

Demo Project for Historical Data with Schedule Backup

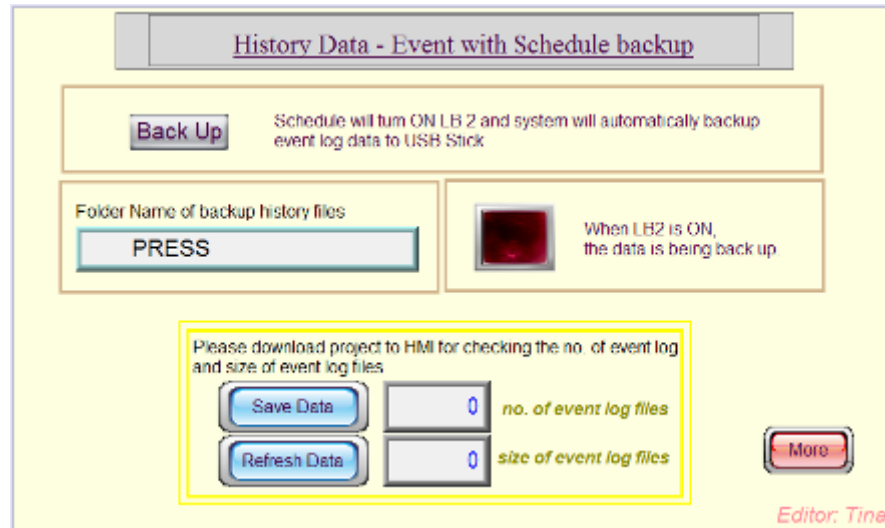
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1. Overview and Operation

[Overview]

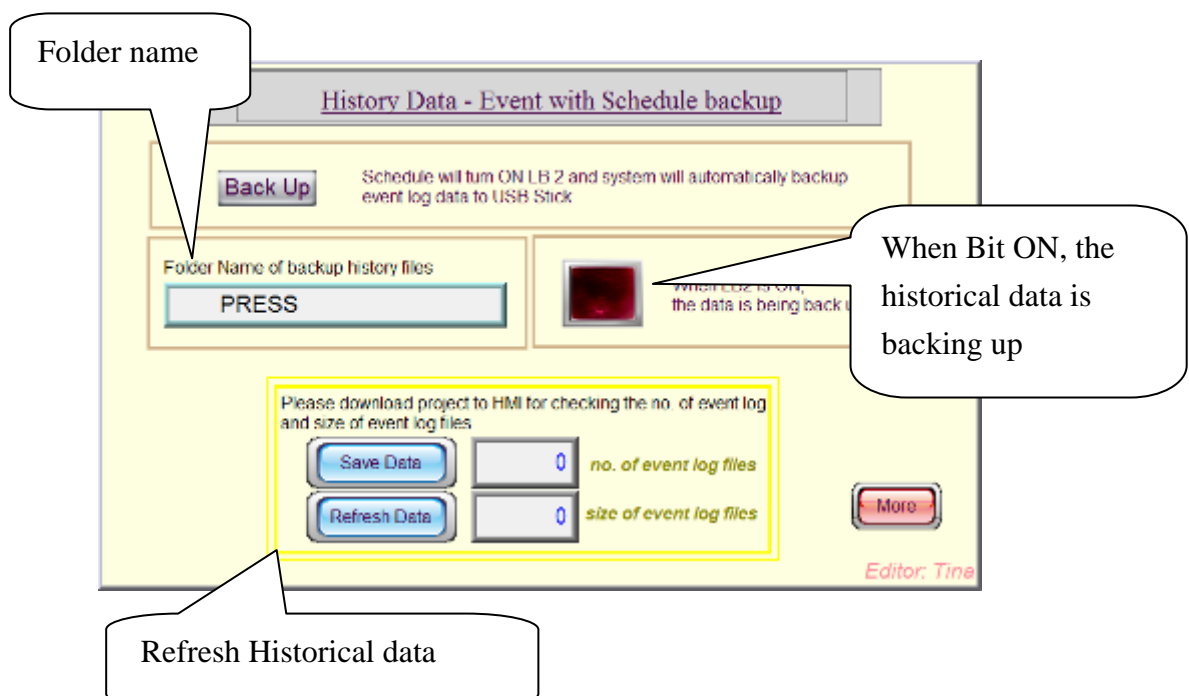
This demo project is using Scheduler feature to auto backup historical files at designated time.



[Operation]

In this demo project, the event log files are auto. saved at 14:00 and data sampling files are saved at 14:05. Before saving the files, users can write the folder name of backup history files to SD or USB disk.

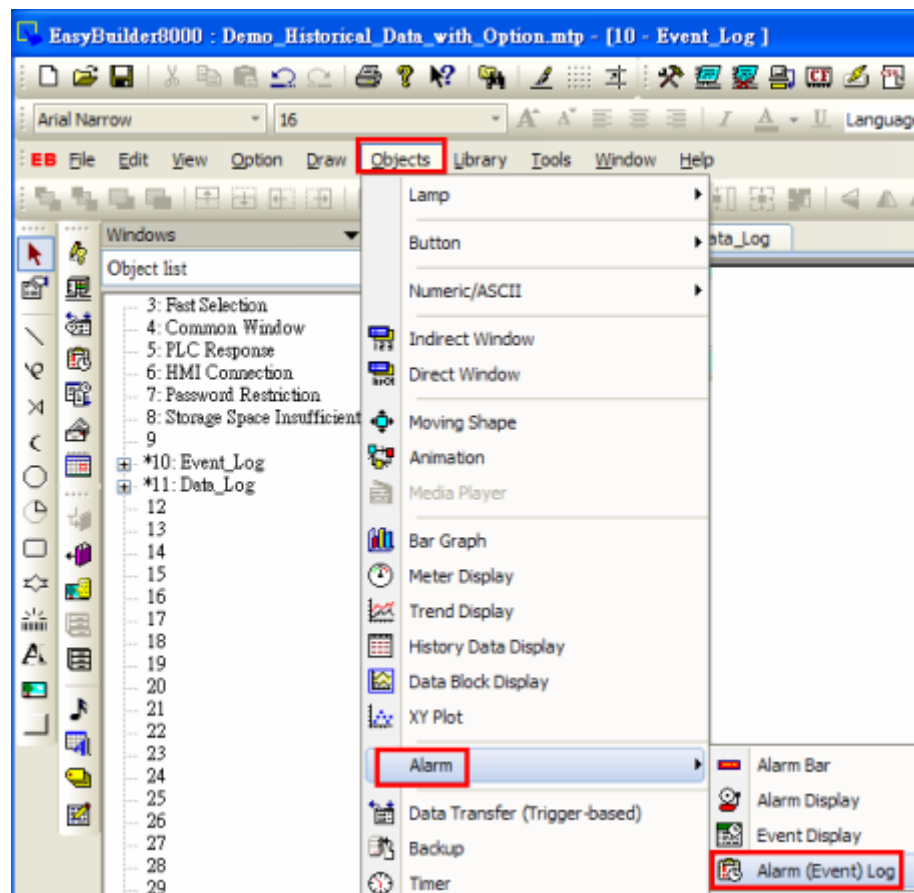
The saved data and refreshed data can not be activated in off-line simulation, please download to HMI for display.



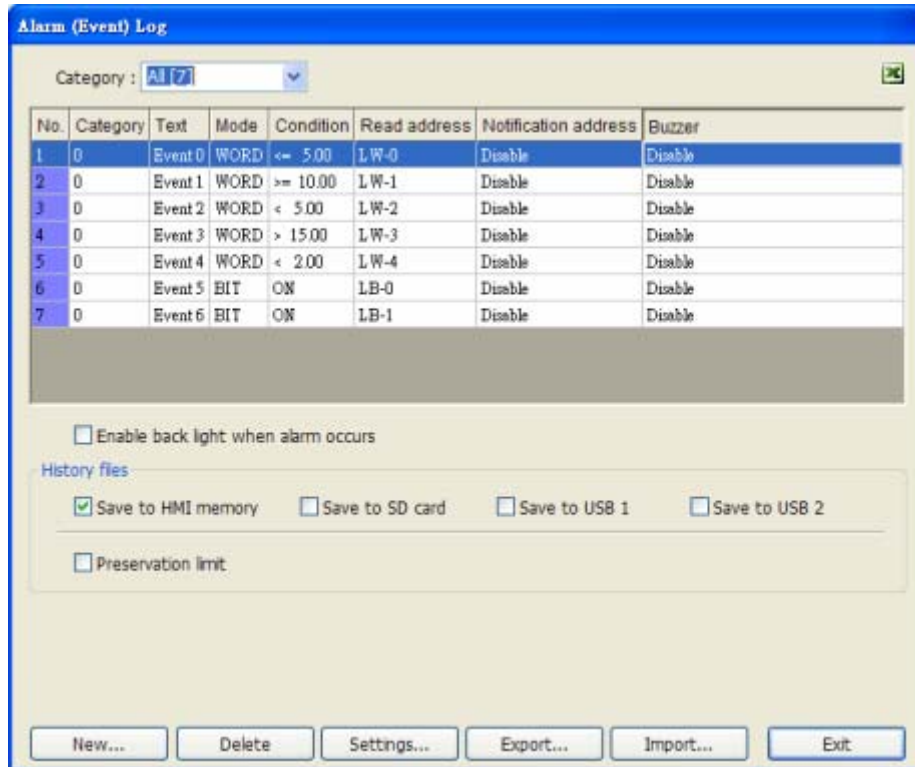
2. Setting up the screen

Setting the Alarm (Event) log and Data Sampling first and then create the Scheduler.

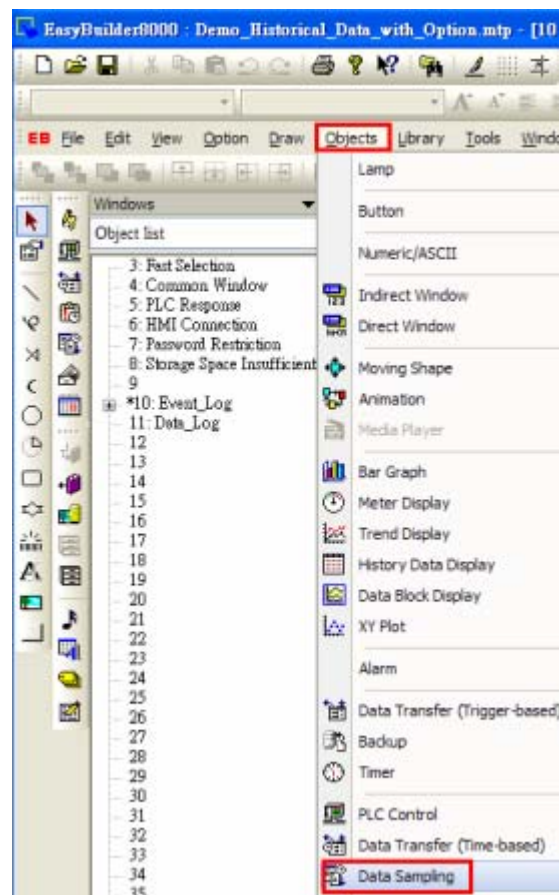
1. In the Objects area, click “Alarm (Event) Log” icon.



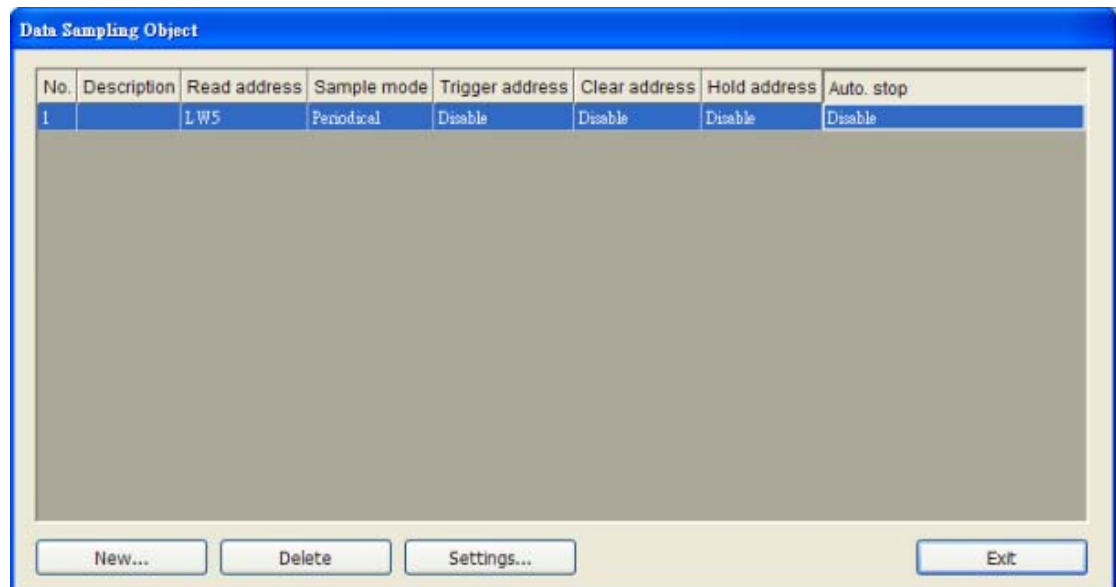
The Alarm (Event) Log table appears as below. This project is setting 7 events.



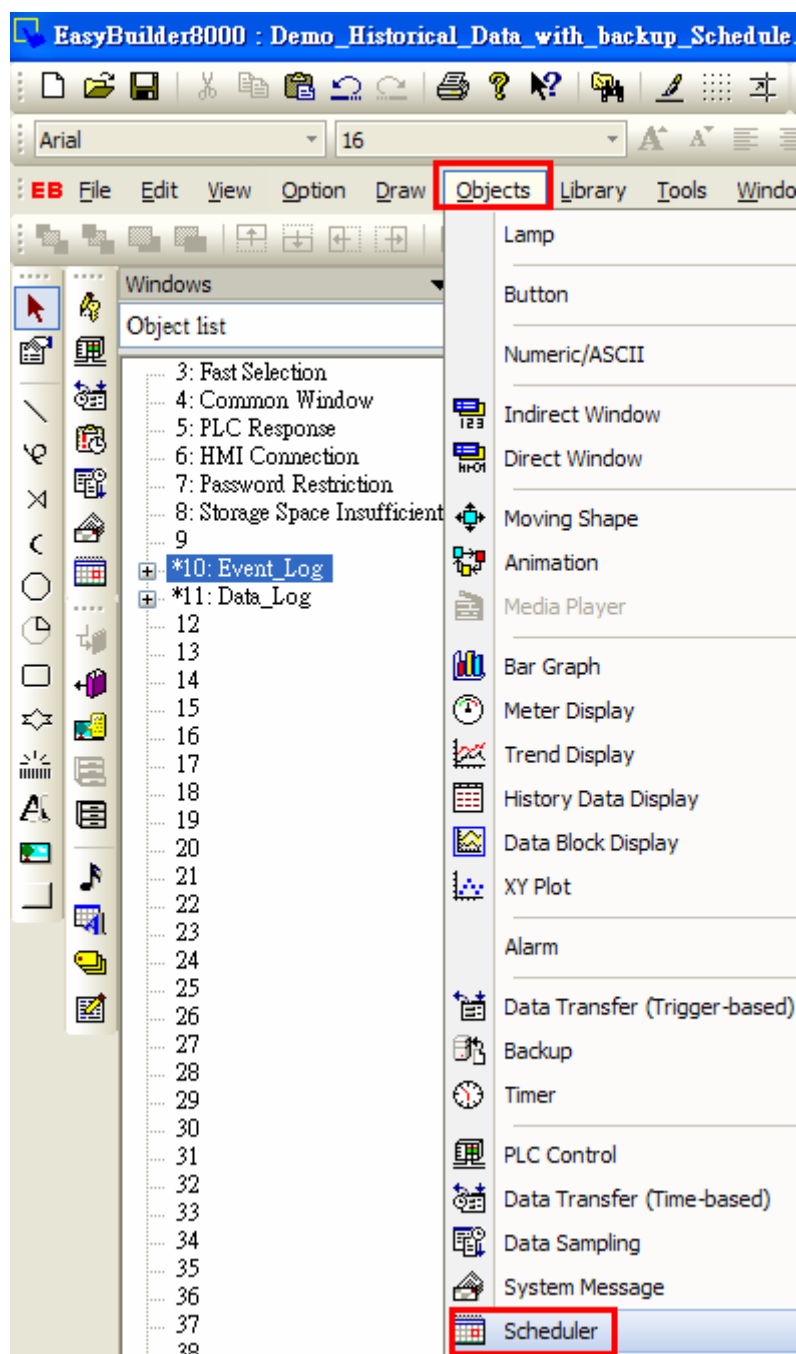
- In the Objects area, click "Data Sampling" icon.



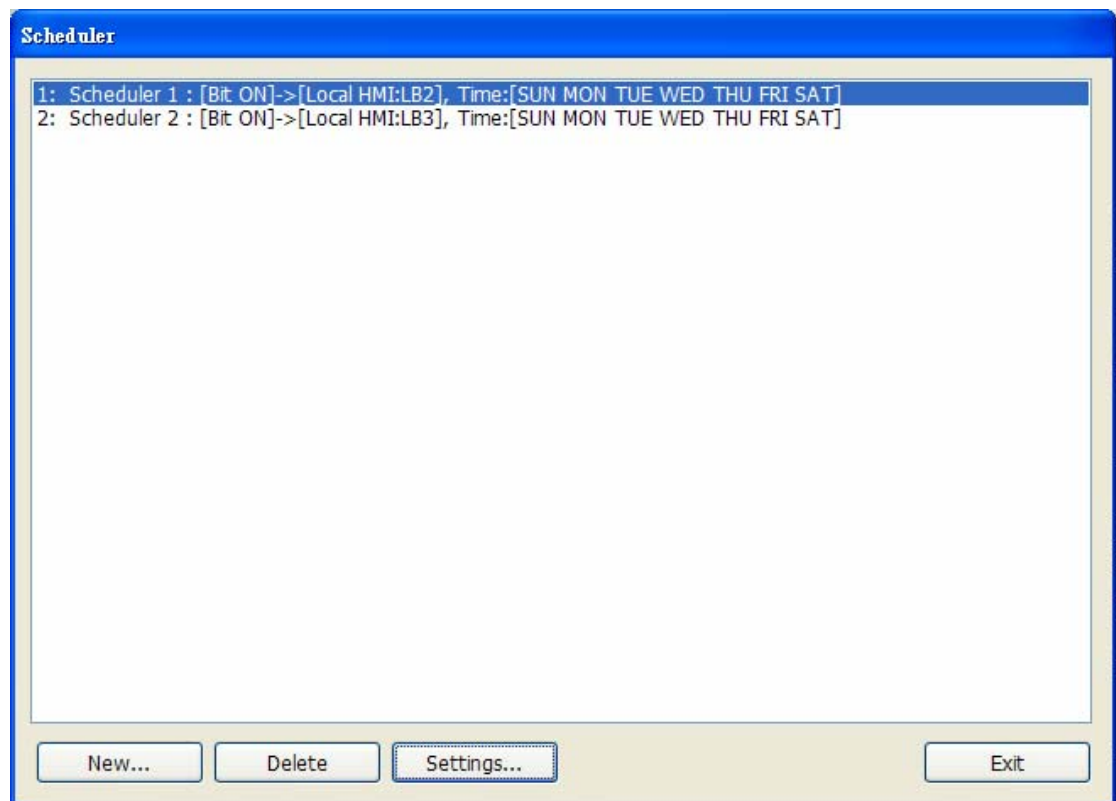
The Data sampling dialogue box appears as below.



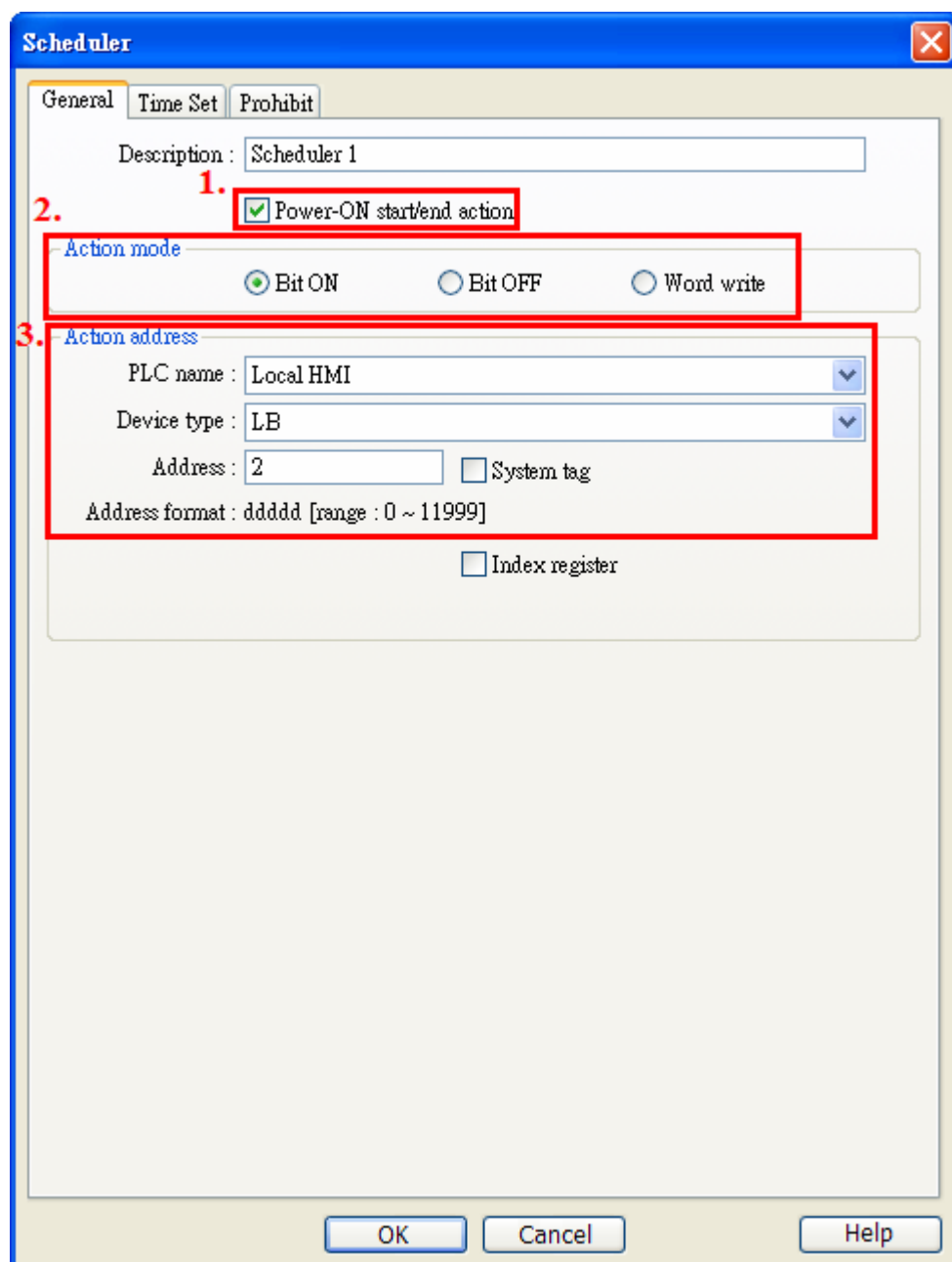
3. Create a Scheduler in the Objects area.



The Scheduler dialogue box appears as below.



- Click Settings and General of Scheduler dialogue box that appears as below.



Step 1. Enable [Power-ON start /end action]

Step 2. Check [Bit ON] in [Action mode]

Step 3. Set LB 2 in [Action address]

- Select [Time Set] of Scheduler

Scheduler

General Time Set Prohibit

1. ☒ Constant ☐ Address

2. ☐ Setting on individual day

Start

14 0 0

☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

End

☒ Enable termination action

14 3 0

OK Cancel Help

Step 1. Check [Constant]

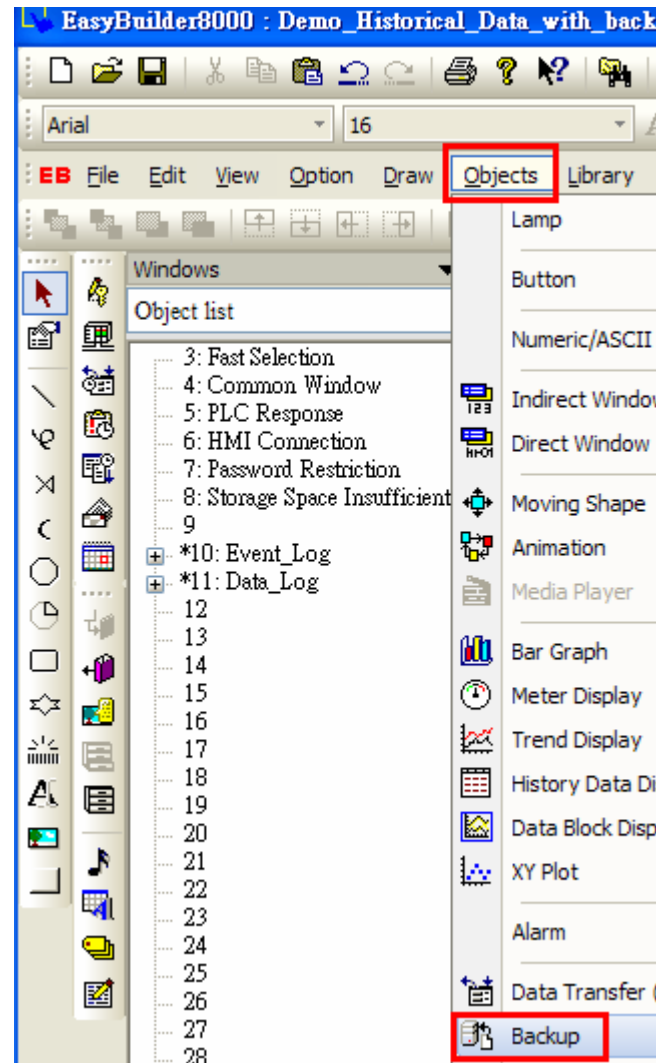
Step 2. **Don't** select [Setting on individual day]. In [Start], adjust time as 14:00:00 and select all days from Sunday to Saturday.

In [End], select [Enable termination action] and adjust time as 14:03:00.

Create Scheduler 2 in the same steps as Scheduler 1 but the [Action address] is LB3 and In [Start], adjust time as 14:05:00 and select Sunday to Saturday.

In [End], select [Enable termination action] and adjust time as 14:08:00.

4. Create a Backup object in Objects area.



The Backup Object dialogue box appears as below.

The screenshot shows the 'Backup Object's Properties' dialog box with the following settings highlighted by numbered red boxes:

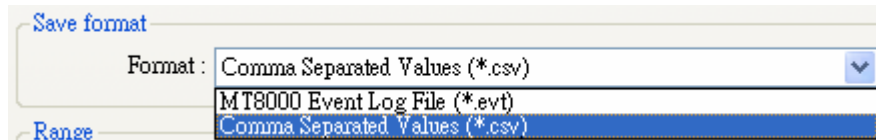
- 1.** Source: ☒ Historical event log
- 2.** Backup position: ☒ USB 1
- 3.** Save format: Comma Separated Values (*.csv)
- 4.** Range: Start: ☒ Today, Within: All
- 5.** Attribute: Mode: External trigger, Trigger mode: OFF->ON
- 6.** Trigger address: PLC name: Local HMI, Device type: LB, Address: 2

Additional visible settings include: Description (empty), Security (selected), Shape (selected), Label (selected), Profile (selected), RW (selected), RW_A (selected), Historical data log (selected), Note (Use LW9032~9039 to change the backup folder name. Note: Use [Remote printer/backup server] to store data to a remote PC. Enable the server in [System Parameter][Printer/Backup Server] settings.), Format (Comma Separated Values (*.csv)), Start (Today), Yesterday, Within (All), Trigger mode (OFF->ON), PLC name (Local HMI), Device type (LB), Address (2), System tag (unchecked), Address format (dddd [range: 0 ~ 11999]), Index register (unchecked), OK, Cancel, and Help buttons.

Step 1. Check [Historical event log]

Step 2. Select [USB1] for backup position

Step 3. Select [Comma Separated Values] for backing up the data to csv file or you can select evt format.



Step 4. Select All for the range of time period

Step 5. and 6

Set LB2 in [Trigger address] and select [External trigger]/ [OFF->ON] in Attribute.

In window 11 it is backing up the historical data log, for the back up object, select [Historical data log] in [Source] and LB3 in [Trigger address] as illustration below.

Backup Object's Properties

General Security Shape Label Profile

Description : |

Source

☐ RW ☐ RW_A ☐ Historical event log ☒ Historical data log

Data Sampling object index : 0

Backup position

☒ USB 1 ☐ USB 2 ☐ Remote printer/backup server

Note : Use LW9032~9039 to change the backup folder name.
 Note : Use [Remote printer/backup server] to store data to a remote PC. Enable the server in [System Parameter][Printer/Backup Server] settings.

Save format

Format : Comma Separated Values (*.csv)

Range

Start : ☒ Today ☐ Yesterday

Within : All

Attribute

Mode : External trigger Trigger mode : OFF->ON

Trigger address

PLC name : Local HMI

Device type : LB

Address : 3 ☐ System tag

Address format : ddddd [range : 0 ~ 11999]

☐ Index register

OK Cancel Help

3. Addresses

The addresses used in this demo project are listed below. Please change these addresses according to your system.

Addresses		Object's ID	Detail
Alarm (Event) Log		Window 10	
Word	LW0	SW_0	Trigger event 0
	LW1	SW_1	Trigger event 1
	LW2	SW_2	Trigger event 2

	LW3	SW_3	Trigger event 3
	LW4	SW_4	Trigger event 4
Bit	LB0	SB_0	Trigger event 5
	LB1	SB_1	Trigger event 6
	LB2	BL_0	Action address of scheduler
System reserved address	LB9024	SB_2	refresh event log information
	LW9060	NE_0	no. of event log files
	LW9061	NE_1	size of event log files
	LW9032	AE_0	Folder name of backup files
Backup		BU_0	Backup object settings
Data Sampling		Window 11	
Bit	LB3	BL_1	Action address of scheduler
Word	LW5~LW10	SW_0~SW_5	Data sampling reading addresses
System reserved address	LB9027	SB_0	Refresh data sampling information
	LW9063	NE_0	No. of data sampling files
	LW9064	NE_1	Size of data sampling files
	LW9032	AE_0	Folder name of backup files
Backup		BU_0	Backup object settings