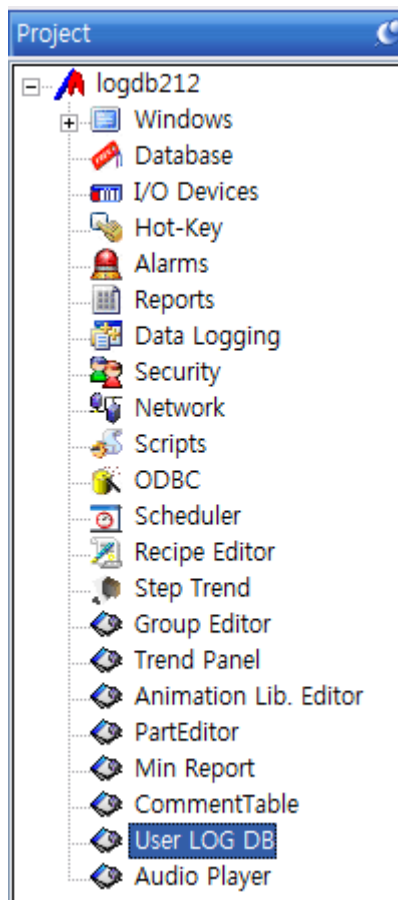


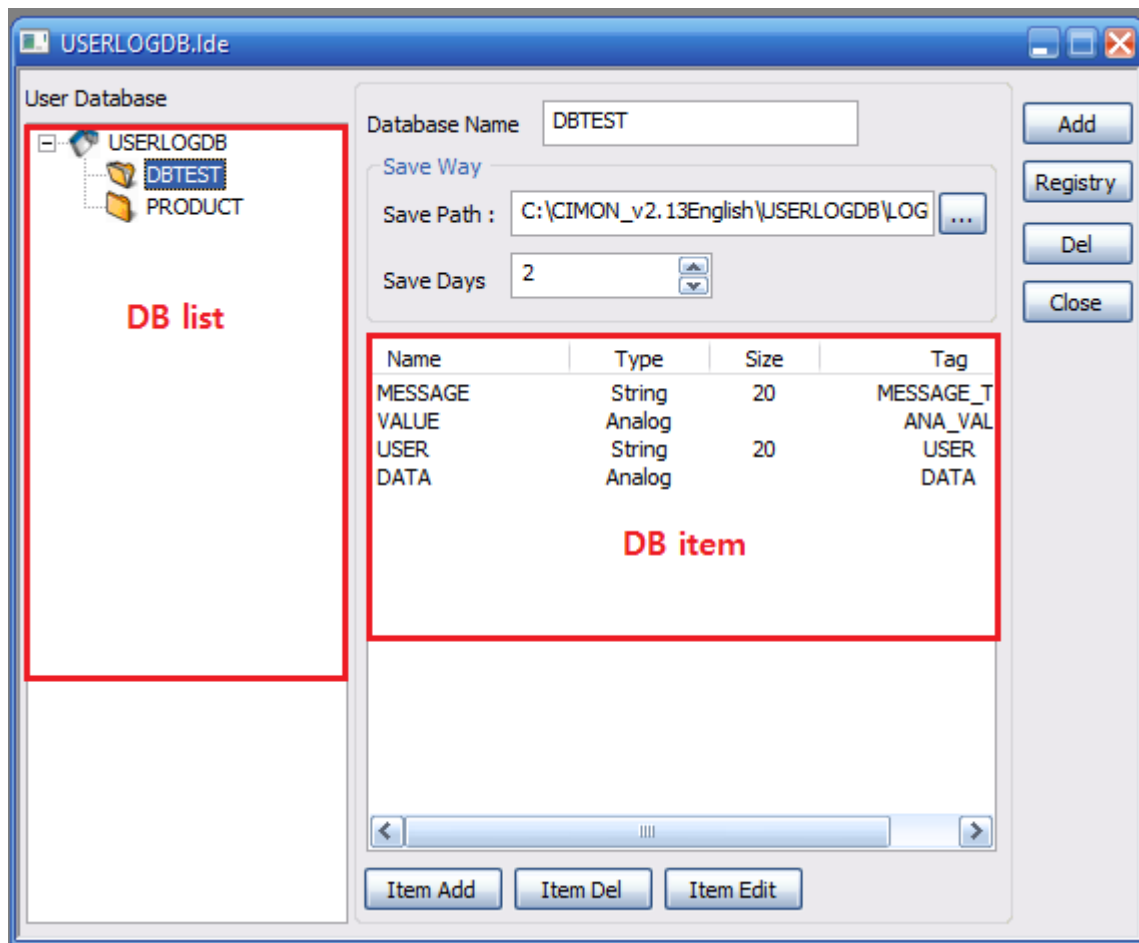
USER LOG DB overview

- 1) USER LOG Database is used for simple data search or data insert in CIMON-SCADA instead of using commercial database.
- 2) The data will show on "List Control"
- 3) The data can be printed out as PDF or Excel format. Therefore, user cannot modify PDF format.
- 4) This manual is made under assuming that user is able to use CIMON-SCADA basic functions.

1) DB Model Editor



USER LOG DB

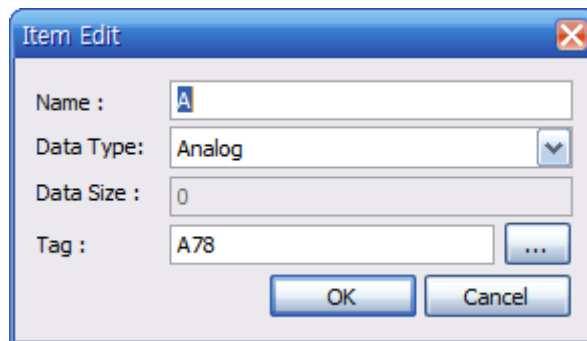


Open Cimond and click [Tools] → [User LOG DB]

[DB Model Editor]

- ① Database Name - Write DB model name
- ② Save Path - Select Save Path which Log Data file will be saved
- ③ Save Days -Maximum days for data saving.
- ④ Add -Add new DB model.
- ⑤ Registry -Update property of DB model.
- ⑥ Delete - Delete selected DB model
- ⑦ Close - Close DB Model Editor
- ⑧ Item Add - Add new Items in DB model.
- ⑨ Item Delete - Delete Item in DB model.
- ⑩ Item Edit - Edit selected item.

[Item Edit window]



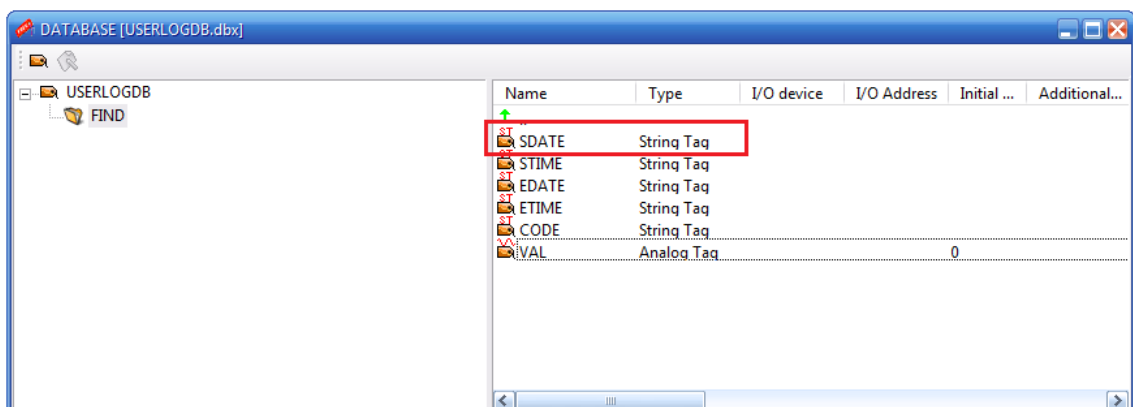
- ① Name - Write Item name
- ② Data Type - Select Data type of Item
- ③ Data Size - If "String" is selected as Data Type, you can assign string data size maximum 80 letters in case of English letter.
- ④ Tag - Select tag name which is designated to Item. Tag value is updated to this item.

2) Calendar setting

[Making Tag]

Make String tag which will receive date or time

This tag must be String and virtual tag.

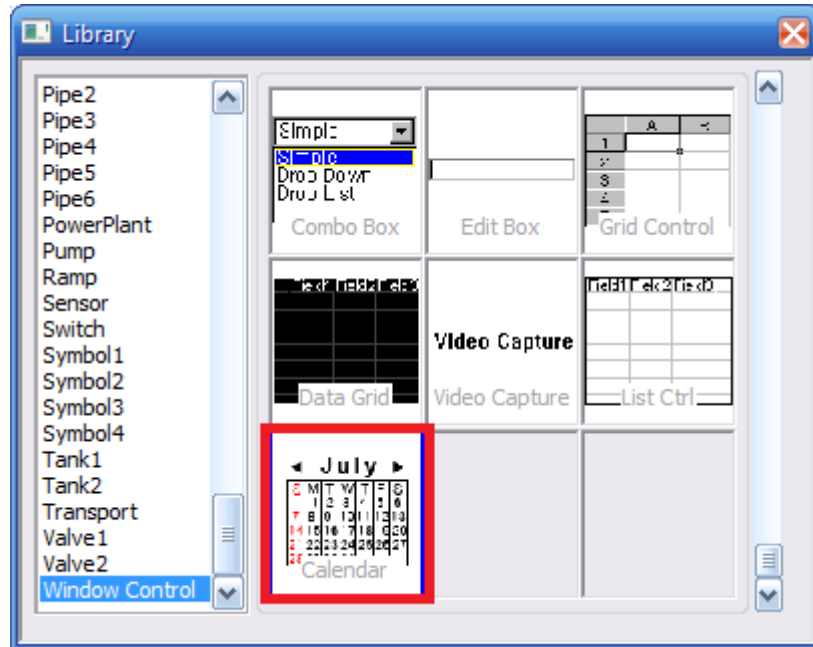


USER LOG DB

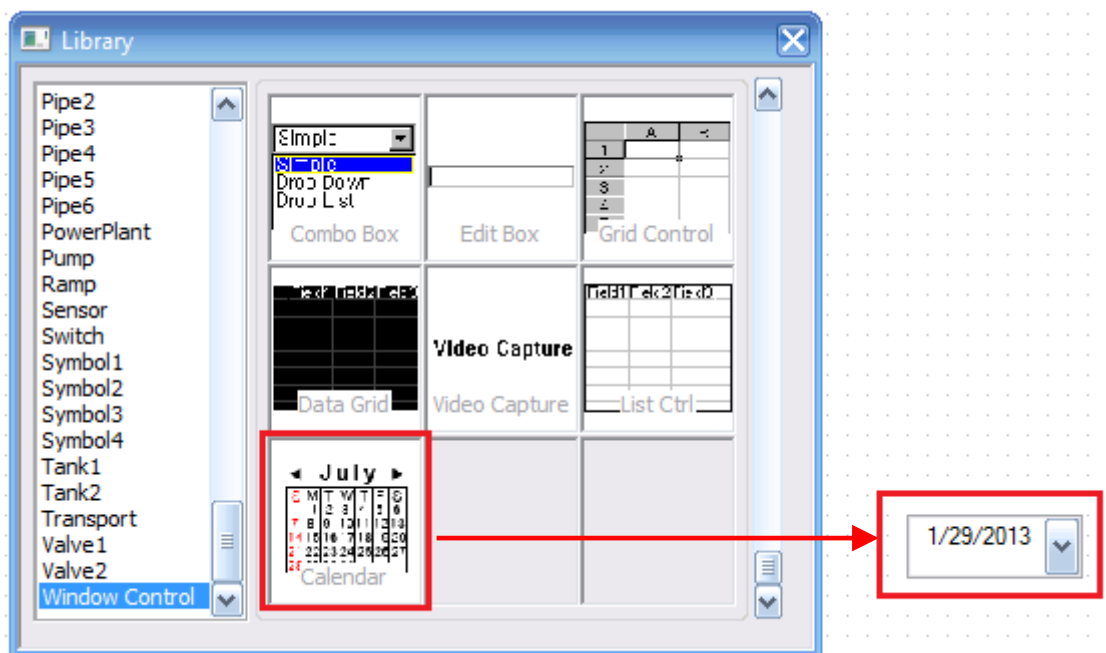
[Making Calendar on the page]

Make page and click [Draw] → [Library]

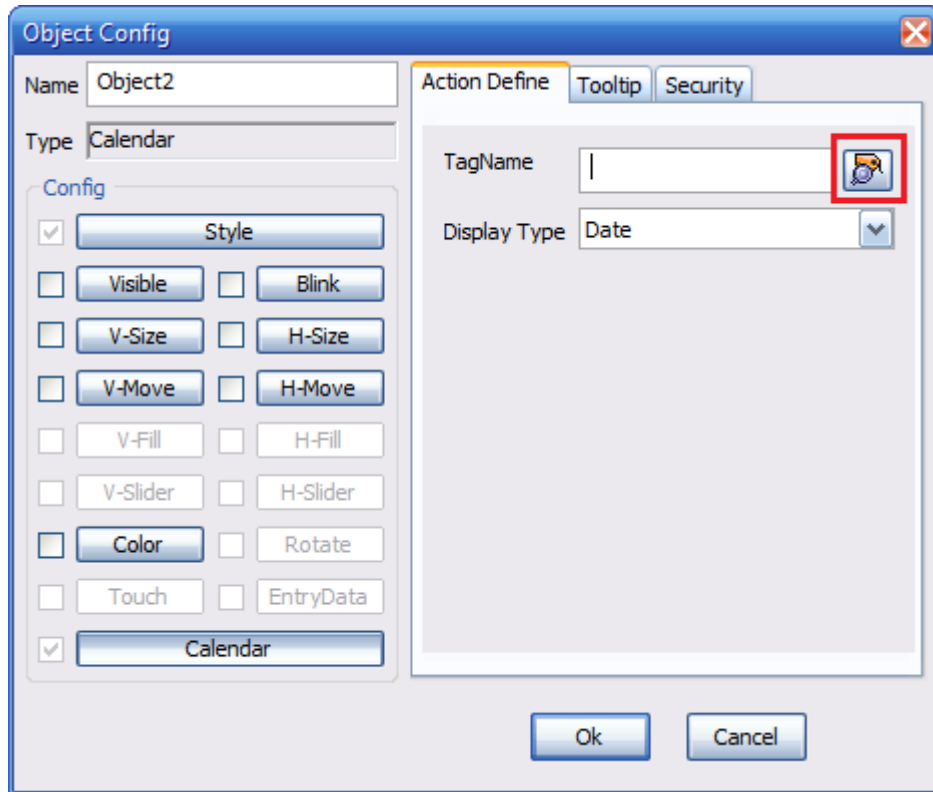
Select Window Control and click the Calendar.



Drag the Calendar to the page and double click "Calendar control"



Write the String tag name or select string tag after click "Finder"



If you select "Date" at [Display Type], February 20, 2013 will be saved at tag as 20130220.

If you select "Time" at [Display Type], 1:36:27PM will be saved at tag as 133627.

USER LOG DB

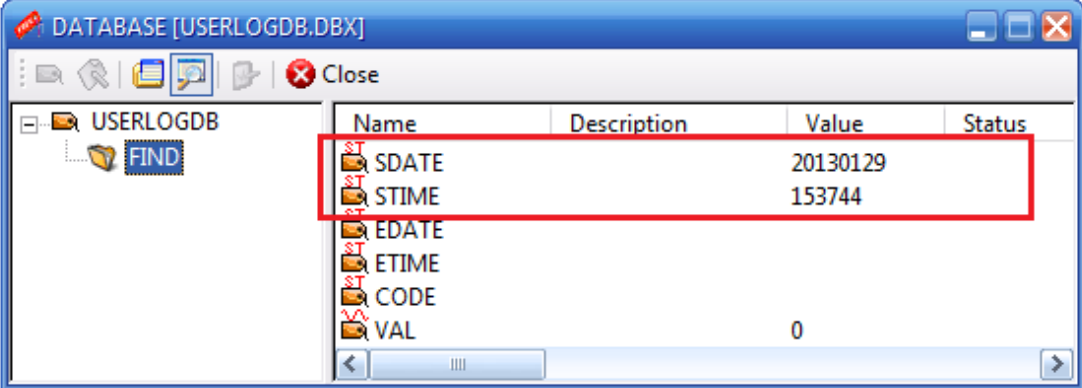
[Check Calendar operation]

Run "CimonX" and click [View] → [Database].

Check the tag value when you change calendar value.

1/29/2013

3:37:44 PM



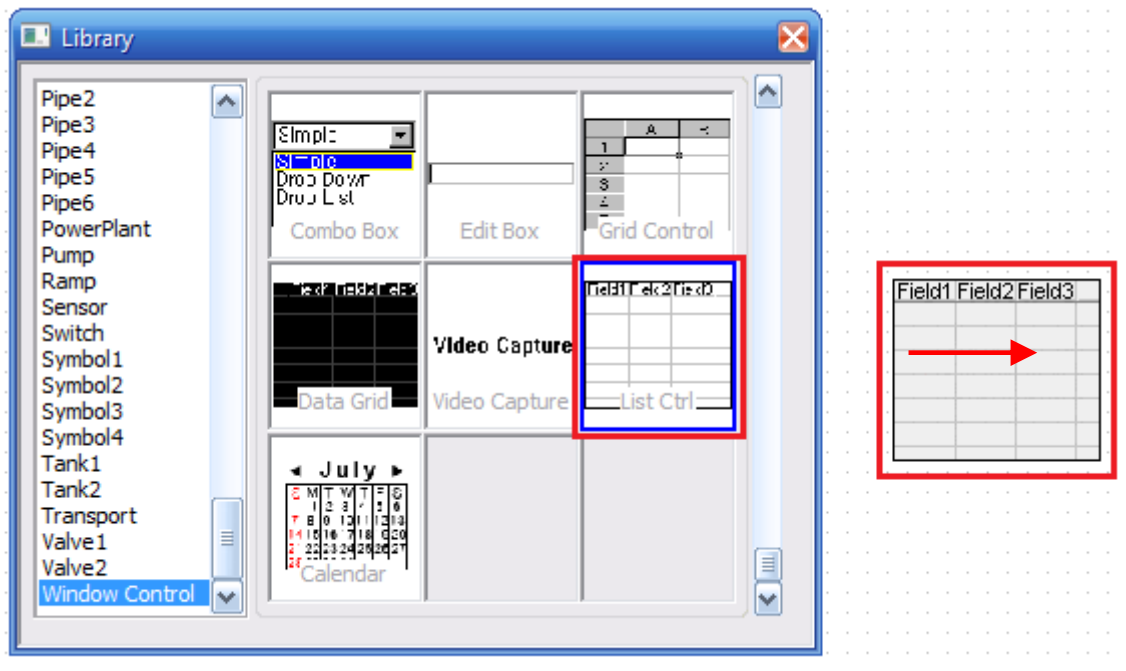
Name	Description	Value	Status
SDATE		20130129	
STIME		153744	
EDATE			
ETIME			
CODE			
VAL		0	

This Database shows Data and Time tag values when Calendar is changed.

3) List Control Setting

[Making List Control on the page]

Click [Draw] → [Library] → [Window Control]



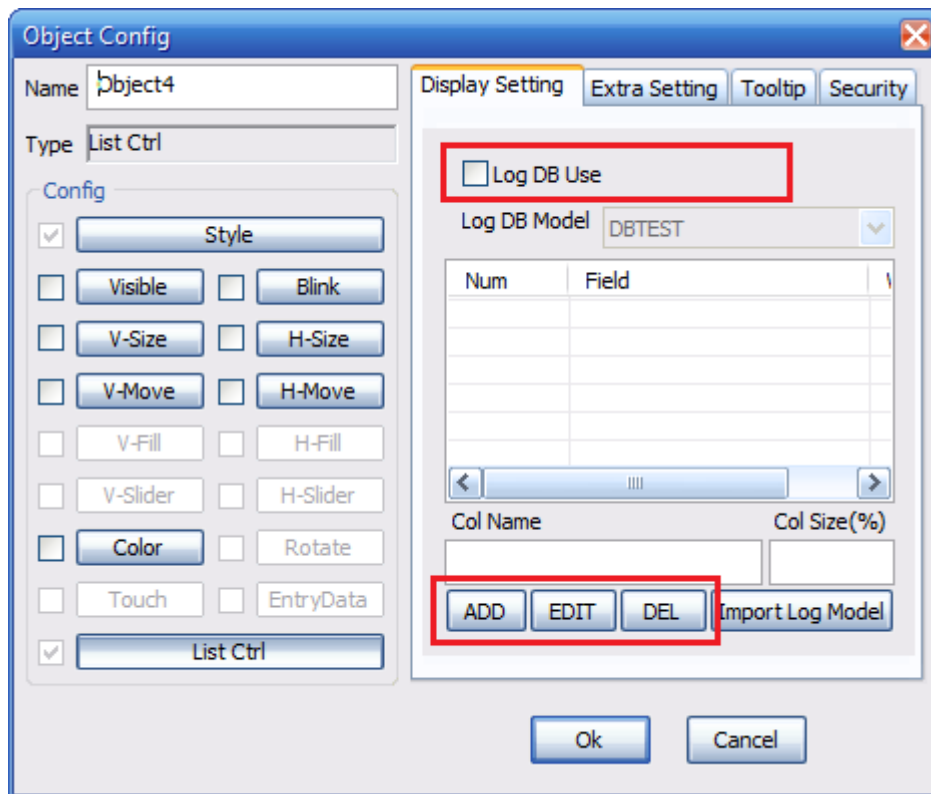
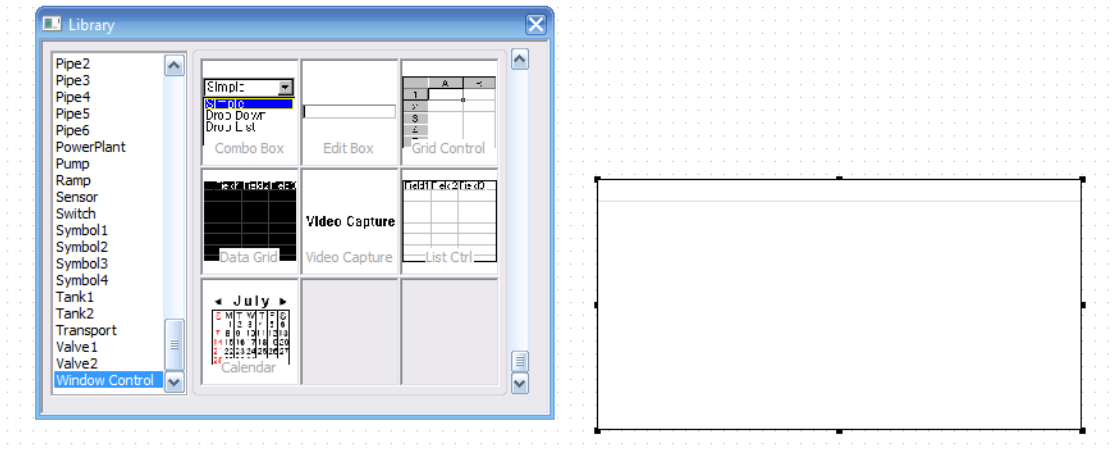
“List Control” shows Log DB value.

In order to operate Log DB, Script must be used.

USER LOG DB

[Display Setting]

Double click "List Control" on the page.

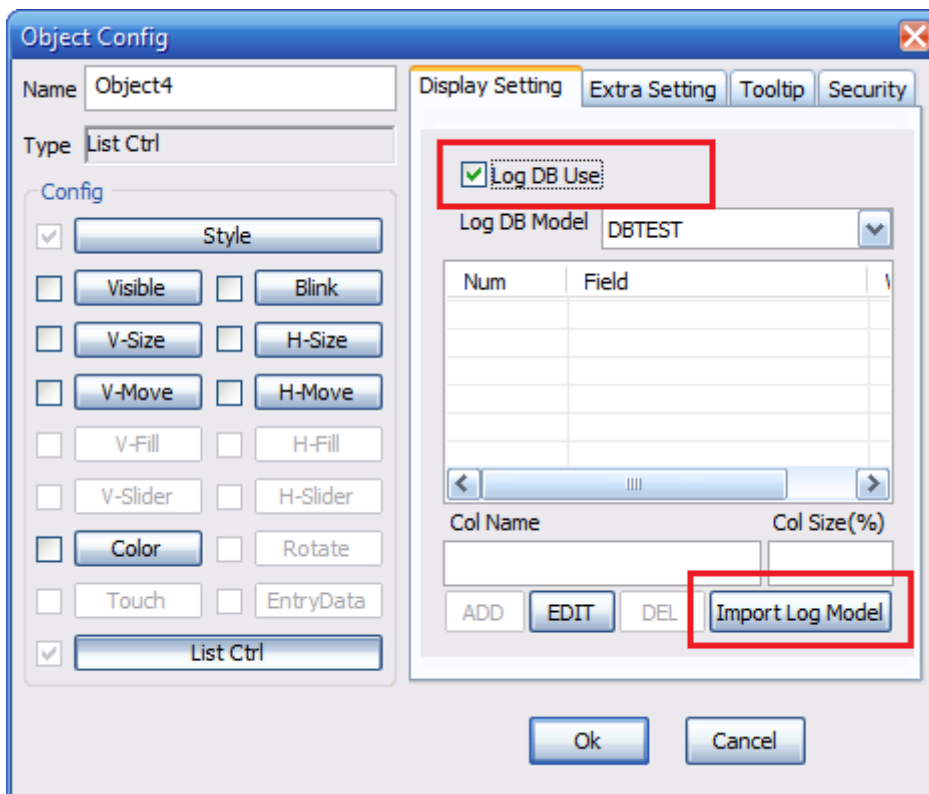


- ① Log DB Use - In order to make column name and size on "List Control",
do not select "Log DB Use".

In order to make column by "Import Log Model" automatically,
click "Log DB Use"
- ② ADD - It is used to add Column name and Column size on the "List Control"
- ③ EDIT - It is used to edit the added column name and size.
- ④ DEL - It is used to delete the added column name and size.

[Import Log Model]

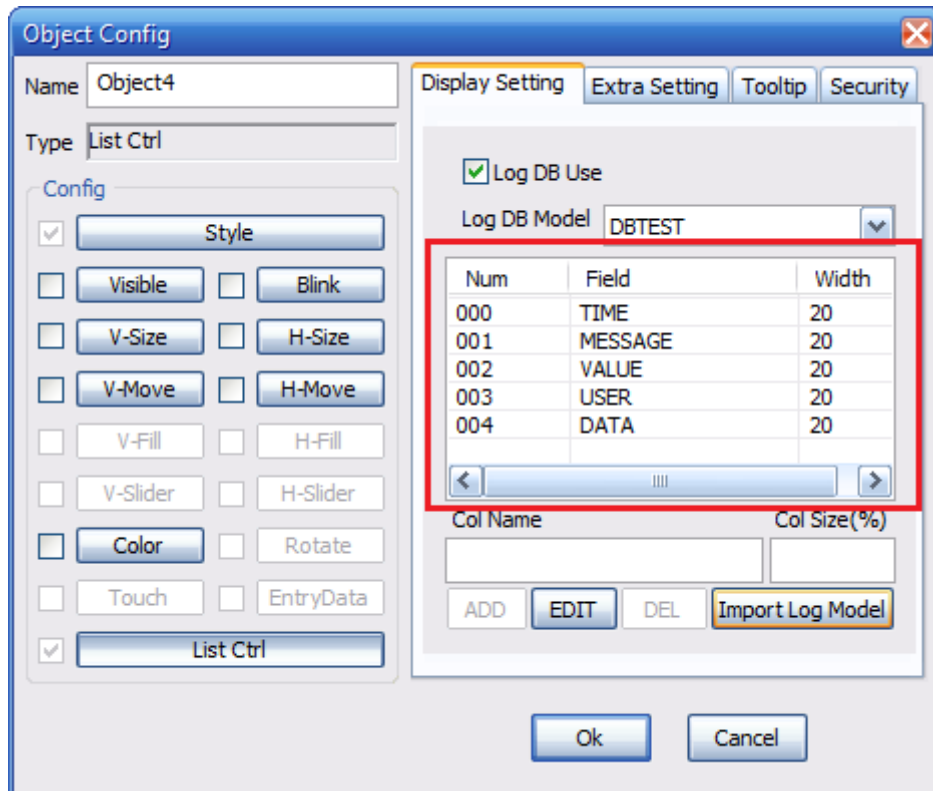
Double click "List Control" on the page.



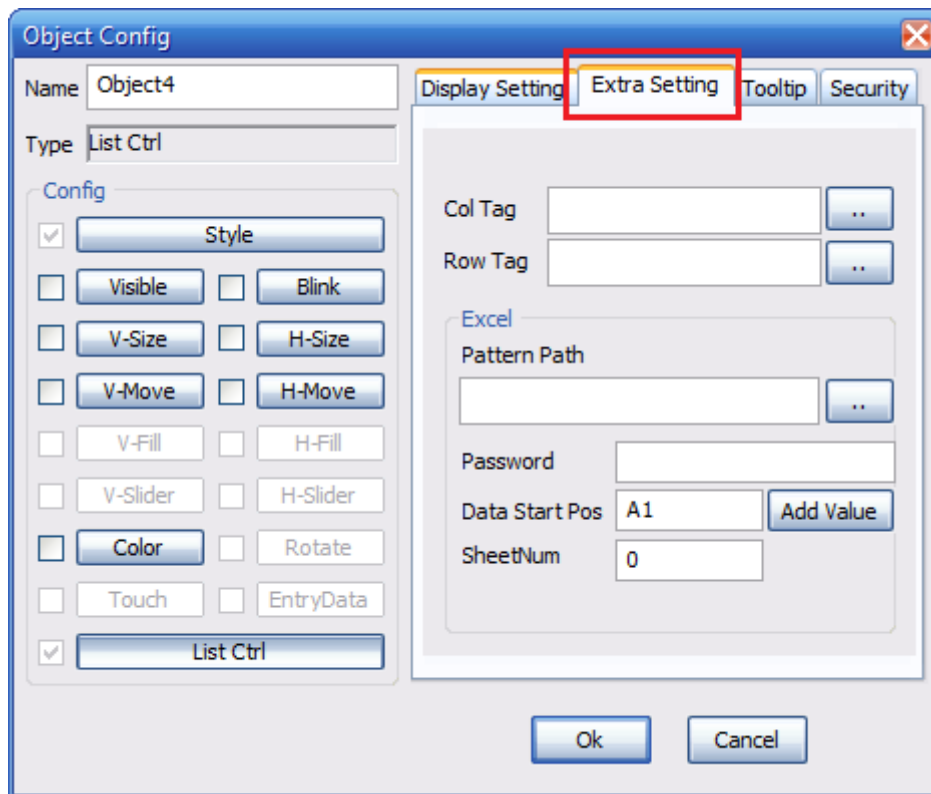
- ① Log DB Use – If you already made "Log DB Model" at the first step and
want to import Log Model, select "Log DB Use"

USER LOG DB

- ② Log DB Model – Select one of Log DB Models that you already made.
- ③ Import Log Model – After select DB model, click it to import log models to show on the “List Control”



After importing Log Models, you can only edit column name and size.

[Extra Setting]

- ① Col Tag – It is used to save column's location when you click items on the "List Control". Select Analog tag here.
- ② Row Tag - It is used to save row's location when you click items on the "List Control". Select Analog tag here.
- ③ Pattern Path –Make Excel form in folder. List Control data will be saved in this format and print out to Excel or PDF format.
- ④ Password - It is used to make password on Excel file.
- ⑤ Data Start Pos - Assign the column and row which data will be saved from this position.
- ⑥ Sheet Num - Assign sheet number which data will be saved. Sheet number starts from 0.

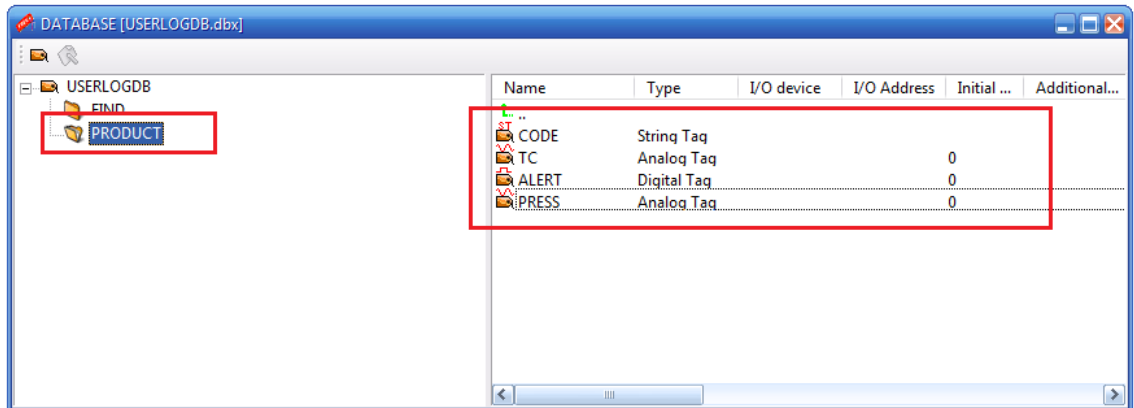
USER LOG DB

4) Summary for Sample project

-There are Basic sample and Advanced sample projects.

-If Product (String tag) value is changed, related TC, ALERT and PRESS' value is saved.

-First of all, make tags as following picture.



Make "PRODUCT" Group and 4 virtual tags as below.

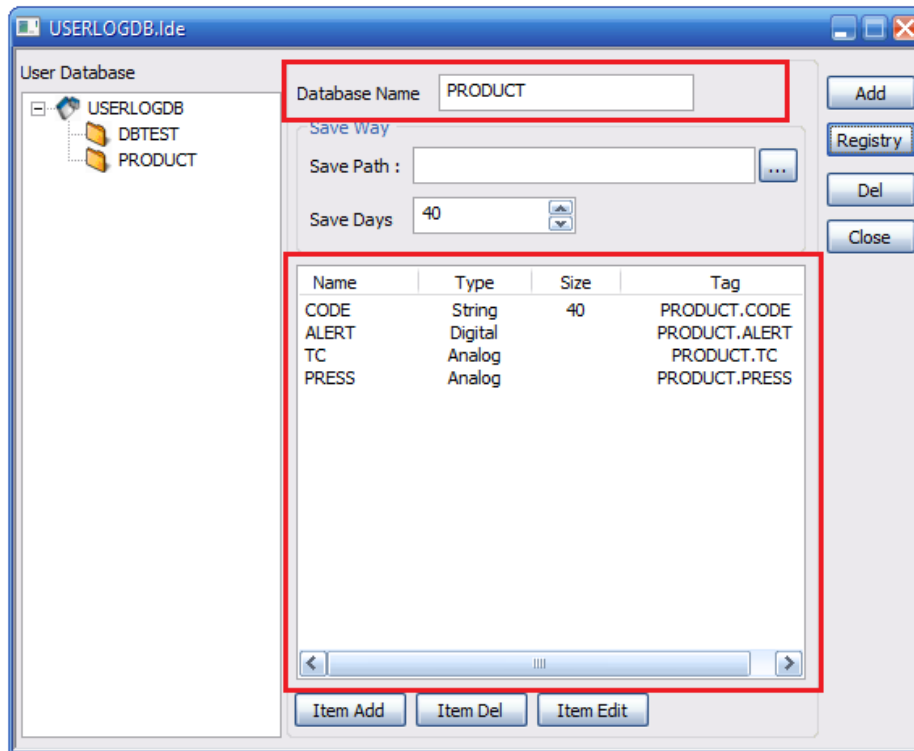
CODE - Product Code (String tag)

TC - Temperature value (Analog tag)

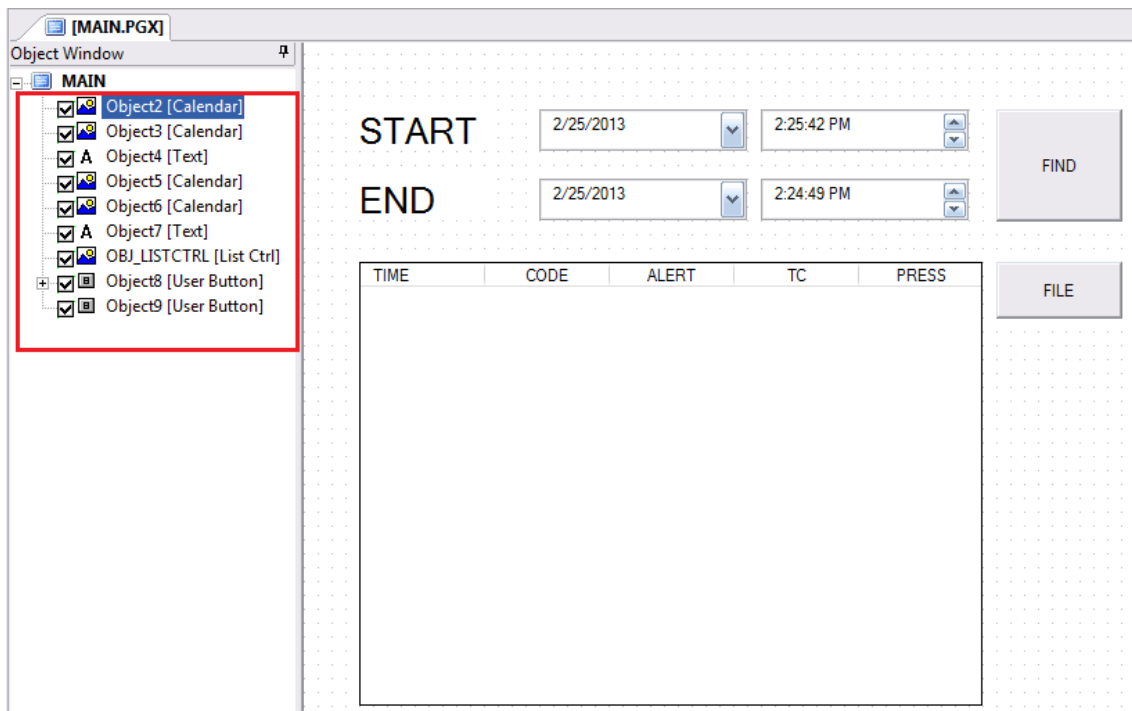
ALERT - Alarm tag (Digital tag)

PRESS - Pressure value (Analog tag)

-Make Log DB Model as below.

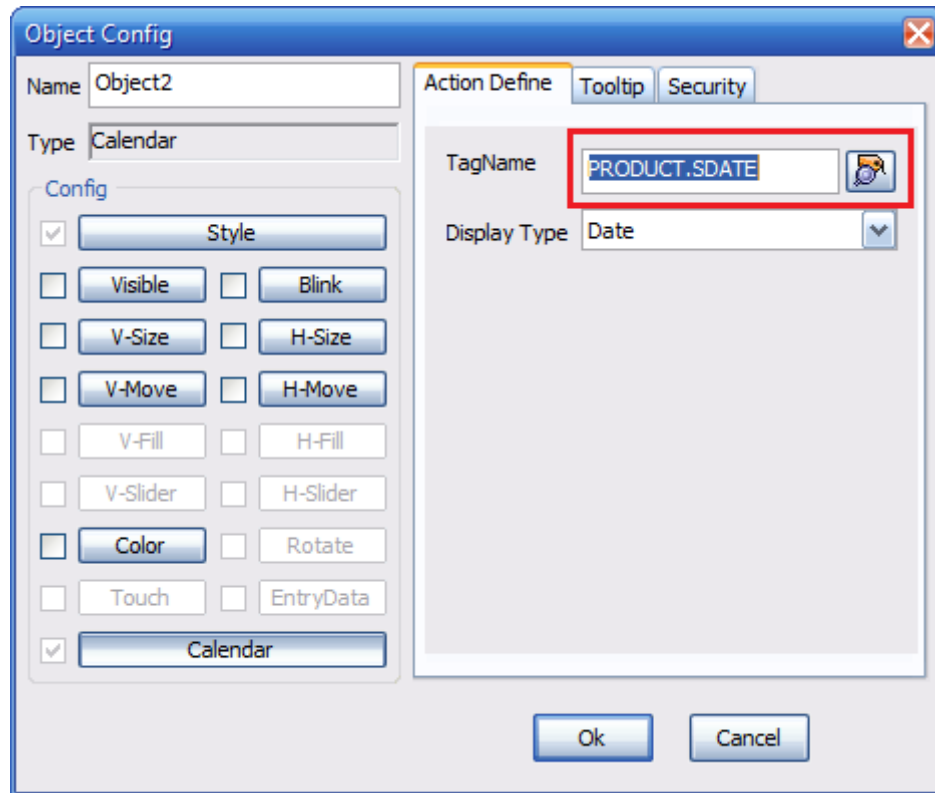


-Make the page as below.



USER LOG DB

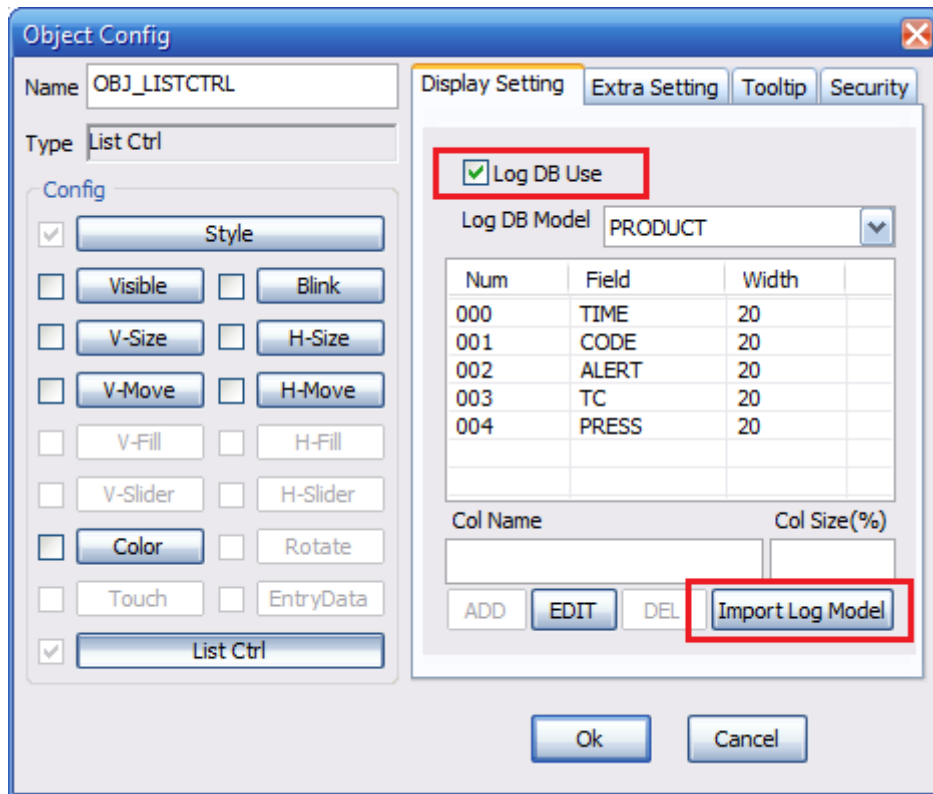
-Make 2 Calendars as Date Types and 2 Time Types as above.



Make 4 String tags as SDATE, STIME, EDATE and ETIME under PRODUCT group.

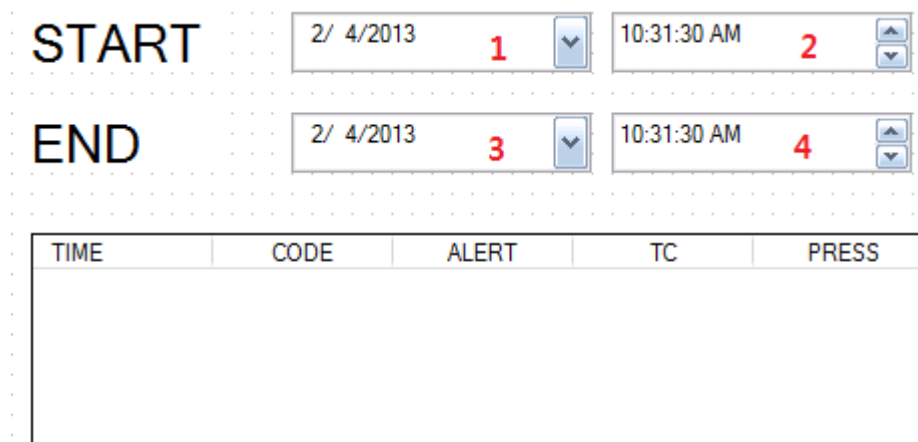
Match those tags to Calendar date and time.

-Set up "List Control" as below.



Click "Log DB Use" and select Log DB Model. After click "Import Log Model", change the Column size and then Click "EDIT".

-The final result is as below.



USER LOG DB

1. Tag name : PRODUCT.SDATE, Display Type : Date
2. Tag name : PRODUCT.STIME, Display Type : Time
3. Tag name : PRODUCT.EDATE, Display Type : Date
4. Tag name : PRODUCT.ETIME, Display Type : Time

5) Script for Basic sample

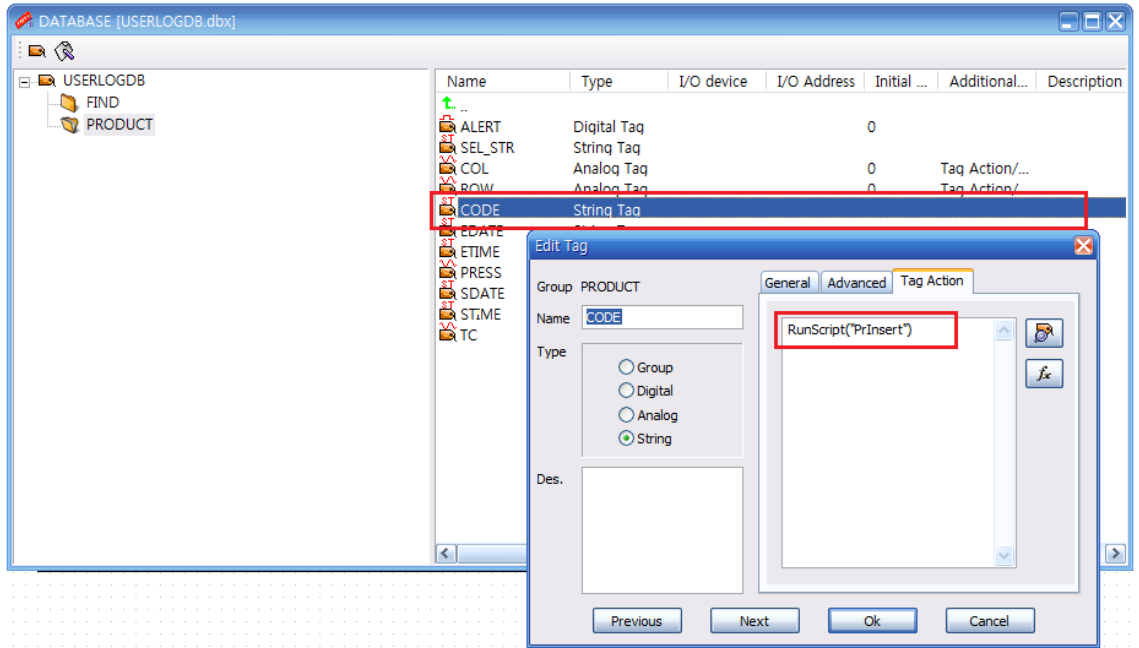
-Data Insert

- ① Use DbInsert("LogDB model name") for adding data.
- ② Make script as below.

```
Sub PrInsert()  
  
    Return_value = DbInsert("PRODUCT")  
  
    'If Return_value is 0, it is success and others are fail.  
  
End Sub
```

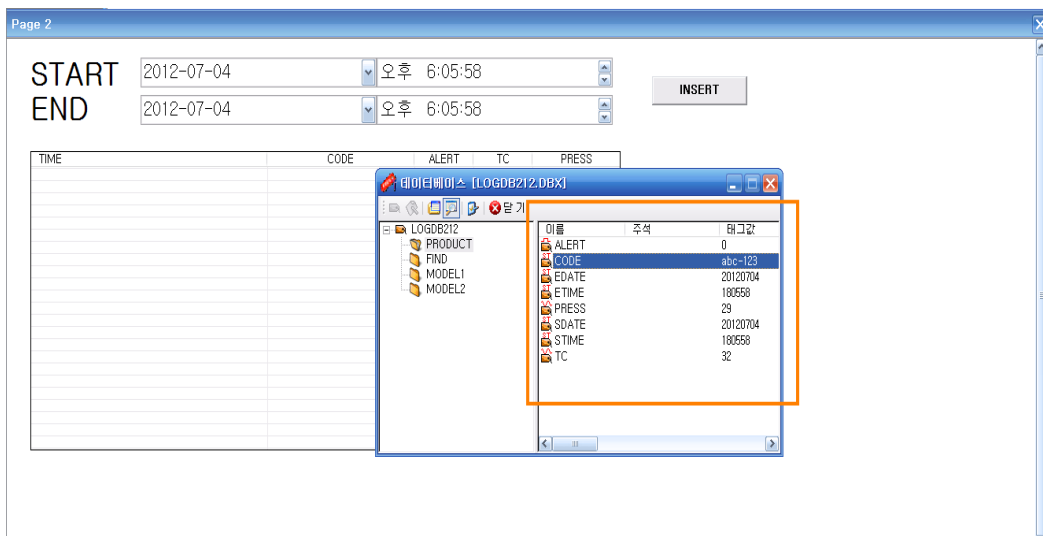
- ③ Click "Database" and select PRODUCT.CODE. Select "Run Tag Action for tag value change" in General and write below script at Tag Action.

RunScript("PrInsert")



If PRODUCT.CODE is changed, tag value is save at Log DB Model.

- ④ Run CimonX
 - ⑤ Open Database and write value to PRODUCT.TC , PRODUCT.PRESS, PRODUCT.ALERT and then change the value of PRODUCT.CODE.
- As value is changed, PrInsert runs and data is saved at Log DB.



USER LOG DB

The screenshot displays a software interface for managing a user log database. The main window, titled 'MAIN', contains search criteria for 'START' and 'END' dates and times, a 'FIND' button, and a table with columns 'TIME', 'CODE', 'ALERT', 'TC', and 'PRESS'. A 'FILE' button is located to the right of the table. An overlaid window titled 'DATABASE [USERLOGDB.DBX]' shows a tree view of the database structure with folders for 'FIND' and 'PRODUCT'. A table within this window lists parameters with their names, descriptions, values, and statuses. The 'ROW' parameter is highlighted in blue.

Name	Description	Value	Status
ALERT		0	
SEL_STR			
COL		2	
ROW		0	
CODE		0	
EDATE		20130224	
ETIME		152233	
PRESS		50	
SDATE		20130224	
STIME		032233	
TC		70	

-Data Finder

① Make script as below.

```
Sub PrTimeFind()

    sDate$ = GetTagVal ("PRODUCT.SDATE")
    sTime$ = GetTagVal ("PRODUCT.STIME")
    ' Bring the Starting date and time for Finder from tags which are related with Calendar
    Control.

    eDate$ = GetTagVal ("PRODUCT.EDATE")
    eTime$ = GetTagVal ("PRODUCT.ETIME")
    ' Bring the Finishing date and time for Finder from tags which are related with Calendar
    Control.

    DbSetFindTimeStr "PRODUCT",sDate$+sTime$,eDate$+eTime$
    ' Set up searching time at "PRODUCT" Log DB model.

    n = DbFindRun("PRODUCT")
    ' Run Finder script.

    wcGridCommand "OBJ_LISTCTRL",102,0,0
    ' OBJ_LISTCTRL is List Control we made before and 102 is command to print out the
    result of Log DB model.

End Sub
```

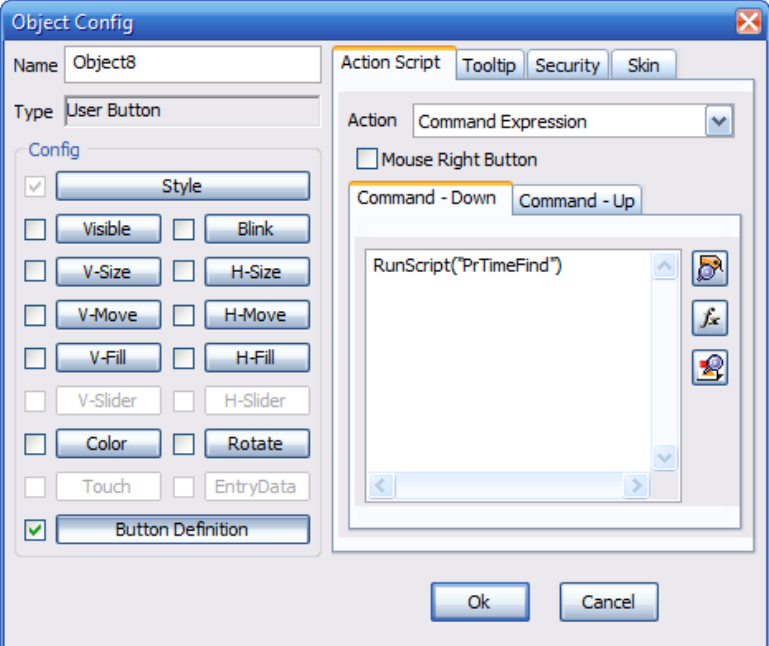
USER LOG DB

Make "FIND" button and write script as below.

START 2/ 4/2013 11:32:45 AM

END 2/ 4/2013 11:32:40 AM

FIND



TIME	CODE
------	------

Object Config

Name: Object8

Type: User Button

Config

- Style
- Visible Blink
- V-Size H-Size
- V-Move H-Move
- V-Fill H-Fill
- V-Slider H-Slider
- Color Rotate
- Touch EntryData
- Button Definition

Action Script

Action: Command Expression

Mouse Right Button

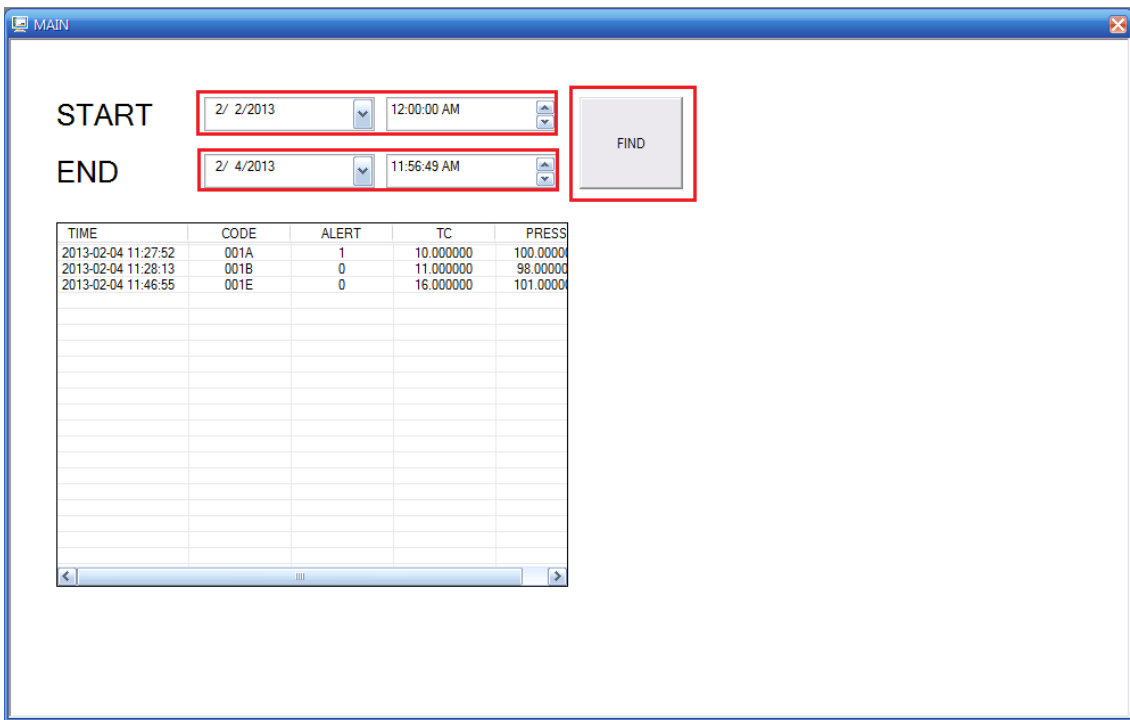
Command - Down Command - Up

```
RunScript("PrTimeFind")
```

Ok Cancel

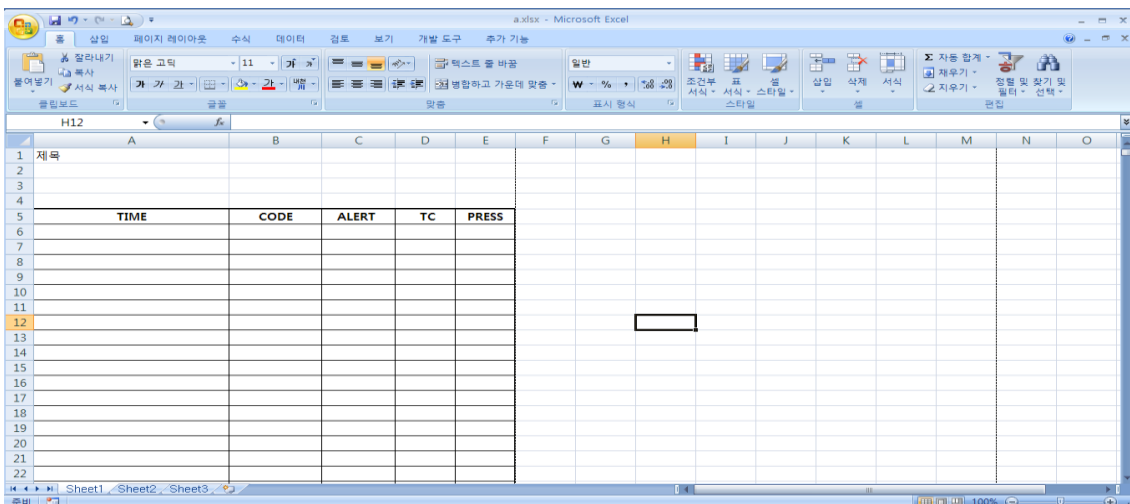
Script is RunScript("PrTimeFind")

- ② Run CimonX and set up the date and time and then click "FIND"



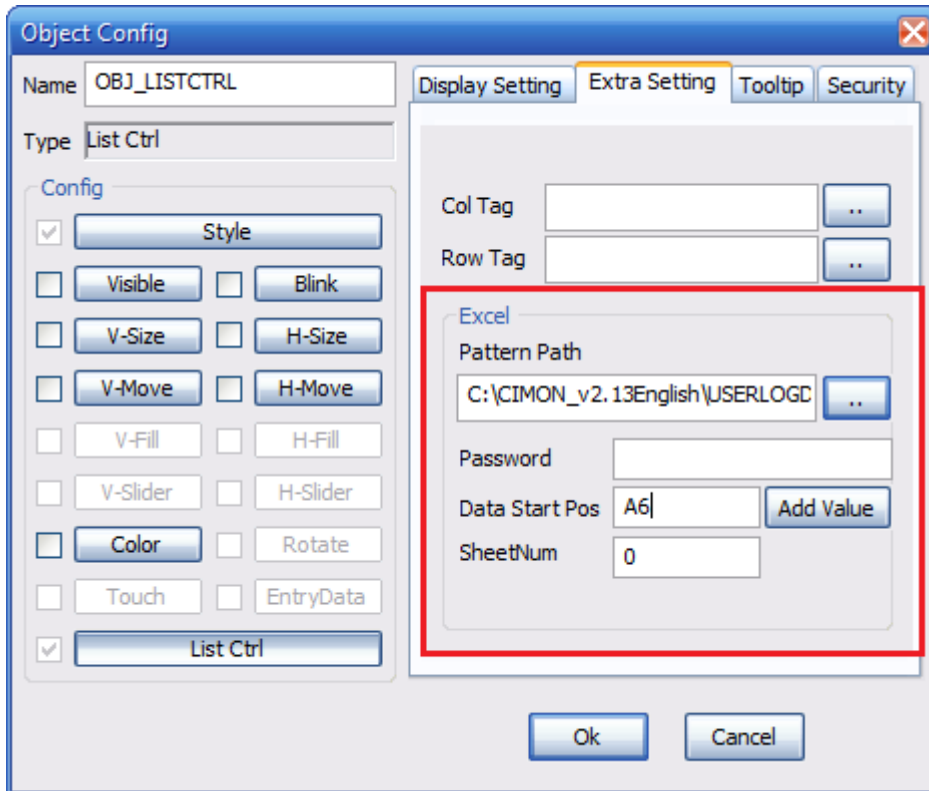
-Data Print

- ① Make Excel file and below and save it in folder.



USER LOG DB

- ② Double click "List Control" in CimonD.



- ③ Make script as below.

```
Sub PrOutput()
```

```
    wcSaveList "OBJ_KISTCTRL","D:\WZ-ExcelWa.csv"
```

```
    ' Print out OBJ_LISTCTRL data to pattern Path as file.
```

```
    wcSaveList " OBJ_KISTCTRL ", "D:\WZ-ExcelWa.xlsx"
```

```
    ' Copy Excel form and print out as Excel file.
```

```
    wcSaveList " OBJ_KISTCTRL ", "D:\WZ-ExcelWa.pdf"
```

```
    ' Copy Excel form and print out as PDF file.
```

```
End Sub
```

- ④ In order to run script, make a button and write RunScript("PrOutput") as Command.
- ⑤ After Click FIND, click FILE to print out.

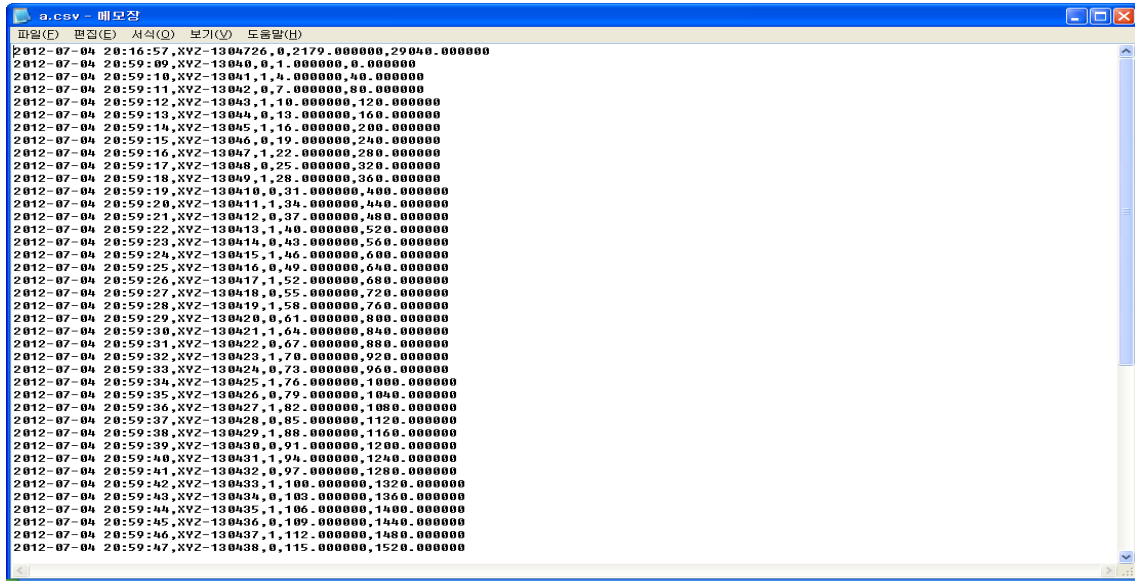
The screenshot shows a software window titled "MAIN" with search filters and a data table. The filters include "START" and "END" dates (both set to 2013-02-25) and times (START: 오후 1:06:08, END: 오후 6:06:08). A "FIND" button is located to the right of the filters. Below the filters is a table with columns: TIME, CODE, ALERT, TC, and PRESS. The table contains four rows of data. To the right of the table, a "PRINT" button is highlighted with a red rectangular box.

TIME	CODE	ALERT	TC	PRESS
2013-02-25 15:...	0	0	0.000000	0.000000
2013-02-25 15:...	fgfgf	0	70.000000	50.000000
2013-02-25 15:...	0	0	70.000000	50.000000
2013-02-25 15:...	0	0	0.000000	0.000000

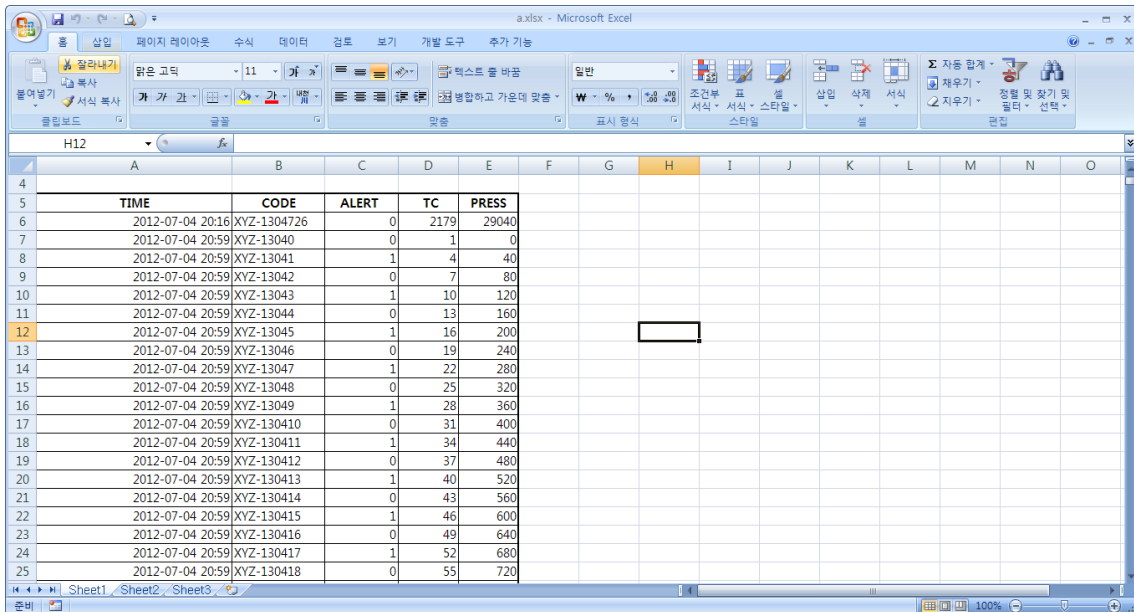
- ⑥ If you check Pattern path folder, you can find out excel or PDF file that you assigned.

USER LOG DB

<CSV file format>



<Excel format>

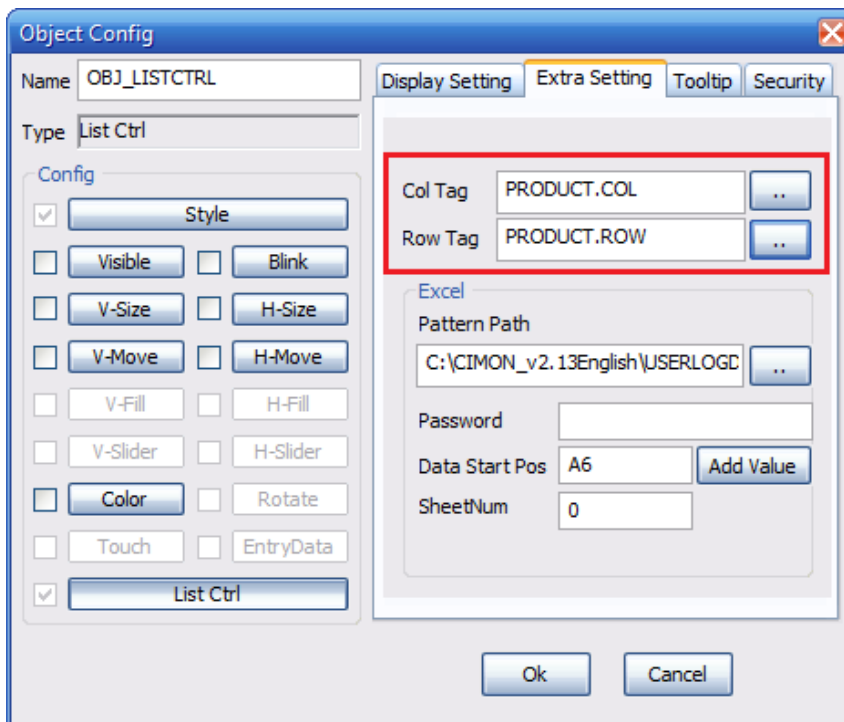


<PDF format>

TIME	CODE	ALERT	TC	PRESS
2012-07-04 20:16	XYZ-1304726	0	2179	29040
2012-07-04 20:59	XYZ-13040	0	1	0
2012-07-04 20:59	XYZ-13041	1	4	40
2012-07-04 20:59	XYZ-13042	0	7	80
2012-07-04 20:59	XYZ-13043	1	10	120
2012-07-04 20:59	XYZ-13044	0	13	160
2012-07-04 20:59	XYZ-13045	1	16	200
2012-07-04 20:59	XYZ-13046	0	19	240
2012-07-04 20:59	XYZ-13047	1	22	280
2012-07-04 20:59	XYZ-13048	0	25	320
2012-07-04 20:59	XYZ-13049	1	28	360
2012-07-04 20:59	XYZ-130410	0	31	400
2012-07-04 20:59	XYZ-130411	1	34	440
2012-07-04 20:59	XYZ-130412	0	37	480

-List Control Event

- ① Make two Analog tags (COL and ROW) in PRODUCT Group.
- ② Double click List Control in CimonD and select Col Tag and Row Tag as below.



USER LOG DB

- ③ Make String Tag(SEL_STR) in PRODUCK Group.
- ④ Make the script as below.

```
Sub PrListChange()  
  
    nRow = GetTagVal("PRODUCT.ROW")  
    ' Read row position of List Control.  
  
    nCol = GetTagVal("PRODUCT.COL")  
    ' Read column position of List Control.  
  
    strData$ = wcGridGetData("그림 3", nCol, nRow)  
    ' Read data value from row and column.  
  
    SetTagVal "PRODUCT.SEL_STR", strData$  
    ' Write data value to tag.  
  
End Sub
```

- ⑤ As row and column are changed, RunScript("PrListChange") runs automatically.
- ⑥ If you click different rows and columns after running CimonX, the tag value of PRODUCT.SEL_STR is changing.

The screenshot shows the CIMON software interface. At the top, there are menu options: 파일(F), 편집(E), 보기(V), 작업(W), 도움말(H). Below the menu is a toolbar with various icons. The main window is titled 'PAGE 2' and contains a log table with columns 'TIME' and 'CODE'. The log entries are as follows:

TIME	CODE
2012-07-04 18:27:30	aaaa
2012-07-04 19:29:54	acrc
2012-07-04 19:32:25	acrx
2012-07-04 19:33:21	ccrx
2012-07-04 19:33:28	xxxx
2012-07-04 19:39:07	XYZ-13040
2012-07-04 19:39:07	XYZ-13040
2012-07-04 19:39:08	XYZ-13040
2012-07-04 19:39:09	XYZ-13040
2012-07-04 19:39:10	XYZ-13040
2012-07-04 19:39:11	XYZ-13040
2012-07-04 19:39:12	XYZ-13040
2012-07-04 19:39:12	XYZ-13040

An orange box highlights the entry at 19:39:07 with code XYZ-13040. An arrow points from this entry to a detailed view window titled '데이터베이스 (LOGDB212.DBX)'. This window shows a tree view on the left with 'LOGDB212' expanded to 'PRODUCT', and a table on the right with columns '이름', '주석', '태그값', '현재상태', and '경보상태'. The 'SEL_STR' entry is highlighted in orange in the table, with its values being:

이름	주석	태그값	현재상태	경보상태
ALERT		0		
COL		0		
ROW		6		
CODE				
SEL_STR		2012-07-04 19:39:07		
COATE		20120705		
E TIME		181952		
PRESS		0		
S DATE		20120704		
S TIME		181952		
TC		0		

At the bottom right of the interface, there is a status bar showing 'a.A' and the date/time '2012/07/05 18:20:24'.