量分别去 定义 APROL 里面对应的通讯变量和类型,把这些红色的三角叹号消除,之后就可以在 CFC 中来调用这 些 Connection 变量了。

APROL system: CC01		Instance: CC01					
Status Configuration CC01 Basic data		Context	: PDA				
CC tasks	Connections (CC)	- Kelevance.	Important		Pacammo	unded	Holoful
Management System services System monitoring System monitoring A APROL connections PKI configuration Commentation	Derics resconnection DuR Gateway Connection Compatibility Connection Compatibility Connection PDA (1) Derics of the connection of t	Connection PDA1	Operator	Password	r !-Onver	Config. file PDA.ctg	Config. mode All tasks
AprolConfig Configuration	Ctrl12 Ctrl13 O RK512						
🍞 Import	O S∨sDataTransfer	blo optro					