

Changing Windows with Finger Slide

Table of Contents

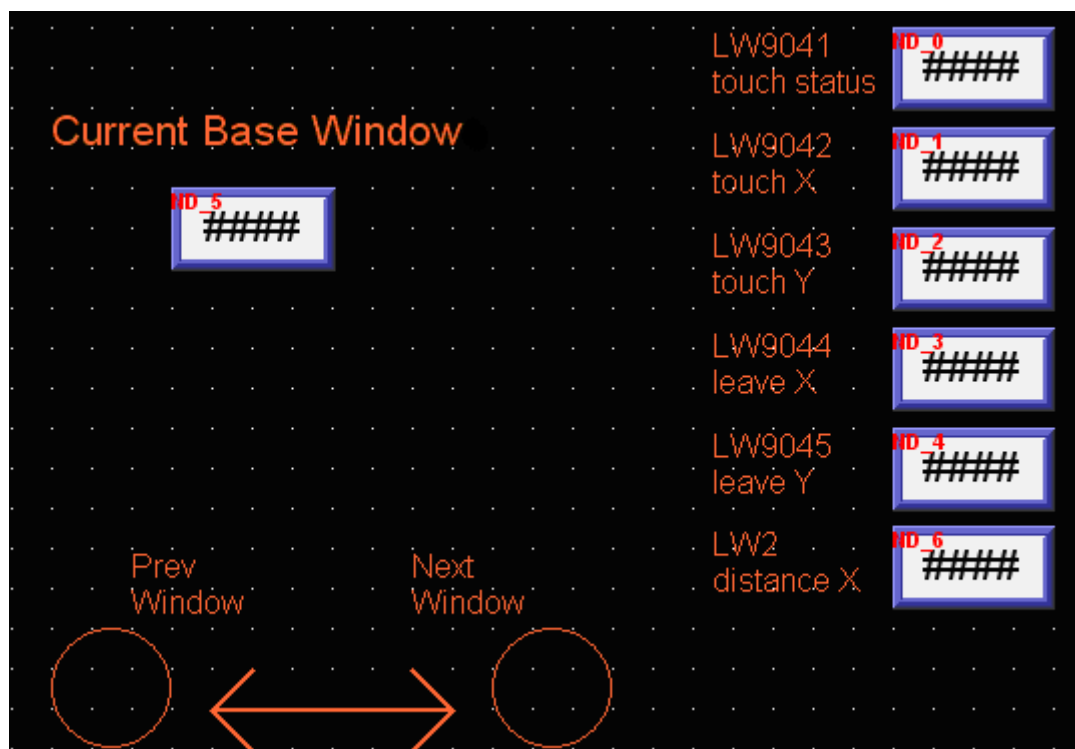
1. Overview and Operation	3
2. Setting Up the Screen	6
3. Addresses	12

1. Overview and Operation

Overview

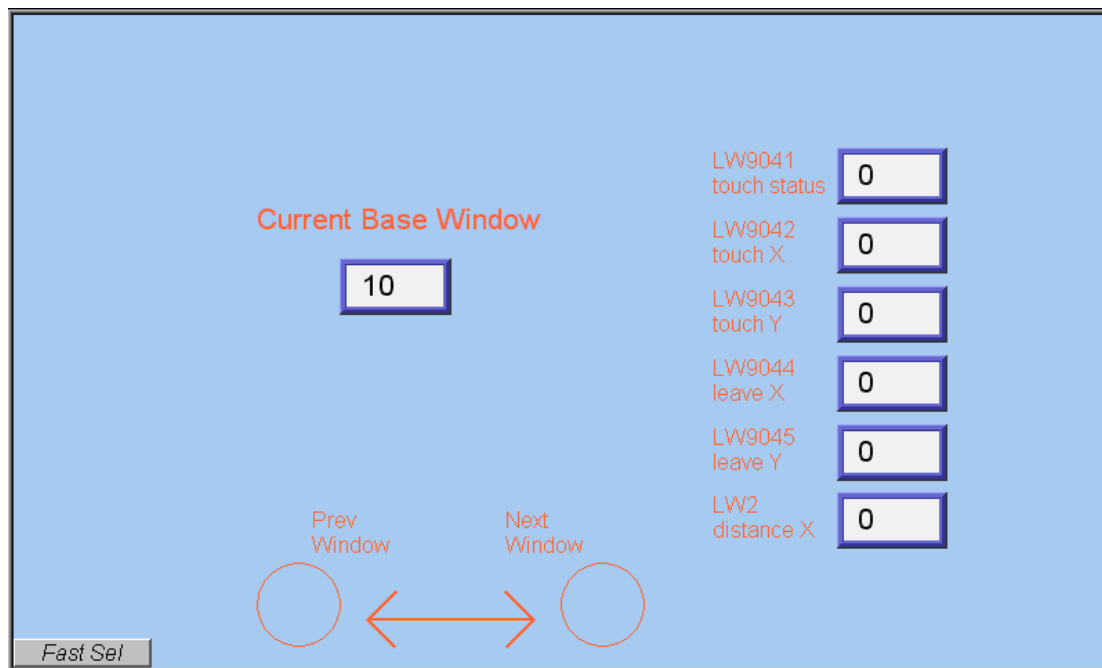
Do you often accidentally touch the change window buttons? Would you like to make changing window mistake free with some easy and intuitive actions other than displaying buttons?

This demonstration will introduce users how to change windows with finger slide through system tag LW9041 touch status.

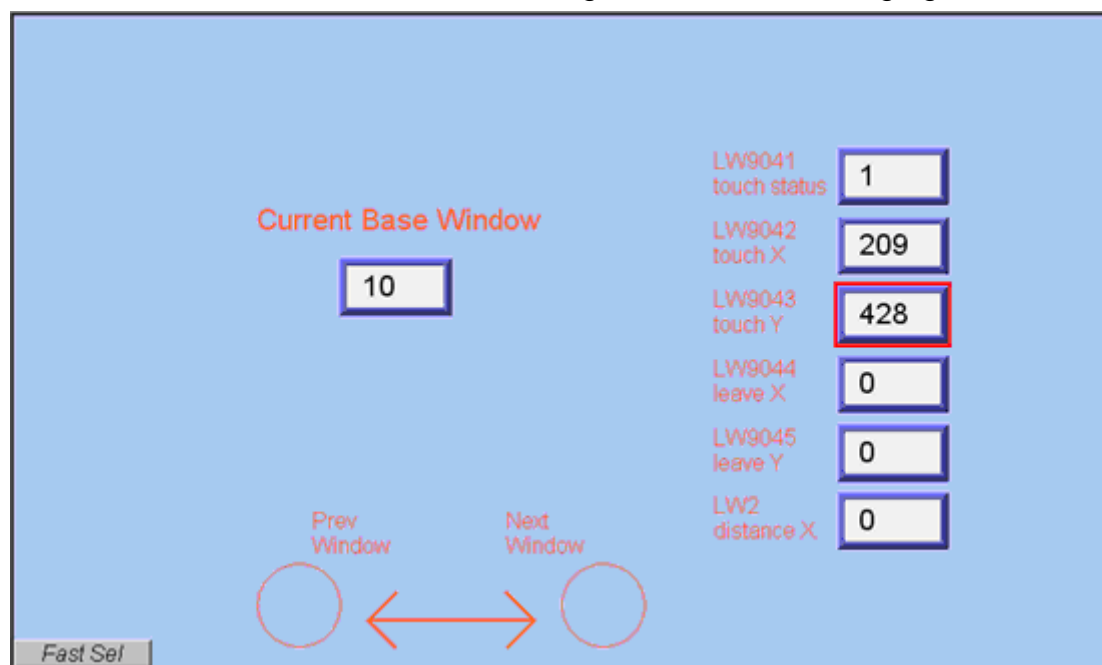


Operation

The demonstration shows as follows:

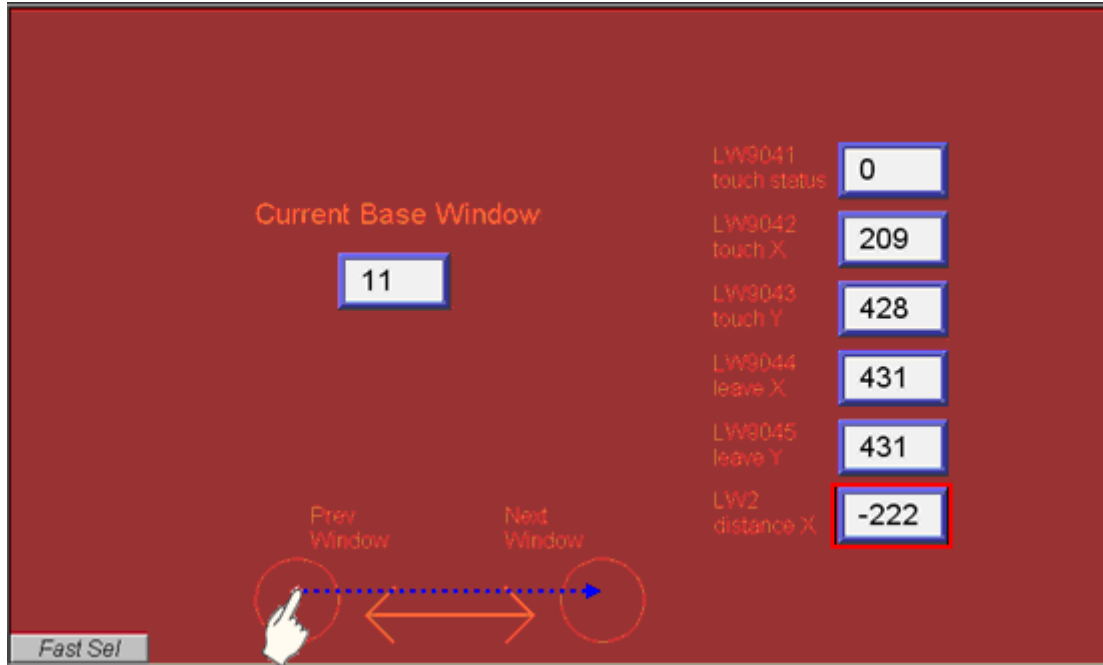


While touching the screen with finger, the state of LW9041 will be displayed as "1". LW9042 and LW9043 indicate the X and Y coordinates respectively. Note: Coordinate Y must reach 400 or higher to activate changing windows.



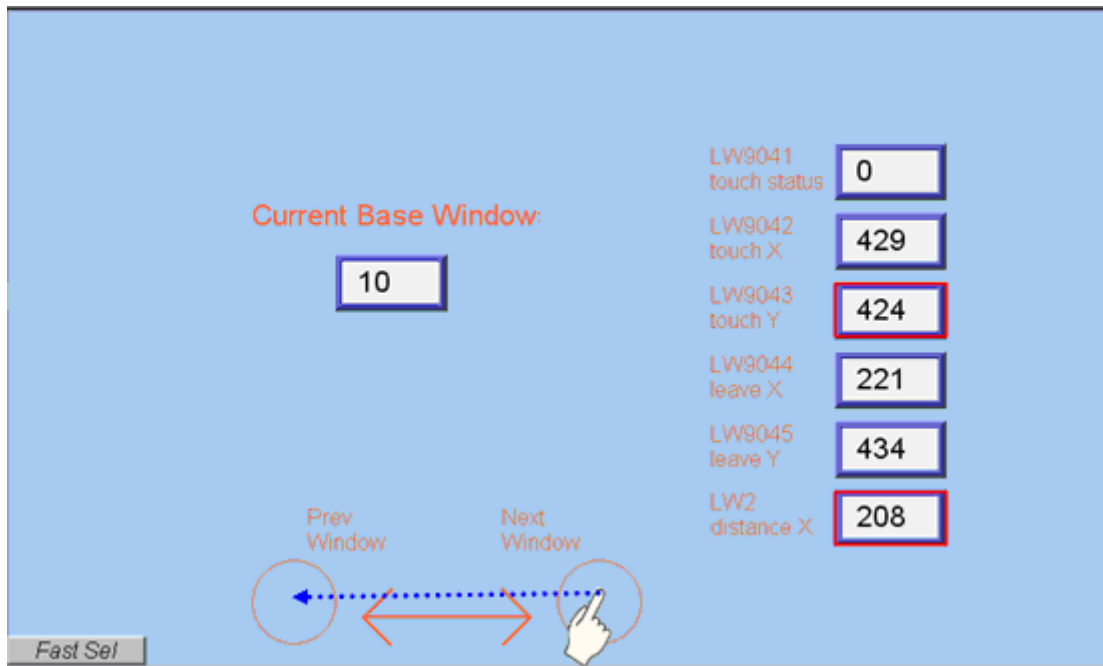
Press and hold finger on screen and slide to right in a distance longer than 100pixels. It will change to next window after removing finger.

LW9044 and LW9045 indicate the X and Y coordinates respectively where the finger leaves the screen. LW 2 displays distance that the finger moves.



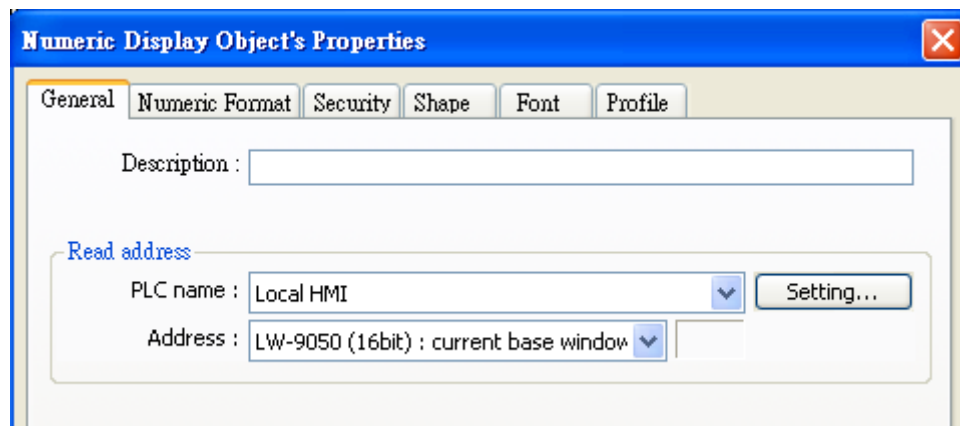
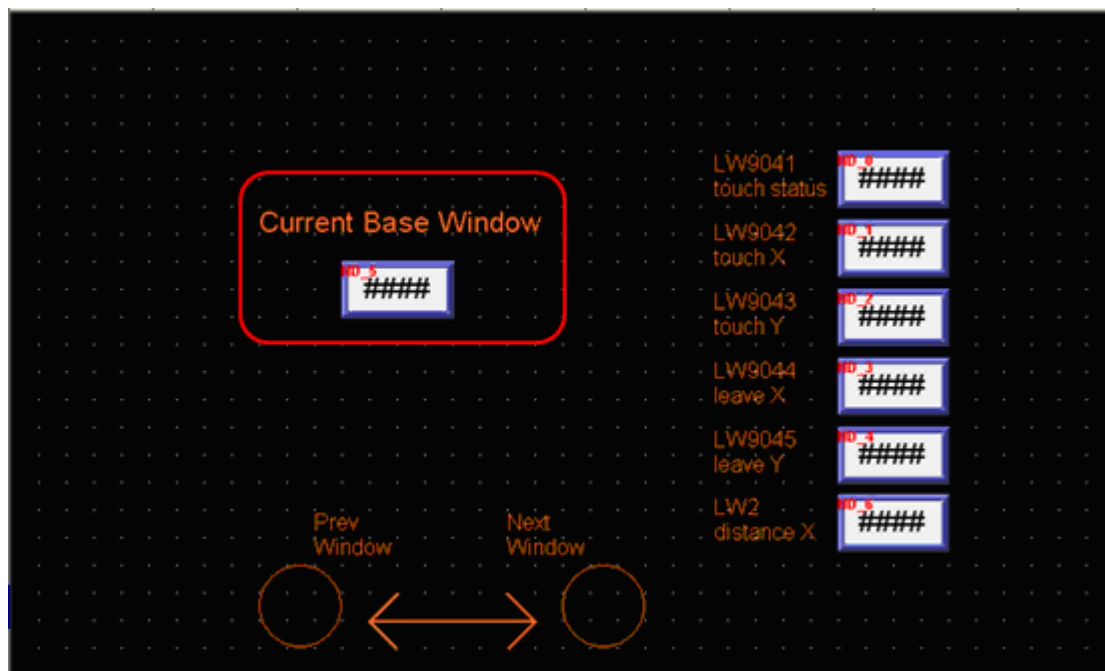
Press and hold finger on screen and slide to left in a distance longer than 100 pixels. It will change to previous window after removing finger.

Coordinate Y (LW9043) must reach 400 or higher and the distance X (LW2) must be longer than 100 to activate changing windows.

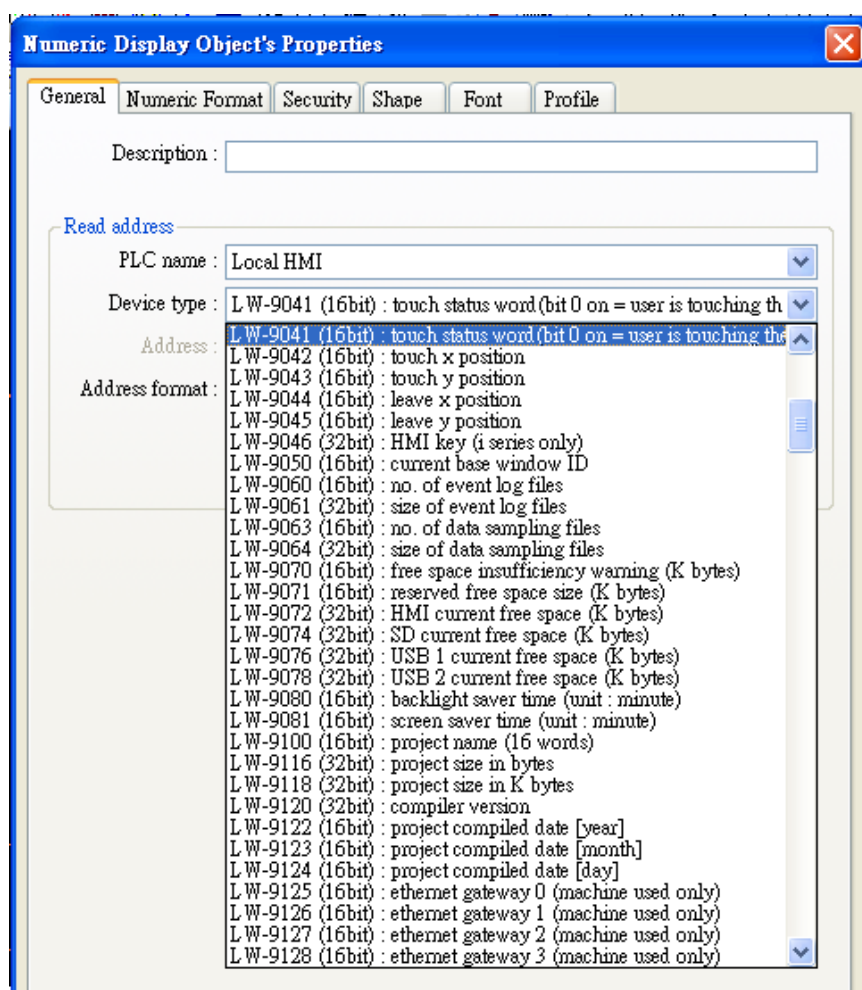
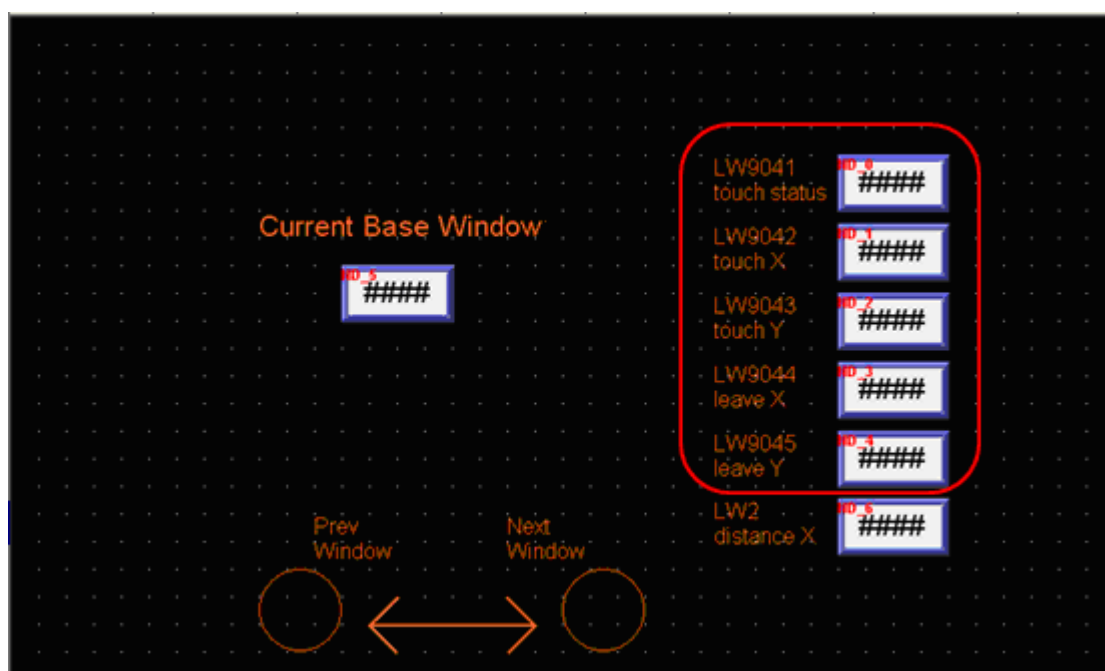


2. Setting up the Screen

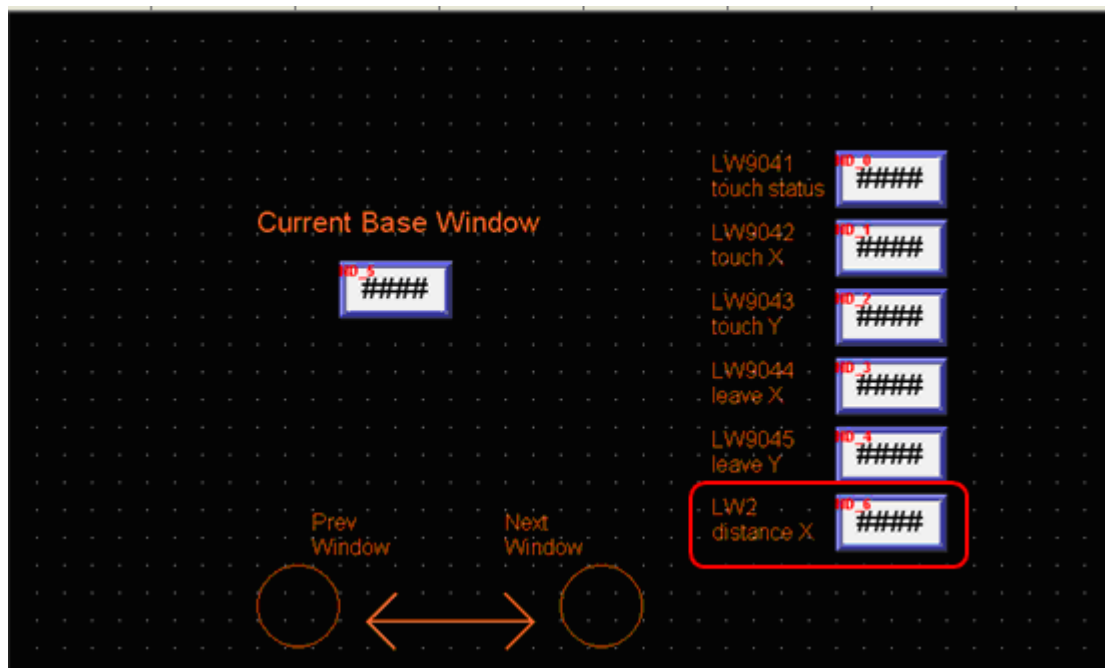
1. Create a Numeric Display object in common window, the system register is LW9050, and is used to display the ID of Current Base Window.



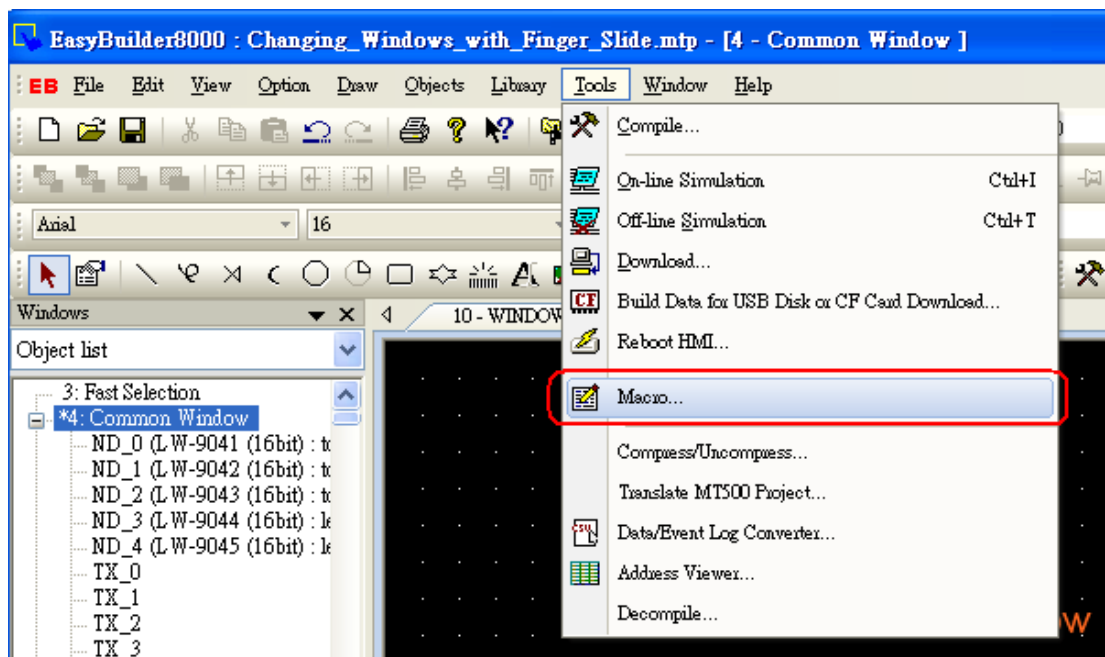
2. Create five Numeric Display objects for showing the status and position that the user touches or leaves the screen by selecting system registers LW9041~LW9045.

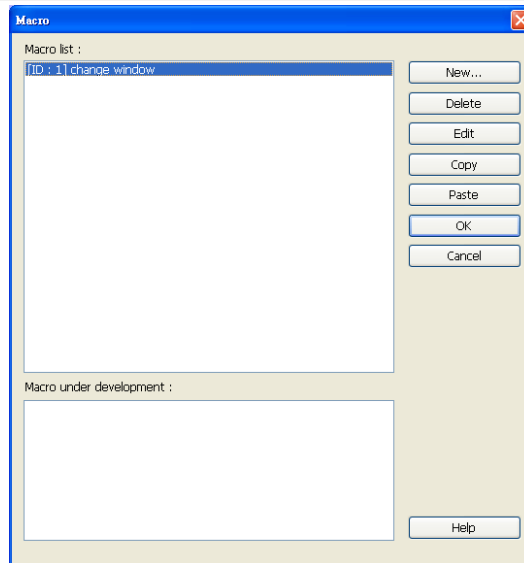


3. Create a Numeric Display object of LW2 for showing the distance X that the user moves while touching screen.



4. Build the macro of changing window, define touch position Y >400, moving distance longer than 100 pixels. This will prevent users from accidentally change windows while operating other objects.





```

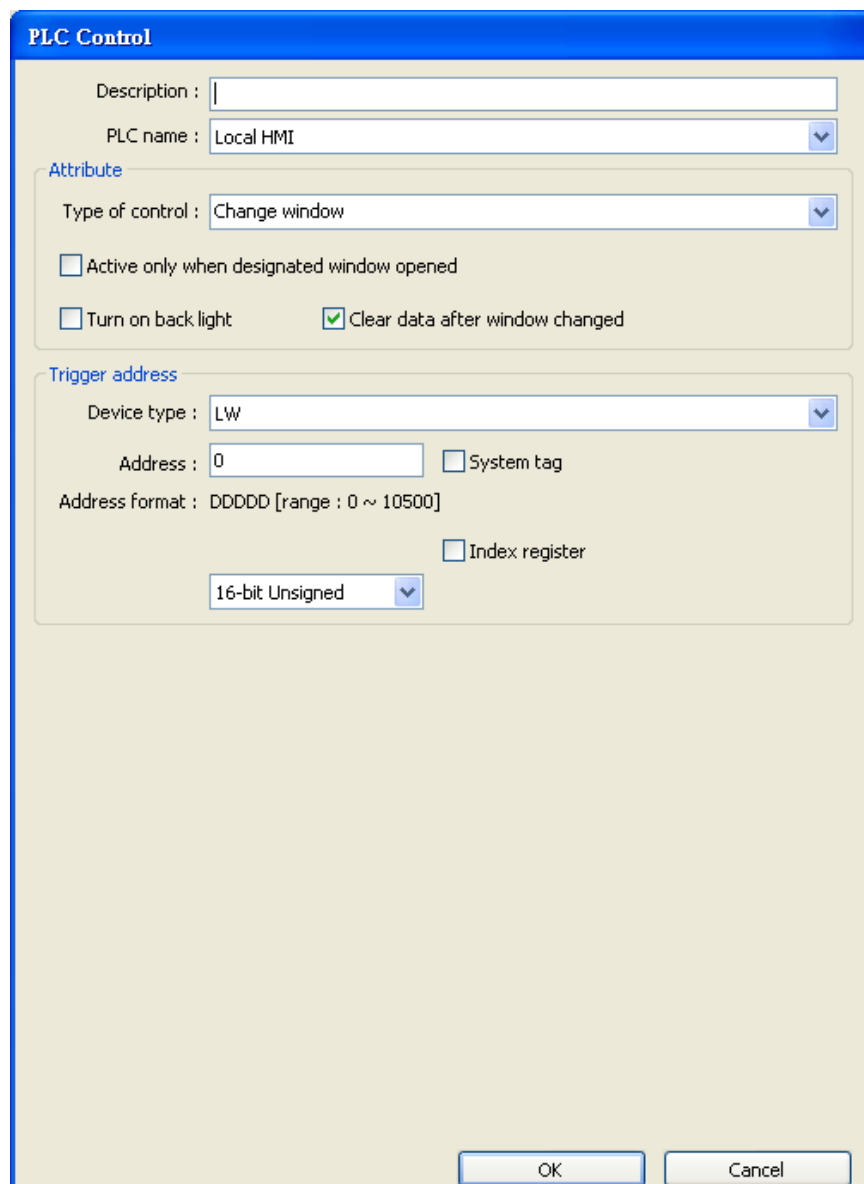
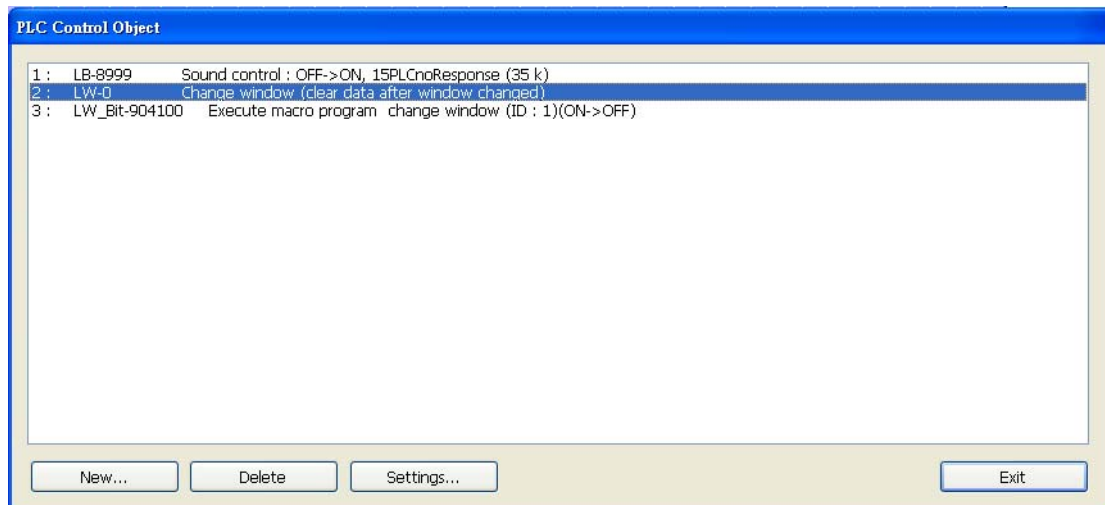
macro_command main()
short base_win, touch_pos[4], distance

GetData(touch_pos[0], "Local HMI", LW, 9042, 4)
distance=touch_pos[0]-touch_pos[2] //X is the moving distance
if touch_pos[1]>400 then //if X > 400
if distance<-100 then //if moving distance <-100
    GetData(base_win, "Local HMI", LW, 9050, 1)
    base_win=base_win + 1 //current base window +1
    if base_win > 16 then //if current base window >16
        base_win=10 //current base window =10
    end if
    SetData(base_win, "Local HMI", LW, 0, 1) //send value in base win to LW0
end if

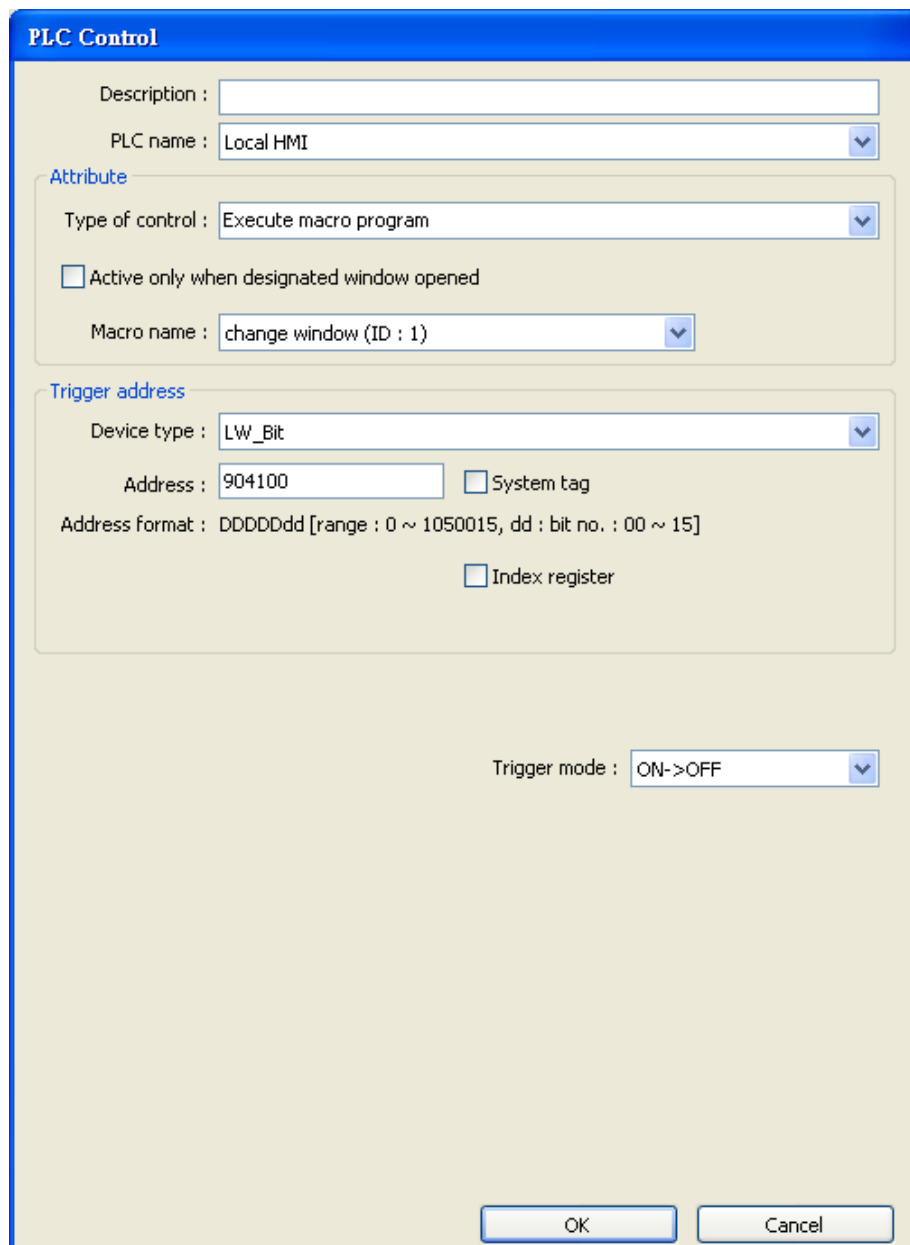
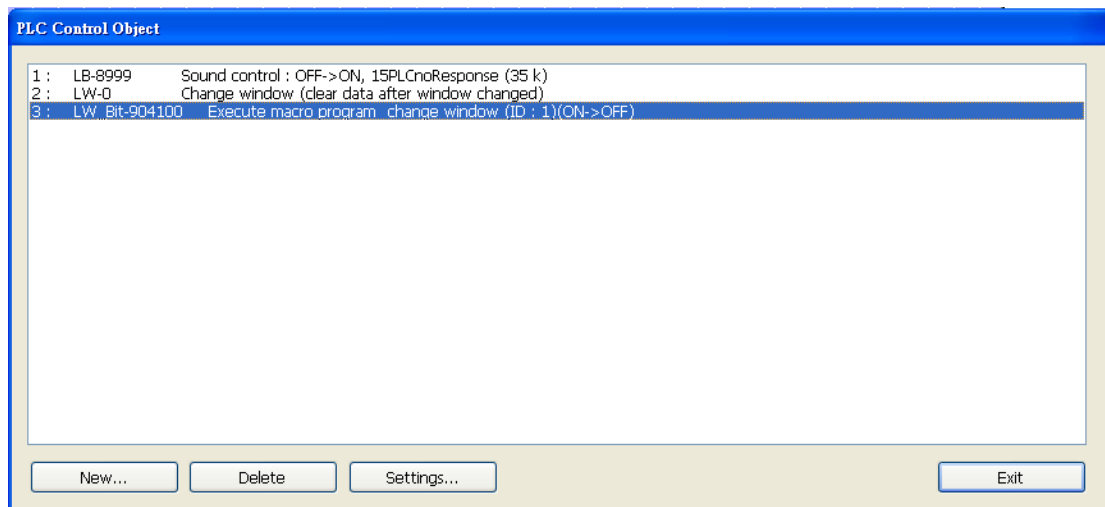
if distance>100 then //if moving distance >100
    GetData(base_win, "Local HMI", LW, 9050, 1)
    base_win=base_win - 1 //current base window -1
    if base_win < 10 then //if current base window <10
        base_win=16 //current base window =16
    end if
    SetData(base_win, "Local HMI", LW, 0, 1) //send value in base window to LW0
end if
    SetData(distance, "Local HMI", LW, 2, 1) //send value of distance to LW2
end if
end macro_command

```

5. Add LW-0 Change Window in PLC Control Object.



6. Add LW Bit-904100 in PLC Control to execute macro of changing window.



3. Addresses

The addresses of objects used in this demonstration are listed below. Users can use different addresses or object ID base on actual usage.

Object	Address	Object ID	Description
Window 4			
Numeric display	LW-9041	ND_0	Touch status
	LW-9042	ND_1	Touch X position
	LW-9043	ND_2	Touch Y position
	LW-9044	ND_3	Leave X position
	LW-9045	ND_4	Leave Y position
	LW-9050	ND_5	Current base window ID
	LW-2	ND_6	Distance X