

WEINTEK LABS., INC.

Data Log - Customized File Handling

Demo Project

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1. Overview and Operation

Overview

This demo project introduces how to use Customized File Handling feature to customize naming and management of data sampling files. This feature provides the following two ways to manage the files:

- Automatic mode: A new file will be created when the file name is changed.
- Trigger mode: A new file will be created when the number of data sampling records reaches the specified "Max. data records in a file", or when the status of a designated Bit address meets the specified condition.

This demo project introduces trigger mode.

Operation

Enter the file name in [File name] field and then click [Create] button. A new data sampling file will be created. Or, name the file using the provided syntax. A data sampling file will be created when the number of records reaches 30 records (in this demo project).

Data Log - Customized File Handling

Separate data log file as you wish

File index

20141217132710

TEST

%Y%m%d%H%M%S

Create

File name (Dynamic format)

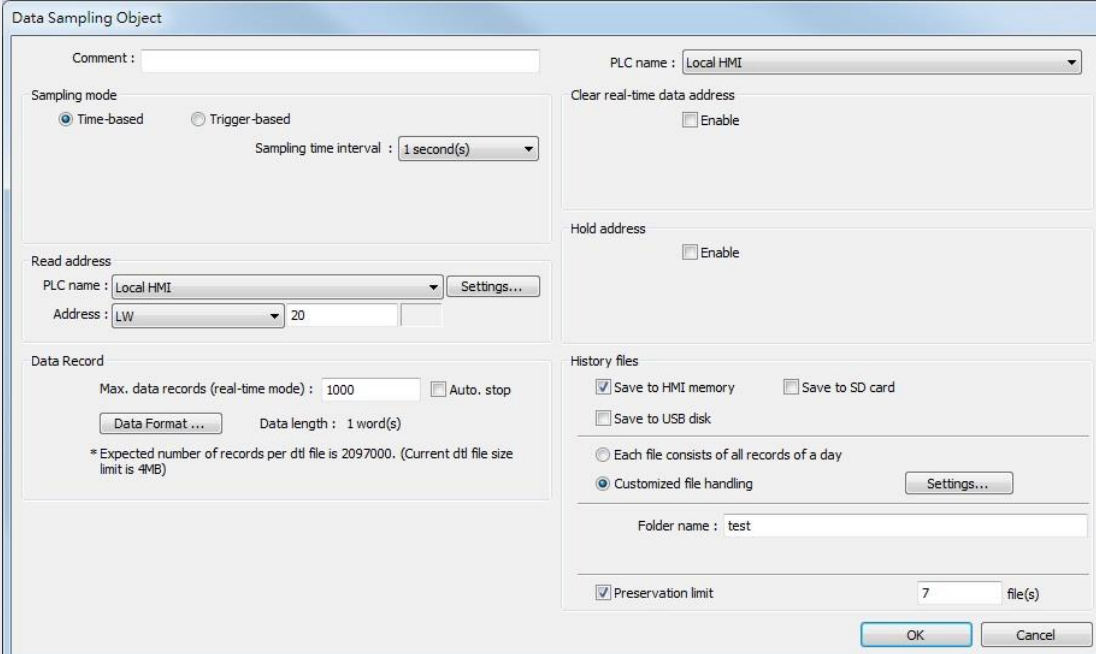
Please configure the value of [Dynamic format] before any data sampling.

When a new file is created, if the file name already exists, the new data sampling records will be appended to the existing file.

No.	Time	Date	Value
12	13:27:21	12/17/14	13
11	13:27:20	12/17/14	12
10	13:27:19	12/17/14	11
9	13:27:18	12/17/14	10
8	13:27:17	12/17/14	10
7	13:27:16	12/17/14	9
6	13:27:15	12/17/14	8
5	13:27:14	12/17/14	7
4	13:27:13	12/17/14	5
3	13:27:12	12/17/14	4
2	13:27:11	12/17/14	3
1	13:27:10	12/17/14	3

2. Setting up the Screen

Step 1. Create a Data Sampling object as shown in the following figure.



Data Sampling Object

Comment :

PLC name : Local HMI

Sampling mode
☒ Time-based ☐ Trigger-based
 Sampling time interval : 1 second(s)

Read address
 PLC name : Local HMI Settings...
 Address : LW 20

Data Record
 Max. data records (real-time mode) : 1000 ☐ Auto. stop
 Data Format ... Data length : 1 word(s)
 * Expected number of records per dtl file is 2097000. (Current dtl file size limit is 4MB)

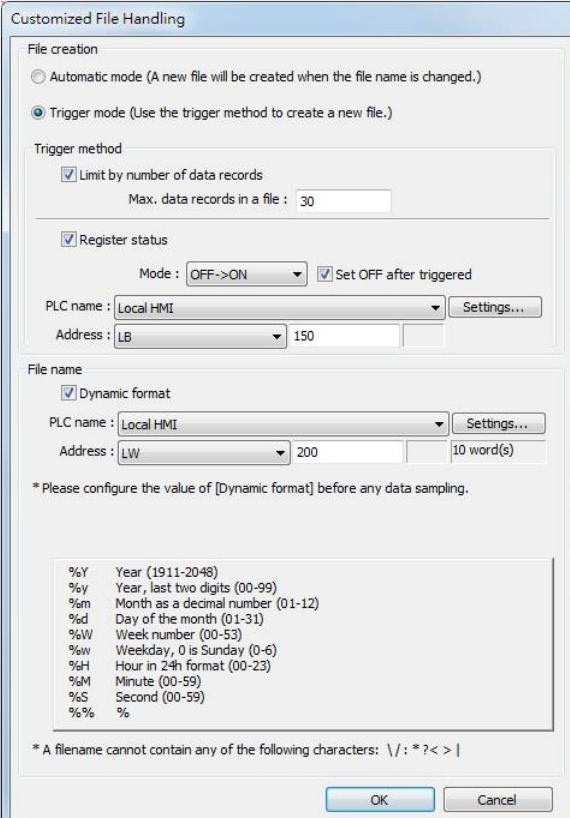
Clear real-time data address
☐ Enable

Hold address
☐ Enable

History files
☒ Save to HMI memory ☐ Save to SD card
☐ Save to USB disk
☐ Each file consists of all records of a day
☒ Customized file handling Settings...
 Folder name : test
☒ Preservation limit 7 file(s)

OK Cancel

Customized File Handling



Customized File Handling

File creation
☐ Automatic mode (A new file will be created when the file name is changed.)
☒ Trigger mode (Use the trigger method to create a new file.)

Trigger method
☒ Limit by number of data records
 Max. data records in a file : 30
☒ Register status
 Mode : OFF->ON ☒ Set OFF after triggered
 PLC name : Local HMI Settings...
 Address : LB 150

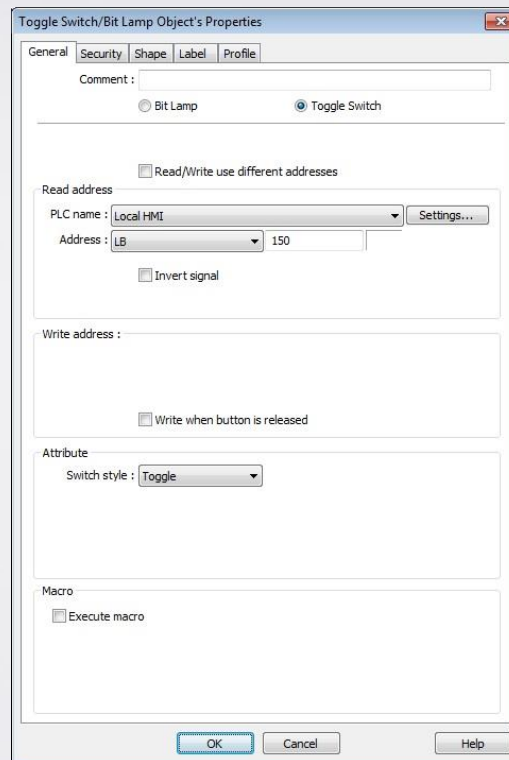
File name
☒ Dynamic format
 PLC name : Local HMI Settings...
 Address : LW 200 10 word(s)
 * Please configure the value of [Dynamic format] before any data sampling.

%Y Year (1911-2048)
 %y Year, last two digits (00-99)
 %m Month as a decimal number (01-12)
 %d Day of the month (01-31)
 %W Week number (00-53)
 %w Weekday, 0 is Sunday (0-6)
 %H Hour in 24h format (00-23)
 %M Minute (00-59)
 %S Second (00-59)
 %% %

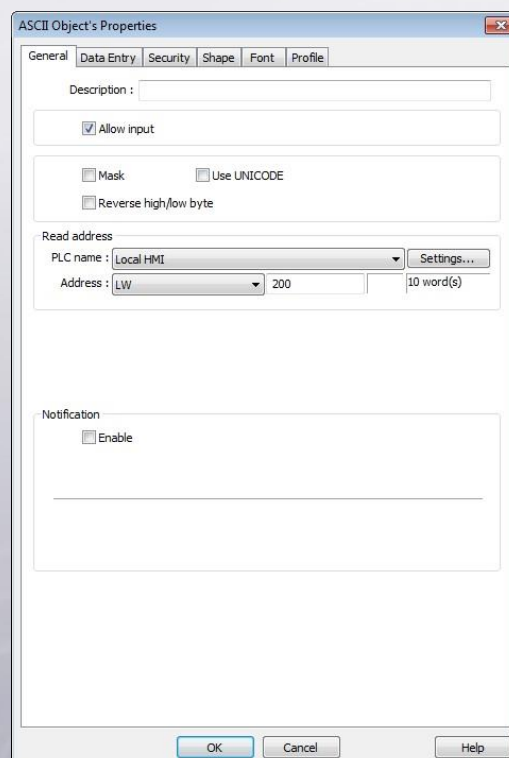
* A filename cannot contain any of the following characters: \ / : * ? < > |

OK Cancel

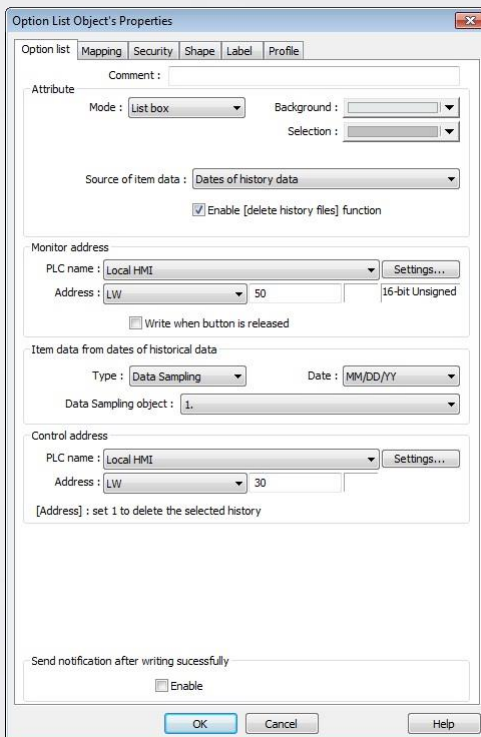
Step 2. Create a Toggle Switch object, set address to LB-150, set switch style to Toggle, for creating a new data sampling file.



Step 3. Create an ASCII Input object, set address to LW-200, set the length to 10 words, for entering a file name.



Step 4. Create an Option List object, set the source of item data to [Dates of history data]. Set monitor address to LW-50, and enable [delete history files] function (LW-30), for viewing historical records.

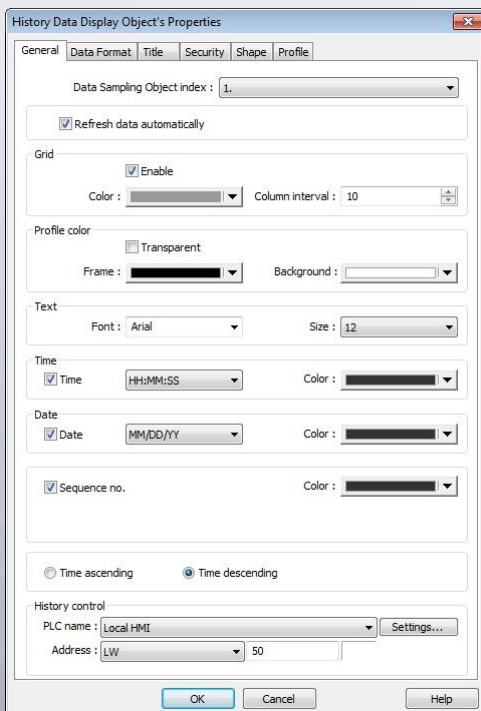


The 'Option List Object's Properties' dialog box is shown with the following settings:

- Option list:** Mapping, Security, Shape, Label, Profile
- Comment:** (empty)
- Attribute:**
 - Mode: List box
 - Background: (empty)
 - Selection: (empty)
- Source of item data:** Dates of history data
- ☒ Enable [delete history files] function
- Monitor address:**
 - PLC name: Local HMI
 - Address: LW 50
 - 16-bit Unsigned
 - ☐ Write when button is released
- Item data from dates of historical data:**
 - Type: Data Sampling
 - Date: MM/DD/YY
 - Data Sampling object: 1.
- Control address:**
 - PLC name: Local HMI
 - Address: LW 30
 - [Address]: set 1 to delete the selected history
- Send notification after writing successfully:**
 - ☐ Enable

Buttons: OK, Cancel, Help

Step 5. Create a History Data Display object, set history control address to LW-50, for viewing historical records.

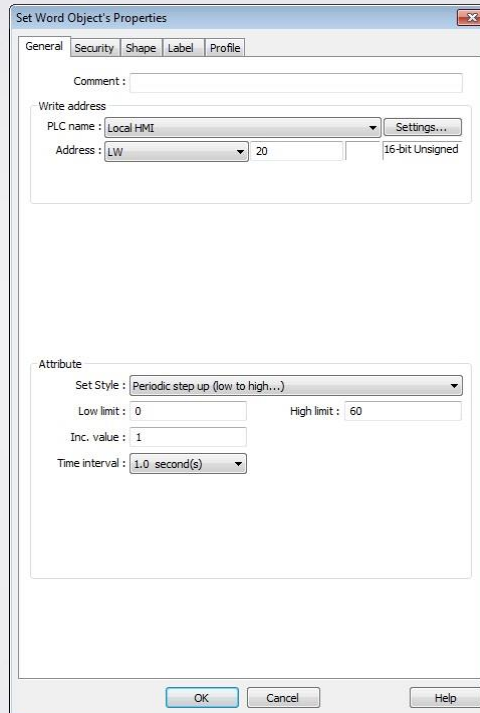


The 'History Data Display Object's Properties' dialog box is shown with the following settings:

- General:** Data Format, Title, Security, Shape, Profile
- Data Sampling Object index:** 1.
- ☒ Refresh data automatically
- Grid:**
 - ☒ Enable
 - Color: (empty)
 - Column interval: 10
- Profile color:**
 - ☐ Transparent
 - Frame: (empty)
 - Background: (empty)
- Text:**
 - Font: Arial
 - Size: 12
- Time:**
 - ☒ Time
 - HH:MM:SS
 - Color: (empty)
- Date:**
 - ☒ Date
 - MM/DD/YY
 - Color: (empty)
- ☒ Sequence no. Color: (empty)
- ☐ Time ascending ☒ Time descending
- History control:**
 - PLC name: Local HMI
 - Address: LW 50

Buttons: OK, Cancel, Help

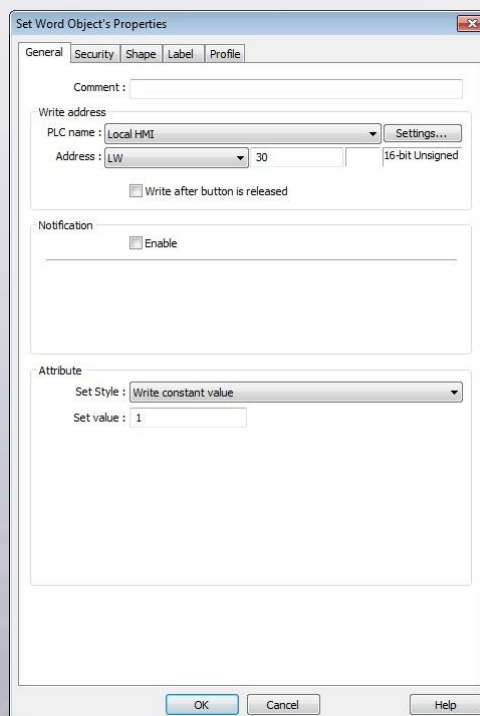
- Step 6.** Create a Set Word object, set address to LW-20, select “Periodic step up (low to high...)” as Set Style, for changing data sampling value.



The dialog box shows the 'General' tab with the following settings:

- Comment: (empty)
- Write address:
 - PLC name: Local HMI
 - Address: LW 20
 - 16-bit Unsigned
- Attribute:
 - Set Style: Periodic step up (low to high...)
 - Low limit: 0
 - High limit: 60
 - Inc. value: 1
 - Time interval: 1.0 second(s)

- Step 7.** Create a Set Word object, set address to LW-30, select “write constant value” (1) as Set Style, for deleting the select item in Option List object.



The dialog box shows the 'General' tab with the following settings:

- Comment: (empty)
- Write address:
 - PLC name: Local HMI
 - Address: LW 30
 - 16-bit Unsigned
- ☐ Write after button is released
- Notification:
 - ☐ Enable
- Attribute:
 - Set Style: Write constant value
 - Set value: 1