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# How to Use Win-GRAF SoftLogic and eLogger HMI in the Win-GRAF PAC?

"eLogger" is an HMI development tool developed by ICP DAS. It features an easy-to-use graphical user interface (GUI), not only supports the Local HMI (<u>Section 2.5</u>) but also the Web HMI (<u>Section 2.9</u>). Both eLogger and Win-GRAF project can run in the same PAC. Users can conduct remote I/O control through the web browser on a smart phone or tablet.

#### [Contents]



Visit the **Win-GRAF FAQ** web page to download demo programs (demo\_faq018.zip): <u>http://www.icpdas.com/root/support/faq/win-graf.php</u>



Visit the web page to download the user manual and software:

Win-GRAF web page:
 <a href="http://www.icpdas.com/root/product/solutions/softplc">http://www.icpdas.com/root/product/solutions/softplc</a> based on pac/win-graf/win-graf.html



eLogger web page:
 <a href="http://www.icpdas.com/root/product/solutions/software/scada\_hmi/elogger/elogger.html">http://www.icpdas.com/root/product/solutions/software/scada\_hmi/elogger/elogger.html</a>



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The following will show you how to design the Win-GRAF project and the eLogger project:

In this example, users need to use a WP-8x28-CE7 PAC come with a I-87063W module on slot 0 as well as Win-GRAF and eLogger HMI software. Refer to the following content to upload both Win-GRAF and eLogger projects to the PAC. In addition, it requires to install "eLogger Runtime" on PAC.

Win-GRAF Project	eLogger Project	Description	
eL01.zip	eL_01.wez	<ul> <li>Designing the Local HMI and Web HMI Pa</li> <li>Win-GRAF:         <ul> <li>Restore/Create a Win-GRAF Project</li> <li>Declare Win-GRAF Variables</li> <li>Set Win-GRAF Variables for accessing</li> <li>Edit Win-GRAF Programs</li> <li>Compile/Download Win-GRAF Project</li> </ul> </li> <li>eLogger:         <ul> <li>Install eLogger Software</li> <li>Copy/Create an eLogger Project</li> <li>Design the Local HMI</li> <li>Save/Upload/Test the Local HMI</li> <li>Test the Web HMI</li> <li>Advanced eLogger Functions</li> </ul> </li> </ul>	( <u>P3 - 4</u> ) ( <u>P5 - 7</u> ) ( <u>P8 - 11</u> ) ( <u>P12 - 15</u> )

Also, there are two projects are provided for this FAQ (i.e., eL02 and eL03). Refer to <u>Section 3.3 and 3.4</u> of the <u>ISaGRAF FAQ</u> – 115 for more details.

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## Chapter 1. Writing the Win-GRAF Demo Program

If users are familiar with Win-GRAF programming, simply restore the "eL01.zip" to Win-GRAF on PC, and download it to the Win-GRAF PAC. Then, go to <u>Chapter 2</u> to create eLogger HMI pages.

## Restore the Win-GRAF Project:

	M.	Vin-GRAF							
(	File		ols Window He	elp					
		<u>N</u> ew Project						65'	<u>الم </u>
		Open Proje					•		
		Add New Pr	roiect						
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			,,						om Zip
		Print Setup	₩ 開啟舊檔						
		<u>1</u> eL01.w5l	搜尋位置(I):	demo_faq018	]_all	<u>}</u>	- G 🌶	<b>ت</b> ال	file
			(Com)	eL01.zip		J			
			最近的位置	eL02.zip					
			<b>桌面</b>						
			<mark>集體</mark> 櫃						
			<b>《</b> 】 電腦						
			網路	檔案名稱(N): 檔案類型(T):	eL01.zij Zip file			• ( • (	開啟舊檔(O) 取消 說明(H)
			Destination folder :	C:\Win-GRAF\Pi	ojects		- Brow	se	
			Name:	eL01	·				
		ŕ							
It us	ers a	ire not far	niliar with W	in-GRAF, re	ter to	Win-GRAF	FAQ:		
4	FAC	<b>2-001</b> – H	low to install	and run Wi	n-GRA	AF Workbe	nch.		
	<u>http</u>	<u>)://ftp.icp</u>	das.com/pub	/cd/win-gra	af-pac	-cd/napdo	s/faq/english	<mark>/faq-</mark>	<u>001.pdf</u>
4	FAC	<b>2-003</b> – H	low to backu	p (5:13) or r	estore	e (5:40) a W	/in-GRAF prc	oject.	
	<u>http</u>	<u>://ftp.icp</u>	das.com/pub	/cd/win-gra	af-pac	-cd/napdo	s/faq/english	<u>/faq-</u>	<u>003.pdf</u>
	Vide	eo : <u>https:</u>	//www.youtu	ibe.com/wa	<u>tch?tiı</u>	<u>me_continu</u>	ie=3&v=UA	CZxZI	N1HSM

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1.1 Creating					1		Next
1.1. Creating		-	v project pame	d ac "al (	)1″		<u>Next</u>
To launch Win-G	KAF and then t	Lieale a liev	v project name		)1.		
Win-GRAF							
	Tools Window H oject List						
	oject List	Project wizard					
	W Project	Project					
		ML Import Library Automation scrip					
		Automation scrip	סנ				
		·					<u>00</u> <u>00</u> <u>00</u> <u>00</u> <u>00</u>
		ireate a new projec	CL.				<u>^</u>
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	Ν	lame:	eL01				
	C	Comment:	eLogger01				
					Next	Cancel	Help
	Settings					×	
	Programs					1	
	Language:	LD: Ladder Diagr	am 🔪		▼		
	Compiling optio	ns				Ĩ.	
	0	<ul><li>Debug</li><li>Release</li></ul>					
	Communication						
	Settings:	192.168.1.31:502					
	Protocol:	T5 Runtime					
	Other		PAC IP:TCP	port			
		values with the Recij	pe editor				
			<上一步(B) 】 【下一步	₽(N) >	完成 📐 🕢 取消		
		ICP DAS	Co., Ltd. Techn	ical Docu	ument		

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## 1.2. Declaring Win-GRAF Variables

<u>Next</u>

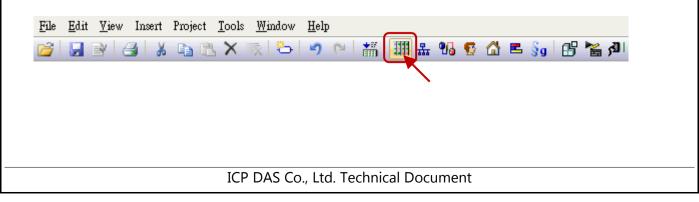
The following Win-GRAF variables will be used for this demo program.

Name	Туре	Attrib.	Address	Description
Long_1	DINT		1	Used to communicate with all agger tag
PAC_ss	DINT		3	Used to communicate with eLogger tag DINT : 32-bit Long
Word_4	INT	-	5	INT : 16-bit Integer
Float_5	REAL		6	REAL : 32-bit Float
OUT_101		Outout	101	I/O variables which used to link to DO0 and
OUT_102	DOOL	Output	102	DO1 of I-87063W on slot0
M1	BOOL			Used for the ST program
DIR				Set the Init. Value of DIR as TRUE.
PAC_Y				
PAC_M				
PAC_D	DINIT	-	-	Line of females, TIME, CET from sting, black
PAC_WD	DINT			Used for the TIME_GET function block
PAC_hh				
PAC_mm				

## Note:

- 1. Configuring the **I/O Boards** function before using I/O variables, e.g., OUT\_101 and OUT\_102. (Reference: <u>Section 1.2.2</u> Declaring I/O Variables)
- 2. Configuring the corresponding Modbus address to allow the HMI/SCADA to access Win-GRAF variable data. (Reference: <u>Section 1.3</u> Make Win-GRAF Variables Accessible to the HMI/SCADA)

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Configure variable	Configure variables in the <b>Variables</b> window and click the <b>Save</b> button to save the settings. Reference: Section 2.3.1 and 2.3.2 of <u>the Win-GRAF Getting Started Manual</u> .) Click the "Insert Variable" button to add a variable.													
		Tool	Vindow Hel	•										
	ъ в X		9 🗠 🕇	5 III &	<b>%</b> 😨	🙆 🖪 💡	ß	الار 🕍		_				
Workspac		ariables		Turne	Die	6 M-3-	L Cult	luit color	Liller Creve	Tee	Description			
eLO1	L L L L L L L L L L L L L L L L L L L	Name	lobal variables	Туре	Dim	. Attrib.	Syb.	Init value	User Group	Tag	Description			
Click the "Save" Recipe Signals Soft Scope Spy String Tables Fieldbus Config Profiles I/Os Click the "Save"	figurations guration	Long_ Word_ Float_ DIR PAC_N PAC_N PAC_C PAC_Y PAC_F PAC_r PAC_s	1 4 5 Y M D WD nh mm	DINT INT REAL BOOL DINT DINT DINT DINT DINT DINT DINT DINT	Not	e that p	ress t	TRUE	er" key aft	er typ	oing text.			
La Types			6QX0.1 - i_870	_		0.1.1		C	onfigure "	I/O B	oards" first			
(All Projects)			.1.0=OUT_10 .1.1=OUT_10			Output Output		to	generate	e I/O v	variables.			
		%QX0		BOOL		Output								
		%QX0		BOOL		Output								
		⊞ <b>∐</b> L												
		3			111						4			
In this example, u " <b>i_87063</b> " on <b>No.</b>	. <b>0</b> in the	I-8706	3W DIO m							erefo	re, adding			
Follow these step 1. Click the <b>Ope</b>		utton c	on the too	lbar for a	addin	g the I/C	) link							



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2. Double-click <b>Close</b> butto	063 Con "Slot <b>0</b> " and n to exit the wind OCC AS - XP-WP-VF I 870 i 870	double-cl dow.	lick on " <b>i_8</b> 7 oards <u>7063</u> <u>i_87063_D1</u> <u>i_87063_D0</u> <u>ch8 (* 8-ch AC</u> (* 8-ch, A/O, 0~ <b>08ch</b> (* 8-ch, A h D/I *)	7063" to cho 7063" to cho 0, V, mA with oper 10V *) 70, 0~20V *)	bose this I/O b	oard, and	then click the
Conta Nov.0	i5W Digital Outputs, 4-Ch Digi ct Type : Form C, normal 15,2013 AS , Taiwan	*	Help				
No		oard If ther			to set it as a		

After completing this process, all I/O variables will be displayed in the Variables window, <u>as illustrated on</u> <u>the previous page</u>. Users can double-click on the **Name** field to specify the variable name.

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1.3. Make W	in-GRAF Vari	ables Ac	cessible to th	ne HMI/	SCADA		Next							
Configure Win-G	RAF PAC as Mo	dbus TCP	Slave device an	d make V	Win-GRAF vari	ables public.								
(Reference: Chapt	onfigure Win-GRAF PAC as Modbus TCP Slave device and make Win-GRAF variables public. Reference: Chapter 3 of <u>the Win-GRAF Getting Started Manual</u> .)													
Follow these step	ollow these steps:													
		ndow.												
-	<ol> <li>Open the "I/O Drivers" Window.</li> <li>Click the Open Fieldbus Configuration button on the toolbar.</li> </ol>													
2 L	🛃 🐰 🗅 🛍	X 🔨 🕴	5   49 (P   🏭	III &	14 😨 🟠 🖻	§g 🗄 🚰	الآر							
2. Enable the V	Vin-GRAF PAC	as the Mi	odbus TCP Slav	ve device	9									
			on the left, sele			d click <b>OK</b> .								
IO Drivers *														
	ODBUS Slave			Name	Value									
	Ad	d Configurat	tion				<							
		Choose a conf												
		⊡ · (All)				ОК								
		MODBU	S			Cancel								
<u>.</u>			BUS Master											
			BUS Slave											
<u>∎</u> ∔ Slave nu	mber Server II	)	•											
•														
3. Set the Slave														
Click the <b>Inse</b>	ert Master/Por	<b>t</b> button o	n the left, set th	ne <b>Slave</b>	number (e.g.,	"1"), and clic	ck <b>OK</b> .							
旧	( DAI	ODBUS Slave	Drotocol											
	IVI	JDBUS Slav	e Protocol		×									
		Slave number	. 1.	C	ж									
				Car	ncel									
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#### 4. Add Modbus Slave requests for eLogger HMI to read/write data.

E

Click the **Insert Slave/Data Block** button on the left to open the **MODBUS Slave Request** window. Next, choose **Holding Registers** (i.e., AO), set **Base address** as "1", and set **Nb items** as "2000".

MODBUS Slave Request	
Request Description: Value	OK Cancel
Data read by the master Input Bits Input Registers	
Data read or forced by the master Coil Bits Holding Registers	For the Modbus Master to read/write AO data
Data block Base address: 1 Nb items: 2000	Recommend to set <b>Base address</b> as " <b>1</b> " and set the value of <b>Nb items</b> is greater than " <b>200</b> ".

As mentioned above, add one another **Data Block (Coil Bits, DO)** and configure it as illustrated in the figure below.

MODBUS Slave Request Request Description: I-87063W DO	OK Cancel
Data read by the master <ul> <li>Input Bits</li> <li>Input Registers</li> </ul>	
Data read or forced by the master Coil Bits Holding Registers Data block	For the Modbus Master to read/write DO data
Base address: 1 Nb items: 2000	<b>Nb items</b> refers to how much variable data can be provided by one "data block"
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### **5.** Set the Modbus address for public Win-GRAF variables.

#### For AO Variables:

Click the Data Block - Holding Registers, drag variables to the **Symbol** field, and configure **Offset** and **Storage** fields.

### Note:

- ✓ The **Offset** value starts at "**0**" and the Modbus address of variable is equal to this value **plus 1**.
- ✓ When using a 32-bit (or above) variable, e.g., DINT or REAL, two Modbus addresses are required. Moreover, the **Storage** field must set to "**DWORD (Low – High)**".

Name	Туре	Address	Description
Long_1	DINT	1	Used to communicate with eLogger tag
PAC_ss	DINT	3	DINT : 32-bit Long
Word_4	INT	5	INT : 16-bit Integer
Float_5	REAL	6	REAL : 32-bit Float

Double-click data fields to set "Offset" and "Storage", and press the Enter key.

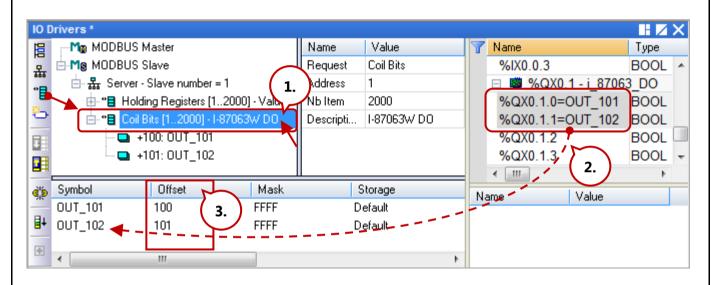
IO D	rivers *											Z X
E	MODBUS M	laster		$\frown$	Name	•	Value		🝸 Name 👘		Туре	
뮮	🖻 M8 MODBUS SI	lave		( 1.	Requ	est	Holding Registers		<u> </u>	Global va	riables	*
*	🗄 🚠 Server - 9	Slave number	= 1		Addre	SS	1		Long_	1	DINT	
	🗄 📲 Holdin	ng Registers [1	2000]	-Value	Nb Ite	m	2000		Word	4	INT	
8		1: Long_1			Desci	iption	Value		Float_	5	REAL	J
	💶 +4:	: Word_4							M1	1	BOOL	
	- 🗖 +5.	6: Float_5							DIR	1	BOOL	
		3: PAC_ss							PAC_		DINT	
ŝ.	🗄 😁 🔁 Coil Bi	its [12000] - I	-87063\	√D0					PAC_I	М	DINT	-
∎+	Symbol	Offset 🛌		Mask		Stora	ge	5-	•			Þ
	Long_1	0	3.	FFFF		DWOP	RD (Low - High)		Name		/alue	
•	Word_4	4		FFFF		Defau						
	Float_5	5		FFFF	_	DWOP	RD (Low - High)					
	PAC_ss	2		FFFF		DWOP	RD (Low - High)					
	•							F I	•			
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### For DO Variables:

Next, click the Data Block - **Coil Bits** and follow the same way to set "**OUT\_101**" and "**OUT\_102**" variables.

Name	Туре	Address	Description
OUT_101	ROOL	BOOL 101	Used to link to DO0 and DO1 of I-87063W
OUT_102	BOOL	102	on slot0



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## 1.4. Writing an LD Program (LD1)

This Win-GRAF project includes an LD program (LD1) and an ST program (ST1).

Follow these steps:

#### 1. Add a LD program.

**Right-click** on **Programs** and click **Insert New Program**. Next, enter "LD1" as program name, select the **LD - Ladder Diagram** language and the **Main program** style, and then click **OK**.

Next

Workspace	No selection!	
eL01		
🛱 🛅 Programs	Rename	New program
■ LD1 ■ ST1	Insert New Folder	Properties Advanced Description
Recipe	Insert New Program	Program
Soft Scope	Shortcuts 62	Name: LD1
📴 Spy 📴 String Table	Ins <u>e</u> rt New Item	Description:
🔓 Fieldbus Co 🗙	<u>D</u> elete	Programming language
		SFC - Sequential Function Chart - Grid editor SFC - Sequential Function Chart - Free form editor FED - Function Block Diagram LD - Ladder Diagram ST - Structured Text IL - Instruction List PACKML - PACKML State Machine
		Execution style
		Main program
		<ul> <li>Sub-program</li> <li>UDFB (User Defined Function Block)</li> </ul>
		Child SFC program
		Child of:
		確定  取消  説明
	L.	

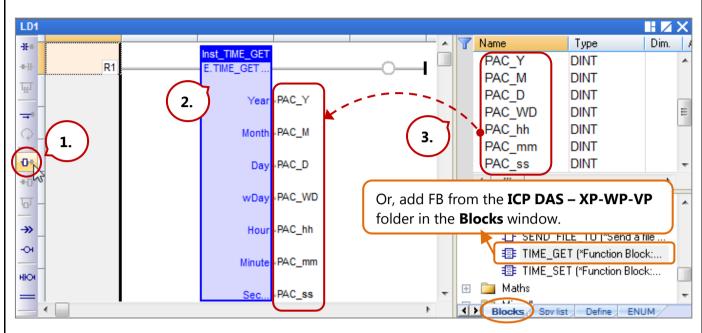
### 2. Open the "LD1" window to edit program.

Double-click on **LD1** and add the **TIME\_GET** function block to get the system date and time.



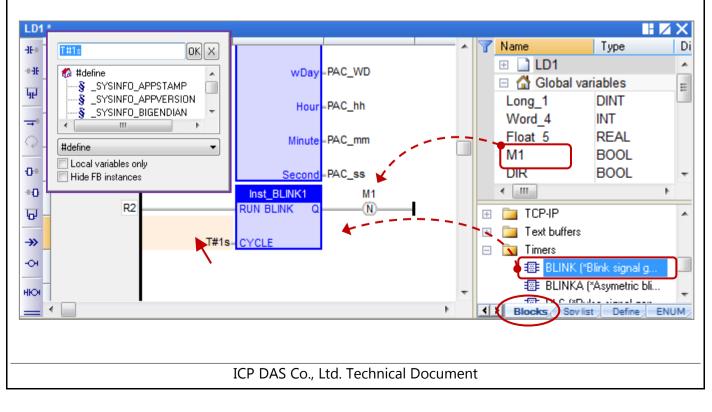
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Click the **Insert <u>FB</u> before** button on the left side to add a function block. Double-click on it to choose the **TIME\_GET**, and then assign variables for all parameters of FB.



**Note:** All parameters of function block must be assigned a variable even if only the "PAC\_ss" variable is used in the project.

3. Add a "BLINK" FB to generate a pulse "True" to the "M1" variable every second. In the Blocks window, drag the BLINK function block from the Timers folder to the LD1 window. Next, assign the M1 variable and press Space several times to set its status to "N", and then doubleclick on the left side of CYCLE to enter "T#1s".



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Next

# 1.5. Writing an ST Program (ST1)

This Win-GRAF project includes an LD program (LD1) and an ST program (ST1).

Follow these steps:

1. Right-click on **Programs** and click **Insert New Program**. Next, enter "ST1" as program name, select **ST - Structured Text** language and the **Main program** style, and then click **OK**.

Workspace No selection	New program	X
eL01         Graphic         Frograms         B LD1         B LD1         B ST1         Insert New Folder         Signals         Soft Scope         Shortcuts         Spy         Insert New Item         String Table         B Fieldbus Co         Delete	Properties Advanced Description Program Name: ST1 Description: Programming language SFC - Sequential Function Chart - Grid editor SFC - Sequential Function Chart - Free form editor FBD - Function Block Diagram LD - Ladder Diagram ST - Structured Text H - Instruction List PACKML - PACKML State Machine	
<ol> <li>Double-click on ST1 to program.</li> <li>Programs         LD1         ST1     </li> <li>Enter the following code:</li> </ol>	Execution style Main program Sub-program UDFB (User Defined Function Block) Child SFC program Child of:	
if M1 then if (Dir=True) then Word_4 := Word_4 + 1; else Word_4 := Word_4 - 1; end_if;		<u> </u>
end_if ; if Word_4 <= 0 then Dir := True ; end_if ;	(* reach Min. value, change to counting up *)	
if Word_4 >= 50 then Dir := False ; end_if ;	(*reach Max. value, change to counting down *)	
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After completing the process, the screen will display as follows. Click Save to save the project.

Win-GRAF - eL01 File Edit View Insert Proje	•	
	🗙 🐟 🗠 🕐 🛗 🏢 🏪 😘 😨 🕼 🖻 🦕 🔐 🔛	
Workspace	ST1	∎ Z X
eLO1     Graphic     Graphic     Programs     D1     ST1     St1     Soft Scope     Spy     String Tables     Fieldbus Configurations     Binding Configuration     Soft Scope     Spy	<pre>if M1 then if ( Dir=True ) then Word_4 := Word_4 + 1 ; (* Counting up *) else Word_4 := Word_4 - 1 ; (* Counting down *) end_if ; end_if ; if Word_4 &lt;= 0 then Dir := True ; (* reach Min. value, change to counting up *) end_if ; if Word_4 &gt;= 50 then Dir := False ; (* reach Max. value, change to counting down *) end_if ;</pre>	Name         ST1         Global         Long_1         Word_4         Float_5         M1         ▲ Adva         ▲ Adva         ➡ Adva         ➡ Adva         ➡ Afrays         ➡ AS-int
	۲ ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	Blocks Sov lis
∲g Global defines ∭ Variables	LD1 ST1	
	Build	×
(All Projects)	Build Cross references Runtime Call stack Breakpoints Digital sampling trace Prompt HMI	Code Checker
Ready	OffLine 192.168.1.31:502 / Ln 1, Ch 1 0 x 1	Ln 1, Ch 1

## 1.6. Compiling the Win-GRAF Project

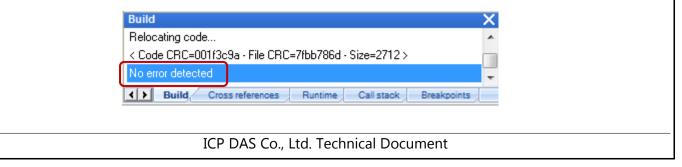
For the Win-GRAF project can function properly in the PAC, we need to compile all programs before downloading them.

Follow these steps:

1. Click **Project** on the menu bar and then click **Build All Projects** to compile all programs.

File Edit View Insert	Pro	ject Tools Window Help	
😂  🖬 🛃 🔏 🛛 🖉	₿	Build All Projects	F7
Workspace		Clean All Projects	
Emme 🗿 eL01 Graphic Emme De Programs		<u>D</u> ownload All Projects <u>S</u> ettings	
	الكر	<u>O</u> n Line	Ctrl+F5
Becipe	*	Simulate	F5

2. If the message "**No error detected**" is displayed that means the project was successfully compiled.



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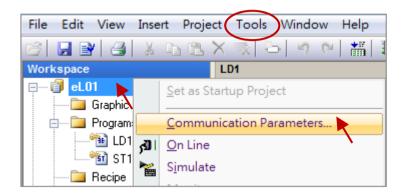
## **1.7.** Downloading the Win-GRAF Project to the PAC

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Before downloading the project, you need to configure the communication parameters.

Follow these steps:

1. **Right-click** on the project name (i.e., eL01) and then click **Communication Parameters...** to open the settings window. Alternatively, click **Tools** on the menu bar and then click "Communication Parameters...".



Enter the IP address and the TCP port number of the Win-GRAF PAC (e.g., WP-8x28-CE7).
 Note: The factory-default IP address and TCP port number for the PAC is 192.168.255.1:502.

Communication Settings	<b>—</b>
▼ 192.168.1.31:502 192.168.1.31:502 192.168.10.200:502 192.168.255.1:502	OK Cancel Browse Help

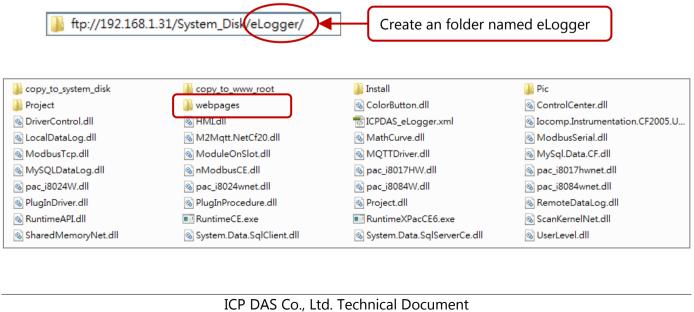
3. Click the **On Line** button on the toolbar to establish the connection with the PAC.

12 2	8 B B X R	5 9 0 <b>1</b>	H & %	😨 🟠 🖻	§9 🗄 层 🖌
	ICP DAS	Co., Ltd. Technical	Documer	nt	

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been modifie		oject is run ct. stoolbar to No a	nning in the PA version! o download the pplication	C. Only	click the <b>Stop</b>	application	button on
Min Win-GRAF - eL01							
File     Edit     View     Insert       ▷     □     □     □     ↓     □	Project Tools Windo 🗃 🖺 🗙 🛼 🏷   🌖			69 🕍 🚮 R		¶⊈ <b>u §</b> ‡	
Workspace Congratulations! Ready Workspace Graphic Graphic Programs Graphic Programs Signals Soft Scope Spy String Tables Fieldbus Configure Graphic Profiles Mill Projects	ations +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ +0 G -0+ -0+ -0+ -0+ -0+ -0+ -0+ -0+	9a - File CRC=7fbb7 is references Run	Inst_BLINK1         III1           RUN BLINK         Q           #1s-         CYCLE           786d - Size=2712 >            time         Call stack         Breakpo           RUN (192,168,1.31;502)	M = 3 D = 14 WD = 2 hh = 12 mm = 1 ss = 47 = FALSE N	mpling trace Prompt	□       ▲ Global variation         Long_1       0         Word_4       44         Float_5       0.         M1       F/         DIR       F/         PAC_M       3         PAC_D       14         PAC_D       14         PAC_M       3         PAC_M       12         PAC_MAC_M       12         PAC_MAC_M       12         PAC_MAC_M       12         PAC_MAC_MAC       47         ▲ Advanced       ▲ Arithmetic         ▲ Arrays       ■ Blocks         ▶ Blocks       Sov list         HMI       Code Checker         x 18       0,0	DINT I INT 0 REAL ALSE BOOL IT DINT DINT DINT DINT 2 DINT DINT 7 DINT 7 DINT 7 DINT 113%

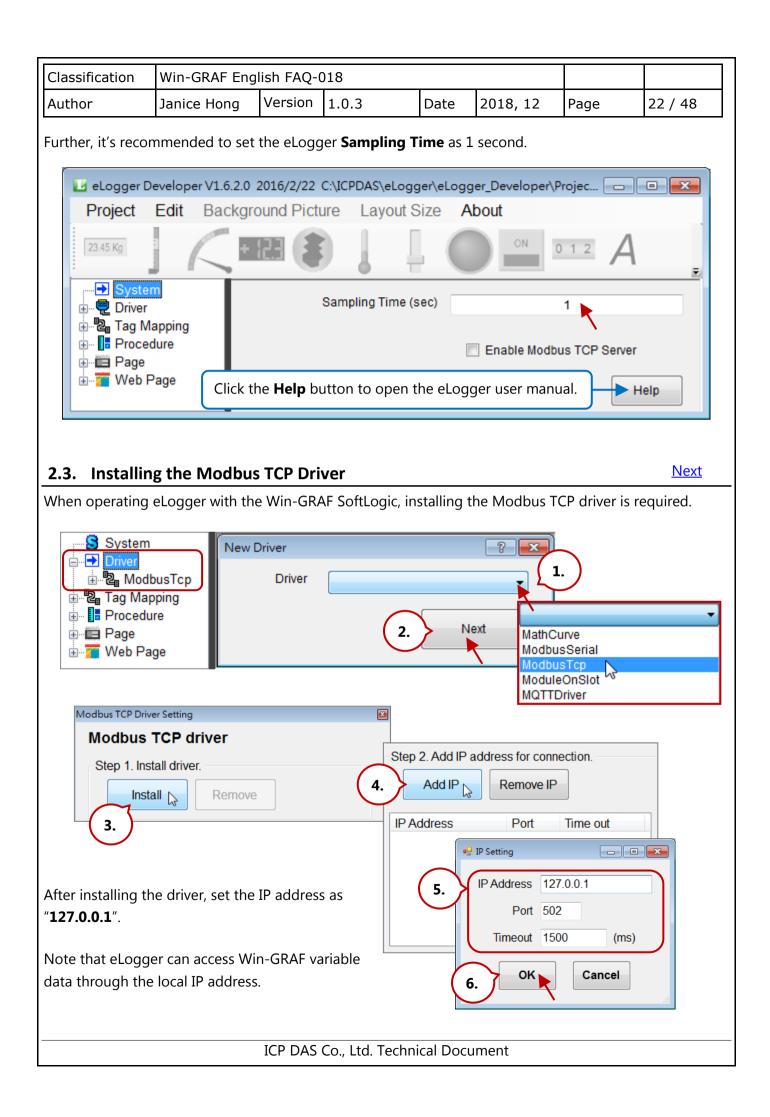
Classification	Win-GRAF Eng	lish FAQ-(	018				
Author	Janice Hong	Version	1.0.3	Date	2018, 12	Page	18 / 48
2. eLogger Runt	two programs: eloper: PC, users can us	e it to des	ign HMI page				
Note: When using	PAC, users MUS						
2.1. Installing	g eLogger Dev	veloper (	PC) and eLo	ogger Ru	intime (PAC	C)	<u>Next</u>
	<u>/ftp.icpdas.com/</u> Manual for moi				·	5	
the <u>eLogger User</u> 2.1.2. Install t If eLogger Runti	Manual for mor he eLogger Ru me (v1.6.2.0 or l	re details. <b>ntime</b> ater) has r	not been insta		AC, first find t	-	
the <u>eLogger User</u> 2.1.2. Install t If <b>eLogger Runti</b>	Manual for mor he eLogger Ru me (v1.6.2.0 or l of eLogger, i.e.,	ntime ater) has r	not been insta	illed on P		-	es in the
the <u>eLogger User</u> 2.1.2. Install t If <b>eLogger Runti</b> installation folder	Manual for mor he eLogger Ru me (v1.6.2.0 or l of eLogger, i.e.,	re details. ntime ater) has r , <b>C:\ICPD/</b>	not been insta <b>\S\eLogger</b> .	illed on P	🔒 eL	he related fil	es in the
the <u>eLogger User</u> <b>2.1.2. Install t</b> If <b>eLogger Runti</b> installation folder eLogger_Deve Manual For_C	Manual for mor he eLogger Ru me (v1.6.2.0 or l of eLogger, i.e.,	re details. ntime ater) has r , <b>C:\ICPD/</b>	not been insta <b>AS\eLogger</b> . ogger_Runtime	illed on P	🔒 eL	he related fil	es in the
the <u>eLogger User</u> <b>2.1.2. Install t</b> If <b>eLogger Runti</b> installation folder eLogger_Deve Manual For_C	he eLogger Rui me (v1.6.2.0 or l of eLogger, i.e., eloper CE7 KP8000CE6 gger Runtime k n the Network p e settings and cli	re details. ntime ater) has r , C:\ICPDA C:\ICPDA oy using F page in th ack the Ap	not been insta AS\eLogger. ogger_Runtime ins000.dat For_Winf For_XP80 TP, make sure e PAC_Utility	e that the	FTP function	he related fil	es in the e_Background

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PAC_Utility  PAC_Utility  I.  File Help Save Save and Rel Reboot Restore Utilit Exit	File		IP Config Netwo ile Server Settings TP Ilow Anonymous et FTP default dov	2. © Enable © Enable wnload director t root directory lows\www	/ to:	Apply	3.
<u>Note</u> : After uploading p automatically che page in PAC Utili to apply the setti When using <b>WP</b> -	eck the HTTP part ty. And, a dialog ings.	th and set box will b	it to <b>\Systen</b> be displayed	n_Disk\eL to remind CPDAS\eL	ogger\webpa users to exect	<b>ages\</b> on th ute "File - S	e Network ave & Reboot



Classification		lich FAO (	21.0						
	Win-GRAF Eng	- -							
Author	Janice Hong	Version	1.0.3	Date	2018, 12	Page	20 / 48		
Note:       There is no need to copy files that stored in the "copy_to_www_root" folder since eLogger v1.6.5.0.         Eile Edit View Go Favorites       ↓ ↓ ▲ ★ ▲ ★ ▲ ★ ▲ ★ ▲ ★ ▲ ★ ▲ ★ ▲ ★ ▲ ★									
Address System	lient s (e.g.,"SharedM	Coopy_ Coopy_ CoorB HMI M2Mqt M2Mqt MySql. Pac_8 pac_8 pac_8 pac_8 pac_8 pac_8 Pacca8 Pacca8 Pacca8 Pacca8 Pacca8 Pacca8 Pacca8 Pacca8 Pacca8 Spac8 Spac8 Spa	to_www_root utton tt.NetCf20 isTcp Data.CF 014WNet 024W 084W 24WNet 24WNet 24WNet T t heCE ernelNet n.Data.SqlServerC 7.dll") from pa at files may be t <u>View Go</u> System_Disk\Icpo	th \Syste different Favorite	MathCuri ModuleC MySQLD Pac_i801 Pac_i802 Pac_i802 Pac_i802 Pac_i802 PlugInDri RemoteE Runtimed SharedM SharedM SharedM SharedM	Instrumenta ve onSlot ataLog L7HW 24wnet 34wnet 34wnet WNet iver DataLog CE7 lemoryNet el	-		
		PACNET PACNET		iical Doc	ument				

Author       Janice Hong       Version       1.0.3       Date       2018, 12       Page       21 / 48         2.2. Creating the eLogger Project       Next         Users can open the "eL_01.wez" demo project by downloading the "demo_faq018_all.zip" file from       Next         Win-GRAF FAQ web page and unzipping it. Next, copy project files (.wez) to path       "C:\ICPDAS\eLogger\eLogger_Developer\Project\" on PC. Then, run eLogger Developer and click         Open on the Project menu to open the project.       Image: Im	Classification	Win-GRAF Eng	lish FAQ-(	018						
Users can open the "eL_01.wez" demo project by downloading the "demo_faq018_all.zip" file from <u>Win-GRAF FAQ</u> web page and unzipping it. Next, copy project files (.wez) to path "C:\ICPDAS\eLogger\eLogger_Developer\Project\" on PC. Then, run eLogger Developer and click Open on the Project menu to open the project. eLogger Developer V1.6.2.0 2016/2/22 ( Project Edit Simulation Remote Mac New Open Save as Language Exit <u>#attata</u> <u>Backa(N): eL_01.wez</u> <u>Project File (*.wez)</u>		-	-		Date	2018, 12	Page	21 / 48		
Win-GRAF FAQ web page and unzipping it. Next, copy project files (.wez) to path         "C:\ICPDAS\eLogger\eLogger_Developer\Project\" on PC. Then, run eLogger Developer and click         Open on the Project menu to open the project.         I elogger Developer V1.6.2.0 2016/2/22 (         Project Edit       Image: Ima	2.2. Creating	the eLogger	Project	1			1	<u>Next</u>		
Project       Edit       課題       Image: Colorger_Developer/Project       受 想导 Project         Remote Mac       New       日金管理<	Win-GRAF FAQ web page and unzipping it. Next, copy project files (.wez) to path "C:\ICPDAS\eLogger\eLogger_Developer\Project\" on PC. Then, run eLogger Developer and click Open on the Project menu to open the project.									
Simulation Remote Mac New Copen Save as Language Exit 個案名稱(N): eL_01.wez  Project File (*.wez)		-	0 2016/2/22	2 (				]		
Remote Mac New Copen Save as Language Exit										
New         Open         Save as         Language         Exit             Image: Ima	1				_Developer\P					
Open       Save as         Language       Demo.wez       eL_02.wez       eL_03.wez         Exit       個案名稱(N):       eL_01.wez       Project File (*.wez)			5理▼ 新唱.	直科火						
Language Exit 檔案名稱(N): eL_01.wez   Project File (*.wez)	_	1								
Exit 檔案名稱(N): eL_01.wez    Project File (*.wez)	Save	e as Demo	o.wez eL_01.	wez eL_02.wez eL	_03.wez					
檔案名稱(N): eL_01.wez ▼ Project File (*.wez) ▼	Lang	uage	-	N						
	Exit									
						開設著	描(0)	▼ 取消 :		
Alternatively, click <b>New</b> on the <b>Project</b> menu to create a new project named "eL_01".			-	_	ew proje		_01.			
Project Edit ■ ##			5 2010/2/22				_	<u> </u>		
Simulation GO V W « eLogger_Developer > Project > v 4 搜尋 Project P			) <b>≂ ]} «</b> eLoge	ger_Developer 🕨 Projec	t 🕨	▼ �� 搜尋 Project	t .	٩		
Remote Maci adde adde adde adde adde adde adde add	Rem	ote Macl 組合管	管理▼ 新増資	料夾			•N • 🗍 🔞			
New   Open   Save as     Demo.wez	💕 Oper		kup Demo.	wez						
Language	Lang	uage								
Exit	Exit									
<b>DO NOT</b> set the project name as "Demo"				<b>DO NOT</b> set th	e project	name as "De	emo"			
檔案名稱(N): eL_01			椔	案名稱(N): eL_01				н.		
ICP DAS Co., Ltd. Technical Document			ICP DAS	Co., Ltd. Techni	cal Docu	ment				



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Next, specify the	range of Modbi	us address	for eLogg	er tags.				
		Step	3. Add Devi	ce				
		<b>(</b> 1. <b>)</b> A	dd Device	Cancel				
Device Setting			45					
- Device Informat Connect from								
Device Nar	121.0.0.1		•					
Station Addre								
StationAddre								
Registers Settir	ng (2.)							
Add Denie		Deviator						
Add Regis		Register						
Register Defi	Registers Setting		3.					
	Module Ent	er Register	De	escription En	ter the re	gister ran	ge.	
	- Address R	ange Definiti	on					
		Absolute ad		Base 1(Mo	odbus ad	dresses)	(4.)	
6.	0xxxx Coil	Status(R/W)		00101	ТО	00102		$\bigcirc$
, ,	1xxxx Input	Status(R)			то			5.
Done	3xxxx Input	Registers(R	.)		ТО			ОК
	4xxxx Hold	ling Register	s(R/W) 🔽	40001	то	40007		Cancel

**Note:** The Modbus address used for eLogger tag and Win-GRAF variable must be the same.

Name	Туре	Address	Description
Long_1	DINT	1	Used to communicate with eLogger tag
PAC_ss	DINT	3	DINT : 32-bit Long
Word_4	INT	5	INT : 16-bit Integer
Float_5	REAL	6	REAL : 32-bit Float
OUT_101	BOOL	101	Used to link to DO0 and DO1 of I-87063W on
OUT_102	BOOL	102	slot0

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<b>2.4. Declari</b> r To access Win-G	ng the eLogge	-			. 10 to			<u>Next</u>
configured. In th four AO tags and Follow these step <b>1. Add I/O Ta</b> g	is example, user d two DO tags. <u>ps:</u>	rs can refer	to the Win	-GRAF va	ariable	table as li	sted above	
System	Memory Address	Name	Location			Description		Note
	HoldingRegister[ HoldingRegister[	-	ModbusTcp->1 ModbusTcp->1			IP:127.0.0.1ID1/		
Al Tag AO Tag DI Tag DO Tag Procedure Page	HoldingRegister( HoldingRegister( HoldingRegister( HoldingRegister( HoldingRegister(	3]     40004       4]     40005       5]     40006	ModbusTcp->1 ModbusTcp->1 ModbusTcp->1 ModbusTcp->1 ModbusTcp->1	27.0.0.1_ID1-> 27.0.0.1_ID1-> 27.0.0.1_ID1->	40004 40005 40006		address = address =	
erage ⊪⊷ <mark>≂</mark> Web Page	New Tag	Delete Ta		aling	Help	,		
	Tag Name	Descrip		lemory Addres	s Data	аТуре	Ga	ain Offset
		🖳 Add Tag			_	0-in	•	0 0
	Tag Nam			pat	a Type	Gain	Offset	Range
		How many ta; 4	gs to add?	_				
2. Set I/O Tag Set the Tag	s Name as "Long	4 0K	Can		)", the	Data Type	<b>e</b> as "32-bit	t Signed Long".
		4 0K	mory Addı		)", the	Data Type	e as "32-bit	t Signed Long".
Set the <b>Tag</b> New Tag Tag Name	Name as "Long Delete Tag Description	4 OK 1", the <b>Me</b> Scaling	mory Addu	r <b>ess</b> as "C Help Data Type		Data Type	Gain	Offset
Set the <b>Tag</b> New Tag Tag Name Long1	Name as "Long Delete Tag Description 32-bit Long	4 OK 1", the <b>Me</b> Scaling Mem	Can mory Addu nory Address 0	ress as "C Help Data Type 32-bit Signe	ed Long		Gain 1	
Set the <b>Tag</b> New Tag Tag Name Long1 Tag Name	Name as "Long Delete Tag Description 32-bit Long Description M	4 OK 1", the <b>Me</b> Scaling Mem emory Address	Can mory Addu mory Address 0 Data Type	ress as "C Help Data Type 32-bit Signe 16-bit Unsig	ed Long ed Integer gned Inte		Gain 1 Range	Offset
Set the Tag New Tag Taq Name Long1 Tag Name Long1 Long1	Name as "Long Delete Tag Description 32-bit Long Description Mr 32-bit Long	4 OK 1", the <b>Me</b> Scaling Mem emory Address 0	Can mory Addi mory Address 0 Data Type 32-bit Signed L	ress as "( Help Data Type 32-bit Signe 16-bit Signe 32-bit Unsigne 32-bit Unsigne	ed Long ed Integel gned Inte ed Long	r ger	Gain 1 Range -3276	Offset 0 8.000~32767.000
Set the <b>Tag</b> New Tag Tag Name Long1 Tag Name AO1	Name as "Long Delete Tag Description 32-bit Long Description Ma 32-bit Long AO1	4 OK 1", the <b>Me</b> Scaling Mem emory Address 0 (null)	Can mory Addu mory Address 0 Data Type 32-bit Signed I 16-bit Signed I	ress as "C Help Data Type 32-bit Signe 16-bit Unsig 32-bit Signe 32-bit Unsig 32-bit Float	ed Long ea Integer gned Inte ed Long gned Long	ger Ig	Gain 1 Range -3276 -3276	Offset 0 8.000~32767.000 8.000~32767.000
Set the Tag New Tag Taq Name Long1 Tag Name Long1	Name as "Long Delete Tag Description 32-bit Long Description Mr 32-bit Long	4 OK 1", the <b>Me</b> Scaling Mem emory Address 0	Can mory Addi mory Address 0 Data Type 32-bit Signed L	Help Data Type 32-bit Signe 32-bit Signe 32-bit Signe 32-bit Float hteger	ed Long ed Integel gned Inte ed Long	r ger	Gain 1 Range -32760 -32760 -32760	Offset 0 8.000~32767.000
Set the <b>Tag</b> New Tag         Taq Name         Long1         Tag Name         A01         A02         A03	Name as "Long Delete Tag Description 32-bit Long Description Mr 32-bit Long AO1 AO2	4 OK 1", the <b>Me</b> Scaling Mem emory Address 0 (null) (null) (null)	Can mory Addi mory Address 0 Data Type 32-bit Signed L 16-bit Signed I 16-bit Signed I 16-bit Signed I	ress as "C Help Data Type 32-bit Signe 32-bit Signe 32-bit Float nteger nteger	ed Long ca integei gned Inte ed Long gned Lon 1 1	ger 19 0	Gain 1 Range -32760 -32760 -32760 -32760	Offset 0 8.000~32767.000 8.000~32767.000 8.000~32767.000 8.000~32767.000

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# 3. Set the $2^{nd}$ to $4^{th}$ AO tags

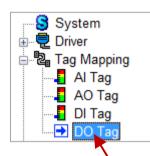
**Note:** When using 32-bit (or above) variables, e.g., "Long\_1", "PAC\_ss", and "Float\_5", two Modbus addresses are needed. In addition, both the name of Win-GRAF variable and eLogger tag can be different because the data accessing is according to the address.

After completing the settings, the screen will be shown as below.

1	New Tag	Delete Tag	Scalir	ng	Help				
Т	ag Name	Description	Me	mory Address	Data Typ	e		Gain	Offset
Float	_5	Real		5	32-bit Flo	at		1	0
	Tag Name	Description	Memory Addres	s Data Type		Gain	Offset	Range	
	Long1	32-bit long	0	32-bit Signed	Long	1	0	-214748364	8.000~21474836
	PAC_ss	Seconds	2	32-bit Signed	Long	1	0	-214748364	8.000~21474836
	Word_4	AO2	4	16-bit Signed	Integer	1	0	-32768.0	00~32767.000
١.	Float_5	Real	5	32-bit Float		1	0		-

### 4. Add DO Tags

Follow the similar way as described before to add two DO tags. After completing the settings, the screen will be shown as below.



Tag Name	Memory Address
DO_101	0
DO_102	1

Memory Address	Name	Location		Description	Note	
CoilStatus[0]	00101	ModbusTcp->127	.0.0.1_ID1-> <mark>00101</mark>	IP:127.0.0.1ID1Address:00101		
coilStatus[1] 00102 ModbusTcp->127.0.0.1_ID1->00102				IP:127.0.0.1ID1Address:00102		
New Tag	De	elete Tag	Scaling	Help		
Tag Name	D	escription	Memory Address	Data Type	Gain	Offset
DO_102	DO1		1		▼ 0	0
Tag Name		Description	Memory Address			
DO_	101	DO0	0			
DO_	102	D01	1			
				_		
				echnical Document		

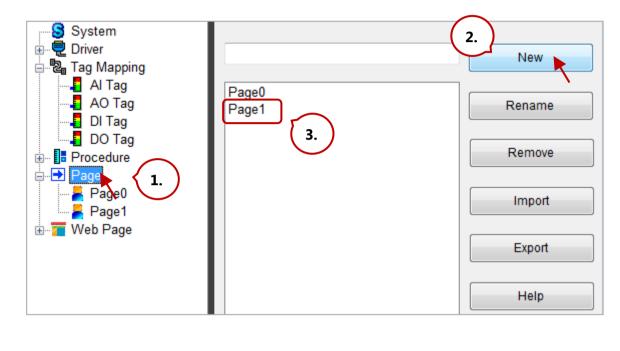
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## 2.5. How do I Design a eLogger Local HMI Page

<u>Next</u>

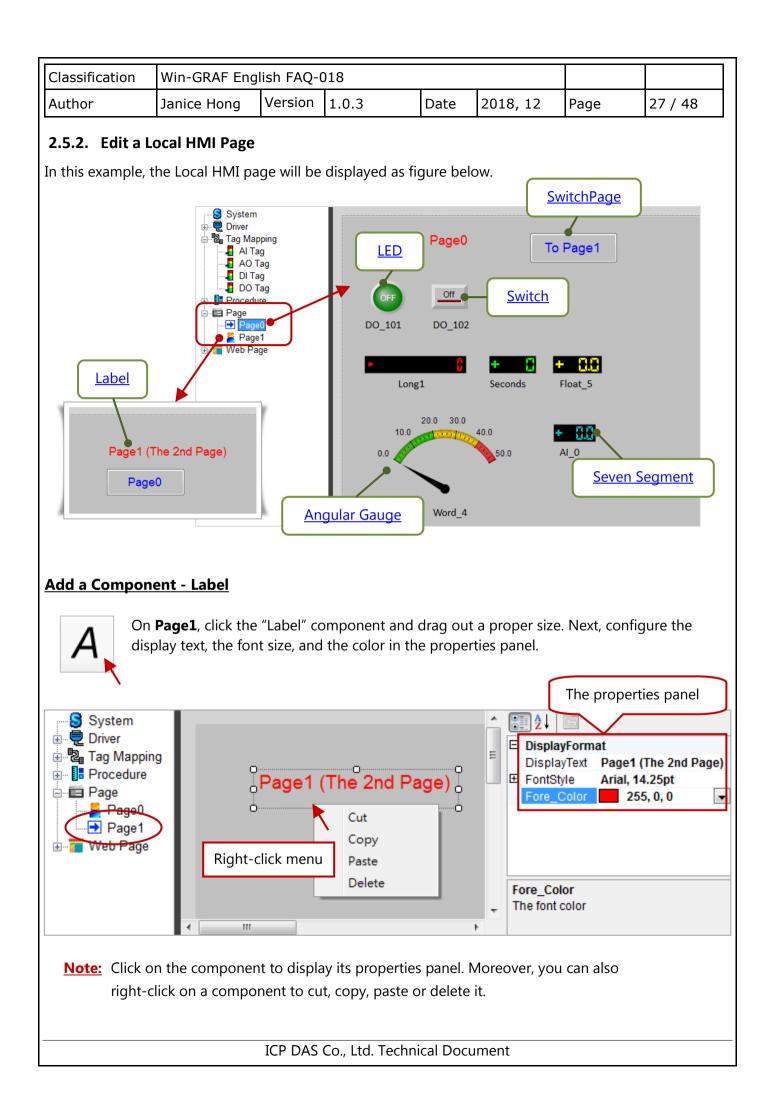
## 2.5.1. Add a Local HMI Page

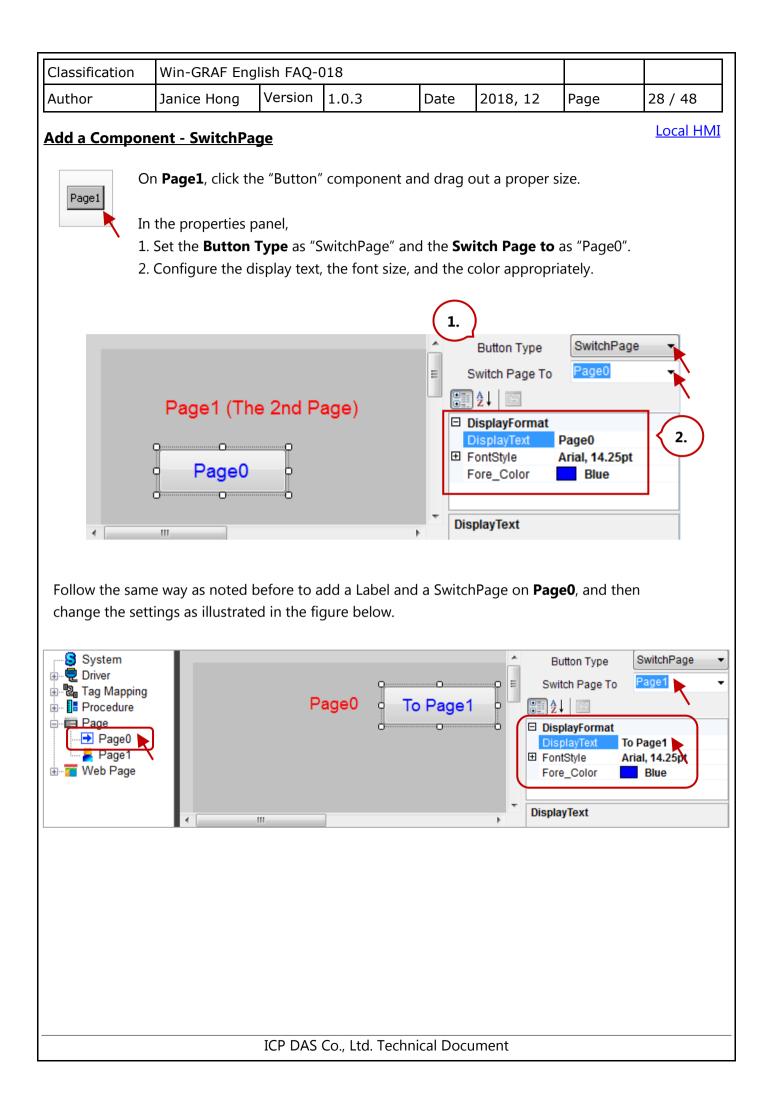
The demo project includes two web pages, i.e., **Page0** (the default page) and **Page1.** Click **Page** and click the **New** button to add the "Page1" page. Note that the Page0 will be displayed first after eLogger Runtime is running.



Next, click **Page 1** on the menu tree to edit page. First, choose the proper VGA layout size for the Win-GRAF PAC. Note that only the <u>ViewPAC</u> series comes with the touch panel.

WP-8x28-CE7, WP-5238-CE7, XP-8x48-CE6: 1024 \* 768 VP-4208-CE7: 800 \* 600 ; VP-2208-CE7: 800 \* 480 ; VP-1238-CE7: 640 \* 480 Edit **Background Picture** Project Layout Size About 320x240 ON 23.45 Kg 0 1 2 Page1 640x480 **~** 800x600 System 3 1024x768 Ξ 🗄 🖳 🔁 Driver 🗄 📲 Tag Mapping . Procedure 🖮 🛅 Page Page1 ÷ Web Page ÷… 🍊 ш Þ ICP DAS Co., Ltd. Technical Document





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### Add a Component - LED

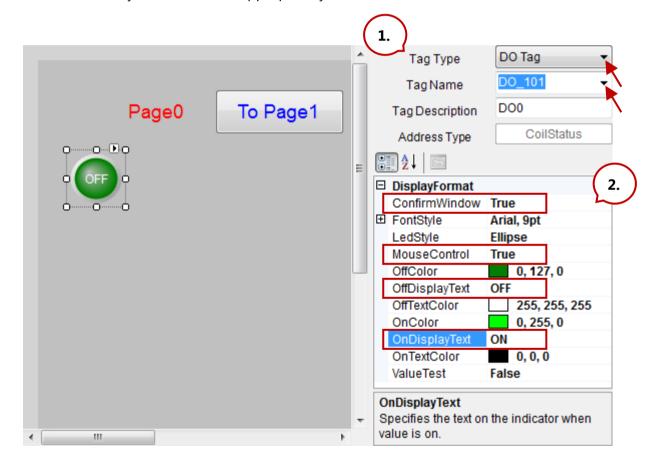
On **Page0**, click the "LED" component and drag out a proper size. This LED component is used to read/write the Win-GRAF variable named OUT\_101, and its corresponding eLogger DO Tag called DO\_101.

Local HMI

In the properties panel,

- 1. Set the Tag Type as "DO Tag", the Tag Name as "DO\_101".
- Set the ConfirmWindow as "True" means allowing output tag data after a confirmation. Set the MouseControl as "True" means allowing output data; "False" means only for reading data.

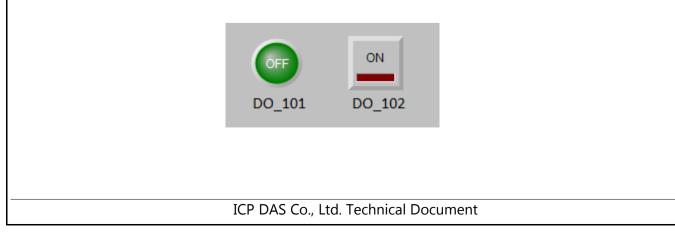
Also, set the text style and the color appropriately.



**Note:** Click on the component to display its properties panel. Moreover, you can also right-click on a component to cut, copy, paste or delete it.

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dd a Compon	ent - Switch							Local HN
	n <b>Page0</b> , click tl	ne "Switch"	componen	t and d	rag o	out a proper	size.	
2. Set the C	erties panel, ag Type as "DO onfirmWindow MouseControl	as "True" as "True" r	means allow	ving ou ving out	tput put c	tag data afte lata;	er a confirmat	ion.
Also, set the	text style and t	he color ap	propriately					
					1.			
			Page1		Tag Ac ■ Dis ■ For Moi Off( Off( Onl	Tag Type Tag Name g Description ddress Type ↓   ⊡ playFormat nfirmWindow htStyle useControl Color DisplayText Color DisplayText ueTest	DO Tag DO_102 DO1 CoilStatu True Arial, 9pt True Maroon Off Red On False	2.
				-	Confi	rmWindow		

Moreover, you can **add two Labels** to describe the use of the LED and the Switch components, or see Section 2.5.1 for more details.



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Local HMI

#### Add a Component - Seven Segment



On **Page0**, click the "Seven Segment" component and drag out a proper size.

In the properties panel,

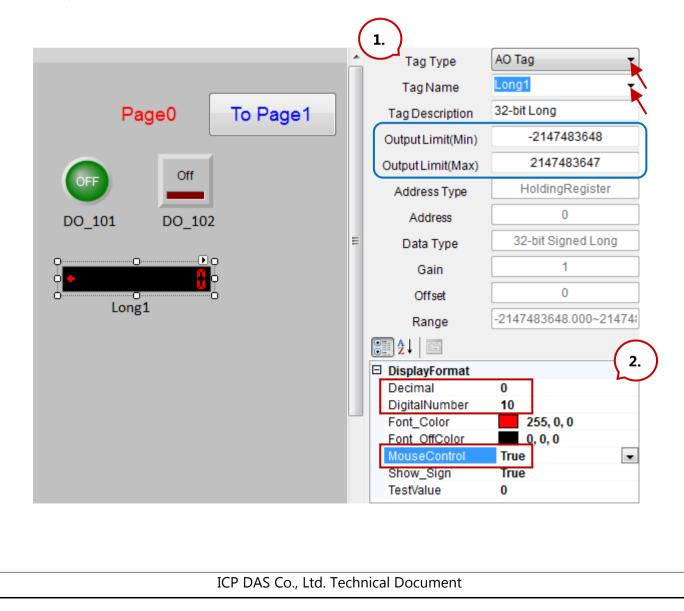
- Set the **Tag Type** as "AO Tag", the **Tag Name** as "Long1".
   For the application needs, users can limit the range of output values.
- 2. Set the **MouseControl** as "True" means allowing output data;

"False" means only for reading data.

Set the **Decimal** as "0" and the **DigitalNumber** as "10" (can be 1 to 24).

In this example, the data type of "Long1" is a 32-bit Long, so no decimal place is required.

Finally, add a Label to describe the purpose of this component.



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	v the same way hem as illustrate					-		
		Page	<b>)</b>	To Pag	e1			
	OFF DO_101	Off DO_10	12					
	• Lor	ng1	• Secon	ds F	loat_5	]		
Tagʻ	Type AO Tag		<b>•</b>	Tagʻ		AO Ta		<b>•</b>
TagN	lame PAC_s	S	•	TagN	lame	Float	_5	•
Tag Des	scription Second	ds		Tag Des	scription	Real		
Output Li	imit(Min)	-32768		Output Li	imit(Min)		-10	.0
Output Li	mit(Max)	32767		Output Li	mit(Max)		10.	0
Addres	ss Type	loldingRegist	er	Addres	s Type		HoldingR	Register
	ress	1			ress		3	
Data		-bit Signed Lo	ng	Data			32-bit	Float
	ain 🗌	1		Ga			1	
	iset	0		Off			0	
Rar		83648.000~2	147483	Rar				
	.90	200.000 2		Rar ₽	-			
E Display								
Decima				Decima		1		
DigitalN				DigitalN		3		
Font_C		0, 255, 0		Font_C			255, 2	55, 0
Function	fColor	0, 0, 0		Font_Of			<u>0,</u> 0,0	
Font_Of				MouseC	Control	Т	rue	
Font_Of MouseC	Control False							
Font_Of	Control False Bign True			Show_S TestValu	Sign		rue	

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Local HMI

#### Add a Component - Angular Gauge



On **Page0**, click the "Angular Gauge" component and drag out a proper size.

In the properties panel,

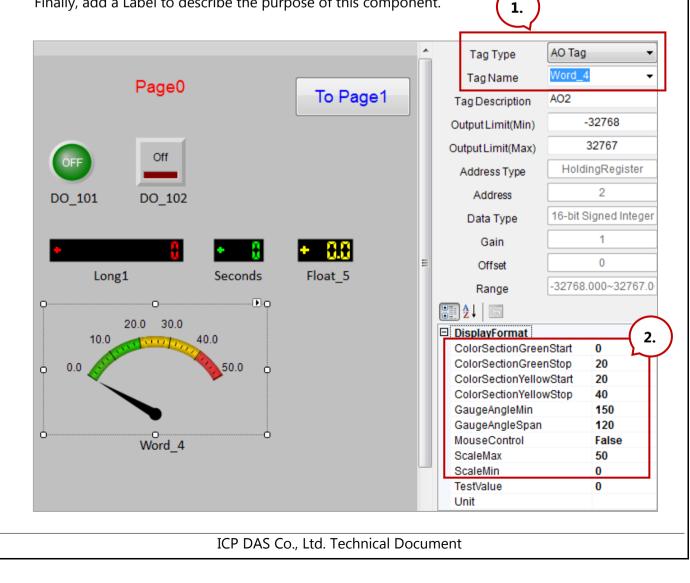
- 1. Set the **Tag Type** as "AO Tag", the **Tag Name** as "Word\_4".
- 2. Set the MouseControl as "False" means only for reading data.

Set the ScaleMin as "0" and the ScaleMax as "50".

In this case, the range of output values has been assigned as 0 to 50 in the Win-GRAF program. Set the GaugeAngleMin as 150 degrees and the GaugeAngleSpan as 120 degrees (i.e., the minimum value is at the location of 150 degrees, anti-clockwise direction. And, the entire header expansion is 120 degrees.)

Set the ColorSectionGreenStart as "0", the ColorSectionGreenStop as "20", the ColorYellowSectionStart as "20" and the ColorYellowSectionStop as "40".

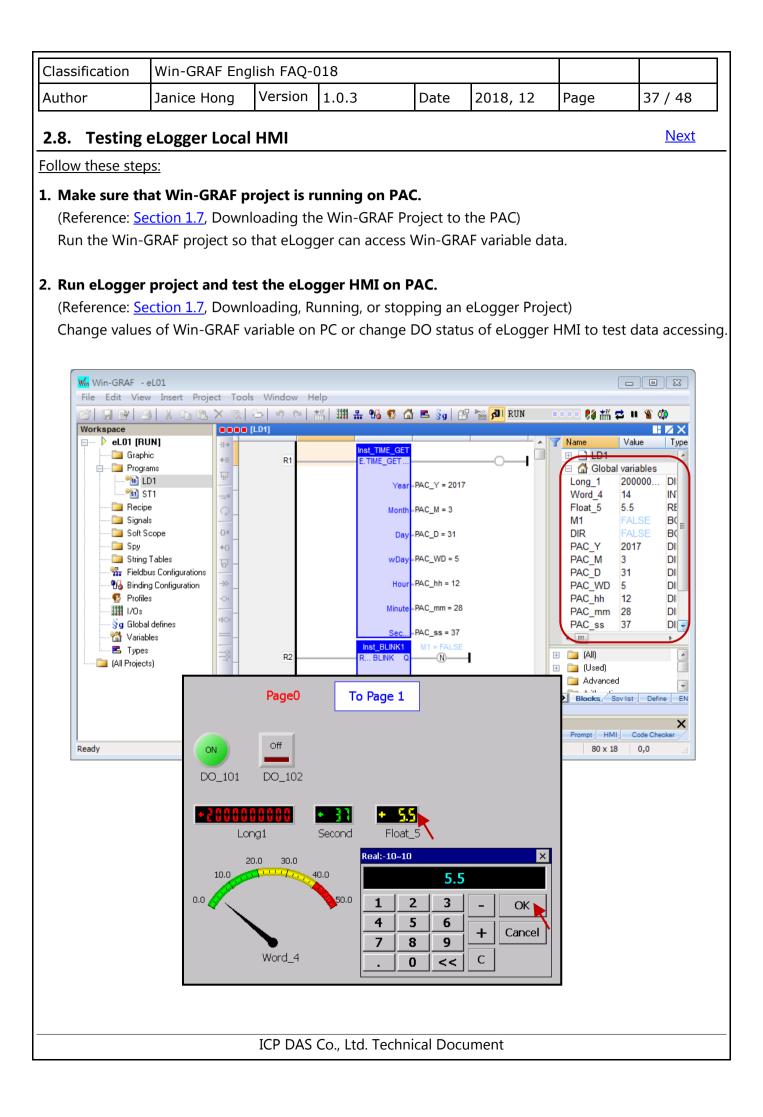
Finally, add a Label to describe the purpose of this component.



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	Dealum an al						<u> </u>	
2.6. Save or Backup an eLogger Project								
Congratulations! You have completed the 1 <sup>st</sup> eLogger project. Project Edit Background Pictu								
A.C. 1		Simulat		Ctrl+M				
After completing add a folder in th	Remote	Machine	Ctrl+R					
eLogger_Develop	New		Ctrl+N					
(.wez).	Open Save as	-	Ctrl+O Ctrl+A					
					Langua			
					Exit	ye	Ctrl+X	
					EXIL			
2.7. Uploadii	ng, Running, d	or Stopp	ing an eLogg	er Proje	ect	<u>Cont</u>	<u>ents ` Next</u>	
Follow these step	<u>)S:</u>							
1. Make sure that	at eLogger Run	time is ac	tivated.					
	<b>/ Device</b> on PAC			untime (	e.g., RuntimeC	E7.exe) in pa	ath	
\System_Disk	\eLogger\							
		e	eLogger V1.6.5.0		-		×	
My Dev	vice		Execute Pr	oject	Auto Run			
		ſ	📒 Open Proj	ect				
<u>F</u> ile <u>E</u> dit <u>V</u>	<u>(</u> iew <u>G</u> o F <u>a</u> voi	rites						
A <u>d</u> dress Syste	em_Disk\eLogger		🍏 Log In					
Name S UserLevel			å Log Out					
System.Data.	SqlServerCe		<u> </u>					
🔊 System.Data. 🔊 SharedMemor	-		Admin login				<b>^</b>	
🔊 ScanEngine			Project: \System_D	JISK VELOGIGE	ar projecty emo. w	82		
RuntimeCE7	2.	l						
	· · ·							
<u>Notice</u> :								
If eLogger Runtime is not activated, eLogger Developer cannot establish connection to								
upload the project.								
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<ul> <li>2. Perform "Remote Machine" in eLogger Developer on PC. Click Remote Machine on Project menu and enter the IP address of the PAC. Click Connect to make establish connection and click the Upload Project &amp; Web Pages button to upload the project.</li> <li>Project Edit Background Pictu</li> </ul>										
-	Simulation		trl+M							
Remote Machine Ctrl+R										
	lew	Remo	teMachine					-?- <b>-</b> ×-		
	Open Save as		IP Add	dress 19	2.168.1.31		nnect 📐 D	isconnect		
L	anguage	-	Remote Co							
E	Exit			- Tun				Upload Project & Webpages		
		· ·	Admin Pass	word	word			Set Password		
		Powe	Power User Password				Set Password			
		Status						Close		
			Status U	pload project finis	hed.					
3. Remotely Run or Stop eLogger HMI on PC. Click the Run or Stop button to remotely run / stop eLogger HMI in the PAC.           Run eLogger HMI automatically whenever eLogger Runtime is activated										
			-							
•	iding the pr <b>uto Run</b> to a			eLogger V1.6.2		'02/22 ↓ 🔽 Auto Run	)	×		
also tick <b>Auto Run</b> to automatically run eLogger HMI whenever "eLogger										
Runtime" is activated.										
				👗 Log In						
				🖂 Log Ou	t	]				
The report provides a summary of a successful uploads.										
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<ul> <li>Activate eLogger Runtime automatically whenever PAC is power-on</li> <li>1) On the Auto Execution page in PAC Utility, set Program 2 as eLogger Runtime (e.g., \System_Disk\eLogger\RuntimeCE7.exe) and click the Apply button.</li> <li>2) Click Reboot on the File menu to restart the PAC and to apply the settings.</li> <li>Note: The path of Win-GRAF PAC driver (e.g., \System_Disk\Win-GRAF\Win_GRAF_WP_8x28.exe) MUST be added on the Auto Execution page that can not be removed.</li> </ul>										
PAC_Utility	PAC Utility [1.2 File Help General Display			Network De	_			·		
		ſ		ogram 2:			Win-GRAF\Win_G Logger\Runtime		Browse	
$\sim$ /		L		ogram 3:	/ -				Browse	
			Program 4:					(3.)	Browse	
File Help		pgrams	Pro	ogram 5:					Browse	
Save Save and Reboot		ed to natically							Browse	
<u>R</u> eboot		Pr	Pro	ogram 7:					Browse	
	5.			Pro	ogram 8:					Browse
Restore Utility E <u>x</u> it	Default Settings			Program 9:					Browse	
		_	Pro	ogram10:					Browse	
					Clea	an		4. Apply		
		ICP DA	.S (	Co., Ltd. Te	echni	cal Docu	ument			



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# 2.9. How do I Design a eLogger Web HMI Page

eLogger allows users to design their web HMI pages, set the username and the password for the **login** web page by using the eLogger Developer. After downloading the eLogger project to the PAC, users can log into the web page through a Web Browser, e.g., Google Chrome, Firefox, Safari, and so on, to conduct the remote I/O control.

# 2.9.1. Add a Web Page and Set the Login Username and Password

The demo project includes two web pages, **login** (the default page) and **index1.** Click **Web Page** and click the **New** button to add an "index1" page. Next, set the login username and password for the webpage.

	.6.2.0 2016/2/22 C:\ICPDAS\eLogger\eLogger_Developer\P
Project Edit Ba	ckground Picture Layout Size About
23.45 Kg + 🔛 A	Page1
1. System Driver Tag Mapping Procedure Page Uveb Page Index1	Web Page Username     admin       Web Page Password     0000
	2. New 🔍 📉
	Rename login Also, enter a page name here and then click the New button.
	Remove
	Import
	Export
	Help
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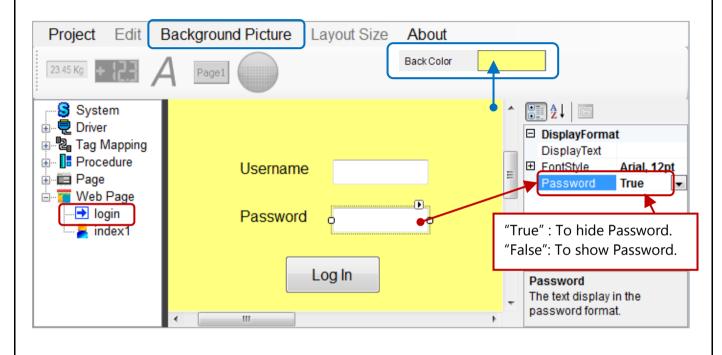
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## 2.9.2. Edit the Login Web Page

Note that any component on the default login web page CAN NOT be added or removed, can only be modified.

# Configure the background color or image

- 1. Click the **Back Color** property to set the background color.
- 2. Click **Background Picture** on the menu bar to add a background image. Note that the image will be stored in the **WebBackPic** folder under the HTTP path. (Reference: <u>Section 2.1.2</u>)



## **Configure properties of the component**

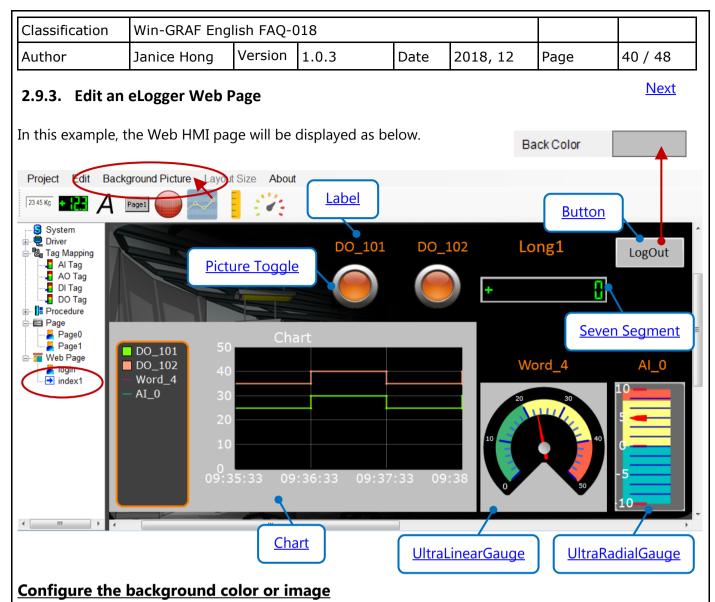
Click on any component to display the corresponding property window and modify the settings.

	DisplayFormat	
l	DisplayText	Username
Ξ	FontStyle	Arial, 12pt
	Name	ab Arial
	Size	12
	Unit	Point
	Bold	False
	GdiCharSet	1
	GdiVerticalFont	False
	Italic	False
	Strikeout	False
	Underline	False
	Fore_Color	0, 0, 0

Button	Туре	Login	•
Switch P	age To		-
<b>₽</b> 2↓   □	3		
DisplayF	ormat		
DisplayT	ext	Log In	
FontStyle	;	Arial, 12pt	
Name		ab Arial	
Size		12	
Unit		Point	
Bold		False	
GdiCh	arSet	1	
GdiVe	rticalFont	False	
Italic		False	
Strike	out	False	
Under	line	False	
Fore_Co	lor	0, 0, 0	

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- 1. Click the **Back Color** property to set the background color.
- 2. Click **Background Picture** on the menu bar to add a background image. Note that the image will be stored in the **WebBackPic** folder under the HTTP path. (Reference: <u>Section 2.1.2</u>)

The following will show you all components that used in the eLogger web page - index1.

## 1) Label:



The web page includes five Label components (i.e., DO\_101, DO\_102, Long1, Word\_4, and AI\_0) that used to describe the purpose of the component.

Ξ	DisplayFormat	
	DisplayText	DO_101
Ð	FontStyle	Calibri, 21.75pt
	Name	ab Calibri
	Size	21.75
	Unit	Point
	Bold	False
	GdiCharSet	1
	GdiVerticalFont	False
	Italic	False
	Strikeout	False
	Underline	False
	Fore_Color	255, 128, 0

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?) Picture Togg	ıle:						
	, The web page ir	ncludes tw	o Picture To	aale compo	onents that u	sed to displa	av or control
	the state of the						
	illustrated in the				_ ,		, ,
MouseContr	ol: Set to "True			5		DO Tag;	
Off/OnPictu	re: Set to Faise		that only for	0		)FE or ON	
On/OnFictu	•				eLogger\eLog		per\ <b>WebPic</b>
ValueTest:		•			alse" to view		•
_			_				
Тад	Type DO Tag	g ,	-				
Tag	Name DO_10	)1 •	•				
Tag De	scription DO0						
Addre	ess Type Co	oilStatus					
Ad	dress	0					
Data	Туре	Bit					
	eControl Tru	Ie I					
OffPic	ture ligt	nt58.jpg					
OnPic Value	-	nt59.jpg Ie	$\mathcal{N}$				
	□ 開啟檔案						<b>—</b>
		C:\ICPDAS\eLo	ogger\eLogger_De	veloper\WebPic	<b>▼ <del>4 )</del> 搜尋 We</b>	ebPic	
		新増資料夾				•N •	0
	p						<b>^</b>
		$\bigcirc$	<b>—</b>		-	<b>D</b>	
	light57.jpg	light58.jpg li	ght59.jpg minus		m minus3.bm m p	inus4.bm minus p p	
		$\bigcirc$					
	minus6.bm	minus7.bm n	ninus8.bm minus	9.bm minus10.	b other1.bm of	ther2.bm other	3.bm
	р	р	р р	mp	р	p p	
			日期: 2014/1/14上 評等: ☆☆☆☆☆		86 x 85 22.4 KB		
		檔案名稱	i(N): light59.jpg		✓ Image Files(*	.bmp;*.gif;*.jpg;*	jp, 🔻
							<i>,</i>
					開啟舊檔(O		

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#### 3) Seven Segment:



The web page includes one Seven Segment component that used to display or write the value of the AO Tag (i.e., Long1).

Refer to the property settings as illustrated in the figure:

### Output Limit (Min./Max.):

For the application needs, users can limit the range of output values (e.g.,  $-32768 \sim 32767$ ).

### **Decimal:**

The decimal place is set to "0".

#### **DigitalNumber:**

The display number of digits is set to "10".

#### MouseControl:

Set to "True" indicates allowing to write the value of AO Tag.

Tag Type	AO Tag 👻
Tag Name	Long1 -
Tag Description	32-bit Long
Output Limit(Min)	-32768
Output Limit(Max)	32767
Address Type	HoldingRegister
Address	0
Data Type	32-bit Signed Long
Gain	1
Offset	0
Range	-2147483648.000~214
<b>₽</b> ↓   <b>©</b>	
DisplayFormat	
Decimal	0
DigitalNumber	10
Font_Color	0, 255, 0
Font OffColor	0, 0, 0
MouseControl	True
Show_Sign	True
TestValue	0

#### 4) Button:

Page1

The web page includes one Button component that used to log out the web page.

Button Type	LogOut 👻
Switch Page To	-
<b>2</b> ↓ 🖻	
DisplayFormat	
DisplayText	LogOut
FontStyle	Calibri, 20.25pt
Name	ab Calibri
Size	20.25
Unit	Point
Bold	False
GdiCharSet	1
GdiVerticalFont	False
Italic	False
Strikeout	False
Underline	False
Fore_Color	0, 0, 0

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### 5) Chart:



The web page includes one Chart component that used to display the line chart for I/O data. Refer to the property settings as illustrated in the figure.



### 6) UltraRadialGauge:

Refer to the settings as the figure in the next page. The web page includes one UltraRadialGauge component that used to display a radial gauge for I/O data.



### 7) UltraLinearGauge:

Refer to the settings as the figure in the next page. The web page includes one UltraLinearGauge component that used to display a linear gauge for I/O data.



Lir	ne1 Line2 Line3	3 Line4 Li	ine5	
	Description	Word_4		
	Тад Туре	AO Tag	•	
	Tag	Word_4	•	
	Color			
	Digital On	-	1	
	Digital Off	-	1	
( <b>1</b> =-				
Ō	]2↓   □			
۵	DisplayFormat		_	
	AxisColor_X		0, 0, 0	_
	AxisColor_Y		0, 0, 0	_
	AxisFormat_X		Time	_
	Extent_X		50	_
	Extent_Y		50	_
	FontColor_X		255, 255, 255	_
	FontColor_Y		255, 255, 255	_
⊳	FontStyle_X		Verdana, 14.25pt	_
⊳	FontStyle_Y		Verdana, 14.25pt	_
	Interval_X		1	_
	Interval_Y		10	_
	LegendBackgrou		64, 64, 64	-
	LegendBorderCo		255, 128, 0	-
	LegendBorderCo		10	-
	LegendBorderSty		Solid	-
	LegendBorderThi	ckness	3	-
⊳	LegendFont		Verdana, 12pt	-
	LegendFontColor		255, 255, 255	-
	LegendLocation MajorGridColor >	,	Left	-
	MajorGridColor_X		192, 192, 192 169, 169, 169	-
	PlotBackground		0.0.0	-
ſ	RangeMax_Y		50	-
	RangeMin_Y		0	-
C	Rotation X		0	+
	Span_X		3	-
	TitleColor		255, 255, 255	-
	TitleExtent		0	-
Þ	TitleFont		Verdana, 15.75pt	-
ſ	TitleText		Chart	-
C				_

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6) UltraRad	alGauge	1	_	7) Ultr	raLinearGaug	je	
Tag Ty	Tag Type 🛛 AO Tag 👻			Т	ag Type	Al Tag	•
Tag Nar	me Word_4		-	Та	g Name	AI_0	-
Tag Descr	iption AO2			Tagl	Description	AIO	
Output Limi	t (Min.)	-32768		Output	t Limit (Min.)	-3276	8
Output Limit	t (Max.)	32767		Output	Limit (Max.)	3276	7
Address	Type Hold	ingRegister		Add	lress Type	InputReg	ister
Addres	s	2		A	ddress	0	
Data Ty	pe 16-bit S	Signed Integer	r	Da	ata Type	16-bit Signed	d Integer
Gain		0		51	Gain	0.00030518	
Offsel						0	
		00~32767.00	0		Offset	-10.000~10.000	
Range	-52700.0	100-32101.00		_	Range	-10.000-1	0.000
<u>₿</u> 2↓   ©		_		₽		_	
DisplayFe Backgrou		), 0, 0			playFormat kgroundColor	105 1	105, 105
GaugeEr		, 0, 0			elColor		255, 255
GaugeSt					elExtent	10	,
LabelCol	or 🗌 2	255, 255, 255		Lab	elFont	Verdana, f	14.25pt
LabelExt				Lab	elFrequency	5	
LabelFor		ana, 14.25pt			orExtent	25	
LabelFre					orFrequency	10	
MajorExte					orLength	20	
MajorFre					orTickColor		20, 60
MajorTic		), 0, 205			orWidth	4	
MajorTic	-				kerColor	255, 0	), 0
MinorExt					kerExtent	20	
MinorFre					kerWidth	25	
MinorTic		65, 105, 225			orExtent	20	
MinorTick MouseCo	-				orFrequency	5	
ScaleMax					orLength orTickColor	60	102
ScaleMin					orWidth	2	192
Section1		0 170 113			useControl	Z	
Section 2	=	60, 179, 113 255, 255, 128	_		leMax	10	
Section2		233, 233, 120			leMin	-10	
Section2 Section3		255, 99, 71	_		tion1Color		2, 192
Section3		55, 99, 11	_				
Sections			_		tion2Color tion2Start	0	255, 128
Section							99, 71
TestValue		:			tion3Color tion3Stort		59,71
restvalue	e 23.45				tion3Start	8	
					tionExtent	10	
					tionWidth tValue	70 5	

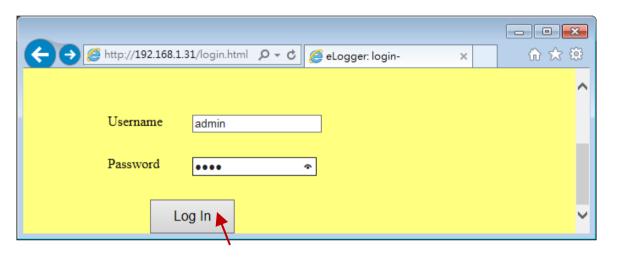
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### 2.9.4. Test the eLogger Web PageNext

Before testing the web page, make sure that both the Win-GRAF project (eL01.zip, refer to <u>Section 1.7</u>) and the eLogger project (eL\_01.wez, refer to <u>Section 2.7</u>) have been uploaded to the PAC.

1. Open a browser and enter the IP address of the PAC (e.g., 192.168.1.31) in the address bar on PC. Next, enter the username and the password (defaults: admin/0000), and then click the **Log-in** button to log into the web page.



- 2. Next, users can observe I/O data or click an HMI component to change either the status of the DO tag or the value of the AO Tag.
- 3. Click the **LogOut** button to log out the web page.



Note: To test negative value, first set the Long1 as a negative value on the local HMI page on PAC.

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## Chapter 3. Advanced eLogger Functions

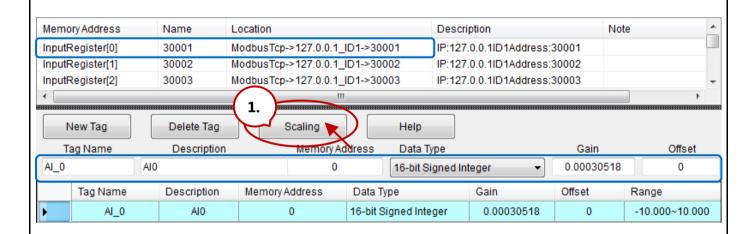
## **3.1.** The Scaling Function

<u>Next</u>

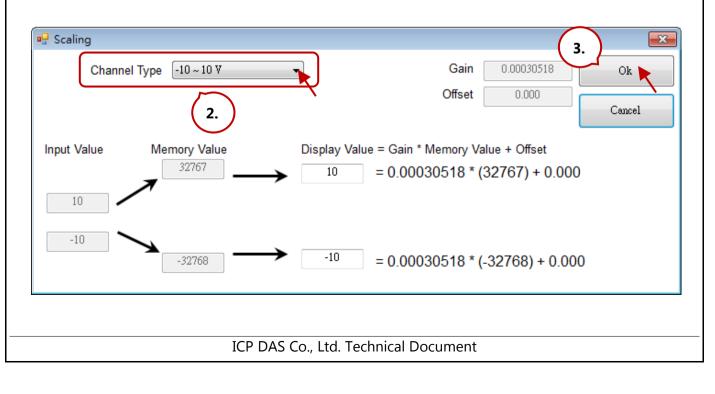
When using an <u>I-8017HW</u>, an eight-channel AI module, and setting the type code to "8" that means the module is used to measure -10 to +10 V. In this case, "AI\_0" is used to read the value of channel 0 of the I-8017HW and the data type is a 16-bit signed integer.

However, the value that Win-GRAF workbench reads from the device is an integer ranging from -32768 to +32767. At this point, if users want to display the value in a range from -10 to +10 on eLogger HMI, the "Scaling" function must be used.

Note that if **Gain** is set to "1" and **Offset** is set to "0" that means not to convert value.



Click the **Scaling** button and choose a **Channel Type** (e.g., -10 to 10 V), and then click **OK**. Then, both the **Gain** and **Offset** values will automatically be set in the respective fields.



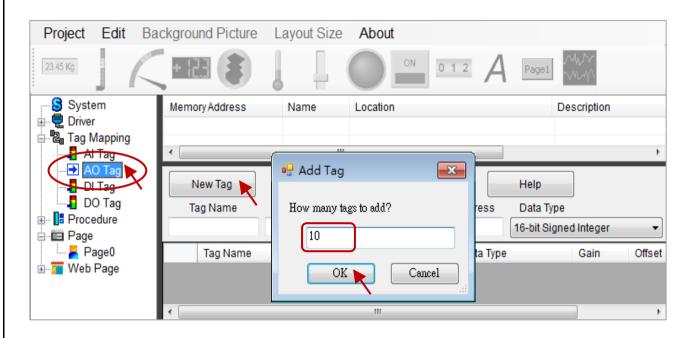
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	Samee nong		1.010	Date	2010/1	_	rage	17 / 10	_
Testing for the \	/alue Conversio	<u>on</u> :					ALTOR	_]	n
First, add a Sever	Segment to the	e page and	d refer to the		Tag T		Al Tag		
property settings	as illustrated in	the figure			Tag Na	ame	AI_0	•	IJ
	- 1	00	0		Tag Desc	criptior	n Alo		
+ (2	<b>3</b> _	•+ 👪	<b>I</b> -		Output Lin	nit (Mii	n.)	-32768	
	■ └┦	AI 0	Ò		Output Lim	nit (Ma	x.)	32767	
		/0			Address	s Type	Inp	utRegister	
1) Set the <b>Tag</b>	<b>Fype</b> as "AI Tag'				Addr	ess		0	ח
2) Set the <b>Tag I</b>	Name as "AI_0".				Data T	Type	16-bit 9	Signed Integer	Γ
3) Set the <b>Mou</b>	seControl as "Fa	alse".			Gai			0030518	h
"True": allow	ing output data;	"False": o	nly for reading	g data.	Offs			0.000	
	5 1 .		,	,			10.0	000~10.000	
					Rang	_	-10.0	10.000	V
Win-GRAF Setting	<u>gs:</u>			l	<b>8</b> ∎ <b>2</b> ↓   ©				
1. Add the "AI_0"	' variable in the	Win-GRAF	and set the		Display Decima		1		h
<b>Type</b> as "INT".					Digital				J
		• • • •	10 D ·		Font_Ba	-			
2. Add a Data Blo					FontCo			92, 192	h
window allowi	ng the eLogger	HMI to rea	ad data.		Mouse Show_S		False		J
(Reference: Se	ction <u>1.2</u> and <u>1.3</u>	<u>3</u> · Declare	e/Public		TestVal		0		
Win-GRAF Var 3. Download the		act to the	PAC and sot th		of the AI O	) varia	blo		
	nen, the convert							AI_O	
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## 3.2. Configuring Multiple eLogger Tags with Name and Data Type

[Contents]

eLogger allows to set the name and the data type for multiple tags at once, as follows:



### **1**. Set the Data Type for multiple tags.

After selecting multiple tags, choosing a data type.

## 2. Set the Tag Name and Description for multiple tags.

After selecting multiple tags, entering text in the Tag Name and Description fields.

N	ew Tag	Delete Tag	Scaling		Help				
Tag Name Description		4. Memory	Address	Data Type (3.)					
VAL REAL Value		· · ·	-1	32-bit Float		-			
1.	Tag Name	Memory Address	Data Type	16-bit Signed 16-bit Unsign					
	VAL_0	REAL Value_0 (null)		32-bit Float	32-bit Signed Long				
Click it and hold down the "Shift" key, and									
			J D	32-bit Float		1	0		
then	CIICK the last i	row to select all.	)	32-bit Float		1	0		
	VAL_4	REAL Value_4	(null)	32-bit Float		1	0		
	VAL_5	REAL Value_5	(null)	32-bit Float		1	0		
	VAL_6	REAL Value_6	(null)	32-bit Float		1	0		
	VAL_7 REAL Value_7		(null)	32-bit Float		1	0		
2.	VAL_8	REAL Value_8	(null)	32-bit Float		1	0		
	VAL_9	REAL Value_9	(null)	32-bit Float		1	0		
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