

# Demo Project of Event Display with History Mode

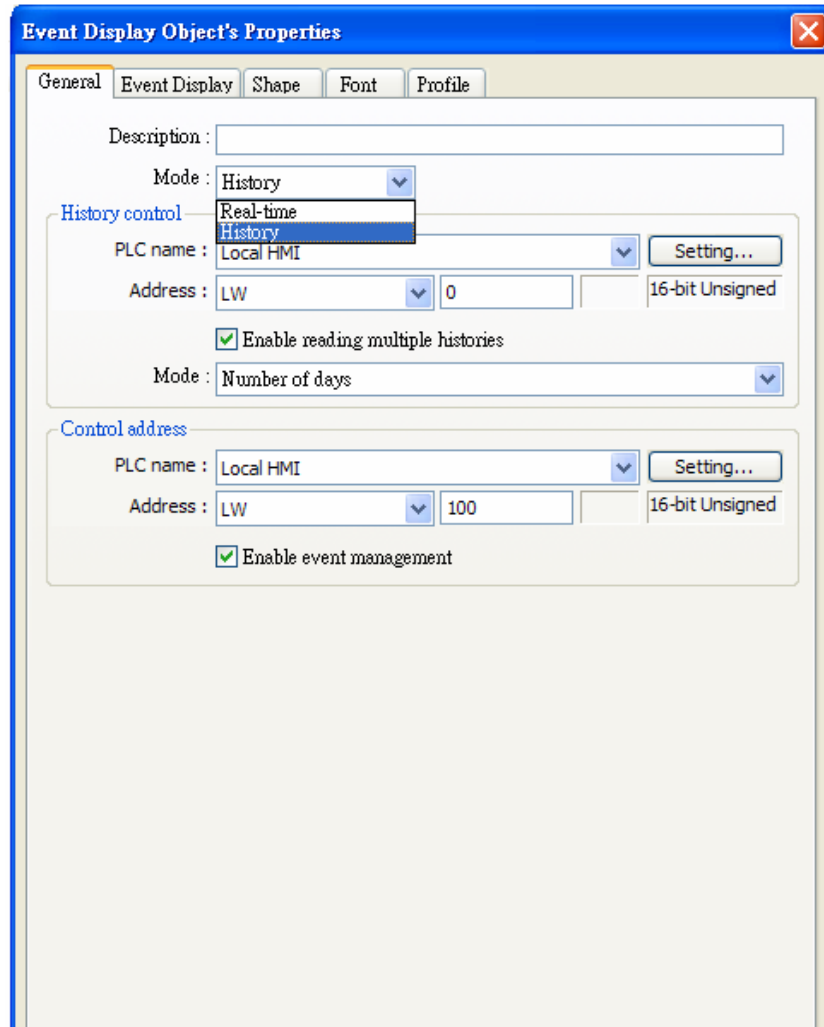
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## 1. Overview and Operation

### Overview

This demo project will introduce users how to use **[Event display]** with **[History]** mode to display the triggered historical events.











The event log files are stored in **EB8000\HMI\_memory\eventlog**.

	EL_20100619	1 KB	EVT
	EL_20100618	1 KB	EVT
	EL_20100616	1 KB	EVT
	EL_20100615	1 KB	EVT
	EL_20100614	1 KB	EVT
	EL_20100613	1 KB	EVT
	EL_20100612	1 KB	EVT
	EL_20100610	1 KB	EVT

## Operation

**[History Control address]** means to open the first historical event log file. The data will be numbered in reverse order which means the newest data will be numbered No. 0 and the earlier be No. 1~. Input “0” to open No. 0 data and “1” to open No. 1 and so on.

 EL_20100619	No.0	1 KB	EVT
 EL_20100618	No.1	1 KB	EVT
 EL_20100616	No.2	1 KB	EVT
 EL_20100615	No.3	1 KB	EVT
 EL_20100614	No.4	1 KB	EVT
 EL_20100613	No.5	1 KB	EVT
 EL_20100612	No.6	1 KB	EVT
 EL_20100610	No.7	1 KB	EVT

**[Event Control address]** allows users to select which confirmed or recovered event to be hidden or displayed.

- A. Set Address number “0” → Display all events.
- B. Set Address number “1” → Hide the confirmed events.
- C. Set Address number “2” → Hide the recovered events.
- D. Set Address number “3” → Hide the confirmed and recovered events.

## 1. Number of Days Mode

**[Number of Days]** means to start from first (newest) historical event log to days before (the start day included). For illustration below, input “3” as shown, the displayed days of events should be 20100619~20100617. Since in this case there's no data in 20100617, the displayed days of events will be 20100619 and 20100618.

Event Display with History Mode - Number of Days Mode

09:21:40	06/19/10	Even.4
09:21:38	06/19/10	Even.3
09:21:36	06/19/10	Even.2
09:21:35	06/19/10	Even.2
09:21:34	06/19/10	Even.1
09:21:32	06/19/10	Even.1
09:20:35	06/19/10	Even.1
09:20:34	06/19/10	Even.1
09:23:41	06/18/10	Even.4
09:23:37	06/18/10	Even.4
09:23:37	06/18/10	Even.3
09:23:36	06/18/10	Even.2
09:23:34	06/18/10	Even.1

History Control:

0

Number of days:

3

Event Control:

1

Next Mode

Fast Sel

If users input "4" for [Number of Days], the displayed days of events will be 20100619~20100616.

Event Display with History Mode - Number of Days Mode

09:21:40	06/19/10	Even.4
09:21:38	06/19/10	Even.3
09:21:36	06/19/10	Even.2
09:21:35	06/19/10	Even.2
09:21:34	06/19/10	Even.1
09:21:32	06/19/10	Even.1
09:20:35	06/19/10	Even.1
09:20:34	06/19/10	Even.1
09:23:41	06/18/10	Even.4
09:23:37	06/18/10	Even.4
09:23:37	06/18/10	Even.3
09:23:36	06/18/10	Even.2
09:23:34	06/18/10	Even.1
09:24:10	06/16/10	Even.4
09:24:09	06/16/10	Even.1
09:24:00	06/16/10	Even.2

History Control:

0

Number of days:

4

Event Control:









1

Next Mode

Fast Sel

## 2. Index of the Last History Mode

[Index of Last History] means to designate the end of the display. If input “2” for [History Control] and “6” for [Index of Last History], the events displayed will start from No. 2 and end at No.6.

 EL_20100619	No.0	1 KB	EVT
 EL_20100618	No.1	1 KB	EVT
 EL_20100616	No.2	1 KB	EVT
 EL_20100615	No.3	1 KB	EVT
 EL_20100614	No.4	1 KB	EVT
 EL_20100613	No.5	1 KB	EVT
 EL_20100612	No.6	1 KB	EVT
 EL_20100610	No.7	1 KB	EVT

Event Display with History Mode - Index of Last History Mode

09:24:07	06/16/10	Even.1
09:24:33	06/15/10	Even.4
09:24:31	06/15/10	Even.3
09:24:31	06/15/10	Even.2
09:24:31	06/15/10	Even.2
09:24:30	06/15/10	Even.1
09:24:29	06/15/10	Even.1
09:28:17	06/14/10	Even.4
09:28:16	06/14/10	Even.2
09:28:14	06/14/10	Even.2
09:28:13	06/14/10	Even.3
09:28:12	06/14/10	Even.1
09:28:39	06/13/10	Even.4
09:28:37	06/13/10	Even.4
09:28:37	06/13/10	Even.3
09:28:37	06/13/10	Even.2

History Control:

Index of last history:

Event Control:

If users input “3” for [History Control] and “7” for [Index of Last History], the events displayed will start from No. 3 and end at No. 7.

Event Display with History Mode - Index of Last History Mode

09:24:29	06/15/10	Even. 1
09:28:19	06/14/10	Even. 3
09:28:17	06/14/10	Even. 4
09:28:14	06/14/10	Even. 2
09:28:13	06/14/10	Even. 3
09:28:12	06/14/10	Even. 1
09:28:38	06/13/10	Even. 3
09:28:37	06/13/10	Even. 4
09:28:37	06/13/10	Even. 3
09:28:37	06/13/10	Even. 2
09:29:03	06/12/10	Even. 4
09:29:01	06/12/10	Even. 3
09:29:00	06/12/10	Even. 2
09:28:59	06/12/10	Even. 3
09:28:59	06/12/10	Even. 1
09:28:26	06/10/10	Even. 1

History Control: 3

Index of last history: 7

Event Control: 2

Back

Fast Sel

## 2. Setting Up the Screen

1. When adding a **[New Event Display Object]**, there are 3 steps for setting in **[General]** tab.

**[Number of days mode]**

**New Event Display Object**

General | Event Display | Shape | Font

Description :

1. Mode : History

History control

2. PLC name : Local HMI

Address : LW 100 16-bit Unsigned

☒ Enable reading multiple histories

Mode : Number of days

Control address

3. PLC name : Local HMI

Address : LW 150 16-bit Unsigned

☒ Enable event management

Step1. Set the mode to be **[History]**.

Step2. Set the Address to be **[LW100]**, and the mode to be **[Number of days]**.

Step3. Set **[Control Address]** to be **[LW150]**.

\*The addresses can be specified by users.



**[Index of the last history mode]**

**Event Display Object's Properties**

General | Event Display | Shape | Font | Profile

Description : |

1. Mode : History

**History control**

2. PLC name : Local HMI | Setting...  
Address : LW 200 | 16-bit Unsigned  
☒ Enable reading multiple histories  
Mode : Index of the last history

**Control address**

3. PLC name : Local HMI | Setting...  
Address : LW 250 | 16-bit Unsigned  
☒ Enable event management

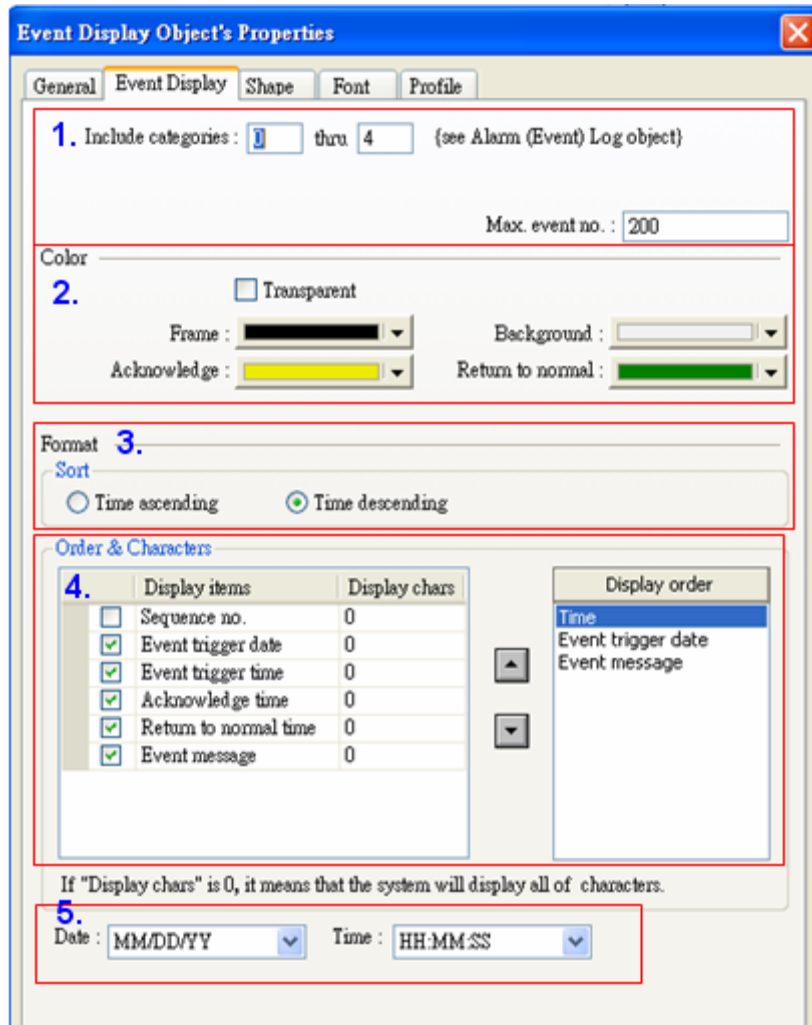
Step1. Set the mode to be **[History]**.

Step2. Set the address to be **[LW200]** and mode **[Index of the last history]**.

Step3. Set **[Control Address]** to be **[LW250]**.

\*The addresses can be specified by users.

2. There are 5 steps in setting the properties of **[Event display]** tab.



The screenshot shows the 'Event Display Object's Properties' dialog box with the 'Event Display' tab selected. Five steps are highlighted in red boxes:

- 1.** Include categories :  thru  (see Alarm (Event) Log object)
- 2.** Color settings: ☐ Transparent, Frame: , Background: , Acknowledge: , Return to normal: .
- 3.** Format ☐ Sort: ☐ Time ascending, ☒ Time descending.
- 4.** Order & Characters table:

Display items	Display chars
<input type="checkbox"/> Sequence no.	0
<input checked="" type="checkbox"/> Event trigger date	0
<input checked="" type="checkbox"/> Event trigger time	0
<input checked="" type="checkbox"/> Acknowledge time	0
<input checked="" type="checkbox"/> Return to normal time	0
<input checked="" type="checkbox"/> Event message	0
- 5.** Date: , Time: .

If "Display chars" is 0, it means that the system will display all of characters.

Step1. Set the display range. (See Alarm (Event) Log object)

Step2. Set the display color.

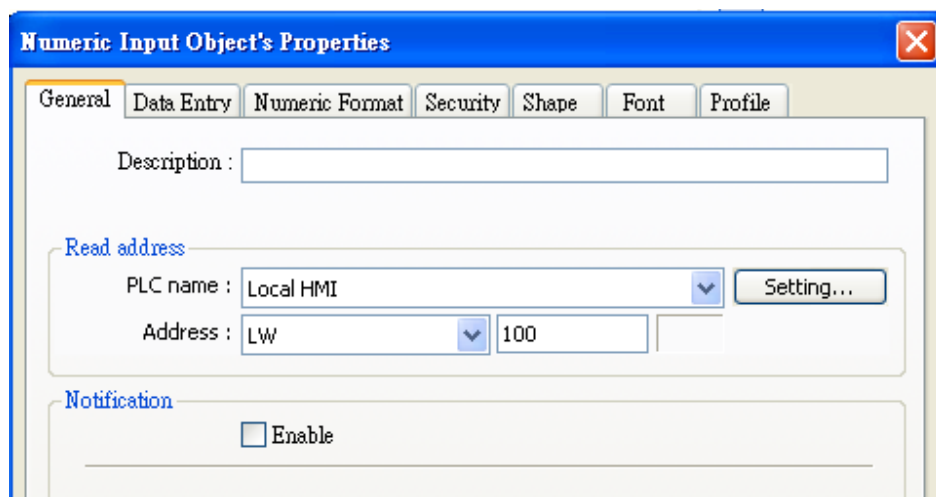
Step3. Sort the events in sequence.

Step4. Tick the items to be displayed. (Event trigger date or time, Acknowledge time and Return to normal time must be chosen, since [Event Control] only works in this way.)

Step5. Set the format of date and time.

3. Create three **[Numeric Input]** Objects for [History Control], [Number of days] / [Index of the last history] and [Control address].

History Control:



**Numeric Input Object's Properties**

General Data Entry Numeric Format Security Shape Font Profile

Description :

**Read address**

PLC name : Local HMI

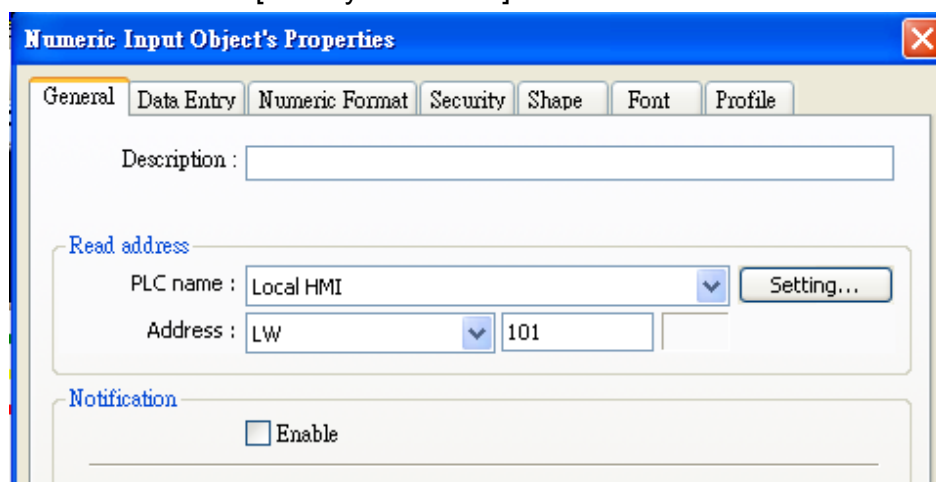
Address : LW

**Notification**

☐ Enable

Number of days / Index of the last history:

\*The address should be [History Control+1]



**Numeric Input Object's Properties**

General Data Entry Numeric Format Security Shape Font Profile

Description :

**Read address**

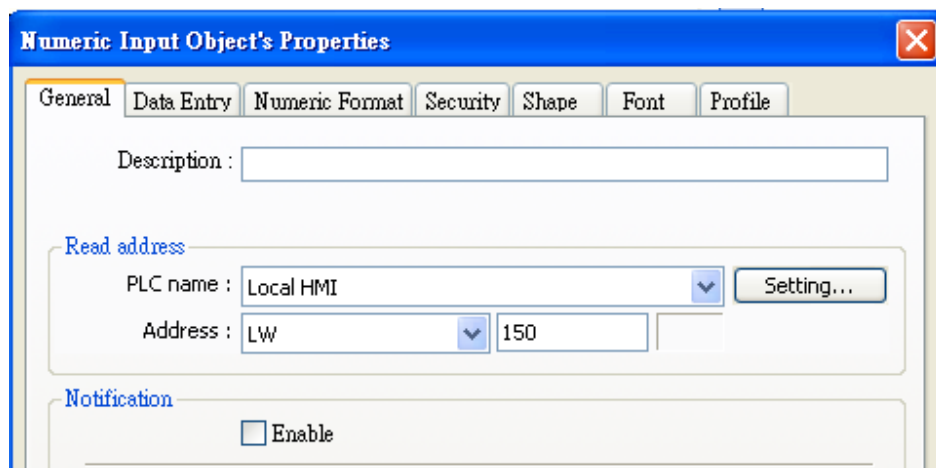
PLC name : Local HMI

Address : LW

**Notification**

☐ Enable

Control address:



**Numeric Input Object's Properties**

General Data Entry Numeric Format Security Shape Font Profile

Description :

**Read address**

PLC name : Local HMI

Address : LW

**Notification**

☐ Enable

### 3. Addresses

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

Object	Address	Object ID	Description
<b>Window 10</b>			
Event display	LW-100, LW-150	ED_0	Event display History mode
Numeric input	LW-100	NE_0	History control address
	LW-101	NE_1	Number of days address
	LW-150	NE_2	Event control address
<b>Window 11</b>			
Event display	LW-200, LW-250	ED_0	Event display History mode
Numeric input	LW-200	NE_0	History control address
	LW-201	NE_1	Index of the last history address
	LW-250	NE_2	Event control address