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DOP eServer User Manual

*We reserve the right to change the information in this manual without prior notice.





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About this Manual...

User Information

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Date	Issue Version	Description of Changes		
2010/10/23	eServer-001	1. First Edition		
2011/03/14	eServer-002	1. Add Time stamp of Format Cells explanation (P4-7) Add CH08 Database Access 2007 at Windows7 explanation		
2012/07/19	eServer-003	 Fixed ODBC setting interface for Wizard. Fixed Excel setting interface for Wizard. Fixed Tools > Options > Disconnect interface of function menu. (P3-10) Fixed Screen Editor example to DOPSoft example. Add Tool > Options > Environment interface of function. (P3-10) Add Excel Overwrite the file when saving and Other setting function. (P4-16~P4-20) Add Recipe Auto Refresh on Startup function. (P11-4~P11-5), (P12-5, P12-11, P12-16~P12-17, P12- 19, P12-25, P12-27~P12-28, P12-32~P12-33) 		
2014/03/02	eServer-004	 Add Chapter 10 Writing Data in SQL Server 2005 description. 		

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
DOP-AE Series	DOP-AE57CSTD	required when using eServer
	DOP-AE80THTD1	product.
	DOP-AE10THTD1	
	DOP-B03E211	
	DOP-B07E415	
DOD P Sorios	DOP-B07E515	
DOP-B Series	DOP-B08E515	
	DOP-B10E515	
	DOP-B10E615	

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	Microsoft Office 2000
Office Software	Microsoft Office 2003 Microsoft Office 2007

Chapter 2 Software Installation

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.



WIv To select the default directory C: \Program Files\Delta Industrial Automation\DOP eServer 1.00.xx, 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 Component	5	
Choose Components Choose which components of DOP sho	uld be installed.	4
	Check the components you wai install. Click Install to start the	nt to install and uncheck the components you don't want to installation.
	Select components to install: Space required: 19.7MB	DOP eServer Main Program Description Hover your mouse over a component to see its description
	< Back	Install Cancel

Step 5. The system will start DOP eServer Installation.

💈 DOP Setup: Copying Files		
Installing Please wait while DOP is being installed.		
	Extract: ModbusRTU_HEX.dll Show details	
	STOP Close	Cancel

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.xx > 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**).

Update Firmware Tool v1.3			×
USB Driver	Model Name	Version	
Reinstall	AE80C16 AE940	1.08C 1.08C	
Mode Selection	AE10C16 AE10C100	1.08C	
CUSB 📃 💿 Ethernet	B10E615	1.08C 3.0036	_ =
	B07E415 B07E515	3.0036	
(?) About Update	B08E515	3.0036	~

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

Network select Network Connections (Connections).

📴 Control Panel								
File Edit View Favorites Tools	Help							
🕝 Back - 🕤 - 🏂 🔎 Se	arch 🔀 Fol	ders						
Address 🚱 Control Panel							*	🔁 Go
Control Panel	Ġ,	Ń	6	-	2		P	
🚱 Switch to Category View	Accessibility Options	Add Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time	
See Also	8	N		·	9		1	
🍪 Windows Update	Display	Folder Options	Fonts	Game Controllers	Intel® Graphics	Internet Options	Keyboard	
Help and Support		Ċ			4		<u> </u>	
	Mail	Mouse	Network Connections	Phone and Modem	Power Options	Printers and Faxes	Regional and Language	
	3	1	۲	Ø,	s?	S		
	Scanners and Cameras	Scheduled Tasks	Security Center	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	
	<u>8</u> 2	6						
	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	? 🛛
General	Authentication	Advanced	
Connec	et using:		
BB) I	ntel(R) PRO/100	0 MT Network Con	Configure
This co	nnection uses th	e following items:	
	Ulient for Micro File and Printer QoS Packet So Internet Protoc	soft Networks Sharing for Microso cheduler ol (TCP/IP)	ft Networks
	install	Uninstall	Properties
Tran wide acro:	smission Control I area network pro ss diverse interco	Protocol/Internet Protocol that provides onnected networks.	otocol. The default communication
☐ Sho ☑ Noti	w icon in notifica fy me when this c	tion area when con connection has limite	nected ed or no connectivity
			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.

Internet Protocol (TCP/IP) Pro	operties 🛛 🖓 🔀
General	
You can get IP settings assigned a this capability. Otherwise, you need the appropriate IP settings. O Obtain an IP address automat	utomatically if your network supports d to ask your network administrator for tically
IP address:	172.16.190.1
Subnet mask:	255.255.255.0
Default gateway:	
 Obtain DNS server address a Ouse the following DNS server Preferred DNS server: 	utomatically addresses:
Alternate DNS server:	Advanced
	OK Cancel

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 DOPSoft software program and click **Options** > **Communication Setting** > **Ethernet** > **LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**.

nmunication Setting	3	Commun	ication Setting	
	Device LocalHo	st SMTP		
COM1	Localhost			
COM2		🔽 Overwrite IP		
	_	📃 Obtain an IP address autom	atically	
COM2		HMI	HMI	
		HMI IP Address	172 . 16 . 190 . 51	
		Subnet Mask	255 . 255 . 255 . 0	
Ethernet		Gateway IP	0.0.0.0	
		upload/download port	12346	
		Modbus TCP Server Port	502	
	Application (e	Remote/eServer)		
	D	Password	12345678	
	1	Scan Time	100 (ms)	
		Port	12348	
				~
Comm Interrut	2 .	then image		
_ comm. Interrupt	times	then ignore		
			ОК	Cancel

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.



3.4.1 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			X
 Local Host Synchronize Communication Disconnect Environment Language 	Local H	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. Port Number 12348 (0 ~ 65535)	
		OK Cancel	

3.4.2 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.

eServer Option		\mathbf{X}
 Local Host Synchronize Communication Disconnect Environment Language 	Synchronize Time and Date Synchronize from Timing Synchronize when Synchronize when Synchronize when (Date) (Dat	
	OK 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.

eServer Option		×
 Local Host Synchronize Communication Disconnect Environment Language 	Synchronize Synchronize Time and Date Synchronize from Timing Synchronize when starting. Synchronize when the following cycle reaching. Synchronize when the following cycle reaching. Current Local Time Monday, July 23, 2012 14:54:18	
	OK Cancel	

3.4.3 Disconnect Function

This function allows the system to display warning message when the HMI connection to Ethernet is disconnected, the eServer will showing the warning message after the configured time period.

eServer Option					×
Local Host Synchronize Communication Disconnect Environment Language	Disconnect When the connection to try to reconnect and sh	Ethernet is dis ow warning me	connected, th ssage. ssage since hr	ne eServer will ni disconnect.	
	Linkage	Hour	Minute	Second	
	Excel1	0	0	15	
	ODBC2	0	0	15	
	🔽 Recipe3	0	0	15	
	✓ all settings are the same value un	nder No.1			
				ок	Cancel

For example, see the above figure, if the time is set to 15 seconds, when the connection to Ethernet is disconnected, the eServer will display warning message after 15 seconds.

3.4.4 Environment Language Setting

User could change eServer interface language; we provide English, Traditional Chinese and Simplified Chinese to select.



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.

М	ake R	untime Shortcut			
	Runt	ime Shortcut Name	DOP eS	ierver Runtime	
	How	to activate eServer			
	There	e are two methods p	provided:		
	⊙ ^M th ○ci	ake eServer softwa e system will activa reate a eServer sho Server shortcut on o	re program ru te eServer au rtcut on deski desktop and th	n on Windows startup. After sta tomatically. top. After starting up, double-cli ne system will activate eServer in	arting up, icking the mmediately.
ſ	HMI F	assword			
	No	Linkage	HMI	Password	
	1	ODBC1	eServer	12345678	
				Install Uninstall	Close

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

Make Runtime Shortcut		×
Runtime Shortcut Name How to activate eServer There are two methods provide Make eServer software pro the system will activate eSe	DOP eServer Runtime ed: gram run on Windows startup. After starting up, erver automatically.	
Create a eSer eServer short HMI Password No Linkage 1 ODBC1	区 ble-clicking the rver immediately. 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.



Make Runtime Shortcut	×
Make Runtime Shortcut Name DOP eServer Runtime How to activate eServer There are two methods provided: Make eServer software program run on Windows startup. After starting up, the system will activate eServer automatically. Image: Create a eSet eServer eServer shore Image: Uninstall runtime shortcut success ! Image:	
Install Uninstall Close]

This page intentionally left blank.

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.



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 Please click the following butto	ation such as communication setti to link original project information el1 ons to access nodes:	ng, symbol etc
and the second second	No HMI Name	IP	Port
	To continue, click Next.		>
	< Back	Next > Cancel) 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.

elect a exist	Screen (DL is and Settin	nas\shir	rom stroe lev.lai\Mv	ed med v Docu	ia. ments\D	emo .
^o Address	172 .	16	. 190 .	2		
	Piect a exist Di \Document Address	Pleter a exist Screen (Dr C:\Documents and Settin Address 172 .	CAddress	Process 172 16 190	CODE A Exist Screen (DOP) me nom stroed med C:\Documents and Settings\shirley.lai\My Docu Address 172 . 16 . 190 . 2	COMPARENT Screen (DOP) me mont stroed media. C:\Documents and Settings\shirley.lai\My Documents\D Address 172 . 16 . 190 . 2

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

Transfer - Path	×
Please select the following 2 methods to 1. O Select a exist Screen (DOP) file from stroed media.	
2 O Tapefor from Dolta - HMT	
OK Cancel	

After searching finished, press select wanted HMI then press **OK** button.

IP Address Setu	þ		
IP Address ✔ Search IP in El	0,0,0,	1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-B10E615	172.16.190.131	12348
		ОК	Cancel

eServer will ask user to input authorize password to upload HMI project. The default security password is **12345678**. After input password finished, press **OK**.

Upload Authorize					
Password :	****				
	OK Cancel				

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
A B C D 1 THE THE 2 3 4	O Select a exist Excel file from stroed media.
	To continue, click Next.

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		3			
	Excel Logging Range Please select range that you want to logging Sheet1				
	Need to log data				
A B C D 1 2	 Multi-Vertical Multi-Horizontal Single-Vertical Single-Horizontal Anywhere 				
	You could be clicked the right button to execute Excel and then decided the range.				
	Stamp Time and Date, Tpye %m/%d/%y:%H:%M				
	To continue, click Next.				
	< Back Next > Cancel Finish				

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.	Adrl Adr2 Adr3					

Sampling Direction	Diagram
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 I Adr 2 Adr 3
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 Adri Adri Adri
Anywhere: When this option is selected, the register data could be logged into any desired cell.	Adr I Adr 2 Adr 4 Adr3 Adr 1 Adr4

2. Selection Range

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

You could be clicked the right button to execute Excel and Excel				
Selection Range C3 - D20				

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

S 1	🗷 Microsoft Excel - Tem461								ð		
	C3	-	fx .		17						
	A		В	C	D	E	F	G	H	L L	~
1				Daily Report		999-					
2			Time	DATA 1	DATA 2	Data Aver	age				
3			%m/%d/%y %H:%M%%S			#DIV/0	!				
4						#DIV/0	!				
5				ĺ		#DIV/0					
6						#DIV/0			0.		
7						#DIV/0	!				
8						#DIV/0	<u> </u>				
9						#DIV/0	1				
10						#DIV/0	!				
11						#DIV/0	1				
12						#DIV/0	1				
13						#DIV/0	1				
14						#DIV/0					
15						#DIV/0					
16						#DIV/0	!				
17						#DIV/0	I				
18						#DIV/0	1				
19						#DIV/0	!				
20	3				8	∬ #DIV/0	1				
21		1		2	2 		2				
22											
23											
24											
25											
26						-					
27											
28								1		1	
29											
30											
31		1									
32							2				
33							Please decide the	selection rang	e and then clic	k the close but	ton
34						· · · · · · · · · · · · · · · · · · ·	Coloction	C2	D 20	1	
35							Selection	0.3	. 020		
36											
37									Close		
38	h		(1		_			*
114 -	> > > > > > > > > > > > > > > > > > >	neet /							J		
Rea	dy									NUM SCRL	

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.

- 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
%H	Hour
%M	Minute
%S	Second

When change time stamp to "%m/%d %H:%M:%S" \cdot Excel will automatically transfer

General type to Text type of Format Cells. Therefore, if set the value to 03/09

12:58:36 , it will corresponding to 2011/3/9 12:58:36. If you would like to use the

custom format in Excel, please set the time stamp column, and press right key of

mouse, into Format Cells to change the General type to Text type.

💌 N	lic	rosoft Ex	cel - Book1									
1	Ei	le <u>E</u> dit	⊻iew Ins	sert F <u>o</u> r	mat <u>T</u> oo	ols <u>D</u> ata	Ĩ	<u>N</u> indow <u>I</u>	<u>H</u> elp			
10	C	j 🖬 🖪		🖏 🛍 -	9 - 8]Σ - 2	ţ,	1	Arial		- 10	- B
	E	=7	▼ fx	e								
		А	В	С	D	E		F	G	Н		<u> </u>
1	De	to (Time	Data1	aily Repor	t Celina	Aueree	10					
1	Pr	ress rid	balan htkev of		SUM	Averag	e					
4		Format	Cells	mouse	1			?				
5							-					
6	H	Number	Alignment	Font	Border	Patterns	Pt	rotection				
8	Η	Categor	y:	Sam	ple							
9		Genera										
10		Current	y									
11		Date	ting	Te	ext format o	ells are trea	ted	as o the				
12		Time		Ce	ell. The cell i	s displayed	exa	ictly as				
13		Fraction	age N	er	ntered.							
15		Scientif										
16		Special										
17		Custom	· · · · · · · · · · · · · · · · · · ·									
18												
19												
20												
22												
23												
24					ſ	OK		Cancel				
25					l			Cancer			_	
26												
28							_					

4.1.4 Register Setting

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

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	
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
	 If the register address is set to Bit, this integer setting cannot be set. 	
Integer	 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. 	
	 When Read Count is 2, Format is floating, it can be set Integer. 	
	 If the register address is set to Bit, this fraction setting cannot be set. 	
Fraction	 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. 	
	When Read Count is 2, Format is floating, it can be set Fraction.	
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.

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:

izard - Logging	Logging The Condit trigger cor	g Co tion will ndition.	ndition provide 2 solutions	to help you easy	create parameters for
	No Ty	/pe	HMI Name	Detail	Format
O	1 Tr	igger	HMI	\$0.0	Rising edge
Ŧ	2 Tr	igger	HMI	\$0.2	Falling edge
• 0	<				>
	To continu	e, dick	Next.		

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. 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	
Format	 When the register address is set to Bit, the selectable options are: A. Rising edge: Triggered by rising-edge B. 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		X
	Output Setting	
		Ecxel Sheet
	Repeat	
	🔘 Add a new file	
	O Add a new sheet	
	-	
	1	Output
		Oatpac
	Location	C:\Program Files\Delta Industrial Automati
	Location Report File Name	C:\Program Files\Delta Industrial Automati Data_%H%M
2 3 4 1000 ALETO BEE 0002	Location Report File Name	C:\Program Files\Delta Industrial Automati Data_%H%M
	Location Report File Name	C:\Program Files\Delta Industrial Automati Data_%H%M
	Location Report File Name Period Fixed Auto Save How lor	C:\Program Files\Delta Industrial Automati Data_%H%M
	Location Report File Name Period Fixed Pauto Save How lor 0 2 (Day	C:\Program Files\Delta Industrial Automati Data_%H%M I P ng would you like to save your logging data ?) 0 (Hour) 30 (Minute)
	Location Report File Name Period Fixed Auto Save How lor 0 (Day click Finish.	C:\Program Files\Delta Industrial Automati Data_%H%M
	Location Report File Name Period Fixed Auto Save How lor 0 0 (Day click Finish.	C:\Program Files\Delta Industrial Automati Data_%H%M I Ing would you like to save your logging data ? () 0 (Hour) 30 (Minute)

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.

Microso	ft Excel	- Tem2E1					
C	510	▼ ;	£				
	A	В		С	D	E	F
1				Daily Report			
2		Tim	e	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.

 Repeat Add a new file Add a new sheet 		Ecxel Sheet	
 Add a new file Add a new sheet 	 Repeat 		
○ Add a new sheet	○ Add a new file		
	O Add a new sheet		

2. Output Setting

Output File				
Location C:\Documents and Settings\TINA.Q.LEE.DELT/				
Report File Name Data_%H%M%S				
Auto Save & Record				
Auto Save How long would you like to save your logging data ?				
Overwrite the file when saving				
Auto Save when power off				
Follow the last stop logging position				
If either of the above check boxes is checked, the history records will be memorized. You can press the right button to clear the history records.				

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
%H	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.
 Auto save function include Period and Fixed.

Period is corresponding to user custom time, if period time set to one minute, it means every minute save file and refer to Excel sheet to repeat, add a new file or add a new sheet.

Q			Condition						
Nude	seung	Address	Condition	Odipar					
	(Output File							
Location	C:\Docu	iments and Settings\"	TINA.Q.LEE.DELT						
Report File Name	Data_%	ьH%M%S							
	Auto :	5ave & Record							
	Fixed		⊳						
Auto Save	How long would	l you like to save you	r logging data ?						
0	🛟 (Day) 🛛 0	🔶 (Hour) 1 📫	(Minute)						
🔽 Overwrite the	e file when saving	ļ							
Auto Save wr	Auto Save when power off								
	c scop logging po	sidon							
It either of the ab history records wi the right button to	ove check boxes I be memorized. ' o clear the history	is checked, the You can press y records.	K Clear History Record						

Fixed time format is 24h. A day could only save one time. If set fixed time to 15 hour, it means it will save file at 15 hour in a day and refer to Excel sheet to repeat, add a new file or add a new sheet.

Node Setting	Address	Condition	Cutput						
Location C Report File Name D	Output File \Documents and Settings\ ita_%H%M%S	TINA.Q.LEE.DELT							
Auto Save & Record Period Fixed									
V Overwrite the file when	e would you like to save you of the constant o	ur iogging data ?							
Auto Save when power Follow the last stop logg If either of the above check									

D. Overwrite the file when saving

This function default is enable, it means when logging data is not full with data range, it will keep saving data into the same file. If disable this function, it means when logging data is not full with data range, it will save as file and will not overwrite data.

Set one minute to auto save file, scan time is five minutes, data range is 20, disable overwrite the file when saving :

When time arrived one minute, the data range still not full, and due to disable overwrite the file when saving option, the file will save as file according to one minute.

Set one minute to auto save file, scan time is five minutes, data range is 20, enable overwrite the file when saving : When time arrived one minute, the data range still not full, and due to enable overwrite the file when saving option, the data will overwrite to the same file until the data range full and will according to repeat, add a new file or add a new sheet to save file.

E. Auto Save when power off

This option provide when HMI power off, eServer will auto save the currently data.

F. Follow the last stop logging position

When user enable this function, it means eServer follow the last stop logging position to continue logged and will not clear the previously data.

G. Clear History Record

User could press this Clear History Record button to clear all previously logging data.

4.1.7 Other Setting

	Others										
F	Please specific the cell default value when the desired hmi is disabled.										
[
	NO	HIVII	Default Value								
	1	HMI									

This function only at Excel and ODBC logging and have to fill with default value when uncheck usage. If use Recipe logging, this function does not have to fill with default value, so uncheck usage node at Recipe just means without connection.

Excel:

When user create multi-nodes, but it does not need to use one of them, eServer provide

function for user could select if execute node to logging data or not.

Step1. Uncheck eServer node to logging.

	N	Q lode	Setting Add	Ø ress	Condition	Notput (
1 🔁 🔀 😚							
	No	Enable	HMI Name	IP		Port	COM1
	1 eServer 2 Image: HMI-B07E515			172.16.190.	123	12348	n/a
				172.16.190.	151	12348	Delta DVP PLC

Step2. If uncheck usage each node, it have to fill with some default numeric data at Output

setting. Users could fill with empty or some numeric like 222.

						(Output File
						Location	C:\Documents and Settings\tina.q.lee.TW\桌可
_						Report File Name	Data_%H%M%S
😼 eServer - C:\Docum	ents and Settings\tin	a.q.lee.TW\桌面\eServ	er/eServer.edx				
; File View Wizar	d Tool Help						Auto Save & Record
1 🗋 🚰 🖬 式 🗧	۽ 🎯 ا 💽						ïixed ▷
Project View $\mathfrak{P} \times$						Auto Save Hou	v long would you like to save your logging data ?
eServer	Node	Setting	Address	Condition	Output	0 🛟 (Day) 0 🛟 (Hour) 1 🛟 (Minute)
Excell eSe	I 🖻 😥						
E KCel3	Sheet1	Sheet2				Auto Save when p	ower off
	No Туре	HMI Name	Detail	Format	Controller	follow the last stop	logging position
	1 Trigger	HMI-B07E515	\$200.0	Falling edge	Internal Memory	If either of the above of history records will be r	heck boxes is checked, the nemorized. You can press
eSe						the right button to clea	r the history records.
🖨 🗐 ODBC4	eServ	er node is l	ogging dat	a to Sheet	1. But		
HMI	this I	node had ur	icheck to le	ogging, so	if set		
Recipe:	HMI-E	307E515 to 1	rigger it, it	will log da	ta like		Others
		output fill wi	th default v	/alue "222'		Please specific the cell	default value when the desired hmi is disabled.
I – I						No HMI	Default Value
						1 eServer	222
						2 HMI-B07E51	5

Step3. When trigger \$200.0 at HMI-B07E515 node, the excel data will fill with 222.

	TemiFE1 ×										
	A B			DE F G				Н	Ι		
1				Daily Report							
2		Data1	Data2	Data3	Data4	Data5	Data6	Data7	Data8		
3	12/08/2011	222	222	222	222	222	222	222	222		
4	12/08/2011	222	222	222	222	222	222	222	222		
-											

ODBC:

ODBC logging also provide user could select usage node or not. And the default value is

according to each ODBC data base setting to data table for "allow nulls" and "default value".

Table1 : Table			
Column Name	Data Type	Length	Allow Nulls
▶ time	char	50	V
data1	char	50	V
data2	char	50	V
data3	char	50	V
data4	char	50	V
data5	char	50	V
data6	char	50	V
data7	char	50	V
data8	char	50	V
Columns Look			1
	.ap		1
Default Value		•	<u>~</u>
Precision)		
Scale)		
Identity 1	lo		
Identity Seed			
Identity Increment	T		
Is KowGuid	10		
Colletion	databasa dafanlta		
Collation 4	(datadase delatui>		
Decimal Places			
Decimal Flaces			

Allow nulls have three kinds of state:

- a. If set allow nulls for not null and uncheck usage then logging data, eServer will display error message and stop logging.
- b. If set allow nulls for null and does not set default value, eServer will fill with empty to replace data.

c. If set allow nulls for null and does set default value like 222, eServer will fill with 222 to

replace data.

Step1. Uncheck HMI-B07E515 node to logging.

	N	Q lode	Setting Add	ress Condition	Notput Output			
ľ	1 🔁 🔯 😚							
	No	Enable	HMI Name	IP	Port	COM1	COM2	COM3
	1		HMI-B07E515	172.16.190.151	12348	Delta DVP PLC	S7 200	n/a
	2		eServer	172.16.190.123	12348	n/a	Delta DVP Q-Link	n/a

Step2. Table 1 is logging data to HMI-B07E515 node. Set trigger for eServer node at Table 1.

						Ħ	Table1 : Table			
							Column Name	Data Ty	pe Length	Allow Nulls
		-9	-		10	▶	time	char	50	V
	J						data1	char	50	V
blov	- 10	Cotting	0 ddrooo	Condition	Output		data2	char	50	\checkmark
NUI	16	Setting	Address	Condition	Output		data3	char	50	V
•	,						data4	char	50	~
							data5	char	50	V
📑 Tab	le1 🤤	Table2					data6	char	50	V
		1	(-	(=	[data7	char	50	V
No	Гуре	HMI Name	Detail	Format	Controller		data8	char	50	V
1	Frigger	eServer	\$0.0	Rising edge	Internal Memory					
2	Frigger	eServer	\$0.2	Falling edge	Internal Memory					
HM	I-B07	E515 nod	e is logging	data to Ta	ble1. But					
this	node	e had unc	heck to usa	ae. so if se	t eServer			Fille	d with emp	tv
nor		trigger it	it would log	data like D	ata Base				/	1
100										
TH	i with	default v	alue for emp	by or some	e value.					
						-	1	/		
							Columns Look	աթ		
							Default Value		•	<u>~</u>
							Duraisian			

Step3. When trigger on \$0.0 and \$0.2 at eServer node, the table1 would fill with empty data.

	Table1 : Table											
	time	data1	data2	data3	data4	data5	data6	data7	data8			
►	12/08/2011 13:52:40											
	12/08/2011 13:52:51											
	12/08/2011 13:52:53											
	12/08/2011 13:53:03											
	12/08/2011 13:53:13											
	12/08/2011 13:53:15											
	12/08/2011 13:53:16											
	12/08/2011 13:53:29											
	12/08/2011 13:53:31											

Chapter 5 Writing Data in Microsoft Excel

Before creating testing example, make sure to change the upload and download option (Options > Environment) on DOPSoft 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 DOPSoft 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 B10E615 type DOP series HMI is used.

III C	ADocuments and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dps - DOPSoft		
File	<u>Edit Yiew Element Screen Iools Options Window H</u> elp		
	🧉 🛱 🧐 🗮 🕺 🍓 📪 💕 🚖 🚺 100% 🔍 🍳 🔍 😋 ୬ 🍖 🏷		
12			
		Property	
_		Screen_1	✓ 0
		Screen Name	Screen_1
		Screen Properties	Detail
		Background Color	RGB(252, 252, 252)
<u>A</u>		🖃 Screen Macro	
11.1	\$3 ####	Screen Open Macro	0
=		Screen Close Macro	0
		Screen Cycle Macro	2
		Width	1024
		Height	600
	\$6 ####		
	<		
Outr	and the second se		
Car	u la seconda de la seconda		
St a	p Action [1] Cit to lowert		
-	[1] Cuteriterit		
->	- [] Move element		
Rec	ond Ouput		
B			
	Download.USB [798,185] DOP-B10E615 65536 Colors Rotate 0 degree		

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



Click **Options** > **Communication Setting** > **Ethernet** > **LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**. Then, press **OK** button to finish the settings.

Communication Setting		
	Commun	ication Setting
COM1	Host SMTP	
Localhost		
сом2	✓ Overwrite IP Obtain an IP address autom	atically
	HMI	HMI
COM3	HMI IP Address	172 . 16 . 190 . 100
	Subnet Mask	255 . 255 . 255 . 0
Ethernet	Gateway IP	0.0.0.0
	upload/download port	12346
	Modbus TCP Server Port	502
Application	n (eRemote/eServer)	
D	Password	12345678
	Scan Time	100 🗘 (ms)
	Port	12348
Comm. Interrupt 3 💮 tiu	mes then ignore	
		OK Cancel

5.1.2 eServer Setting

1. After eServer is started, eServer window will open.

Server File View Wizard Tool Help Tool Wigard Project View C Server Server Server Server Server Server Server Server Server Server Server Server Server Server Server		_ = X
	Output eServer Initialize	# X

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

	•				
ł	File	View	Wizard	Tool	Help
		🞢 🖫	1) (0

4. Select icon to enable Excel Logging (Sampling) Wizard.

New		3
Logging L (Excel) (1	ogging Recipe DDBC) Access	
New Project Name:	EXCEL	
Location:	C:\Documents and Settings\Tina.Q.Lee\Desktop	
	Add to the current project	
	OK Cancel	



Press Next button to go to next step.

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

Wizard - Logging			X
	Linkage eServer will need some inform And Linkage will help you how Llinakge name	nation such as communication v to link original project inform cel1 cons to access nodes:	setting, symbol etc
and the second s	No HMI Name	IP	Port
eServer			
	To continue, click Next.		2
	< Back	Next > Cance	el Finish

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

Transfer - Path
Please select the following 2 methods to 1. O Select a exist Screen (DOP) file from stroed media.
2. Tansfer from Delta - HMI O . O . O . 1 : 12348 OK Cancel

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press

OK.

IP Address Setup			
IP Address ✓ Search IP in Eth	o,o,o,	1 : 12348	Update
HMI Name HMI	HMI Model DOP-B10E615	IP 172.16.190.100	Port 12348
		ОК	Cancel

eServer will ask user to input the authorize password to connected with HMI. (The

default password is 12345678.)

Upload Author	nize		×
Password :	******		
		OK Cancel	

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



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 ~ E20 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	=AVERAGE(C5:D5)	E14	=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)

📧 Microsoft E	ixcel - Book11								_ 7	X
Eile Edit	View Insert Format Tools Data	<u>W</u> indow <u>H</u> elp Ado <u>b</u>	e PDF				Type a q	uestion for help	· - 8	×
i 🗅 💕 🔒 🕻	ه ۱۰ 🕄 🕰 🕹 🕹 ا	δ - 🧎 🛄 🕝	🚆 i Arial	▼ 10 ▼ B .	ΙŪΙ≣	= = •	\$ %	i≢ ⊞ • <	≫ - <u>A</u> -	
SnagIt 📑	Window -									
E3	► =AVERAGE(C3:D3)			-	-					_
A	В	Deily Devent	U	E	F	G	н		J	^
1	Time	Dally Report	DATA C	Doto Auorogo	-					
2	06m/06d/06v 06H-06M- 06S	DAIAT	DATAZ							
4	7011/700/703 701.7010.703									
5				#DIV/0						
6		0		#DIV/0!			-			
7		8		#DIV/0!						
8				#DIV/0!						
9				#DI∨/0!						
10				#DIV/0!						
11				#DIV/0!						
12		3		#DIV/0!						
13				#DIV/0!						
14				#DIV/0!						
15		1		#DIV/U!						
16				#DIV/U!	-					
1/	2			#DIV/0!						
10				#DIV/0!			-			
20										
20				m010/01	-					
22						-	-			
23										
24										
25										
26										
27				Care Care						
28				(i)						
29				4	Please	layout excel a	nd then click	close button to	next step.	
30							Close			
31										
H + H AS	heet1 / Sheet2 / Sheet3 /			<					>	ŕ
Ready								NUM	1 SCRL	-

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
3	

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

You could be clicked the right button to execute Excel and 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.

🛎 Microsoft I	xcel - Tem461								ð
C3	✓ f _x		-						
A	B	C	D	E	F	G	Н	. I.	~
1		Daily Report							
2	Time	DATA 1	DATA 2	Data Average	2				
3	%m/%d/%y %H:%M%%S			#DIV/0!					
4				#DIV/0!					
5				#DIV/0!					
6				#DIV/0!					
7				#DIV/0!					
8				#DIV/0!					
9				#DIV/0!					
10				#DIV/0!					
11				#DIV/0!					
12				#DIV/0!					
13				#DIV/0!					
14				#DIV/0!					
15				#DIV/0!					
16				#DIV/0!					
17				#DIV/0!	0				
18				#DIV/0!					
19				#DIV/0!					
20				#DIV/0!					
21					4				
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33				Please	decide the se	election range	and then click	the close bu	utton
34							0.00		
35				Selecti	on	L3	· U20		
36									
37						Clo	se		
38	-			1.00					×
14 4 P H S	neet /				100				>
Deady								NUM SCRI	

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.

Stamp Time and Date, Tpye %m/%d/%y %H:%M:%S

8. Set the register addresses.

	Please in	ister Se	etting address in the follow	ing Cell(s)	Excel	
	Sheet	Cell	HMI Name	Address	Format	[t
	1	C3	HMI	\$3	Unsigned	1
	1	D3	HMI	\$6	Unsigned	7
A B C D						
A B C D 2 9876543210 3 4	3					

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

out						
Type	Link		[]	ntern	al Mer	mory 🔽
OLTO Device (word)	Devic	е Тур	ie 🤇	6		*
OPLC Device (Bit)	Addre	ss		6		
⊙ Internal Memory (Word)	Tag					~
O Internal Memory (Bit)	В	C	D	E	F	-
	6	7	8	9	A	CE
	1	2	3	4	5	4
PDC Station Number	0	10	+	-	1	
0 🔅 🗌 Default		•		Þ	Ione	

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

Wizard - Logging		
	Logging Condition The Condition will provide 2 solutions to help you easy create parameters for trigger condition. The Condition will provide 2 solutions to help you easy create parameters for trigger condition. Sheet1	
	No Type HMI Name Detail Format 1 Const n/a Ss n/a	
	Detect Scan Time How long would you like on your logging data ? (500ms ~ one day) (Hour) (Hour) (Minute) (Second) OK Cancel	
	< Back Next > Cancel Finish	

10. Choose Add a new file in Excel Sheet and define the file location and file name shown as the figure below. Selected Period in Auto Save and set one minute, then press Finish button to complete the settings.

Wizard - Logging		×
	Output Setting	
	Ecxel Sheet	
	○ Repeat	
	⊙ Add a new file	
	◯ Add a new sheet	
ABCD	Output	
2	Location C:\Documents and Settings\tina.q.lee.TW	
	Report File Name Data_%H%M%S	
	Auto Save How long would you like to save your logging data ?	
	0 (Day) 0 (Hour) 1 (Minute)	
	click Finish.	
	< Back Next > Cancel Finish	

11. Press D icon and enter the password 12345678. Then, the system will start sampling operation, i.e. writing data in Excel file.

	<u>></u>				
:	File	View	Wizard	Tool	Help
		ž 🛃	* 8	> (0

Aut	ihor			E	3
N	To	Linkage	HMI	Password	
1		Excel1	HMI	****	
E	all p	basswords are the	same password une	der No.1	
				OK Cancel	

A 1 2 3 3 4 5 6 7 8 9 9 10 11 11 12 13 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5	B Time 0624/2009 17:18:16 0624/2009 17:18:17 0624/2009 17:18:18 0624/2009 17:18:20 0624/2009 17:18:20 0624/2009 17:18:22 0624/2009 17:18:22 0624/2009 17:18:23 0624/2009 17:18:25 0624/2009 17:18:25	C Daily Report DATA 1 35 45 54 64 74 84 93 65439 65439	D DATA 2 35 46 54 64 74 84 93	E Data Average 35 45.5 54 64 74 84	F	Ģ	Н	1 · · · · · · · · · · · · · · · · · · ·	1	K	L	М
1 2 2 4 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time 08/24/2009 17:18:16 08/24/2009 17:18:17 08/24/2009 17:18:19 08/24/2009 17:18:20 08/24/2009 17:18:20 08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:23	Daily Report DATA 1 35 45 54 64 74 84 93 65439 65449	DATA 2 35 46 54 64 74 84 93	Data Average 35 45.5 54 64 74 84								
2 3 4 5 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time: 08/24/2009 17:18:17 08/24/2009 17:18:17 08/24/2009 17:18:19 08/24/2009 17:18:19 08/24/2009 17:18:20 08/24/2009 17:18:22 08/24/2009 17:18:22 08/24/2009 17:18:25	DATA 1 35 45 64 74 84 93 65439 65439	DATA 2 35 46 54 64 74 84 93	Data Average 35 45.5 54 64 74 84								
3 4 4 5 5 6 6 7 7 8 9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0864/2009 17:18:17 0864/2009 17:18:17 0864/2009 17:18:18 0864/2009 17:18:19 0864/2009 17:18:20 0864/2009 17:18:21 0864/2009 17:18:22 0864/2009 17:18:22 0864/2009 17:18:24 0864/2009 17:18:24	35 45 54 64 74 84 93 65439 65439	35 46 54 64 74 84 93	35 45.5 54 64 74 84								
4 6 6 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0824/2009 17:18:17 08:24/2009 17:18:18 08:24/2009 17:18:19 08:24/2009 17:18:20 08:24/2009 17:18:21 08:24/2009 17:18:22 08:24/2009 17:18:22 08:24/2009 17:18:25 08:24/2009 17:18:25	45 54 64 74 84 93 65439 65449	46 54 64 74 84 93	45.5 54 64 74 84								
5 6 7 8 9 9 10 11 12 2 3 3 4 4 5	08/24/2009 17:18:18 08/24/2009 17:18:19 08/24/2009 17:18:20 08/24/2009 17:18:22 08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:25 08/24/2009 17:18:25 08/24/2009 17:18:25	54 64 74 84 93 65439 65449	54 64 74 84 93	54 64 74 84								
6 7 8 9 10 12 2 3 3 4 4 5	08/24/2009 17:18:19 08/24/2009 17:18:20 08/24/2009 17:18:21 08/24/2009 17:18:22 08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:26	64 74 84 93 65439 65449	64 74 84 93	64 74 84								
7 8 9 9 10 11 12 22 33 4 4 5	08/24/2009 17:18:20 08/24/2009 17:18:21 08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:25	74 84 93 65439 65449	74 84 93	74 84								
8 9 10 12 23 3 4 4 5	08/24/2009 17:18:21 08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:25	84 93 65439 65449	84 93	84								
9 10 12 13 4 5	08/24/2009 17:18:22 08/24/2009 17:18:23 08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:25	93 65439 65449	93									
10 11 12 13 14 15	08/24/2009 17:18:23 08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:25	65439 65449		93								
11 22 33 44 55	08/24/2009 17:18:24 08/24/2009 17:18:25 08/24/2009 17:18:25	65449	3	32721								
2 3 4 5	08/24/2009 17:18:25 08/24/2009 17:18:26	Vertire .	13	32731								
13 14 15	08/24/2009 17:18:26	65459	23	32741								
4		65468	32	32750								
5	08/24/2009 17:18:27	65478	42	32760								
	08/24/2009 17:18:28	65488	52	32770								
6	08/24/2009 17:18:29	65498	62	32780								
7	08/24/2009 17:18:30	65508	72	32790								
8	08/24/2009 17:18:31	65517	81	32799								
9	08/24/2009 17:18:32	65527	91	32809								
80	08/24/2009 17:18:33	1	1	1								
21			1000									
2												
23												
24												
5												
26												
7												
28												
9												
30												
1												
2												
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4												
15												
6												
17												
10												
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12												
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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
STA with DATE 1922 CART DATE 1922 CART DAT 1927 CART DAT 1927	This wizard helps you how to logging data from HMI to Database.
L	To continue, click Next.
	< Back Next > Cancel Finish

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

Wizard - Logging		
	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 Please click the following buttons to access nodes: Please click the following buttons to access nodes: No HIMI Name IP Port No HIMI Name IP Port To continue, click Next.	
	< Back Next > Cancel 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 (D	DP) file f	rom stroe	d med	ia.	
	C:\Document	s and Setti	ngs\shir	ley.lai\My	Docu	ments\De	mo_ [
	IP Address	172 .	16	. 190 .	2		
~							
. 0	Tanster from L)elta - HMI					

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 1. O Select a exist Screen (DOP) file from stroed media.	
2. Tansfer from Delta - HMI	
0.0.0.1: 12348	
OK Cancel	

After searching finished, press select wanted HMI then press **OK** button.

IP Address Setu	p		
IP Address ✔ Search IP in Et	0,0,0	. 1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-B10E615	172.16.190.131	12348
		ОК	Cancel

eServer will ask user to input authorize password to upload HMI project. The default security password is **12345678**. After input password finished, press **OK**.

Upload Autho	rize	×
Password :	****	
	OK Cancel	

6.1.2 ODBC (Open Data Base Connectivity)

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

Wizard - Logging			
10 TH 100 112	ODBC Please indicate the following item Chooses a data source (DSN) ar	ns nd input user name and pa	assword
1001 IN 102 104 NG 101 N	ODBC Data Source	eServer	∽
and the set	User Name	root	
101 101 101 111 101 101	Password	****	
0 70 80 807 808 pro 10 10 407 808	Database Driver	MySQL	~
ACTION OF LEASE AND LEASE ACTION OF LEASE	Table	table1	∨ ∎↔
		table1	×
	I ime and Date Table	Time %m%d%tz	<u>хну</u>
3		7°II07°07°y	7011.701
	To continue, click Next.		
	< Back	Next > Cance	Finish

Item	Explanation	
ODBC Data Source	Name of ODBC Data Source	
User Name	Login Username	
Password	Login Password	
Database Driver	Select wanted connection Database, like MySQL, SQL Server and Oracle.	
Table	Name of Sampling Data Table	

ODBC sampling setting provide refresh button. This function could help user to select the table after press this refresh button in Wizard setting.

0 Node	Setting	Address	condit) 🔯 ion Output
Chooses a data so	ource (DSN) and	d input user name a	nd password	
ODBC Data Sourc	e [eserver	*	
User Name	l	root		
Password	:	****		
Database Driver	[MySQL	*	
Table		table1	▼ ⊕ ↔	
		table1 table2	×	•
Time and Date	Table F	7ield Detail		 <!--</td-->

Time and Data Stamp Function:

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

Item	Explanation			
Time and Date	Choose if	f Time and Date Stam	np 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	The form character Please re	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	
	%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						
	Reg Please i	jister Se nput logging a	tting address in the fi	ollowing Cell(s)	Add	Delete
and the the	No	Table	Field	HMI Name	Address	Form
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	Table1	Data1	нмі	\$3	Unsig
and the set	2	Table1	Data2	HMI	S 6	Unsig
	<					>
	To con	tinue, click Ne	xt.			
			< 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
	 If the register address is set to Bit, this integer setting cannot be set. 	
Integer	 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. 	
	3. When Read Count is 2, Format is floating, it can be set Integer.	
	 If the register address is set to Bit, this fraction setting cannot be set. 	
Fraction	2. 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.	
	When Read Count is 2, Format is floating, it can be set Fraction.	
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 to help you easy create parameters for trigger condition. Type HIMI Name Detail Format To const n/a 5s . n/a Detect Scan Time How long would you like on your logging data ? (SOOms ~ one day) (Hour) (Minute) 5 (Second) (Hour) (Minute) 5 (Second) (K Cancel
	< Back Next > 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:



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

Setting Item	Description	Remark
No.	Condition number	Unchangeable
Туре	Sampling type. There are two kinds of options for selection: Const and Trigger.	
	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	
Format	 When the register address is set to Bit, the selectable options are: 	
	A. Rising edge: Triggered by rising-edge	
	B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

Logging Condition:

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Chapter 7 Writing Data in Microsoft Access 2003 at XP Operating System

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft 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 <u>http://www.microsoft.com/downloads/details.aspx?familyid=413744d1-a0bc-</u> <u>479f-bafa-e4b278eb9147&displaylang=zh-tw#filelist</u> 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.

🚦 SQL Server Network Utility		×
General Network Libraries		
Instance(s) on this server:	IABU-SHIRLEY-EN	
Disabled protocols:	Enabled protocols:	
Multiprotocol NWLink IPX/SPX	Enable >> Named Pipes TCP/IP	
AppleTalk Banyan Vines	<< Disable	
Force protocol encryption Enable WinSock proxy WinSock proxy address: WinSock proxy address:	Properties	
With and black base	OK Cancel Apply 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 connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.	
Programs and Services:	
 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 Delete Image: Display a notification when Windows Firewall blocks a program What are the risks of allowing exceptions? Image: DK Cancel	ŀ

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

Add a Port	×
Use these settings number and protoc want to use.	to open a port through Windows Firewall. To find the port col, consult the documentation for the program or service you
Name:	SQL
Port number:	1433
What are the risks	of opening a port?
Change scope	OK 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.

😺 Wind	ows Firewa	ill in the second s	×		
General	Exceptions	Advanced			
Windo progra to work	ws Firewall is b ms and service < better but mig ms and Servic	olocking incoming network connections, except for the es selected below. Adding exceptions allows some programs ght increase your security risk. es:			
Nam	ie		1		
▼Fi ▼N ▼R ▼R	le and Printer etwork Diagno emote Assistar emote Deskto MLMProxy Mo	Sharing Istics for Windows XP Ince p dule - HP1006MC, EXE			
⊠s	SQL				
	 ✓ UPnP Framework ✓ Windows Live Messenger 8.1 ✓ Windows Live Messenger 8.1 (Phone) ✓ Windows® NetMeeting® 				
Add Dis	Program play a notificat	Add Port Edit Delete]		
<u>What a</u>	are the risks of	allowing exceptions?			
		OK 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.

Microsoft Access	💶 🗗 🔀
Elle Edit View Insert Tools Window Help Adobe PDF	Type a question for help 😽
:] 🐸 🖟 🕄 🖇 특별 ! 이 - ! 텔 - ! 륨 - ! 원 🗢 1 램 1팩 29 - 1 💿 💂	
File New Database Swei pr Data Wy Rearch Destop Wy Documents Wy Computer Wy Computer Wy Network Save as type: Mercosoft Office Access Project (*.adp)	New File × Image: Second se
Peady	NIM

Press Create button to enable Microsoft SQL Server Database Wizard.

Microsoft SQL	Server Datab	ase Wizard		
	What <u>S</u> QL Se	erver would you like to use for this database?		
	DELTA-SQL	▲ ₩	Select L	ocal or the name
	Please specif with CREATE	y the login ID and password of an account DATABASE privileges on this server.	of the c Server	onnecting SQL
	Use Trust		Useria	
		sd	User's r	name: sa
	<u>P</u> assword:	****	User's	assword: 0000
	What do you	want to name your new SQL Server <u>d</u> atabase?		
33333	DELTA		Name o	database: DELTA
	2			
		ancel < Back Next >	Einish	

Press Next button to continue.

Microsoft SQL Serv	er Database Wizard
	The wizard has all the information it needs to create your SQL Server database.
	Cancel < <u>B</u> ack <u>N</u> ext > <u>Finish</u>

Press Finish button to complete the settings.

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



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

Column Name Time Data1 Data2	Data Type char char char	Length 50 50	Allow Nulls	Description	~
Time Data1 Data2	char char char	50 50	V		
Data1 Data2	char char	50			
Data2	char		¥		
		50	V		
					~
1					
Columns	Lookup		1		
Default Value					
Precision	0				
Scale	0				
Identity	No				
Identity Seed					
Identity Increment	100		_		
IS ROWGUID	No				
Collation	<database default<="" td=""><td>></td><td></td><td></td><td></td></database>	>			
Format	Collabor doi dail				
Decimal Places					
Input Mask			× 1		

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

	Table1 : Table					🔳 🗖 🐱
•	Column Name Time Data1 Data2	Data Type char char char	Length 50 50 50	Allow Nulls	Description	
	Columns Default Value Precision Scale Identity Seed Identity Seed Identity Increment Is RowGuid Formula	Lookup		Choose Enter a Table1	Name Name for the table: OK Cancel Help	
_	Format Decimal Places Input Mask			<u> </u>		

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.

🗇 ODBO	Data Source Administrator	? 🗙
User DS	N System DSN File DSN Drivers Tracing Connection Pooling Abo	out
Syster	n Data Sources:	_
Nam	e Driver Add	
	Remove	
	Configure	
3	An ODBC System data source stores information about how to connect the indicated data provider. A System data source is visible to all users on this machine, including NT services.	to
	OK Cancel Apply He	lp

Select SQL Server and then click on Finish button.

Select a driver for which you want to set up Name Microsoft FoxPro VFP Driver (*.dbf) 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 Driver	a data source, 1 2 4 4 4 1 1 1
< Back Finish	Cancel

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 So	rce to SQL Server 🛛 🔀
Selaci a dirver ru-	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 How do you want to describe the data source? Description: Which SQL Server do you want to connect to? Server: DELTA-SQL

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 🛛 🔀				
Select a driver ro- me off dBase T off dBase T off Base T off Excel I both ODBr	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. To change the network library used to communicate with SQL Server, and the network library used to communicate with SQL Server.				
	Click Client Configuration. Client Configuration Client Configuration Connect to SQL Server to obtain default settings for the additional configuration options. Login ID: sa				
Password: **** < Back Next > Cancel Help					

Change the default database to **DELTA**.

Press **Next** button to continue.

Create a New Data Sou	ILCE	e to SQL Server 🛛 🔀
Selacit a diriver to:	2	Change the default database to: DELTA Attach database filename:
Soft Bacel (Hardeon FoxPri Hardeon FoxPri Hardeon FoxPri Ball Serve	া ৰ ব	Create temporary stored procedures for prepared SQL statements and drop the stored procedures; C Only when you disconnect. When you disconnect and as appropriate while you are connected. Use ANSI quoted identifiers. Use ANSI nulls, paddings and warnings. Use the failover SQL Server if the primary SQL Server is not available.
		< Back Next > Cancel Help

Press Finish button.

Create a New Data So	urce to SQL Server 🛛 🔀
Select a driver w Me of d Base I of d Base I of t Excel of t	 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: C:\DOCUME~1\shirley.lar\LOCALS~1\Temp\QUE Browse Long query time (milliseconds):
	Log ODBC driver statistics to the log file: C:\DOCUME~1\shirley.lai\LOCALS~1\Temp\STAT Browse
	< Back Finish Cancel Help

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

ODBC Microsoft SQL Server Setup	×
A new ODBC 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 Null, Paddings and Warnings: Yes Data Encryption: No	
Test Data Source OK Cance	*

7.1.2 Create HMI Project File

Start DOPSoft 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 B10E615 type DOP series HMI is used.

R. C	\Documents and Settings\TINA.Q.LEE.DELTA.000\桌面\example.dp	- DOPSoft			- 7 🗙
File	<u>E</u> dit <u>V</u> iew Ele <u>m</u> ent <u>S</u> creen <u>T</u> ools <u>O</u> ptions <u>W</u> indow <u>H</u> elp				
	逽 🕞 🗳 🤊 🐑 🐰 🐚 🖺 🖓 📑 🚔 🚺 100%	✓ Q Q Q C D & D			
12	Verdana V A A A A A A A	I U Language1 🗸 🖉 🖉 👘 🖬 🐨 🖷 🔳 🗰			
	🚹 🗔 🥃 🕰 🔵 🔤 🖆 🕅 🚾 🖉 🎽 📟 🕂 📴 👌 0	### 🔹 💿 🖬 🗗 📮 🖼 🐺 🗊 🗊 🚛 🔛			
	1 - Screen 1		Proj	perty	□×
<u> </u>	T BOICDE_I		Scre	en_1	✓ 0
				Screen Name	Screen_1
×				Screen Properties	Detail
~				Background Color	RGB(252, 252, 252)
<u></u>				Screen Macro	
H	\$3	####		Screen Open Macro	0
===				Screen Close Macro	0
				Screen Cycle Macro	2
	_			Width	1024
	# 0			Height	600
	Ф Ф	<i>** ** **</i>			
			~		
	<		>		
Outp	t				□×□
St	o Action				
-	1] Cut element				
	2] Paste element				
	3j Wlove element				
Rec	rd Ouput				
5	한 [대 대 대 대 :::::::::::::::::::::::::::::	4			
1.000	Download:USB	[798,185] DOP-B10E615 65536 Colors Rotate 0 degree			

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



Click **Options** > **Communication Setting** > **Ethernet** > **LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**. Then, press **OK** button to finish the settings.

Соп	munication Setting	g			X
			Commur	ication Setting	
	COM1	Device LocalHo	st SMTP		
	COM2 COM3 COM3 Ethernet	Localhost	Overwrite IP Obtain an IP address autom HMI HMI IP Address Subnet Mask Gateway IP upload/doursload post	atically HMI 172 . 16 . 190 . 100 255 . 255 . 255 . 0 0 . 0 . 0 . 0	
		Application (e	upload/download port Modbus TCP Server Port Remote/eServer) I Enable Password Scan Time Port	12346 502 12345678 100 12348 (ms) 12348	
	Comm. Interrupt	3 🔹 times	then ignore		OK Cancel

7.1.3 eServer Setting

1. After eServer is started, eServer window will open.

🦻 eServer	_ o x
; File View Wizard Tool Help	
: 🗋 💕 🔙 式 🤔 🏹 🎯 🔒	
Project View 🛛 🗘 🗙	
1 🕸 🗟 🍕	
🗊 eServer	
	Output a ×
	eServer Initialize

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

-	\$				
ł	File	View	Wizard	Tool	Help
		🞽 🖬	式 🗳) (0

4. Select icon to enable ODBC Logging Wizard.

X	
(Excel)	(ODBC) Access
lew Project Name:	ODBC
lew Project Name:	ODBC C:\Documents and Settings\Tina.O.Lee\Desktop\OI
lew Project Name: ocation:	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).

Linkage eServer will need some in And Linkage will help you Llinakge name Please dick the following	formation such as communicat how to link original project info ODBC1 puttons to access nodes:	ion setting, symbol etc ormation
No HMI Name	IP	Port
To continue, click Next.		>
	Linkage eServer will need some in And Linkage will help you Llinakge name Please dick the following to No HMI Name No HMI Name To continue, dick Next.	Linkage eServer will need some information such as communicate And Linkage will help you how to link original project info Llinakge name Please click the following buttons to access nodes: Please click the following buttons to access nodes: No HMI Name IP No HMI Name IP To continue, click Next.

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

Transfer - Path	×
Please select the following 2 methods to	
1. O Select a exist Screen (DOP) file from stroed media.	
	—
OK Cance	

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press

OK.

IP Address Setup			
IP Address [☑ Search IP in Eth	0.0.0.	1 : 12348	Update
HMI Name HMI	HMI Model DOP-810E615	IP 172.16.190.100	Port 12348
		ОК	Cancel

eServer will ask user to input the authorize password to connected with HMI. (The

default password is 12345678.)

Upload Autho	rize		×
Password :	*****		
		OK Cancel	

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 and press refresh button to select table.

Wizard - Logging			×
	ODBC Please indicate the following item Chooses a data source (DSN) ar	ns Ind input user name and password	
154 192 19 194 123 19	ODBC Data Source	IESI Y	
and and and	User Name	sa	
and and and and and	Password	****	
and the set	Database Driver	SQL Server	
ACCESS ON A STATE OF A	Table	Table1 🗸 🕂 🛧	
		Table1	
	Time and Date Table	Field Detail	
8	Stamp Table1	Time %m/%d/%y %H:%I	
	To continue, click 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						
10 000	Reg Please i	jister Se	tting address in the fi	ollowing Cell(s)	Add	Delete
and an High	No	Table	Field	HMI Name	Address	Form
12 12 18 12 12 18	1	Table1	Data1	HMI	\$3	Unsig
and and and	2	Table1	Data2	HMI	S 6	Unsig
	<					>
	To cont	tinue, click Ne	xt.			
			< Back	Next > C	ancel	inish

8. Set the sampling conditions to constant **5s**.

Press Next button to continue.

9. Press D icon. After the password 12345678 is entered, the system will start sampling operation, i.e. writing data in Microsoft Access.

hor				
o Linka	age	HMI	Password	
ODB	IC1	HMI	*******	-

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.



Chapter 8 Writing Data in Microsoft Access 2007 at Windows 7

Before creating testing example, make sure to change the upload and download option (Options > Environment) on DOPSoft 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 \$100 every second, record the data in Microsoft Access database via ODBC interface, and save the collected data into the specified folder.

8.1.1 Database Setting

1. Install SQL Server 2005 Express Edition :

Presently only SQL 2005 Express and SQL Server 2008 can used in Windows 7 OS, so we

choose SQL Server 2005 Express as the database server. To download it, go

to http://www.microsoft.com/downloads/details.aspx?familyid=3181842A-4090-4431-

<u>ACDD-9A1C832E65A6&displaylang=zh-tw</u> and a download link will redirect the users to

download it. (SQLEXPR_CHT.EXE is for x64 bits OS, and SQLEXPR_CHT32.EXE is for x32 bits OS)

After running the self-extracting file, starting the installation of SQL Server:

Microsoft SQL Server 2005 Setup	x
Installing Prerequisites Instals software components required promotio installing SQL Server.	
SQL Server Component Update will install the following components required for SQL Server Setup:	*
🛩 Microsoft SQL Server 2005 Setup Support Eles	
The required components were installed successfully.	
Next >>> Conc	el

Check system configuration, then click $\ensuremath{\,^{\ensuremath{\mathbb{F}}}}$ Next $_{\ensuremath{\mathbb{I}}}$.

1 ²¹ Microsoft SQL Server 2005 Setup System Configuration Check Wait while the system is checked for poter problema.	ital installation	
Success	13 Total 12 Success	0 Error 1 Warning
Details: Action	Status	Messaue
 Minimum Hardware Regutement Pending Reboot Requirement Default Installation Path Permission Re Internet Explorer Requirement COM Pub Catalog Requirement ASP Net Version Recistration Requirement Minimum MDAC Version Requirement Edition Change Check 	Success Success Success Success Success Warning Success Success Success	Moszecco
Filter 🔻	Stop	Report -
Help		Noxt >

Feature selection. Set as below figure and click $\,{}^{\mathbb{F}}\, {\rm Next}_{\,\mathbb{J}}$.

15 Microsoft SQL Server 2005 Express Edition Setu	u			
Feature Selection Select the program features you want installed.				
Click an icon in the following list to change how a feature is installed.				
Clent Components Connectivity Components Software Development Kit	Teature description Installs the SQL Server Database Engine, tools for managing relational and XML data, and replication.			
	This feature requires 87 MB on your bard drive. It has 2 of 3 subfeatures selected. The subfeatures require 100 MB on your hard drive.			
Installation path c:\Program Files (x86)\Microsoft SQL Server\	Browse Disk Cost			
Haip Carlos Carl				

Input the instance name of SQL server and click $\,{}^{\mathbb{F}}\, {\rm Next}_{\, \mathbb{J}}\,$.

You can install a default instance.	instance or you can specify a named
Provide a name for the insta Next. To upgrade an existin	ance. For a default installation, dick Default instance and dick g default instance, dick Default instance. To upgrade an existing
named instance select Name	constance and specify the instance name.
O Default instance	
Named instance	
SQLExpress	
To view a list of existing	instances and components dick on Installed Instances.
	Installed instances

Choose the authentication mode. Set as below figure and click $\,{}^{\mathbb{F}}\,\text{Next}\,{}_{\mathbb{J}}\,$.

🛃 Microsoft SQL Server 2005 Express Edition Setup	x
Authentication Mode The authentication mode specifies the security used when connecting to SQL Server.	
Select the authentication mode to use for this installation.	
Windows Authentication Mode Windows Authentication and SQL Server Authentication)	
Specify the sallogon password below:	
Enter password:	
Confirm gassword:	
I lep < Dack Next > Cancel	

Setup the account. Set as below figure and click $\,{}^{\mathbb{F}}\,\text{Next}_{\,\mathbb{J}}\,$.



Setup the error report way. Set as below figure and click $\[\] Next_{\]}$.

🔂 Microsoft SQL Server 2005 Express Edition Setup
Error and Usage Report Settings Help Microsoft improve some of the SQL Server 2005 components and services.
Automatically send Error reports for SQL Server 2005 to Nicrosoft or your corporate error reporting server. Error reports include information regarding the condition of SQL Server 2005 when an error occurred, your bardware configuration and other data. Error reports may unintentionally include personal information, which will not be used by Nicrosoft.
Automatically send Feature Usage data for SQL Server 2005 to Microsoft. Usage data Indudes anonymous information about your hardware configuration and how you use our software and services
By installing Microsoft SQL Server 2005, SQL Server and its components will be configured to automatically send fatal service error reports to Microsoft or a Corporate Error Reporting Server , Microsoft uses error reports to improve SQL Server functionality, and treats all information as confidential.
Help Next > Cancel

Setup completely and start to install.



The progress of installation shows as , and then click ${\ensuremath{\,\mathbb F}}\, {\rm Next}_{\,{\ensuremath{\mathbb J}}}$.

Microsoft SQL Server 2005 Setup			x
Setup Progress The selected components are being config	jured		
Product SQL Setup Support Files SQL Native Client SQL VSS Writer SQL Server Database Services	Status Setup frished Setup frished Setup frished Setup frished		
Help	<< Back	Next >	Cancel

The report of the SQL Server installation shows. Click $\ensuremath{\,{\mathbb F}}$ Finish $\ensuremath{_{\mathbb J}}$.

Microsoft SQL Server 2005 Setup
Completing Microsoft SQL Server 2005 Setup Setup has finished configuration of Microsoft SQL Server 2005
Refer to the setup error logs for information describing any failure(s) that occurred during setup. Click Hirish to exit the installation wizard. Summary Loc
To minimize the server surface area of SQL Server 2005, some features and services are disabled by default for new installations. To configure the surface area of SQL Server, use the
Surface Area Conflouration too.
Configuring and Managing SQL Server
For improved manageability and security, SQL Server 2005 provides more control over the SQL Server surface area on your system. To minimize the surface area, the following default configurations have been applied to your instance of SQL server
n TCPIP connections are disabled
Help

2. SQL Server Configuration Setup :

Maintenance	Default Programs
Microsoft Games 🗧	
Microsoft Office	Help and Support
Microsoft Silverlight	
Microsoft SQL Server 2005	
👫 SQL Server Management Studio Express	
🎍 Contiguration Tools	
🔄 📷 SQL Server Configuration Manager 💷	
📑 SQL Server Errogand Usage Reportin	
🕵 SQL Server Surface Area Configuration	
Skype 🔻	
1 Back	1
Search programs and files	Shut down

Enable the Named Pipes and TCP/IP communication protocol.

🛐 SQL Server Configuration Manager		117	
File Action View Help			
 SQL Server Configuration Manager (Local) SQL Server 2005 Services SQL Server 2005 Network Configuration (3: SQL Server 2005 for SQLEXPRESS Protocols for MYSQLEXPRESS SQL Native Client Configuration (32bit) 	Protocol Name 같 Shared Memory 같 Named Pipes 같 TCP/IP 'S 같 VIA	Status Enabled Enabled Enabled Disabled	

Restart the instance of SQL server.

SQL Server Configuration Manager				
Fle Action View Help (************************************				
🛞 SQL Server Configuration Manager (Local)	Name		State	Start Mode
 GQL Server 2005 Services ▲ 토. SQL Server 2005 Network Configuration (3:	SQL Server	Resume Resume Properties Help	Running Running Kunning	Automatic Automatic Automatic

3. Windows Firewall Setting :

Click 『Control Panel 』 → 『Windows Firewall 』, then enter the 『Advanced Settings』.



Choose ${\tt \ \ } Inbound \ {\tt Rules}\, {\tt \ \ } then \ click \ {\tt \ \ } New \ {\tt Rule...}\, {\tt \ \ }$. Input the name of new import rule and

choose the connection action.

🔐 Windows Hrewall with Advanced Security			
File Action View Help			
Image: Second Rules Image: Second Rules Inbound Rules Image: Second Rules Image: Second Rules Seco	Action Allow	Artionx Inbound Kules Image: State of the profile Image: State of the profile <tr< th=""><th>, , , ,</th></tr<>	, , , ,

Enable specific ports for the Named Pipes connection and the TCP/IP connection. Due to the

connection default port no. are 1433 and 1434, we set local connection port as "1433-1434".

eServer ODB	C. Properties						x
Gene	ral N	Program	is and Sen	vices		Compute	ers
Protoco	ls and Ports	Se	ope 👘	Ac	ivanced	- 0	sers
Fretacol	s and ports						
and -	Protocol type:		TCP			•	
	Protocol number	:		6 🚊			
	Local port:		Specific	Ports		•	
			1433-143	34			
			Example	80, 44	3, 5000-50	10	
	Remote port.		All Ports			•	
			Example	80, 44	3, 5000-50	10	
	Internet Control (ICMP) settings:	Message	e Protocol		Custor	nizē	
Learn mor	e about protocol a	and ports	3				

4. SQL Server User Authority:



Click the ${\ensuremath{{}^{\sc r}}} Add$ New Administrator ${\ensuremath{{}^{\sc r}}}$.

SQL Server 2005 Surface Area Configuration	X
Microsoft SQL Server 2005 Help Protect Your SQL Server	Windows Server System
Minimize SQL Server 2005 Surface Area SQL Server 2005 improves manageability and security by giving administrators more control over and entropy legtances of SQL Server 2005. With the SQL Server 2005 Surface Area Control over	r the surface area of local
 Disable unused services and network protocols for remote connections. Disable unused features of SQL Server components. 	u nicuus, yuu can basiy.
For new installations, use these tools to enable required features, services, and network protoco default. For upgraded instances, use these tools to identify and disable unused features, service	ols that are disabled by es, and protocols.
Users with administrative privileges on Microsoft Windows Vista and later versions with or longer provileges on this SQL Server installation by default. To explicitly add yourself as a SQL Server below link.	have administrative administrator, click on the
Add New Administrator	
Configure Surface Area for localhost (charge some iter)	
Surface Area Configuration for Services and Connections	
Surface Area Configuration for Features	

Choose authority of server to user. After choosing, click $\,{}^{\mathbb{F}}\,{}^{>}\,{}_{\mathbb{J}}\,$.

SQL Server User Provisioning on Vista - DELTACORP\rodrigo.	carrillo on RCARRILLO-LTP	? ×
SQL Server 2005 User Provisioning Too Help Protect Your SQL Server on Windows Vista	l for Vista	
Granting administrative rights to Windows Vista user	User to provision:	DELTACORP\vodrgo.camllo
Windows Vista users that are members of the Windows Administrators they are not automatically granted administrative privileges.	group are not automatically granted	permission to connect to SQL Server, and
Select the administrative privileges needed by Windows user DELTAD	ORP\rodrigo.carrillo.	
Available privileges: MYSQLEXPRESS SOI EXPRESS SOI EXPRESS Member of SQL Server SysAdmin role on SQL EXPRESS Member of SQL Server SysAdmin role on SQL EXPRESS	Finaleges that will be grant	ted to DELTACORP/vodrgo.camilo:
		CK Cancel

 $\mathsf{Click}\ {{}^{\mathbb{F}}\mathsf{OK}}\ _{\mathbb{J}}$ and finish the setup.

SQL Server User Provisioning on Vista - DELTACORP\rodrigo.	carrillo on RCARRILLO-LTP	? ×
SQL Server 2005 User Provisioning Tool Help Protect Your SQL Server on Windows Vista	for Vista	
Granting administrative rights to Windows Vista user	User to provision:	DELTACORP\rodrigo.carrillo
Windows Vista users that are members of the Windows Administrators of they are not automatically granted administrative privleges.	group are not automatically granted	d permission to connect to SQL Server, and
Select the administrative privileges needed by Windows user DELTAC	DRP\rodrigo.carrillo.	
Available privleges:	Frivileges that will be gran	ited to DELTACORP/vodingp.camile:
WYSQLEXPRESS	SGLEXFRESS Member of SQL	Server SysAdmin role on SQLEXPRESS
		2
		CK Cancel

5. Access 2007 Setting :

Open Access 2007 and click ^rAdd New Database _a , then click ^e icon.

Getting Started with Microsoft Of	fice Access		
Blank Database			
Asers Cortacts Issues Event	s Arrised projects		
		 Blank Database 	
Coffice Online	More on Office Online: Training Templates Downloads	Create a Microsoft Office Acc not contain any existing data	ess database that does or objects.
What's new in Access 2007? The new Access 2007 contains more powerful tools the new Access 2007 contains more powerful tools information in a monageable environment. Learn more about the new features and improvements.	 Get the latest content while working in the 2007 Microsoft Office system Guide to Access 2007 User Interface Organize all your objects using the new, easy access 	Databace1 C:\Users\yodrgo.carrilo\Docu Create Canc	manta)

Input the file name and select the file type as Access 2007, then confirm it.

🕼 File New Database	A REAL PROPERTY OF A REAL PROPERTY.	X
🕞 🕞 🗢 📃 Desktop 🕨	✓ ↔ Search Desktop	٩
Organize 👻 New fold	cr	
Microsoft Office A	Datos E server File folder	•
Favorites E Desktop Downloads	My Desk File folder	
🖫 Recent Places	File folder	
 Internet E Documents Music 	Database1 Microsoft Office Access 2007 Dat 303 KB	E
 Pictures Videos + 	Secure Access SSL VPN Internet Shortcut	-
File name: Data Save as type: Micro	aase1 soft Office Access 2007 Databases	•
) Hide Folders	Tools 🔻 🛛 OK	Cancel

$\mathsf{Click}\ {\ensuremath{\mathbb{C}}} \mathsf{Create}\, {\ensuremath{\mathbb{J}}}$.

Getting Started with Mid	crosoft Office Access	
Blank Database		
Asses Cortacts Issue	s Projects	e i i i i i i i i i i i i i i i i i i i
		 Blank Database
Ciffice Online	More on Office Online: Training Templates Downloads	Create a Microsoft Office Access database that does not contain any existing data or objects.
What's new in Access 2007?		File Name:
The new Access 2007 contains m to help you quickly track, report information in a manageable or more about the new restures an	ore powerful tools and chaie vironnent. Learn id improvements. Organize all your objects using the	ng in the 2007 C:\Users\vodge.com/lo/Dektop\ C:\Users\vodge.com/lo/Dektop\ mew, easy eccess Cannel

Edit the table name (Table1) and create data column (date, data1, data2).

	. 9 -	P (•)=	÷ .	1.44				Table Tools	Database
9	Home	Create	Extern	al Data	Database Tr	onls	Arrohat	Design	
View	Primary Key	Builder Tes	t Validatio Rules	Re Inse Pel Re Inse Pel Re Ioo	ert Rows ete Rows ikup Column	Propert	y Indexes		
Views			Tools			Shor	w/Hide		
All Tabl	All Tables 🔍 🗮 Table1								
Table1			*	A	Field N	ame		Data Ty	pe
🛄 Tal	blel : Tab	le		8 ID			А	utoNumber	
				date			Т	ext	
				data	1		Т	ext	
				data	2 13		Т	ext	

Execute $\ensuremath{\,^{\ensuremath{\mathbb{S}}}}$ Database Tool $\ensuremath{_{\mathbb{J}}}\ensuremath{\rightarrow}\ensuremath{\,^{\ensuremath{\mathbb{S}}}}$ SQL Server $\ensuremath{_{\mathbb{J}}}$.

		100 C 10	Table To	ols Database	1 : Database (Access 20	07) M
Home Create Extern	al Dat	ta Database Tools Arrobat	Desig	n		
Visual Basic Marco	Relationships		Analyze Database Do Analyze Perfi Analyze Tabl	commenter commenter commenter square square commenter square commenter square commenter square commenter square commenter comm	access atabase	
	(T.L.A				
All Tables 💌 🕷		Tablet				
Table1 🛠		Field Name	Data Type			
🛄 Tablel : Table	8	D A	AutoNumber			
da da		date 1	Text			
		data1 1	Text			
	da		Text			

Upsizing Wizard	And in case of the local division of the loc		
	The Upsizing Wizard allows you to easily upsize your Microsoft Access database to a Nicrosoft SQL Server database.		
	You can create a new SQL Server database or upsize to an existing SQL Server database. Which do you want to do?		
	🔘 Use existing database		
	Create new database		
	After you click the Next butten, you'll supply information for the new database.		
Help	Cance < Back Next > Einish		

Choose SQL Server instance to use, and input the name for new SQL Server Database which is transferred from Access 2007 database.

Upsizing Wizard	
	What SQL Server would you like to use for this database?
	પ્રત Please specify the login ID and password of an account with CREATE DATABASE privileges on this server.
	☑ Use Trusted Connection
	Login ID: Passwoid:
	What do you want to name your new SQL Server <u>d</u> atabase? Database1SQL
Help	Cance < Back Next > Einish

Choose the table exporting to SQL Server. After choosing, click $\,{}^{\mathbb{F}}\!>_{\,\mathbb{J}}\,$.

Upsizing Wizard
Which tables do you want to export to SQL Server?
Available Tables: Export to SQL Server:
Selected Table: Table1
Help Cance < Back Next > Einish

Setup the attributes of the transfering table and click $\,{}^{\mathbb{F}}\, {\rm Next}_{\,\mathbb{J}}\,$.

Upsizing Wizard				
The Upsizing Wizard can export table attributes in addition to data.				
What table attributes do you want to upsize? Indexes Inde				
What data options do you want to include?				
Add timestamp fields to tables?: Yes, let wizard decide				
Only create the table structure; don't upsze any data.				
Help Cance < Back Next > Einish				

Setup the operation of the transfering database and click $\,{}^{\mathbb{F}}\, {\rm Next}_{\,\mathbb{J}}\,$.

Upsizing Wizard				
The Upsizing Wizard can modify the existing application or create a new application to work with the SQL Server database.				
What application changes do you want to make?				
Oreate a new Access client/server application.				
ADP File Name: C:\Users\rodrigo.carrilo\Desktop\Database1JCS.adp Browse				
C Link SQL Server tables to existing application.				
No application changes.				
Save password and user ID.				
Help Cancel < Back Next > Einish				

Complete setup steps and click $\,{}^{\mathbb{F}}\mbox{Finish}_{\,\mathbb{J}}$.

Upsizing Wizard	And in case of the local data		
	The Upsizing Wizard has all the information it needs to upsize your database.		
	Do you want to open the resulting ADP file after the upsizing operation is complete?		
12 16 11	Cpen the new ADP fie		
	🕤 Keep the Database file open		
Help	Cance < Back Nexts Einish		
After finishing setup steps and the below window will show, then click ${\ensuremath{\,^{\!\!\!\!\!\!\!\!\!\!\!}}}$ Open $_{\ensuremath{\mathbb{J}}}$.

Microsoft Office Access Security Notice				
A potential security concern has been identified.				
Warning: It is not possible to determine that this content came from a trustworthy source. You should leave this content disabled unless the content provides critical functionality and you trust its source.				
File Path: C: \Users\rodrigo.carrillo \Desktop \Database 11CS.adp				
This file might contain unsafe content that could harm your computer. Do you want to open this file or cancel the operation?				
Mare information				
Open Cancel				

SQL transfering reporting will turn up and close it.

One Page Zoom	Refresh Exe	cel SharePoint List Data	PDF pt XPS	IV Word → Text File → More ~	Close Print Preview Close Preview
Upsizing Wizard R	eport				
Database	Cilesiado estatem	Tables I and			
SQL Server 9 abit and	Charlen (Carlor) (Carlor) Déscrie (SQU	antenaj aj mi			
Errors					

6. ODBC Setting :

Click $"Control Panel_ \rightarrow "Administrative Tools_ \rightarrow "Data Source(ODBC)_ , then enter the$

 ${\ensuremath{\mathbb T}}$ User DSN $_{\ensuremath{\mathbb J}}$ and add a new item.

🕤 ODBC Data Source A	dministrator	×
Usor DSN System DSN	File DSN Drycers Tracing Connection i	Pooling About
User Data Sources:	IAC"	
Name	Enver	Add
dBASE Fles Excel Fies	Microsoft Access dBASE Driver (* dbf. * ndx Microsoft Excel Driver (* ds. * xlsx, * xlsm, * x	Remove
MS Access Database	Microsoft Access Driver ("mdb. ".accdb)	Corfigure
e	4	
An ODBC Us the indicated	ser data source stores information about how to I data provider. A User data source is only visi	b connect to ible to you,
and can only	be used on the current machine.	
	OK Cancel Apply	Help

 Name	Version	Company	
SQL Serv	6. 00. 6000. 16386	Microsoft	Corpora
•	m		,

Input the name of ODBC and select connecting SQL Server.

Microsoft SQL Server DSN	V Configuration
	This wizard will heb 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: eServer1 How do you want to describe the data source? Description: Which SQL Server do you want to connect to? Server: RCARRILLO-LIP/SQLEXPRESS RCARRILLO-LIP/SQLEXPRESS
	Finish Next > Cancel Help

Choose the authentication method show as below figure and click $\,{}^{\mathbb{F}}\,\text{Next}_{\,\mathbb{J}}\,$.

Microsoft SQL Server DS	N Configuration
	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 To change the network library used to communicate with SQL Server, click Client Corriguration. Client Config ration Connect to SQL Server to obtain default settings for the additional particulation actions
	Login ID: rodrigo.carillo
	Password: < back Net > Cance Heb

Choose the corresponding database to be the default database.

Microsoft SQL Server DS1	N Contiguration
	Configuration Configuration Change the default database to Database 1SQL Change the default database to Database to the database to Database to the data
	Use ANSI nulls, paddings and warnings. Use the fallover SQL Server If the primary SQL Server is not available.
	<back noxt=""> Cancel Holp</back>

Setup as below figure and click $\ensuremath{\,\mathbb{F}}$ Finish $\ensuremath{_\mathbb{I}}$ to finish the ODBC setup.

Microsoft SQL Server DSN	Configuration
	 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: C:\Users\RODRIG~1 CAR\AppData\Local\Temp\{ Browse Long query time (milliseconds) 30000 Log ODBC driver statistics to the log file: C:\Users\RODRIG~1 CAR\AppData\Local\Temp\{ Browse

ODBC setup completes and can testing DSN.

ODBC Microsoft SQL Server Setup
A new QDBC data source will be created with the following configuration.
Microsoft SQL Server ODBC D1ver Version 06.01.7600
Data Source Name: eServer1
Server: RCARRILLO-LTP\SQLEXPRESS
Database: Database1SGL Lancuage: (Default)
Translate Character Data: Yee
Log Driver Statistics: No
Use Regional Sattings: No Prepared Statements Option: Drop temporary procedures on
disconnect Use Failover Server: No
Use ANSI Quoted Identifiers: Yes
Data Encryption. No
· · · · · · · · · · · · · · · · · · ·
Teet Data Source OK Carcel

8.1.2 Create HMI Project File

Start DOPSoft software program and click 『File』 → 『New』 to create a new project. Then,

click 『Element』 → 『Input』 → 『Numeric Entry』 to create a numeric entry element (\$100) on

the screen. In this case, B10E615 series HMI is used.

🔛 C:\Documents and Settings\TIN	IA.Q.LEE.DELTA.000\桌面\example.dps -	DOPSoft				
<u>File Edit V</u> iew Ele <u>m</u> ent <u>S</u> creen	<u>T</u> ools <u>Options W</u> indow <u>H</u> elp					
📑 🚰 🚍 🖳 🖉 🕅 🐰 🐚	🔋 🖄 🗔 🗭 🚖 🕦 100% 🔍	Q Q Q C 5 & b				
12 Verdana				i		
				<u> </u>		
				The second se		= ~
<u>/</u> 🔜 1 - Screen_1					eny	
				Scre	en_I	
\bigcirc					Screen Name	Screen_1
Z					Screen Properties	Detail
A					Background Color	RGB(252, 252, 252)
101					Screen Macro	
III	\$100	####			Screen Open Macro	0
					Screen Close Macro	0
					Screen Cycle Macro	2
					Width	1024
					Height	600
<.				V A		
Output						□ ×
Step Action						<u>^</u>
➡ [4] Delete element						
⇒ [5] Delete element						
 [6] Modify element property [7] Modify element property 	у 					
→ [/] Modify element property	y					✓
Record Ouput						
[ːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːːː	19 11 🖽 🕅 🕪 İ 🖽					
	Download:USB	[892,274]	DOP-B10E615 65536 Colors Rotate 0 degree			

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



Click **Options** > **Communication Setting** > **Ethernet** > **LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**. Then, press **OK** button to finish

the settings.

ication Setting				
		Commun	ication Setting	
·	Device LocalHo	st SMTP		
COM1				^
	Localhost			≡
COM2		🔽 Overwrite IP		
		🔲 Obtain an IP address automs	atically	
• • • • • •		HMI	HMI	
COM3		HMI IP Address	172 . 16 . 190 . 110	
		Subnet Mask	255 . 255 . 255 . 0	
Ethernet		Gateway IP	0.0.0.	
		upload/download port	12346	
		Modbus TCP Server Port	502	
	Application (e	RemoteleServer)		
	rippication (e	Enable		
		Password	12345678	
	-	Scan Time	100 (ms)	
		Port	17348	
		1011		
Comm Internint	3 📥 times	then ignore		
· · · · · · · · · · · · · · · · · · ·				
			ОК	Cancel

8.1.3 eServer Setting

Open a new Logging (ODBC) project file.



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

Wizard - Logging	×
Frit 100 100	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 ODBC1
	Please dick the following buttons to access nodes:
	No HMI Name IP Port
	To continue, dick Next.
	< Back Next > Cancel Finish

Choose a HMI screen project file to link with this eServer project.

Wizard - Loggin	g 🗙
	Linkage eServer will need some information such as communication setting, symbol etc And Linkage will help you how to link original project information
	Transfer - Path Image: Constraint of the strength of the strengt of the strengt
	To continue, dick Next.
	< Back Next > Cancel Finish

ODBC Data Source Setting: input the ODBC Data Source name, account and password. Press the refresh button and select the table name and click [+], then chooses the field as below figure.

Wizard - Logging		×
10 TO 10 10	ODBC Please indicate the following ite Chooses a data source (DSN) a	ms and input user name and password
1141 113 1172 114 1152 1172	ODBC Data Source	TEST
and and a	User Name	rodrigo.carrllo
101 200 200 111 200 400 111 200 200	Password	****
100 101 607 604 100 101 607 805	Database Driver	SQL Server 💙
10070 101 108 109 10000 101 108 107 108	Table	Table1 🗸 🗣 😽
		Table1
	Time and Date Table	Field Detail
S	Stamp Table1	Time %m/%d/%y %H:%I
	To continue, click Next.	
	< Back	Next > Cancel Finish

Set the register address to the corresponding field as below figure.

-	Regi Please in	ster Setti outlogging addr	ng ress in the follow	ving Cell(s)	C tha	lete
and	No	Table	Field	HMI Name -	Address	Form
272 - 272 - 2 121 - 272 - 2	1	tablel	datal	HMI	\$100	Unsig
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	table1	data2	HMI	\$200 💽] Unsiį
	I To contin	nue, dick Next.	[adk] Nex	रू हे हे	5100	ě.

Set the sampling conditions as constant, and set the value as 5s.

Wizard - Logging	
	Logging Condition The Condition will provide 2 solutions to help you easy create parameters for trigger condition. Type HMI Name Detail Formation Const n'a Js n'a
	To continue, dick Next.
	<bade next=""> Cance Finish</bade>

Save and Execute.

🧔 - eServer						
File View						
Wizard Tool						
Help						
1 🖬 🐸 🛃 式 🕯	ب 💿 ایک ≷					
Project	🕕 🕞 Execute ac	five Linkage				
1 12 🗴 47	Run					
	<u> </u>	-			N	
I 🖬 HMI	Node	Setting	Address	Condition	Output	
	No. HMI Name		TP	Port	COM	
		-				

After the password is entered, the system will start sampling operation and write data in

Microsoft Access.

٨	uthor	1.00	-	Statement of the local division of the local	2
	No	Linkage	HMI	Paseword	
	1	ODBC1	HMI	00000000	
			2º		
			-		
	📃 all	passwords are th	ie same passw	ord under No.1	
				ОК	Cancel

eServer Logging Database :

We can see that a ${\ensuremath{\,^{\!\!\!\!\!\!\!\!\!\!\!\!\!\!}}$ Database1SQL $_{\ensuremath{\mathbb{J}}}$ file is existed in the folder as the original created access

2007 file in. Logging data shows as below figure.

	- 9 •	(~ •) ⇒	•		-			Da	atabase1CS :	Proje	ct - Database	1SQL
	Home	Create	Exterr	nal Da	ata Da	tabase	Tools	Acroba	it			
	Ĥ	∦ Cut		Cal	ibri		* 11	-	E≡≡		1	
View •	Paste	Served Copy	Painter	B	ΙŪ	<mark>A</mark> -			-	4 23 3	:= ab? •	Ref A
Views	(Clipboard	- Di				Font		- Di	J	Rich Text	
All Acce	ss Obje	cts	• «		Table1							
Tables			*		ID	*	date	*	data1	Ŧ	data2	
🔠 Ta	ble1					1	02/14/2011	13:14	883		441	
						2	02/14/2011	13:19	990		500	
						3	02/14/2011	13:24	1003		611	
						4	02/14/2011	13-29	1201		690	

This page intentionally left blank

Chapter 9 Writing Data in MySQL

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft 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 MySQL via ODBC interface, and save the collected data into the specified folder (C:\Data).

9.1.1 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.



Open Fil	le - Security Warning	×
The pu run this	blisher could not be verified. Are you sure you want to software?	
	Name: appserv-win32-2.5.10.exe	
	Publisher: Unknown Publisher	
	Type: Application	
	From: C:\Documents and Settings\shirley.lai\Desktop	
🔽 Alwa	Run Cancel	כ
8	This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust. <u>How can I decide what software to run?</u>	

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.

AppServ 2.5.1	0 Setup 🔲 🗖 🔀
	License Agreement Please review the license terms before installing AppServ 2.5.10.
Press Page Down	to see the rest of the agreement.
GNU L Ver	ESSER GENERAL PUBLIC LICENSE
Copyright (C) 19 59 Temple Plac Everyone is perm of this license do [This is the first re	91, 1999 Free Software Foundation, Inc. .e., Suite 330, Boston, MA 02111-1307 USA .itted to copy and distribute verbatim copies cument, but changing it is not allowed. eleased version of the Lesser GPL. It also counts of the GNULL incary Public License, version 2, bence
the version numb	or the GNO Library Public License, version 2, hence
If you accept the agreement to inst	terms of the agreement, click I Agree to continue. You must accept the all AppServ 2.5.10.
	< Back I Agree Cancel

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

👪 AppServ 2.5.10	Setup
	Choose Install Location Choose the folder in which to install AppServ 2.5.10.
Setup will install App Browse and select a	DServ 2.5.10 in the following folder. To install in a different folder, click nother folder. Click Next to continue.
Destination Folder	Browse
Space available: 47	7.3MB
Nullsoft Install System	v2.18 < Back Next > Cancel

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 Components Select the components you want to install, clear the components you do not want to install.			
AppServ Package	e Components			
✔ Apache HT ✔ MySQL Dat	TP Server abase			
PHP Hyper	text Preprocessor			
🔽 phpMyAdm	in			
Nullsoft Install System v	2.18 Sack Next > Cancel			

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

🚳 AppServ 2.5.1	0 Setup	
X	Apache HTTP Server Information Please enter your server's information.	
Server Name (6	e.g. www.appservnetwork.com)	
Administrator's	Email Address (e.g. webmaster@gmail.com)	
Apache HTTP F 80	Port (Default : 80)	
Nullsoft Install Syster	n v2.18 < Back Next >	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.) Enable InnoDB	
Nullsoft 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.

👪 AppServ 2.5.10 Setu	P	
	Installing Please wait while AppServ 2.5.10 is being installed.	
Installing Apache2,2 Servi	ce	
Show details		
Nullsoft Install System v2.18		2
	<back next=""></back>	Cancel

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

🚳 AppServ 2.5.10 Setup	
The second secon	Completing the AppServ 2.5.10 Setup Wizard AppServ 2.5.10 has been installed on your computer. Click Finish to close this wizard. Start Apache Start MySQL

After installing AppServ, please restart the computer. After restart computer, 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		- 7 🛛
	Live Search	P -
File Edit View Favorites Tools Help		
😪 🚸 😁 🕶 🥸! (546 🗆 🗆 🔟 appserverne 🚺 Microsoft SQ 🚮 Microsoft SQ	🌈 AppServ 🗙 👘 🔹 🔂 🔹 👼 🔹 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 COPYING Official Site : http://www.AppServNetwork.com Hosting support by : http://www.AppServHosting.com		
Basy way to build webserver, Database server with AppServ :-)		
I Done	Sccal intranet	€ 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.

17A	localhost	phpMyAdmin - 2.10.3
phpMyAdmin	聞Server version: 5.0.51b-community-nt-log Protocol version: 10 聞Server: localhost via TCP/IP User: root@localhost 団MySQL charset: UTF-8 Unicode (utf8) 団MySQL connection collation:	 MySQL client version: 5.0.51a Used PHP extensions: mysql Language English Theme / Style: Original Font size: 100% CopbpMyAdmin documentation
Please select a database	utt8_unicode_ci ♥ ⑦ Create new database ⑦ Collation ♥ ⑦ Create ♥ Show MySQL runtime information 圖 Show MySQL system variables ⑦ ♥ Processes ⑦ ⑨ Character Sets and Collations ⑧ Storage Engines ▶ Reload privileges ⑧ ⑩ Databases ⑩ Export ⑩ Import	 PhpMyAdmin wiki Official phpMyAdmin Homepage [ChangeLog] [Subversion] [Lists]
		phpMyAdmin

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.

17-A	58 <mark>S</mark>	erver: loc	alhost									
	e	atabases)	ST SQL	🛛 🕸 Status	🗒 V	ariables	Charsets	Engines	😭 Privileges	Processes	a Export	a Import
phpMyAdmin	@ C	atabase	es									
		Databaco		Collation								
Database		mysql	ut	tf8 general ci	<u>1</u>							
(Databases) 👻		phpmyadm	nin	utf8_bin	1							
		test	ut	ff8_general_ci	5							
Please select a database		Total: 3	ut	f8_general_ci								
		A Not ser	e: Enat ver.	bling the data	base	statisti	cs here might	cause heav	y traffic betwe	en the web se	ver and the	e MySQL
	1	test	ew dat	abase 🕲	Colla	tion		 Create 	e			
										Open nev	v phpMyAdı	min window

A new database has been created.

ΓA	圀 Server: localhost > 쪧 Database: test
	🖀 Structure 💀 SQL 🔎 Search 🗿 Query 🚵 Export 🆓 Import 🛠 Operations 🎲 Privileges 🔀 Drop
phpMyAdmin	
	 Database test has been created.
Database	
test (0)	CREATE DATABASE 'test' :
test (0)	[Edit]] Create PHP Code]
itest (0)	
No tables found in database.	
	No tables found in database.
	一 1 Create new table on database test
	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.

🔀 Server: lo	calhost	▶ 🗗 Data	base: test						
Structure	sa SQL	Search	Page Cuery	a Export	Import	% Operations	🗯 Privileges	🔀 Drop	
No tables foun	d in data	base.							
Name: table	new table 1	e on databa:	se test	Numbe	r of fields:	3			
									Go
							🗖 Op	en new phpM	lyAdmin window

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

Field	Туре 🕜	Length/Values ¹	Collation	Attributes	Null	De
Time	VARCHAR	50	v	×	not null 🐱	
Data1	VARCHAR 🗸	50	✓		not null 🐱	
Data2	VARCHAR 🗸	50		~	not null 💌	
				Save Or Add 1	field(s)	Go
¹ If field If you e i examp	d type is "enum" or "s ever need to put a bac le '\\xyz' or 'a\'b').	et", please enter the ckslash ("\") or a sing	values using this format: 'a' gle quote (""") amongst those	,'b','c' values, precede it with	a backslash ((for

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.

localhost	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 @ Create 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 (1) 	 MySQL client version: 5.0.51a Used PHP extensions: mysql Language : English Theme / Style: Original Font size: 100% PhpMyAdmin documentation PhpMyAdmin wiki Official phpMyAdmin Homepage [ChangeLog] [Subversion] [Lists]
	phpMuAdmin

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

U:	B B	overview CDEFGH	нјк	LMNOP	Q	R S	т	U	V	W	x	ίZ	[Show all]
	User	Host	Password	Global privileges	Grant	• •							
	Any	localhost	No	USAGE	No	9/							
	Any	production mysal com	No	USAGE	No	97 8-2							
	root	127.0.0.1	No	ALL PRIVILEGES	Yes	80							
	root	localhost	Yes	ALL PRIVILEGES	Yes	5							
	root	production.mysql.com	No	ALL PRIVILEGES	Yes	\$							
	Ch	eck All / Uncheck All											
	Add a	new User											
_								_				_	

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

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.

blobal privileges (Check All / Uncheck All)		
te: MySQL privilege	names are expressed in English		
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 REPLICATION CLIENT REPLICATION SLAVE CREATE USER	
-Resource limits			
Note: Setting these	e options to 0 (zero) removes the limit.		
MAX QUERIES	PER HOUR 0		
MAX UPDATES	PER HOUR 0		
MAX CONNECT	IONS PER HOUR 0		
MAX USER CO	NNECTIONS 0		

A conformation message will be displayed as follows.



User 'root'@'%': Edit Privileges

-Global privileges (Check All / Uncheck All)					
Note: MySQL privilege names are expressed in English					
Data	Structure	-Administration			
SELECT	CREATE	GRANT			
INSERT	ALTER	SUPER			
UPDATE		PROCESS			
DELETE	☑ DROP	RELOAD			
	CREATE TEMPORARY TABLES	SHUTDOWN			

3. Setting Windows Firewall

Ŧ

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 connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.					
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 Delete					
Display a notification when Windows Firewall blocks a program					
What are the risks of allowing exceptions?					
OK Cancel					

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

Add a Port	to open a part Hyrough) (findews Firewall. To find the part
number and protoc want to use.	colligen a polit through windows rifewall. To find the political consult the documentation for the program or service you
N	MuSOL
Port number:	3306
What are the risks	of opening a port?
Change scope	OK Cancel

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 <u>http://dev.mysql.com/downloads/connector/odbc/5.1.html</u>.



5. ODBC Setup

In the Control Panel, double-click Administrative Tools.



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

🐞 Administrative Tools			
File Edit View Favorites Too	ols Help		1
🌀 Back 👻 🕥 - 🏂 🔎	Search 📂 Folders 🛄 -		
Address 🦏 Administrative Tools			💌 🄁 Go
File and Folder Tasks	Component Services	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	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.

ODBC Data Sourc	e Administra	tor	- 20	?
User DSN System DS	N File DSN I	Drivers Tracing	Connection Po	oling About
System Data Sources			_	
Name Driver				Add
				Remove
				Configure
An ODBC the indica on this ma	System data sou ted data provide chine, including	urce stores inform r. A System data NT services.	ation about how a source is visible	to connect to to all users
	ОК	Cancel	Apply	Help

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

Create New Data Source		×
	Select a driver for which you want to set up a of Name Microsoft ODBC for Oracle Microsoft Paradox-Treiber (*.db.) Microsoft Paradox-Treiber (*.db.) Microsoft Text Driver (*.txt; *.csv) Microsoft Visual FoxPro-Driver Microsoft Visual FoxPro-Treiber MySQL ODBC 5.1 Driver SQL Server Comments SQL Server Comments Co	data source.

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

MySQL Connector/ODB	C Data Source Configuration	
MysqL Connector/ODB	с	
Connection Parameter Data Source Name: Description:	s eServer	
Server: User: Password:	localhost Port: 3	306
Details >>	OK Cancel	st

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.

Test Result	
Connection suc	cessful
ОК	
	11

9.1.2 Create HMI Project File

Start DOPSoft 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 B10E615 type DOP series HMI is used.

	C:\Documents and Settings\TINA.Q.L	.EE.DEL TA.000\桌面\example.dps -	DOPSoft			_ 7 🗙
File	<u>E</u> dit <u>V</u> iew Ele <u>m</u> ent <u>S</u> creen <u>T</u> ools	<u>Options W</u> indow <u>H</u> elp				
	· 🚰 🚍 🗳 💌 🐑 🔛 🖀	🚧 📑 🖻 🚊 🕦 100% 💊	<u>ର୍ର୍ଷ୍</u> ୯୦ ୫ 🏷			
1	2 🗸 Verdana 🔍 🗛	SADALTATATA A · B	T U Language1 🗸 🛛 🖉 🗐 🖷 🖷 🐨 🖬 🗐 🗐			
) 🕰 🗖 🥃 🕰 🔵 🔤 📑 🛚 🚾	M 👗 🎟 🕂 🛅 👌 🛛 - ##	## 🔹 🖸 🖬 🖆 📮 🛗 🐺 💷 🔛			
	I - Screen 1				Property	□×
_	I BORGELI				Screen_1	✓ 0
				~	Screen Name	Screen_1
4					Screen Properties	Detail
~					Background Color	RGB(252, 252, 252)
n m					🖃 Screen Macro	
HT 1		\$3	####		Screen Open Mac	ro 0
					Screen Close Mac	ro 0
					Screen Cycle Mac	no 2
					Width	1024
		A A			Height	600
		\$6	####			
				~		
	<			>		
Out	put				- 11	□×
S	tep Action					
-	[1] Cut element					
	[2] Paste element					
	· [J] INDVE Element					
	-					
Re	cord Ouput					
R	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	盐 훈 팬)서 또 🖽 🗓 🖶				
-		Download:USB	[798,185] DOP-B10E615 65536 Colors Rotate 0 degree			

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



Click **Options > Communication Setting > Ethernet > LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**. Then, press **OK** button to finish the settings.

Communication Setting				Đ
		Communica	tion Setting	
COM1	Device LocalHos	t SMTP		
COM2	Localhost	✓ Overwrite IP		8
COM3		Uotam an IP address automatic HMI HMI IP Address	ыцу НМІ 172.16.190.100	
Ethernet		Subnet Mask Gateway IP	255 255 255 0 0 . 0 . 0	
		upload/download port Modbus TCP Server Port	12346 \$ 502 \$	
	Application (eR	lemote/eServer)	17245470	
		Password Scan Time	100 (ms)	
		For	1290	
Comm. Interrupt	3 文 times t	hen ignore		
				OK Cancel

9.1.3 eServer Setting

1. After eServer is started, eServer window will open.

😼 eServer	x
; File View Wizard Tool Help	
: 🗋 💕 🔙 式 🤔 🏹 🎯 🔒	
Project View 🛛 🗘 🗙	
/ 車 🗟 😽	
··································	
	0ubut # *
	eserver initialize
1	

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

-	\$				
ł	File	View	Wizard	Tool	Help
		🞢 🖫 (1) (0

4. Select icon to enable ODBC Logging Wizard.

	Logging Recipe
(Excel)	(ODBC) Access
New Project Name:	ODBC
New Project Name: .ocation:	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 inforr And Linkage will help you how Llinakge name	nation such as communication v to link original project inform IBC1 cons to access nodes:	setting, symbol etc ation
- S	No HMI Name	IP	Port
	To continue, dick Next.		>

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

Transfer - Path	
Please select the following 2 methods to	
1. O Select a exist Screen (DOP) file from stroed media.	
2. C Tansrer from Delta - HMU	
OK Can	el

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press

OK.

IP Address Setup			
IP Address [☑ Search IP in Etl	0.0.0.	1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
		ОК	Cancel

eServer will ask user to input the authorize password to connected with HMI. (The

default password is 12345678.)

Upload Authori	ze		×
Password :	*****		_
		OK Cancel	

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 and press refresh button to select table.
| Wizard - Logging | | | |
|--|--|---------------------------------------|-------------------------|
| IR TA IN IN | ODBC
Please indicate the following item
Chooses a data source (DSN) an | ns
nd input user name and password | |
| 1001 HA 102
104 102 102 | ODBC Data Source | eServer 🔽 | |
| and and a | User Name | root | |
| 1011 2010 A110
1111 2010 A110 | Password | **** | |
| 10 752 107 108
107 105 1 407 404
109 105 407 109 | Database Driver | MySQL 🔽 | |
| And a | Table | table1 🗸 🕂 | |
| | | table1 | |
| | Time and Date Table | Field Detail | — |
| | 🔽 Stamp table1 1 | Data1 %m/%d/%y %H:%I | $\overline{\mathbf{X}}$ |
| | | | € •) |
| | To continue, click Next. | | |
| | < Back | Next > Cancel Fin | nish |

Press Next button to go to next step.

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

	Table table1 table1	Field Data1	HMI Name	Address	-
	table1 table1	Data1	and the second sec		Form
	table1	Tana and tana	HMI	\$3	Unsig
		Data2	HMI	S 6	Unsig
<					>
To co		lext.			

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

Wizard - Logging	
Wizard - Logging	► Condition will provide 2 solutions to help you easy create parameters for trigger condition.
	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.

-	
; File View Wiz	ard Tool Help
🗄 🗋 😂 🖬 🛛 🐋	💕 💽 💿 📮
T	
Author	×
No Linkage HMI	Password
1 ODBC1 HMI	******
all passwords are the same passwo	ord under No.1
	OK Cancel

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
phpMyAdmin Image: Constraint of the second seco	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 Calculate and the database @
	Collation Create
	Show MySQL runtime information Show MySQL system variables @

12. Click on Structure link.

58 <mark>5</mark>	erver: lo	calhost	▶ 👜 Data	abase:	test							
1	Structure	SQL SQL	D Search	an <mark>a</mark>	uery	🛍 Export	a Import	Coperations	🗯 Priv	ileges	🔀 Drop	
					_		-					
-	Table	-	Action	TOR:	R	ecords	Type	Collation	Size	Overh	ead	
	table1		r 🗷 🏞		~	0	MyISAM	utts_general_ci	1.0 KIB			
	1 table(s)		Sum			0	MyISAM	utf8_general_ci	1.0 KiB		0 B	
_ 1	_ Check	(All / Un	check All		With s	selected:	~					
F Nan	rint view Create n	Data Data	Dictionary	/ ase tes	t	Numbe	r of fields:					
												Go

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

Browse Structure SQL Search ≩4 insert SExport Import & Operations Tempty ➤ Drop Showing rows 0 - 29 (109 total, Query took 0 0392 sec) SQL query: SELECT: FROM Tablet* LIMIT 0 . 30 Cuery results operations Print view (with full texts) Export Cuery results operations Cuery results operatins	월 Server: localhost ▶ @ Database: test ▶ Table: table1	
Image: Showing rows 0 - 29 (109 total, Query took 0.0392 sec) SQL query: SELECT * FROM 'table 1' LINIT 0, 30 Cuery results operations Print view Print view Print view Print view Im Inorizontal Im Inorizontal Im Inorizontal V 10/19/2009 18:25:00 853 2 X 10/19/2009 18:25:10 873 2 X 10/19/2009 18:25:10 3 2 X 10/19/2009 18:25:14 2 X 10/19/2009 18:25:14 3 X X 10/19/2009 18:25:14 </td <td>🔚 Browse 😭 Structure 💀 SQL 🔎 Search 👫 Insert 🎬 Export 🛗 Import 🛠 Operations 🛗 Empty 🔀 Drop</td> <td></td>	🔚 Browse 😭 Structure 💀 SQL 🔎 Search 👫 Insert 🎬 Export 🛗 Import 🛠 Operations 🛗 Empty 🔀 Drop	
Image: Showing rows 0 - 29 (109 total, Query took 0.0392 sec) SQL query:- SELECT ' FROM table1' IMMT 0 : 30 Cuery results operations Print view Print view Print view Show: 30 row(s) starting from record # 30 Image: Print view Show: 30 row(s) starting from record # 30 Image: Print view Image: Print view Show: 30 row(s) starting from record # 30 Image: Print view Image: Print view Show: 30 row(s) starting from record # 30 Print view Image: Print view Image: Print view Show: 30 row(s) starting from record # 30 Image: Print view Image: Print view Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view Image: Print view <td></td> <td></td>		
Image: Showing rows 0 - 29 (109 total, Query took 0.0392 sec) SQL query: SLECT FROM table1* LIMIT 0.30 Image: Query results operations Print view Print view Print view Print view Image: Print view <t< td=""><td></td><td></td></t<>		
SQL query: SELECT * FROM Table1* LIMIT 0 , 30 Courry results operations Print view Page number: Im In horizontal Im potata Data1 Data2 P Im horizontal Im potation 1 Divisione 1019/2009 18:25:00 Page number: 1m Page number: 1m Page number: 1m Page number: 1m<	Showing rows 0 - 29 (109 total, Query took 0.0392 sec)	
SQL query: FROM Table 1' Exter1 FROM Table 1' LIMIT 0, 30 [Edit][Explain SQL][Create PHP Code][Refresh] Ouery results operations [Edit][Explain SQL][Create PHP Code][Refresh] Show: 30 row(s) starting from record # 30 in horizontal mode and repeat headers after 100 cells > ← → Time Data2 ▲ X 10/19/2009 18:25:07 Add 2529 ▲ X 10/19/2009 18:25:08 Bd3 2559 ▲ X 10/19/2009 18:25:01 ▲ X 10/19/2009 18:25:10 ▲ X 10/19/2009 18:25:10 ▲ X 10/19/2009 18:25:13 ▲ X 10/19/2009 18:25:13 ▲ X 10/19/2009 18:25:13 ▲ X 10/19/2009 18:25:14 ▲ X 10/19/2009 18:25:15		
FROM 'table1' LIMIT 0 , 30 [Edit][Explain SQL][Create PHP Code][Refresh] Query results operations Print view Print view (with full texts) Export Show: 30 row(s) starting from record # 30 > in horizontal mode and repeat headers after 100 cells ✓ X 10/19/2009 18:25:07 843 2529 ✓ X 10/19/2009 18:25:10 873 2589 ✓ X 10/19/2009 18:25:10 873 2599 ✓ X 10/19/2009 18:25:12 884 2655 ✓ X 10/19/2009 18:25:13 894 2682 ✓ X 10/19/2009 18:25:14 904 2712 ✓ X 10/19/2009 18:25:15 914 2742		
Cuery results operations Query results operations Print view Print view (with full texts) In horizontal mode and repeat headers after 100 cells ← → Time Data1 Image: Page number: 1 × Page number: 1 × Page number: 1 × Image: Page number:	FROM 'table1'	
Query results operations Print view Print view (with full texts) Image: Show: 30 row(s) starting from record # 30 >>> Page number: 1 in horizontal mode and repeat headers after 100 cells Time Data1 Data2 × 10/19/2009 18:25:07 843 26:9 × 10/19/2009 18:25:08 853 26:9 × 10/19/2009 18:25:10 873 26:9 × × 10/19/2009 18:25:13 894 × × × 10/19/2009 18:25:14 904 × × × × × × × × × × × × × × × × × ×		
Query results operations Print view (with full texts) I Export Show: 30 row(s) starting from record # 30 >> Page number: 1 in horizontal mode and repeat headers after 100 cells	[Edit][Explain SQL][Create PHP Code][F	Refresh]
Query results operations Print view Print view (with full texts) I Export Show: 30 row(s) starting from record # 30 >>> Page number: 1 in horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal mode and repeat headers after 100 cells Im horizontal Data1 Data2 cells cells Im horizontal Data2 cells cells <td></td> <td></td>		
Show: 30 row(s) starting from record # 30 >> Page number: 1 ▼ in horizontal mode and repeat headers after 100 cells ← → Time Data1 Data2 ◇ × 10/19/2009 18:25:07 843 2529 ◇ × 10/19/2009 18:25:08 853 2559 ◇ × 10/19/2009 18:25:10 873 2619 ◇ × 10/19/2009 18:25:12 884 2655 ◇ × 10/19/2009 18:25:13 894 2682 ◇ × 10/19/2009 18:25:14 904 2712 ◇ × 10/19/2009 18:25:15 914 2742	Query results operations	
Show: 30 row(s) starting record # 30 > Page number: 1 in horizontal mode and repeat headers after 100 cells Im Time Data1 Data2 Data2 Data1 Data2 Im 10/19/2009 18:25:07 843 2529 Data2 Data2 Im 10/19/2009 18:25:08 853 2559 Data2 Data2 Im 10/19/2009 18:25:09 863 2589 Data2 Data2 Im 10/19/2009 18:25:10 873 2619 Data2 Data2 Im 10/19/2009 18:25:13 894 2655 Data2 Data2 Im 10/19/2009 18:25:13 894 2682 Data2 Data2 Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im Im	Print view @ Print view (with full texts) III Export	
In horizontal winde and repeat headers after 100 cells Time Data1 Data2	Show: 30 row(s) starting from record # 30 > >> Page number: 1 v	
Image Time Data1 Data2 Image Ima	in horizontal wode and repeat headers after 100 cells	
♪ × 10/19/2009 18:25:07 843 2529 ↓ × 10/19/2009 18:25:08 853 2559 ↓ × 10/19/2009 18:25:09 863 2589 ↓ × 10/19/2009 18:25:10 873 2619 ↓ × 10/19/2009 18:25:12 884 2655 ↓ × 10/19/2009 18:25:13 894 2682 ↓ × 10/19/2009 18:25:14 904 2712 ↓ × 10/19/2009 18:25:15 914 2742	$\leftarrow \top \rightarrow \qquad \text{Time} \qquad \text{Data1} \text{Data2}$	
♪ X 10/19/2009 18:25:08 853 2559 ♪ X 10/19/2009 18:25:09 863 2589 ♪ X 10/19/2009 18:25:10 873 2619 ♪ X 10/19/2009 18:25:12 884 2655 ♪ X 10/19/2009 18:25:13 894 2682 ↓ X 10/19/2009 18:25:14 904 2712 ↓ X 10/19/2009 18:25:15 914 2742	10/19/2009 18:25:07 843 2529	
♪ X 10/19/2009 18:25:09 863 2589 ↓ X 10/19/2009 18:25:10 873 2619 ↓ X 10/19/2009 18:25:12 884 2655 ↓ X 10/19/2009 18:25:13 894 2682 ↓ X 10/19/2009 18:25:14 904 2712 ↓ X 10/19/2009 18:25:15 914 2742	10/19/2009 18:25:08 853 2559	
♪ X 10/19/2009 18:25:10 873 2619 ♪ X 10/19/2009 18:25:12 884 2655 ♪ X 10/19/2009 18:25:13 894 2682 ↓ X 10/19/2009 18:25:14 904 2712 ↓ X 10/19/2009 18:25:15 914 2742	10/19/2009 18:25:09 863 2589	
✓ × 10/19/2009 18:25:12 884 2655 ✓ × 10/19/2009 18:25:13 894 2682 ✓ × 10/19/2009 18:25:14 904 2712 ✓ × 10/19/2009 18:25:15 914 2742	10/19/2009 18:25:10 873 2619	
♪ × 10/19/2009 18:25:13 894 2682 □ ♪ × 10/19/2009 18:25:14 904 2712 □ ♪ × 10/19/2009 18:25:15 914 2742	□ 🖍 🗙 10/19/2009 18:25:12 884 2655	
♪ × 10/19/2009 18:25:14 904 2712 □ ♪ × 10/19/2009 18:25:15 914 2742	□ <i>▶</i> × 10/19/2009 18:25:13 894 2682	
□ 🖉 🗙 10/19/2009 18:25:15 914 2742	□	
	□ 🖉 🗙 10/19/2009 18:25:15 914 2742	

Chapter 10 Writing data in SQL Server 2005

Before giving the example, please setup the upload/download mode for DOPSoft. The default is [USB]. If desire to change the mode to [Ethernet], please refer to Appendix A.

10.1 Example

Followings introduce the method for sampling HMI register data, \$100, \$200 and \$300 via eServer every 5 seconds. Then, save the data in SQL Server 2005 through ODBC interface. The collected data will be saved in the specified file.

10.1.1 Setup Data Base

> Installation of SQL Server 2005 Express:

XP supports SQL Server 2005 Express and SQL Server 2008. Please select SQL Server 2005 Express here. Download SQL Server 2005 Express (SQLEXPR_CHT.EXE is 64 bit and SQLEXPR32_CHT.EXE is 32 bit) from:

http://www.microsoft.com/downloads/details.aspx?familyid=3181842A-4090-4431-ACDD-9 A1C832E65A6&displaylang=zh-tw

Steps of SQL Server installation:



SQL Server 2005 Express Configuration check. Click Next.

	N .	13 Total	0 Error	
Ľ	Success	12 Success	1 Warning	
Deta	ils:			
	Action	Status	Message	-
0	SQL Server Edition Operating System	Success		
Ø	Minimum Hardware Requirement	Success		
Ø	Pending Reboot Requirement	Success		
Ø	Default Installation Path Permission Re	Success		
Ø	Internet Explorer Requirement	Success		
Ø	COM Plus Catalog Requirement	Success		
۸	ASP.Net Version Registration Require	Warning	Messages	
Ø	Minimum MDAC Version Requirement	Success		
	Edition Change Check	Success		

Select the installation element. It is suggested to check all and then click Next.

岗 Microsoft SQL Server 2005 Express Edition Se	etup 🔀				
Feature Selection Select the program features you want installed.					
Click an icon in the following list to change how a feature is installed.					
Database Services Client Components Connectivity Components Software Development Kit	Feature description Installs the SQL Server Database Engine, tools for managing relational and XML data, and replication.				
	This feature requires 87 MB on your hard drive. It has 3 of 3 subfeatures selected. The subfeatures require 119 MB on your hard drive.				
Installation path C:\Program Files (x86)\Microsoft SQL Server\	Browse Disk Cost				
Help < Back	Next > Cancel				

Enter a name as the one used in SQL Server. Then, click **Next**.

😸 Microsoft SQL Server 2005 Express Edition Setup
Instance Name You can install a default instance or you can specify a named instance.
Provide a name for the instance. For a default installation, dick Default instance and dick Next. To upgrade an existing default instance, dick Default instance. To upgrade an existing named instance select Named instance and specify the instance name.
Default instance Named instance TINAMYSQLExpress
To view a list of existing instances and components click on Installed instances.
Installed instances
Help < Back Next > Cancel

SQL Server Authentication Mode. Select Windows Authentication Mode and click Next.

🖟 Microsoft SQL Server 2005 Express Edition Setup	×
Authentication Mode The authentication mode specifies the security used when connecting to SQL Server.	9
Select the authentication mode to use for this installation.	
 Windows Authentication Mode Mixed Mode (Windows Authentication and SQL Server Authentication) 	
Specify the sa logon password below:	
Enter password:	
Confirm <u>p</u> assword:	
Help < Back Next > Ca	ncel

Setup the accounts. Check both and click Next.

岃 Microsoft SQL Server 2005 Express Edition Setup	×
Configuration Options Configure user and administrator accounts	
☑ Enable User Instances This option enables users without administrator permissions to run a separate instance of the SQL Server Express Database Engine.	
Add user to the SQL Server Administrator role This option adds the user who is running the SQL Server Express installation program to the SQL Server System Administrator role. By default, users on Microsoft Windows Vista operating system are not members of the SQL Server System Administrator role.	
Help <a>K <a>K<td></td>	

Error and Usage Report Settings. Setup **Do not send error report** here. Then, click **Next**.

📅 Microsoft SQL Server 2005 Express Edition Setup 📃 🛋
Error and Usage Report Settings Help Microsoft improve some of the SQL Server 2005 components and services.
Automatically send Error reports for SQL Server 2005 to Microsoft or your corporate error reporting server. Error reports include information regarding the condition of SQL Server 2005 when an error occurred, your hardware configuration and other data. Error reports may unintentionally include personal information, which will not be used by Microsoft.
Automatically send Feature Usage data for SQL Server 2005 to Microsoft. Usage data includes anonymous information about your hardware configuration and how you use our software and services.
By installing Microsoft SQL Server 2005, SQL Server and its components will be configured to automatically send fatal service error reports to Microsoft or a Corporate Error Reporting Server. Microsoft uses error reports to improve SQL Server functionality, and treats all information as confidential.
Help < Back Next > Cancel

The setting is completed. Click Install for installation.

😸 Microsoft SQL Server 2005 Express Edition Setup	×
Ready to Install Setup is ready to begin installation.	
Setup has enough information to start copying the program files. To proceed, click Inst change any of your installation settings, click Back. To exit setup, click Cancel.	all. To
The following components will be installed: • SQL Server Database Services (Database Services, Replication)	
Client Components (Connectivity Components)	
Help Cancel Cancel	

Display setup progress. After all setting is finished, click **Next**.

💹 Microsoft SQL Server 2005 Setup			×
Setup Progress The selected components are being config	ured		
Bradust	Status		
	Status		
SQL Setup Support Files	Setup finished	1	
SQL Native Client	Setup finished	1	
SQL VSS Writer	Setup finished	1	
SQL Server Database Services	Setup finished	1	
Workstation Components, Books Onlin	Setup finished	1	
Help	<< Back	Next >>	Cancel

Complete SQL Server setup. Click Finish.

Microsoft SQL Server 2005 Setup	— ×
Completing Microsoft SQL Server 2005 Setup	
Setup has finished configuration of Microsoft SQL Server 2005	
Refer to the setup error logs for information describing any failure(s) tha setup. Click Finish to exit the installation wizard.	t occurred during
Summary Log	
To minimize the server surface area of SQL Server 2005, some features a disabled by default for new installations. To configure the surface area o	and services are f SQL Server, use the
Surface Area Configuration tool.	•
Express	_
 For improved manageability and security, SQL 	=
Server 2005 provides more control over the SQL	
Server surface area on your system. To minimize the surface area, the following default	
configurations have been applied to your	
instance of SQL server:	
o TCP/IP connections are disabled	
 Named Pines is disabled 	Ŧ
Help	Finish

Installation of SQL Server Management Studio Express:

Download Microsoft SQL Server Management Studio Express from: http://www.microsoft.com/zh-tw/download/details.aspx?id=8961

After the download is completed, please execute SQLServer2005_SSMSEE.msi. The following installation window will pop up. Click **Next**.



Select [I accept the terms in the license agreement], then click Next.

岃 Microsoft SQL Server Management Studio Express Setup	×
License Agreement	
Please read the following license agreement carefully.	
MICROSOFT SOFTWARE LICENSE TERMS	<u> </u>
MICROSOFT SQL SERVER 2005 MANAGEMENT STUDIO EXPRESS	
These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft	Ŧ
 I accept the terms in the license agreement I do not accept the terms in the license agreement 	
< Back Next > Cancel	

Please enter your name and the name of your organization. (Any name will do)

😸 Microsoft SQL Server Management Studio Express Setup 🛛	X
Registration Information The following information will personalize your installation.	
Enter your name and the name of your organization in the field	ds below.
Name:	
tina	
,	
Company:	
< Back Next	> Cancel

Use default setting, click Next directly.

🗒 Microsoft SQL Server Management Studio Express	Setup 🗾
Feature Selection Select the program features you want installed.	
Click an icon in the following list to change how a feat	ure is installed.
Management Studio Express	Feature description
	Installs interactive management tools for running SQL Server, including SQL Server Management Studio Express.
Installation path	
C:\Program Files\Microsoft SQL Server\	Browse
	Disk Cost
< Back	Next > Cancel

Please click Install.

😸 Microsoft SQL Server Management Studio Express Setup	x
Ready to Install the Program	
Setup is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click Cancel to exit Setup.)
< Back Install Cancel	

The installation might take $1 \sim 2$ minutes. Then, the following window will pop up. Please click **Finish** to exit.



> Configuration setting of SQL Server communication:

Enable ^CSQL Server Configuration Manager ₁ to setup SQL Server communication configuration.

🐌 Maintenance	
퉬 Microsoft SQL Server 2005	Control Panel
Configuration Tools	
\overline SQL Server Configuration Manager	Devices and Printers
📑 SQL Server Error and Usage Reportin	
韻 SQL Server Surface Area Configurati	Default Programs
Oracle VM VirtualBox Guest Additions	
퉬 Startup	Help and Support
4 Back	
Search programs and files	Shut down 🕨

Please enable server, Named Pipes and TCP/IP.



Please restart the server.



> Firewall setup:

ZP setting



 $^{\ }$ Exceptions $_{
 \ }$.

Windo	ws Firewa	ıll			
ieneral	Exceptions	Advanced			
Window program to work Program	us Firewall is t is and service better but mi ns and Servic	blocking incom es selected bel ght increase yc es:	ing network c low. Adding e our security ris	onnections, exe xceptions allow: k.	cept for the s some programs
Name	•				
🗹 File	e and Printer	Sharing			
🗹 Ne	twork Diagno	ostics for Wind	ows XP		
🗹 Re	mote Assista	nce			
🗹 Re	mote Deskto	P			
🗹 SM	ILMProxy Mc	dule - HP1006	MC.EXE		
🗹 UF	nP Framewo	rk			
⊻ Wi	indows Live M	lessenger 8.1			
∨ Wi	indows Live N	/lessenger 8.1	(Phone)		
₩ Wi	indows® Netl	vleeting®			
Add f	^D rogram	Add Port.		Edit	Delete
🔽 Disp	lay a notifical	ion when Wind	dows Firewall	blocks a progra	m
- 6	88 8				
What a	re the risks of	allowing exce	ptions?		
				[
				UK	Cancel

Select [Add a Port]. Its parameter setting is shown as below.

var	nt to use.	oi, consult th	ie documeni	ation for	ine program	r or service yo
	Name:	SQL				
	Port number:	1433				
			Our	P		

After the setting is completed, please restart the computer.

Win 7 Setting Ŧ

Enter \lceil Control Panel $] \rightarrow \rceil$ System and security $\textcircled{v}] \rightarrow \rceil$ Windows Firewall $\textcircled{v} \rightarrow \rceil$



□ Exceptions _ .



Choose I Inbound Rules then click New Rule.......

Windows Firewall with Advanced	l Security							×
File Action View Help								
🗢 🄿 🔰 🖬 🔒 🛛 🖬								
Windows Firewall with Advance	Inbound Rules						Actions	
Inbound Rules	Name	Group	Profile	Enabled	Action	-	Inbound Rules	•
Connection Security Rules	🔇 eServer		Private	Yes	Allow		🚉 New Rule	
Monitoring	🕑 eServer		Private	Yes	Allow	=	Filter by Profile	•
	🕑 eServerODBC		All	Yes	Allow	-	The be find	
	BranchCache Content Retrieval (HTTP-In)	BranchCache - Content Retr	All	No	Allow		Y Filter by State	•
	BranchCache Hosted Cache Server (HTT	BranchCache - Hosted Cach	All	No	Allow	-1	Filter by Group	•
	BranchCache Peer Discovery (WSD-In)	BranchCache - Peer Discove	All	No	Allow		View	•
	Connect to a Network Projector (TCP-In)	Connect to a Network Proje	Domain	No	Allow		Pefrech	
	Connect to a Network Projector (TCP-In)	Connect to a Network Proje	Private	No	Allow		Q Refresh	
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Domain	No	Allow		🛃 Export List	
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Private	No	Allow		? Help	
	Connect to a Network Projector (WSD Ev	Connect to a Network Proje	Private	No	Allow			

Select **Port** for further setting.

P New Inbound Rule Wizard					
Rule Type					
Select the type of firew	all rule to create.				
Steps:					
Rule Type	What type of rule would you like to create?				
Protocol and Ports					
Action	Program				
Profile	Rule that controls connections for a program.				
Name	Port				
	Rule that controls connections for a TCP or UDP port.				
	Predefined:				
	BranchCache - Content Retrieval (Uses HTTP)				
	Rule that controls connections for a Windows experience.				
	Custom				
	Custom rule.				
	l earr more about rule types				
	< Back Next > Cancel				

Enable specific ports for the Named Pipes connection and the TCP/IP connection. Since the connection default port no. is 1433 and 1434, we set local connection port as "1433-1434".

	New Inbound Rule Wizard		×
Р	rotocol and Ports		
Spe	ecify the protocols and ports to v	which this rule applies.	
Ste	eps:	Decembric rule perclute TCP or LIDP2	
۰.	Rule Type	Does this fulle apply to TCF or ODF?	
۲	Protocol and Ports	● TCP	
•	Action	© UDP	
•	Profile		
٠	Name	Does this rule apply to all local ports or specific local ports?	
		Specific local ports: 1432-1424	
		Example: 80, 443, 5000-5010	
		Learn more about protocol and ports	
		< Back Next > Cancel	

Please select Allow the connection.

	New Inbound Rule Wizard		×				
A	Action						
Sp	ecify the action to be taken wh	en a connection matches the conditions specified in the rule.					
G	anc'						
•	Rule Type	What action should be taken when a connection matches the specified conditions?					
•	Action	Allow the connection This includes connections that are protected with IPsec as well as those are not.					
•	Profile Name	 Allow the connection if it is secure This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node. Customize Block the connection 					
		Leam more about actions < Back					

Select all then click Next.

🔐 New Inbound Rule Wizard		×
Profile		
Specify the profiles for which this rul	le applies.	
Change		
Steps.	When does this rule apply?	
Rule Type		
Protocol and Ports		
Action		
Profile	Applies when a computer is connected to its corporate domain.	
Name	V Private	
	Applies when a computer is connected to a private network location.	
	Public	
	Applies when a computer is connected to a public network location.	
	Learn more about profiles	
	< Back Next > Cancel	

Enter the Name of this rule. eServerODBC is the entered name in this example. Users can self setup the name.

	🔐 New Inbound Rule Wizard 🧾						
N	Name						
Sp	ecify the name and description	of this rule.	ł.				
St	eps:						
٠	Rule Type						
٠	Protocol and Ports						
٠	Action						
۲	Profile		Name:				
۲	Name		ESAVAODDC				
			Description (optional):				
			< Back Finish Cancel				

After the setting is completed, double click **eServerODBC properties** to check the following settings.

eServerODBC	C Properti	es					— ×
Gene	ral	Pro	grams	s and Sen	vices	C	Computers
Protoco	ls and Port	s	Sco	ope	Advanc	ed	Users
Protocol	s and ports						
	Protocol t	ype:		TCP			-
	Protocol r	number:			6		
	Local por	t:		Specific	Ports		•
				1433-143	34		
	Demote			Example:	80, 443, 50	00-5010	
	Remote p	ort:		All Ports			
				Example	80, 443, 50	00-5010	
	Internet C (ICMP) se	Control Mee ettings:	ssage	Protocol		Customize	e
Leam mor	e about pro	otocol and	ports				
				ОК	Ca	ancel	<u>Apply</u>

Then, please restart the computer.

> Setting of SQL Server Authorization:

Enter [©] SQL Server Surface Area Configuration ₁ to setup user authorization.

Microsoft SQL Server 2005	Control Panel
Configuration Tools	Devices and Printers
SQL Server Error and Usage Repo	Default Programs
SQL Server Surface Area Configu	Help and Support
4 Back	
Search programs and files	Shut down 🕨

Click $\ensuremath{\,\mathbb{F}}\xspace$ Add New Administrator $\ensuremath{_\mathbb{I}}\xspace$.

😭 SQL Server 2005 Surface Area Configuration	
Microsoft SQL Server. 2005 Help Protect Your SQL Server	Windows Server System
 Minimize SQL Server 2005 Surface Area SQL Server 2005 improves manageability and security by giving administrators more and remote instances of SQL Server 2005. With the SQL Server 2005 Surface Area Disable unused services and network protocols for remote connections. Disable unused features of SQL Server components. For new installations, use these tools to enable required features, services, and network default. For upgraded instances, use these tools to identify and disable unused feat Users with administrative privileges on Microsoft Windows Vista and later versions v privileges on this SQL Server installation by default. To explicitly add yourself as a S below link: 	e control over the surface area of local a Configuration tools, you can easily: work protocols that are disabled by ures, services, and protocols. will no longer have administrative SQL Server administrator, click on the
 Add New Administrator Read more about configuring the SQL Server surface area. 	
Configure Surface Area for localhost (change computer)	tions

Select Avaliable privileges. Then, press $\ensuremath{\ulcorner} \ensuremath{\mathsf{>}}_{\ensuremath{\square}}$.

SQL Server User Provisioning on Vista - tina-PC\tina on TINA-PC		
SQL Server 2005 User Provisioning Tool for Help Protect Your SQL Server on Windows Vista	Vista	
Granting administrative rights to Windows Vista user tina-PC\tina.	User to provision:	tina-PC\tina
Windows Vista users that are members of the Windows Administrators group a they are not automatically granted administrative privileges.	are not automatically granted	permission to connect to SQL Server, and
Select the administrative privileges needed by Windows user tina-PC $\$		
Available privileges:	Privileges that will be grante	ed to tina-PC\tina:
SQLEXPRESS Member of SQL Server SysAdmin role on SQLEXPRESS		OK Cancel

Press OK.

👬 SQL Server User Provisioning on Vista - tina-PC\tina on TINA-P	C		?
SQL Server 2005 User Provisioning Tool Help Protect Your SQL Server on Windows Vista	for V	'ista	
Granting administrative rights to Windows Vista user tina-PC\tina.		User to provision:	tina-PC\tina
Windows Vista users that are members of the Windows Administrators grathey are not automatically granted administrative privileges.	roup are	not automatically granted	permission to connect to SQL Server, and
Select the administrative privileges needed by Windows user tina-PC $\$	ia.		
Available privileges:		Privileges that will be grant	ted to tina-PC\tina:
	» > <	SQLEXPRESS Member of SQL	Server SysAdmin role on SQLEXPRESS
			OK Cancel

Setting of SQL Server 2005 Database:

Click Start \rightarrow All Program \rightarrow Microsoft SQL Server 2005 \rightarrow SQL Server Management Studio Express. And the following window will pop up. Please click **[Connect]**.

🚽 Connect to Server	×				
SQL Serve	Windows Server System				
Server type:	Database Engine				
Server name:	TINA-PC\SQLEXPRESS				
Authentication:	Windows Authentication				
User name:	tina-PC\tina 💌				
Password:					
	Remember password				

When the connection is established, the following window will pop up.



Go to the window of <code>[Object Explorer]</code> . Right click <code>[Database]</code> , then select <code>[New Database(N)</code> ... <code>]</code> .

🌆 Microsoft SQL Server Management Studio Expres	55
File Edit View Tools Window Commun	ity Help
🗄 🔔 New Query 🛅 📂 🗐 🧊 🚺 🥻	📴 🗃 🖕
Object Explorer 🗸 🕂 🗙	Summary
P P P P	🔁 🗟 🦨 🍸 🕅 List -
😑 🐻 TINA-PC\SQLEXPRESS (SQL Server 9.0.4035 -	
Databases	Databases
🕀 🛅 New Database	Databases
	TINA-PC\SQLEXPRESS\Databases
Ger Restore Database	
The store Files and Filegroups	ime
Refresh	System Databases

Then, the following window will pop up. Setup Database name in [Database name(N)]. In this example, the database name is $\[\]$ Test $\[\]$. Please click [OK] after the setting is completed.

New Database					
Select a page	🛒 Script 🔻 📑	Help			
General		-			
	Database name:		Test		
	Owner:		<default></default>		
	Use full-text in	ndexing			
	Database files:				
	Logical Name	File Type	Filegroup	Initial Size (MB)	Autogrowth
	Test	Data	PRIMARY	2	By 1 MB, unrestricted growth
	Test_log	Log	Not Applicable	1	By 10 percent, unrestricted growth
Connection					
Server:					
TINA-PC\SQLEXPRESS					
Connection: tina-PC\tina					
View connection properties					
Progress					
Ready	•	III			Add Remove
					OK Cancel

When establishing the database, [[]Test] has been created in [Databases] which under [Object Explorer]. And [Tables] is under it. Right click **Tables**, then select [New Table...].



Please enter the newly added data in sequence. Data1, data2 and data3 are three column names in this example, their data type are nchar(10).



Then, please click **Save** to save the column name, see as below. A **Choose Name** dialogue will pop up at the moment. This example shows $\[\]$ Table_1 $\[\]$. After entering the name, click [OK].

Microsoft SQL Server Management Studio Express									
File Edit View Table Designer Tools Wind	ow	Community Help							
😟 New Query 📑 📬 🗐 🗿 🗎 🍅		*							
Object Explorer	/1	able - dbo Table 1* S	umman/		- X	P	roperties	→ ₽)	ĸ
		Column Name	Data Type	Allow Nulls		l n	[bl] dbo.Table 1		
TINA-PC\SOLEXPRESS (SOL Server 9.0.4035 - :		data 1	nchar(10)	V					
Databases		data2	nchar(10)	V		ē	i ž↓ ⊡		
🕀 📄 System Databases	۲	data3	nchar(10)	V		Ξ	(Identity)		
🖃 间 Test							(Name)	Table_1	
🕀 🧰 Database Diagrams							Database Name	Test	
🕀 🧰 Tables							Description		_
🕀 🧰 Views							Schema	dbo	
🕀 🧰 Synonyms							Server Name	tina-pc\sqlexpress	
🕀 🧰 Programmability		Channe Norma				Ξ	Table Designer		
🕀 🧰 Security		Choose Name					Identity Column		
🕀 🚞 Security		Enter a name for th	e table:				Indexable	Yes	
🕀 🚞 Server Objects		7.11.1				Ŧ	Regular Data Spac	PRIMARY	
Replication		Table_1					Replicated	No	
🗄 🚞 Management					<u> </u>		Row GUID Colum		
					Cancel		Text/Image Filegr	PRIMARY	

After establishing the data sheet, users can see the newly added one in [Object Explorer]. Please note that, "dbo" will be added as the prefix in front of the name. Thus, if it is named Table_1, users will see 『dbo.Table_1』 in [Object Explorer].

🧏 Microsoft SQL Server Management Studio Express	;				
File Edit View Table Designer Tools Wind	dow	Community Help			
😫 New Query 🛅 📂 🛃 🕼 🗎 🔯 🦉	i 📩	* <u>-</u>			
:s: ? < # # # = .					
Object Explorer 🗸 🕂 🗙	1	able - dbo.Table_1 Su	mmary		→ ×
왕 🛃 = 🖻 🝸		Column Name	Data Type	Allow Nulls	
🖃 🚺 TINA-PC\SQLEXPRESS (SQL Server 9.0.4035 - 1		data1	nchar(10)	\checkmark	
🖃 🚞 Databases		data2	nchar(10)	V	
표 🚞 System Databases	►	data3	nchar(10)	V	
🖃 🧻 Test					
🕀 🚞 Database Diagrams					
🖃 🧰 Tables					
🕀 🧰 System Tables					
Views					

ODBC Setting:

The installation of SQL Server 2005 and SQL Server Management Studio Express in Win 7 is similar to XP window system. The only difference is that, if desire to install ODBC driver in Win 7 64bits, only the built-in 32-bit ODBC driver can be used to connect eServer. Please download 32-bit ODBC driver from <u>C:\Windows\SysWOW64\odbcad32.exe</u>.

Please copy the above link and execute the program. Refer to the following description for ODBC setting.

Enable $\[$ Control Panel $\] \rightarrow \[$ Administrative Tools $\] \rightarrow \[$ Data Sources (ODBC) $\]$ and select $\[$ System DSN $\]$ to add new item.



Control P	anel System and Security Administrative T	ools 👻 🍕	Search Administrative
Organize 🔻			
☆ Favorites	Name	 Date modified 	Туре
🧮 Desktop	Component Services	7/13/2009 9:57 PM	Shortcut
🗼 Downloads	🔝 Computer Management	7/13/2009 9:54 PM	Shortcut
🕮 Recent Places	📷 Data Sources (ODBC)	7/13/2009 9:53 PM	Shortcut
	📷 Event Viewer	7/13/2009 9:54 PM	Shortcut
🥽 Libraries	🙈 iSCSI Initiator	7/13/2009 9:54 PM	Shortcut
Documents	🔁 Local Security Policy	1/21/2014 12:22 PM	Shortcut
J Music	Performance Monitor	7/13/2009 9:53 PM	Shortcut
Pictures	🔚 Print Management	1/21/2014 12:22 PM	Shortcut
🚼 Videos	Services	7/13/2009 9:54 PM	Shortcut
	冠 System Configuration	7/13/2009 9:53 PM	Shortcut
👰 Computer	🔝 Task Scheduler	7/13/2009 9:54 PM	Shortcut
🏭 Local Disk (C:)	🞓 Windows Firewall with Advanced Security	7/13/2009 9:54 PM	Shortcut
🥳 CD Drive (D:) Virtual	減 Windows Memory Diagnostic	7/13/2009 9:53 PM	Shortcut
DOP-eServer (\\vbo:	😹 Windows PowerShell Modules	7/13/2009 10:32 PM	Shortcut

👼 ODBC 🛛	Data Source Administrator
User DSN	System DSN File DSN Drivers Tracing Connection Pooling About
System [Data Sources:
Name	Driver Add
	Remove
	Configure
	An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.
	OK Cancel Apply Help

Please select SQL Server as the driver. Then, click [Finish].

Create New Data Source			—
	Select a driver for w	hich you want to se	t up a data source.
	Name	Version	Company
	SQL Native Client	2005.90.4035.00 6.01.7601.17514	Microsoft Corporat Microsoft Corporat
	•	1	4
	< B	ack Finish	Cancel

Please note that this is set according to Delta's Intranet. Thus, the following server name (TWTN1PC0364) might be different from the one you installed.

[Name] : Please setup the name, such as DELTA-SQL in the example.

[Server] : Please select the corresponding server after installing SQL Server 2005

When the setting is completed, click [Next].

Microsoft SQL Server DS	N Configuration
	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: DELTA-SQL
	How do you want to describe the data source?
	Description:
	Which SQL Server do you want to connect to?
	Server: TWTN1PC0364\TINAMYSQLEXPRESS
	Finish Next > Cancel Help

Please select [With Windows NT authentication using the network login ID (W)] and click [Next].

Create a New Data Sour	ce to SQL Server			
	How should SQL Server verify the authenticity of the login ID?			
	With Windows NT authentication using the network login ID.			
	$^{\scriptsize \bigcirc}$ With SQL Server authentication using a login ID and password entered by the user.			
	To change the network library used to communicate with SQL Server, click Client Configuration.			
	Client Configuration			
	Connect to SQL Server to obtain default settings for the additional configuration options.			
	Login ID: tina			
	Password:			
	< Back Next > Cancel Help			

Please check ${\tt \ \ } Change$ the default database to $_{\tt \ \ }$, and select database ${\tt \ \ \ \ } Test_{\tt \ \ }$ which is built before. Then, click [Next] .

Create a New Data Sour	ce to SQL Server
	Change the default database to: Test Attach database filename:
	 Create temporary stored procedures for prepared SQL statements and drop the stored procedures: Only when you disconnect. When you disconnect and as appropriate while you are connected. Use ANSI quoted identifiers. Use ANSI nulls, paddings and warnings. Use the failover SQL Server if the primary SQL Server is not available.
	< Back Next > Cancel Help

Use the default value and click [Finish].

Create a New Data Source	e to SQL Server
	 Change the language of SQL Server system messages to: (Default) 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: C:\Users\tina\AppData\Local\Temp\QUERY.LOG Browse Long query time (milliseconds): 30000 Log ODBC driver statistics to the log file: C:\Users\tina\AppData\Local\Temp\STATS.LOG Browse
	< Back Finish Cancel Help

It shows ODBC is installed, which can test if the connection between ODBC Driver and SQL Server is successfully built.

ODBC Microsoft SQL Server Setup	×
A new ODBC data source will be created with the following configuration:	
Microsoft SQL Server ODBC Driver Version 06.01.7601 Data Source Name: DELTA-SQL Data Source Description: Server: TWTN1PC0364\TINAMYSQLEXPRESS Database: Test Language: (Default) Translate Character Data: Yes Log Long Running Queries: No Log Driver Statistics: 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 Data Encryption: No	•
Test Data Source OK Cano	cel

Click [SQL Server ODBC Data Source Test] and test some items. If no problem occurs, the window will display the following message. Then, please click [OK] to complete the testing procedure.

SQL Server ODBC Data Source Test 🧾	٢.
Test Results	
Microsoft SOL Server ODPC Driver Version 06.01.7601	
Microsoft SQL Server ODBC Driver Version 06.01.7601	
Running connectivity tests	
Attempting connection	
Verifying option settings	
Disconnecting from server	
TESTS COMPLETED SUCCESSFULLY!	
v	
ОК	

After complete the test, click [OK]. It will go back to [System DSN], one ODBC Driver is newly added at the moment and is named as $\[$ DELTA-SQL $\]$, which shown as below.


10.1.2 Create HMI Project File

Enable DOPSoft. B10E615 is created in this example.

Create a new project and three numeric entry, \$100, \$200 and \$300.

. .	D	OPSo	ft -											
Fi	le	Edit	View	Element	Screen	Tools	Options	Window	w Help					
	•	6	- 🕰	9 (*	Χ 🕨	a M	📑 🖻	â 🛈	100%		QQCO	e 🔊		
	12	-	Verda	ina	-) A+ (A)	PAL A	ið á	<u>A</u> - 1	B I <u>I</u>	J Language1		- 2	I (II) I
				🕰 🔵 🛽	8 📑 N	<u>~</u> M	🞽 📟	-	🖾 👌	0 - ###	##	-	1 🚰 🗸	- 🖬 🛗
0	2	1	- Scree	n_1										
))		W W	7:\$100 # 7:\$200 # 7:\$300 #	###									*

Enter the following macro in Clock Macro.

*[&Clock Macro]
😂 🔜 🏹 🐰 🗈 🔋 🖳 🛒 🙌 📲 🕼
1 \$100 = \$100 + 1
2 IF \$100 == 1000
3 \$100 = 0
4 ENDIF
5
6 \$200 = \$200 + 2
7 IF \$200 = 1000
8 \$200 = 0
9 ENDIF
10
11 \$300 = \$300 + 3
12 IF \$300 == 1000
13 \$300 = 0
14 ENDIF

Enter \lceil Selection $\rfloor \rightarrow \rceil$ Communication Setting $\rfloor \rightarrow \rceil$ Ethernet $\rfloor \rightarrow$ setup HMI IP Address in \lceil LocalHost \rfloor , then check **Enable** to activate 【Network】. Preset the password as \lceil 12345678 $_{\parallel}$. Users can self change this password.

ommunication Setting			
	Communica	tion Setting	
COM1	st SMTP		_
COM2	✓ Overwrite IP─ Obtain an IP address automatic	ally	
	HMI	HMI	
COM3	HMI IP Address	172 . 16 . 190 . 110	
	Subnet Mask	255 . 255 . 255 . 0	
Ethernet	Gateway IP	0.0.0.0	
	upload/download port	12346	
	Modbus TCP Server Port	502	
Network (eRe	emote/eServer/Ladder Monitoring)		
	Password	12345678	
	ScanTime	100 (ms)	
	Port	12348	
	Show warning in disconnection		
	Close warning window wh	en the connection is ok	
			-
Comm. Interrupt 3 times	then ignore		
		OK Can	ıcel

10.1.3 eServer Setting

1. Open a new project of Logging (ODBC) and click [J to activate ODBC Logging Wizard.





Add nodes.

Wizard - Logging	×
Wizard - Logging	Exerver will need some information such as communication setting, symbol etc And Linkage will help you how to link original project information Linakge name DBC1 Please click the following buttons to access nodes: No Enable HMI Name IP
1000 C	4
	To continue, click Next.
	< Back Next > Cancel Finish

Select the screen project and click [OK] , then click [Next] .

Wizard - Logging	X
10 10 10	Linkage eServer will need some information such as communication setting, symbol etc And Linkage will help you how to link original project information
that mit	Transfer - Path
	Please select the following 2 methods to 1. Select a exist Screen (DOP) file from stroed media. C:\Users\tina\Desktop\HMI.dps IP Address 0.0.0.1 • : 12348 2. Tansfer from Delta - HMI 0.0.0.1 • : 12348 OK Cancel
	To continue, dick Next.
	< Back Next > Cancel Finish

This page is for setting ODBC. Please refer to the following description: ODBC Data Source: Please click [DELTA-SQL] which is created before. User Name and Password: Enter any name you want

Database Driver: Please select [SQL Server], then click	to update the datasheet.
---	--------------------------

Select [Table_1] and click 🕩 to add [Table_1] to the table.

Check Stamp to add time and date.

When the above setting is complete, please click [Next].

Wizard - Logging
ODBC Please indicate the following items Chooses a data source (DSN) and input user name and password ODBC Data Source User Name Password Database Driver SQL Server Table_1 Image: Stamp Table_1 Date Yamp Table_1 Date Yamp'dd'vg YdH'yi Image: Stamp Table_1 Date Yamp'dd'vg YdH'yi Image: Stamp Table_1 Date Yam'vdd'vg YdH'yi Image: Stamp Table_1 Date Yam'vd'wg YdH'yi Image: Stamp Table_1 Date Yam'vd Table Image: Stamp Table_1 Date Yam

Please add the logging address (\$100, \$200, \$300) which is set by screen project in sequence. It will correspond to the field name (data1, data2, data3) which created by SQL Server.

Wizard - Logging					×		
100	Register Setting Please input logging address in the following Cell(s)						
Time and the test	No Table	Field	HMI Name	Address	Form		
204 225 Z	1 Table_1	data1	HMI	\$100	Unsig		
012 205 205 112 206 205 112 206 406	2 Table_1	data2	HMI	\$200	Unsig		
A 191 A 197 A 198	3 Table_1	data3	HMI	\$300 🛄	Unsig		
	To continue, dick Next.				Þ		
	< B.	ack Nex	t > Car	ncel Finis	h		

Please select Logging Condition. In this example, select [Const] type as the conditional parameter. Click [Finish] to exist Logging Wizard.

Wizard - Logging			×
Vizind - cogging	Logging Condition The Condition will provide 2 solutions to trigger condition. Table_1 No Type HMI Name 1 Const n/a I Const n/a	help you easy create	e parameters for Format n/a
	Sack Next >	Cancel	Finish

Click 【save 📕 】 first then click 【execute 📭】.									
🥪 eServer - C:\Users\tina.q.lee\D	esktop\123\123.ed	lx	B1		Course of the local division of the local di	And in case of the local division of the loc	And Distances in the local distances in the local distances of the l	A	
: File View Wizard Tool H	Help								
i 🗅 📽 🔜 🛒 💕 💽 💿 💡									
Project View 🛛 🗘 🗙			<u>a</u>						
🗾 🐳 😒 🍫	<u>v</u>	- V							
eServer	Node	Setting Add	ress Condition	Output					
DDBC1	E 🖻 😣								
	No Enable	HMI Name	IP	Port	COM1	COM2	COM3		
	1 🔽	HMI	0.0.0.1	12348	n/a	Delta DVP PLC	n/a		

Please enter the password to activate eServer. The default number is 12345678.

Au	uthor				×			
	No	Linkage	HMI	Password				
	1	ODBC1	HMI	******				
all passwords are the same password under No.1								
OK Cancel								

10.1.4 View Data from SQL Server 2005 Database

Go to SQL Server Management Studio Express, right click Table_1 and select (Open Table), which shown as below. Users can view the acquired data.



Chapter 11 Writing Data in Oracle

Before creating testing example, make sure to change the upload and download option (Options > Environment) on DOPSoft 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 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).

11.1.1 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 <u>http://www.oracle.com/technetwork/database/express-</u> edition/downloads/index.html.

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

ORACLE		Welcome	Lee (<u>Account</u>	Help Sign Out)	United States 🛪	Communities •	🔻 Iama 👻 Iwant to 👻	Sun Quick Links ▼ ▼ Secure Search Q
Products and Services	Downloads	Store	Support	Education	Partners	About		Oracle Technology Network 💌
Oracle Technology Network > [Database > Data	ibase Expre	ess Edition > D	lownloads				
Database 11g	Overview	Down	loads Doc	umentation	Community	Learn More		Popular Downloads
Database Focus Areas			U					Eerkeley DB
Database Options	Orac	le Dat	abase 10	g Express	Edition E	ownloads	;	🝷 Enterprise Manager
Database Express Edition								Database EE and XE
Database Upgrade	Database Upgrade Oracl			e Database 10g Express Edition				
Berkeley DB	Berkeley DB		Debian Mand	🛓 Fusion Middleware				
TimesTen In-Memory Database	⊠ <u>Ora</u>	cle Databa	ase 10g Expre	ISS Edition for M	icrosoft Windov	<u>'S</u>		🛓 Java EE & GlassFish
Database 10g								🛃 Java SE
Database Lite								JDeveloper and ADF
RDB								MySQL
Audit Vault								差 NetBeans IDE
Secure Backup								差 <u>Solaris</u>
Real Application Clusters								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		Eerkeley DB
Database Options	Oracle Database 10g Release 2 (10.2.0.1)	差 Enterprise Manager
Database Express Edition	Express Edition for Microsoft Windows	差 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.	差 Fusion Middleware
TimesTen In-Memory Database	Accept License Agreement D Decline License Agreement	差 Java EE & GlassFish
Database 10g	Oracle Database 10g Express Edition (Western European)	👤 Java SE
Database Lite	OracleXE.exe (165,332,312 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		星 <u>Solaris</u>
Real Application Clusters	interface available in the following languages: Brazilian Portuguese, Chinese (Simplified and	差 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.

Oracle Database 10g Express Edition - Install Wizard	×
License Agreement Please read the following license agreement carefully.	CRACLE DATABASE EXPRESS EDITION
ORACLE DATABASE 10g EXPRESS EDITION LICENSE AGREEMENT	
To use this license, you must agree to all of the following terms (by either clicking the accept button or installing and using the program)	:
	~
I accept the terms in the license agreement	rint
○ I do not accept the terms in the license agreement	
InstallShield	
<u> ≺ B</u> ack <u>N</u> ext > U	Cancel

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.

Oracle Database 10g Express Edition	- Install Wizard	×
Choose Destination Location		ORACLE
Select folder where setup will install files.		CATABASE Express cortion
Setup will install Oracle Database 10g Exp	ress Edition in the following fo	older.
To install to this folder, click Next. To instal another folder.	l to a different folder, click Br	owse and select
✓ Oracle Database 10g Express Edition		1593016 K
Destination Folder		
C:\oraclexe\		B <u>r</u> owse
Space Required on C:	1593016 K	
Space Available on C: InstallShield	11287008 K	
	< <u>B</u> ack <u>N</u> ex	t > Cancel

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

To select a directory other than the default directory, click **Browse**.

Oracle Database 10g E	xpress Edition - In	nstall Wiza	rd	×
Specify Database Pas	swords			
Enter and confirm passwor the SYSTEM database ac	ids for the database. T counts.	his password	will be used for both	n the SYS and
Enter Password	*****			
Confirm Password	*****			
Note: You should use the Database Home Page aft	SYSTEM user along w er the install is complete	vith the passv a.	vord you enter here I	to log in to the
InstallShield —————		< <u>B</u> ack	<u>N</u> ext >	Cancel

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.		
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		
	>	
InstallShield	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	
The InstallShieldR Wizard is installing Oracle Database 10g Express Edition	
Copying Files	
InstallShield	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.

💞 ODBC Data Source Administrator	? 🔀
User DSN System DSN File DSN Drivers Tracing Connection	n Pooling About
System Data Sources:	
Name Driver	Add
	Remove
	Configure
An ODBC System data source stores information about h the indicated data provider. A System data source is vis on this machine, including NT services.	ow to connect to ible to all users
OK Cancel Apply	Help

Select Oracle in XE and then click on Finish button.

Create New Data Source	Select a driver for which you want to set up a Name 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	data source.
	Microsoft Visual FoxPro-Treiber Oracle in XE SUL Server	

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

Oracle ODBC Driver Configuration		
	ОК	
Data Source Name DracleSQL		
Description		
TNS Service Name 🔀		
User ID system	Test Connection	
Application Oracle Workarounds SQLServer Migration		
Enable Result Sets 🔽 Enable Query Timeout 🔽 H	Read-Only Connection 🥅	
Enable Closing Cursors 🧮 Enable Thread Safety 🔽		
Batch Autocommit Mode Commit only if all statements succeed		
Numeric Settings Use Oracle NLS settings	-	

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).

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

		2 10 17 1 1 1 2 1 1 1 2 1 1 1 2 1 1 2 1 2 1
💼 Oracle Database 10g Express Edition	•	💼 Get Help 🔹 🕨
		🛃 Backup Database
		🔙 Get Started
	(2)	🐻 Go To Database Home Page
		🗟 Restore Database
		🔤 Run SQL Command Line
	(1)	民 Start Database
		🥫 Stop Database

(2) Go to Database homepage.

ORACLE Database Express Edition		
Database Login		
Enter your database username and password.		
Username system		
Password		
Login		
Click here to learn how to 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 Logout Held
User: SYSTEM	
Home > Object Browser	
Tables	Create 🔻
AGS_OUCUE_TABLES AGS_CHEDULES	
DEFS_AQCALL DEFS_AQERROR DEFS_CALLDEST	
DEFS_DEFAULTDEST DEFS_DESTINATION	
DEFS_ERROR DEFS_LOB	
DEFS_URIGHT	
DEFS_TEMPSLOB	

Click on Table link.



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			Ca	ncel I	Next >
Primary Key	🕱 🕷 Table Name					
V Facility Mary	Table name must be specified.	9				
Foreign Key						
Constraints	Column Name	Туре	Precision	Scale	Not Null	Move
¥	TIME	CHAR]	100		TA .
Contirm	DATA1	CHAR]	100		¥.A
	DATA2	CHAR]	100		TA.
		- Select Datatype - 🗸]			¥.A
		- Select Datatype - 💙				V A
		- Select Datatype - 💙				V A
				(Add Colu	ımn

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

Columns V	Primary Key Cancel < Previous Next >
Primary Key Foreign Key Constraints Confirm	Table name: ORACLETABLE Primary Key: No Primary Key Populated from a new sequence Populated from an existing sequence Not populated

Click on Next button for the next step.

Columns V	Foreign Keys Cancel < Previous Next >	
Primary Key Foreign Key	Foreign Key Columns Referenced Table Referenced Columns Action	
Constraints	Add Foreign Key Add	
<u>Confirm</u>	ORACLETABLE_fk ORACLETABLE_fk O Cascade Delete Set Null on Delete	
	Select Key Column(s) * Key Column(s)	
	* References Table	

Click on Finish button to complete the settings.

<u>Columns</u> ♥	Constraints	Cancel	< Previous	Finish
Primary Key V	Constraint Name Type Column(S)/Check			
Foreign Key				
Constraints	Add Constraint			Add
Confirm	⊙ Check ○ Unique			
	* Name ORACLETABLE_ck1			

Availiable Columns

Example Check Constraints

Click on Create button to create a new table.

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

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

Tables 💌									ORA	CLETA	BLE	
P	E C	Table	Data	Indexes Mode	Constraints	Grants	Statistics	UI Defa	aults T	riggers	Depender	ncies SQL
AQ\$_INTERNET_AGENTS	^	Add Col	umn	Modify Column	Rename Col	umn Dr	op Column	Rename	Сору	Drop	Truncate	Create Lookup Table
AQ\$_INTERNET_AGENT_PRIVS		Colum	n Nam	e Data Type	Nullable	Default	Primary	Kev				
AQ\$_QUEUES		TIME		CHAR(100)	Vee	bordun						
Q\$_QUEUE_TABLES		TIME		CHAR(100)	res	-	-					
Q\$_SCHEDULES		DATA1		CHAR(100)	Yes	-	-					
EF\$_AQCALL		DATA2		CHAR(100)	Yes	-	-					
EFS_AQERROR							1 - 3					
EF\$_CALLDEST												
EF\$_DEFAULTDEST												
EF\$_DESTINATION												
EF\$_ERROR	- 1											
EF\$_LOB												
EF\$_ORIGIN												
EF\$_PROPAGATOR												
EF\$_PUSHED_TRANSACTIONS												
EFS_TEMPSLOB		<										
ELP		-										
OGMNEC DENAME UD MAR												

11.1.2 Create HMI Project File

Start DOPSoft 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 > Momentary** to create two maintained button elements (\$0.0 and \$0.2) on the screen. In this case, 10 inches color B10E615 type DOP series HMI is used.

🦞 DOPSoft - C./Documents and Settings/TINA.Q. LEE. DEL TA. 000/桌面/example.dps	
Eile Edit Yiew Element Screen Iools Options Window Help	
😋 🛱 📮 🔍 🔍 🐌 🖺 🏘 屏 🛱 🚖 🕼 100% 🔍 🔍 🔍 🔍 🔿 🏷 😓	
	Property 🗖 🗙
	Screen_1
	Screen Name Screen 1
	Screen Properties Detail
	Background Color RGB(252, 252, 252)
	🖃 Screen Macro
\$3 ####	Screen Open Ma 0
	Screen Close Macro 0
	Screen Cycle Macro 2
	Width 1024
	Height 600
\$6 ####	
\$0.0 Momentary \$0.2 Momentary	
Output	
Step Action	
⇒ [11] Modify element property	
[12] Modify element property	
■ [13] Modify element property	
• [14] Diology element property	Image: A state of the state
Record Ouput	

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



Click **Options** > **Communication Setting** > **Ethernet** > **LocalHost**, set HMI IP Address and check the Application(eRemote / eServer) function **Enable**. Then, press **OK** button to finish the settings.

Communication Setting COM1 Device LocalHost SMTP COM2 Image: Communication an IP address automatically COM3 Image: Communication an IP address automatically COM3 Image: Communication an IP address automatically HMI HMI HMI IP Address 172 16 190 100 Subnet Mask 255 . 255 . 255 . 0 Gateway IP 0 . 0 . 0 . 0 upload/download port 12346 @ Modbus TCP Server Port 502 @ Application (eRemote/6Server) Image: Password Pessword 12345678 Scan Time 100 @ (ms) Port 12348 @	Communication Setting				E
Image: Comparison of the comparison o			Communic	ation Setting	
Localhost COM2 COM3 Image: Coms COM3 Image: Coms Image: Com		Device LocalHo	st SMTP		
HMI IP Address 172.16.190.100 Subnet Mask 255.255.255.0 Gateway IP 0.0.0.0 upload/download port 12346 Modbus TCP Server Port 502 Application (eRemote/eServer) Password 12345678 Scan Time 100 Port 12348	COM2	Localhost	♥ Overwrite IP ■ Obtain an IP address automat HMI	ically HMI	
Application (eRemote/eServer) Password Scan Time Port 12348	Ethernet		HMI IP Address Subnet Mask Gateway IP upload/download port Modbus TCP Server Port	172 16 190 100 255 255 255 0 0 0 0 0 12346 • • 502 • •	
		Application (el	Remote/eServer) Enable Password Scan Time Port	12345678 100 (ms) 12348	
Comm. Interrupt 3 🔿 times then ignore	Comm. Interrupt	3 🛟 times	then ignore		

11.1.3 eServer Setting

1. After eServer is enabled, eServer is enable

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



2. Then, open eServer window.

😼 eServer	-	. 🕫 X
; File View Wizard Tool Help		
: 🗋 🧭 🔚 式 💕 💽 @ 🖕		
eServer		
	Output	μ×
	eServer Initialize	
Ready	ICAPIN	UMISCRL

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



4. Select icon to enable ODBC Logging Wizard.

	ogging Recipe
(Excei)	(UDBC) Access
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			
	Linkage eServer will need some inforr And Linkage will help you how Llinakge name	nation such as communicatio v to link original project infor D <mark>BC1</mark> tons to access nodes:	n setting, symbol etc mation
	No HMI Name	P	Port
	To continue, dick Next,		<u>></u>
	< Back	Next > Cano	el Finish

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

Transfer - Path	×
Please select the following 2 methods to 1. O Select a exist Screen (DOP) file from stroed media.	
2. Tansfer from Delta - HMI	

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press

OK.

IP Address Setup			
IP Address	0.0.0.	1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
		ОК	Cancel

eServer will ask user to input the authorize password to connected with HMI. (The

default password is 12345678.)

Upload Autho	rize		X
Password :	*****		
		OK Cancel	

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 and press refresh button to select table.

Wizard - Logging								
Ell ante your	ODBC Please indicate the following items Chooses a data source (DSN) and input user name and password ODBC Data Source OracleSOL							
164 322 38 214 223 38	ODBC Data Source							
10 224 244 05 205 200 201	Descword	\$Y5LEIII ******						
6 751 684 685 10 10 10 10 10 10 10	Database Driver	Oracle 🗸						
ann mi an an an Ann mi an an	Table							
		ORACLETABLE						
	Time and Date Table	Field Detail						
	Stamp ORACLET.	TIME %m/%d/%y %H:%I						
9		(* 2)						
	To continue, click 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						
	Reg Please	jister Sett	Add Delete			
and mi th	No	Table	Field	HMI Name	Address	Form
and the second	1	oracletable	DATA1	eServer	\$3	Unsig
and the second	2	oracletable	DATA2	eServer	\$6	Unsig
		House and Name	IIII			>
	To con	tinue, dick Next	Back N	ext > 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					
	_Ogg The Co trigger	ing Co ondition will condition.	ndition provide 2 solutions	to help you easy	create parameters for
the the	No	Туре	HMI Name	Detail	Format
	1	Trigger	HMI	\$0.0	Rising edge
t	2	Trigger	HMI	\$0.2	Falling edge
	To con	tinue, dick	Next.	kt > Canc	el Finish

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



No	Linkage	HMI	Password
1	ODBC1	HMI	*******
		the came pacewo	rd 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.

ables 💌						OR	ACLETA	BLE	
2	Table Data Ind	exes Model	Constraints	Grants	Statistics U	II Defaults	Triggers	Dependenc	ies SQL
S_INTERNET_AGENTS	Add Column Mo	dify Column	Rename Colu	mn Droj	Column Re	name Cop	y Drop	Truncate	Create Lookup Table
S_INTERNET_AGENT_PRIVS	Column Name	Data Type	Nullable	Default	Primary Ke	ev			
_QUEUES	TIME	CHAR(100)	Vee		,				
_QUEUE_TABLES		CITAR(100)	163	-	-				
S_SCHEDULES	DATA1	CHAR(100)	Yes	-	-				
S_AQCALL	DATA2	CHAR(100)	Yes	-	-				
S_AQERROR					1-3				
S_CALLDEST									
5_DEFAULTDEST									
S_DESTINATION									
S_ERROR	1								
\$_LOB									
\$_ORIGIN									
S_PROPAGATOR									
S_PUSHED_TRANSACTIONS									
\$_TEMP\$LOB	<								
.P									

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.

////						
AQ\$_QUEUE_TABLES		н		09/13/2010 12:06:29	14311	42933
AQ\$_SCHEDULES						
DEF\$_AQCALL			R	09/13/2010 12:06:35	14375	43125
DEF\$_AQERROR						
DEF\$_CALLDEST						
DEF\$_DEFAULTDEST						
DEF\$_DESTINATION		1				
DEF\$_ERROR						
DEF\$_LOB						
DEF\$_ORIGIN						
DEF\$_PROPAGATOR						
DEF\$_PUSHED_TRANSACTIONS						
DEF\$_TEMP\$LOB						
HELP						
LOGMNRC DBNAME UID MAP	×.	<				

12.1 Detailed Settings

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

12.1.1 New Project

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

🦻 eServer		- ¤ x
; File View Wizard Tool Help		
Project View 🛛 🗙 🔊		
1 🕂 🖸 😽		
🗊 eServer		
Ready		CAP NUM SCRL

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

New		Σ
Logging Li (Excel) (1	Vigging Recipe Access	e s
New Project Name:	Recipe	
Location:	C: \Documents and S	Settings\Tina.Q.Lee\Desktop\Re
	Add to the curren	nt project
		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.

C:\Documen	s and Settin	as\shirle	u Jai\Mu	Docu	 ments\D	emo
IP Address	172 .	- 16 .	190 .	2		
) Tansfer from	Delta - HMI					

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

Transfer - Path	×
Please select the following 2 methods to 1. O Select a exist Screen (DOP) file from stroed media.	
2. O Tansfer from Delta - HMI 0 . 0 . 0 . 1 : 12348	

After searching HMI IP in Ethernet, select HMI Name is HMI, IP is 172.16.190.100, press

OK.

IP Address Setup)		
IP Address ✔ Search IP in Et	0.0.0.	1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
		ОК	Cancel

eServer will ask user to input the authorize password to connected with HMI. (The

default password is 12345678.)

Upload Author	ize	×
Password :	****	
	OK Cancel	

12.1.2 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

	Import										
м	ode		Fixed	~							
N	0	Usage	Name	Туре	HMI Name	File Name	Format	Destination Path	Auto Refresh on Startup		
1			Import16(1)	16 bits	HMI	Import16_%H%M	RCP	C:\Documents and Settings\TINA.Q.LEB			
2			Import32(1)	32 bits	HMI	Import32_%H%M	RCP				

Import - Variance

_											
	Mode		Variance	*							
	No	Usage	Name	Туре	HMI Name	File Name	File Name Length	Format	Controller	Destination Path	Auto Refresh on Startup
	1		Import16(1)	16 bits	HMI	\$100	4	RCP	Internal Memory	C:\Documents and Settings\TINA.Q.L.	
	2		Import32(1)	32 bits	HMI	None	1	RCP			

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. Note: The register only could be set to Word. 	
Format	Provide user could save recipe as RCP and CSV file.	
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.	
Auto Refresh on Startup	Auto Refresh on Startup function for user could select when execute recipe at first. No matter what the condition set to Trigger or Const, if check auto refresh on start up function then eServer will execute Import or Export recipe at first time.	

Export - Fixed

	Re	Exp	ort					
Mod	e	Fixed	*					
No	Usage	Name	Туре	HMI Name	Information	Modify Recipe	Auto Refresh on Startup	•
1		Export1	16 bits	HMI	Length(3), Group(3)	-0223.rcp		 ×.

Export - Variance

Ļ	Export										
Mode	Mode Variance										
No	Usage	Name	Туре	HMI Name	File Name	File Name Length	Controller	Source Path	Auto Refresh on Startup		
1		Export16(1)	16 bits	HMI	\$100	4	Internal Memory	Cil			
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
Modify Recipe	Edit recipe directly for selected file	
File Name	It is the register address of a certain trigger element. Note: The register only could be set to Word.	
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.	
Auto Refresh on Startup	Auto Refresh on Startup function for user could select when execute recipe at first. No matter what the condition set to Trigger or Const, if check auto refresh on start up function then eServer will execute Import or Export recipe at first time.	

12.1.3 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 second, minute or hour.

0 Node	Setting	Condition					
Name	Туре	HMI Name	Detail		Format	Controller	:
Import16(1)	Const	n/a	5s		n/a	n/a	
		Detect Scan Time How long would yo (500ms ~ one day 0 (Hour)	u like on your k ') 0 💽 (Mi	ogging da nute) [5 OK	ata ? 5 🔹 (Secon	⊠ .d)	

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:

Q Node	🗾 Setting	Condition			
Name	Туре	HMI Name	Detail	Format	Controller
Import16(1)	Trigger	HMI	\$0.0	Rising edge	Internal Memory
Export16(1)	Trigger	HMI	\$0.2	Falling edge	Internal Memory

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

Setting Item	Description	Remark
No.	Condition number	Unchangeable
Туре	Sampling type. There are two kinds of options for selection: Const and Trigger. Const: Execute sampling repeatedly in a certain span of time.	

Logging Condition:
Setting Item	Description	Remark
	Trigger: Execute sampling when the trigger conditions are satisfied.	
HMI Name	Name of connecting HMI	
Detail	Register Address and set Const time	
Format	 When the register address is set to Bit, the selectable options are: A. Rising edge: Triggered by rising-edge 	
	B. Falling edge Triggered by falling-edge	
Controller	Connecting controller	Unchangeable

Chapter 13 Recipe Access Example

Before creating testing example, make sure to change the upload and download option (**Options > Environment**) on DOPSoft 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**.

13.1 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.xx** > **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 v1.3								
USB Driver		Model Name	Version					
調査	Reinstall	AE80C16	1.08C					
		AE940	1.08C					
Mode Colection		AE10C16	1.08C					
		AE10C100	1.08C					
		AE10C200	1.08C	=				
	🖞 💽 Ethernet	B10E615	3.0036					
		B07E415	3.0036					
		B07E515	3.0036					
(?) About	Update	B08E515	3.0036	~				
		p.	1					

Start eServer

To start eServer, click Start > Programs > Delta Industrial Automation > HMI > DOP eServer 1.00.xx > eServer.



13.1.1 New Project

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



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.

New	
Logging L (Excel) (1	ogging ODBC) Recipe Access
New Project Name:	Recipe
Location:	C:\Documents and Settings\Tina.Q.Lee\Desktop\Re
	Add to the current project
	OK Cancel

13.1.2 Node

Click conto link HMI screen project file. There are two methods available for selection. Here choose **Select Transfer from Delta-HMI** option to create a new node.

Select Transfer from Delta-HMI

Via Ethernet to search IP address of the connecting HMI.

Transfer - Path
Please select the following 2 methods to
1. 🔘 Select a exist Screen (DOP) file from stroed media.
2. 💿 Tansfer from Delta - HMI
0.0.0.1:12348
OK Cancel

After finishing the auto search, please select IP address is **172.16.190.100**.

IP Address Setu	D		\mathbf{X}
IP Address ✔ Search IP in El	0,0,0	. 1 : 12348	Update
HMI Name	HMI Model	IP	Port
HMI	DOP-B10E615	172.16.190.100	12348
HMI	DOP-807E515	172.16.190.177	12344
		ОК	Cancel

Press OK button to input authorize password, default password is 12345678.

Upload Author	ize	×
Password :	****	
	OK Cancel	

Input correct password then eServer will get HMI data like HMI Name, IP address as below.

(N	Node Setting Condition			ition				
	⊳							
No	Enable	HMI Name		IP	Port	COM1	COM2	COM3
1		HMI		172.16.190.175	12348	Delta DVP PLC	n/a	n/a

13.1.3 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

Setting :

- a. Select Fixed.
- b. Check the check box to use 16-bit recipe as the example.
- c. User-define the File Name as Import16_%H%M%S.
- d. Select Format to RCP.
- e. Set **Destination Path** (destination location) where the imported file is located.
- f. Enable Auto Refresh on Startup

Import									
	Mode	b.	Fixed	~] a.	с.	d.	e.	f.
	No	Usage	Name	Туре	HMI Name	File Name	Format	Destination Path	Auto Refresh on Startup
	1		Import16(1)	16 bits	HMI	Import16_%H%M%S	RCP	C:\Documents and Settings\TINA.Q.LE	
	2		Import32(1)	32 bits	HMI	Import32_%H%M	RCP		

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).

	Q Node	(www. Setting		Condition					
l	a. Name	a.	Туре	ΗM	II Name	Detail		Format	Controller	
	Import16(1)		Const	n/a	b.	5s		n/a	n/a	
	Detect Scan Time How long would you like on your logging data ? (500ms ~ one day) (Hour) (Hour) (Minute) (Second) (OK Cancel									

After completing all the settings on eServer, use the most updated DOPSoft program editing software to open the selected .dps 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	21. Kernel Ver - R 2.74				
Select RCPNO 1	Buffer	9	18	27	
PLC TO HMI HMI TO PLC	Recipe Address 1 2 3	9 8 44	18 16 55	27 24 66	
	PLC Address				

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 (172.16.190.100) 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							.
🕝 Back - 🕥 - 🏂 🔎 Se	earch 🔀 Fo	lders						
Address 🚱 Control Panel							~	🗦 Go
Control Panel	Ġ,	Ń	6	-	4		P	
Switch to Category View	Accessibility Options	Add Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time	
See Also	<u>s</u>	I	d	S	9	Providence	1	
🍓 Windows Update	Display	Folder Options	Fonts	Game Controllers	Intel® Graphics	Internet Options	Keyboard	
 Help and Support 		Ċ			٩.	2	<u>©</u>	
	Mail	Mouse	Network Connections	Phone and Modem	Power Options	Printers and Faxes	Regional and Language	
	3	1	۲	Ø,	Ś	3		
	Scanners and Cameras	Scheduled Tasks	Security Center	Sounds and Audio Devices	Speech	System	Taskbar and Start Menu	
	<u> </u>	6						
	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	? 🛛
General Authentication Advanced	
Connect using:	
Intel(R) PR0/1000 MT Network Con	Configure
This connection uses the following items:	
 Client for Microsoft Networks Client for Microsoft Networks Client Printer Sharing for Microsoft Networks QoS Packet Scheduler Internet Protocol (TCP/IP) 	tworks
Install Uninstall	Properties
Transmission Control Protocol/Internet Protocol wide area network protocol that provides com across diverse interconnected networks.	ol. The default munication
Show icon in notification area when connecters Notify me when this connection has limited or	ed no connectivity
ОК	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.

rnet Protocol (TCP/IP) Pro	automatically if your network supports
Obtain an IP address autom	atically
IP address:	: 172.16.190.1
Subnet mask:	255 . 255 . 255 . Q
Default gateway:	
Obtain DNS server address Ottain DNS server Ottain DNS server	automatically er addresses:
Preferred DNS server:	
Alternate DNS server:	
	Advanced
	OK Cance

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

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

DUP	B • √ s	ystem Settir	ıg ●			S Back	K 🔶 Home
	HMI DHC IP Mass Gate MAC	Name: Recipe P : OFF : 172. : k : 255 2: eway : 0. : 0B: (16.190.100 55.255.0 0.0.0 00:00:00:00	0: 00			
			▼				10
DEC.	INC.	UP	DOWN	LEFT	RIGHT		BACK

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:

-	<mark>د د</mark>	ave)	Run	
ł	File	W	Wizard	pol	Help
:	1 💪		1		0

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

Author				×			
No	Linkage	HMI	Password	ר			
1	Recipe1	HMI	****				
all passwords are the same password under No.1							
			OK Cancel				

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 *icon* will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable the auto refresh on startup, eServer will execute import recipe to destination path. But if disable the auto refresh on startup, eServer will wait for 5 second then the eServer execute import recipe to destination path. After import recipe, user could 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.

8	uthor				×			
	No	Linkage	HMI	Password				
	1	Recipe1	HMI	***				
			еЅетчет					
				Password input fail 確定				
all passwords are the same password under No.1								
	OK Cancel							

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. Select Format as RCP.
- f. Set Destination Path (destination location) where the imported file is located.
- g. Enable Auto Refresh on Startup.

Ļ	Ropert Import										
	Mode	b.	Variance	~	a.	C.	d.	e.		f.	g.
	No	Usage	Name	Туре	HMI Name	File Name	File Name Length	Format	Controller	Destination Path	Auto Refresh on Startup
	1		Import16(1)	16 bits	HMI	\$100	4	RCP	Internal Memory	C:\Documents and Settings\TINA.Q.L	
	2		Import32(1)	32 bits	HMI	None	1	RCP			

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).

	Q Node	🥩 Setting	Condition	b.			
	Name a.	Туре	HMI Name	Detail	Format	Controller	
	Import16(1)	Const	n/a	5s 🛄	n/a	n/a	
Detect Scan Time Image: Comparison of the system How long would you like on your logging data ? (SoOms ~ one day) 0 (Hour) 0 (Minute) 5 (Second) OK Cancel							

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 (172.16.190.100) 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 Too	ls Advanced Help	2
🚱 Back 👻 🕥 🕤 🏂 🔎	Search 🎼 Folders 🛄 🗸	
Address 🔇 Network Connections		🖌 🄁 Go
Network Tasks Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection <td>LAN or High-Speed Internet Local Area Connection Connected, Intel(R) PRC Bridge Connections Create Shortcut Delete Rename Properties</td> <td></td>	LAN or High-Speed Internet Local Area Connection Connected, Intel(R) PRC Bridge Connections Create Shortcut Delete Rename Properties	
	×	

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

- Local General	Area Connec	tion Properties	2 🛛
	Addienteadon	Advanced	
Connec	st using:		
HAN I	ntel(R) PR0/100	0 MT Network Con	Configure
This co	nnection uses th	e following items:	
	Client for Micro File and Printer QoS Packet So Internet Protoc	soft Networks Sharing for Microsoft cheduler ol (TCP/IP)	Networks
Desc	nstall	Uninstall	Properties
Tran wide acro	smission Control area network pross diverse interco	Protocol/Internet Prot otocol that provides c onnected networks.	ocol. The default ommunication
📃 Sho 🔽 Noti	w icon in notifica ify me when this o	tion area when conne connection has limited	ected For 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.

neral	
ou can get IP settings assigned is capability. Otherwise, you nee e appropriate IP settings. O Obtain an IP address autom.	automatically if your network supports d to ask your network administrator for atically
 Use the following IP address 	•
IP address:	172 . 16 . 190 . 1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
 Obtain DNS server address Use the following DNS serve Preferred DNS server: Alternate DNS server: 	automatically er addresses:
	Advanced

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

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

DUP-	• B • √ S	ystem Settir	ig ●			S Back	Home
	HMI DHC IP Masi Gate MAC	Name: Recipe P : OFF : 172. : < : 255.2 way : 0 : 0B: (16 190 100 55 255 0 0 0 0 00: 00: 00: 00): 00			
-	+		▼	•			5
DEC.	INC.	UP	DOWN	LEFT	RIGHT		BACK

After completing all the settings and make sure that the communication is good, use the most updated DOPSoft program editing software to open the selected .dps 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, please trigger the character input element on HMI and enter TINA these four characters at first, then return to eServer, save the file first and then run the recipe data.

ł	File	Ww	Wizard	loc	Help
1		3	1		0,

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

Author				X			
No	Linkage	HMI	Password				
1	Recipe1	HMI	****				
all passwords are the same password under No.1							
OK Cancel							

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 *icon* will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable auto refresh on startup, it will auto import recipe to destination path, but if disable enable auto refresh on startup, please trigger the character input element on HMI and enter TINA these four characters, then wait for 5 second to import recipe to destination path. Please refer to the figure below:

	ASCII-	KEY					10						\times
[TINA												
[1	2	з	4	5	6	7	8	9	0	-	=	ALT
PLC T(Q	w	E	R	т	Y	U	I	0	Р]]	
нмі тс	A	s	D	F	G	н	C J	ĸ	L	;			DEL
—[z	x	С	v	В	N	м	,			N		ENT

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

<mark>≊a,</mark> tina

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.

Author				×					
No	Linkage	HMI	Password						
1	Recipe1	HMI	***						
		eServer							
	Password input fail 確定								
all passwords are the same password under No.1									
OK Cancel									

13.1.4 Setting and Condition - Export

Export – Fixed

Setting :

- a. Press 🛨 to add file name as -0223.rcp of export file.
- b. Select Fixed.
- c. Check the check box to use **16-bit recipe** as the example.
- d. Set **Destination Path** (destination location) where the imported file is located.

Please note: the value of the selected -0223.rcp 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			

e. Enable Auto Refresh on Startup.

Ļ	Export								
Mode	с.	Fixed	*	b.		d.	е.		a.
No	Usage	Name	Туре	HMI Name	Information	Modify Recipe	Auto Refresh on Startup		-
1		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 as Rising edge.

Q Node	setting	Condition	b.	C.	
Name a.	Туре	HMI Name	Detail	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 (172.16.190.100) 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							1	
G Back Image: Search Image: Folders									
Address 🚱 Control Panel							*	🔁 Go	
Control Panel 🔊	ل Accessibility Options	Xdd Hardware	Add or Remov	Administrative Tools	Automatic Updates	BDE Administrator	Date and Time		
See Also	S Display	Folder Options	j Fonts	Game Controllers	Intel® Graphics	Internet Options	达 Keyboard		
Help and Support	لیک 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 Connec	tion Properties:	? 🛛
General	Authentication	Advanced	
Connec	ct using:		
	ntel(R) PRO/100	00 MT Network Con	Configure
This co	nnection uses th	ne following items:	
	Client for MICR File and Printe QoS Packet S Internet Protoc	r Sharing for Microso cheduler col (TCP/IP)	Ift Networks
	nstall	Uninstall	Properties
Tran wide acro:	ismission Control area network pi ss diverse interc	Protocol/Internet Pr rotocol that provides onnected networks.	otocol. The default communication
🗌 Sho 🔽 Noti	w icon in notifica ify me when this	ation area when con connection has limit	nected ed or no connectivity
			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.

Internet Protocol (TCP/IP) Pr	operties 🛛 🛛 🔀
General	
You can get IP settings assigned a this capability. Otherwise, you nee the appropriate IP settings. Obtain an IP address automa O use the following IP address:	automatically if your network supports d to ask your network administrator for atically
IP address:	172.16.190.1
Subnet mask:	255.255.255.0
Default gateway:	12 1 I
 Obtain DNS server address a Use the following DNS serve Preferred DNS server: Alternate DNS server: 	r addresses:
	Advanced OK Cancel

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

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

DUP-	S Back	Home					
	HM DH IP Ma Ga MA	I Name: Recipe CP : OFF : 172. : sk : 255 23 teway : 0, C : 0B: (16.190.100 55.255.0 0.0.0 00:00:00:00): 00			
-	+		▼				3
DEC.	INC.	UP	DOWN	LEFT	RIGHT		BACK

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

🔜 1 - Screen_1					
					<u>^</u>
Select RCPNO ####	Buffer	1234	1234	1234	
*****	\$0.0	Rising Edge	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	
					>
<					>

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.

-	1	Save)	Run	
8	File	W	Wizard	Jool	Help
:		2	*		0

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

٨	uthor				×			
	No	Linkage	HMI	Password				
	1	Recipe1	HMI	****				
	all passwords are the same password under No.1							
	OK Cancel							

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 icon will display on the tool bar at the left-bottom corner. When eServer performs reading, due to enable auto refresh on startup, eServer will auto convert recipe value to -0223.rcp recipe value without trigger \$0.0, but if disable auto refresh on startup, please trigger the maintained button element on HMI. 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:

Delta Soft Simulator ¥2.21.	Kernel Ver - R 2.74					
					,	
Select RCPNO	Buffer	9	18	27		
	Trig	g er \$0.0 Rising Edge	Falling Edge			
	Recipe Address 1	9	18	27		
PLC TO HMI	2 [8	<u>16</u> 55	66		
HMI TO PLC	2					
	PLC Address	0	0	0		
🔜 Delta Soft Simulator ¥2.21	Kernel Ver - R 2.74					
■ Delta Soft Simulator ¥2.21.	Kernel Ver - R 2.74					
Delta Soft Simulator ¥2.21	. Kernel Ver - R 2.74					
Delta Soft Simulator ¥2.21	Kernel Ver - R 2.74	111	222	333		
Delta Soft Simulator V2.21 Select RCPNO	Kernel Ver - R 2.74	111 Rising Edge	222 Falling Edge	333		
Delta Soft Simulator ¥2.21 Select RCPNO	Kemel Ver - R 2.74 Buffer	111 Rising Edge	222 Falling Edge	333		
Delta Soft Simulator V2.21 Select RCPNO	Kernel Ver - R 2.74 Buffer Recipe Address 1 2	111 Rising Edge 111	222 Falling Edge 222 555	<u>333</u> <u>333</u> <u>666</u> €		
Delta Soft Simulator ¥2.21 Select RCPNO	Exempl Ver - R 2.74	111 Rising Edge 1111 444 777	222 Falling Edge	333 333 666 <		
Delta Soft Simulator V2.21 Select RCPNO PLC TO HMI HMI TO PLC	Kernel Ver - R 2.74 Buffer Recipe Address 1 3	111 Rising Edge 111 444	222 Falling Edge 222 555 888	333 333 666 <		
Delta Soft Simulator ¥2.21 Select RCPNO 1 PLC TO HMI HMI TO PLC	Exempl Ver - R 2.74 Buffer Recipe Address 1 2 1 2 1 PLC Address	111 Rising Edge 1111 444 777	222 Falling Edge	333 333 666<		
Delta Soft Simulator ¥2.21 Select RCPNO 1 PLC TO HMI HMI TO PLC	Kernel Ver - R 2.74 Buffer Recipe Address 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	111 Rising Edge 1111 444 7777	222 Falling Edge 222 555 888	333 333 666 <		
Delta Soft Simulator ¥2.21 Select RCPNO 1 PLC TO HMI HMI TO PLC	Kemel Ver - R 2.74 Buffer Recipe Address 1 2 1 PLC Address	111 Rising Edge 1111 444 7777	222 Falling Edge	333 333 666<		

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



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 **\$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 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:\).
- f. Enable Auto Refresh on Startup

ecipe Setup				Save As							? 🕻
🕑 Enable F	Recipe	F	Recipe Ref	Save in:	🍚 Windows XP P	rofessional (C:)	~	3	1 📂		
Address	1@D20			My Recent Documents	2010.03.12 Documents and Program Files Tina	Settings					
	W1	W2	W3	R							
1	111	222	333	Desktop	eServer.ini						
2	444	555	666		RCP.edx						
3	777	888	999		tina.csv						
				My Documents My Computer	tina.csv.xls						
					File name:	tina.csv			*	(Save
				My Network	Save as type:	All Files(*.*)			*	(Cancel

Export									
Mode b. Variance a. c. d. e. f.									
No	Usage	Name	Туре	HMI Name	File Name	File Name Length	Controller	Source Path	Auto Refresh on Startup
1		Export16(1)	16 bits	HMI	\$100	4	Internal Memory	C:)	
2		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 as Rising edge.

Node	:	www. Setting	Condition	b.	c.	
Name	a.	Туре	HMI Name	Detail	Format	Controller
Export16(1)		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 (172.16.190.100) 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 Too	ls Advanced Help	
🚱 Back 🝷 🕥 🕤 🏂 🔎	Search 🍺 Folders 🛄 🗸	
Address 🔕 Network Connections		💌 🔁 Go
Network Tasks Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection Image: Create a new connection <th>LAN or High-Speed Internet Local Area Connection Connected, Intel(R) PRC Bridge Connections Create Shortcut Delete Rename Properties</th> <th></th>	LAN or High-Speed Internet Local Area Connection Connected, Intel(R) PRC Bridge Connections Create Shortcut Delete Rename Properties	
· · · · · · · · · · · · · · · · · · ·	~	

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

Connec	Authentication	Advanced		
119	ntel(R) PRO/100	00 MT Network Con	Configure]
This co	nnection uses th	ne following items:		
	Client for Micro File and Printer QoS Packet S Internet Protoc	osoft Networks r Sharing for Microso cheduler col (TCP/IP)	ft Networks	
	nstall	Uninstall	Properties	j
Tran wide acro	smission Control area network pr ss diverse interco	Protocol/Internet Pr rotocol that provides onnected networks.	otocol. The default communication	
Sho	w icon in notifica fy me when this	ation area when con connection has limit	nected ed or no connectivity	
Sho	w icon in notifica fy me when this	ation area when con connection has limit	nected ed or 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.

neral ou can get IP settings assigned is capability. Otherwise, you nee ie appropriate IP settings. O Obtain an IP address automa	automatically if your network supports ad to ask your network administrator for atically
 Use the following iP address IP address: 	172.16.190.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
 Obtain DNS server address Use the following DNS serve Preferred DNS server: Alternate DNS server: 	automatically er addresses:
	Advanced

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

Setting IP Address in HMI

Enter into the system menu and set IP address to 172.16.190.100. Please see the figure below:

DUP-	OUP-B • ✓ System Setting •							
	HMI DHC IP Mas Gate MAC	Name: Recipe P : OFF : 172. 1 k : 255 25 away : 0 C : 0B: 0	.6.190.100 ;5.255.0 0.0.0 ;0:00:00:00	0: 00				
_	+		▼				5	
DEC.	INC.	UP	DOWN	LEFT	RIGHT		BACK	

After completing all the settings and make sure that the communication is good, use the most updated DOPSoft program editing software to open the selected .dps 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:



Then, compile it and download the recipe data to HMI. After recipe data is downloaded to HMI successfully, trigger the numeric input element (\$100) and input TINA on HMI, then return to eServer, save the file first and then run the recipe data.

-	•				
ł	File	W	Wizard	ool	Help
			🛣 😫		0

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

Tı	anslat	ed	×
[🗹 Tra		
[File Path Name	ОК
		C:\tina.csv	Capcel
	<		🗹 Overwrite All

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.

٨	uthor							
	No	Linkor	TIMI	Decoursed				
	140	Lunkage	riivii	rassword	_			
	1	Recipe1	HMI	****				
	all passwords are the same password 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 *icon* will display on the tool bar at the left-bottom corner.

When eServer performs reading, due to enable auto refresh on startup, eServer will auto convert the recipe to Tina.csv recipe value, but if disable auto refresh on startup, please trigger the character input element (\$100) and input TINA then trigger the maintained button element (\$0.0) 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:

🗮 Delta Soft Simulator ¥2.21. Kernel ¥er - R 2.74	
Select RCPNO 1 Buffer 9 18 27 (2) Trigger Rising edge	
(1) Input "TINA" first Address 1 9 18 27	
РLС ТО НМІ 2 <u>8</u> <u>16</u> <u>24</u>	
3 44 55 66	
HMI TO PLC	
Delta Soft Smulator ¥2.21. Kernel Ver - K 2.74	
Select RCPNO 1 Buffer 111 222 333	
PLC TO HMI 2 444 555 666	
3 777 888 999	
HMI TO PLC	
PLC Address	

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


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Appendix A Upload/Download via Ethernet

A.1 Environment Settings

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

<u>O</u> pt	ions <u>W</u> indow <u>H</u> elp				
	Configuration				
	Communication Setting				
	History Buffer Setup				
	Password setting				
	<u>T</u> ag Table				
	Print Type <u>s</u> etting				
	Sound Setting				
	Recipe				
	32 bits recipe				
	<u>P</u> icture Bank				
	<u>T</u> ext Bank				
	Submacro				
	Initial Macro				
	Background Macro				
	<u>C</u> lock Macro				
	Environment				

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

Environment 🛛 🗙
System Path C:\Program Files\Delta Industrial Automation\DOPSoft 1.00.07\ScrEditApp Output Path C:\Program Files\Delta Industrial Automation\DOPSoft 1.00.07\ScrEditApp\out
Options ToolBars/Windows Text Bar Difference Bitmap Bar Zoom Bar Zoom Bar Layout Bar Property Table Output Bar Output Bar
Reinstall HMI USB Driver Uninstall HMI USB Driver

A.2 Communication Setting

If the users choose to use DHCP mode, please into **Options** > **Communication Setting** > **Ethernet** > **LocalHost** to enable **Obtain an IP address automatically**.

ommunication Setting				E
		Commu	nication Setting	
COM1	Device LocalHos	t SMTP		
	Localhost	Verwrite IP		
COM2		✓ Obtain an IP address autom		
сомз		HMI HMI IP Address	172 . 16 . 190 . 110	
Ethernet		Subnet Mask Gateway IP	255 255 255 0 0 0 0 0 0	
		upload/download port Modbus TCP Server Port	12346 \$ 502 \$	
	Application (eF	lemote/eServer)		
	O	✓ Enable Password	12345678	
		Scan Time	100 😭 (ms)	
		Port	12348	
Comm. Interrupt	3 🛟 times	hen ignore		
				OK Cancel

If the users choose to use user-defined IP address, please into **Options** > **Communication Settings** > **Ethernet** > **LocalHost** and set HMI IP Address then ensure that the domain name is the same as the IP address of the personal computer.

ommunication Settin	g				(
		Commu	uication Setting		
COM1	Device LocalHo	st SMTP			
COM2	Localhost	✓ Overwrite IP			
		🗌 Obtain an IP address autom HMI	atically HMI		
СОМЗ		HMI IP Address	172 . 16 . 190 . 11		
Ethernet		Subnet Mask Gateway IP	255 . 255 . 255 . 0 0 . 0 . 0 . 0		
		upload/download port	12346		
	Application (e	Remote/eServer)	502		
	D	🔽 Enable Password	12345678		
		Scan Time	100 🔅 (ms)		
		Port	12348		
				<u> </u>	
Comm. Interrupt	3 💽 times	then ignore			
				OK Cancel	

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.



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	ct using:		_
	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	soft Networks Sharing for Microsol cheduler ol (TCP/IP)	it Networks
	nstall	Uninstall	Properties
-Desci Tran wide acros	ription ismission Control i area network pri ss diverse interco	Protocol/Internet Pro otocol that provides onnected networks.	otocol. The default communication
☐ Sho ☑ Noti	w icon in notifica ify me when this (ition area when conr connection has limite	ected d or no connectivity
			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.

Internet Protocol (TCP/IP) P	roperties 🛛 🛜 🔀
General	
You can get IP settings assigned this capability. Otherwise, you nee the appropriate IP settings. Obtain an IP address autom O Use the following IP address	automatically if your network supports ed to ask your network administrator for atically s:
IP address:	172 . 16 . 190 . 1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Obtain DNS server address Obtain DNS server DNS server	automatically er addresses:
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.

A.3 Compile and Upload / Download All Data

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

<u>T</u> oo	ls <u>O</u> ptions <u>W</u> indow	<u>H</u> elp
	Compile	Ctrl+F7
<u>₩</u>	Rebuild All	
-	Download All Data	Ctrl+F8
	Upload all Data	
Q	Download Screen	Ctrl+F9
	Upload recipe	
	Download Recipe	
	Download Logic Data	
	Upload Logic Data	
<u>.</u>	On-line Simulation	Ctrl+F4
_	Off Line Simulation	Ctrl+F5
	Edit Logic Data	
	Update <u>F</u> irmware	
	Get Firmware Informa	tion
	Reset HMI	
<u>T</u> ool	ls <u>Options W</u> indow	<u>H</u> elp
<u>T</u> ool	ls <u>Options W</u> indow Compile	<u>H</u> elp Ctrl+F7
<u>T</u> ool	ls <u>Options W</u> indow Compile Rebuild All	<u>H</u> elp Ctrl+F7
<u>T</u> ool	ls <u>Options W</u> indow Compile Rebuild All Download All Data	Help Ctrl+F7 Ctrl+F8
	ls <u>Options Window</u> Compile Rebuild All Download All Data Upload all Data	Help Ctrl+F7 Ctrl+F8
	ls Options Window Compile Rebuild All Download All Data Upload all Data Download Screen	Help Ctrl+F7 Ctrl+F8 Ctrl+F9
	ls Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe	Help Ctrl+F7 Ctrl+F8 Ctrl+F9
	ls Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe	Help Ctrl+F7 Ctrl+F8 Ctrl+F9
	S Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe Download Logic Data	Help Ctrl+F7 Ctrl+F8 Ctrl+F9
	ls Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe Download Logic Data	Help Ctrl+F7 Ctrl+F8 Ctrl+F9
	Is Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe Download Logic Data Upload Logic Data On-line Simulation	Help Ctrl+F7 Ctrl+F8 Ctrl+F9 Ctrl+F9
	S Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe Download Logic Data Upload Logic Data On-line Simulation Off Line Simulation	Help Ctrl+F7 Ctrl+F8 Ctrl+F9 Ctrl+F9 Ctrl+F4 Ctrl+F5
	Options Window Compile Rebuild All Rebuild All Intervention Download All Data Intervention Upload all Data Intervention Download Recipe Intervention Download Logic Data Intervention On-line Simulation Off Line Simulation Edit Logic Data Intervention	Help Ctrl+F7 Ctrl+F8 Ctrl+F9 Ctrl+F9 Ctrl+F4 Ctrl+F5
	Is Options Window Compile Rebuild All Download All Data Upload all Data Download Screen Upload recipe Download Recipe Download Logic Data Upload Logic Data Upload Logic Data On-line Simulation Off Line Simulation Edit Logic Data	Help Ctrl+F7 Ctrl+F8 Ctrl+F9 Ctrl+F9 Ctrl+F4 Ctrl+F5
	Options Window Compile Rebuild All Download All Data Data Download All Data Data Download Screen Upload recipe Download Recipe Download Logic Data Upload Logic Data On-line Simulation Off Line Simulation Edit Logic Data Update Firmware Get Firmware Information	Help Ctrl+F7 Ctrl+F8 Ctrl+F9 Ctrl+F4 Ctrl+F5

Then, the following dialog box will appear.

Destination			
Static IP	0.0.0.0	: 12346 HMI Finding	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.

Destination				×
Static IP	0.0.0.0	: 12346]	
🗹 Auto Seac	h			Refresh
HMI	Model type	Source IP Ad	Port	
HMI	DOP-B10E615	172.16.190.100	12346	
	Start	Close		

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