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About this Manual...

User Information

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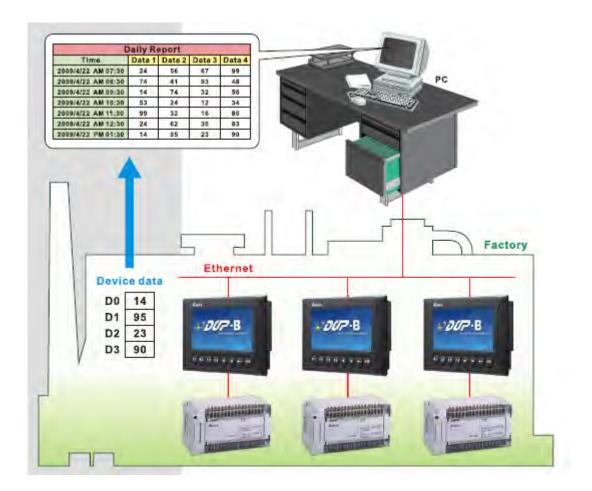
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1.1 eServer Data Collection Software

eServer is a PC software used to help the customers collect and transfer production information and history data directly from production site to a PC in the office via Ethernet. eServer also supports Microsoft Excel (hereinafter "Excel") software functions, such as formulas, tables and graphs. This allows that the collected data can be saved in user-defined Excel file according to various purposes for the customers to easily and quickly create required production reports. In addition, it also supports ODBC interface which is able to save the collected data to a database for the purpose of management and use in production sites.



1.2 Supported Models

The supported models for eServer Data Collection Software are listed in the table below.

Series	Model Name	Remark
	DOP-AE57BSTD	
	DOP-AE57GSTD	DOP series Extension Ethernet Module, DOP-EXLNHJ1AE is
DOP-AE Series	DOP-AE57CSTD	required when using eServer
	DOP-AE80THTD1	with DOP-AE series HMI product.
	DOP-AE10THTD1	
	DOP-B10E615	
DOP-B Series	DOP-B07E415	
	DOP-B08E515	

1.3 System Requirement

Below are the system requirements to comply with the operating environment of eServer:

Hardware / Software	System Requirement	
CPU	Pentium 4, 1.6GHz or greater is recommended	
Memory	1GB and above is recommended	
Hard Disk	Capacity: 50MB and above	
Monitor	Support resolution: 1024×768 or higher full-color display.	
Printer	Printer compatible with Windows 2000 / Windows XP / Windows Vista / Windows 7	
Operation System	Windows 2000 / Windows XP / Windows Vista / Windows 7	
Supported Microsoft Office Software	Microsoft Office 2000 Microsoft Office 2003 Microsoft Office 2007	

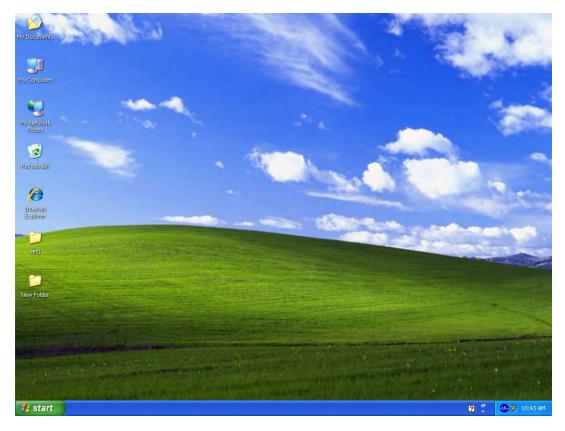
2.1 eServer Setup

In this chapter, it will introduce general functions of eServer with Windows. The users can use it to design what they want. Detail information for each function will be discussed in the following chapters.

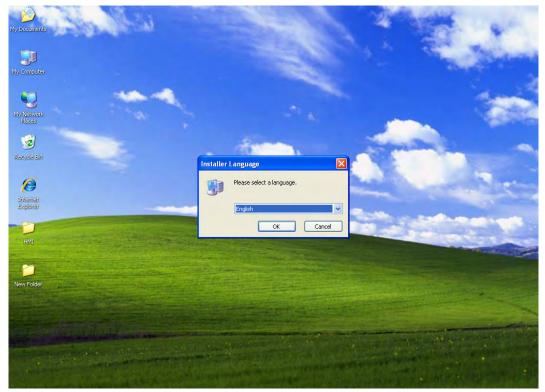
2.1.1 Software Installation

To start the eServer setup, please refer to the following steps:

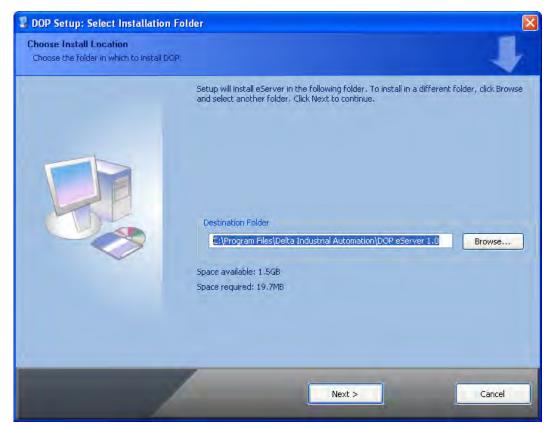
Step 1. Please start-up your computer to Windows 2000 / Windows XP / Windows Vista / Windows 7 system.



Step 2. Execute setup.exe from Windows taskbar by clicking "Start" > "Run". After pressing OK, the system will setup automatically and the following dialog box will appear for selecting the desired display language.



Step 3. After pressing OK, the system will setup automatically and the users will get the following dialog box to choose destination location.



To select the default directory C: \Program Files\Delta Industrial Automation\DOP eServer 1.0, click Next> for the next step. Setup will install in the directory indicated in the Destination Directory box at the bottom of the dialog box.

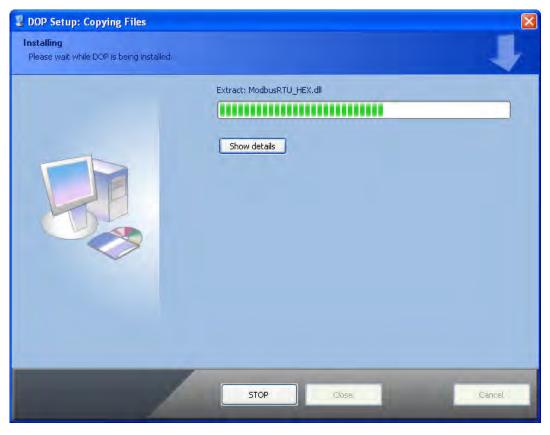
To select a directory other than the default directory, click **Browse**. A list of available directories appears. Highlight the desired directory for the Delta eServer and click **OK**, then **Next**> for the next step.

If necessary, click < **Back** button to take you back through Setup dialog boxes one by one.

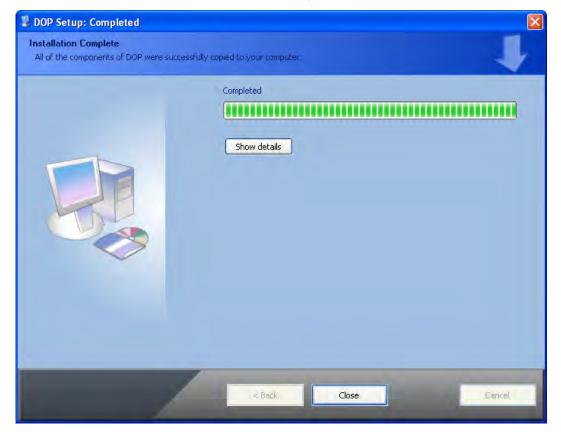
Step 4. After pressing **Next**, the following dialog box will appear and ask the users to select the installation software, i.e. DOP eServer. Then click **Install** button to start DOP eServer installation.

DOP Setup: Select Components	5	
Choose Components Choose which components of DOP sho	uld be installed.	1
	Check the components you wa install. Click Install to start the	nt to install and uncheck the components you don't want to installation.
	Select components to install:	DOP eServer
	Space required: 19.7MB	Description Hover your mouse over a component to see its description
	< Back	Install

Step 5. The system will start DOP eServer Installation.



Step 6. DOP eServer has been installed successfully. Press **Close** to finish the installation.

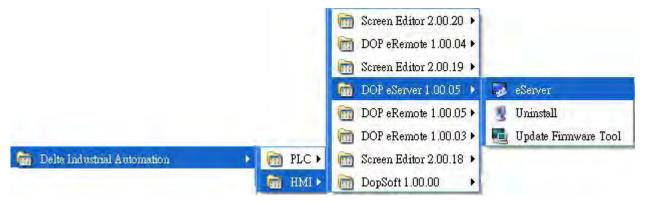


Chapter 3 Before Using eServer

Before using eServer, the users need to update HMI firmware and complete PC and HMI network settings. Please ensure to read the following instructions fully so that the users could understand how to update HMI firmware and complete PC and HMI network settings correctly.

3.1 Update Firmware

Remember to update the firmware before using eServer. To select this function, click **Start** > **Programs** > **Delta Industrial Automation** > **HMI** > **DOP eServer 1.00.0x** > **Update Firmware Tool**.



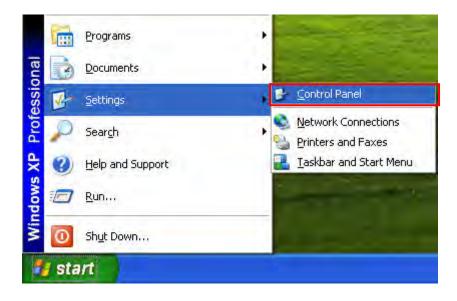
The system will detect if the HMI firmware is the same as the firmware included in eServer. If the HMI firmware is older than the firmware included in eServer, a warning message will pop up to ask for updating the firmware. After clicking **Update Firmware Tool**, the following dialog box will appear for the users to select the communication interface (the default setting is USB driver). Press **Update** button to update HMI firmware automatically. The function of **Update Firmware Tool** is the same as the function of **Update Firmware** provided in eServer (click **Tool** > **Update Firmware**).

B Driver		1 Manufau
	Model Name	Version
Reinst:	all AE570	1.08B
	AE57C	1.08B
de Selection	AE80C16	1.08B
e Selection	AE940	1.08B
OUSB OEthernet	AE10C16	1.08B
引 🔿 USB 📃 💿 Ether	AE10C100	1.08B
	AE10C200	1.08B
	B10E615	2.0203

3.2 Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

3.2.1 Setting PC Network



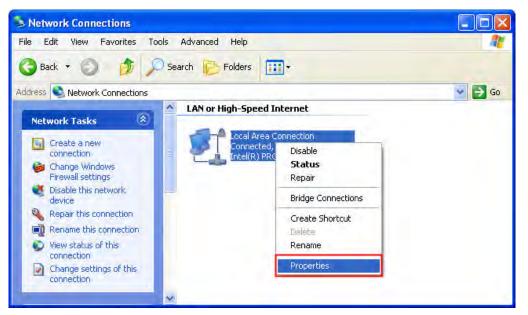
Power on PC and start Windows. Click **Start > Programs**, point to Control Panel, and then



select Network Connections (Connections).

F Control Panel								
File Edit View Favorites Tools	Help							- A
🔘 Back - 🕥 - 🏂 🔎 Se	earch 🌔 Fold	lers 🛄 •						
Address 🕞 Control Panel							~	→ Go
Control Panel 🛞	د Accessibility Options	Rdd Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time	
See Also 🙁	Display 1	Folder Options	Fonts	Game Controllers	Intel® Graphics	Internet Options	کی ایک Keyboard	
Help and Support	Mail	Mouse	Network Connections	Phone and Modem	Power Options	Printers and Faxes	Regional and Language	
	Scanners and Cameras	Scheduled Tasks	Security Center	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	
	User Accounts	Windows Firewall	Wireless Network Set,					

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.



The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

Local Area Connection Properties	20
General Authentication Advanced	
Connect using:	
Intel(R) PRO/1000 MT Network Con	Configure
This connection uses the following items:	
 ✓ Similar Client for Microsoft Networks ✓ File and Printer Sharing for Microso ✓ QoS Packet Scheduler ✓ Thternet Protocol (TCP/IP) 	ft Networks
Install	Properties
Description	
Transmission Control Protocol/Internet Pr wide area network protocol that provides across diverse interconnected networks.	
Show icon in notification area when con Notify me when this connection has limite	
	OK Cancel

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

	and the second
IP address:	172.16.190.1
Subnet mask:	255 . 255 . 255 . Q
Default gateway:	
Oblam DNS server address :	automatically
Our Server S	er addresses:
Preferred DNS server:	<u> </u>
Alternate DNS server:	· · · ·
	Advanced

Then, press **OK** button to finish the settings.

Please note that if the IP address numbers of subnet masks of the PC and HMI are different, HMI may not be displayed in the list when finding node.

3.2.2 Setting HMI Network

Start Screen Editor software program and click **Options > Configuration**. Use **Communication** tab to select **Ethernet** and complete HMI networking settings shown as the figure below. Then, press **OK** button to finish the settings.

nfiguration Standard Communication Print Defa	ult Others	
Add Mavs Up	Recovery the IP a	address in HMI
Delete Move Down	DHCP HMI Name	eRemote
- 2 COM1	HMI IP Address	172 . 16 . 190 . 2
Base Port	Subnet Mask	255 . 255 . 255 . 0
COM3	Default Gateway	0 , 0 , 0 , 0

Then, click **Options > Networking**. The following **Remote Setting** dialog box will appear. Check the check box before **Enable eServer/Remote** and set a password for network communication. After **OK** button is pressed, HMI networking is completed. Compile the edited project file at the end of the programming and the edited project file could be transferred to HMI.

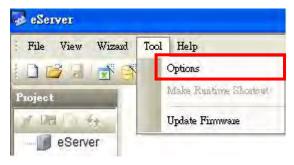
3.3 Start eServer

To start eServer, click Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.0x > eServer.



3.4 eServer Options

Start eServer and click **Tool** > **Options** to synchronize Time and Date settings and perform Disconnect function. When the type on Condition page is selected as Trigger, it is necessary to set the PC Ethernet port number that you have connected. The default setting is 12348.



3.4.1 Synchronize Function

Click **Tool** > **Options** to enter **eServer Option** dialog box. After the box before "Synchronize Time and Date" is checked, the Synchronize function is enabled and the users can choose the source of synchronization function shown as the figure below. When PC is selected, it indicates that the time and date of HMI are both synchronized with the PC. If a linkage (node) is selected, it indicated that the time and date of HMI and PC are all synchronized with the selected linkage.

E Local Host	Synchronize	
○ Communication Disconnect	Synchronize Time and Date Synchronize from Timing Synchronize when Synchronize when Synchronize when Current Local Time Thursday, October 14, 2010 09:08:12	Cancel

After enable "Synchronize" function, set the timing for synchronizing the time and date.

There are two selections for setting the timing:

one is "Synchronize when starting" and the other is "Synchronize when the following cycle reaching". Please refer to the figure below.

If "Synchronize when starting" is selected, the time and date of HMI will be synchronized when eServer is started. If "Synchronize when the following cycle reaching" is selected and the cycle time is set to 12 hours, the time and date of HMI will be synchronized once every 12 hours.

Server Option		
 Local Host Synchronize Communication Disconnect 	Synchronize Image: Synchronize from Synchronize from Image: Synchronize when starting. Synchronize when starting. Synchronize when the following cycle reaching. Image: Omega (Day) Current Local Time	
	Thursday, October 14, 2010 09:12:07	ancel

3.4.2 Disconnect Function

This function allows the system to automatically resume the communication to Ethernet. When the connection to Ethernet is disconnected, the eServer will try to reconnect during the configured time period.

Local Host Synchronize Communication	Disconnect When the conn to reconnet dur	ection to EtherNet is dis ing the configured time	sconnect, the period.	eServer will try
	Linkage	Hour	Minute	Second
	ODBC1	0	0	15
	ODBC2	0	0	15
	ODBC3	0	0	15
	✓ all settings are the same			

For example, see the above figure, if the time is set to 15 seconds, when the connection to Ethernet is disconnected, the eServer will try to resume the communication for 15 seconds.

3.4.3 Local Host

When the type on Condition page is selected as Trigger, it is necessary to set the PC Ethernet port number that you have connected. The default setting is 12348.

eServer Option					
Communication	Local	When the type on O	Condition page is selecte t number that you have 12348	ed as Trigger, it is necessary e connected. (0 ~ 65535)	to set
				ОК Са	ncel

3.5 Make Runtime Shortcut

Start eServer and click **Tool** > **Make Runtime Shortcut** to create a eServer shortcut and activate eServer quickly.



There are two methods provided for making Runtime Shortcut. Please refer to the figure below.

Kunt	ime Shortcut Na	me DOP eSe	erver Runtime	
How	to activate eSer	ver		
There	e are two metho	ids provided:		
Ocr	eate a eServer		op. After starting up, doub e system will activate eSer	
No	Linkage	HMI	Password	-
1	ODBC3	eServer	12345678	

When selecting the desired method, press **Install** button to finish the settings.

ake Runtime Shortcut	
O Create a eSer	orogram run on Windows startup. After starting up, Server automatically.
HMI Password No Linkage 1 ODBC3	Install runtime shortcut success !
	Install Uninstall Close

If the users want to delete the shortcut, please start eServer, click **Tool > Make Runtime Shortcut** and press **Uninstall** button to remove the shortcut. Failure to follow the above instruction to delete the shortcut will result in system error or abnormal operation.

Runtime Shortcut Name DOP eServer Runtime How to activate eServer There are two methods provided:
There are two methods provided:
 Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically.
O Creat eServer g the diately.
HMI Pas ? Are you want to remove the runtime shortcut (y/n) ?
No
1 是(2) 否(1)
Install Uninstall Close

	the second s
Runtime Shortcut Name	DOP eServer Runtime
How to activate eServer	
There are two methods pro	ovided:
• Make eServer software the system will activate	program run on Windows startup. After starting up eServer automatically.
Create a eSe	e-dicking th
eServer shor	ver immediat
MI Password (i)	Uninstall runtime shortcut success !
No Linkage	
1 ODBC3	確定

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4.1 Detailed Settings

Please refer to the following steps to complete Excel sampling setting, i.e. how to log data from HMI to Excel.

4.1.1 Linkage

Start eServer, and click **File > New** or click **New** icon After the **New** dialog box is opened, select **Logging (Excel)** icon and press **OK** button.

Then, the **Excel Logging Wizard** will be activated and the following dialog box will appear. Press **Next** button to continue.

Wizard - Logging		
	Welcome to the Excel Logging Wizard	
	This wizard helps you how to logging data from HMI to Excel.	
	Attenation :	
	The wizard program only support Excel 2000, 2003, 2007 and Excel 2010.	
and the second second	The new version of Excel might be unstable The maximum of sheet in Excel only support 128 pages.	
	To continue, dick Next.	
	< Back Next > Cancel Finish	

Click New icon to access nodes (link to HMI).

Wizard - Logging			X	
	Linkage eServer will need some information such as communication setting, symbol etc And Linkage will help you how to link original project information Llinakge name Excel1 Please dick the following buttons to access nodes:			
EServer	No HMI Name	IP	Port	
	To continue, click Nex		cel Finish	

Click icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.

Transfer	- Path						8
Please	select the follow	ving 2 met	nods to	link			
1. 💿	Select a exist	Screen (DI	DP) file	from stroe	d med	ia.	
	C:\Document	s and Setti	ngs\shi	rley.lai∖My	Docu	iments\Demo_	
	IP Address	172 .	16	. 190 .	2		
2.0	Tansfer from [)elta - HMI					
	0 0	Ū	8	1			
				-			-
					OK	Car	ncel

2. Transfer from Delta - HMI: Transfer the HMI screen project file via network communication directly.

Transfer - Path	X
Please select the following 2 methods to link	
1. O Select a exist Screen (DOP) file from stroed media.	
2, 💿 Tansfer from Delta - HMI	
172 . 16 . 190 . 2	
ОК	Cancel

Press **OK** button to go to next step.

4.1.2 Excel Template Sheet Design

This step is used to create the desired Excel template sheet. There are two methods available for selection:

- 1. Create a new Excel file: When this option is selected, the system will activate Excel automatically and allow the users to design the desired Excel template sheet.
- 2. Select an existing Excel file from stored media: When this option is selected, the system will allow the users to open an existing Excel file.

Wizard - Logging	
×	Excel Template Designed Template Designed will provide a method to help you easy build a sheet in Excel
	Please select the following options to decide how to design a template
	© Create a new Excel file.)
A B C D 1 THA THA THA 2 3 4	O Select a exist Excel file from stroed media.
	To continue, click Next.
	< Back Next > Cancel Finish

Press Next button to go to next step.

4.1.3 Excel Logging Range Setting

This step is used to specify the logging range to which the sampling data will be written. There are three parts in this dialog box.

Wizard - Logging	Excel Logging Range Please select range that you want to log Sheet1	gging			×
	 Need to log data Multi-Vertical Multi-Horizontal Single-Vertical Single-Horizontal Anywhere 				
	You could be clicked the right button to execute Excel and Excel Selection Range A1 - A1				
	Stamp Time and Date, Tpye To continue, dick Next. < Back	n/%d/%v %6H:% :>) (Car			3 Inish

1. Sampling Direction

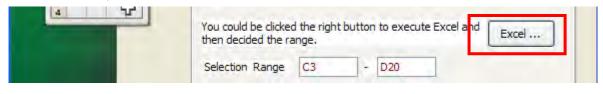
Check **Need to log data** box to determine the sampling direction and select the data range that you want to log. If **Need to log data** box is not checked, the sampling direction will be disabled and the data range cannot be selected. There are five different sampling directions could be selected. Please refer to the following table for explanation.

Sampling Direction	Diagram
Multi-Vertical: When this option is selected, multiple numbers of different register data could be logged into each vertical column in the selecting area simultaneously.	Adri Adr2 Adr3
Multi-Horizontal: When this option is selected, multiple numbers of different register data could be logged into each horizontal row in the selecting area simultaneously.	Adr 1 ···· Adr 2 ···· Adr 3 ····

Sampling Direction	Diagram
Single-Vertical: When this option is selected, only one number of register data could be logged into one cell for one time. The sampling operation is in vertical direction. The sampling operation of the second vertical column will not start unless the sampling operation of the first vertical column is done. Please refer to the right diagram.	Adri
Single-Horizontal: When this option is selected, only one number of register data could be logged into one cell for one time. The sampling operation is in horizontal direction. The sampling operation of the second horizontal row will not start unless the sampling operation of the first horizontal row is done. Please refer to the right diagram.	Adri
Anywhere: When this option is selected, the register data could be logged into any desired cell.	Adr I Adr 2 Adr4 Adr3 Adr n

2. Selection Range

Press Excel button and the system will open the editing Excel template sheet immediately.



In Excel template sheet, use the mouse to decide the selection range. After the desired range is selected, press **Close** button to finish.

C3	<mark>▼ f*</mark> B	C	D	E	F	G	н	1 1
A	D	Daily Report	U		F	6		
-	Time	DATA 1	DATA 2	Data Average	0	-		
	%m/%d/%y %H:%M%%S		DAIAZ	#DIV/0!	e			
	70117 7007 70 y 7011. 70101 70 70 3			#DIV/0!				
				#DIV/0!			1	
				#DIV/0!				
				#DIV/0!				
}				#DIV/0!				
				#DIV/0!				
3				#DIV/0!				
1				#DIV/0!				
2				#DIV/0!				
3				#DIV/0!				
4				#DIV/0!	and the second second			
5				#DIV/0!				
4 5 6				#DIV/0!				
7				#DIV/0!				
8				#DIV/0!				
9 10 11				#DIV/0!		-		
0				#DIV/0!				
9								
2 3								
3			-					
4 5 6						-		
6						-		
5	1							
7								
9								
0						-		
1								
2			-					
3				P	Please decide the	selection tange	and then click	the close but
3 4 5 6 7								
5				9	Selection	C3	- D20	
6				-		1		
7						Cle	ose	
	1.0.1.0			10		_		

3. Stamp Time and Date

When this option is selected, the sampling time and date will be written as well automatically when the sampling data is recorded. The written position will be different depending on the setting sampling direction. Generally, the written position will be at the previous column or row before the selection range. However, if the following three conditions occur, the function of Stamp Time and Date will be disabled.

- a. When the sampling direction is vertical and the selection range includes column
 A (the first column).
- b. When the sampling direction is horizontal and the selection range includes row1 (the first row).
- c. When the sampling direction is anywhere.

The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.

String Format	Representation
%m	Month
%d	Date
%у	Year
%Н	Hour
%M	Minute
%S	Second

4.1.4 Register Setting

This step is used to set the register address of the sampling data.

		ister So	etting address in the follow	ina Cell(s)	Excel	
		Cell	HMI Name	Address	Format	U
	1	C3	HMI	\$3	Unsigned	W
	1	D3	HMI	\$6	Unsigned	17
3 4						
	<					>

Setting Item	Description	Remark
Sheet	Excel Sheet index which the sampling data will be written	Unchangeable
Cell	Excel Cell which the sampling data will be written	Unchangeable
HMI Name	Name of connecting HMI	
Address	Register Address	

Setting Item	Description	Remark
Format	 When the register address is set to Bit, this data format setting will be disabled. When the register address is set to Word, this data format setting will be enabled and the available settings include: BCD, Signed, Unsigned, Hex, Floating, Char (Character) 	
Unit	Unit of the data length of the register	Unchangeable
Read Count	 When the register address is set to Bit, this setting will be 1(one) always. When the register address is set to Word, if the data format is set to BCD, Signed, Unsigned, Hex, and Floating, the setting value of this field could not exceed 2(two). When the register address is set to Word, if the data format is set to Char (Character), the setting value of this field could be user-defined and the max. setting value could be set to 100(hundred). 	
Integer	 If the register address is set to Bit, this integer setting cannot be set. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this integer setting can be set. 	
Fraction	 If the register address is set to Bit, this fraction setting cannot be set. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this fraction setting can be set. 	
Controller	Connecting controller	Unchangeable

4.1.5 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

This option is used to determine how long the sampling process is repeated. The time unit can be defined as ms, second, minute or hour.

Wizard - Logging	Logging Condition The Condition will provide 2 solutions to help you easy create parameters for trigger condition. Sheet1
0	No Type HMI Name Detail Format 1 Const n/a 5s n/a
x>Y	Detect Scan Time
	How long would you like on your logging data ? (500ms ~ one day) 0
	OK Cancel
	To continue, dick Next.
	<pre>Cancel Finish</pre>

2. Trigger (Execute sampling when the trigger conditions are satisfied)

This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:

izand - Logging	The C trigge	ging Co Condition will er condition.	provide 2 solutions	: to help you easy	create parameters for
	No	Type	HMI Name	Detail	Format
0	1	Trigger	HMI	\$0.0	Rising edge
Ŧ	2	Trigger	HMI	\$0.2	Falling edge
• 0	K		HID		
	-				
	To co	ntinue, dick		kt > Can	cel Finish

Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark		
No.	Condition number	Unchangeable		
Туре	Sampling type. There are two kinds of options for selection: Const and Trigger.TypeConst: Execute sampling repeatedly in a certain span of time.			
	Trigger: Execute sampling when the trigger conditions are satisfied.			
HMI Name	Name of connecting HMI			
Detail	Register Address			
Format	 When the register address is set to Bit, the selectable options are: A Bising adds: Triggered by rising adds 			
	A. Rising edge: Triggered by rising-edgeB. Falling edge Triggered by falling-edge			
Controller	Connecting controller	Unchangeable		

4.1.6 Output Setting

This step is used to set how to output and save the sampling data.

Wizard - Logging		×			
	Output Setting				
	Ecxel Sheet				
	 Repeat Add a new file Add a new sheet 	0			
A B C D	Output				
2	Location	Example \eServer_excel \eServer \example			
	Report File Name	Data_%H%M			
	Auto Save How long would you like to save your logging data (Day) (Day) (Hour) (Hour) (Minute)				
	dick Finish.	Next > Cancel Finish			

There are two parts in this dialog box:

- 1. Excel Sheet
 - A. Repeat

When the sampling data has been filled in the selection range to the full, the system will write the data into the selection range from the first column or row repeatedly.

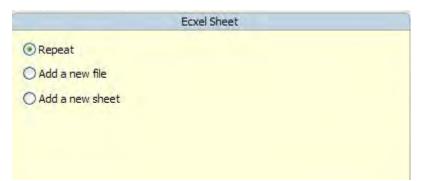
G	-10 - <i>f</i> *				
1	A B	С	D	E	F
1		Daily Report			
2	Time	DATA 1	DATA 2	Data Average	
3	08/24/2009 17:18:	16 35	35	35	-
4	08/24/2009 17:18:	17 45	46	45.5	
5	08/24/2009 17:18:	18 54	54	54	
6	08/24/2009 17:18:	19 64	64	64	
7	08/24/2009 17:18:	20 74	74	74	
8	08/24/2009 17:18:	21 84	84	84	
9	08/24/2009 17:18:	22 93	93	93	
10	08/24/2009 17:18:	23 65439	3	32721	
11	08/24/2009 17:18:	24 65449	13	32731	
12	08/24/2009 17:18:	25 65459	23	32741	
13	08/24/2009 17:18:	26 65468	32	32750	
14	08/24/2009 17:18:	27 65478	42	32760	
15	08/24/2009 17:18:	28 65488	52	32770	
16	08/24/2009 17:18:	29 65498	62	32780	
17	08/24/2009 17:18:	30 65508	72	32790	
18	08/24/2009 17:18:	31 65517	81	32799	
19	08/24/2009 17:18:	32 65527	91	32809	
20	08/24/2009 17:18:	33 1	1	1	
21					
22					
23					

B. Add a new file

When the sampling data has been filled in the selection range to the full, the system will open a new Excel file automatically and write the data into the new Excel file.

C. Add a new sheet

When the sampling data has been filled in the selection range to the full, the system will open a new Excel sheet automatically and write the data into the new Excel sheet.



2. Output Setting

	Output				
Location	Example \eServer_excel \eServer \= xample \				
Report File Name	Data_%H%M				
Auto Save How long would you like t	o save your logging data				
0 🗘 (Day)	0 🗘 (Hour) 30 🛟 (Minute)				

- A. Location: Choose file destination location.
- B. Report File Name: Specify the name of the report file. The users can add the date and time in the end of the file name. The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.

String Format	Representation
%m	Month
%d	Date
%у	Year
%Н	Hour
%M	Minute
%S	Second

C. Auto Save: When this option is enabled, the system will back up the data in a period of specified time automatically in case the data will be lost due to abnormal operation when the power source is cut off unexpectedly or other accident occurs.

Chapter 5 Writing Data in Microsoft Excel

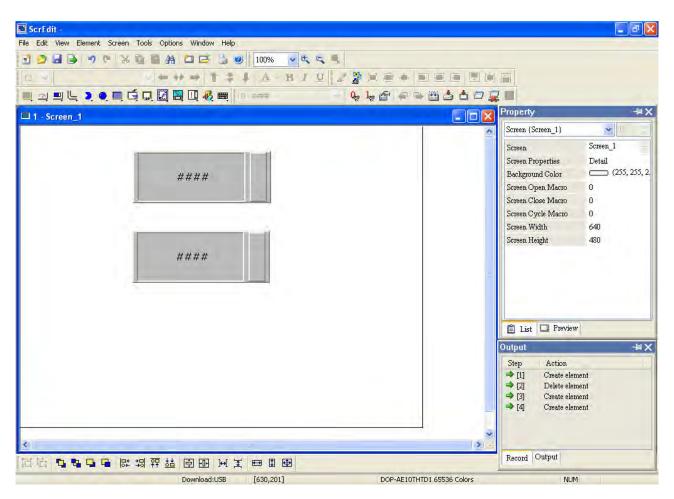
Before creating testing example, make sure to change the upload and download option (**Options > Configuration**) on Screen Editor first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

5.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses \$3 and \$6 every second, record the data in Excel report file; meanwhile, calculate the average value of the register addresses \$3 and \$6 by using Excel formula and save the collected data in the specified folder (C:\Data).

5.1.1 Create HMI Project File

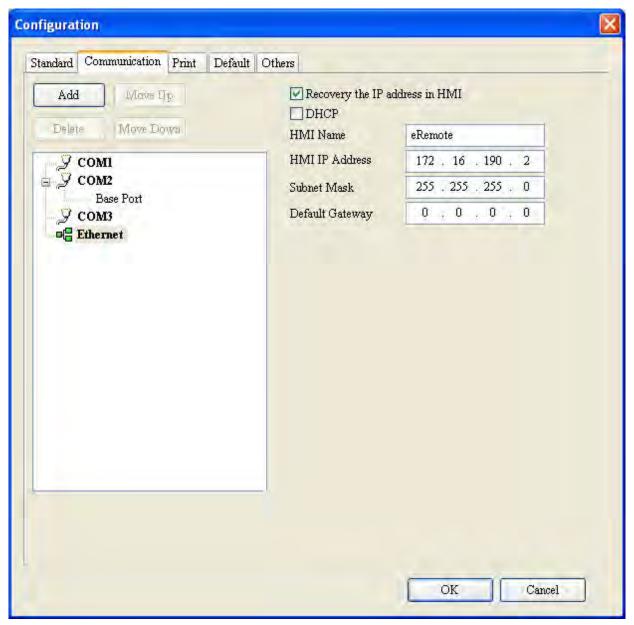
Start Screen Editor software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements (\$3 and \$6) on the screen. In this case, 10 inches color AE type DOP series HMI is used.



Use Screen Cycle Macro and enter the following commands in macro command window.



Click **Options > Configuration** and use **Communication** tab to select **Ethernet** and complete HMI networking settings shown as the figure below. Then, press **OK** button to finish the settings.



🖺 ScrEdit -				
File Edit View Element Screen Tools C	ptions Window Help			
: ♪ # ♪	Configuration <u>A</u> larm Setup History Setup Passowrd Table Setting	▼		
	Network Setting		Property	×⊮-
1 - Screen_1	<u>T</u> ag Table Print Type <u>s</u> etting		Screen (Screen_1)	× .
	<u>P</u> icture Bank <u>T</u> ext Bank		Screen Properties D	creen_1 Detail
	Submacro Initial Macro Background Macro Clock Macro		Screen Open Macro 0 Screen Close Macro 0 Screen Cycle Macro 2	
	Environment		Contract Care Contractor	40 80
	####		🖹 List 💷 Preview	
			Output	XIII-
			Step Action ⇒ [1] Create element ⇒ [2] Delste element ⇒ [3] Create element ⇒ [4] Create element	
<.		×	To 1 Output	
티면 다 다 다 다 다 나 나 나 나 나 나 나 나 나 나 나 나 나 나	법 호교 써 또 📼		Record Output	
Change Window Position	Download:USB [366	141@179.40.W:220.H:83 DOP-AE10THTD1.65536 Colors	NUM	

Next, click **Options > Network Setting**.

The following **Remote Setting** dialog box will appear. Check the check box before **Enable eServer/Remote** and set a password for network communication. After **OK** button is pressed, HMI networking is completed. Compile the edited project file at the end of the programming and the edited project file could be transferred to HMI.

Romote Setting		X
🗹 Enable eSe	rver/Remote	
Password	12345678	
Screen sample	e time in 100 🔮	ms
ОК	Cancel	

5.1.2 eServer Setting

1. After eServer is enabled, eServer icon will appear at the bottom right of Windows screen.

Right-click this icon and select **Setting** option from the pop-up menu.



2. Then, eServer window will open.

er
View Wizeod Tool Help
Server
ject
»» •

- 3. Click **File** > **New** or click icon to create a new project file.
 - Server File View Wizard Tool Help

4. Select

icon to enable Excel Logging (Sampling) Wizard.

9)					
	Logging Recipe				
(Excel) ((ODBC) Access				
New Project Name:	EXCEL				
New Project Name: Location:	EXCEL C:\Documents and Settings\Tina.Q.Lee\Desktop				



Press Next button to go to next step.

5. Click New icon to access nodes (link to HMI).

Wizard - Logging			×
		ome information such as communic o you how to link original project i	
	Llinakge name	Excel 1	
	Please click the folio	IP	Port
eServer			
	To continue, click Ne	ext.	2
		< Back Next >	Cancel Finish

Choose **Transfer from Delta** – **HMI** option to transfer the HMI screen project file via network communication directly. Press **OK** button to go to next step.

ransfer – Path	1
Please select the following 2 methods to link 1. O Select a exist Screen (DOP) file from stroed media.	
2. Tansfer from Delta - HMI	
IP Address Setup	Cancel
IP Address	
Search IP in Ethernet Update	
Name Target IP eRemote 172.16.190.2	
OK Cancel	

6. Design Excel template sheet. Select **Create a new Excel file** option and press **Next** button to go to next step.

Wizard - Logging	
X	Excel Template Designed Template Designed will provide a method to help you easy build a sheet in Excel
	Please select the following options to decide how to design a template
A B C D 1 Time Time 2 3	Select a exist Excel file from stroed media.
	To continue, click Next.
	< Back Next > Cancel Finish

The system will enable Excel automatically. Create a Excel template sheet as the figure below and enter the following formulas into the cells of E3 ~ E22 in order. Then, press Close button in the dialog box which appears at the bottom right of Windows screen to go to next step.

Column	Formula	Column	Formula
E3	=AVERAGE(C3:D3)	E12	=AVERAGE(C12:D12)
E4	=AVERAGE(C4:D4)	E13	=AVERAGE(C13:D13)
E5	E5 =AVERAGE(C5:D5)		=AVERAGE(C14:D14)
E6 =AVERAGE(C6:D6)		E15	=AVERAGE(C15:D15)
E7	=AVERAGE(C7:D7)	E16	=AVERAGE(C16:D16)
E8	=AVERAGE(C8:D8)	E17	=AVERAGE(C17:D17)
E9	=AVERAGE(C9:D9)	E18	=AVERAGE(C18:D18)
E10	=AVERAGE(C10:D10)	E19	=AVERAGE(C19:D19)
E11	=AVERAGE(C11:D11)	E20	=AVERAGE(C20:D20)

	Excel - Book11								
	lit <u>V</u> iew Insert Format Tools Data							estion for hel	
	691918 B B-19-18	δ τ ζί 🛄 🔞	Arial	• 10 • B 2	Ū ≣	章 署 座	\$ %		≫ - <u>A</u> -
SnagIt 🕒	y Window								
E3	★ f =AVERAGE(C3:D3)	111 U.S.		-					
A	В	Ċ	D	E	F	G	Н	1	J
		Daily Report							
	Time	DATA 1	DATA 2	Data Average					
	%m/%d/%y %H:%M: %S	la como como como como como como como com	1	(#DIV/0!					
				#DIV/0!					
_				#DIV/0!					
-				#DIV/0!					
-	1			#DIV/0!	_				
-				#DIV/0!					
		-		#DIV/0!					
		-		#DIV/0!					-
				#DIV/0!					
				#DIV/0! #DIV/0!					
		· · · · · ·		#DIV/0!	-			-	
				#DIV/0! #DIV/0!					
		-		#DIV/0!					
		-		#DIV/0!					
3		-		#DIV/0!					
	7			#DIV/0!					
	-			#DIV/0!					
	-			#D10/0:					
1									
1									
				1000					
				i					
				4	Please	ayout excel a	nd then click	close button to	next step.
1							Close		
							01026		
1	about (church (church)			Lau		1			12
• • • • / ?	Sheet1 / Sheet2 / Sheet3 /			<				NUM	

7. Excel Logging Range Setting

7.1 Set the sampling direction as Multi-Vertical.

	Sheet1	
	✓ Need to log data	
	Multi-Vertical	
	O Multi-Horizontal	-
	Single-Vertical	
ABCD	Single-Horizontal	
1	O Anywhere	
2		_

7.2 Press **Excel** button and the system will open the editing Excel template sheet immediately.

You could be clicked then decided the ra		t buttor	n to execute Excel ar	d Excel
Selection Range	C3	-	D20	

7.3 In Excel template sheet, the users can drag the mouse to select the selection range. In this case, C3 ~ D20 is selected. Then, press **Close** button to finish.

	СЗ		fx								
1	A		В	C	D	E	F	G	н	1	1
				Daily Report							
			Time	DATA 1	DATA 2	Data Averaç	qe				
		%m	/%d/%y %H:%M%%S			#DIV/0!					
						#DIV/0!					
						#DIV/01					
						#DIV/0!	1.0				
					-	#DIV/0!					
						#DIV/0!					
						#DIV/01					
						#DIV/0!					
						#DIV/0!					
					C	#DIV/0!					
						#DIV/01					
				1		#DIV/0!					
						#DIV/0!					
						#DIV/0!					
						#DIV/0!					
						#DIV/0!					
		-				#DIV/0!	-		1		
)						#DIV/0!					
9 2 2 3 4 5 7 7 8 8 8 8											
9											
3											
ī											
0											
1				1							
					i						
						-					
									1		1
							Please decide th	ne selection rang	e and then click	the close but	atton
							Selection	C3	• D20		
					1 1		_	1			
								1.0	Close		
1		heet /				10					13

7.4 Check the check box before Enable Stamp Time and Date function and change the format to %m/%d/%y %H:%M:%S. Once the sampling operation is enabled, the sampling date and time will be recorded into the cells of B3 ~B20.



8. Set the register addresses.

		ister So	address in the follow	ving Cell(s)	Excel	
	Sheet	Cell	HMI Name	Address	Format	1
	1	C3	HMI	\$3	Unsigned	1
	1	D3	HMI	\$6	Unsigned	
A B C D						
	1					

Use the following dialog box to set the sampling register addresses.

ut							
Type PLC Device (Word)	Link		[]	intern	al Mer	mory 💌	
	Devic	Device Type		\$			
FLC Device (Bit)	Addre	SS		6			
⊙ Internal Memory (Word)	Tag						
O Internal Memory (Bit)	В	c	D	E	F	-	
	6	7	8	9	A	CE	
TRACE IN A	11	2	3	4	5	T	
PLC Station Number	0	:	+	-	1	-	
11 Default			1	N	lone		

9. Set Logging Condition (Sampling Time) to 5s.

Wizard - Logging		×
	Logging Condition	
X	The Condition will provide 2 solutions to help you easy create parameters for trigger condition.	or
	Sheet1	_
0	No Type HMI Name Detail Format 1 Const n/a 5s n/a	-
X		
X>Y	Detect Scan Time How long would you like on your logging data ?	
	(500ms ~ one day)	
t t	0. (Hour) 0 (Minute) 5 (Second) 0 (minute)	s)
	OK Cancel)
	To continue, click Next.	
	<back next=""> Cancel Finish</back>	

10. Choose **Add a new file** in Excel Sheet and define the file location and file name shown as the figure below. After enabling the function of **Auto Save**, press **Finish** button to complete the settings.

Wizard - Logging		
	Output Setting	
		Ecxel Sheet
	 Repeat Add a new file Add a new sheet 	
ABCD	<u> </u>	Output
2	Location	Example \eServer_excel \eServer \example \
4 BOY OF ALIETO BEFE	Report File Name	Data_%H%M
	Auto Save How long would you like	to save your logging data
	dick Finish.	
	< Back	Next > Cancel Finish

11. Press 🖸 icon and enter the password. Then, the system will start sampling operation, i.e. writing data in Excel file.

🥪 - eServer	
File View Wizaw	t Tool Help
i 🗋 💕 🔒 📑 🤅	ے 🔍 💽 🐔
Project	
🖌 🗔 😒 ++	<u>v</u>
😑 🧊 eServer	Node
Excel1	1000

atho			19
No	Linkage	HMI	Password
1	Excel1	HMI	*******
al	passwords are	the same passwo	ord under No. 1
-			OK Cancel
			OK Caricei

G10	+ fe												
A	В	C	D	E	F	G ·	н	1	t	ĸ	L	м	
1		Daily Report										-	
2	Time	DATAI	DATA 2	Data Average									
3	08/24/2009 17:18:16	.35	35	35									
4	08/24/2009 17:18:17	45	46	45.5									
5	08/24/2009 17:18:18	54	154	-54									
6	08/24/2009 17:18:19	64	.64	64									
7	08/24/2009 17:18:20	74	74	74									
8	08/24/2009 17:18:21	84	84	84									
9	08/24/2009 17:16:22	93	93	93		-							
10	08/24/2009 17:18:23	65439	3	32721									
ľ1	08/24/2009 17:18:24	65449	13	32731			[·						
12	08/24/2009 17:18:25	65459	23	32741									
13	08/24/2009 17:18:26	65468	32	32750									
14	08/24/2009 17:18:27	65478	42	32750									
15	08/24/2009 17:18:28	65488	52	32770									
16	08/24/2009 17:18:29	65498	62	32780									
17	08/24/2009 17:18:30	65508	72	32790									
18	08/24/2009 17:18:31	65517	81	32799									
19	08/24/2009 17:18:32	65527	9]	32809									
20	08/24/2009 17:58:33	-1	1	1									
21													
22						-		-					
23								_	_		_		
24													
25											_		
26										-			
27													
28								-			-		
29								_	-	-			
30						-	-	-					
31													
32													
33													
34 35													
35						-	-	-	-	-			
30													
38								-		-			
39				-		-		-	-	-			
40													
40								-					
								-	-				
A > H\Sheet	1/					10					_		a.

12. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select **Pause** or **Stop** option from the pop-up menu, the sampling operation will pause and stop immediately. The users also can use **Excel Visible** option to decide whether the Excel window displays on the screen or not.



6.1 Detailed Settings

Please refer to the following steps to complete ODBC sampling setting, i.e. how to log data from HMI to a database.

6.1.1 Linkage

Start eServer, and click **File > New** or click **New** icon After the **New** dialog box is opened, select **Logging (ODBC)** icon and press **OK** button.

Then, the **ODBC Logging Wizard** will be activated and the following dialog box will appear.

Press Next button to continue.

Wizard - Logging		
	Welcome to the ODBC Logging Wizard	
	This wizard helps you how to logging data from HMI to Database.	
L	To continue, click Next.	
	< Back Next > Cancel Finis	h

Click New icon to access nodes (link to HMI).

Wizard - Logging			
	And Linkage will help you Llinakge name	formation such as communication how to link original project inform ODBC1 buttons to access nodes:	
	No HMI Name	IP	Port
BServer Land Land	To continue, dick Next.		>
	< Bac	k Next > Can	cel Finish

Click icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.

Select a exist	Screen (DC	P) file	from stroe	d med	ia.	
C:\Document	s and Settin	ngs\shi	rley.lai∖My	Docu	ments\Demo	
IP Address	172 .	16	. 190 .	2		
O Tansfer from I	Delta - HMI	8				

2. Transfer from Delta - HMI: Transfer the HMI screen project file via network communication directly.

Transfer - Path	×
Please select the following 2 methods to link	
1. O Select a exist Screen (DOP) file from stroed media	L-
2. () Tansfer from Delta - HMI 172 . 16 . 190 . 2	
172 . 10 . 130 . 4 []	
05	7

Press **OK** button to go to next step.

6.1.2 ODBC (Open Data Base Connectivity)

This step is used to create an ODBC Data Source pointing to your database.

Wizard - Logging			
de la	DDBC Please indicate the following its Chooses a data source (DSN)		password
and the	ODBC Data Source	TEST	
	User Name	sa	
15 T	Password	****	
	Database Driver	SQL Server 🐱	
	Table	Table 1	.
		Table 1	\mathbf{X}
	[]		
	Time and Date Table	Field Detail	👲
E	Stamp Table1	Time %m/%d/%	y %H:%M:%8
	<	JHI	>
т	o continue, dick Next.		
	< Back	Next > Can	cel Finish

ltem	Explanation
ODBC Data Source	Name of ODBC Data Source
User Name	Login Username
Password	Login Password
Table	Name of Sampling Data Table

Time and Data Stamp Function:

Time and Date	Table	Field	Detail
🖂 Stamp	Table1	Time 💌	%m/%d/%y %H:%M:%S
		Time	
		Data1	
		Data2	

ltem	Explanation						
Time and Date	Choose if	Choose if Time and Date Stamp function is enabled.					
Table	Table wh	ich the time and date	e will be written.				
Field	Field whi	ch the time and date	will be written.				
Detail	character	The format of the date and time is specified by a string of characters which can be user-defined and changed freely. Please refer to the table below for the string representation.					
		String Format Representation					
		%m Month					
		%d Date					
		%y Year					
		%H Hour					
		%M Minute					
		%S	Second				

6.1.3 Register Setting

This step is used to set the register address of the sampling data.

Wizard - Logging						
		jister Se	Add	Delete		
	No	Table	Field	HMI Name	Address	Form
S 3 3	1	Table1	Data1	HMI	\$3	Unsig
	2	Table1	Data2	HMI	\$6	Unsi
	<					3
		tinue, click Ne				
		C	< Back	Next > C	ancel	Finish

Setting Item	Description	Remark
Table	Table which the sampling data will be written	
Field	Field which the sampling data will be written	
HMI Name	Name of connecting HMI	
Address	Register Address	
Format	 When the register address is set to Bit, this data format setting will be disabled. When the register address is set to Word, this data format setting will be enabled and the available settings include: BCD, Signed, Unsigned, Hex, Floating, Char (Character) 	
Unit	Unit of the data length of the register	Unchangeable
Read Count	 When the register address is set to Bit, this setting will be 1 (one) always. When the register address is set to Word, if the data format is set to BCD, Signed, Unsigned, Hex, and Floating, the setting value of this field could not exceed 2(two). When the register address is set to Word, if the data format is set to Char (Character), the setting value of this field could be user-defined and the max. setting value could be set to 100(hundred). 	

Setting Item	Description	Remark
Integer	 If the register address is set to Bit, this integer setting cannot be set. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this integer setting can be set. 	
Fraction	 If the register address is set to Bit, this fraction setting cannot be set. If the register address is set to Word, except Floating and Char(Character), when the other format is selected, this fraction setting can be set. 	
Controller	Connecting controller	Unchangeable

6.1.4 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

This option is used to determine how long the sampling process is repeated. The time unit can be defined as ms, second, minute or hour.

Wizard - Logging			×
	Logging Condition The Condition will provide 2 solutions trigger condition.	to help you easy crea	te parameters for
0	No Type HMI Name	Detail	Format
X>Y	Detect Scan Time		×
	How long would you like on your loggi (500ms ~ one day) 0 (Hour) 0 (Minub) 0 😂 (ms)
0 0		ОК	Cancel
	To continue, click Next.		<u> </u>
	< Back Nex	t > Cancel	Finish

2. Trigger (Execute sampling when the trigger conditions are satisfied)

This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:

Wizard - Logging	The C trigge	ging Co Condition will er condition.	provide 2 solutions	s to help you easy	create parameters for
0	No		HMI Name	Detail	Format
¥	1	Trigger Trigger	HMI HMI	\$0.0 \$0.2	Rising edge Falling edge
	<		III		
	То со	ontinue, click	Next.		
			< Back Ne	xt > Can	cel Finish

Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark		
No.	Condition number	Unchangeable		
	Sampling type. There are two kinds of options for selection: Const and Trigger.			
Туре	Const: Execute sampling repeatedly in a certain span of time.			
	Trigger: Execute sampling when the trigger conditions are satisfied.			
HMI Name	Name of connecting HMI			
Detail	Register Address			
E a mus a t	 When the register address is set to Bit, the selectable options are: 			
Format	A. Rising edge: Triggered by rising-edge			
	B. Falling edge Triggered by falling-edge			
Controller	Connecting controller	Unchangeable		

This page intentionally left blank

Chapter 7 Writing Data in Microsoft Access

Before creating testing example, make sure to change the upload and download option (**Options > Configuration**) on Screen Editor first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

7.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses \$3 and \$6 every second, record the data in Microsoft Access database via ODBC interface, and save the collected data into the specified folder (C:\Data).

7.1.1 Database Setting

1. Installing MSDE

First download the free software MSDE from the Microsoft web site. To download it, go to http://www.microsoft.com/downloads/details.aspx?familyid=413744d1-a0bc-479f-bafa-e4b278eb9147&displaylang=zh-tw#filelist and a download link will redirect the users to download it.

After running the self-extracting file, open **setup.ini** file within MSDE subdirectory for editing.

In the setup.ini file under the [Options] tag insert:

SAPWD="0000"

SECURITYMODE="SQL"

The SAPWD is the password required for the system administrator (SA) login account. In this case, the SA login password is set to **0000**. The users can set the desired password freely. Once the setup.ini file is saved, double-click setup.exe to complete MSDE installation.

2. Enabling MSDE

Execute **SVRNETCN.exe** () within C:\Program Files\Microsoft SQL

Server\80\Tools\Binn subdirectory and enable Named Pipes and TCP/IP options.

eneral Network Libraries			
Instance(s) on this server:	IABU-SHIRI	LEY-EN	-
Disabled protocols:		Enabled protocols:	
Multiprotocol NWLink IPX/SPX	Enable >>	Named Pipes TCP/IP	
AppleTalk Banyan Vines	<< Disable]	
Force protocol encryption Enable WinSock proxy Wintack move address		Proper	ties
wingerst, breek bare	ок	Cancel A	oply Help

3. Setting Windows Firewall 🤎

Click **Start** and then click **Control Panel**. In the **Control Panel**, click **Windows Security Center > Windows Firewall**. Then, click on the **Exceptions** tab.

Windows Firewall	
General Exceptions Advanced	
Windows Firewall is blocking incoming network connection: programs and services selected below. Adding exceptions a to work better but might increase your security risk. Programs and Services:	
Name	
 File and Printer Sharing Network Diagnostics for Windows XP Remote Assistance Remote Desktop SMLMProxy Module - HP1006MC.EXE UPnP Framework Windows Live Messenger 8.1 Windows Live Messenger 8.1 (Phone) Windows® NetMeeting® 	
Add Program Add Port Edit Display a notification when Windows Firewall blocks a p What are the risks of allowing exceptions?	Delete
	JK Cancel

Click Add Port button and the following Add a Port dialog box will appear.

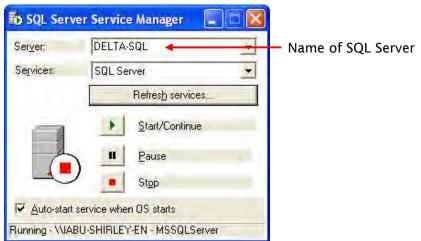
Add a Port		
	to open a port through Windows Firewall. ol, consult the documentation for the prog	
Name:	SQL	
Port number:	1433	
	O TCP O UDP	
What are the risks Change scope	of opening a port?	Cancel

In the Add a Port dialog box, type SQL in the Name text field and type the port number of the instance of the Database Engine, such as 1433 for the default instance in the Port number text field. Ensure that TCP is selected and click OK to complete the settings. When SQL port is shown and selected in Windows Firewall dialog box, it indicates that SQL Server port will not be blocked and the incoming connections to SQL Server will be allowed.

😺 Windows Firewa	all		
General Exceptions	Advanced		
programs and service	blocking incoming netw es selected below. Add ght increase your secu es:	ing exceptions a	
Name			
Remote Assista	ostics for Windows XP nce		
⊘ SQL			
 ✓ Windows® Net Add Program ✓ Display a notifical 	vlessenger 8.1 vlessenger 8.1 (Phone)	Edit	Delete
			JK Cancel

4. Activating SQL Server

Double-click the bottom right of Windows screen to open the following SQL Server Service Manager dialog box and click Start/Continue button.



5. Starting Microsoft Access

Start Microsoft Access by clicking Start > Programs > Microsoft Office > Microsoft Office > Microsoft Office Access.



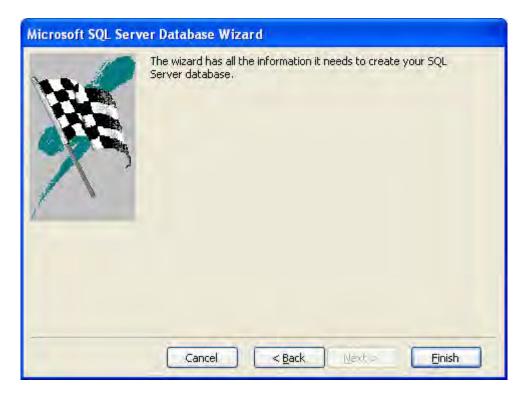
Then, click **New** icon and choose **Project using new data** to open a new database file and set the directory to C:\Data.

	e New Database		X	New File
M	Save in: My Recent Documents Desktop y Documents y Documents File File	Data	adp1.adp	New Islank database Islank data access page Project using existing data Project using new data Promexisting file Templates Search online for: Image: Complate the search online for:

Press **Create** button to enable Microsoft SQL Server Database Wizard.

Microsoft SQL	Server Data	base Wizard		
	What <u>S</u> QL S	erver would you like to use for this database?		
-	DELTA-SQL	4 2	- Select L	ocal or the name
	with CREAT	fy the login ID and password of an account E DATABASE privileges on this server.	of the c Server	onnecting SQL
	Login ID:	sa 🖌	— User's r	iame: sa
	Password:	****		assword: 0000
	What do you	u want to name your new SQL Server <u>d</u> atabase?		
	DELTA		Name o	[:] database: DELTA
		Tancel Rack <u>N</u> ext > F	inish	

Press Next button to continue.



Press **Finish** button to complete the settings.

Then, click **Design** in the following pop-up window to create a database table in Design view.

🚛 adp1 : Project - DEL1	FA (Access 2000 file format)	
😭 Open <u>M</u> esign 🔄 <u>N</u> e	w 🗙 🖕 📴 🗰	
Objects	Create table in Design view	
Tables		
gueries		
📑 Database Diagrams		
E Forms		
E Reports		
Pages		
2 Macros		
at Modules		
Groups		
Favorites		

In the Table dialog box, create a database like the following figure shown below.

Table1 : Table					
Column Name	Data Type	Length	Allow Nulls	Description	
Time	char	50	V		
Data1	char	50	V		
Data2	char	50	V		
Columns	Lookup	-			
Columns	Lookup		1		
	Lookup				
Default Value Precision	Lookup)				
Default Value Precision Scale	D				
Default Value Precision Scale Idanaty	D				
Default Value Precisión Scale Idantity Idantity Idantity Scad	D				
Precision Precision Scale Identity Scend Identity Scend Identity Increment	D D No				
Preceion Stelle Identity Jdentity Jdentity Sted Jdentity Increment Is Rowguld	D				
Default Value Precisión Scale Identity Sced Identity Sced Identity Increment Is Roweduld Formula	U D No No	×			
Columns Default Value Precision Scala Identity Sced Identity Sced Identity Increment Is Bowald Formula Collation Format	D D No	>			
Default Value Precisión Scele Identity Sced Identity Sced Identity Increment Is Rowsuld Formula Collation	U D No No	>			

After editing the table, close the window to give a name for this table such as Table 1.

			1	Ť	Table1 : Table
1	Description	Allow Nulls	Length	Data Type	Column Name
		Y	50 50	char char	Time
		× ×	50	char	Data1 Data2
		v	50	unar	
					-
					-
					-
					1
					2
		Choose Name			1
		Choose Mame			
	he table:	Enter a name for			
		Table1			
		I CLORENT			
	OK Cancel Help	Г			
	OK Calicer Help				
				.ookup	Columns
					a martin
					Default Value
				0	Precision Scale
				No	Identity
				IND	Identity Seed
					Identity Increment
				No	Is RowGuid
					Formula
			>	<database default:<="" td=""><td>Collation</td></database>	Collation
					Format
					Decimal Places Input Mask

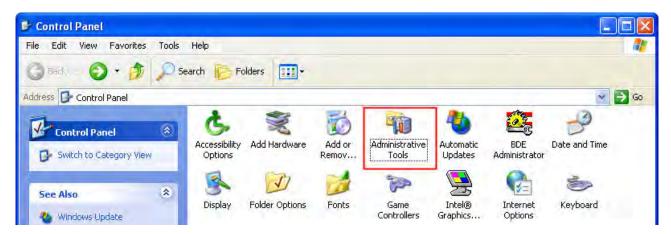
Click **OK** button, and the following warning dialog will pop-up.

Please press No button to complete the settings.



6. ODBC Setup

In the Control Panel, double-click Administrative Tools.



In the Administrative Tools, double-click Data Sources (ODBC).



In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.



Select **SQL Server** and then click on **Finish** button.

)
-01
1
-
~
1

In the Create a New Data Source to SQL Server dialog box, do the following:

Enter the name of the data source and select the SQL Server that the users want to access.

Create a New Data Sou	irce to SQL Server 🛛 🔀
Select a dayer we want to an a do	This wizard will help you create an ODBC data source that you can use to connect to SQL Server. What name do you want to use to refer to the data source? Name: TEST ••••••••••••••••••••••••••••••••••
	Finish Next > Cancel Help

Press Next button to continue.

Choose how SQL Server should verify the authenticity of the login ID. Enter the user's name and the password. In this case, the user's name is **sa** and the password is **0000**. Press **Next** button to continue.

Create a New Data So	urce to SQL Server	×
Selaci a diver io Selaci a diver io internit Access I olt dBase I soft Excel I Norosoft ForPri	How should SQL Server verify the authenticity of the login ID? With Windows NT authentication using the network login ID. With SQL Server authentication using a login ID and password entered by the user.	1
in proceeding constructions of the para	To change the network library used to communicate with SQL Server, click Client Configuration Client Configuration	
	Login ID: sa Password: ****	
	< Back Next > Cancel Help	1

Change the default database to **DELTA**.

Press Next button to continue.

Create a New Data So	urce	e to SQL Server	×
Selacit a diwer we	N	Change the default database to:	
and Albert	T R R R	Attach database filename:	
		< Back Next > Cancel Help	

Press Finish button.

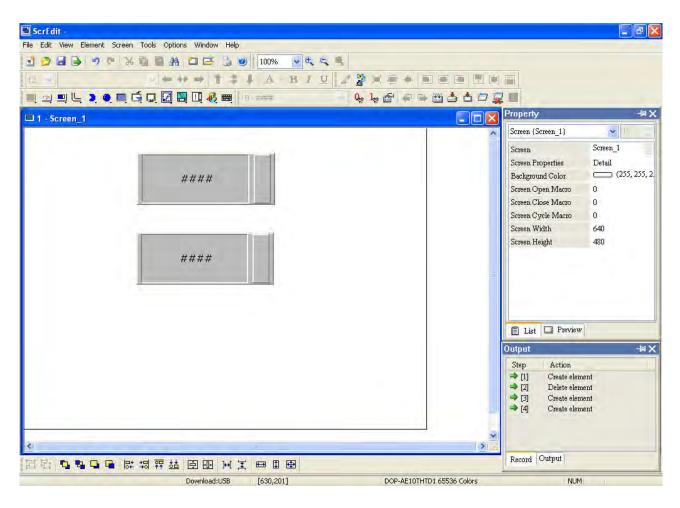
Create a New Data So	urce to SQL Server 🛛 🛛 🔀
Selact a driver ru- Selact a driver ru- off Access f off	 Change the language of SQL Server system messages to: English Use strong encryption for data Perform translation for character data Use regional settings when outputting currency, numbers, dates and times. Save long running queries to the log file;
Sarry	Log ODBC driver statistics to the log file:
	C (DOCUME TAshiney lar)LOCALS TATEMEASTAT Browse < Back Finish Cancel Help

Press **OK** button to complete ODBC setup.

ODBC Microsoft SQL Server Setup	×
A new DDBC data source will be created with the following configuration:	
Microsoft SQL Server ODBC Driver Version 03.85.1117 Data Source Name: TEST Data Source Description: Server: IABU-SHIRLEY-EN Database: master Language: (Default) Translate Character Data: Yes Log Long Running Queries: No Log Driver Statistics: No Use Integrated Security: No Use Integrated Security: No Use Regional Settings: No Prepared Statements Option: Drop temporary procedures on disconnect Use Failover Server: No Use ANSI Quoted Identifiers: Yes Use ANSI Quoted Identifiers: Yes	The second se
Data Encryption: No Test Data Source DK. Cancel	1

7.1.2 Create HMI Project File

Start Screen Editor software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements (\$3 and \$6) on the screen. In this case, 10 inches color AE type DOP series HMI is used.



Use Screen Cycle Macro and enter the following commands in macro command window.

📕 Screen_1 - Cycle Macro											
	B	e ç	5	Ж	Þ	â	∃↓	Ĩ			
1	\$3	=	\$3	+	1						
2	\$6	=	\$3 \$6	+	3						

Click **Options** > **Configuration** and use **Communication** tab to select **Ethernet** and complete HMI networking settings shown as the figure below. Then, press **OK** button to finish the settings.

nfiguration Standard Communication Print Defaul	It Others						
Add Mave Up	It ■ Others It ■ Others It ■ Recovery the IP address in HMI ■ DHCP						
Delete Move Down	HMI Name	eRemote					
COM1 COM2 Base Port	HMI IP Address	172 . 16 . 190 . 2					
	Subnet Mask	255 . 255 . 255 . 0					
COM3	Default Gateway	0,0,0,0					

🛎 ScrEdit -			
File Edit View Element Screen Tools	Options Window Help		
■ 2 ■ 4 9 % % D 12 ♥ ■ 2 ■ 4 ♥ € ● ■ 6 ₽	Configuration <u>A</u> larm Setup History Setup Passowrd Table Setting	▼ < < 5 B / U / 2 2 × 0 + ■ = ■ ■ ▼ & & & = ■ ± ± ⊐ ⊊	
	Network Setting		Property –IXX
1 - Screen_1	<u>T</u> ag Table Print Type <u>s</u> etting		Screen (Screen_1)
	<u>P</u> icture Bank <u>T</u> ext Bank		Screen Screen_1 Screen Properties Detail
1	<u>S</u> ubmacro Initial Macro <u>B</u> ackground Macro <u>C</u> lock Macro		Background Color (255, 255, 2 Screen Open Macro 0 Screen Close Macro 0 Screen Cycle Macro 2
	Environment	-	Screen Width 640 Screen Height 480
	####		🖹 List 💷 Preview
			Output – 🕷 🗙
			Step Action → [1] Create element → [2] Delete element → [3] Create element → [4] Create element
4		×	
land -	盐原图室时		Record Output
			511154

Next, click **Options > Network Setting**.

The following **Remote Setting** dialog box will appear. Check the check box before **Enable eServer/Remote** and set a password for network communication. After **OK** button is pressed, HMI networking is completed. Compile the edited project file at the end of the programming and the edited project file could be transferred to HMI.

Romote Setting		
🗹 Enable eSer	ver/Remote	
Password	12345678	
Screen sample	time in 100 😂	ms
ОК	Cancel	

7.1.3 eServer Setting

1. After eServer is enabled, eServer icon will appear at the bottom right of Windows screen.

Right-click this icon and select **Setting** option from the pop-up menu.



2. Then, eServer window will open.

	ſ
a eServer	
File View Wizned Tool Help	
Project	
JF 198 CP 49	
eServer	
Fin Project	
»,	

3. Click **File > New** or click icon to create a new project file.

🤌 eS	elael			
File	View	Wizaud	Tool	Help
0	23	8		

4. Select icon to enable ODBC Logging Wizard.

	Logging Recipe (ODBC) Access
(Excel)	
New Project Name:	ODBC
New Project Name:	ODBC
New Project Name: Location:	ODBC C:\Documents and Settings\Tina.Q.Lee\Desktop\OI



Press Next button to go to next step.

5. Click **New** icon to access nodes (link to HMI).

Wizard - Logging				
		you how to link i	uch as communication setting, original project information	symbol etc
	No HMI Name		[IP	Port
	To continue, dick Ne	xt.		>
		Back Ne	ext > Cancel	Finish

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.

lease :	elect the following 2 methods to link
1. 0	Select a exist Screen (DOP) file from stroed media.
-	
2. 🔘	Tansfer from Delta - HMI

Press **OK** button to go to next step.

P Address	172 16 190	
Search IP in .	Ethemet	Update
Name	Target IP	_
eRemote	172.16.190.2	

Press OK button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings.

Wizard - Logging	
	ODBC Please indicate the following items Chooses a data source (DSN) and input user name and password
	ODBC Data Source TEST
2 2 2	User Name sa
5 3	Password ****
	Database Driver SQL Server
15 m	Table 1 Hereita Table 1
	Table 1
	Time and Date Table Field Detail
	Stamp Tablel Time %m/%d/%y %H:%M:%S
	× · · · · · · · · · · · · · · · · · · ·
	To continue, dick Next.
	< Back Next > Cancel Finish

Press Next button to go to next step.

7. Register Setting: Set the register address of the sampling data.

Wizard - Logging						
		jister Se		ollowing Cell(s)	Add	Delete
	No	Table	Field	HMI Name	Address	Form
5. 2. 2	1	Table1	Datal	HMI	\$3	Unsig
15 A	2	Table1	Data2	HMI	\$6	Unsig
	<					2
	To con	tinue, click Ne	xt.			
			< Back	Next > C	ancel	Pinish

8. Set the sampling conditions to constant 5s.

Wizard - Logging			_	×
	Logging Co The Condition will trigger condition.	provide 2 solutions	to help you easy	create parameters for
	No Type	HMI Name	Detail	Format
Q	1 Const	n/a	5s	n/a
x>Y>	Detect Scan Time			×
	How long would ye (500ms ~ one da			econd) 0 🔅 (ms).
00			ОК	Cancel
	1	1111		
	To continue, click	Next.		
		< Back Next	t> Can	icel Finish

Press Next button to continue.

9. Press D icon. After the password is entered, the system will start sampling operation, i.e. writing data in Microsoft Access.

 □ □ □ □ □ □ □ □ □ <	
eServer	Node
ют	
Linkage HMI	Password
ODBC1 HMI	*******

	Time	Datal	Data2
İ	08/26/2009 13:24:51	52	52
	08/26/2009 13:24:52	61	61
	08/26/2009 13:24:53	71	71
-	08/26/2009 13:24:54	81	81
	08/26/2009 13:24:55	90	91
	08/26/2009 13:24:56	65436	0
	08/26/2009 13:24:57	65446	10
	08/26/2009 13:24:58	65456	20
	08/26/2009 13:24:59	65466	30
l	08/26/2009 13:25:00	65475	39
1	08/26/2009 13:25:01	65484	48
1	08/26/2009 13:25:02	65494	58
ĺ	08/26/2009 13:25:03	65504	68
	08/26/2009 13:25:04	65513	77
1	08/26/2009 13:25:05	65523	87
Ĩ	08/26/2009 13:25:06	65533	97
1	08/26/2009 13:25:07	7	7
	08/26/2009 13:25:08	16	16
	08/26/2009 13:25:09	26	27
1	08/26/2009 13:25:10	36	36
	08/26/2009 13:25:11	46	46
	08/26/2009 13:25:12	54	54
1	08/26/2009 13:25:13	64	64
	08/26/2009 13:25:14	74	74
	08/26/2009 13:25:15	84	84

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.



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Chapter 8 Writing Data in MySQL

Before creating testing example, make sure to change the upload and download option (**Options > Configuration**) on Screen Editor first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

8.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses \$3 and \$6 every second, record the data in MySQL via ODBC interface, and save the collected data into the specified folder (C:\Data).

8.1.1 Software Installation

1. AppServ Introduction

AppServ is a free and full-featured software of Apache HTTP Server, MySQL, PHP, and phpMyAdmin. To download it, go to <u>http://www.appservnetwork.com</u>.

Package of AppServ

- Apache HTTP Server: It is a free and open source HTTP Server.
- MySQL: It is a relational database management system.
- PHP: It is a free and general-purpose scripting language designed for web development.
- phpMyAdmin: It is web-based open source tool written in PHP for MySQL database management.

After double clicking the appserv-win32-2.5.10.exe file downloaded from the website exe file, the following dialog box will appear.

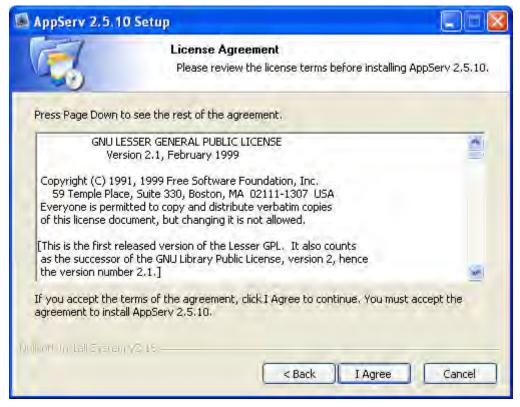
AppServ	Open	Project
http://www.	appservnetw	ork.com



Click on **Run** button to install AppServ.

AppServ 2.5.10 Setup	
	Welcome to the AppServ 2.5.10 Setup Wizard This wizard will guide you through the installation of AppServ 2.5.10. It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer. Click Next to continue.
	Next > Cancel

Click on Next button to go to the next step.



The users must read license agreement before installation. Click on **I Agree** button to continue.

AppServ 2.5.1	0 Setup 📃 🗔 🔀
	Choose Install Location Choose the folder in which to install AppServ 2.5.10.
Browse and select	pServ 2.5.10 in the following folder. To install in a different folder, click another folder. Click Next to continue.
Destination Folde	Browse
Space required: 56 Space available: 4	
Nullsoft Install System	<pre>/v2.18</pre>

Select the default directory C:\AppServ, and click on **Next** button for the next step. To select a directory other than the default directory, click **Browse**.

📓 AppServ 2.5.10) Setup		
	Select Compo Select the com you do not war	ponents you want to insta	all, clear the components
AppServ Packa	ge Components		
🗹 Apache H	TTP Server		
MySQL Da	atabase		
PHP Hype	rtext Preprocessor		
🗹 phpMyAdi	nin		
Nulsoft Install System	V2:16	_	
		< Back Ne:	xt > Cancel

Then, select the AppServ Package Components to install, and click on **Next** button for the next step.

AppServ 2.5.1	0 Setup	
	Apache HTTP Server Information Please enter your server's information.	
Server Name (e.g. www.appservnetwork.com)	
Administrator's	Email Address (e.g. webmaster@gmail.com)	
Apache HTTP F	Port (Default : 80)	
soft Install System	<pre>// VC 18 // Kext ></pre>	Cancel

Specify Server Name, Administrator's Email Address and Apache HTTP port for Apache Web Server. When perform testing, the Servo Name can be specified as **localhost** directly. Click on **Next** button for MySQL Server Configuration settings

AppServ 2.5.10 Setup	
MySQL Server Configuration Configure the MySQL Server instance.	
Please enter Root password for MySQL Server.	
Enter root password	
Re-enter root password	
••••••	
MySQL Server Setting Character Sets and Collations	
UTF-8 Unicode	
Old Password Support (PHP MySQL API function.)	
Nulsoft Install System v2-18	
Back Install	Cancel

Enter root password for MySQL database and complete the settings for MySQL Server.

Character Sets and Collations: The users can select data storage language and collations from the drop-down menu.

Old Password Support (PHP MySQL API function): When this option is selected, the users can code PHP code with old MySQL API.

Enable InnoDB: When InnoDB is used, ensure to select this option.

Click on **Install** button to installing Apache.

MappServ 2.5.10 S	etup	
	Installing Please wait while AppServ 2.5.10 is being installed.	
Installing Apache2.2.5	ervice	
Show details		
Nolsoft Install System V2	18-	
	<back next=""></back>	Candel

Click on **Finish** button to complete AppServ setup.

📓 AppServ 2.5.10 Setup	
	Completing the AppServ 2.5.10 AppServ 2.5.10 has been installed on your computer. Click Finish to close this wizard. Start Apache Start MySQL
	< Back Finish Cancel

After installing AppServ, the users can view the web site by pointing a web browser to <u>http://localhost/</u>. If the following screen displays, it indicates that Apache has been installed successfully.

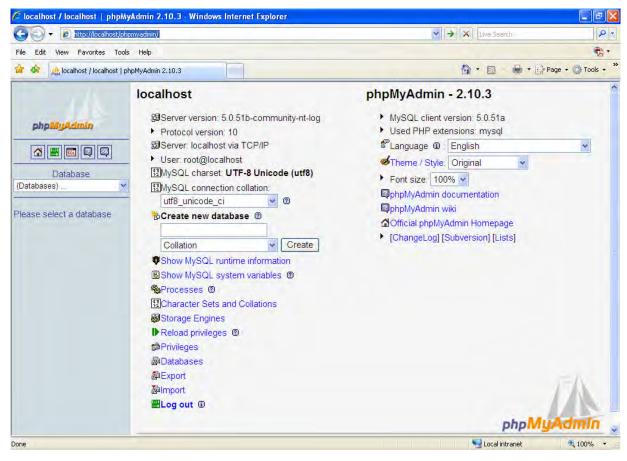
AppServ Open Project 2.5.10 - Windows Internet Explorer		
💽 👻 🙋 http://localhost/	🖌 😽 🗙 Live Search	P
e Edit View Favorites Tools Help		
🚸 🔠 🗸 🞯! (546 🗆 🗆 🖸 appserverne 🚺 Microsoft SQ 🚺 Microsoft SQ 🚺 Microsoft SQ	Serv 🗴 🚺 🔹 🔯	📾 🔹 🔂 Page 👻 🌍 Tools 👻
The AppServ Open Project - 2.5.10 for Windows		
phpMyAdmin Database Manager Version 2.10.3 PHP Information Version 5.2.6		
About AppServ Version 2.5.10 for Windows AppServ is a merging open source software installer package for Windows includes :		
Apache Web Server Version 2.2.8 PHP Script Language Version 5.2.6 MySQL Database Version 5.0.51b phpMyAdmin Database Manager Version 2.10.3		
ChangeLog README AUTHORS COPVING		
COPYING Official Site : http://www.AppServNetwork.com Hosting support by : http://www.AppServHosting.com		
Change Language : 🚃 🛒		
🕏 Easy way to build Webserver, Database Server with AppServ :-)		
	Second intra	anet 🔍 100% 🔻

2. MySQL Settings

Use phpMyAdmin built-in AppServ to perform the relevant MySQL settings. Open the browser, type: <u>http://localhost/phpMyAdmin/</u>, a **Connect to localhost** dialog box will display. Enter **root** for username and your password for password (The default administrator account is root, but depending on your setup it may be a different user name.)



Then, it will connect to MySQL database.



A. Create New Database

Click on **Databases** link.

1 1 1 1	localhost	phpMyAdmin - 2.10.3
phpMyAdmin	Server version: 5.0.51b-community-nt-log	 MySQL client version: 5.0.51a Used PHP extensions: mysql
Database (Databases) V Please select a database	Server: localhost via TCP/IP User: root@localhost MySQL charset: UTF-8 Unicode (utf8) MySQL connection collation: utf8_unicode_ci Collation Colla	 Language : English Theme / Style: Original Font size: 100% PphpMyAdmin documentation PphpMyAdmin wiki Official phpMyAdmin Homepage [ChangeLog] [Subversion] [Lists]
		phpMuAdmin .

Enter the name of the new database. In this case, the name of the new database is entered as **test**. Click on **Create** button for the next step.

	Databases	alhost	s 📑 Variabl	es 🚮 Charsets	Engines	😭 Privileges	Processes	a Export	import
PhpMyAdmin Database (Databases) V	=≋Enable :	Collation utt8_general_ nin utt8_b utt8_general_ utt8_general_ utt8_general_ autt8_general_ All / Uncheck All	in 😭 ci 🍘 ci With selecte		t cause heav	y traffic betwe	en the web se	ver and the	e MySQL
	Create r test	new database @	Collation		Creat	•			
							Open nev	v nhnMvAd	min windov

A new database has been created.

	圀 Server: localhost ト @ Database: test
phpMyAdmin	III Structure 磊 SQL 夕 Search @ Query 静 Export 猫 Import % Operations Privileges IX Drop
	Database test has been created.
Database test (0)	-SQL query:
test (0)	[Edit][Create PHP Code]
No tables found in database.	
	No tables found in database.
	Name: Number of fields:
	Go

B. Create New Table

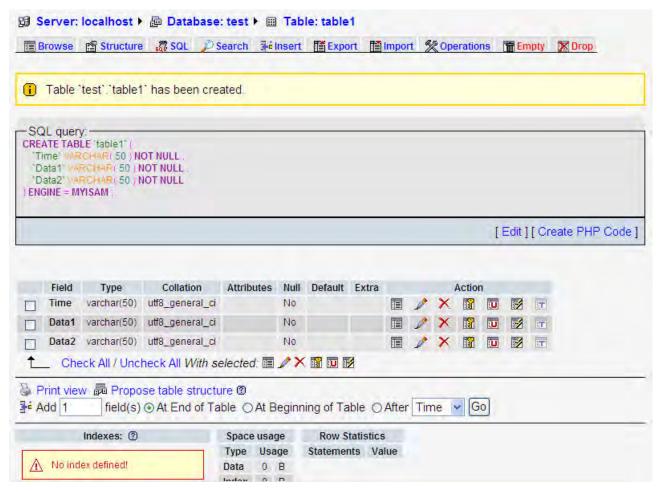
Click on **Structure** link to create new table on database. In this case, the new table is named as table1 and the number of fields is set to 3. After **Go** button is pressed, a new table on database will be created.

Structure	SQL SQL	Search	a Query	🚔 Export	The Import	% Operations	Privileges	🔀 Drop	
o tables four	nd in data	base.							
Vame: table		e on databa	se test	Numbe	r of fields:	3			-
									Go

Complete the settings by referring to the figure below and press **Save** button to save changes.

Field	Type 🕐	L	ength/Values ¹	Collation	Attributes	Null	De
Time	VARCHAR	*	50	×	×	not null 💌	
Data1	VARCHAR	~	50	v		not null 💌	
Data2	VARCHAR	Y	50	× .	¥	not null 🐱	2
					Save Or Add 1	field(s)	Go
		or "set	, please enter the	values using this format: 'a',	'b','c'	a backslash (i	

After the table1 has been created, the screen will be shown as follows.



C. Create New User

Click on **Privileges** link to open User overview page.

ocalhost	phpMyAdmin - 2.10.3
 Server version: 5.0.51b-community-nt-log Protocol version: 10 Server: localhost via TCP/IP User: root@localhost MySQL charset: UTF-8 Unicode (utf8) MySQL connection collation: utf8_unicode_ci © Create new database @ Collation Create Show MySQL runtime information Show MySQL system variables @ Processes @ Character Sets and Collations Storage Engines Reload privileges @ Privileges Databases Export Import Log out @ 	 MySQL client version: 5.0.51a Used PHP extensions: mysql Language : English Theme / Style: Original Font size: 100% OphMyAdmin documentation OphMyAdmin wiki Official phpMyAdmin Homepage [ChangeLog] [Subversion] [Lists]
	phpMyAdmin

Click on Add a new User link to display the add new user page

The second s	sup our y oran		les 🔁 Charsets	M Engir	ies a	Privileges	Processes	Export
import								
User o	verview							
A B C	DEFGH	IJK	LMNOP	Q	RS	TUV	W X Y Z	[Show all]
User	Host	Password	Global privileges 🔮	Grant				
🗌 Any 🤊	%		USAGE	No	3/			
🗌 Any 1	ocalhost	No.	USAGE	No	20			
🗌 Any r	production.mysql.com	No	USAGE	No	3/			
root 👘	127.0.0.1	No	ALL PRIVILEGES	Yes	3/			
root I	ocalhost	Yes	ALL PRIVILEGES	Yes	3/			
root p	production.mysql.com	No.	ALL PRIVILEGES	Yes	30			
t_ Che	ck All / Uncheck All							
🛃 Add a n	ew User							
	ve selected users-							
Develop all	active privileges fro	m the user	s and delete them a	fterwa	rds.)			

ogin Information User name:	Use text field:	*	root
Host:	Use text field:	~	%
Password:	Use text field:	~	•••••
Re-type:			•••••
Generate Password:	Generate Copy		

Login Information:

User name: Enter user name root

Host: Select Any host from the drop down menu and insert a % code.

Password: Enter the desired password

Re-type: Re-enter the desired password

General Password:

- Click on **Generate** button to automatically generate a password.
- Click on Copy button to insert the password into the fields of Password and Re-type.

Scroll the screen down and click on **Check All** link to select all privileges. Then, click on **GO** button to create a new user.

-Data SELECT INSERT UPDATE DELETE FILE	Structure CREATE ALTER INDEX DROP CREATE TEMPORARY TABLES CREATE VIEW SHOW VIEW CREATE ROUTINE ALTER ROUTINE EXECUTE	Administration GRANT SUPER PROCESS RELOAD SHUTDOWN SHOW DATABASES LOCK TABLES REFERENCES REFERENCES REFLICATION CLIENT REPLICATION SLAVE CREATE USER	
-Resource limits	and a second		
	e options to 0 (zero) removes the limit.		
MAX QUERIES			
MAX UPDATES	PER HOUR 0		
MAX CONNECT	IONS PER HOUR 0		
MAX USER_CO	NNECTIONS 0		

A conformation message will be displayed as follows.



i You have added a new user.

- SQL query: CREATE USER 'root@'%' IDENTIFIED BY '*******

GRANT ALL PRIVILEGES ON * . * TO 'root'@'%' IDENTIFIED BY ******* WITH GRANT OPTION MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0 MAX_UPDATES_PER_HOUR 0 MAX_USER_CONNECTIONS 0 :

[Edit][Create PHP Code]

er 'root'@	%': Edit Privileges		
bal privileges (Check All / Uncheck All)		
e: MySQL privilege	names are expressed in English		
-Data	Structure	-Administration	
SELECT	CREATE	GRANT	
INSERT	☑ ALTER	SUPER	
UPDATE	☑ INDEX	PROCESS	
DELETE	DROP	RELOAD	
FIF	CREATE TEMPORARY TABLES	DI SHUTDOWN	

3. Setting Windows Firewall

Click **Start** and then click **Control Panel**. In the **Control Panel**, click **Windows Security Center > Windows Firewall**. Then, click on the **Exceptions** tab.

Wind	ows Firewa	att			
General	Exceptions	Advanced			
progran to work	ns and service	olocking incoming n es selected below. A ght increase your se es:	dding exce		
Nam		1			
I Fi	e and Printer	Sharing			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second second	ostics for Windows>	(P		
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	emote Assista				
⊠ Re	emote Deskto	p			
ISN SN	MLMProxy Mo	dule - HP1006MC.E	XE		
1U	PnP Framewo	rk			
₩	indows Live N	lessenger 8.1			
ØW	indows Live N	lessenger 8.1 (Pho	ne)		
W W	indows® Netl	vleeting®			
-			1		
Add	Program	Add Port	Edi		Dialete
-		_			
Disp	olay a notifical	ion when Windows	Firewall blo	cks a progra	m
-				a nota é a	
What a	re the risks of	allowing exception:	?		
			-		-
				OK	Cancel

Click Add Port button and the following Add a Port dialog box will appear.

	to open a port through Windows Firewall. To find col, consult the documentation for the program or s	
Name:	MySQL	
Port number:	3306	

In the Add a Port dialog box, type MySQL in the Name text field and type the port number of the instance of the Database Engine, such as 3306 for the default instance in the Port number text field. Ensure that TCP is selected and click OK to complete the settings.

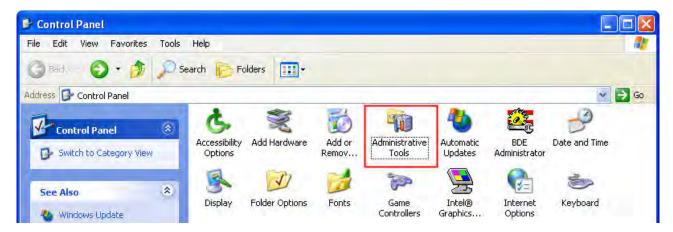
4. Connector/ODBC Installation

Connector/ODBC is a standardized database driver which can be downloaded from MySQL website at http://dev.mysql.com/downloads/connector/odbc/5.1.html.



5. ODBC Setup

In the **Control Panel**, double-click **Administrative Tools**.



In the Administrative Tools, double-click Data Sources (ODBC).

le Edit View Favorites	Tools Help	
3 Back + 🕥 🎁	🔎 Search 🌔 Folders 🛄 🗸	
idress 🦏 Administrative Too		Image: A start of the start
File and Folder Tasks	Component Services Shortcut 2 KB	Computer Management Shortcut 2 KB
Other Places	Data Sources (ODBC) Shortcut 2 KB	Event Viewer Shortcut 2 KB
Control Panel	Local Security Policy Shortcut 2 KB	Performance Shortcut 2 KB

In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.

	System DSN File DSN Drivers Tracing	
Name	Driver	Add
		Fremove
		1. on figure

Select MySQL ODBC 5.1 Driver and then click on Finish button.

	Microsoft ODBC for Oracle Microsoft Paradox Driver (*.db) Microsoft Paradox-Treiber (*.db) Microsoft Text Driver (*.txt; *.csv) Microsoft Text-Treiber (*.txt; *.csv) Microsoft Visual FoxPro-Driver Microsoft Visual FoxPro-Treiber Microsoft Visual FoxPro-Treiber SQL Server	2 4 4 4 1 1 5 2
--	---	--------------------------------------

Now specify the Connection Parameters as mentioned in the below dialog.

onnector/ODB	с		-
Connection Parameter	s		
Data Source Name:	eServer		
Description:			-
Server:	localhost	Port: 3306	-
User:	root	_	
Password:	****		
Database:	test	▼ Test	1

Connection Parameters:

Data Source Name: Enter ODBC data source name **eServer** or enter the name of the data source you want to access.

Description: Enter some text to identify the connection.

Server: Enter the default **localhost** or the name of MySQL server host that the users want to access.

User: Enter user name **root** to use for this connection.

Password: Enter the corresponding password for this connection.

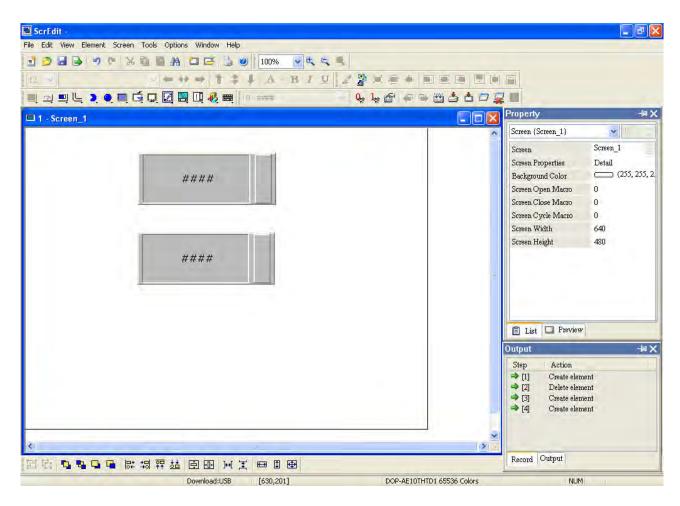
Database: The list of databases that the user has permissions to access will be shown automatically.

Click on **Test** button to verify the connection. If the test succeeds, the figure shown below will appear on the screen to indicate that MySQL connection is now available to use. At this time, click on **OK** button to complete the settings. If the test does not succeed, please review the settings.

ssful
1

8.1.2 Create HMI Project File

Start Screen Editor software program and click **File > New** or click **New** icon to create a new project. Then, click **Element > Input > Numeric Entry** to create two numeric entry elements (\$3 and \$6) on the screen. In this case, 10 inches color AE type DOP series HMI is used.



Use Screen Cycle Macro and enter the following commands in macro command window.

🗹 s	стее	n_	1 - 0	Cyc	le M	асто					
	B	e ç	5	Ж	Þ	â	∃↓	Ĩ			
1	\$3	=	\$3	+	1						
2	\$6	=	\$3 \$6	+	3						

Click **Options** > **Configuration** and use **Communication** tab to select **Ethernet** and complete HMI networking settings shown as the figure below. Then, press **OK** button to finish the settings.

andard Communication Print Defau Add Mays Up	ult Others	address in HMI
Delete Move Down	HMI Name	eRemote
у сомі	HMI IP Address	172 . 16 . 190 . 2
Base Port	Subnet Mask	255 . 255 . 255 . 0
COM3	Default Gateway	0,0,0,0

ScrEdit File Edit View Element Screen Tools Options Window Help 3 3 H B 7 8 X D 1 Configuration * 4 4 4 Alarm Setup B/U/22×** 12 🐱 History Setup 티 _ 티 드 이 티 드 디 드 Passowrd Table Setting 🖌 🔍 🖟 🖉 🦛 🖦 🛗 📥 🗇 🖳 🔳 Network Setting Property N N I - Screen_1 Tag Table . Screen (Screen 1) × Print Typesetting .. Screen 1 Screen Picture Bank Detail Screen Properties Text Bank (255, 255, 2 Background Color Submacro Screen Open Macro 0 Initial Macro Screen Close Macro 0 Background Macro Screen Cycle Macro 2 Clock Macro Screen Width 640 Environment Screen Height 480 #### 🖹 List 🗔 Preview Output Step Action ⇒ [1] Create element ⇒ [2] ⇒ [3] Delete element Create element ⇒ [4] Create element 1.51 Record Output ┗┓ ┗┓ ┗┓ 🖬 🛱 📅 🖬 🖬 🖬 🖬 🖽 昭出 Change Window Position Download:USB [366,14] @179,40 W:220 H:83 DOP-AE10THTD1 65536 Colors NUM

Next, click **Options > Network Setting**.

The following **Remote Setting** dialog box will appear. Check the check box before **Enable eServer/Remote** and set a password for network communication. After **OK** button is pressed, HMI networking is completed. Compile the edited project file at the end of the programming and the edited project file could be transferred to HMI.

Romote Setting		×
🗹 Enable eSer	ver/Remote	
Password	12345678	
Screen sample	time in 100 😂	ms
ОК	Cancel	

8.1.3 eServer Setting

1. After eServer is enabled, eServer icon will appear at the bottom right of Windows screen.

Right-click this icon and select **Setting** option from the pop-up menu.



2. Then, open eServer window.

Seinei			
File View Wizaud			
i 🗋 🗳 🗟 💣 🤮	🦻 💽 🔍 🖕		
Project Projec Proj			
Froject			
» •			

3. Click **File > New** or click icon to create a new project file.



4. Select icon to enable ODBC Logging Wizard.

	ogging Recipe
(Excel)	(ODBC) Access
New Project Name:	ODBC
New Project Name: Location:	ODBC C:\Documents and Settings\Tina.Q.Lee\Desktop\O[



Press Next button to go to next step.

5. Click **New** icon to access nodes (link to HMI).

Wizard - Logging			
	Linkage eServer will need some inform And Linkage will help you how Llinakge name	to link original project informa	
	No HMI Name	IP	Port
	To continue, dick Next.		
	< Back	Next > Cancel	Finish

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.

ease s	elect the following 2	2 methods	to link		
. 09	elect a exist Scree	en (DOP) f	ile from stroe	ed media.	
_					
0	ansfer from Delta	HMI	_		
2.0	Fansfer from Delta - 172 . 16 .		2	_	

Press **OK** button to go to next step.

P Address	172 Les 1(40)	_
Search IP in	Ethemet	Updat
Name	Target IP	
eRemote	172.16.190.2	

Press **OK** button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings.

Wizard - Logging			E Contraction of the second se
	ODBC Please indicate the following Chooses a data source (DSI	items V) and input user name and pa	assword
	ODBC Data Source	eServer	
2 2	User Name	root	
2 2	Password	*******	
11 I I	Database Driver	MySQL	*
22 2	Table	table 1	.
		table 1	×
	Time and Date Table	Field Detail	
8	Stamp table1	Time %m/%d/%y	%H:%M:%S
	<		>
	To continue, dick Next.		
	< Back	Next > Cance	Enish

Press Next button to go to next step.

7. Register Setting: Set the register address of the sampling data.

		Register Setting Please input logging address in the following Cell(s) Add						
1	No	Table	Field	HMI Name	Address	Form		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	table1	Data1	HMI	\$3	Unsig		
	2	table1	Data2	HMI	\$6	Unsi		
5	<					3		

8. Set the sampling conditions to constant **5s**. Press **Next** button to continue.

Wizard - Logging	
	Logging Condition The Condition will provide 2 solutions to help you easy create parameters for trigger condition. Table 1
	No Type HMI Name Detail Format
Q	1 Const n/a 5s n/a
x x x	etect Scan Time 🛛 🔀
	How long would you like on your logging data ? (500ms ~ one day) 0 (Hour) 0 (Minute) 5 (Second) 0 (ms)
00	OK Cancel
	×
	To continue, click Next.
	< Back Next > Cancel Finish

9. Press D icon. After the password is entered, the system will start sampling operation, i.e. writing data in MySQL Server.

🥪 - eServer	
File View Wizaud	l Tool Help
i 🗋 🗃 🖬 📑 🤮	چ 🛛 💽
Project	
1 2 2 47	<u>v</u>
🖃 🧊 eServer	Node
E B ODBC1	5 100.00

utho				E
No	Linkage	HMI	Password	
1	ODBC1	HMI	*******	
-				
a	passwords are	the same passwo	ord under No.1	
				-
			OK Ca	incel

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.



11. Open the browser, type: <u>http://localhost/phpMyAdmin/</u>, and select the test database from the Database drop-down menu.

	localhost	
php <mark>MyAdmin</mark>	Berver version: 5.0.51b-co Protocol version: 10	mmunity-nt-log
Database	 BServer: localhost via TCP/I User: root@localhost 1000000000000000000000000000000000000	
(Databases) Y		TAN TE INTO I
(Databases) mysql (17) phpmyadmin (7)	utf8_unicode_ci	v 0
test (1)	Collation	Create
	Show MySQL runtime infor	

12. Click on **Structure** link.

Structure	ST SQL	Search	P	Query	A Export	The Import	Coperations	😭 Privi	ileges 👔	X Drop	
Table		Action			Records	Туре	Collation	Size	Overhea	d	
table1		1 🗉 👫	m	×	0	MyISAM	utf8_general_ci	1.0 KiB		-	
1 table(s)):	Sum			0	MyISAM	utf8_general_ci	1.0 KiB	0	В	
Check	k All / Un	check All		Wit	h selected:	*					

13. The recorded data will be shown at the bottom of the window.

弱 Server: localhost > 쪧 Database: test > 圖 Table: table1	^
🔚 Browse 😭 Structure 🧔 SQL 🔑 Search 😼 Insert 🎬 Export 🛗 Import 🛠 Operations 🖀 Empty 🔀 Drop	
Shawing rows 0, 20 (400 total, Owani tooli 0.0202 app)	
Showing rows 0 - 29 (109 total, Query took 0.0392 sec)	
r SQL query:	
SELECT * FROM 'table1'	
LIMIT 0, 30	
[Edit] [Explain SQL] [Create PHP Code] [Refres]
	_
Query results operations	
Print view Derived Print view (with full texts) Export	
Show : 30 row(s) starting from record # 30 > >> Page number: 1 v	
in horizontal v mode and repeat headers after 100 cells	
$\leftarrow \top \rightarrow \qquad \qquad \text{Time} \qquad \text{Data1} \qquad \text{Data2}$	
 	
□	
□	
□ √ × 10/19/2009 18:25:12 884 2655	
□ <i>♪</i> × 10/19/2009 18:25:13 894 2682	
10/19/2009 18:25:14 904 2712	
□ <i>P</i> × 10/19/2009 18:25:15 914 2742	~

Chapter 9 Writing Data in Oracle

Before creating testing example, make sure to change the upload and download option (**Options** > **Configuration**) on Screen Editor first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

9.1 Example

This example is used to help the users to understand how to use eServer to read the data of the register addresses \$3 and \$6 every second, record the data in Oracle via ODBC interface, and save the collected data into the specified folder (C:\Data).

9.1.1 Software Installation

1. Oracle Introduction

Oracle is a free and a database management system produced and marketed by Oracle Corporation. In this example, To download it, go to

http://www.oracle.com/technetwork/database/express-edition/downloads/index.html.

Please be sure to select Oracle Database 10g for Microsoft Windows.

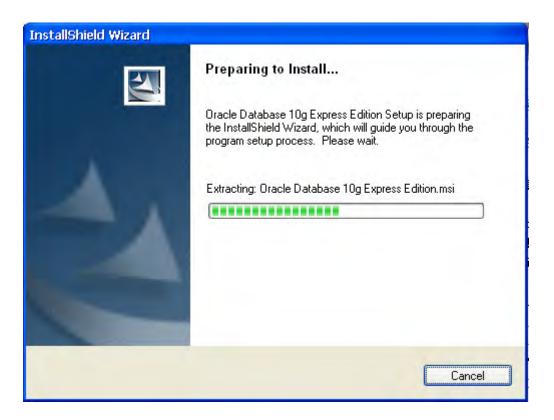
Products and Services	Downloads	Store Su	ipport Educati	on Partners	About		Oracle Technology Network
Oracle Technology Network >	Database > Datab	ase Express Edi	ition > Downloads				
Database 11g	Overview	Downloads	Documentation	Community	Learn More	1	Popular Downloads
Database Focus Areas							Eerkeley DB
Database Options	Orac	le Databa	se 10g Expr	ess Edition	Downloa	ds	差 Enterprise Manager
Database Express Edition							🝷 Database EE and XE
Database Upgrade			e 10g Express Og Express Edition				🛓 Enterprise Pack for Eclipse
Berkeley DB	- Ava	ilable for Debis	an Mandriva Novel	Red Hat and Uh			Fusion Middleware
TimesTen In-Memory Database	□ <u>Orac</u>	le Database 1	0g Express Edition	for Microsoft Wind	DWS		差 Java EE & GlassFish
Database 10g					_		👤 Java SE
Database Lite							JDeveloper and ADF
RDB							E MVSQL
Audit Vault							NetBeans IDE
Secure Backup							E Solaris
Real Application Clusters							E SQL Developer
Clusterware							VM VirtualBox
Multimedia							More Database Downloads
Windows							Database Express Edition

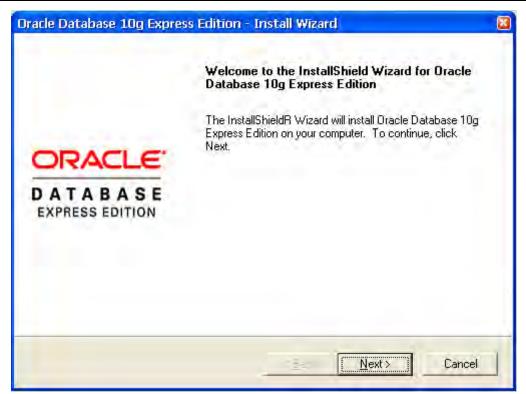
Then, accept the license agreement and download **OracleXEUniv.exe**, which is the multi-byte Unicode database for all language deployment.

Oracle Technology Network > Database > Database Express Edition > Downloads

Database 11g	Overview Downloads Documentation Community Learn More	Popular Downloads
Database Focus Areas		Eerkelev DB
Database Options	Oracle Database 10g Release 2 (10.2.0.1)	Enterprise Manager
Database Express Edition	Express Edition for Microsoft Windows	E Database EE and XE
Database Upgrade	You must accept the OTN License Agreement for Oracle Database Express Edition to download this	🛓 Enterprise Pack for Eclipse
Berkeley DB	software.	Eusion Middleware
TimesTen In-Memory Database	Accept License Agreement D Decline License Agreement	🛓 Java EE & GlassFish
Database 10g	Oracle Database 10g Express Edition (Western European)	星 Java SE
Database Lite	OracleXE.exe (185,332,312 bytes) Single-byte LATIN1 database for Western European language storage, with the Database	JDeveloper and ADF
RDB	Homepage user interface in English only.	MySQL
Audit Vault	Oracle Database 10g Express Edition (Universal)	NetBeans IDE
Secure Backup	OracleXEUniv.exe (216,933,372 bytes)	E Solaris
Real Application Clusters	Multi-byte Unicode database for all language deployment, with the Database Homepage user interface available in the following languages: Brazilian Portuguese, Chinese (Simplified and	SQL Developer
Clusterware	Traditional), English, French, German, Italian, Japanese, Korean and Spanish.	VM VirtualBox

After downloading **OracleXEUniv.exe**, click on **Run** button to install Oracle.





Click on **Next** button to go to the next step.

racle Database 10g Express Edition - Ins	tall Wizard		2
License Agreement Please read the following license agreement care	fully.		CRACLE DATABAS EXPERSE ID/1100
ORACLE DATABASE 10g EXPR AGREEMENT	ESS EDITIO	N LICENSE	
To use this license, you must agree to either clicking the accept button or ins		and the second sec	
			M
🕫] accept the terms in the license agreement		Er	int
C I do not accept the terms in the license agree	ment		
GilShield.			
	< Back	Next> C	ancel
-			

The users must read license agreement before installation. Choose I accept the terms in the license agreement to continue.

Click on Next button to go to the next step.

hoose Destination Location		
Select folder where setup will ins	tall files.	CATABAS STREET LOTTO
Setup will install Oracle Databas	e 10g Express Edition in the following	ı folder.
To install to this folder, click Nex another folder.	kt. To install to a different folder, click	Browse and select
Oracle Database 10g Express	s Edition	1593016 K
and a second		
Destination Folder		
Destination Folder C:\oraclexe\		Biowse
	1593016 K	Browse
C:\oraclexe\	1593016 K 11287008 K	Browse

Select the default directory C:\oraclexe, and click on **Next** button for the next step.

To select a directory other than the defa	ult directory, click Browse .
---	--------------------------------------

Oracle Database 1	Ig Express Edition -	Install Wizard		
Specify Database	Passwords		CRAC DATAB	ASE
Enter and confirm pa- the SYSTEM databa:		This password will be	used for both the SYS and	
Enter Password	*****	-		
<u>C</u> onfirm Password	*****	_		
	e the SYSTEM user along ge after the install is comple		a enter here to log in to the	
hotalishield				_
		< <u>B</u> ack	Next > Cancel	1

Then, enter and confirm the password for the database.

Click on **Next** button for the next step.

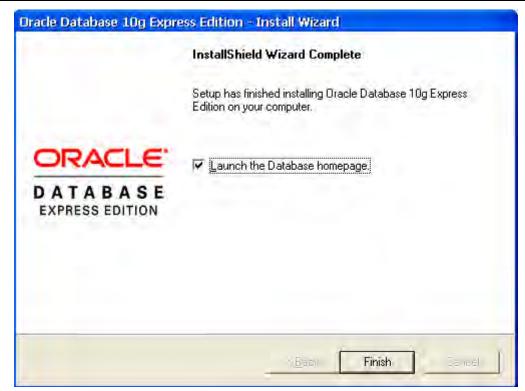
Oracle Database 10g Express Edition - Install Wizard	
Summary Review settings before proceeding with the Installation.	CATABASE EXPRESSION
Current Installation Settings:	
Destination Folder: C:\oraclexe\ Port for 'Oracle Database Listener': 1521 Port for 'Oracle Services for Microsoft Transaction Server': 2030 Port for HTTP Listener: 8080	
No.	J
rastal@meld < <u>B</u> ack []	Cancel

The users can review the settings before proceeding with the Installation.

Click on Install button to installing Oracle Database 10g.

Oracle Database 10g Express Edition - Install Wizard	
Setup Status	CATABASE EXPRESSION
The InstallShieldR Wizard is installing Oracle Database 10g Express Edition	
Copying Files	
Lonali Svield	
	Cancel

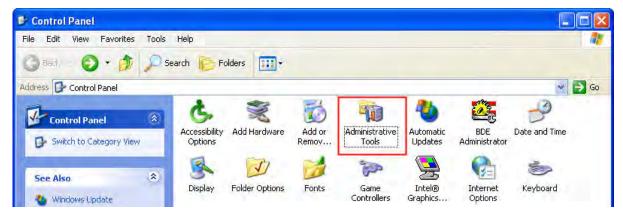
The installation wizard is installing **Oracle Database 10g**.



Click on **Finish** button to complete **Oracle Database 10g** setup.

2. ODBC Setup

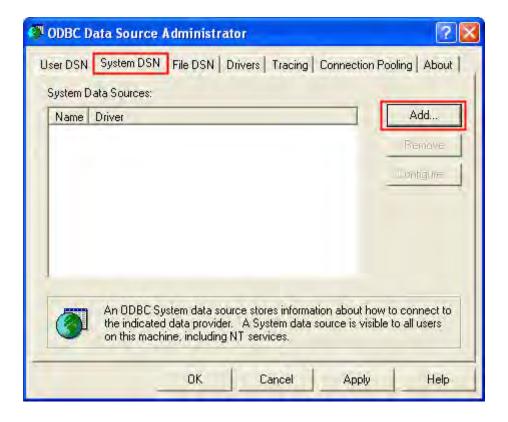
In the Control Panel, double-click Administrative Tools.



In the Administrative Tools, double-click Data Sources (ODBC).



In the **ODBC Data Source Administrator** dialog box, select **System DSN** tab and click on **Add** button to add system data source.



Select Oracle in XE and then click on Finish button.

Create New Data Source	Select a driver for which you want to set up Name Microsoft ODBC for Oracle Microsoft Paradox-Treiber (*.db) Microsoft Paradox-Treiber (*.db) Microsoft Text Driver (*.txt; *.csv) Microsoft Text-Treiber (*.txt; *.csv) Microsoft Visual FoxPro-Treiber Dracle in XE SUL Server	a data source.
	Earth Finish	Cancel

Now complete Oracle ODBC Driver Configuration as mentioned in the below dialog.

Data Source Name	Orca	aleSQL				OK Cancel
Description					-	
TNS Service Name	XE					Help
User ID	syste	em				Test Connection
Application Oracle V	/orkarou	unds SQLSer	rver Migration			
Application Oracle V Enable Result Sets Enable Closing Cursor	V		y Timeout 🔽	Read-Only Co	nnection Г	
Enable Result Sets	▼ 	Enable Query Enable Threa	y Timeout 🔽	Anna a Car	nnection Г	•

Data Source Name: Enter ODBC data source name or enter the name of the data source you want to access.

Description: Enter some text to identify the connection.

TNS Service Name: Must select XE in the TNS Service Name drop down list.

User ID: Enter user name **system** to use for this connection. This User ID is also the Username of Oracle database (see the figure below).

Database Login	_		
ter your database username and pa	assword.		
sername			
assword			
	Login		
Click here to learn how to get sta	rted		

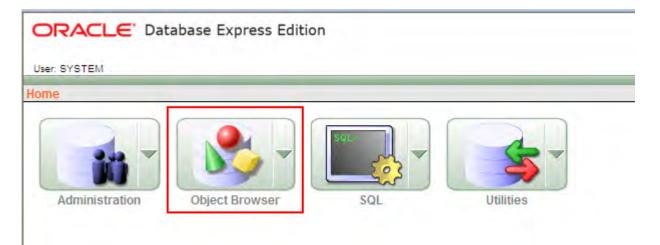
- 3. Create Database and Table
 - (1) Start Database (see the figure below)

📸 Oracle Database 10g Express Edition.	🕨 🛅 Get Help 🔹
	🛃 Backup Database
	📑 Get Started
(2) 🛛 👼 Go To Database Home Page
	📑 Restore Database
	www.sql. Command Line
(1) 🛃 Start Database
	👼 Stop Database

(2) Go to Database homepage.

	Database Log	in		
Enter your da	atabase username a	and password.		
Username	system			
Password	•••••			
		Login		
Click	here to learn how to o	get started		

Enter username and password for the database and press **Login** button to enter into the database homepage. Then, select **Object Browser**.



Press Create button.

ORACLE Database Express Edition	Home Lago	
Home > Object Browser		_
Home > Object biowser		_
Tables	Create	-
S		
AQ\$_NTERNET_AGENTS		
AQS_INTERNET_AGENT_PRIVS		
AQS_QUEUES		
AQ\$_QUEUE_TABLES		
AQS_SCHEDULES		
DEFS_AQCALL		
DEFS_AQERROR		
DEFS_CALLDEST		
DEFS_DEFAULTDEST		
DEFS_DESTINATION		
DEFS_ERROR		
DEFS_LOB		
DEFS_ORIGIN		
DEFS_PROPAGATOR		
DEFS_PUSHED_TRANSACTIONS		
DEFS_TEMPSLOB		1

Click on Table link.

	User: SYSTEM	ress Edition	Home Logout Help
AOS_INTERNET_AGENT_PRIVS AOS_INTERNET_AGENT_PRIVS AOS_OUEUES AOS_OUEUES AOS_SCHEDULES DEFS_AQCALL DEFS_AQCALL DEFS_AQCALL DEFS_AQCALL DEFS_DEFAULTDEST DEFS_DEFAULTDEST DEFS_DEFINATION DEFS_DESTINATION DEFS_DESTINATION <th>Home > Object Browser</th> <th></th> <th></th>	Home > Object Browser		
AdS_INTERNET_AGENTS Select the type of database object you wish to create: AdS_OUEUES AdS_OUEUE_TABLES AdS_SCHEDULES Package Database Link DEFS_ACCALL View Procedure Materialized View DEFS_ACCALL View Procedure Synonym DEFS_DEFAULTDEST Index I(x) Function Synonym DEFS_DEFAULTDEST Sequence Trigger DEFS_LOB View Image: Image: DEFS_IONGM DEFS_PROPAGATOR Image: Image: DEFS_INSHED_TRANSACTIONS View Image: Image: DEFS_INSHED_TRANSACTIONS View Image: Image: DEFS_TEMPSLOB View Image: Image: Image: Image: Image: Image: Image: Image: Image: DEFS_TEMPSLOB View Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image: Image:			
AOS_QUEUE_TABLES AOS_SCHEDULES DEFS_AQCALL DEFS_AQCALL DEFS_AQCALLSST DEFS_LOEFAULTDEST DEFS_DEFAULTDEST DEFS_DESTINATION DEFS_DESTINATION DEFS_DESTINATION DEFS_DESTINATION DEFS_DESTINATION DEFS_DESTINATION DEFS_PROPAGATOR DEFS_PROPAGATOR DEFS_INSHED_TRANSACTIONS		Select the type of database object you wish to create:	
DEFS_AQEARAC View Procedure Materialized View DEFS_CALLDEST Index ((A) Eunction Synonym DEFS_DEFAULTDEST Sequence Trigger DEFS_ERROR Exaction Synonym DEFS_LOB View View	AQS_QUEUE_TABLES	Table Package Database Link	
DEFS_CALLDEST Index Index Index Synonym DEFS_DEFAULTDEST Sequence Imager Imager DEFS_DESTINATION DEFS_CORIGN Imager Imager DEFS_CORIGN Imager Imager Imager DEFS_DRUSHED_TRANSACTIONS Imager Imager Imager DEFS_DUSHED_TRANSACTIONS Imager Imager Imager	DEFS_AQCALL		
DEFS_DESTINATION DEFS_DESTINATION DEFS_DESTINATION DEFS_DRIGN DEFS_DRIGN DEFS_PROPAGATOR DEFS_PROPAGATOR DEFS_TEMPSLOB	DEF\$_CALLDEST		
DEFS_ORIGIN DEFS_PROPAGATOR DEFS_PUSHED_TRANSACTIONS DEFS_TEMPSLOB	DEFS_ERROR		
DEFS_PUSHED_TRANSACTIONS DEFS_TEMPSLOB	DEFS_ORIGIN		
	DEFS_PUSHED_TRANSACTIONS		
Language: zh-tw Copyright © 1989, 2006, Oracle. All rights reser			Application Express 2.1.0.00.39 Copyright © 1999, 2000, Oracle, All rights reserved.

Enter the name of the table. In this case, the name of the new table is entered as **oracletable**. Create three columns: TIME, DATA1 and DATA2 and select Type as CHAR (Character). Click on **Next** button for the next step.

Columns	Create Table	Create Table						
Primary Key Y Foreign Key	(B) * Table Name Table name must be specified	oracletable	Preserve Case	e				
onstraints	Column Name	Туре	Precision	Scale	Not Null	Move		
♥ onfirm	TIME	CHAR	*	100				
	DATA1	CHAR	*	100				
	DATA2	CHAR	*	100				
		- Select Datatype -	*					
		- Select Datatype -	*					
	-	- Select Datatype -	*					
					Add Col	umn		

Select No Primary Key. Click on Next button for the next step.

Columns	Primary Key	Cancel	< Previous Next >
Primary Key Foreion Key Constraints Constraints Confirm	Table name. ORACLETABLE Primary Key: O Populated from a new s O Populated from an exis O Not populated	the second se	

Click on **Next** button for the next step.

<u>Columns</u>	Foreign Keys	Cancel < Previous Ne
Primary Key V	Foreign Key Columns Referen	nced Table Referenced Columns Action
Foreign Key	Add Foreign Key	
Confirm]	
Contanti	* Name ORACLETABLE_fk	Disallow Delete Cascade Delete Set Null on Delete
	Select Key Column(s) Key Colum	
	DATA1 O DATA2 O	
	* References Table	(1)

Click on **Finish** button to complete the settings.

Constraints	Cancel < Previous Finis
Constraint Name Type Column(S)/Check	
]	
Add Constraint	A
Check Unique	
	12 -
* Name ORACLETABLE ck1	
	Constraint Name Type Column(S)/Check Add Constraint O Check O Unique

Example Check Constraints

Click on **Create** button to create a new table.

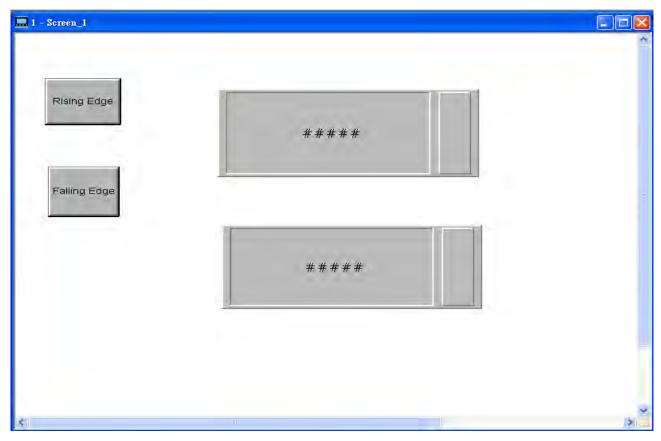
Columns V	Create Table	Cancel Create
Primary Key V Foreign Key	Please confirm your request. Schema: SYSTEM	
Constraints	Table name: ORACLETABLE	
Confirm	SQL	

When the following figure shows on the screen, it indicates that a new table on Oracle database is created successfully.

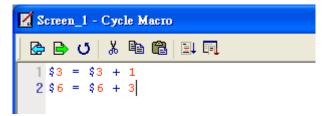
Tables 💌										ORA	CLETA	BLE	
\$ Q		Table Dat	a Inc	dexes Mode	I Constraints	Gra	ants	Statistics	UI Defa	ults Tr	iggers	Depender	ncies SQL
AQS_INTERNET_AGENTS	~	Add Colum	n Me	odify Column	Rename Col	umn	Drop	Column	Rename	Сору	Drop	Truncate	Create Lookup Table
AQS_INTERNET_AGENT_PRIVS		Column N	ame	Data Type	Nullable	Def	ault	Primary	Key				
AQS_QUEUES		TIME			Yes	-							
AQ\$_QUEUE_TABLES				CHAR(100)		-		-					
AQS_SCHEDULES		DATA1		CHAR(100)	Yes	-		-					
DEFS_AQCALL		DATA2		CHAR(100)	Yes	-		-					
DEFS_AQERROR								1-3					
DEFS_CALLDEST								100					
EFS_DEFAULTDEST	-												
DEFS_DESTINATION	1												
DEFS_ERROR	1												
DEFS_LOB													
DEFS_ORIGIN													
DEFS_PROPAGATOR													
DEFS_PUSHED_TRANSACTIONS													
DEFS_TEMPSLOB													
HELP													
OCHNIC DRNAME UP MAD													

9.1.2 Create HMI Project File

Start Screen Editor software program and click **File** > **New** or click **New** icon to create a new project. Then, click **Element** > **Input** > **Numeric Entry** to create two numeric entry elements (\$3 and \$6) and click **Element** > **Button** > **Maintained** to create two maintained button elements (\$0.0 is for rising edge and \$0.2 is for falling edge)on the screen. In this case, 10 inches color AE type DOP series HMI is used.



Use Screen Cycle Macro and enter the following commands in macro command window.



Click **Options** > **Configuration** and use **Communication** tab to select **Ethernet** and complete HMI networking settings shown as the figure below. Then, press **OK** button to finish the settings.

andard Communication Print Defau Add Mays Up	ult Others	address in HMI
Delete Move Down	HMI Name	eRemote
у сомі	HMI IP Address	172 . 16 . 190 . 2
Base Port	Subnet Mask	255 . 255 . 255 . 0
COM3	Default Gateway	0,0,0,0

ScrEdit File Edit View Element Screen Tools Options Window Help 3 3 H B 7 8 X D 1 Configuration * 4 4 4 Alarm Setup B/U/22×** 12 🐱 History Setup 티 _ 티 드 이 티 드 디 드 Passowrd Table Setting 🖌 🔍 🖟 🖉 🦛 🖦 🛗 📥 🗇 🖳 🔳 Network Setting Property H X I - Screen_1 Tag Table . Screen (Screen 1) × Print Typesetting .. Screen 1 Screen Picture Bank Detail Screen Properties Text Bank (255, 255, 2 Background Color Submacro Screen Open Macro 0 Initial Macro Screen Close Macro 0 Background Macro Screen Cycle Macro 2 Clock Macro Screen Width 640 Environment Screen Height 480 #### 🖹 List 🗔 Preview Output Step Action ⇒ [1] Create element ⇒ [2] ⇒ [3] Delete element Create element ⇒ [4] Create element 1.51 Record Output ┗┓ ┗┓ ┗┓ 🖬 🛱 📅 🖬 🖬 🖬 🖬 🖽 昭出 Change Window Position Download:USB [366,14] @179,40 W:220 H:83 DOP-AE10THTD1 65536 Colors NUM

Next, click **Options > Network Setting**.

The following **Remote Setting** dialog box will appear. Check the check box before **Enable eServer/Remote** and set a password for network communication. After **OK** button is pressed, HMI networking is completed. Compile the edited project file at the end of the programming and the edited project file could be transferred to HMI.

Romote Setting		×
🗹 Enable eSer	ver/Remote	
Password	12345678	
Screen sample	time in 100 😂	ms
ОК	Cancel	

9.1.3 eServer Setting

1. After eServer is enabled, eServer icon will appear at the bottom right of Windows screen.

Right-click this icon and select **Setting** option from the pop-up menu.



2. Then, open eServer window.

707 7	
View Winesd Tool Help	
i i i i i i i i i i i i i i i i i i i	
eServer	
uject	
») •	

3. Click File > New or click \square icon to create a new project file.



4. Select icon to enable ODBC Logging Wizard.

	ogging Recipe (ODBC) Access
(Excel)	(ODDC) ACCESS
	1
New Project Name:	ODBC
New Project Name: .ocation:	ODBC C:\Documents and Settings\Tina.Q.Lee\Desktop\OI



Press Next button to go to next step.

5. Click **New** icon to access nodes (link to HMI).

Wizard - Logging				
		p you how to link	original project infor	n setting, symbol etc mation
	No HMI Name		P	Port
Later Manager	1.59		1	>
	To continue, dick N		ext > Can	cel Finish

Choose **Transfer from Delta – HMI** option to transfer the HMI screen project file via network communication directly.

ease select the following 2 metho	ods to link
. O Select a exist Screen (DOF	P) file from stroed media.
. 💽 Tansfer from Delta - HMI	
	. 2
172 . 16 . 190 .	

Press **OK** button to go to next step.

P Address	172 he 190	
Search IP in .	Ethemet	Update
Name	Target IP	
eRemote	172.16.190.2	

Press **OK** button to go to next step.

6. ODBC Data Source Setting: Create an ODBC Data Source pointing to your database. Please refer to the following settings.

Vizard - Logging							
		ODBC Please indicate the following items Chooses a data source (DSN) and input user name and password					
	ODBC Data Source	OracleSQL					
3	User Name	system					
2 2	Password	******					
1 2	Database Driver	Orcale					
1 1	Table	oracletable					
		oracletable					
	Time and Date Table	Field Detail					
3	Stamp oracleta	ble TIME %m/%d/%y %H:%M:%S					
	1 m						
	To continue, dick Next.						
	< Back	Next > Cancel	Finish				

Press **Next** button to go to next step.

7. Register Setting: Set the register address of the sampling data.

Wizard - Logging						
		jister Sett		llowing Cell(s)	Add	Delete
1 1 m	No	Table	Field	HMI Name	Address	Form
2 2 2	1	oracletable	DATA1	eServer	\$3	Unsig
	2	oracletable	DATA2	eServer	\$6	Unsig
	×					3
	1 martine	tinue, click Next				
		<	Back N	lext > C	ancel	Finish

8. Select the Type as **Trigger**. Then, set the format of address \$0.0 to **Rising edge** and the format of address \$0.2 to **Falling edge** respectively. Press **Finish** button to continue.

Wizard - Logging					D
	The C trigge	er condition.	provide 2 solutions	s to help you easy	create parameters for
1 1	No	Type	HMI Name	Detail	Format
0	1	Trigger	HMI	\$0.0	Rising edge
Ŧ	2	Trigger	HMI	\$0.2	Falling edge
	<		101		
	То со	ntinue, dick		xt > / Can	cel Finish

9. Press D icon. After the password is entered, the system will start sampling operation, i.e. writing data in MySQL Server.

🥪 - eServer	
File View Wizaa	d Tool Help
i 🗋 💕 🖬 📑	چ 💿 💽 🗧
Project	
1 🔽 😒 🕂	<u>v</u>
Gerver ODBC1	Node
E ODBC	A GUN OTH

Autho	C.			X
No	Linkage	HMI	Password	
1	ODBC1	HMI	*******	-
-				
a	ll passwords are	the same passwo	ord under No. 1	

10. If the users want to pause or stop the sampling operation, only right-click eServer icon at the bottom right of Windows screen and select Pause or Stop option from the pop-up menu, the sampling operation will pause and stop immediately.



11. Open the browser and go back to the Oracle database. Click on **Data** link.

Tables 💌											ORA	CLETA	BLE	
2		Table	Data	Indexe	s Model	Constraint	s Gri	ants	Statistics	UI Defa	ults Ti	riggers	Depender	ncies SQL
AQS_INTERNET_AGENTS	~	Add Co	nmulo	Modify	Column	Rename Co	lumn	Drop	Column	Rename	Сору	Drop	Truncate	Create Lookup Table
AQS_INTERNET_AGENT_PRIVS		Colur	nn Nan	ne D	ata Type	Nullable	Def	ault	Primary	Kev				
AQS_QUEUES		TIME			HAR(100)	Yes	-	aleste.						
AQ\$_QUEUE_TABLES							-		-					
AQS_SCHEDULES		DATA1		C	HAR(100)	Yes	-							
DEFS_AQCALL		DATA2	2	CI	HAR(100)	Yes	÷.		-					
DEFS_AQERROR									1-3					
DEFS_CALLDEST														
DEF\$_DEFAULTDEST														
DEFS_DESTINATION														
DEF\$_ERROR	1													
DEFS_LOB														
DEFS_ORIGIN														
DEFS_PROPAGATOR														
DEFS_PUSHED_TRANSACTIONS														
DEFS_TEMPSLOB		٤												
HELP														
LOGHNEC DENAME UP HAD	2													

There are two recorded data shown on the screen.

When **Rising Edge** button (\$0.0) on HMI screen is pressed, the writing operation will be triggered and the system will write the first data into the database.

When **Falling Edge** button (\$0.2) on HMI screen is pressed, the writing operation will be triggered and the system will write the second data into the database.

		Г	_			
AQ\$_QUEUE_TABLES		н	R	09/13/2010 12:06:29	14311	42933
AQ\$_SCHEDULES			· · · ·			
DEFS_AQCALL			R	09/13/2010 12:06:35	14375	43125
DEFS_AQERROR		-				
DEF\$_CALLDEST						
DEF\$_DEFAULTDEST						
DEF\$_DESTINATION		•				
DEF\$_ERROR						
DEF\$_LOB						
DEF\$_ORIGIN						
DEF\$_PROPAGATOR						
DEF\$_PUSHED_TRANSACTIONS						
DEF\$_TEMP\$LOB						
HELP						
LOGMNRC DBNAME UID MAP	~	<				

10.1 Detailed Settings

Please refer to the following steps to complete Excel sampling setting, i.e. how to log data from HMI to Excel.

10.1.1 New Project

Start eServer, and click File > New or click New icon

🖗 eServer	[
File View Wizzah Tool Help	
1 Mages	
7 10 F 4	
eServer	
TT Project	
2	

After the New dialog box is opened, select Recipe Access icon and press OK button.

lew			
	ogging ODBC)	Recipe Access	
New Project Name:	Recipe		
Location:	C:\Docum	ents and Sett	tings\Tina.Q.Lee\Desktop\Re
	Add to	the current p	raject
			OK Cancel

Click icon to link HMI screen project file. There are two methods available for selection:

1. Select an existing Screen (DOP) file from stored media: Open an existing screen project file and set the IP address of the connecting HMI.

to a to a subst	Screen(Dr	JPJ file	from stro	ied med	ia.	
:\Document	s and Setti	ngs\sh	iirley, lai\N	ly Docu	iments\Der	no_ [
Address	172 .	16	. 190	. 2		
						Address 172 . 16 . 190 . 2

2. Transfer from Delta - HMI: Transfer the HMI screen project file via network communication directly.

				4			-
		ollowing 2 method					
1. 0	Select a ex	kist Screen (DOP) file fro	om stroe	ed media	э.	
							-
_							
2. ⊙	Tansfer fro	om Delta - HMI	_	_			
2. 🧿	and the second second	and the second second	2				
2. 🔘	and the second second	om Delta - HMI 16 . 190 .	2				-

Press **OK** button to go to next step.

10.1.2 Register Setting

This step is used to set the register addresses of the database. There are two modes, Import and Export available for selection. After selecting the desired mode, choose Fixed or Variance from the drop-down list and complete the settings.

Import - Fixed

Import16(1) 16 bits HMI Import16_%H%M C:\Documents and Settings\Tina.Q.	Import16(1) 16 bits HMI Import16_%H%M C: Documents and Settings/Tit	Usage Name Type HMI Name File Name Destination Path
Tenere22(1) 22 bits 13.67 Tenere22 9/159/3.6	Import32(1) 32 bits HMI Import32 %H%M	
imports2(1) 52 bits rivit imports2_%H%M		Import32(1) 32 bits HMI Import32_%H%M

Import - Variance

No	Usage	Name	Type	HMI Name	File Name	File Name Length	Controller	Destination Path
1		Import16(1)	16 bits	HMI	\$100	4	Internal Memory	C:\Documents and Settings\Tina.Q.Le
2		Import32(1)	32 bits	HMI	None	1		

Setting Item	Description	Remark
No.	Excel Sheet index which the sampling data will be written.	Unchangeable
Usage	If the users want to select 16-bit recipe, enable this option by checking the check box.	
Name	Recipe display name	
Туре	Recipe Bit type	Unchangeable
HMI Name	Name of connecting HMI	Unchangeable
	 When Fixed is selected: It is the file name of the imported file which could be changed and user-defined. 	
File Name	 When Variance is selected: It is the register address of a certain trigger element. Please note: When the data format is set to Word, the data format of the sampling register address could be Unsigned only. 	

Setting Item	Description	Remark
File Name Length	Number of characters by referring the user-defined file name.	
Controller	Connecting controller	Unchangeable
Destination Path	Destination location where the imported file is located.	

Export - Fixed

Usage	Name	Type	HMI Name	Information	Source Path	
	Export1	16 bits	HMI	Length(3), Group(3)	-0223.rcp	

Export - Variance

bd	e	Variance	¥						
No	Usage	Name	Type	HMI Name	File Name	File Name Length	Controller	Source Path	1
1		Export16(1)	16 bits	HMI	\$100	4	Internal Memory	C:\	
2		Export32(1)	32 bits	HMI	None	1			

Setting Item	Description	Remark
No.	Excel Sheet index which the sampling data will be written.	Unchangeable
Usage	If the users want to select 16-bit recipe, enable this option by checking the check box.	
Name	Recipe display name	
Туре	Recipe Bit type	Unchangeable
HMI Name	Name of connecting HMI	
Information	Length and Group of the recipe.	Unchangeable
File Name	It is the register address of a certain trigger element. Please note: When the data format is set to Word, the data format of the sampling register address could be Unsigned only.	

Setting Item	Description	Remark
File Name Length	Number of characters by referring the user-defined file name.	
Controller	Connecting controller	Unchangeable
Source Path	Destination location where the exported file is located.	

10.1.3 Sampling Conditions

This step is used to set the sampling conditions. There are two kinds of options for selection:

1. Const (execute sampling repeatedly in a certain span of time)

This option is used to determine how long the sampling process is repeated. The time unit can be defined as ms, second, minute or hour.

Name	Type	HMI Name	Address	Format	Controller	
Import16(1)	Const	n/a	5s	n/a	n/a	
	(500m	s ~ one day)	(Minute) 5	(Second) 0	🗢 (ms)	

2. Trigger (Execute sampling when the trigger conditions are satisfied)

This option is used to determine how long the sampling process is repeated when the trigger conditions are met. The detailed settings are described as follows:

Name Type HMI Name Address Format Controller nport16(1) Trigger HMI \$0.0 Rising edge Internal Memory	Q.	- Cotting	Condition					
mport16(1) Trigger HMI \$0.0 Rising edge Internal Memory	Node	Setting			(=	(e	1	
caporiso(1) Ingen Invit 50.2 I annie odgo internativienty		and an other descents		No. of Street				

Polling Cycle (Sampling Cycle): It is used to determine how long the sampling process is repeated. The time unit is ms.

Logging Condition:

Setting Item	Description	Remark
No.	Condition number	Unchangeable
	Sampling type. There are two kinds of options for selection: Const and Trigger.	
Туре	Const: Execute sampling repeatedly in a certain span of time.	
	Trigger: Execute sampling when the trigger conditions are satisfied.	
HMI Name	Name of connecting HMI	
Detail	Register Address	
F	 When the register address is set to Bit, the selectable options are: 	
Format	A. Rising edge: Triggered by rising-edge	
	B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

Chapter 11 Recipe Access Example

Before creating testing example, make sure to change the upload and download option (**Options** > **Configuration**) on Screen Editor first. The default setting of upload and download is via **USB**. If the users need to use **Ethernet**, please change the default setting by referring to **Appendix A**.

11.1 Creating Example

Update Firmware

Remember to update the firmware before using eServer. To select this function, click **Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.0x > Update Firmware Tool**. After clicking **Update Firmware Tool**, the following dialog box will appear for the users to select the communication interface (the default setting is USB driver). Press **Update** button to update HMI firmware automatically.

Update Firmware Tool v1.2		×
USB Driver Reinstall	Model Name AE570 AE57C	Version 1.08B 1.08B
Mode Selection	AE80C16 AE940 AE10C16 AE10C100 AE10C200	1.08B 1.08B 1.08B 1.08B 1.08B
(?) About	B10E615	2.0203

Start eServer

To start eServer, click Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.0x > eServer.



11.1.1 New Project

Start eServer, and click File > New or click New icon

Server	eServer 🖉
w View Wiend Tool Help	
Project	Project
Troject > >	

After the **New** dialog box is opened, select **Recipe Access** icon and enter the file name **Recipe** for the Recipe Access database. Then, press **OK** button.

	-		
	ogging (ODBC)	Recipe Access	
New Project Name:	Recipe		
New Project Name: Location:		ents and Settings\Ti	na.Q.Lee\Desktop\Re [
	C:\Docume	ents and Settings\Ti	na.Q.Lee\Desktop\Re

11.1.2 Node

Click icon to link HMI screen project file. There are two methods available for selection. Here choose **Select an existing Screen (DOP) file from stored media** option to create a new node.

Select an existing Screen (DOP) file from stored media

Open an existing screen project file (HMI-recipe.dpb) and set the IP address of the connecting HMI. The IP address is set to **172.16.190.11**

ransfer - Path		
Please select the follo	wing 2 methods to link	
1. Select a exist	Screen (DOP) file from stroe	ed media.
IP Address	172 . 16 . 190 .	. 11 : 12348 🛄
2. O Tansfer from	Delta - HMI	
	n <u>e</u> ()	2348
	_	OK Const
	<u></u>	OK Cancel

Press **OK** button to go to next step.

Open						20
Look in:	🞯 Desktop		*	0 7 :	• 🖽 •	
My Recent Documents	BOP eServer					
My Documents	Le change page f Le change page f DOP-Soft.dph Le eServer exam Le green people. HMI-32位元) ple.dpb dop				
My Computer	HMI-recipe.d	pb				
S.	File name:			1	- (Open
My Network	Files of type:	All files(*.*)				Cancel

After selecting the recipe file and setting the IP address, press **OK** button to go to next step.

ansfei	t - Path		_		_	_		_
Please	select the follow	wing 2 meth	nods to	link				
1. ①	Select a exist	Screen (DC	DP) file	from stroe	ed med	fia.		
	ments and Set	tings\TINA	Q.LEE	\HMI\pra	actice	HMI-	recipe.dp	ь 🛄
	IP Address	172 .	16	190 .	11	:	12348	
2. ()	Tansfer from [Delta - HMI		: [1	2.74 OK		Can	cel

11.1.3 Setting and Condition - Import

When the node is set correctly, click **Setting** and complete the settings next. There are two modes, Import and Export available for selection. Each mode provides two options, Fixed or Variance from the drop-down list for use.

Import - Fixed

<u>Setting</u> :

- a. Select Fixed.
- b. Check the check box to use **16-bit recipe** as the example.
- c. User-define the HMI Name and File Name (file name of the imported file).
- d. Set **Destination Path** (destination location) where the imported file is located.

0	Usage	Name	Type	HMI Name	File Name	d. Destination Path	
I		Import16(1)		HMI	Import16_%H%M	C:\Documents and Settings\Tina.Q.Lee	
1		Import32(1)	32 bits	HMI	Import32_%H%M		

<u>Condition</u> :

As for the method of sampling condition, select **Const (execute sampling repeatedly in a certain span of time)**.

a. Select Const.

b. Set **Polling Cycle** (sampling cycle) to **5s** (default setting value).

	Setting	Condition	b.		1	1
	a. Type	HMI Name	Address	Format	Controller	
mport16(1)	Const	n/a	5s (n/a	n/a	
	0	(Hour) 0	(Minute) 5	(Second) 0		
				OK	Cancel	

After completing all the settings on eServer, use the most updated Screen Editor program editing software to open the selected .dpb file which just has been modified on eServer. Then, compile it and download the recipe data to HMI. The screen data will be shown as the figure below:

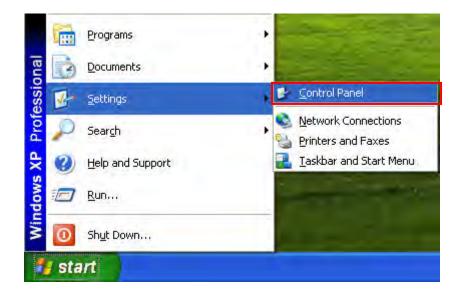
Delta Soft Simulator ¥2.2	1. Kernel Ver - R 2.74				
Select RCPNO	Buffer	9	1 18	27	
PLC TO HMI	Recipe Address 1	9	18	27	
HMI TO PLC	3	<u>44</u>	55	66	

After downloading the recipe data, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.11) are the same; otherwise, HMI may not be displayed in the list when finding node.

Networking Settings

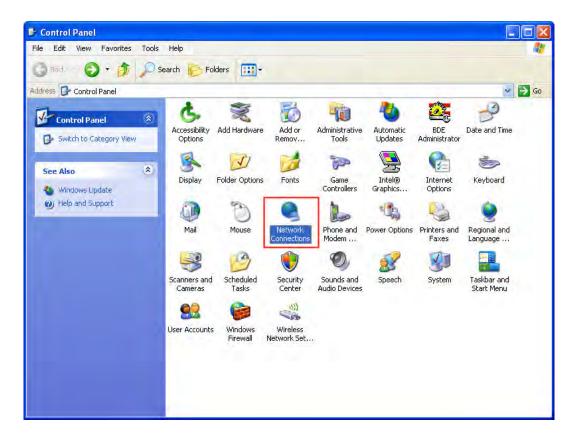
Ensure to observe the following instructions to complete PC networking settings before eServer operation.

Setting PC Network

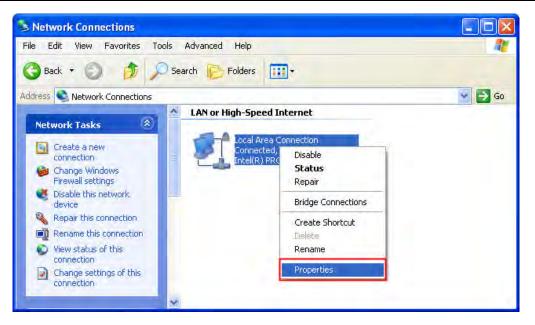


Power on PC and start Windows. Click Start > Programs, point to Control Panel, and then





Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.



The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

eneral Authentication Advanced	
Connect using:	
Intel(R) PRD/1000 MT Network Con	Configure
This connection uses the following items:	
File and Printer Sharing for Microsoft Netw QoS Packet Scheduler Internet Protocol (TCP/IP)	
Install Uninstall	Properties
Description	
Description Transmission Control Protocol/Internet Protocol wide area network protocol that provides comm across diverse interconnected networks.	
Transmission Control Protocol/Internet Protocol wide area network protocol that provides comm	unication

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autom	atically
Use the following IP addres	s:
IP address:	172 . 16 . 190 . 1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Oblam DNS server address	automatically
Use the following DNS serv	er addresses:
Preferred DNS server:	
Alternate DNS server:	· · · ·

Then, press **OK** button to finish the settings.

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.11. Please see the figure below:

ØØ₽-₿ • ✓ System Setting •					S Back	Home
	HMI Name: HMI DHCP : OFF IP : 172 : Mask : 255 2: Gateway : 0. MAC : 0B: 0	552550 000); 00			
10	-			▼	•	
BACK	DEC.	INC.	UP	DOWN	LEFT	RIGHT

After networking settings are set correctly and successfully, return to eServer, save the file first and then run the recipe data. Please see the figure below:



Press Dicon. The following dialog box will pop-up and ask the users to enter the password.

No	Linkage	HMI	Password
1	Recipe	HMI	****
-			
		e the same passv	word under bio 1

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the entered icon will display on the tool bar at the left-bottom corner. When eServer performs reading, the system will examine and check if the saved file name



is saved in the destination path or not. Please refer to the figure such as

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.

 Linkage	HMI	Password
 Recipe	HMI	***
	eServer	
	Can't conne	et to HMI
	ОК	
asswords ar	e the same passw	ord under No.1

Import - Variance

Setting :

- a. Select Variance.
- b. Check the check box to use **16-bit recipe** as the example.
- c. Set the **File Name** (file name of the imported file) to be the same as the register address of HMI. (In this case \$100 character input element is used)
- d. Set **File Name Length** (number of the imported characters). (In this case the File Name Length is set to 4. This is because the name of the imported file is Tina.csv. The system will refer to "Tina" these four characters and convert the imported file to Tina.rcp and then save it to the destination path.)
- e. Set **Destination Path** (destination location) where the imported file is located.

Name	Type	HMI Name	File Name	File Name Length	Controller	Destination Path	
Import16(1)	16 bits	HMI	\$100		Internal Memory	C: Documents and Settings Tina.Q.Lee	
Import32(1)	32 bits	HMI	None	1			

Condition :

As for the method of sampling condition, select **Const (execute sampling repeatedly in a certain span of time)**.

- a. Select Const.
- b. Set **Polling Cycle** (sampling cycle) to **5s** (default setting value).

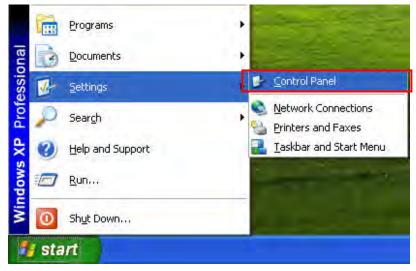
ame	Type	HMI Name	Address	Format	Controller
port16(1)	Const	n/a	5s	n/a	n/a
	(500m	s ~ one day)			
	0	💲 (Hour) 0	💲 (Minute) 5	(Second)) 🌲 (ms)

After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.11) are the same; otherwise, HMI may not be displayed in the list when finding node.

Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

Setting PC Network

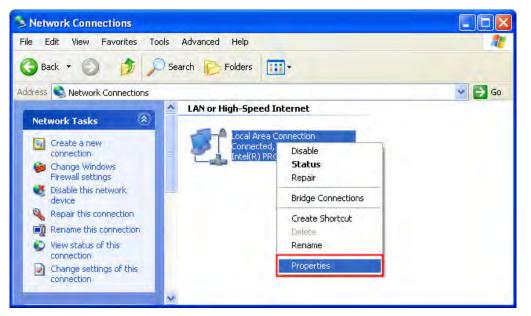


Power on PC and start Windows. Click Start > Programs, point to Control Panel, and then

select Network Connections (Connections).

🕞 Control Panel								
File Edit View Favorites Tools	Help							- -
🌀 Bad 🎯 + 🏂 🔎 Se	earch 🜔 Fold	ders 📰 -						
Address 🔂 Control Panel							*	Di Go
Control Panel	ر Accessibility Options	Add Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time	
See Also 🌸	Display	Folder Options	Fonts	Game Controllers	Intel® Graphics	Internet Options	达 Keyboard	
Help and Support	Mail	D Mouse	Network Connections	Phone and Modem	Power Options	Printers and Faxes	Regional and Language	
	3	9	۲	0	2	3		
	Scanners and Cameras	Scheduled Tasks	Security Center	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	
	8							
	User Accounts	Windows Firewall	Wireless Network Set,					
	· · · ·							

Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.



The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

- Local	Area Connec	tion Properties	20
General	Authentication	Advanced	
Connec	t using:		
Bill In	ntel(R) PR0/10(00 MT Network Con	Configure
This co	nnection uses th	ne following items:	
	Client for Micro File and Printe QoS Packet S Internet Protoc	r Sharing for Microsoft cheduler	Networks
	nstall	Uninstall	Properties
Desci	iption		
wide	area network pr	Protocol/Internet Prot rotocol that provides cr onnected networks.	
		ation area when conne connection has limited	
		0	K Cancel

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

nternet Protocol (TCP/IP) Pi	roperties 🛛 📝 📔					
General						
IP address:	172 . 16 . 190 . 1					
Subnet mask:	255 . 255 . 255 . Q					
Default gateway:						
Oblam DNS server address	automatically					
Our State Stat	er addresses:					
Preferred DNS server:	4 4 6					
Alternate DNS server:	· · · ·					
	Advanced					

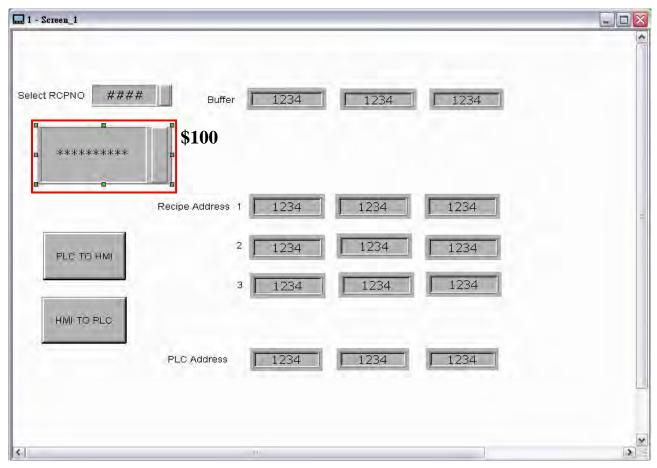
Then, press **OK** button to finish the settings.

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.11. Please see the figure below:

<i>DUP</i> -B•	System Setting •				S Back	Home
	HMI Name: HMI DHCP OFF IP : 172 : Mask 255 24 Gateway 0. MAC : 0B: 0	55.255 0 0 0 0	9; 00			
5	_	+		V	•	
BACK	DEC.	INC.	UP	DOWN	LEFT	RIGHT

After completing all the settings and make sure that the communication is good, use the most updated Screen Editor program editing software to open the selected .dpb file which just has been modified on eServer. Create a character input element and set its address to \$100.



Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, return to eServer, save the file first and then run the recipe data. Next, trigger the character input element on HMI, and the system will save the imported file to the destination path. Please see the figure below:

10.0	File	View	Wizaud	Tool	Help
1110		3	8		 ,
		Save		Run	

Press Dicon. The following dialog box will pop-up and ask the users to enter the password.

Recipe HMI ******	lo Linkage	HMI	Password
	Recipe	HMI	****

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the entered icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, please trigger the character input element on HMI and enter TINA these four characters. Please refer to the figure below:

	ASCII	KEY											\mathbf{X}
	TINA	1											
	1	2	3	4	5	6	7	8	9	0	-	=	ALT
LC T	Q	w	E	R	т	Y	U	I	0	Р	1	1	CLR
	A	s	D	F	G	н	J	к	L	;			DEL
	z	X	с	v	в	N	м	1		1	1	ľ	ENT

Then, the system will examine and check if the saved file name is saved in the destination



path or not. Please refer to the figure such as

On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.

lo Linkage	HMI	Password
l Recipe	HMI	***
	eServer Can't conn	
all password:	are the same passw	vord under No.1

11.1.4 Setting and Condition - Export

Export - Fixed

Setting :

- a. Select Fixed.
- b. Check the check box to use 16-bit recipe as the example.
- c. Information shows the length and the group of the recipe data.
- d. Set **Destination Path** (destination location) where the imported file is located.

Please note: the value of the selected <u>-0223.rcp</u> file (item d.) is the downloading value when the element is triggered on HMI.

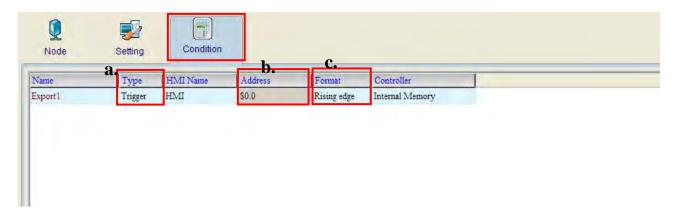
	A	В	С
1	3	3	
2	111	222	333
3	444	555	666
4	777	888	999

Usage Name Type HMI Name Information	Source Path
Export1 16 bits HMI Length(3), Group(3)	-0223.rcp

Condition :

As for the method of sampling condition, select **Trigger (Execute sampling when the trigger conditions are satisfied)**.

- a. Select **Trigger**.
- b. Set **Address** to the register address of the trigger element. (In this case the trigger element is a maintained button element and its address is set to \$0.0)
- c. Select **Format**. There are two options for selection: **Rising edge** and **Falling edge**. (In this case it is set to Rising edge)

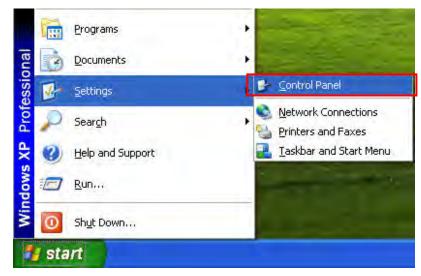


After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.11) are the same; otherwise, HMI may not be displayed in the list when finding node.

Networking Settings

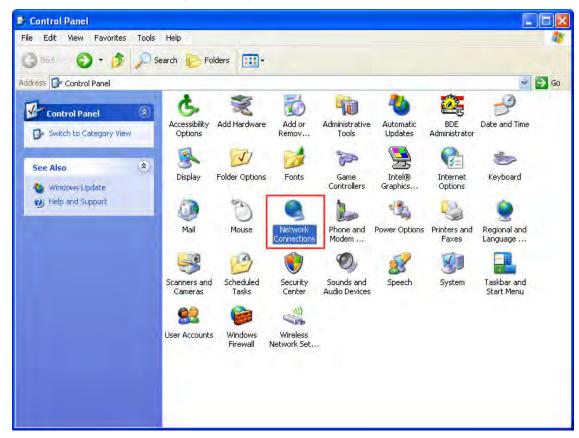
Ensure to observe the following instructions to complete PC networking settings before eServer operation.

Setting PC Network



Power on PC and start Windows. Click Start > Programs, point to Control Panel, and then

select Network Connections (Connections).



Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.

S Network Connections		
File Edit View Favorites Tools Adv	vanced Help	1
🌀 Back 🔹 🕥 🎲 🔎 Search	Folders 🛄 -	
Address 🛸 Network Connections		🐱 ラ Go
Network Tasks	AN or High-Speed Internet	
Create a new connection Change Windows Firewall settings	Local Area Connection Connected, Intel(R) PRC Status Repair	
Disable this network	Bridge Connections	
Repair this connection	Create Shortcut	
Rename this connection View status of this connection	Delete Rename	
Change settings of this connection	Properties	
~		

The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

Local	Area Connec	tion Properties	? 🛛
General	Authentication	Advanced	
Connec	ct using:		
B	ntel(R) PR0/100	0 MT Network Con	Configure
This co	nnection uses th	e following items:	
	File and Printer QoS Packet S Internet Protoc	A COLORADO DE C	Networks Properties
-	ription	Dimsion	Topenes
Tran wide	smission Control area network pr	Protocol/Internet Proto otocol that provides co onnected networks.	
Sho	w icon in notifica	ition area when conne	cted
🔽 Noti	fy me when this (connection has limited	or no connectivity
_			
			K Cancel

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

	I automatically if your network supports ed to ask your network administrator for natically
Use the following IP addres	s:
IP address:	172.16.190.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Oblam DNS server address	automatically
Our State Stat	ver addresses:
Preferred DNS server:	<u> </u>

Then, press **OK** button to finish the settings.

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.11. Please see the figure below:

DUP	• B • 🗸 sy	stem Setting •				S Back	Home
	DHC IP Masl	: 172 1 c : 255 25 way : 0	.6 190 11 55 255 0 0. 0. 0 0; 00; 00; 00	1: 00			
\mathfrak{O}					V	•	
BACK		DEC.	INC.	UP	DOWN	LEFT	RIGHT

After completing all the settings and make sure that the communication is good, use the most updated Screen Editor program editing software to open the selected .dpb file which just has been modified on eServer. Create a maintained button element and set its address to \$0.0.

🛄 1 - Screen_1					
					^
		-	-	-	
Select RCPNO ####	Buffer	1234	1234	1234	
****		• • • • • • • • • • • • • • • • • • •	and a firm		
A D A D A D A A A A	\$0.0			k.	
	Recipe Address 1	1234	1234	1234	=
	1		1224		
PLC TO HMI	2	1234	1234	1234	
	3	1234	1234	1234	
HMI TO PLC					
	PLC Address	1234	1234	1234	_
					Set
(ŝ)					

Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, return to eServer, save the file first and then run the recipe data. Next, trigger the numeric input element on HMI, and the system will save the imported file to the destination path. Please see the figure below:

	Save		Run	
	3	1		 ,
File	View	Wizaud	Tool	Help

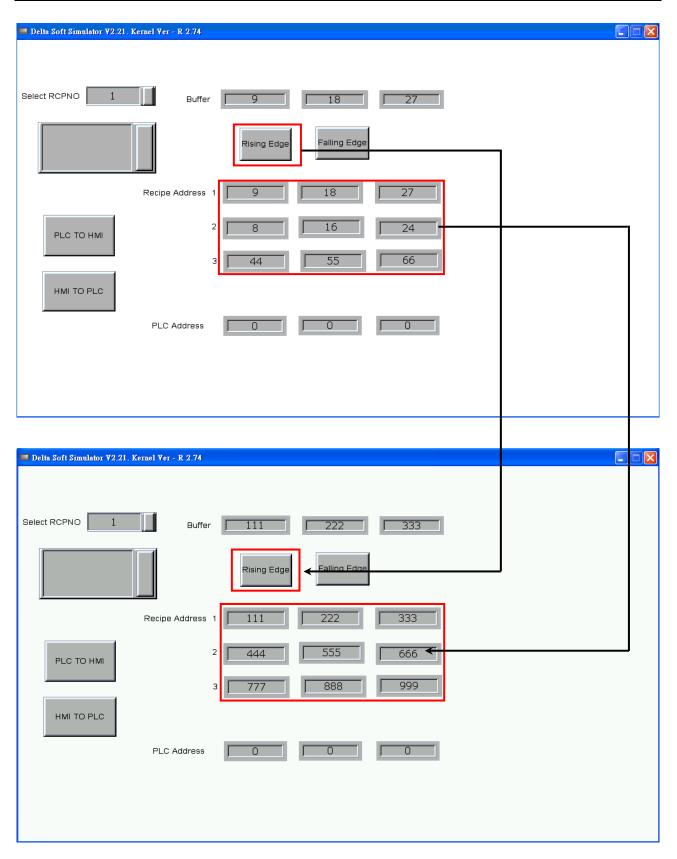
Press Dicon. The following dialog box will pop-up and ask the users to enter the password.

No Linkage	HMI	Password	1
1 Recipe	HMI	****	
			-
	s are the same passw	and second and	

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the entered icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, please trigger the maintained button element on HMI and enter the value of 4. Then, the system will convert the recipe data to the data of -0223.rcp and show on HMI screen.

Please refer to the figure on next page:



On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.

No	Linkage	HMI	Password
1	Recipe	HMI	***
		eServer	
		Can't conne	ct to HMI
		OK	

Export - Variance

Setting :

- a. Select Variance.
- b. Check the check box to use **16-bit recipe** as the example.
- c. Set the **File Name** (file name of the imported file) to be the same as the register address of HMI. (In this case \$110 character input element is used.)
- d. Set **File Name Length** (number of the imported characters). (In this case the File Name Length is set to 4. This is because the name of the exported file is Tina.csv. This file will be open in Screen Editor and save the value into .csv file.)
- e. Set **Source Path** (destination location) where the exported file is located (Tina.csv file is saved in C:\).

icips Setup				Save As				_			2
🗹 Enable F	Recipe		Recipe Ret	Save in:	Servindows X	P Professional (C:)	*	C Ø	1	*	
Address	1@D20			My Recent Documents	2010.03.12 Documents a Program Files						
/	W1	W2	W3	Ø	WINDOWS						
1	111	222	333	Desktop	Carl AddressBook	txt					
2	444	555	666	DESKIUP	RCP.edx						
3	777	888	999	- A -	test.edx						
				My Documents	File name: Save as type:	tina.csv			*	-	Save
				mynouron	care as oppo.	Circuico(,)					

Name	Type	HMI Name	File Name	File Name Length	Controller	Source Path	
Export16(1)	16 bits	HMI	\$100	4	Internal Memory	C:\	
Export32(1)	32 bits	HMI	None	1			

Condition :

As for the method of sampling condition, select **Trigger (Execute sampling when the trigger conditions are satisfied)**.

- a. Select **Trigger**.
- b. Set **Address** to the register address of the trigger element. (In this case the trigger element is a maintained button element and its address is set to \$0.0)
- c. Select **Format**. There are two options for selection: **Rising edge** and **Falling edge**. (In this case it is set to Rising edge)

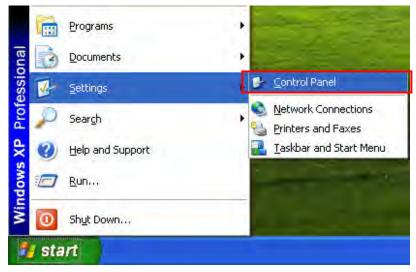
	Setting	Condition	_	C.		
Name a.	Туре	HMI Name	D. Address	Format	Controller	
Export1	Trigger	HMI	\$0.0	Rising edge	Internal Memory	

After completing all the settings, please make sure that the IP address numbers of subnet masks of the PC (172.16.190.1) and HMI (172.16.190.11) are the same; otherwise, HMI may not be displayed in the list when finding node.

Networking Settings

Ensure to observe the following instructions to complete PC networking settings before eServer operation.

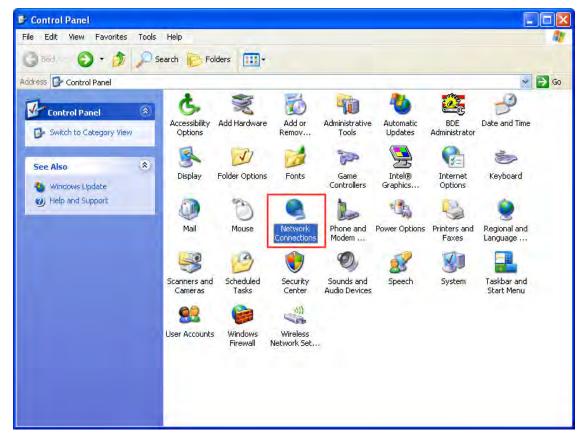
Setting PC Network



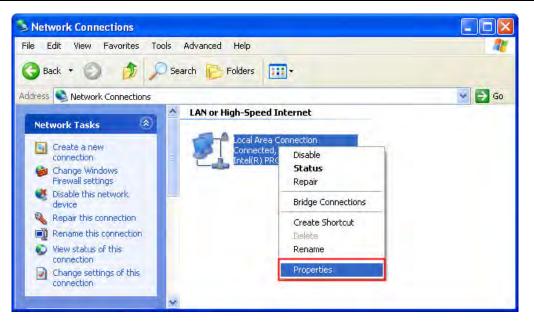
Power on PC and start Windows. Click Start > Programs, point to Control Panel, and then



select Network Connections (Connections).



Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.



The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

	Authenticatio	on Advanced		
Conne	ct using:		_	
田野	intel(R) PRO/1	000 MT Network	k Con	Configure
This co	onnection uses	the following ite	ms:	
		Contractory of the second state of the second		works
-	Install	Uninstal		Properties
	ription			
wide	e area network	rol Protocol/Inter protocol that pro rconnected netw	vides comr	the state of the s
	ow icon in notif	ication area whe		d no connectivity

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

	I automatically if your network supports ed to ask your network administrator for natically		
Use the following IP addres			
IP address:	172 . 16 . 190 . 1		
Subnet mask:	255 . 255 . 255 . 0		
Default gateway:			
Oblam DNS server address	automatically		
Use the following DNS serv	ver addresses:		
Preferred DNS server:			

Then, press **OK** button to finish the settings.

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.11. Please see the figure below:

DOP-B • 🗸 System Setting •							Home
	DHC IP Mas	: 172 1 c : 255 25 way : 0		9; 00			
\mathfrak{O}			-		V	•	
BACK		DEC.	INC.	UP	DOWN	LEFT	RIGHT

After completing all the settings and make sure that the communication is good, use the most updated Screen Editor program editing software to open the selected .dpb file which just has been modified on eServer. Then, create two elements. One is a character input element and its address is set to \$100. The other is a maintained button element and its address is set to \$0.0. Please refer to the figure below:

🔜 1 - Screen_1		
		^
Select RCPNO #### Buffer \$100	1234 1234 1234	
**********************\$\$0.	.0 Rising Edged Falling Edge	
Recipe Address	1 1234 1234 1234	
PLC TO HMI	2 1234 1234 1234	
	3 1234 1234 1234	
HMI TO PLC		
PLC Address	1234 1234 1234	
		100
		AL

Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, return to eServer, save the file first and then run the recipe data. Next, trigger the numeric input element on HMI, and the system will save the imported file to the destination path. Please see the figure below:

10.04	File	View	Wizaud	Tool	Help
		3	8		 ,
		Save		Run	

Press D icon. The following dialog box will pop-up and ask the users if it is necessary to convert the file of Tina.csv.

_	File Path Name	OK
	C:\tina.csv	Cancel
		(

Check the box before **Translate All** and press **OK** button, the following dialog box will pop-up and ask the users to enter the password.

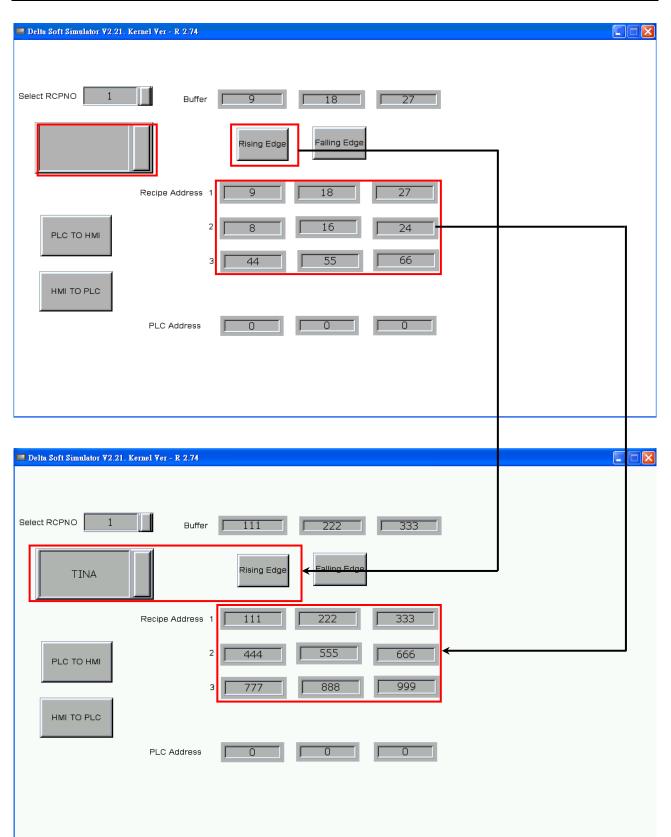
No	Linkage	HMI	Password
1	Recipe	HMI	****
	l passwords a	e the same passv	vord under No 1

Please enter 12345678 in the filed of the password at the first time (12345678 is the default setting value and the users can change it freely). After the correct password is entered, the entered icon will display on the tool bar at the left-bottom corner.

When eServer performs reading, please trigger the character input element (TINA) and the maintained button element on HMI. Then, the system will convert the recipe data to the record data of Tina.csv file.

Please refer to the figure on next page:

ogervar



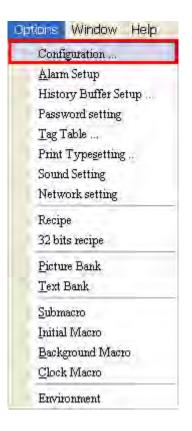
On the other hand, if incorrect or invalid password is entered, the following error message dialog box will appear to alert the users.



Appendix A Upload/Download via Ethernet

A.1 Configuration Settings

The default setting of upload and download on Screen Editor is via **USB**. If the users need to use **Ethernet**, please activate Screen Editor and select **Options** > **Configuration** to access the configuration options and change the upload and download setting.



In **Configuration** dialog box, change the default setting of upload and download to **Ethernet**. Then, press **OK** to complete the setting.

General	General	
Control Block COM port Printer Setup Default Other	Standard Project Name IMI Type DOP-B10E615 65536 Colors DOP-B10E615 65536 Colors Non-volatile data location Security Password Security Password 12345678 Starting Level Insufficient password level reminder Check password when download prog Buzzer ON Audio ON	Upload/Download USB PC CDM Port Startup Delay Time Clock Macro Delay Time Clock Macro Priority Background macro update cycle Show disk access error message Alarm History Recipe

A.2 COM Port Settings

If the users choose to use DHCP mode, it is not necessary to set Ethernet IP address in COM Port tab.

Configuration				
General Control Block	COM port			
COM port Printer Setup	Add	Delete	Move Up	🔲 Overwrite IP
Default	Modify]	Move Down	Obtain an IP address automatically
Other	COM COM COM COM COM COM	12 Fase Port 13		HMI Name HMI HMI IP Address 0.0.0.0.0 Subnet Mask 255.255.255.0 Gateway IP 0.0.0.0 upload/downloa 12346
				OK Cancel

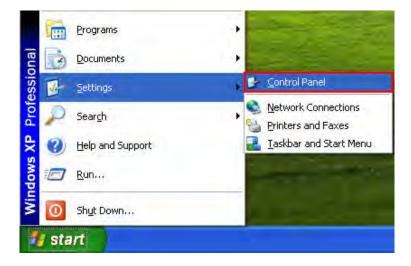
If the users choose to use user-defined IP address, please set Ethernet IP address in COM Port tab and ensure that the domain name is the same as the IP address of the personal computer.

General Control Block	COM port						
COM port Printer Setup	Add	Delete	Move Up	Verwrite IP			
Default	Modify	Modify Move Down			Obtain an IP address automatically		
Other	CON	Z COM1			HMI		
	Base Port			HMI Name HMI IP Address	172.16.190.11		
	S COM	- 🖉 сомз			255.255.255.0		
	e Ethe	ernet		Subnet Mask Gateway IP	0.0.0.0		
				upload/downloa	12346		
				upioau/uowfilua	12040		

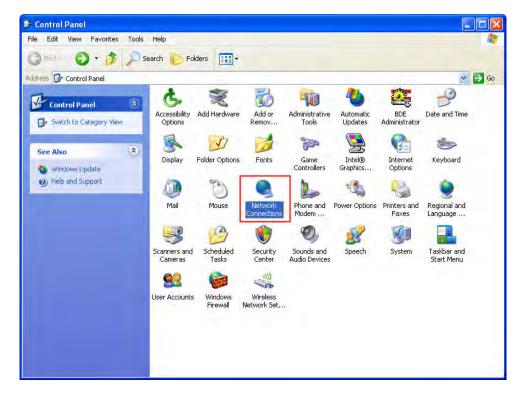
After Ethernet IP address is set, the users can enter into the system menu to verify if the IP address is written correctly or not.

DUP	- B • √ sy	stern Setting •				S Back	Home
	DHC IP Mask	: 172 1 c : <mark>255</mark> 25 way : 0	16 190 11 55 255 0 0 0 0 00: 00: 00: 00); 00			
S		-	+		V	•	
BACK		DEC.	INC.	UP	DOWN	LEFT	RIGHT

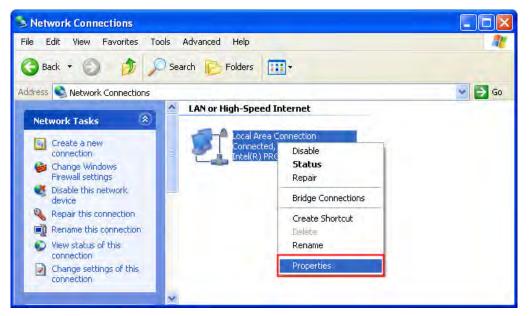
Then, observe the following instructions to complete PC networking settings.



Power on PC and start Windows. Click **Start > Programs**, point to **Control Panel**, and then select **Network Connections**.



Double-click **Network Connections** icon, the following windows will appear. Right-click the **Local Area Connection** icon, and then select **Properties** from the pop-up menu.



The Local Area Connection Properties dialog box will open. Use General tab to select Internet Protocol (TCP/IP). Then, press Properties button.

Local	Area Connec	tion Properties	?
General	Authentication	Advanced	
Connec	t using:		
By In	ntel(R) PRO/100	0 MT Network Con	Configure
This co	nnection uses th	e following items:	
	Client for Micro File and Printer QoS Packet So Internet Protoc	Sharing for Microsoft I sheduler	Networks
Descr	nstall	Uninstall	Properties
Tran: wide	smission Control I area network pro	Protocol/Internet Proto otocol that provides co onnected networks.	and don't water to be made to
		tion area when conne connection has limited	
-		[0]	K Cancel

The Internet Protocol (TCP/IP) Properties dialog box will open. Choose Use the following IP address and enter the IP address numbers of the PC into the field of IP address and Subnet mask.

Internet Protocol (TCP/IP) P	roperties 🛛 🛛 🛛 😨		
General			
IP address:	172 . 16 . 190 . 1		
Subnet mask:	255.255.255.0		
Default gateway:			
Obtain DNS server address			
Preferred DNS server:	Ţ. i ī		
Alternate DNS server:			
	Advanced		
	OK Canc		

Then, press **OK** button to finish the settings.

Please note that if the IP address numbers of subnet masks of the PC and HMI are different, HMI may not be displayed in the list when finding node.

A.3 Compile and Upload / Download Screen & Recipe

After completing PC networking settings, compile the editing program immediately. When compile operation is performed successfully, choose **Upload Screen & Recipe** or **Download Screen & Recipe** next.

Too	ols	Options	Window	Help
	Cor	npile		Ctrl+F7
-	Dot	vnload Scr	een & Recipe	ctrl+F8
	Upl	load Screen	a & Recipe	
	Dot	vnload Scr	een	Ctrl+F9
	Upl	oad recipe	h	
	Dot	vnload Red	ripe	
	On-	line Simula	ation	Ctrl+F4
	Off	Line Simu	lation	Ctrl+F5
	Up	grade firmv	vare	
	Get	Firmware	Information	

Too	ols Options Wi	ndow Help
22	Compile	Ctrl+F7
1	Download Screen &	Recipe Ctrl+F8
E	Upload Screen & R	ecipe
	Download Screen	Ctrl+F9
	Upload recipe	
	Download Recipe	
5	On-line Simulation	Ctrl+F4
-	Off Line Simulation	Ctrl+F5
	Upgrade firmware	
	Get Firmware Infor	mation

Then, the following dialog box will appear.

Destination	t -	2
Static IP	0.0.0.0 : 12346	Refresh
HMI	Model type Source IP Ad Port	
	Start Close	_

The users can check the box before **Auto Search**, and the system will detect the connecting HMI automatically.

Static IP A uto Seac		12946]	Refresh
НМІ	Model type	Source IP Ad	Port	
НМІ	DOP-B10E615	172.16.190.118	12346	

When the connecting HMI is found, press Start button, and the system will start to upload or download the screen data via Ethernet immediately.

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