iFACE Designer

Codesys

Month 2021

Version 1.02

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CODESYS (controller development system) is a design and development environment for industrial automation control programs. It complies with the IEC 61131-3 standard, allowing traditional PLC users to directly use languages such as ladder diagrams and sequential function charts for seamless development.

1. CODESYS Settings

1.1 Launch CODESYS

Install and launch the CODESYS program (Version 3.5.14.30 used for this example). Select the Windows desktop icon [· double-click to launch CODESYS; or click [Start] → [All Programs] → [CODESYS] → [CODESYS] V3.5 SP14 Patch3] to launch CODESYS.



2. Start a new project.

To start a new project, click [File] at the upper-left corner of the window, then select [New Project...].



Select [Projects] in [Categories] ;

Select [Standard Project] in [Templates]

Enter the name and location for the project, then click [OK].

1 New Pro	oject			×
Categories	s Templates praries ojects Empty projec	t HMI project	Standard project	Standard project w
A project c	containing one device, one application, and a	n empty impleme	ntation for PLC_	PRG
Name	Untitled2			
Location	C: \Users \danie \Documents			~
			ОК	Cancel

 Select the languages in [Device] and [PLC_PRG]. CODESYS editing program provides 6 languages, which you can choose under the [PLC_PRG] dropdown menu. Ladder Logic Diagram (LD) is used for this example. Once confirmed, click [OK].

Standard I	Project		×					
	You are about to create a new standard project. This wizard will create the following objects within this project: - One programmable device as specified below - A program PLC_PRG in the language specified below - A cyclic task which calls PLC_PRG - A reference to the newest version of the Standard library currently installed.							
	Device	CODESYS Control Win V3 (3S - Smart Software Solutions GmbH)	\sim					
	PLC_PRG in	Ladder Logic Diagram (LD)	\sim					
		OK Cancel						

2. After entering the program's editing page, right-click [Application] to open

the pop-up menu, select [Add Object] → [Symbol Configuration...] to open

the symbol configuration function.

💿 Untitled2.project - CODESYS	5			
File Edit View Project	FBD/LD/IL Build	Online	Debug	Tools Window Help
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Devices	- ₽ X	H PLC	PRG X	
□] Untitled2	•	1	PROGRAM	PLC_PRG
Device (CODESYS Contr	ol Win V3)	2	VAR	
		3	END_VAR	
- C Applicatio	C.e		1	
	Сору		23	Alarm Configuration
🖻 🎆 Task Co 🕮	Paste		0	Application
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#	Refactoring		•	C Code Module
6	Properties		🕓	Cam table
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	Add Object		<u> </u>	CNC settings
	Add Folder		-	Data Sources Manager
	Edit Object		*	DUI
	Edit Object With		<u>1</u>	External File
¢,	Login		2	Global Variable List
	Delete application	from device	1	Global Variable List (tasklocal)
-				Image Pool
			~	Natwork Variable List (Passiver)
				Network Variable List (Neceiver)
			T	Persistent Variables
			æ	POU
			æ	POU for implicit checks
				Recipe Manager
			Ø	Redundancy Configuration
			-	Symbol Configuration
				Text List
			⊡ \$	Trace
			22	Trend Recording Manager
Sevices 🗋 POUs		<	3	Unit Conversion
Messages - Total 0 error(s), 0	warning(s), 0 message((s)	3	Visualization
			a	Visualization Manager

3. Use the default setting. Click [Add] to add [Symbol Configuration] to the

[Devices] list.



1.2 Create CODESYS Symbol

 Double-click [PLC_PRG(PRG)] under the [Devices] list OR click the [PLC_PRG] tab in the editing area to switch to PROGRAM PLC_PRG, click [Tabular View] on the right to enter the symbol edit Tabular View.

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File	Edit	View	Project	FBD/LD/IL	Build	Online	Debug	Tools	Window	Help					
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Device	5			•	φ×	🕖 🕂 PLC	_PRG 🗙	📲 Sy	mbol Configura	ation				-	ToolBox
B	Untitled	2			•	🍫 🗠 4	$\mathbb{F}[X]$			PF	ROGRAM PLC_PRO	3		1	General
.	Dev	ice (CODE	ESYS Control	Win V3)		^	Scope	Name	Address	Data type	Initialization	Comment	Attributes		
	-		lication												
			ibrary Manag	er										Ta	bular View
		11) F	PLC_PRG (PRO	5)											- > 1
			Symbol Config	uration											ARET

2. In symbol edit Tabular View, right-click to show the following pop-up menu.

X	Cut
Đ	Сору
Ē	Paste
\times	Delete
	Select All
	Refactoring •
	Refactoring Edit Declaration Header
	Refactoring Edit Declaration Header
*	Refactoring • Edit Declaration Header Insert Move Down

3. Click [Insert] to create a symbol. To create more than one symbol, repeat this

action and enter the symbol content one by one.

Ontitled2.project* - CODESYS File Edit View Project FBD/LD/LL Build Edit View ○ つ よ 臨 職 × 一時 公 6 デ (ク)	Online Debug Tools Window Help 않 ■ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	× ロ - × ▼ ▼ ≒ 栗 + 炎 =+ ⊵ == □
Devices - 4 ×	PLC_PRG X Symbol Configuration	
Untitled2	PROGRAM PLC_PRG	📑 General
Breve (Courses Configuration PLC_prg PLC_prg MainTask (IEC-Tasks) DEC_PRG	Scope Name Address Data type Initialization Comment Attributes	Eventor Receiver of the second
		t Ladder Elements
Contraction POUs	< T T ~ 100 %	> ToolBox V Notifications
Messages - Total 0 error(s), 0 warning(s), 0 message(
	Last build: 🧿 0 🕐 0 Precompile 🗸 🦓 Pre	Project user: (nobody) 🛛 🔇 🙆

4. Click the [Data type] column, then click [\square] on the side of the column \rightarrow

[Input Assistant...] to assign the data type of the symbol.

Untitled2.project* - CODESYS		
File Edit View Project FBD/LD/IL Build	Online Debug Tools Window Help	
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Devices 👻 👎 🗙	Symbol Configuration	•
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	Scope Name Address Data type Initialization	Comment Attributes
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Library Manager	Input Assistant	
PLC_PRG (PRG)	Array Wizard	
Symbol Configuration		
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😑 🍲 MainTask (IEC-Tasks)	· · · · · · · · · · · · · · · · · · ·	7

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Standard Types Structured Types	 Name LTIME LTIME_OF_D LTOD LWORD REAL SINT STRING 	
	◆ WORD ◆ WSTRING	

The following picture is a demonstration of creating Codesys symbols.

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File Edit View Project FBD/LD/IL Build	Online Debug	Tools Window	Help		
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Devices - 4 ×	PLC_PRG X				
S Untitled2	> • • X			PROGRAM F	PLC_PRG
Device (CODESYS Control Win V3)	Scope	Name	Address	Data type	Initialization
	1 🖉 VAR	start		BOOL	
	2 🔮 VAR	stop		BOOL	
	3 🔮 VAR	lamp		BOOL	FALSE
	4 🔷 VAR	t_sint8		SINT	125
Task Configuration	5 🔷 VAR	t_usint8		USINT	253
MainTack (IEC-Tacks)	6 🔷 VAR	t_int16		INT	32765
	7 🛷 VAR	t_uint16		UINT	65533
	8 🛷 VAR	t_dint32		DINT	2147483645
	9 🔷 VAR	t_udint32		UDINT	4294967293
	10 🔷 VAR	t_float		REAL	1.41421356237309504880168872420969807
	11 🔷 VAR	t_string		STRING	'Hello codesys'
	12 🔷 VAR	t_time32		TIME	
	13 🔷 VAR	t_tod32		TIME_OF_DAY	
	14 🔮 VAR	t_dt32		DT	
	15 🔮 VAR	t_double		LREAL	1.41421356237309504880168872420969807
	16 🔷 VAR	t_int64		LINT	9223372036854775805
	17 🔷 VAR	t_uint64		ULINT	18446744073709551613
	18 🔷 VAR	t_uint64word		LWORD	36

1.3 Exporting Codesys Symbol

1. Newly created or changed Codesys symbols need to regenerate codes.

Switch to [Symbol Configuration], and click [Build].

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File Edit View Project Build Online 1월 🗃 🛃 🚭 🗠 여 🐰 🖻 🛍 🗙 🗚 😘	Debug Tools Window Help 🍓 🚰 📕 🎕 🎕 🎕 🛗 🛅 - 🔂 🖽 Application [Device: PLC Logic] 🔹 💖 🕟 🔳 💐 💭 🕫 d
Devices	Symbol Configuration X PLC_PRG View Build Build Bettings Tools Changed symbol configuration will be transferred with the next download or online change
	Symbols Access Rights Maximal Attribute Type Members Comment

2. We need to export symbols created in PLC_PRG, therefore select [PLC_PRG].

The second secon	
File Edit View Project Build Online 管 🗃 🖬 🚭 너희 더 🕉 ங 🛍 🗙 🏘 🤤 4	Debug Tools Window Help 월 🌜 🎚 🧌 🦄 🦄 💼 ~ 🔓 Application [Device: PLC Logic] 🝷 🧐 👀 🕨 📲 🔧 [코 약물 스
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	Symbols Access Rights Maximal Attribute Type Members Comment Image: Constants Im

3. Select menu [Build] \rightarrow [Generate Code] to regenerate symbol configuration.

Untitled2.project* - CODESYS								
File Edit View Project	Build Online	Debug Tools Wind	dow Help					
1월 📽 🖬 🚭 🗠 여 🕹 🖻	Build Rebuild	F11	🖻 🛅 - 🗗 🛗 4	application [Device: PLC	Logic] •	o ; o; ,	■ % [] cī
Devices	Generate Co	de	tion X HE PLC PRG					
Generate R Clean Device (CODESYS Control Device (CODESYS Control Clean all Clean all		ntime System Files	Settings - Tools -					
		The change of symbol control	variables which are not re wetion will be transferred w	ferenced by t	the IEC code.	Reading a	nd writing to t	hem may not have th
Hipfary Manage Higher PLC_PRG (PRG PLC_PRG (PRG Symbol Configu- Symbol Configu- Task Configura Symbol Conf	er) uration tition IEC-Tasks) RG	Symbols	Access Rights	Maximal	Attribute	Туре	Members	Comment

4. Symbol Configuration generation completed. Symbol configuration is saved

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🎦 🚔 🔲 📇 🗠 🖂 🧯 📾 🗙 🛤 🎎 🌢	🜢 🌿 🛯 🗮 🍿 🎢 🕼 🎬 - 😚 🏙 🛛 Application (Device: PLC Logic) 👻 🥨 🕟 👘 🐇 🗐 🧐	5 10 8 10 1 5 17	2
Devices 8 M		TeelDerr	
Devices + 4 X	Symbol Configuration X III PLC_PRG	IOOIBOX	▼ # X
	🛛 View 🔹 🖽 Build 🛛 🖓 Settings 👻 Tools 👻		
Device (CODESYS Control Win V3)	There are 1 configured variables which are not referenced by the IEC code. Reading and writing to them may not have the		
	Changed symbol configuration will be transferred with the next download or online change		
Library Manager			
	Symbols Access Rights Maximal Attribute Type Members Comment		
Symbol Configuration	Constants		
Task Configuration			
🖃 🍲 MainTask (IEC-Tasks)			
PLC_PRG			
Messages - Total 0 error(s), 0 warning(s), 15 message(s)			- + ×
Build	 O error(s) O warning(s) 15 message(s) X X 		
Description	Project	Object	Position ^
Generated XML file: C:\Users\danie\Documents\Untitled2	Device.Application.xml Untitled2	Symbol Configuratio	Symbol Configuration
Generate code			
Generate global initializations			
Generate code initialization			
Generate relocations			
O Size of generated code: 215078 bytes			
Size of global data: 47215 bytes	symbol configuration (XML) saved in	this path	
Total allocated memory size for code and data: 254916 b	tes by moor comigation (, (, (,),)) bar ca in	and path	
Memory area 0 contains Data, Input, Output, Memory area	d Nonsafe data, size: 1048576 bytes, highest used address: 39836, largest contiguous memory gap: 100		
memory area 3 contains Code: size: 1048576 bytes, high Build annulate - 0 areas 0 warnings - Deady for dample	est used addres: 215080, largest contiguous memory gap: 833496 bytes (79 %)		
build complete 0 errors, 0 warnings : Ready for downlo			~
Messages - Total 0 error(s), 0 warning(s), 15 message	(s)		
	Last huid: 0 0 Precomple /	Project user: (nobo	du) 🙆 🐼
		Project user: (nobol	uy) 🔍 🛄 📖

in the same path as the Codesys project.

5. Content of the Symbol Configuration (.xml file) can be viewed through the

text editor software.

xml version="1.0" encoding="utf-8"?
<symbolconfiguration <pre="">xmlns="http://www.3s-software.com/schemas/Symbolconfiguration.xsd"></symbolconfiguration>
<header></header>
<version>3.5.14.0</version>
<symbolconfigobject compiler="</td" libversion="3.5.16.0" runtimeid="3.5.16.40" version="3.5.16.30"></symbolconfigobject>
<projectinfo appname="Application" devicename="Device" name="Untitled2"></projectinfo>
<typelist></typelist>
<typesimple iecname="BOOL" name="T_BOOL" size="1" swapsize="0" typeclass="Bool"></typesimple>
<typesimple iecname="INT" name="T_INT" size="2" swapsize="2" typeclass="Int"></typesimple>
<typesimple iecname="SINT" name="T_SINT" size="1" swapsize="1" typeclass="SInt"></typesimple>
<typesimple iecname="USINT" name="T_USINT" size="1" swapsize="1" typeclass="USInt"></typesimple>
<nodelist></nodelist>
<node name="Application"></node>
<node name="PLC_PRG"></node>
<node access="ReadWrite" name="lamp" type="T_BOOL"></node>
<node access="ReadWrite" name="start" type="T_BOOL"></node>
<node access="ReadWrite" name="stop" type="T_BOOL"></node>
<node access="ReadWrite" name="t_int16" type="T_INT"></node>
<node access="ReadWrite" name="t_sint8" type="T_SINT"></node>
<node access="ReadWrite" name="t_usint8" type="T_USINT"></node>

6. You may now start coding CODESYS program or use CODESYS supported

PLC	_prg 🗙 🎴	Symbol configur	ation				-
🍫 🗈 🖣	× × -				PROGRAM PLC_PRG		b
^	Scope	Name	Address	Data type	Initialization	^	
1	VAR	start		BOOL			
2	VAR	stop		BOOL			
3	VAR	lamp		BOOL	FALSE		
4	< VAR	t_sint8		SINT	125		
< 5	A VAD	t usint0		LICTAT	757	>	
1	1						
-	st	art s	stop /			lamp ([])	
2		51				lamp1	

PLC to connect HMI.

7. Due to CODESYS' extensive functionalities, many advanced functions cannot

be described in detail in this manual. Please refer to CODESYS related

websites and instructions.

2.1 Launch the iFACE Designer

 Launch the iFACE Designer, please refer to the iFace user manual to set the HMI parameters. CODESYS driver only supports P series HMI, P07-N is selected in this example.

	нмі		
Communicator Port S Add Link Add Node	Delete Link Delete Node	Link- Enabled Display Name: Link 1 Port: ETHERNE: Link ID: LC1 HMI Station ID: 0 Link Type: 1-to-1 (Direct Link) Data Refresh Rate: 30 mse Select Controller Vendor Vendor Model ANIMATICS Agilent Allen Bradley Awiselink BACnet Barcode CODESYS CPC Current Driver Version: 1.0.0 * For P Series HMI only Ethernet Setting Use Multiple IP Address IP Address: 192.168.90.66 Data	
			port
		OK	

 Open the Tag Setting window, click [Import], getting ready to import Codesys symbols.

Note: Importing Codesys symbols will not overwrite existing tags in iFACE Designer. However, if Codesys symbols already exist, importing iFACE Designer regular tags will overwrite Codesys symbols. They will need to be imported again if this happens.

🏈 Tag Setting	- 🗆 ×
Tag Operation Options Add Delete Add Delete Add Cache Setting	tch
Tags System Information Tags System Control Tags Recipe Tags	-
Tag Name Access Connector Type Address Comme	el Connector: Link 1
	Data Type Station Number BYTE:
	Set As Default
	Widgets containing the selected Tag.
	Category Screen Control Use lag
4	
	OK Cancel

 Open the path where Codesys symbols are located, choose [Codesys V3 Import Format] as the import format. Click [Open] after selecting the file to begin importing Codesys symbols.

→ 👻 ↑ 🗎 > This P	C > Acer (C	:) > Users > danie > Documents	~	ර 🔎 Search [Documents
ganize • New folder					
Dropbox	^	Name	Date modified	Туре	Size
OneDrive		Untitled2.Device.Application.xml	5/24/2021 1:38 PM	XML Document	2 KB
Olieblive		ax_tiles.xmi	11/15/2019 10:43 AM	XML Document	1 KB
This PC		🍠 Apple iPad - 捷徑	5/14/2021 9:55 AM	Shortcut	1 KB
🧊 3D Objects		📕 自訂 Office 範本	4/15/2019 1:52 PM	File folder	
Desktop		📕 封包測試	7/22/2019 11:57 AM	File folder	
Documents		📜 WeChat Files	4/29/2021 9:56 AM	File folder	
Downloads		📜 Snagit	1/2/2019 6:29 PM	File folder	
Music		📙 PM Designer	5/29/2020 11:16 AM	File folder	
		📕 Outlook 檔案	11/20/2020 6:47 PM	File folder	
Pictures		Multiboot Cache	6/20/2019 4:49 PM	File folder	
🛃 Videos		📕 log	12/21/2018 5:40 PM	File folder	
🐛 Acer (C:)		KEYENCE	1/20/2020 11:07 AM	File folder	
🧼 Data (D:)		📙 iX Developer 2 項目	3/4/2020 11:24 AM	File folder	
•	~	FFOutput	10/24/2019 10·14 AM	File folder	
File name:	Untitled2.De	evice.Application.xml		CODESYS V3	Import Format (*.»

 You can import all Codesys symbols OR choose individual Codesys symbols to be imported.

[Remove the unimported tags from Tag settings]: tick this box will import only the selected Codesys symbols, remaining Codesys symbols will be removed in the tag settings window.



After completing the settings, click [OK], and wait until import is finished.

<i>\</i>	Fag Setting						- 🗆 X
	Tag Operation Options Filer Import/Export Add Delete Add Many Filer Import/Export Cache Setting Cache Setting Exact match Import/Export						
Т	ags System Information Tags Syste	m Control Tags	Recipe Tags		1		
	Tag Name	Access	Connector	Туре	Address		Connector: Link 1 .
1	Application_PLC_PRG_PLC_HR1	Read/Write	Link 1	INT(16)	INT:Application.PLC_PRG.PLC_HR1		
2	Application_PLC_PRG_PLC_HR2	Read/Write	Link 1	INT(16)	INT:Application.PLC_PRG.PLC_HR2		Data Type Station Number
3	Application_PLC_PRG_PLC_HR3	Read/Write	Link 1	INT(16)	INT:Application.PLC_PRG.PLC_HR3		
4	Application_PLC_PRG_PLC_HR4	Read/Write	Link 1	INT(16)	INT:Application.PLC_PRG.PLC_HR4		BYIE: *
5	Application_PLC_PRG_S1	Read/Write	Link 1	Bit	BOOL:Application.PLC_PRG.S1		Matched Format:
6	Application_PLC_PRG_int8_test	Read/Write	Link 1	INT(8)	SINT:Application.PLC_PRG.int8_test		BYTE: Unsigned 8-bit integer value
7	Application_PLC_PRG_lamp	Read/Write	Link 1	Bit	BOOL:Application.PLC_PRG.lamp		
8	Application_PLC_PRG_lamp1	Read/Write	Link 1	Bit	BOOL:Application.PLC_PRG.lamp1		
9	Application_PLC_PRG_start	Read/Write	Link 1	Bit	BOOL:Application.PLC_PRG.start		
10	Application_PLC_PRG_stop	Read/Write	Link 1	Bit	BOOL:Application.PLC_PRG.stop		
11	Application_PLC_PRG_t_dint32	Read/Write	Link 1	INT(32)	DINT:Application.PLC_PRG.t_dint32		
12	Application_PLC_PRG_t_dint32_1	Read/Write	Link 1	INT(32)	DINT:Application.PLC_PRG.t_dint32_1		Set As Default
13	Application_PLC_PRG_t_dint32_2	Read/Write	Link 1	INT(32)	DINT:Application.PLC_PRG.t_dint32_2		Widgets containing the selected Tag.
14	Application_PLC_PRG_t_double	Read/Write	Link 1	DOUBLE	LREAL:Application.PLC_PRG.t_double		Category Screen Control Use Tag
15	Application_PLC_PRG_t_double_1	Read/Write	Link 1	DOUBLE	LREAL:Application.PLC_PRG.t_double_1	•	
4		Ш					
							OK Cancel

5. Begin planning iFACE Designer screen and download it to HMI. For

operations such as tag import and screen planning, please refer to other

chapters of the iFACE Designer user manual.

	•			iFACE Desig	gner 2.0.01 /codesy			– 🗆 X
Common	Setting Project Transmissi							Options-
्रेट Cut ि Copy	Add Screen - Start-up Screen:	Screen 1 Cr Default/Screer *	olor Background Quick style .	Background Border • • • Style •	Layer Alignment Group	Communication Command setting	al G1 200 ms	4 II +
ClipBoard				Drawing	Placement	Periodic Interv	al Draw C	Dbject
Screen Manager & × V Default	Screen						_	Widgets Library • ×
Screen			SINT8 789 USINT8 789 INT 56789 UINT 56789 DINT 56789 STRING 56789 TIME 56789 DIN 56789 DINT 56789 DINT 56789 DINT 56789 DINT 56789 DIN 56789	REAL 56789 LREAL 56789 LINT 56789 ULINT 56789	Start St	op lamp		Button PB-Bik PB-Bik PB-Whit PB-Thm PB-Thm PB-Thm PB-Thm PB-1 PB-2 PB-3 Indicator Antion Button Antion Button The Wagets Labeau Category
Compile Result	_	_		_	_	_		8×
Errors Type Group Ite	m Description Jump To							
	0 🖸 🗠 🔿	Current La	anguage <mark>English *</mark> Pe	riodic interval	Control	tatus 🥰 🛛 😥	Zoom —	1:1 💢 🏢 • × <u>o :</u> vio :

6. Right-click [1997], the [CODESYS Control Win SysTray] icon, at the bottom right corner on your desktop, then click [Start PLC].



7. Return to the CODESYS program, set the computer as the Codesys device.

Double-click [Device(CODESYS Control Win V3 x64)] to enter

[Communication Settings].

For now, CODESYS has not found PLC or a computer that can be assigned as

a Codesys device, then first to click [Scan network…].

ModbusTCP_Slave_VIGOR.project - COI	DESYS		
File Edit View Project Build	Online Debug Tools Wind	ndow Help	
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Devices 👻 🕂 🗙	Symbol configuration	Device x PLC_PRG	
ModifiusTCP, Slave, VIGOR Device (CODESYS Control Win V3)	Communication Settings	Scan network Gateway • Device •	
I - D - O - O - O - O - O - O - O - O - O	Applications		
Library Manager	Backup and Restore		
Symbol configuration	Files		
=-∲ MainTask (IEC-Tasl ∰ PLC_PRG	Log	Esteway-1 [0042] (active)	
Ethernet (Ethernet) G- Modbus_TCP_Master (Modt	PLC settings	IP-Address: localhost	
Modbus_TCP_Slave (M	Modbus_TCP_Slave (M PLC shell Port 1217		
	Users and Groups		
	Access Rights		

8. After the Select Device window pops up, click [Scan network]. The program

will start searching for CODESYS devices in the network.

Communication Settings	Scan network Gateway + Device +		
Applications			
Backup and Restore	Select Device		
Files	Select the network path to the controller:	Device Name:	Scan network
Log		Gateway-1	Wink
PLC settings		Driver: TCP/IP	
PLC shell		IP-Address:	
Users and Groups		localhost	
Access Rights		Port: 1217	
Symbol Rights			
Task deployment			
Status			
Information			
		0	Consul

9. The search is successful. Please note that [CODESYS Control Win SysTray] in

step 6 needs to be activated or the Codesys device will not be found.

Gateway-1	Device Name:	Scan network
DANIEL-WIN10 [0000.905A]	Gateway-1	Scarriction
		Wink
	Driver:	
	TCP/IP	
	IP-Address:	
	localhost	
	Bart	
	1217	

10. Return to [Communication Settings], you can now select the computer

found in the search as the Codesys device. The Project will then connect to

Scan network Gateway 👻	Device 🗸	
	Gateway	
	Gateway-1 ~	DANIEL-WIN10 (active) ~
	Port: 1217	Device Address: 0000.905A
		Target ID: 0000 0004
		Target Type: 4096
		Target Vendor: 3S - Smart Software Solutions GmbH
		Target Version: 3.5.14.30

this device.

11. Run [Build] to compile CODESYS program.

Build		Online	Debug	Tools	Wind					
***	Build F11									
	Rebuild									
	Generate code									
	Generate runtime system files Clean Clean all									

12. Run [Login] to load CODESYS program.



13. Run [Start] or click [🕨] in the toolbar to execute CODESYS program.

	Deb	oug Tools	Window	Help						
	•	Start			F5					
		Stop			Shift+F8					
		Single Cycle			Ctrl+F5					
	ŧŋ,	New Breakpoi	int							
🎦 🛩 🔚 🛃 🗠 여 👗 🖿 💼	\times A	े 🍰 🐴 🖓 🔳 🔳	위 계 🆄 🎼	1 🔤 🗂	🖽 야 💖	•	- %	Ç⊒ ⊊⊒ ª	a *1 \$	\$ A = V

14. Now the mode sign at the bottom is switched to [RUN].



15. All settings are ready. Monitor the HMI, PC, and PLC and you should see the

displayed data all correct and consistent.

The connection test is now verified.



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-							NOVAKON	
0	SINT8	11	REAL	1414	Start	Stop	lamp	
6	INT	33	LINT	77		\bigcirc	\bigcirc	
	UINT	44 55	ULINT	88				
		66						
II X	TIME	0						
4	TOD DT	0						