ViewX

Planning Program Manual
(ViewX Software User Guide)

CATALOGUE

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1. ViewX Installation and Requirement

1-1 Minimum Hardware Requirement

64MB RAM
20MB in hard disk space
800*600 dpi and 256 colors

Window®

• Intel® Pentium® II/500 MHz or higher (or compatible)

• Microsoft® Window® 2000 or Window XP™

Please check up the computer hardware is suitable for minimum system requirement before you install the software. In order to avoid the problems of using incompatible hardware, the system must fit in with minimum system requirement or higher. If you have any problems, please contact our customer service. The operating system is Windows 2000 Professional and ViewX 1.0 vision.

1-2 ViewX Installation Procedure

Insert the installation CD, or click 【Start】 -> 【Run】, then key in a route of CD-ROM and "setup.exe", such as D:\SETUP.EXE

1-3 Run ViewX

On Windows, click【Start】 → 【Program】 →【ViewX】 → 【ViewX】 (Illustration 1-4.1)

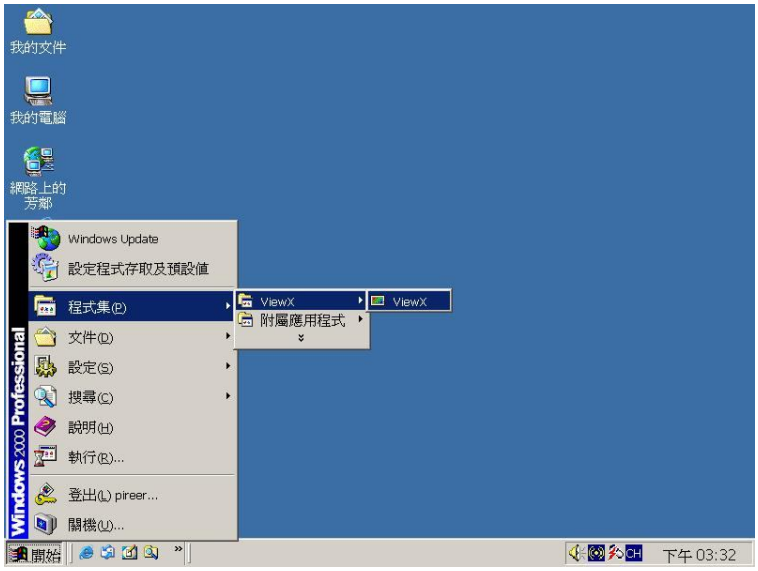


Illustration 1-4.1 to run ViewX on the scene

2. ViewX Function Description

2-1 File

Click【File】or press 【ALT】+【F】with a keyboard, the menu of【File】will appear as illustration 2-1.1. A Toolbar has the shortcut icon on the window, which provides prompt click to users. (Illustration 2-1.2)

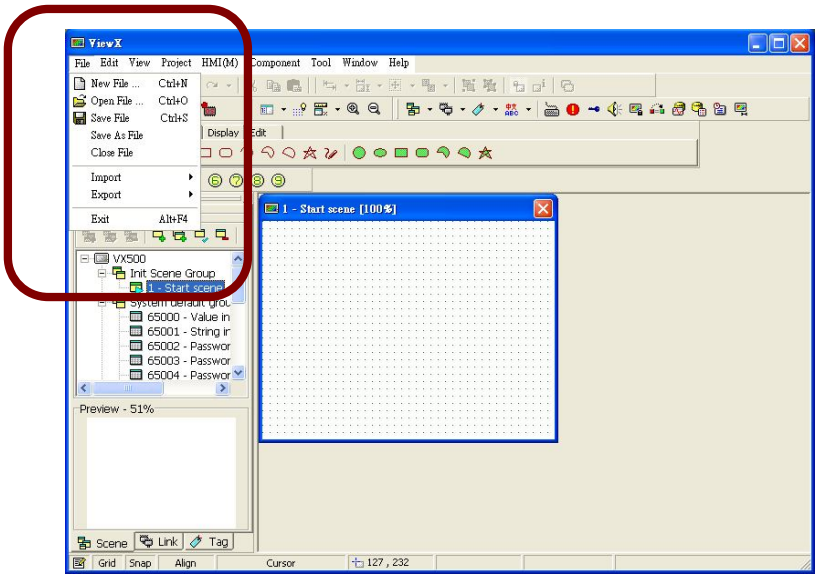


Illustration 2-1.1 【File】pull-down menu

(1) (2) (3) (4) (5)



Illustration 2-1.2 【File】Toolbar

（1）New File
（2）Open File
（3）Save File
（4）Printer Setup
（5）Print

2-1.1 Open New File

After Clicking【New File】, illustration 2-1.1.1 will appear. Key in data and click ”OK” to add new file.

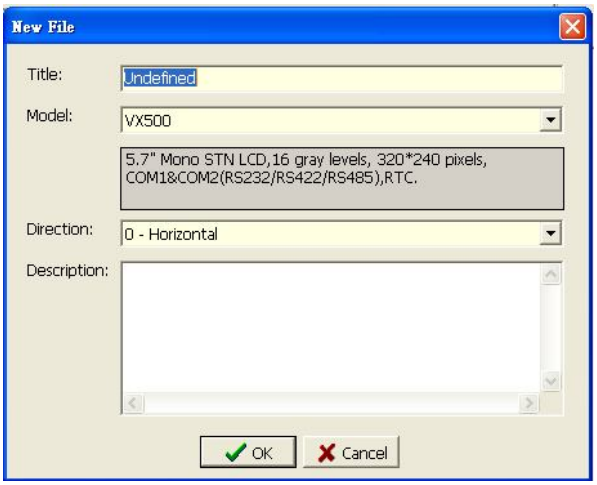


Illustration 2-1.1.1 【New File】window

File name： Input File name.
Model code： Select HMI style
Display mode： Select horizontal or vertical。
Description Input File description

2-1.2 Open Files

This function opens edited files as illustration 2-1.2.1. Choose among an old file. The extension of edited file for ViewX is vxf.

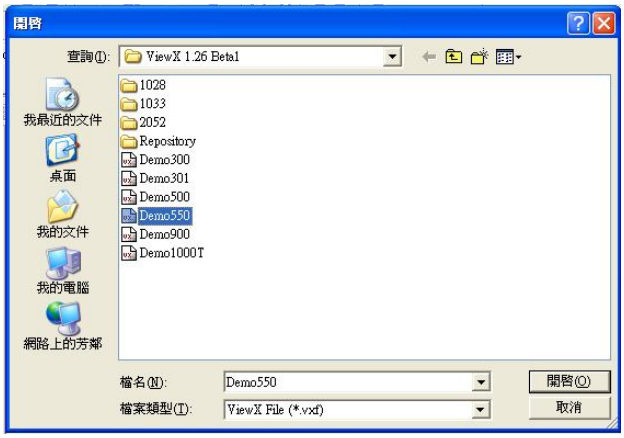


illustration 2-1.2.1 【Open old file】window

Or you can make a quick click to the old file on the toolbar. (Illustration 2-1.2.2)

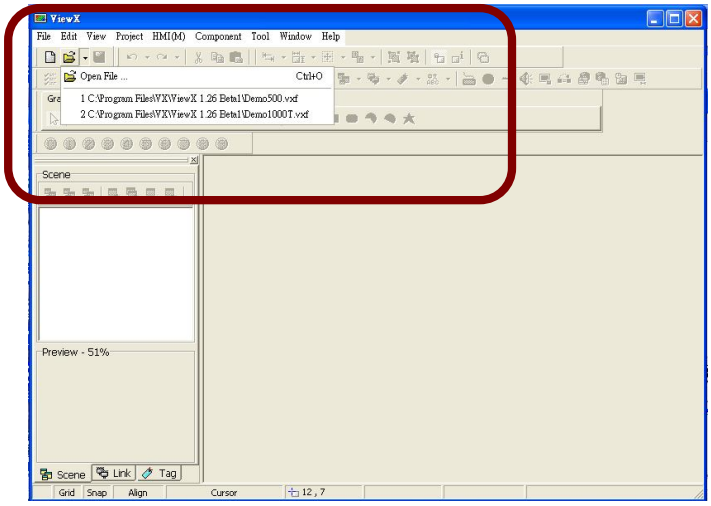


Illustration 2-1.2.2

2-1.3 Save File/ Save As File

In editing new file, clicking【Save File】will appear saving file route as illustration 2-1.3.1. In editing old file, the file will be saved in original route. Clicking【Save As File】will be saved file in the route you input as illustration 2-1.3.1.

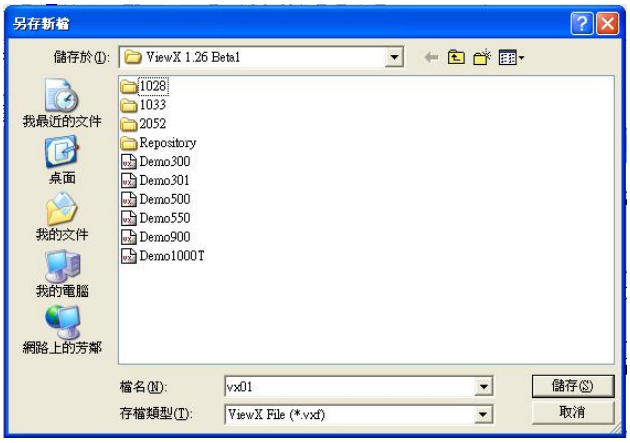


Illustration 2-1.3.1 【Save File/Save As File】window

2-1.4 Close File

Clicking【Close File】will close an opened file. If the file has been edited, a prompter will show the message as "Do you want to save".

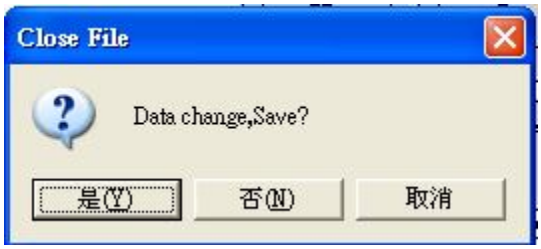


Illustration 2-1.4.1 【Close File】message

Click Yes： Saving and closing file
Click No： Closing file without saving
Click Cancel： Back to editing scene

2-1.5 Import

Choose the item you want to import as illustration 2-1.5.1.

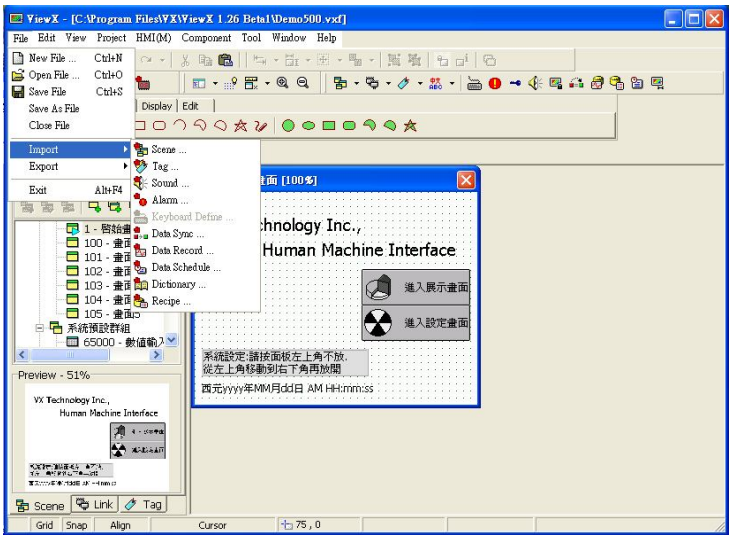


Illustration 2-1.5.1

2-1.6 Export

Choose the item you want to export as illustration 2-1.6.1.

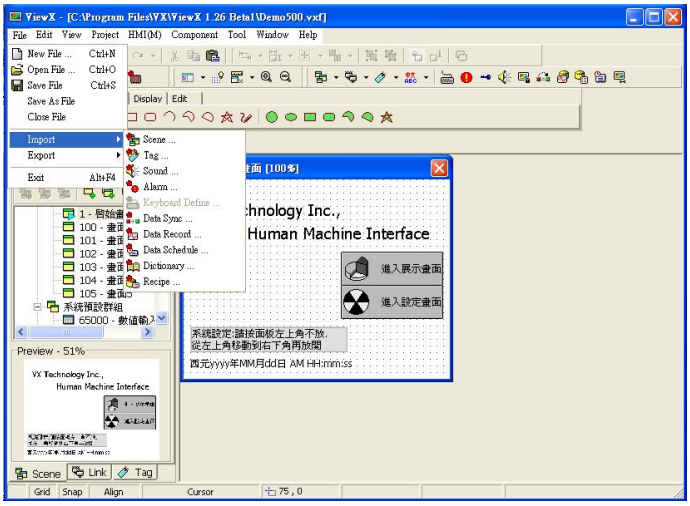


Illustration 2-1.6.1

2-1.7 Printer Setup and Print

Clicking【Printer Setup】will appear as illustration 2-1.7. This setup is similar to Windows setup. Please refer to Windows setup.



Illustration 2-1.7

2-1.8 Exit

Click【Exit】 to close ViewX. If the file has not saved yet, the prompt will pop-up and reminds you to save the file. Please refer to the illustration 2-1.4.1.

2-2 Edit

Click【Edit】or press 【ALT】+【E】with a keyboard, drop-down menu of 【Edit】 will appear. (Illustration 2-1.1) A Toolbar has the shortcut icon on the window, which provides prompt click to the users. (Illustration 2-2.2)

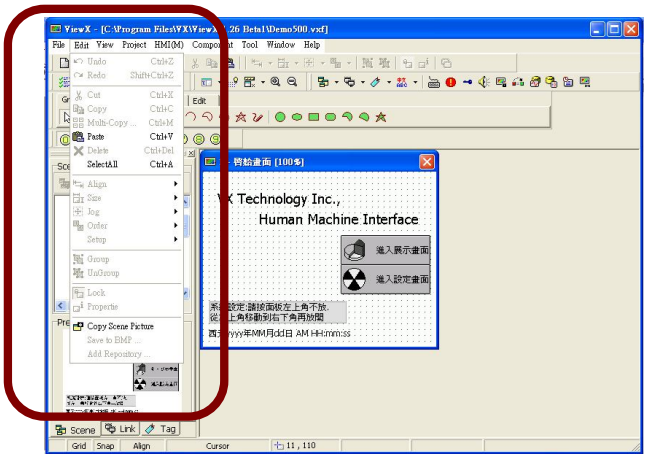


Illustration 2-2.1 【Edit】 pull-down menu

(1) (2) (3)(4)(5) (6) (7) (8) (9) (10)(11) (12)(13)



Illustration 2-2.2 【Edit】toolbar

(1) Undo【Ctrl+Z】
(2) Redo【Shift+Ctrl+Z】
(3) cut【Ctrl+X】
(4) Copy【Ctrl+C】
(5) Paste【Ctrl+V】
(6) Align
(7) Size
(8) Jog
(9) Order
(10) Group
(11) UnGroup
(12) Lock
(13) Properties

2-2.1 Align

Click【Edit】and choose【Align】(Illustration 2-2.1)

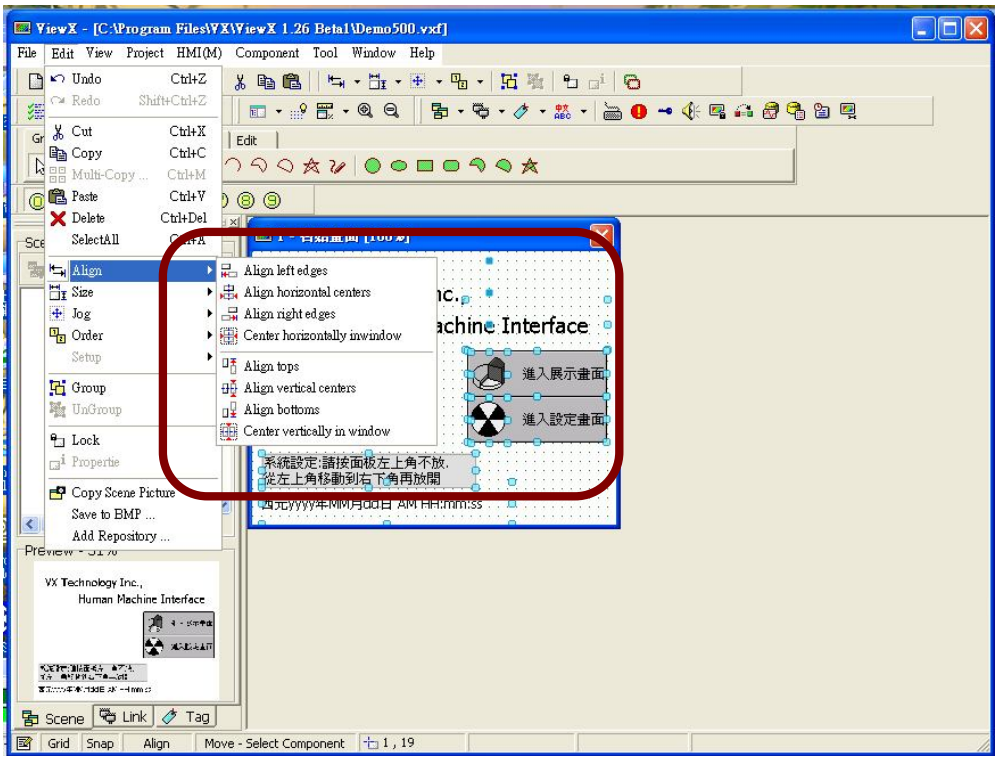


Illustration 2-2.1

Choosing the graphic components which needed to be aligned, it has to be more than two. (Illustration 2-2.1.1) Then select aligning mode as illustration 2-2.1.2.【Align tops】This aligning mode is set for aligning the nearest edge.

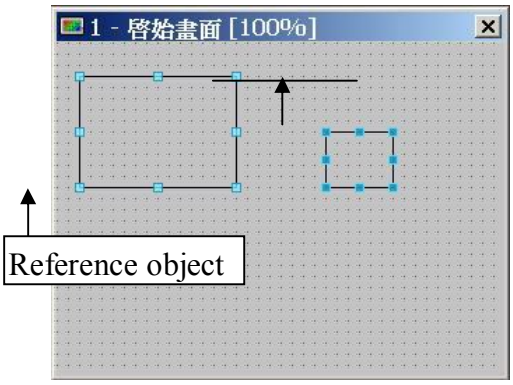


Illustration 2-2.1.1

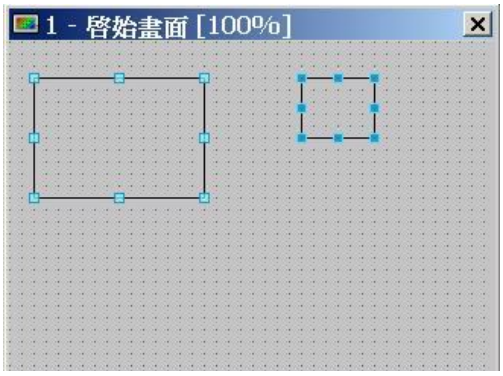


Illustration 2-2.1.2【Align upper edge】

2-2.2 Size

Click【Edit】and choose【Size】(Illustration 2-2.2)

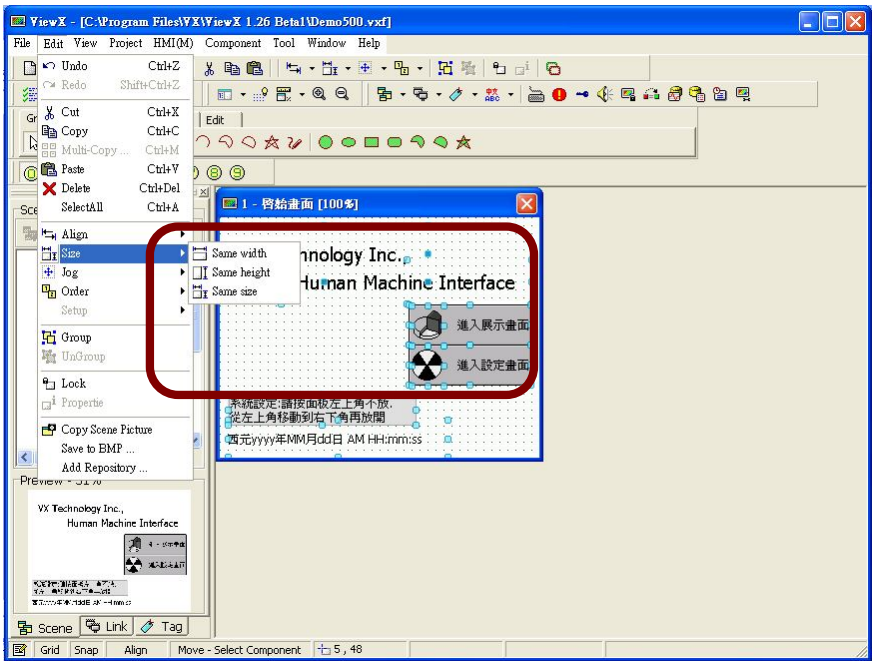


Illustration 2-2.2

While you choose more than two graphic components, you could use this function with speeding up editing. Choose the graphic component you want to modify (Illustration 2-2.2.1) and then pick up which a main component is. Darker point shows means the main component. Then, select the same width, or the same high, or the same size. (ex.【Same width】as Illustration 2-2.2.2)

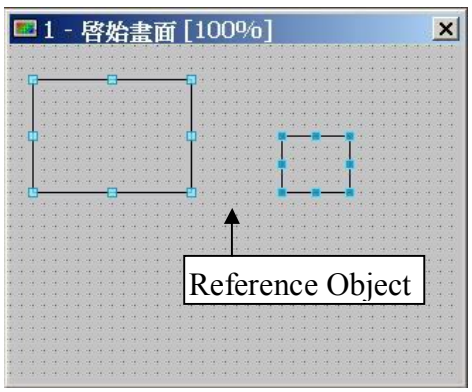


Illustration 2-2.2.1

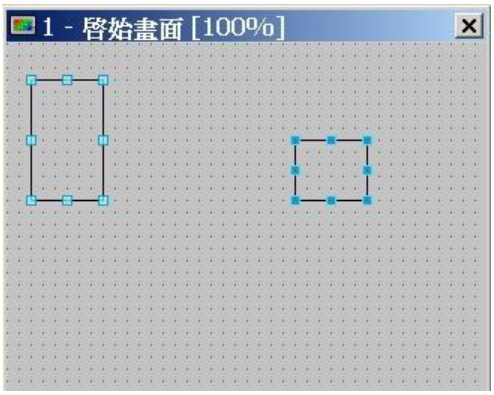


Illustration 2-2.2.2【Same width】

2-2.3 Jog

Click【Edit】and then click【Jog】(Illustration 2-2.3) This Function enables a graphic component to slightly move UP, DOWN, LEFT and RIGHT. Or you could use UP, DOWN, LEFT, and RIGHT keys (Jog), or hold key Shift + UP, DOWN, LEFT, and RIGHT keys (Grid point), or hold key Ctrl + UP, DOWN, LEFT, and RIGHT keys. (Jog for size)

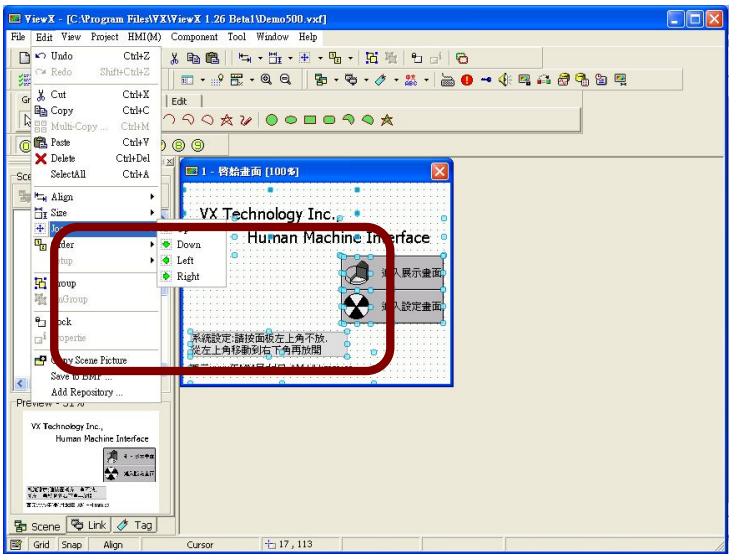


Illustration 2-2.3

2-2.4 Order

Chick【Edit】and then click【Order】as illustration 2-2.4. The graphic component in overlapping can be moved to bring forward, send backward, top layer, bottom layer.

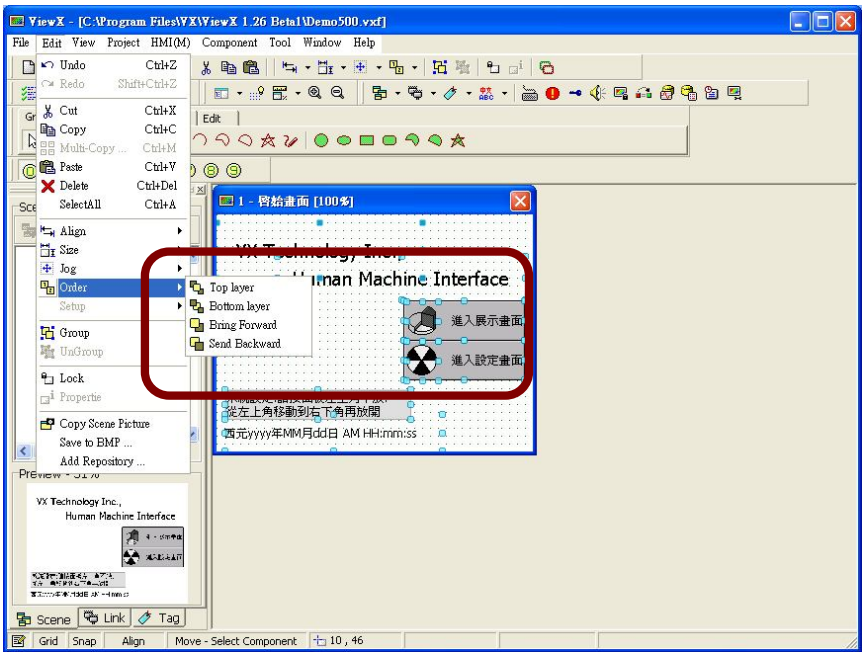


Illustration 2-2.4

2-2.5 Group/Ungroup

Click【Edit】and then click【Group/Ungroup】.When choosing several graphic components, it could combine them into a single component. You could also use the prompt key【G】to edit quickly and easily while moving or copying. Clicking【Ungroup】 can ungroup a collected component. To Ungroup just need to click the combining components then click the 【Ungroup】button, those components will be separated. You could also use the prompt key【U】.

2-2.6 Lock/Unlock

Click【Edit】 then choose【Lock】which could luck the single or multiple graphic components that been chosen. And this function makes the chosen components unmovable or unmodified.

For unlocking, click the graphic component you want to remove, and click 【Edit】, then click【Lock】to unlock. You could also use the prompt key【L】to luck or unlock.

2-2.7 Properties

Due to each graphic components' attribute are different, therefore please refer to User Guide in【3. Component】

2-2.8 Copy Scene Picture

Click【Edit】and then choose【Copy Scene Picture】,which could copy the current editing window to graphic application, (as Illustration 2-2.8.1 to 3) ,or it could also copy to document processing software (ex. WORD) for collating document.

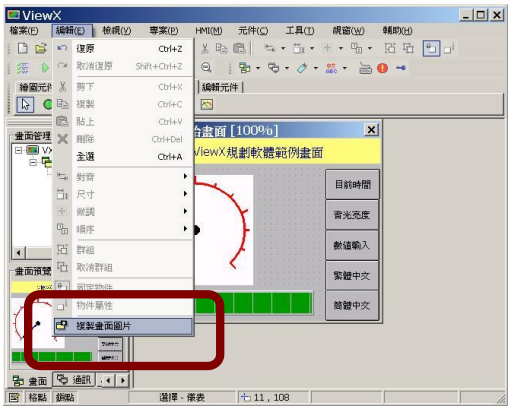


Illustration 2-2.8.1 【Step1】

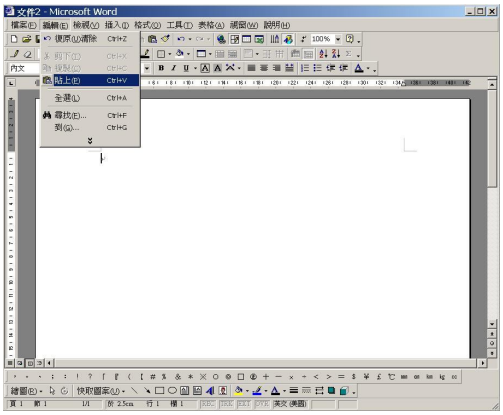


Illustration 2-2.8.2 【Step 2】

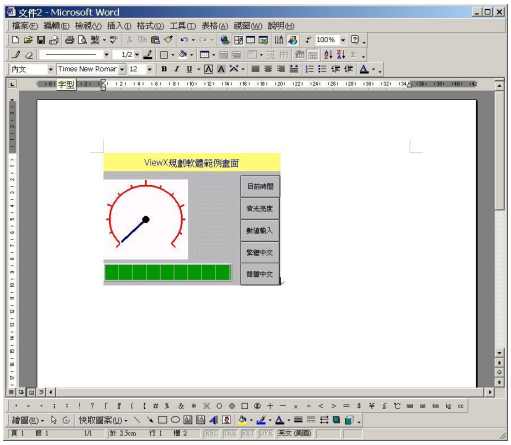


Illustration 2-2.8.3 【Step 3】

2-3 View

Click【View】or press【ALT】+【V】, will appear the drop-down menu under the View section (as Illustration 2-3.1). The toolbar in the window also provides the shortcut, which for user easier to use it (Illustration 2-3.2)

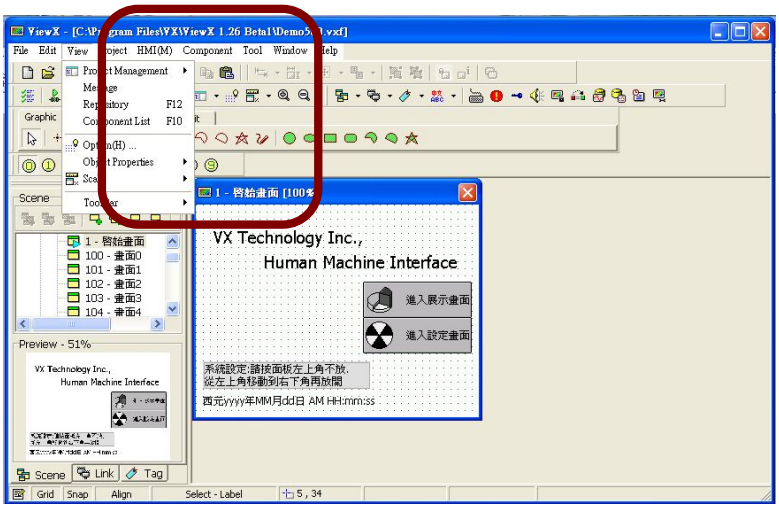


Illustration 2-3.1

(1) (2) (3) (4) (5)



Illustration2-3.2

(1) Project
(2) Option
(3) Scale
(4) Zoom In
(5) Zoom Out

2-3.1 Project Management

Click【View】and choose【Project Management】 Four item will appear. After clicking the【Scene】, it will appear the window of "Scene" on the left side of monitor, or click【Scene】directly on bottom-left corner. (Illustration 2-3.1.1) This function is set for all organization and planning of the scene on HMI. Please refer to chapter 4 of 4-1 Scene.

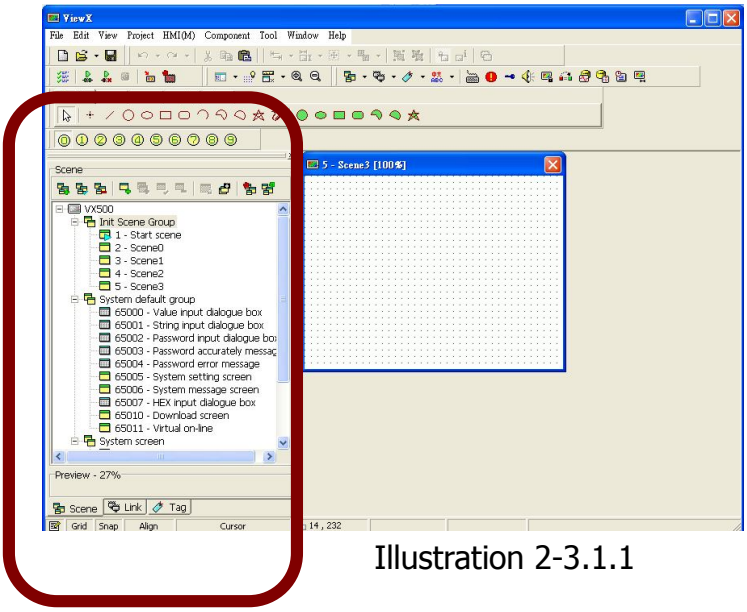


Illustration 2-3.1.1

2、Communication: After clicking the 【communication】, it will appear the window of "Scene" on the left side of monitor, or click【Communication】directly on bottom-left corner. (Illustration 2-3.1.2) This function is set for communication protocol and configuration setup between PLC and HMI. Please refer to chapter 4 of 4-1 Scene.

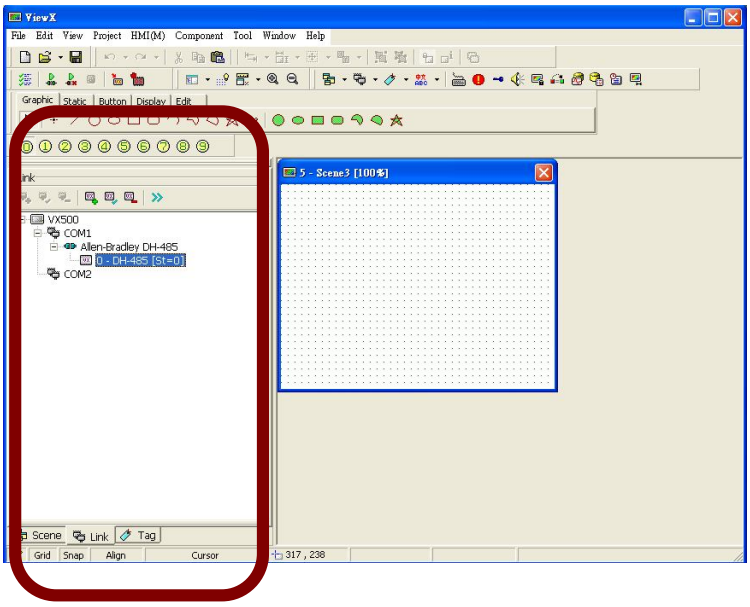


Illustration 2-3.1.2

3、Tag: after click the【Tag】, it will appear the window of "Tag" on the left side of monitor, or you could directly click【Tag】(Illustration 2-3.1.2). Please refer to chapter 4 of 4-3 Tag.

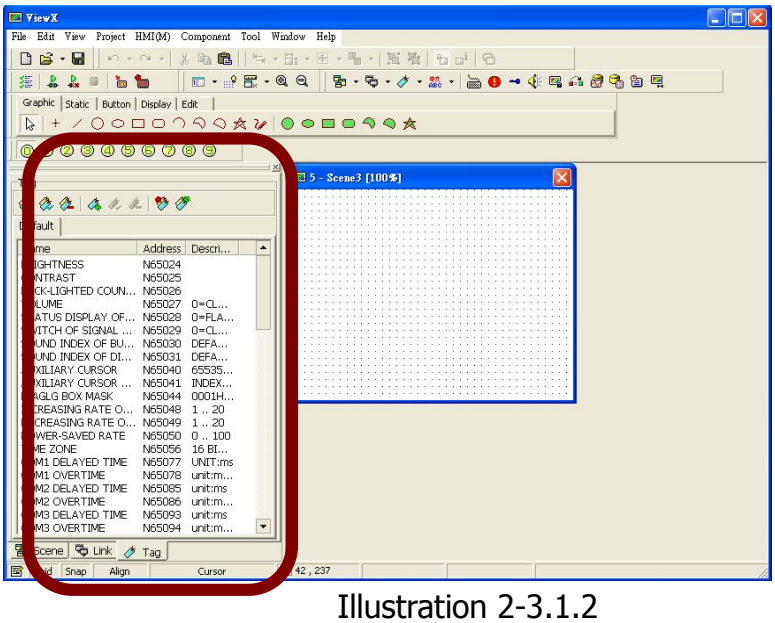


Illustration 2-3.1.2

4、Language: After clicking this function, "Language" will appear as illustration 2-3.1.3. You will see the default of the language family. Please refer to chapter 5 Multinational Language.

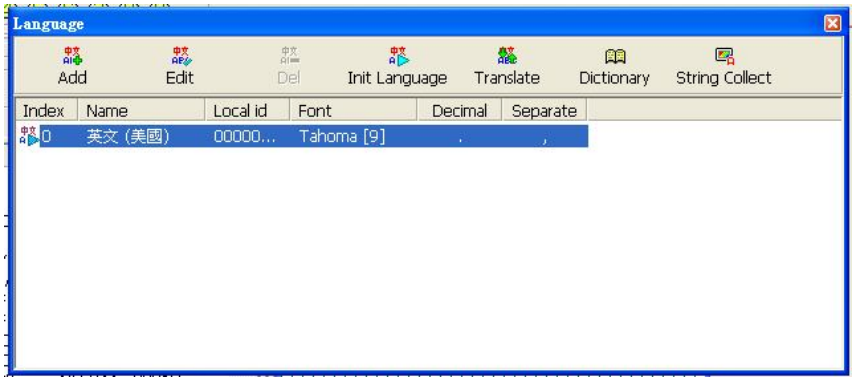


Illustration 2-3.1.3 "Language"

1、Add language：Click this function, illustration 2-3.1.4 will appear.



Illustration 2-3.1.4

Name: choose the language you want to add。
Local ID: the area code for this language.
Font default: default the used font.
Select Front: Select the used font of primary language.
Font: display the chosen font.
Decimal symbol: this function decides which symbol is the decimal Symbol
Separate symbol: this function decides which symbol is the separate Symbol.

2、Edit: Edit existent language in the system.
3、Delete: Delete existent language in the system.
4、Set the Initial language: Set the initial language for operational system's language.

2-3.2 Connection Parameter

Click【View】, then click【connection parameter】(Illustration 2-3.2.1)

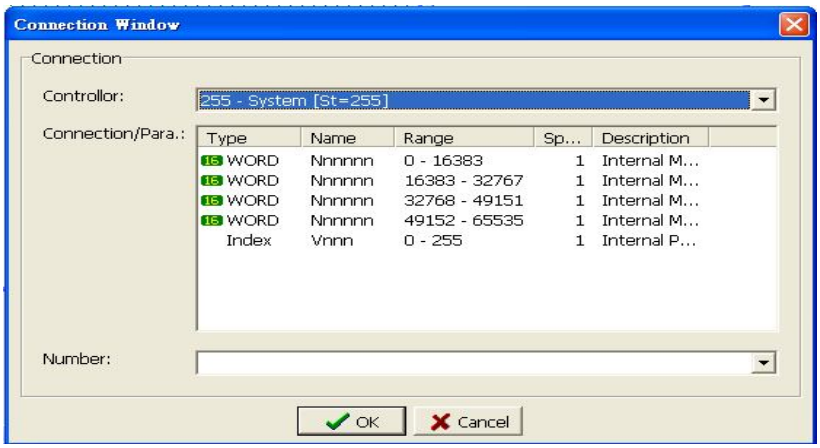


Illustration 2-3.2.1

Junction parameter :

Controller: You could choose junction parameter or communication protocol setup of PLC parameter on this function.

Junction parameter: displaying styles of controller or system parameter you chose

Code: key in junction parameter of system or style.

2-3.3 Message

Click 【View】, and choose 【Message】 it will appear the window of inspecting syntax. (Illustration 2-3.3.1) If the setup is wrong, it will display a wrong message as running.

。

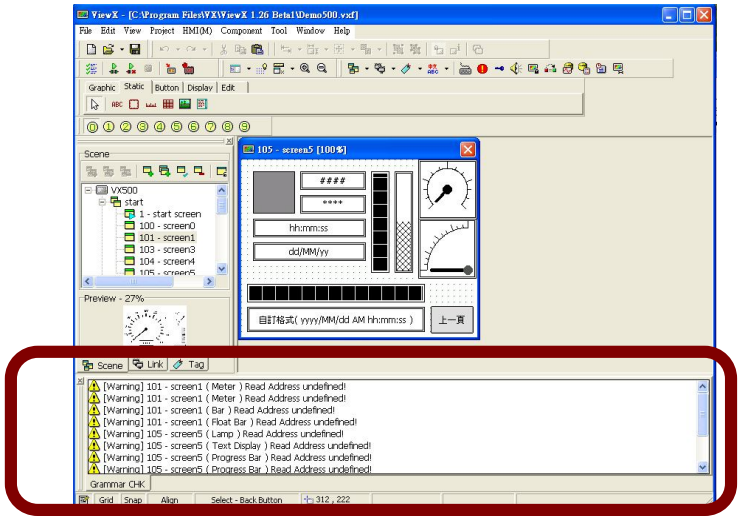


Illustration 2-3.3.1 the window of inspecting syntax

2-3.4 Option

Click【View】, then click【Option】(Illustration2-3.4.1)

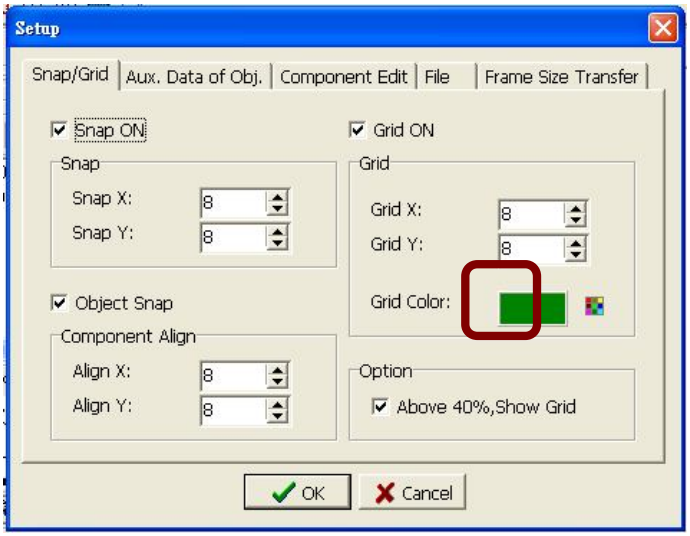


Illustration 2-3.4.1

Open lock point: this option is set whether to stand on net point as editing scene
Open net point: this option is set whether to display net point as editing scene
Color of net point: select color of net points as the red part on Illustration 2-3.4.1

2-3.5 Scale

Click【View】, then click【Scale】, the size of window can be selected as illustration 2-3.4.1. You also can use zoom-in【I】 or zoom-out【O】.

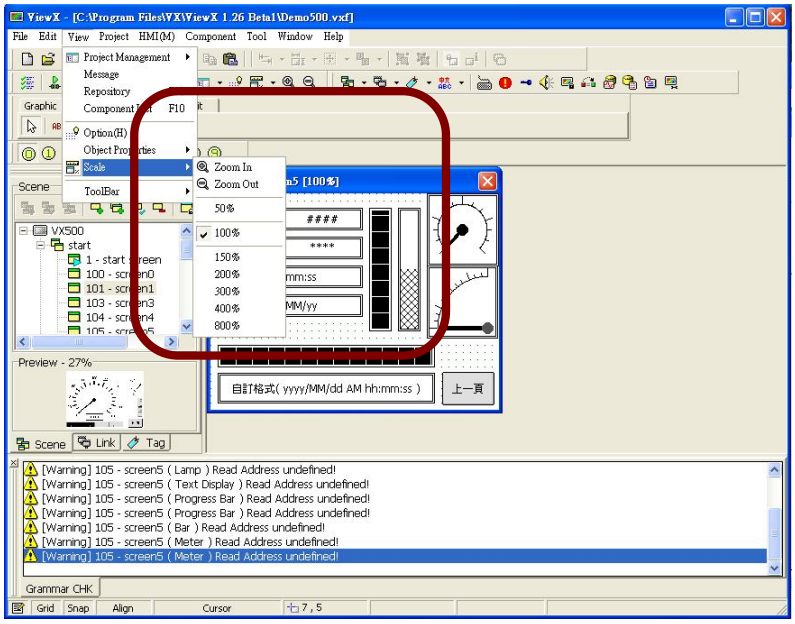


Illustration 2-3.4.1

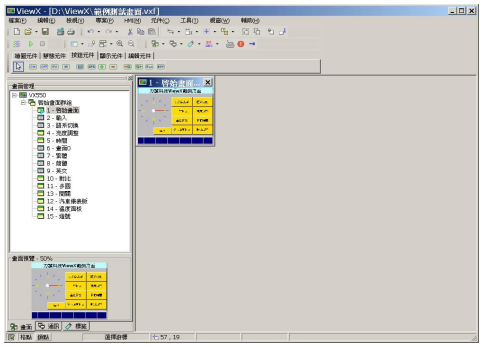


Illustration 2-3.4.2 magnification 50%

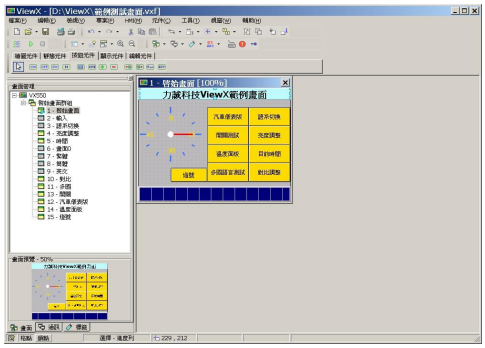


Illustration 2-3.4.3 magnification 100%

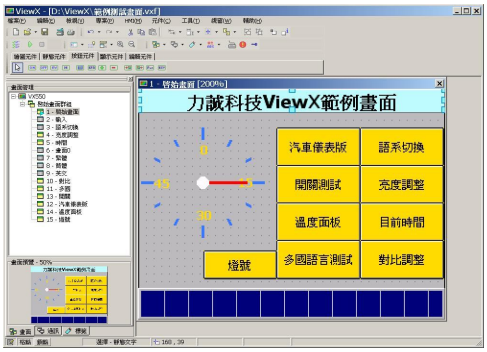


Illustration 2-3.4.4 magnification 200%

2-3.6 Toolbar

Click【View】, then choose【Toolbar】, it will appear selectable shortcut toolbar on ViewX as illustration 2-3.5.1.

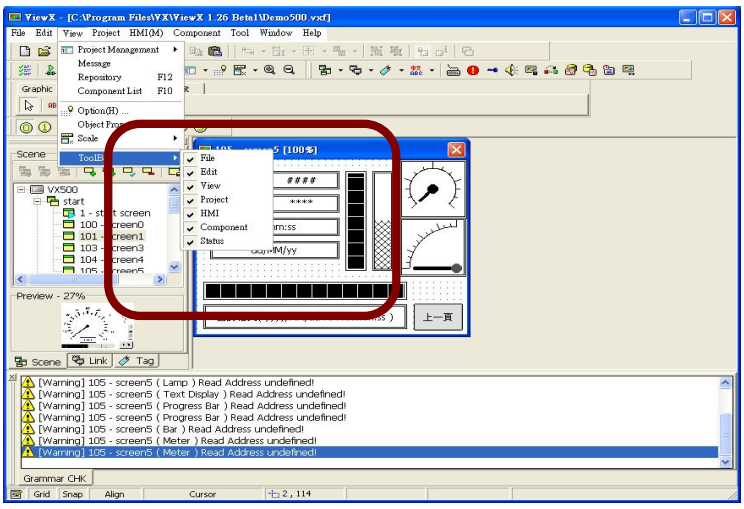


Illustration 2-3.5.1

2-4 Project

Please directly click【Project】, or press【ALT】+【P】, then【Project】will appear drop-down menu as illustration 2-4.1. The toolbar on the window also provides shortcut icon, which is convenient for users as illustration 2-4.2.

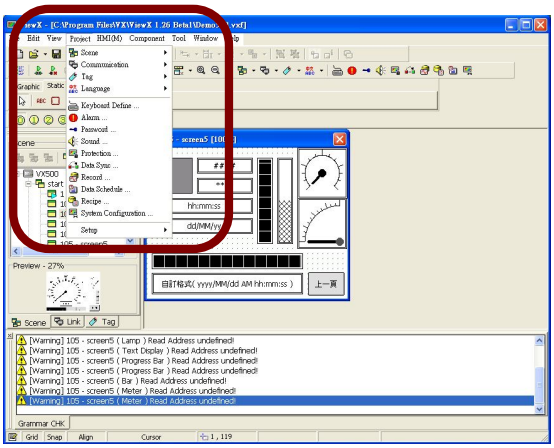


Illustration 2-4.1.

(1) (2) (3) (4) (5) (6) (7) (8)



Illustration 2-4.2

(1) Scene
(2) Communication
(3) Tag
(4) Language
(5) Keyboard define
(6) Alarm
(7) Password
(8) Sound

2-4.1 Scene

Click【Project】and then choose【Scene】as illustration 2-4.1.1. If you want to use add, edit, delete scene, and etc. Please click the start scene group on the left with scene management as illustration 2-4.1.1.

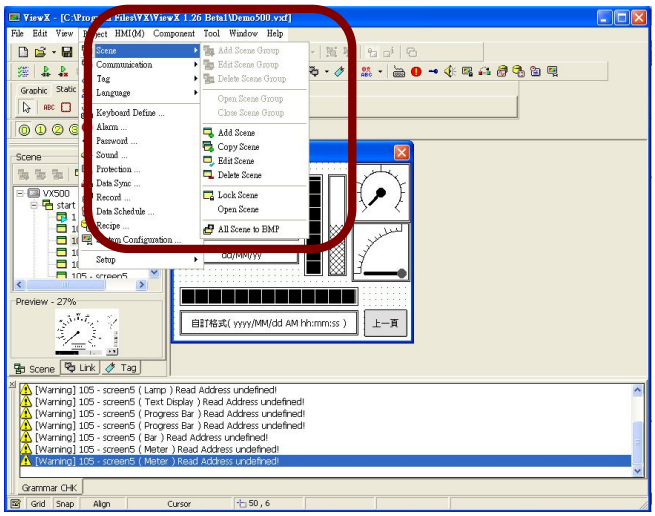


Illustration 2-4.1.1

1、 Add scene group：Click【add scene group】and then appear as illustration 2-4.1.a。

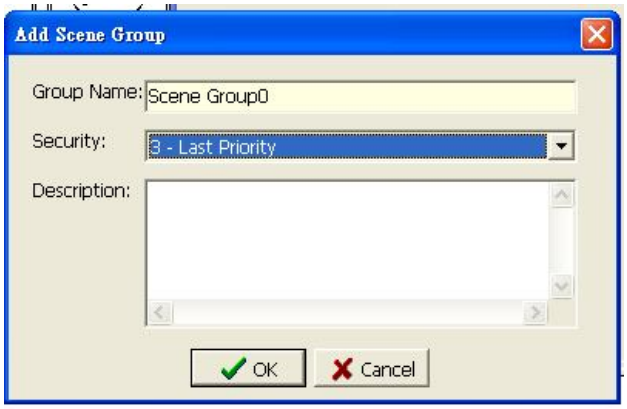


Illustration 2-4.1.a

A. Group name: input the name of the group.

B. Limits of authority:

(1) Maximum limits of authority in control: say the authority of this scene group is of maximum.

(2) Advanced authority in control: say the authority of the scene group is inferior to maximum limits of authority.

(3) Minimum limits of authority in control: say the authority of this scene group is of minimum.

C. Group description: input the description of the group.

2、 Edit scene group: this function is for editing name, access right and group description on an added scene group. Please refer to【add scene group】。此功

3、 Delete scene group: delete the added scene group.

4、 Open scene group: open the entire entire scene belongs to the group.

5、 Close scene group: close the entire scene belongs to the group.

6、 Add scene: Clicking this option that will appear as illustration 2-4.1.b。

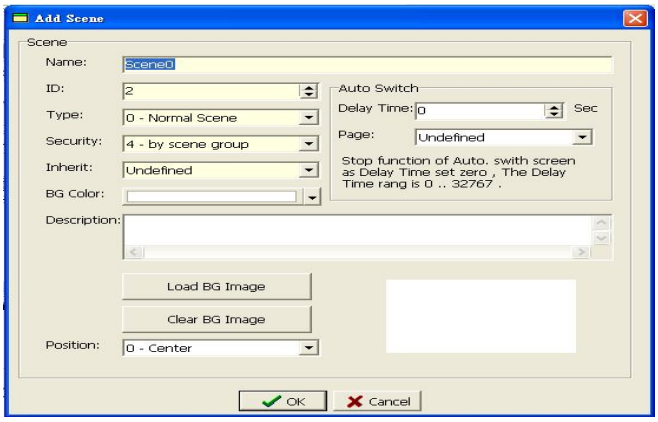


Illustration 2-4.1.b

A. Name: enter the name of added scene

B. ID: enter the number of added scene the number is from 1 to 32767 and number cannot be overlapped.

C. Type: provide four options of choice.

Normal scene	: Basic edit operation scene
Dialogue box	: You could edit dialogue box on this function
Boot scene	: Start HMI scene, similar with Windows boot screens.
initial scene	: Appearing the first scene after start scene

D. Limits of authority: provides four options

(1) Maximum limits of authority in control: say the authority of this scene group is of maximum.

(2) Advanced authority in control: say the authority of the scene group is inferior to maximum limits of authority.

(3) Minimum limits of authority in control: say the authority of this scene group is of minimum.

(4) Set by scene group: the same as the scene group's limits of authority.

E. Inherit: it will succeed to all of setup you choose.

F. Description: the description of the scene.

7、 Edit: This function is used for setup of editing added scene; please refer to last chapter "added scene".

8、 Delete: delete the added scene.

9、 Open: because you will probably add many scenes to edit later on, you could use this shortcut for your convenience to promptly click. As illustration 2-4.1 on the left of scene management, if you add other scenes, you could click the scene you want to display, and then click this function.

2-4.2 Communication

Please set the left of window to 【Communication】window before you click this function. You could directly click【communication】on bottom left., or choose【Project management】from【View】,then click【Communication】, and then please click communication port as illustration 2-4.2.1.

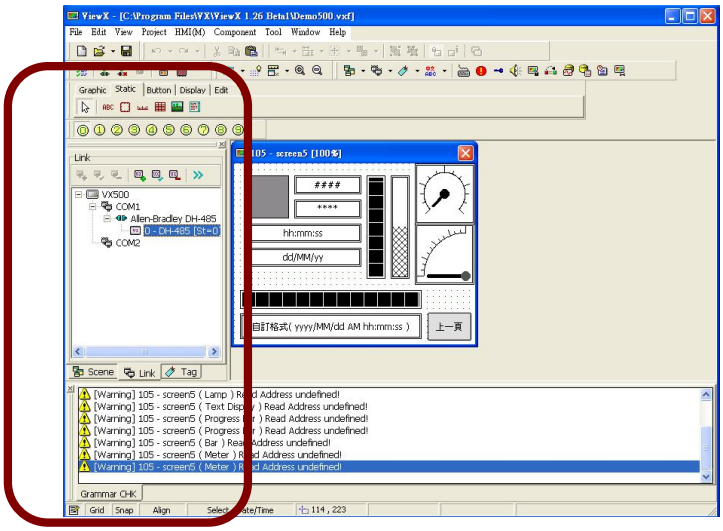


Illustration 2-4.2.1

(1) Add protocol: it will only appear【Add protocol】before you have not set any communication port as illustration 2-4.2.2。

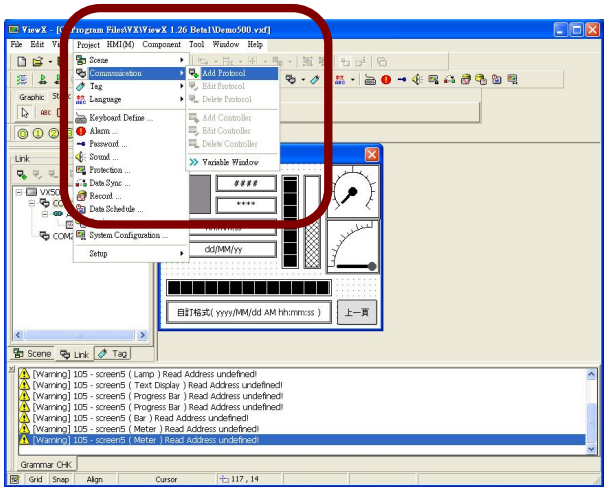


Illustration 2-4.2.2

Clicking【Add protocol】will appear as 2-4.2.3. Set the date, then press【OK】, and setup will be completed.

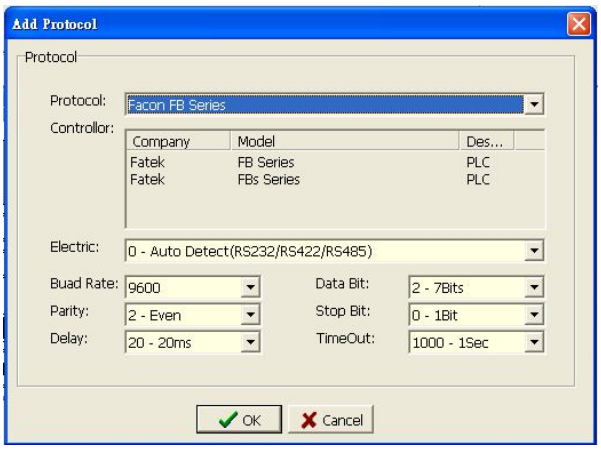


Illustration 2-4.2.3

1、 Communication protocol: display communication protocol.

2、 Controller: display communication protocol with firm and style you chose.

3、 Electric: auto-identified by program.

4、 Baud rate: supply optional 150~115200 in speed rate.

5、 Delay:【Nil】、【Odd parity】、【Even parity】、【Mark】、【Space】。

6、 Data bits:【Five】、【Six】、【Seven】、【Eight】。

7、 Stop bits :【one bit】、【two bit】。

（2）Edit protocol: After adding protocol, you could use this function to modify if you set something wrong.

（3）Delete protocol: Delete added protocol.

（4）Add controller: After add communication protocol, next to add a controller as illustration 2-4.2.4. Please notice the red circle part; you have to click "add protocol". And then you can click "added controller".

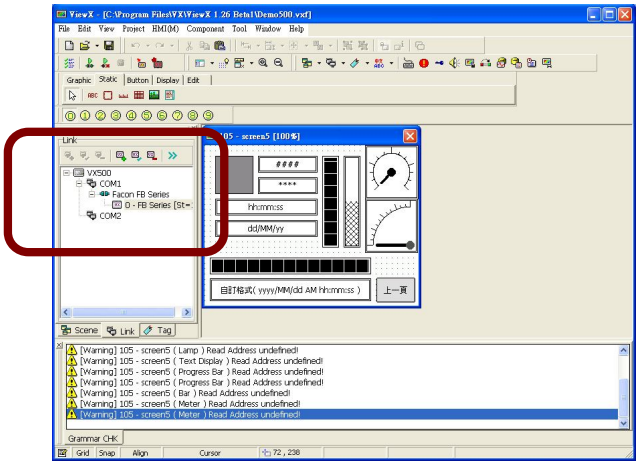


Illustration 2-4.2.4

Clicking “add controller” will appear as illustration 2-4.2.5.

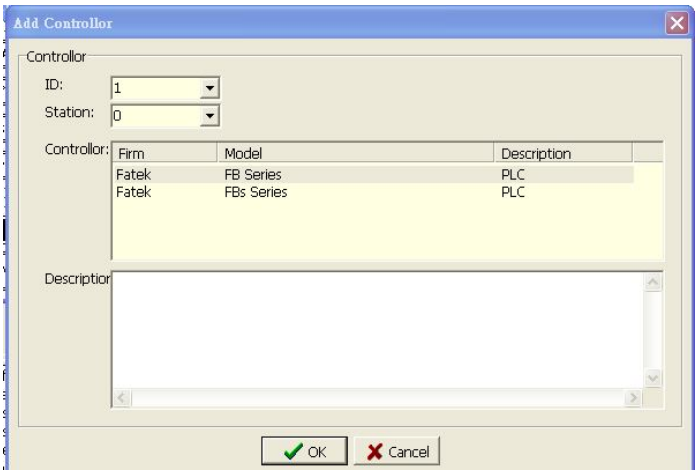


Illustration 2-4.2.5

ID : Input ID of Controller.
Number : Input number of Controller
Controller : Display the information of firm, style and description you chose.
Description : Input description for this controller.

（5）Edit controller: After adding controller, you could use this function to modify if you set something wrong.

（6）Delete controller: Delete the added controller.

2-4.3 Tag

Click【Project】, then clicking【Tag】will appear six options as below:

1、Add tag group: Take labels to do categorize labels, which are convenient for editing.

2、Edit tag group: Edit tag categories.

3、Delete label group: Delete the existence of tag categories.

4、Add tag: As illustration 2-4.3.1

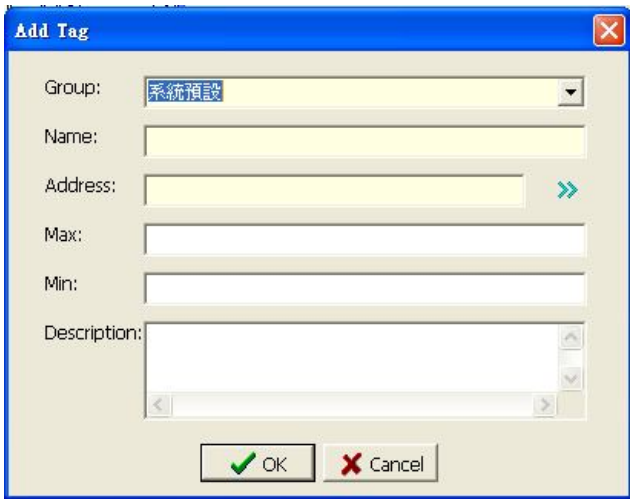


Illustration 2-4.3.1

一、Tag group: If you add tag categories, you could choose the previous added categories

二、Tag name: Input tag name to displace the position.

三、Position: Input buffer or system parameter.

四、Maximum: Input maximum range in read data of position.

五、Minimum: Input minimum range in read data of position.

六、Description: Input description of this tag.

5、Edit tag: Edit tag setup.

6、Delete tag: Delete tag.

2-4.4 Language

Click【Project】, then clicking【Language】will appear four options as below:

1、Add language: Clicking this function will appear as illustration 2-4.4.1.

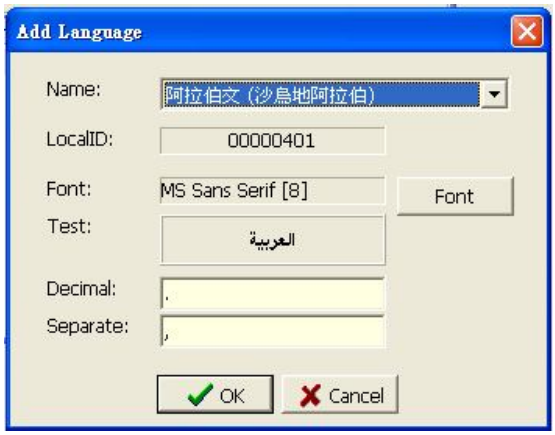


Illustration 2-4.4.1

Name:	Select a language you want to add.
Local ID:	Display the area code for this language.
Front:	Default front.
Optional front:	Select a usable front in a language
Test:	Display the text of front you chose.
Decimal:	this function decides which a symbol is the decimal point
Separate:	this function decides which a symbol is the separate

2、Edit language: Edit language.

3、Delete language: Delete language.

4、Set Initial language: Set language to Initial language.

Language: it can direct edit language, similar to toolbar function as illustration 2-4.4.2~3.

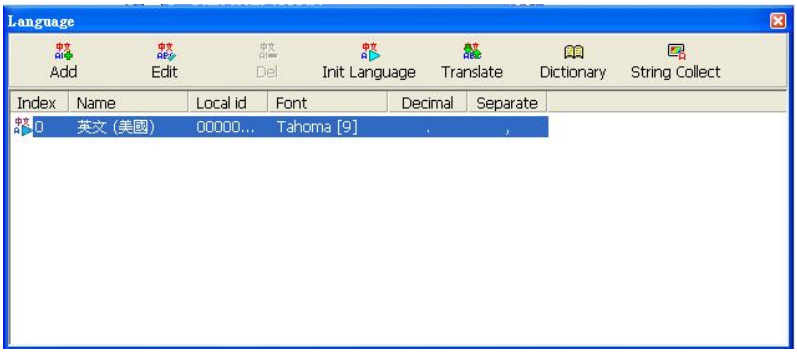


Illustration 2-4.4.2

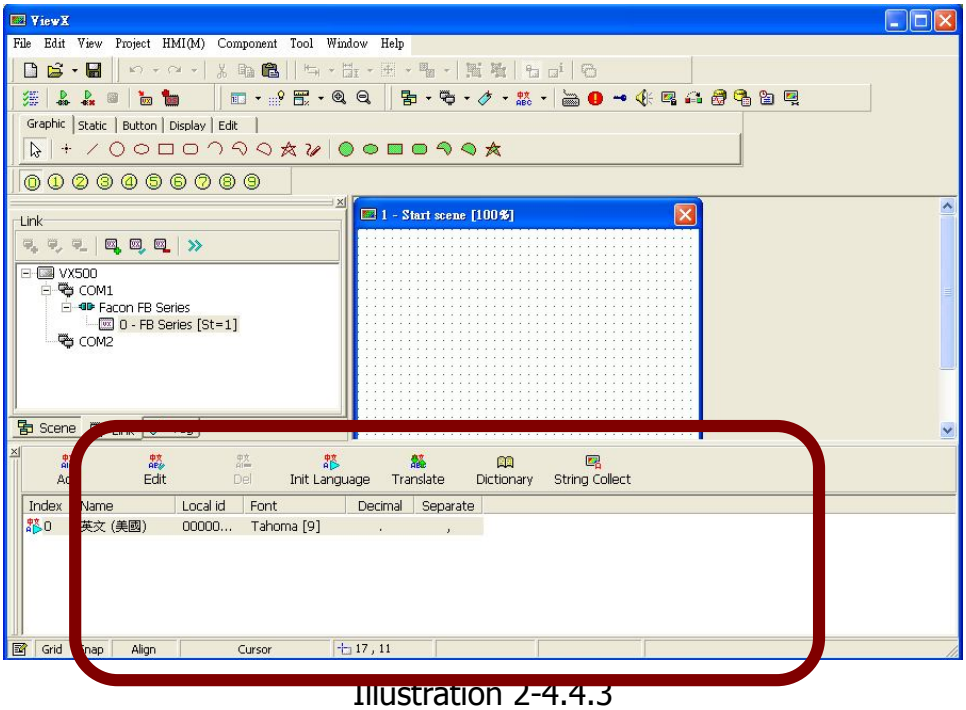


Illustration 2-4.4.3

In Illustration 2-4.4.3, comes to 3 kinds of languages, while you click one of the languages, the scene would also switch to that language. If you do not set a font of language, it will not display the font.

2-4.5 Keyboard Definition

Click【Project】, and then choose【Keyboard define】as illustration 2-4.5.1. Providing the built-in and expansion style keyboard for user to use when opening a new file, and while you select HMI styles, you must choose one of the styles support keyboard definition before you set.



Illustration 2-4.5.1

After selected the ID then press “edit”, then it will appear as illustration 2-4.5.2



Illustration 2-4.5.2

ID Number	:	Edit current ID number.
Name	:	Enter the purpose name of the keyboard
Normal key	:	Set which key can be acted
Shift status	:	Set Shift and one of keys that can be acted.
Ctrl status	:	Set Ctrl and one of keys that can be acted.
Alt status	:	Set Alt and one of keys that can be acted.

2-4.6 Alarm

Click【Project】, and then click【Alarm】(Illustration 2-4.6.1)

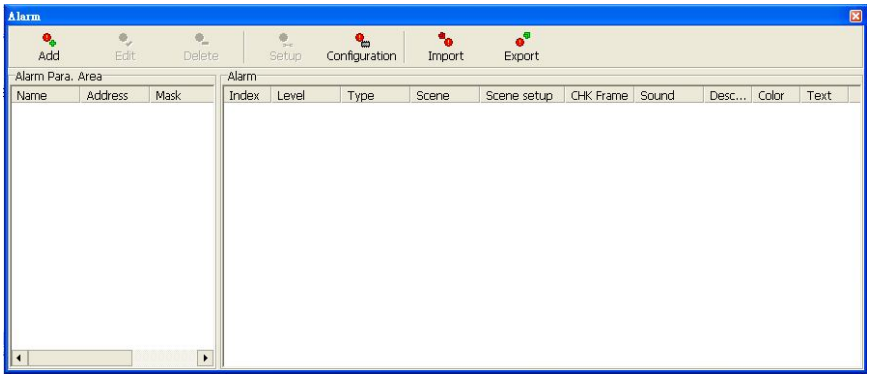


Illustration 2-4.6.1

Add Alarm area: see as Illustration 2-4.6.2。

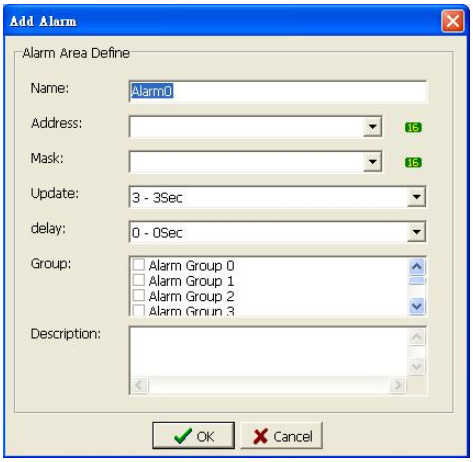


Illustration 2-4.6.2

Name: enter the name of alarm.

Address: input the address of connection parameter, you could press the dual arrow as illustration 2-4.6.3, this position must be WORD, you could see “style” on illustration 2-4.6.3.

Mask: While alarm triggered, you can use this function to mask the alarm, it means alarm would not send out message and sound, you could press the dual arrow to choose mask address as illustration 2-4.6.3。

Update: you can select how long to update at a time. If you choose 3 seconds, it will check the alarm triggered in 3 seconds.

Group: you could select which group would be categorized in alarm. Double-click in group to edit group name.

Description: input description of this alarm.



Illustration 2-4.6.3

After added alarm area,【Alarm】 will show as illustration 2-4.6.4. At the time, there are three more setups has been added. Cause "edit alarm area" and "add alarm area" are all the same in setup. Please refer to "add edit area" setup. Means delete the information that has been selected in "delete alarm area". that will delete data you chose on "alarm".

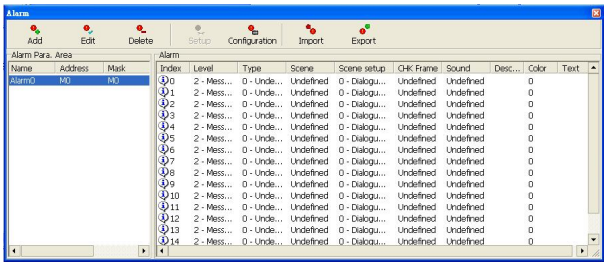


Illustration 2-4.6.4

Set alarm: you could select an index you want to set on illustration 2-4.6.4. And then press "set alarm" or directly double-click the message, that will appear as illustration 2-4.6.5.

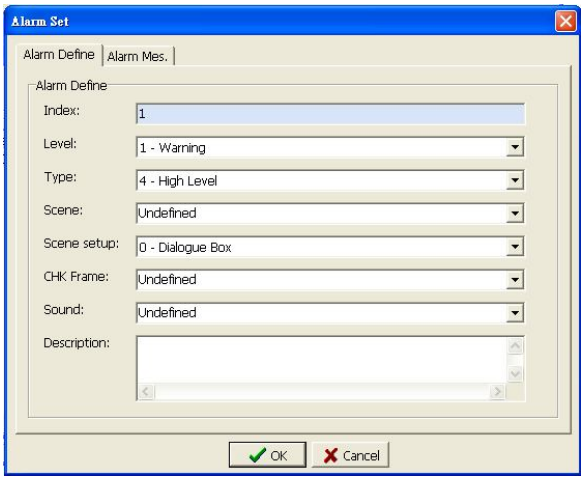


Illustration 2-4.6.5

Index: Cause the alarm address is saved as WORD，and the size of the WORD is 2 bytes. When the WORD value is 1, which turns to「0000 0000 0000 0001」in binary system. Please refer to illustration 2-4.6.6. and the example。

2 power	2^{15}	2^{14}	2^{13}	2^{12}	2^{11}	2^{10}	2^{9}	2^{8}	2^{7}	2^{6}	2^{5}	2^{4}	2^{3}	2^{2}	2^{1}	2^{0}
2 carry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Index	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Illustration 2-4.6.6

Level: It let user easily edit which alarm level is

Trigger method:

Positive: Trigger the alarm as data turns 0 to 1.

Negative: Trigger the alarm as data turns 1 to 0

Positive-negative: Trigger the alarm as data turns 0 to 1 or as data turns 1 to 0。

High: Trigger the alarm as data is 1.

Low: Trigger the alarm as data is 0.

Alarm scene: choose the alarm appear scene. You must add a dialogue box before edit the alarm scene.

Set alarm scene:

Dialogue box:

1. Please notice all of scene setup must have dialogue box with exiting function, otherwise you cannot exit when the alarm happens in dialogue box.
2. Operating scene (dialogue box) will disappear if the alarm happens at the time.

Message: you could select how many seconds the message appear, it will not affect the current operation's function.

View scene: You can add the dialogue box and then edit the scene. After alarm occurs, if you want to see what previous alarm is, then scene will display it. It could let us step-up the expression of alarm scenes.

Alarm sound: select what sound will be as alarming. You must set the sound in stereo management.

Description: descript for this setup.

Example：When the address is set for N1, the mask is set for N2, the trigger method is chosen to the high, and the sound is set for one sound randomly. At this moment, please make a notice for the index value in the alarm setting. For instance, the index value we set is 2 in the alarm setting, so how much N1 value should be to trigger? And how much N2 value of the mask should be to stop triggering?

Trigger：

Please refer to illustration 2-4.6.6, when the index value is 2, corresponding 2 will be 2^2 by power, the value of corresponding N1 is 「0000 0000 0000 0100」 in binary system. That proves $1 * 2^2 = 4$, so when N1 value is 4, index 2 will be triggered.

Mask：

As a result of being triggered by N1 value 4, it will stopped triggering when the value of N2 mask is 4.

Stop triggering when N2 in binary system is「0000 0000 0000 0100」

Start triggering when N2 in binary system is「0000 0000 0000 0000」

Please note that N2 variation between 1 and 0

2-4.7 Password

Click【Project】, and then click【Password】, that will appear as illustration 2-4.7.1. This function provides eight sets of passwords and authority settings. First set of coactive system setting's authority has the top priority, which is to avoid the insufficient authority while the setting has the error.

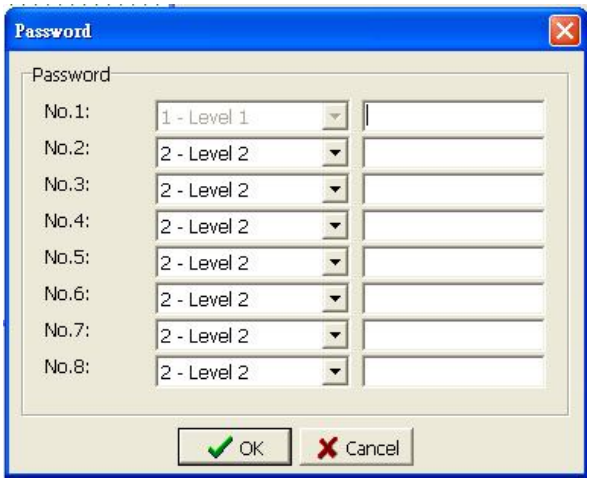


Illustration 2-4.7.1

2-4.8 Sound

Click【Project】, and then click【Sound】, as illustration 2-4.8.1.

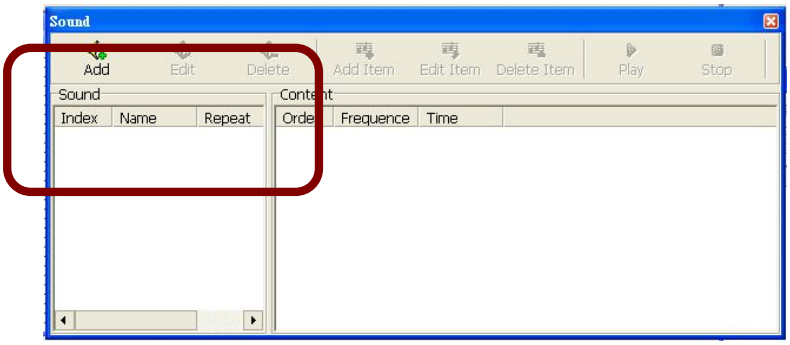


Illustration 2-4.8.1

Red circle of Illustration 2-4.7 is default sound. The system would set index 0 and index 1 for key sound and dialogue sound in illustration.

Add sound：as illustration 2-4.8.2。

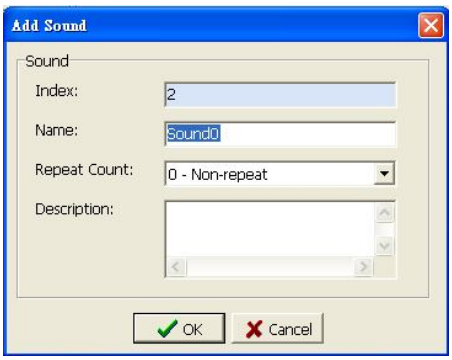


Illustration 2-4.8.2

Name: input the distinguishable name of sound
Repeat Count: You could choose the sound unrepeatable or repeat several times, the maximum is seven times.
Description: it could enter the description for this sound by personal requirement.

"Edit sound" and "add sound" is the same. Please refer to "add sound".

Added item: as illustration 2-4.8.3。

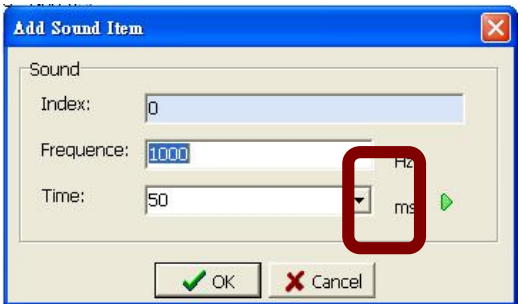


Illustration 2-4.8.3

Frequence: input the frequency of sending out sound, low and high voice will be changed by different frequency. High-frequency will be sharp voice, and low-frequency will be deep voice.

Time: input time of sending out sound, the ms are a unit. 500 ms equal to 0.5 second which means the sound would stop after sending out in 0.5 second at ms (Micro Second).

When the frequency and Time set-up ready, you could press the triangle picture trade to play the sound for testing in illustration. "Edit item" and "add item" is the same. Please refer to "add sound".

Play: as illustration 2-4.8.4.

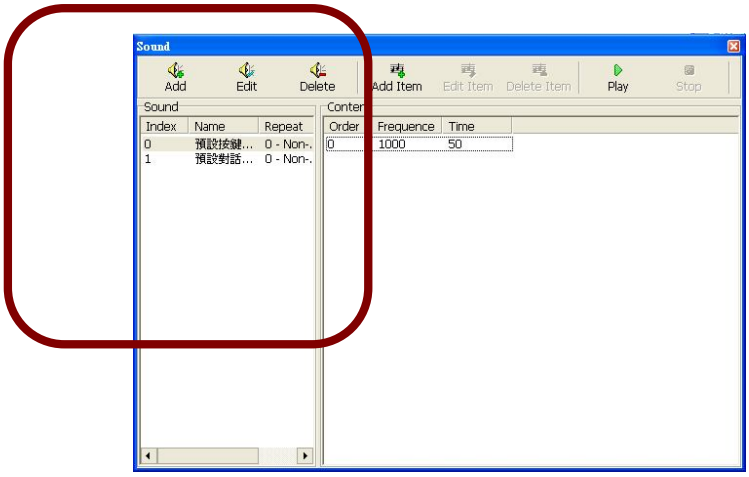


Illustration 2-4.8.4

When you select a item in the【Sound】 (as red circle shows in illustration2-4.8.4.) then press play button, it will play the frequency of sound that you have set.

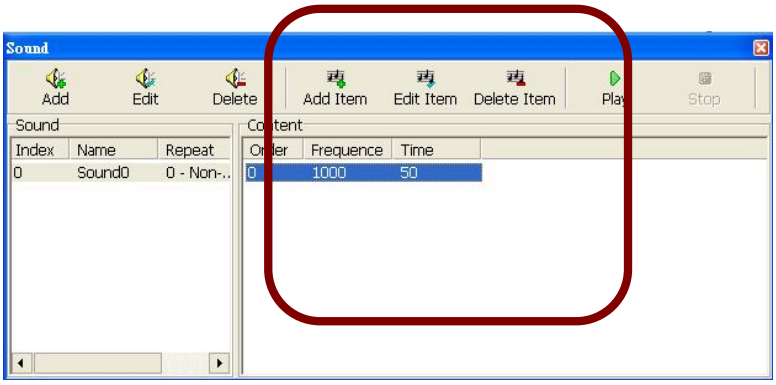


Illustration 2-4.8.5

When you select a item in the【Content】(as red circle shows in illustration2-4.8.4.) then press play button, it will play the frequency of sound that you have set.

Import:

Clicking "Import" will appear as illustration 2-4.8.6. You could select the file you exported.

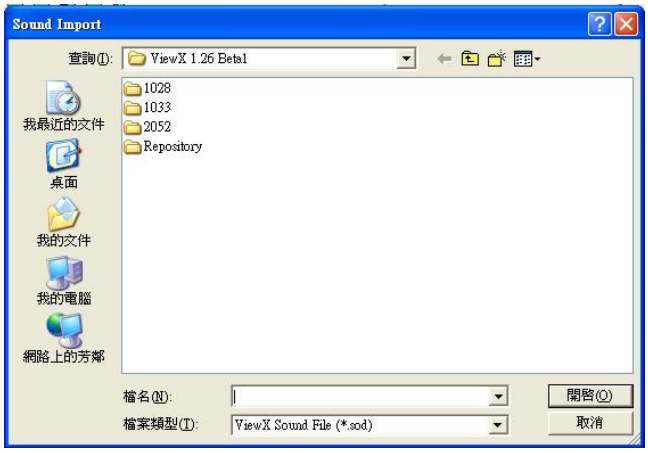


Illustration 2-4.8.6

After you chose the file, press open, it will appear as illustration 2-4.8.7.

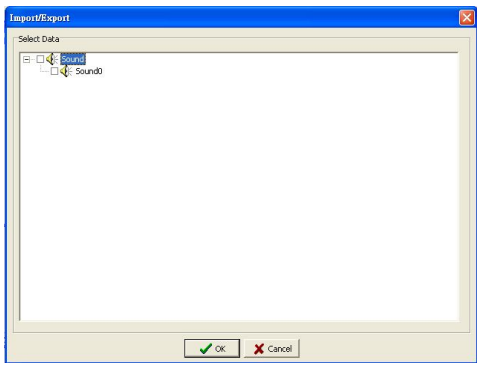


Illustration 2-4.8.7

Put a check the "default sound of dialogue box", if the check is in green color and the "Sound" selection is yellow check, green color means the selections have been selected, yellow color means some contents have not been selected yet, then press "ok".

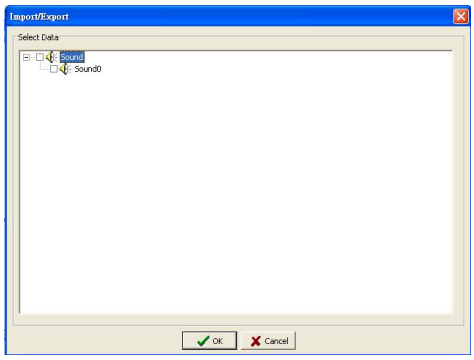
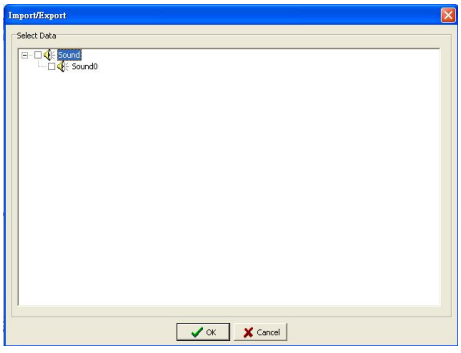


Illustration 2-4.8.7

Export:

Clicking "Export" will appear as illustration 2-4.8.7. You could select the item you want to export. Then click "ok", it will appear as illustration 2-4.8.8.



Press "save" after input file name. Illustration 2-4.8.8

2-5 HMI

You could click【HMI】, or press【ALT】+【M】, it will appear drop-down menu as illustration 2-5.1. Toolbar also provides shortcut for convenience to choose as illustration 2-5.2.

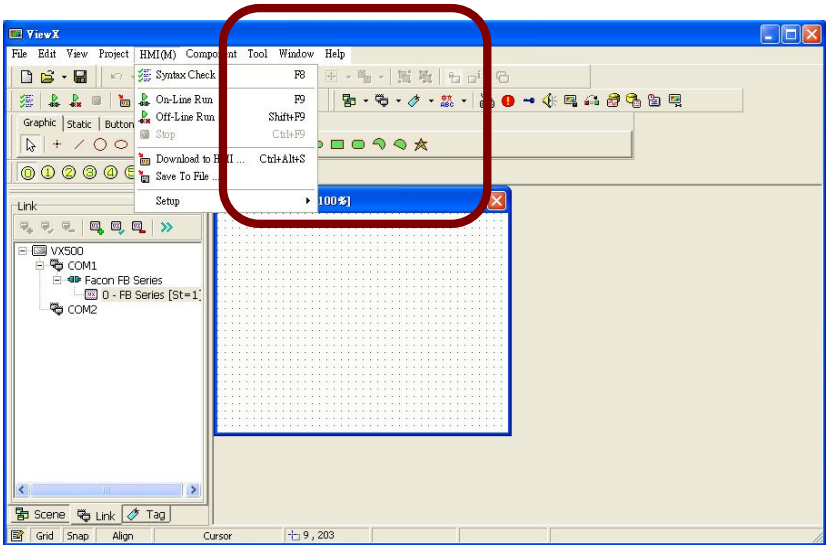


Illustration 2-5.1

(1) (2) (3)



Illustration 2-5.2

(1) Syntax check
(2) Run
(3) Stop

2-5.1 Syntax Check

Click【HMI】, and click【Syntax Check】, or press 【F8】 and 【HMI toolbar】as illustration 2-5.2。When Running【Syntax Check】which will check the compiler, parameter name, and setup.【Syntax Check】provides the error information, so it is convenient to get rid of error.

2-5.2 Run

All setup can be conveyed to HMI after computer simulation. This function is simulated with the scene you edited by computer, you could click【Run】, or press【F9】, or click the triangle picture in toolbar as illustration 2-5.2.

2-5.3 Stop

For stopping computer simulation, you could click【Stop】, or press【CTRL】+【F9】, or click square in toolbar as illustration 2-5.2.

2-5.4 Download to HMI

You could directly download to HMI after all scenes have been set. You could click 【Download to HMI】, or press【CTRL】+【ALT】+【S】。

2-5.5 Setup

Clicking【Setup】will appear as illustration 2-5.5.1、2-5.5.2.

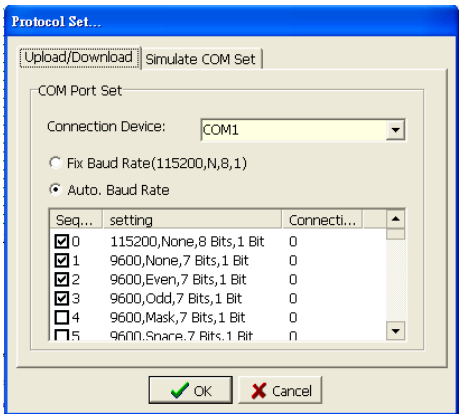


Illustration 2-5.5.1

Upload/Download: as illustration2-5.5.1。

Connection device: set the COM port which you want to connect with.

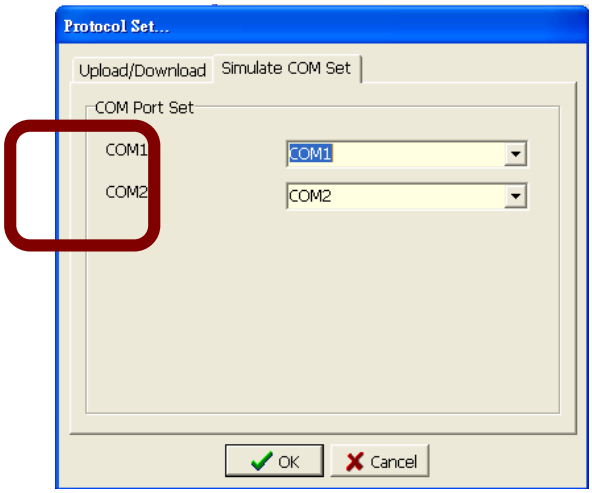


Illustration 2-5.5.2

Simulate COM Set: as illustration 2-5.5.2。

COM1: select the COM port to connect with HMI COM1.

COM2: select the COM port to connect with HMI COM2.

In the red circle of illustration 2-5.5.2, COM1 and COM2 is for the left COM PORT of ViewX as Illustration 2-5.5.3.

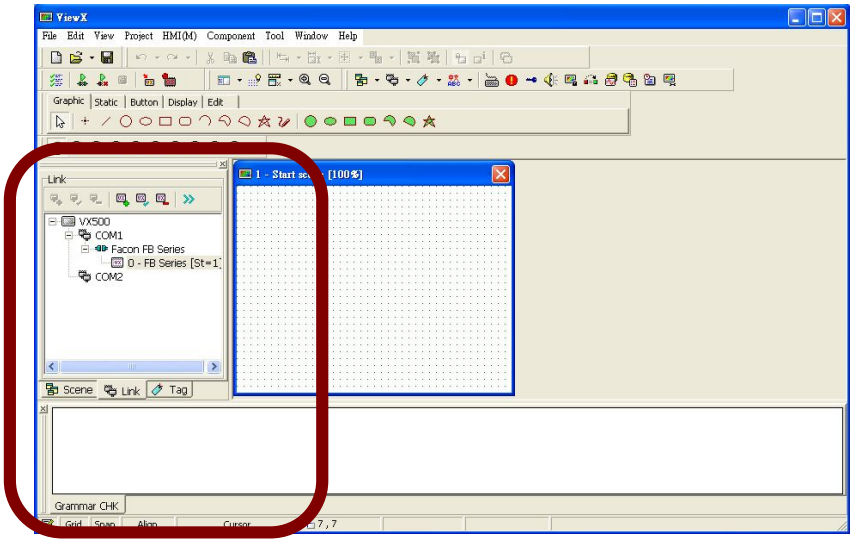


Illustration 2-5.5.3

2-6 Component

Click【Component】, or press【ALT】+【C】, and then will appear drop-down menu of 【Component】as illustration 2-6.1. Toolbar also provides shortcut for convenience to click as illustration 2-6.2.

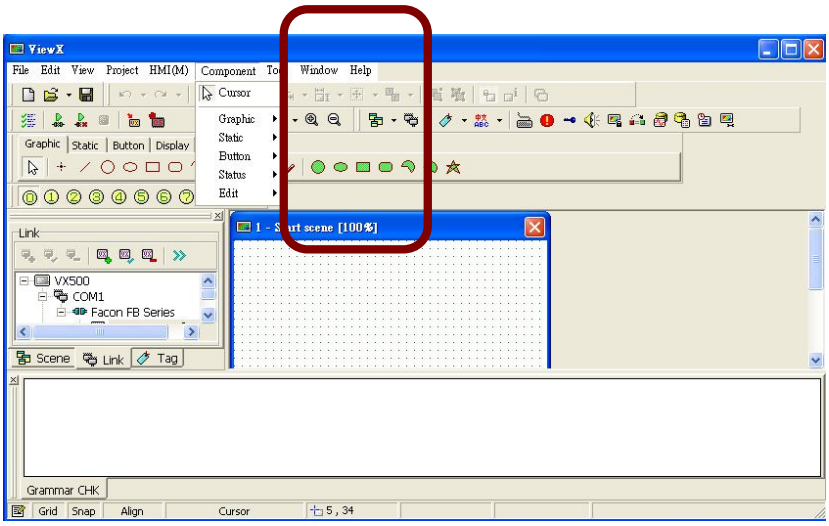


Illustration 2-6.1



Illustration 2-6.2

2-6.1 Component Description

Cause there is a lot of functions in the Component. Please refer to 3rd chapter 【Component】.

2-7 Tools

Click【Tools】, or press【ALT】+【T】, and then will appear drop-down menu of 【Tools】 as illustration 2-7.1.

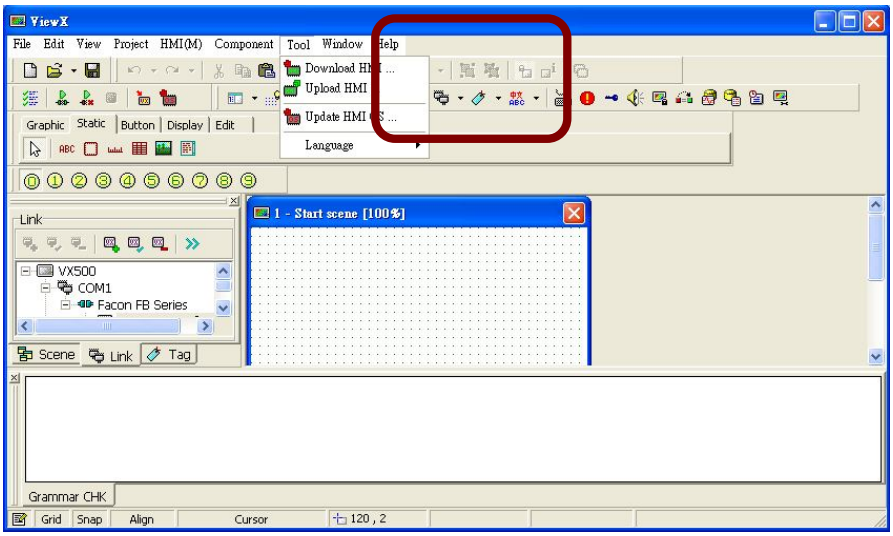


Illustration 2-7.1

2-7.1 Download HMI

Running this function will download HMI OS from computer to HMI.

2-7.2 Upload HMI

Running this function will upload HMI OS from HMI to computer.

2-8 Window

Click【Window】, or press【ALT】+【W】, and then will appear drop-down menu of 【Window】as illustration2-8.1.

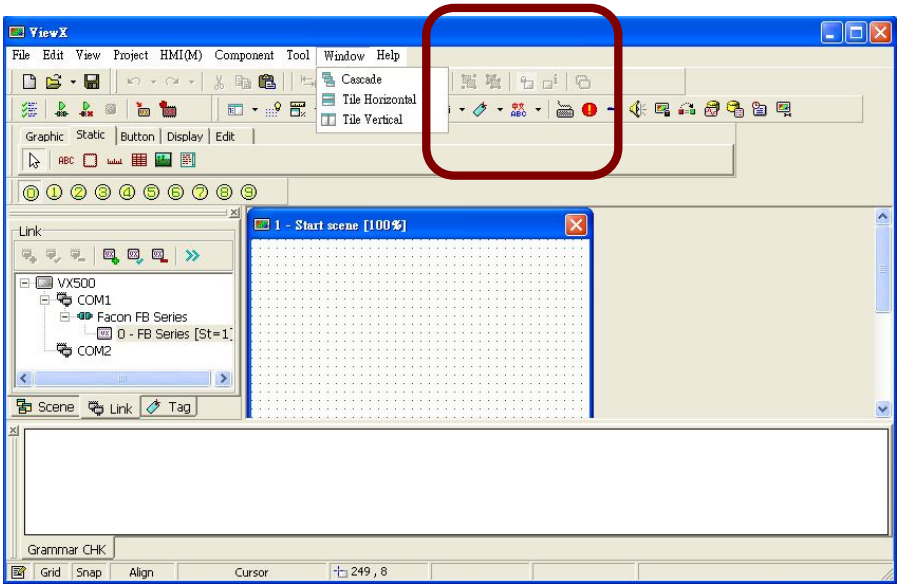


Illustration 2-8.1

When you edit two or more scenes at same time, you could select mode of editing scene for convenience to edit. After add a scene as illustration 2-8.2, you could select 【Cascade】, 【Tile Horizontal】, 【Tile Vertical】, 【Tile icon】.

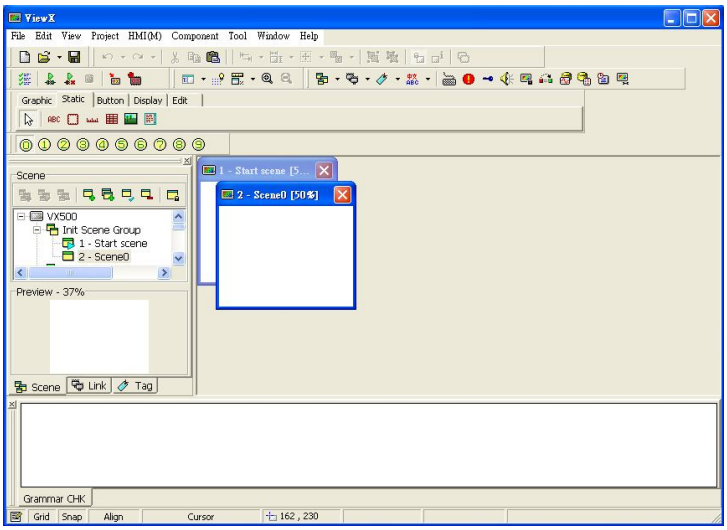


Illustration 2-8.2

2-8.1 Cascade

Clicking【Cascade】will turn illustration 2-8.2 to illustration 2-8.1.1。

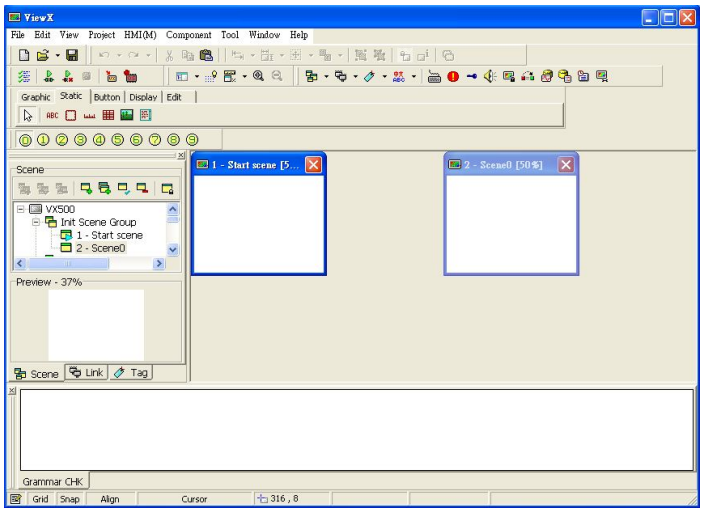


Illustration 2-8.1.1

2-8.2 Tile Horizontal

Clicking【Tile Horizontal】will turn illustration 2-8.2 to illustration 2-8.2.1.

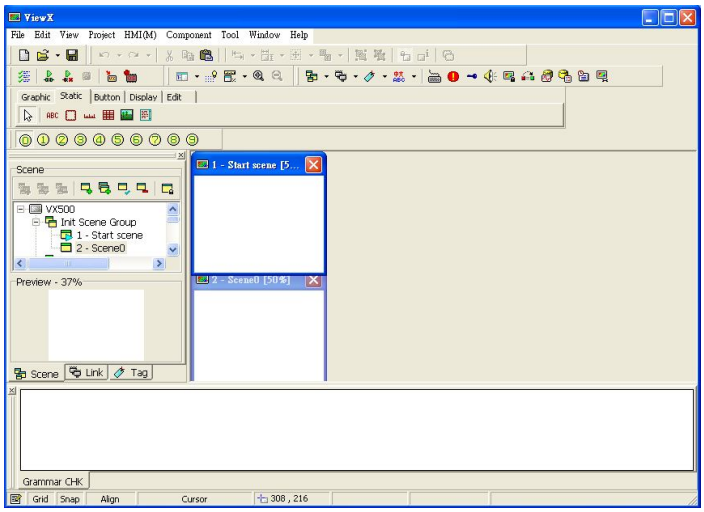


Illustration 2-8.2.1

2-8.3 Tile Vertical

Clicking【Tile Vertical】will turn illustration 2-8.2 to illustration 2-8.3.1.

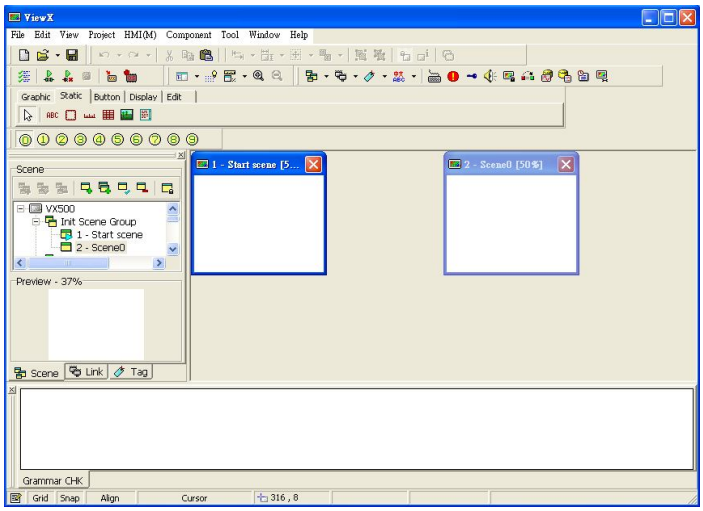


Illustration 2-8.3.1

2-9 Help

Click【Help】, or press【ALT】+【H】, and then will appear drop-down menu of【Help】as illustration 2-9.1. Clicking【About】will show the software vision of ViewX. Please take notice of the vision whether is the latest one or not.

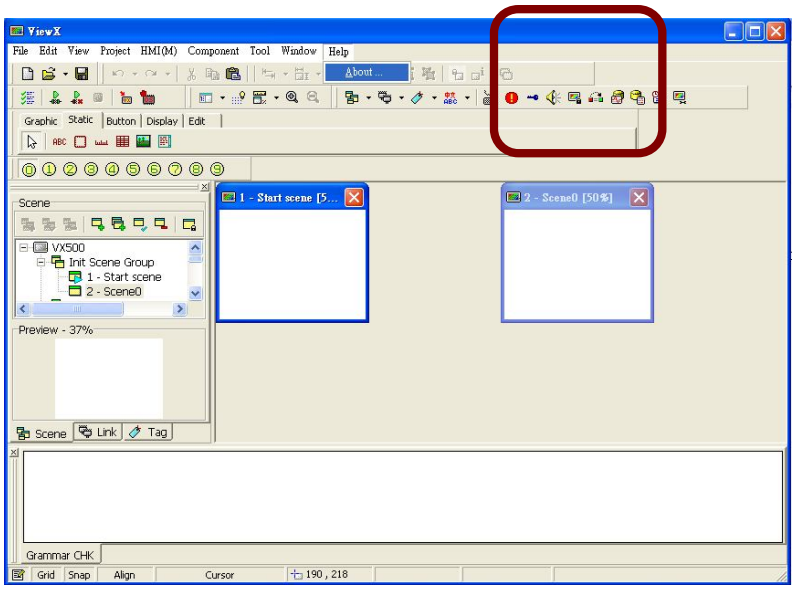


Illustration 2-9.1

3. Component

ViewX provides 5 styles of component:
1、【Graphic】
2、【Static】
3、【Button】
4、【Display】
5、【Edit】

3-1 Graphic

Click【Component】, and click【Graphic】, and then will appear drop-down menu as illustration 3-1.1, or you could click this function on toolbar as illustration 3-1.2.

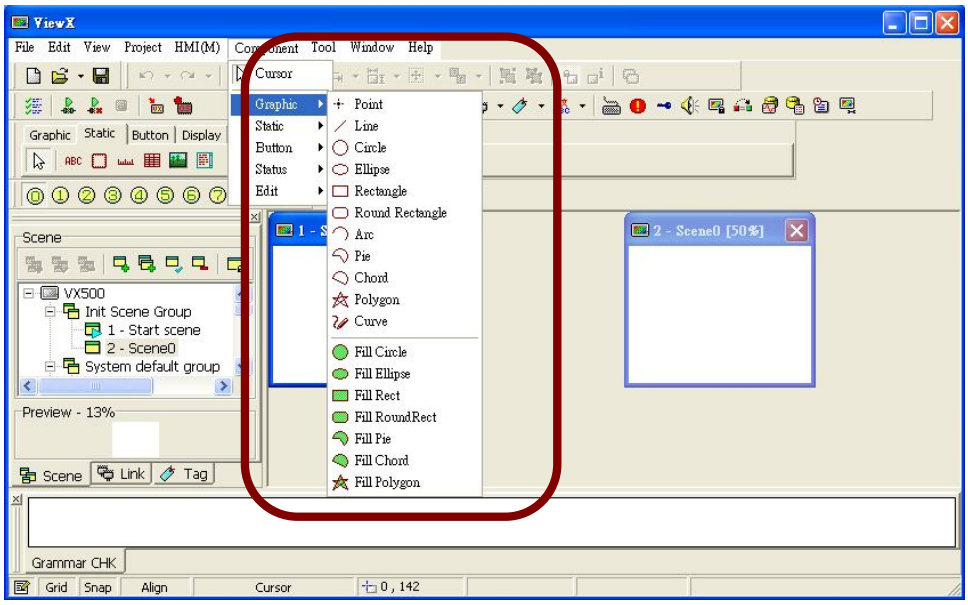


Illustration 3-1.1



Illustration 3-1.2

3-1.1 Function Description

Choose a component and press right-click, and then choose the Properties, or direct double clicking the component you want to edit, and then will appear the properties of the component, 【Point】/【Line】for description of the properties:

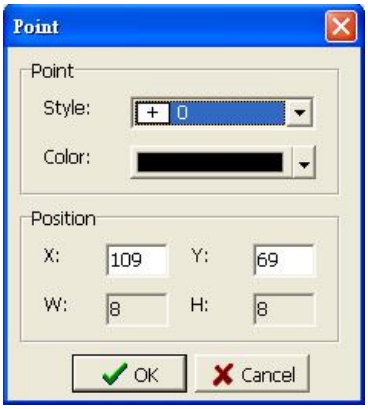


Illustration 3-1.1.1【Point】

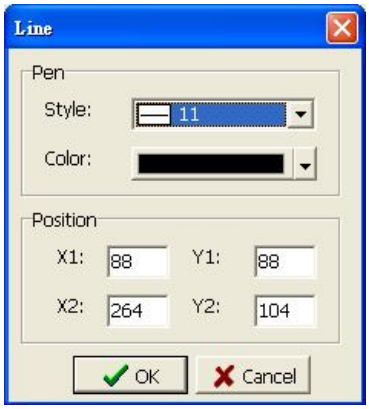


Illustration 3-1.1.2【Line】

Style: according to your requirement, select graphic styles of【Point】/【Line】
Color: modify graphic colors of【Point】/【Line】
Positions: X1/Y1 will be the first dot from the left of【Line】, X2/Y2 will be 加上the first dot from the right【Line】

X: modify the position X of the coordinate. Make the X coordinate's component move to the modificatory X-axis.

Y: modify the position Y of the coordinate. Make the Y coordinate's component move to the modificatory Y-axis.

Description of the co-category window:
Example:

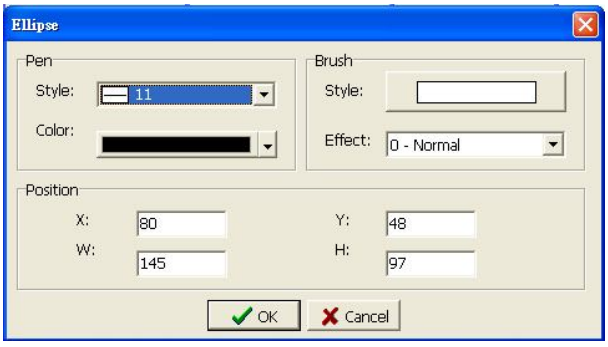


Illustration 3-1.1.3

Pen:

Style: select a style of ellipse on out-bevel.

Color: select a color of ellipse on in-bevel.

Brush：

Style: select a style of bevel on out-bevel.

Color: select a color of bevel on in-bevel..

Positions:

X: Input the position of the ellipse component on X-axis

Y: Input the position of the ellipse component on Y-axis

W: input the width of ellipse component.

H: input the height of ellipse component.

3-2 Static

Click【Component】, and click【Static】, and then will appear drop-down menu as illustration 3-2.1, or you could click this function on toolbar as illustration 3-2.2。

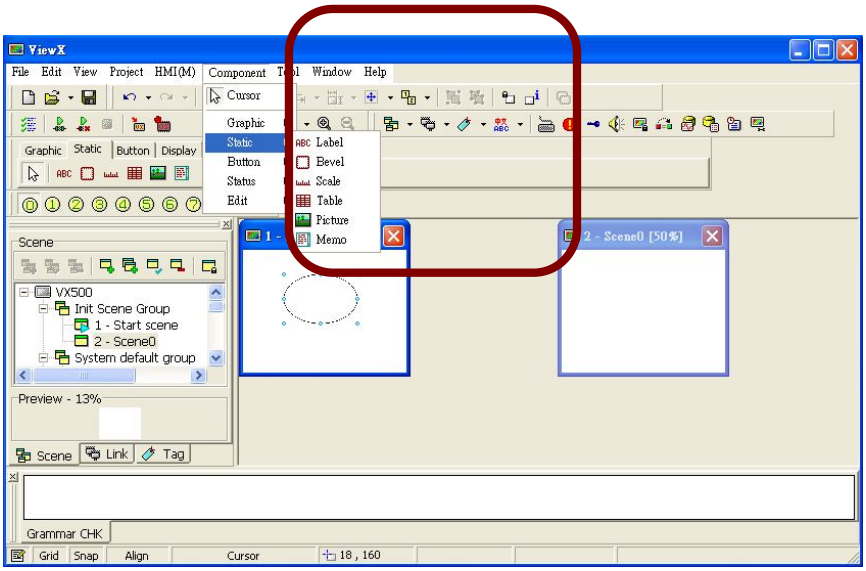


Illustration 3-2.1

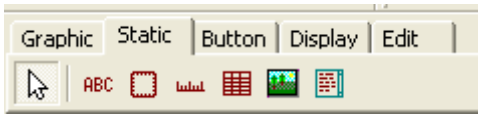


Illustration 3-2.2

3-2.1 Static Text / Bevel

Choose a component and press right-click, and then choose the Properties, or directly double clicking the component you want to edit, and then will appear the Properties of the component setting of the component Properties. The description of the static text's bevel will show as illustration 3-2.1.1.

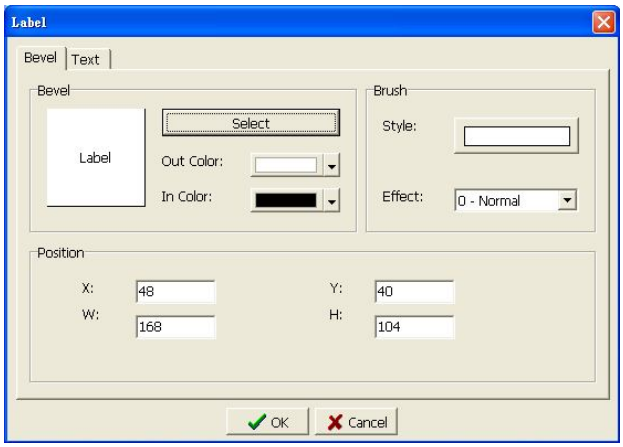


Illustration 3-2.1.1

Bevel:

Select: select a bevel style of static texts as illustration 3-2.1.2。

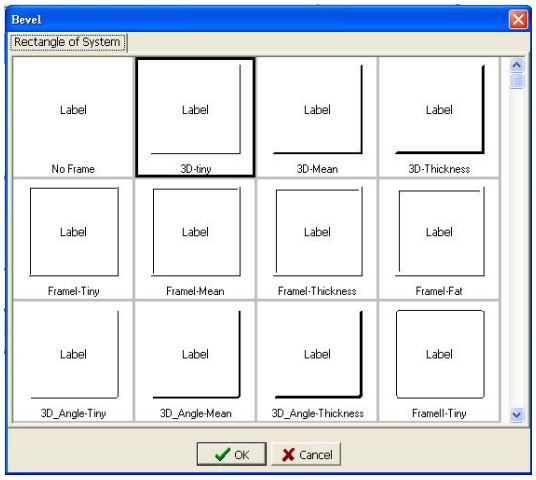


Illustration 3-2.1.2

Out-bevel color: select a out-bevel color of static text.

In-bevel color: select a in-bevel color of static text.

Brush:

Style: select an in-bevel style of static text.

Color: select an in-bevel color of static text.

Position:

X: Input the X-axis's position of the static text.

Y: Input the Y-axis's position of the static text.

W: input width of static texts.

H: input height of static texts.

Description for static texts: as illustration 3-2.1.2。

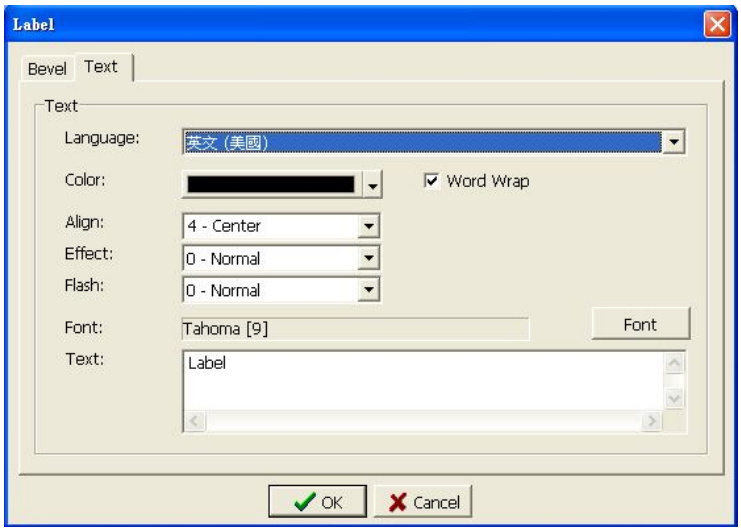


Illustration 3-2.1.2

Text:

Language: select language for static texts.

Color: select color of static texts.

Align: select aligned position of static texts.

Font: select font for static texts.

Text: input static texts you want to show.

3-2.2 Scale

Press right-click to the component, and then choose the properties. Or double clicking the component you want to edit, and then it will appear the setting of properties. Here 【Bevel】 and 3-2.1.【Bevel】are the same setup. Therefore Please refer to 3-2.1 setup of【Bevel】. The window of【Scale】Properties as Illustration 3-2.2.1。

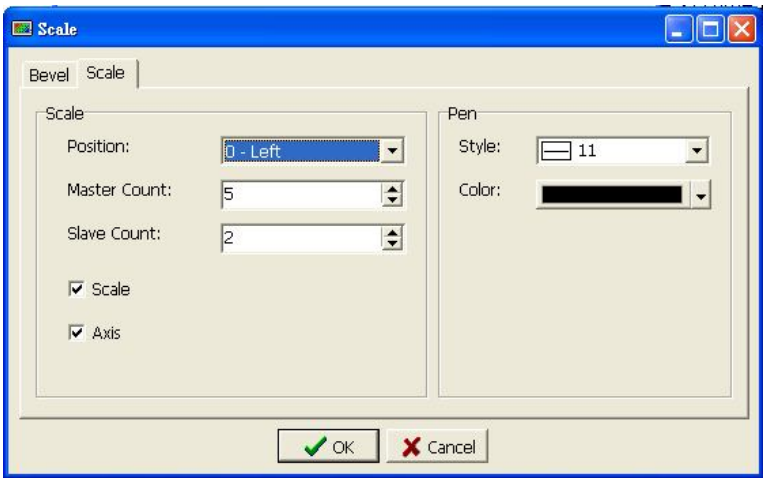


Illustration 3-2.2.1

Scale：

Position: select direction of scale component.

Master Count: select main scale, including the highest and the lowest.

Slave Count: select minor scale, little scale in main scale.

Scale: alternative if display scale.

Axis: alternative if display positions.

Pen：

Style: select style of scale component.

Color: select color of scale component.

3-2.3 Table

Press right-click to the component, and then choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-2.3.1. Cause this 【Bevel】and 3-2.1【Bevel】are the same setup, please refer to 3-2.1【Bevel】.

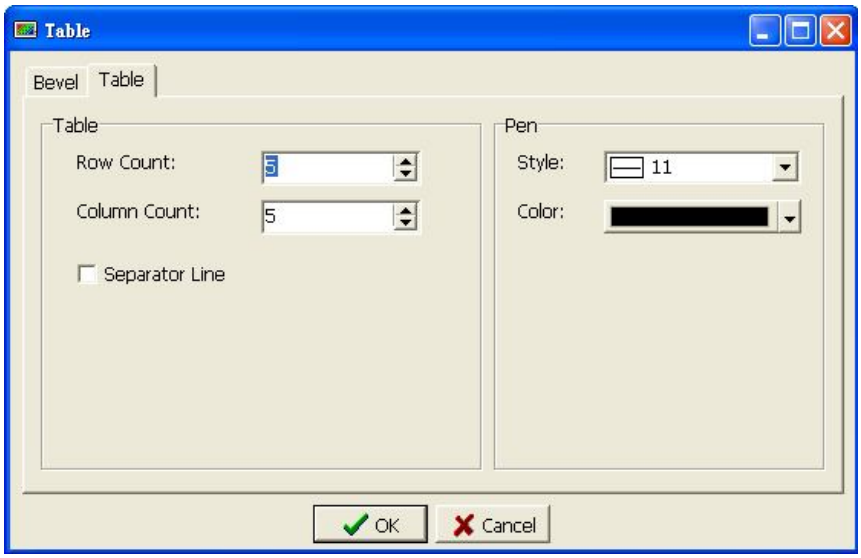


Illustration 3-2.3.1

Table:

Row Count: adjust how many horizontal you need.

Column Count: adjust how many vertical field you need.

Separator line: make a slash in a field as the red circle part of illustration 3-2.3.2，

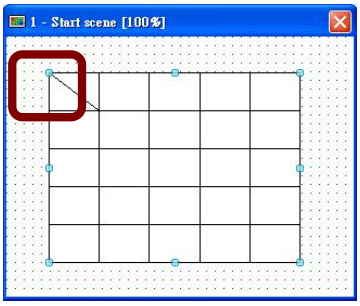


Illustration 3-2.3.2

Pen:

Style: select style of Horizontal field.

Color: select color of Vertical field.

3-2.4 Picture

Press right-click to the component, and then choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-2.4.1. Cause this 【Bevel】and 3-2.1【Bevel】are the same setup, please refer to 3-2.1【Bevel】.

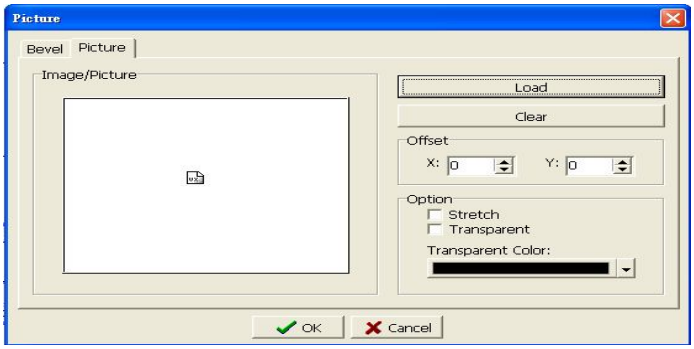


Illustration 3-2.4.1

Image/Picture：

Load image/picture: clicking that will appear as illustration 3-2.4.2. Please select a graphic file. The acceptable form includes: jpeg, bmp, ico, emf, wmf.

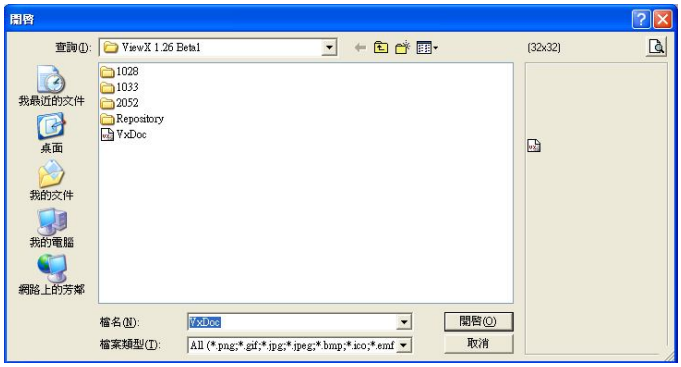


Illustration 3-2.4.2

Delete image/picture: delete the picture you choose.

Option:

Stretch: the picture size will auto zoom by the window size.

Transparent background: the picture will be transparent.

Transparent color: select the color to be transparent.

3-3 Button

Click【Component】, and then click【Button】, will appear the drop-down menu as illustration 3-3.1. Or you could click this function on the toolbar as illustration 3-3.2.

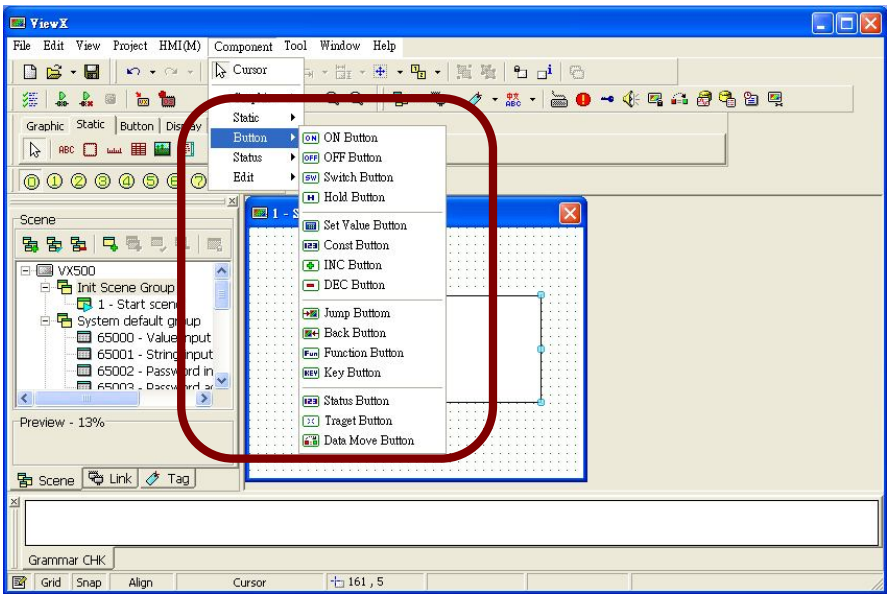


Illustration 3-3.1



Illustration 3-3.2

3-3.1 on/off Button and Switch/Hold Button

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-3.1.1~3.

1、Button:【Button】 and 3-2.1.【Bevel】 are same setup, so please refer to 3-2.1【Bevel】 setup.

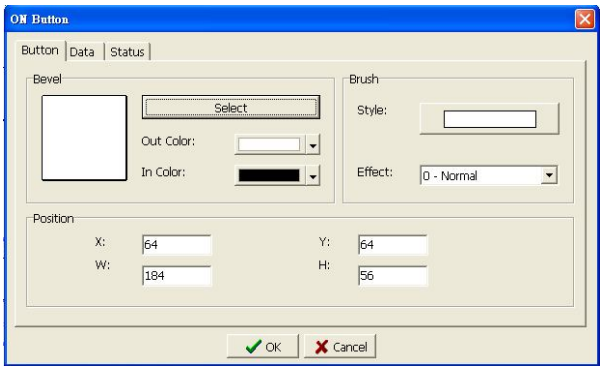


Illustration 3-3.1.1

2、Data: as illustration 3-3.1.2。

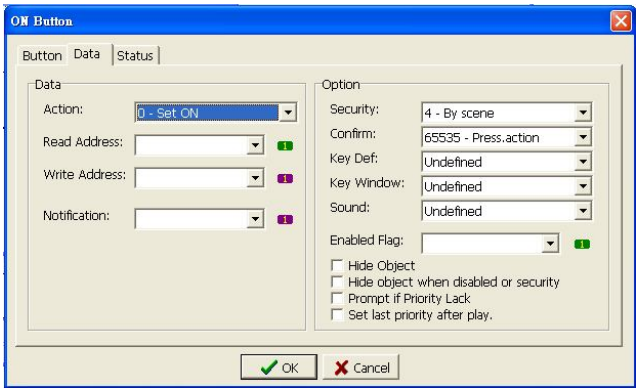


Illustration 3-3.1.2

Data:

Action: there are 4 actions you could select.

Read position: input the position of buffer or system parameter, and then load the figure.

Written position: input the position of buffer or system parameter, and then write the figure to the position.

Option:

Limited authority: added scene has a limited authority of scene setup. Please refer to 2-4.1 scene management. If the limited authority is insufficient for simulating or running HMI, the added scene will appear the password request window.

Confirmation：

Non-confirmation: Run without confirmation while you press button.

Confirm and wait 0.1 sec: to prevent the mindless pressing, therefore here need to be wait 0.1 sec and then run while you press button.

Confirm and wait 0.2 sec: wait 0.2 sec and then run while you press button.

Confirm and wait 0.3 sec: wait 0.3 sec and then run while you press button.

Confirm and wait 0.5sec: wait 0.3 sec and then run while you press button

Keyboard definition: after setup keyboard definition in 2-4.5. Then you could select which function you set for using.

Keyboard window: this function which OKs if running other functions is used for dialogue box.

Hiding: when scene authority is lower than「Options」－＞「Limited authority」. The component will hide up until the authority sufficient to re-show the screen

Display prompt symbol: scene authority is lower than「Options」－＞「Limited authority」. The component will display a prompt symbol "Lock" that means it cannot be operated until the authority sufficient to cancel the lock

3、Status: as illustration 3-3.1.3。

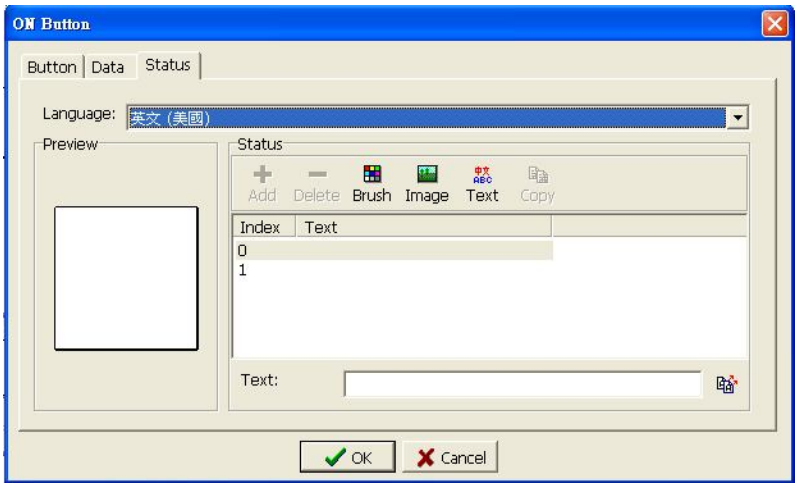


Illustration 3-3.1.3

Language: select the language you want to use.

Preview: you can preview the texts you input, which is to prevent the mistake of

entering

Status:

Add: without adding function due to only 0 or 1 status.

Delete: without deleting function due to only 0 or 1 status.

Brush: as illustration 3-3.1.4.

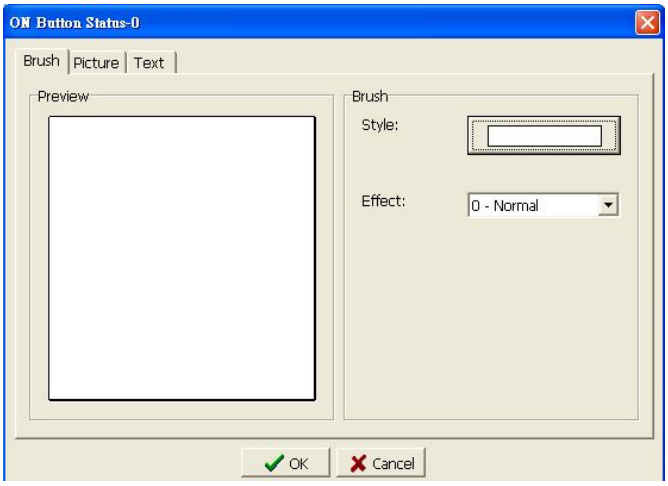


Illustration 3-3.1.4

Style: select a line style on buttons.

Color: select a color style on buttons

Image: please refer to 3-2.4.

Text: please refer to 3-2.1.

Copy: without copying function due to only 0 or 1 status.

Index/Text: index 0 is the text shows on the screen while you press the button. Index 1 is the text shows on the screen while you not press the button.

Input text: input the text you want to display.

3-3.2 Setup/Constant and Increase/Decrease

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-3.2.1. Please refer to 3-3.1.

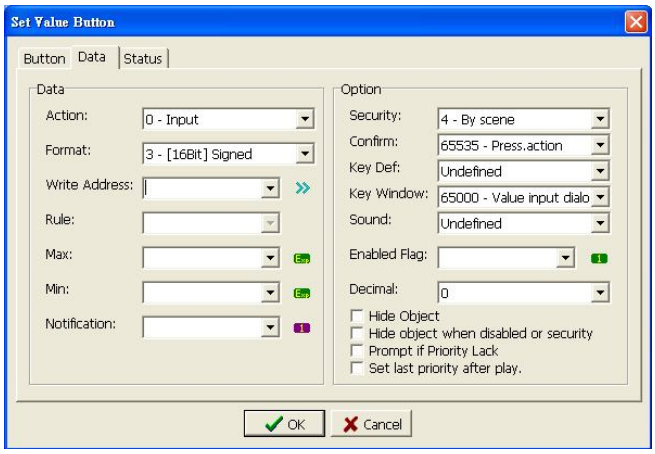


Illustration 3-3.2.1

Action:

Setup for Input window: input data from scene to connection parameter position for matching keyboard window.

Parameter/Constant: input figure to connection parameter by written rules.

Add/minus figure: set add or minus figure while you press at one time.

Data: select the data form you want to write in.

Written position: input connection parameter position.

Written rules:

Input the figure of connection parameter while you choose parameter/constant in movement function. Input【+】 symbol in front of the figure if you want to add value. Input【-】symbol in front of the figure if you want to subtract value.

Maximum: input maximum of data range.

Minimum: input minimum of data range.

Option: please refer to 3-3.1.

3-3.3 Jump/Back

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-3.3.1. Please refer to 3-3.1.

Scene switch: you could use this function when you have a lot of added scene. You could select which scene you want to escape or return to last scene.

Options: please refer to 3-3.1.

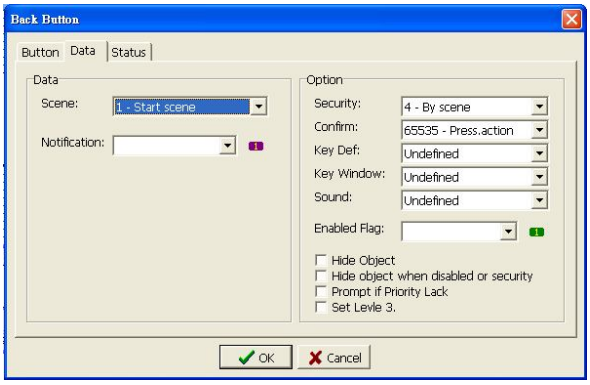


Illustration 3-3.3.1

3-3.4 Function

Please refer to 3-3.1. Function button as illustration 3-3.4.1。

Function: Select the authority needed to be modified while running the program

Options: Please refer to 3-3.1.

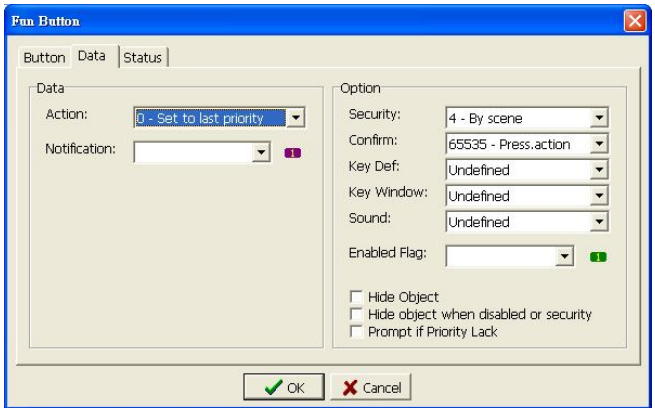


Illustration 3-3.4.1

3-3.5 Key

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-3.5. Please refer to 3-3.1.

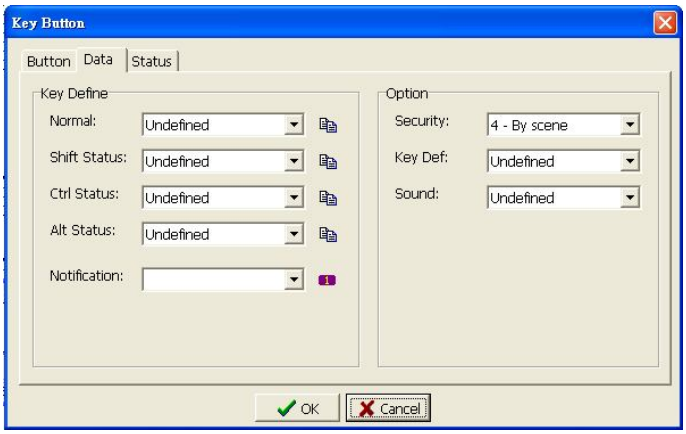


Illustration 3-3.5

Normal key: run that function as pressing a key/button. Shift：run that function as pressing a key/button and 「Shift」key.

Ctrl：run that function as pressing a key/button and 「Ctrl」key.

Alt：run that function as pressing a key/button and 「Alt」key.

Keyboard defines: if the HMI supports keyboard, please refer to 2-4.5.

This Key Shift, Ctrl, Alt of definition is assigned by user. They are not the keys of keyboard. As illustration 3-3.6 and 3-3.7, take key "Shift" for example, we set all of status is the key 17-Shift, which means you take key 17 for key shift.

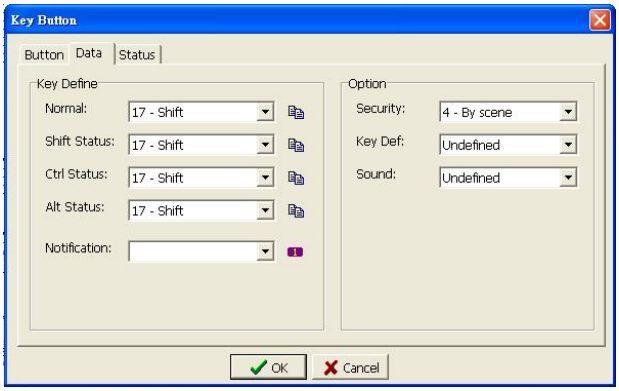


Illustration 3-3.6

Therefore, while you enter the Shift in all status, the key can only operate as a shift function without any other functions.

【Index】You can see index value in 0~3 in illustration 3-3.7. It means the default is 0, Shift is 1, Ctrl is 2, the status of Alt is 3, corresponding with each other. Therefore, if you want to get a lot of functions in a key/button, please refer to this setting.

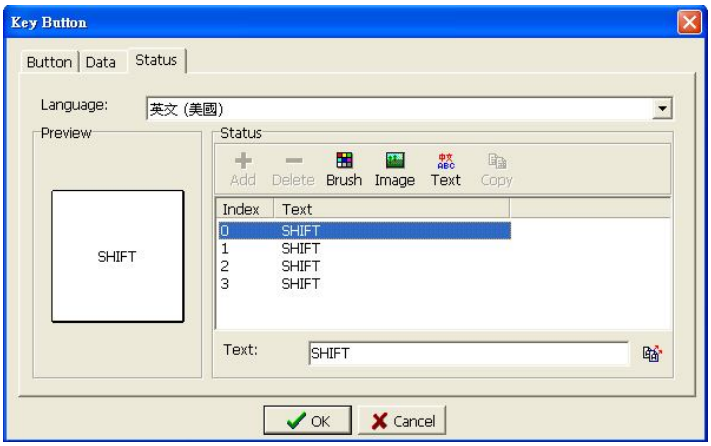


Illustration 3-3.7

The setup will be complete then.

3-3.6 Status

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-3.6.1. Please refer to 3-3.1.

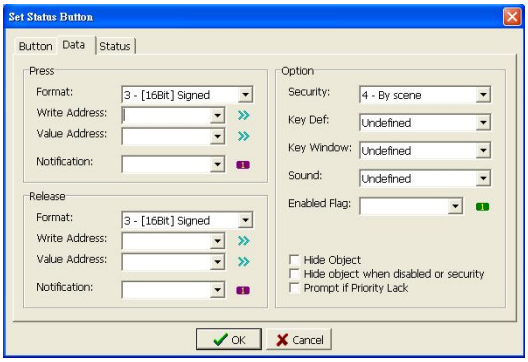


Illustration 3-3.6.1

Data:

Read position: load the position of data.

Written position: the loaded position of data is written to the written position. For example, the value of loaded position is 0; the value of written position would be 1 then.

Option: please refer to 3-3.1.

3-4 Display

Click【Component】, then clicking 【Display】 will appear drop-down menu as illustration3-4.1. Or you could also click this function on the toolbar as illustration 3-4.2.

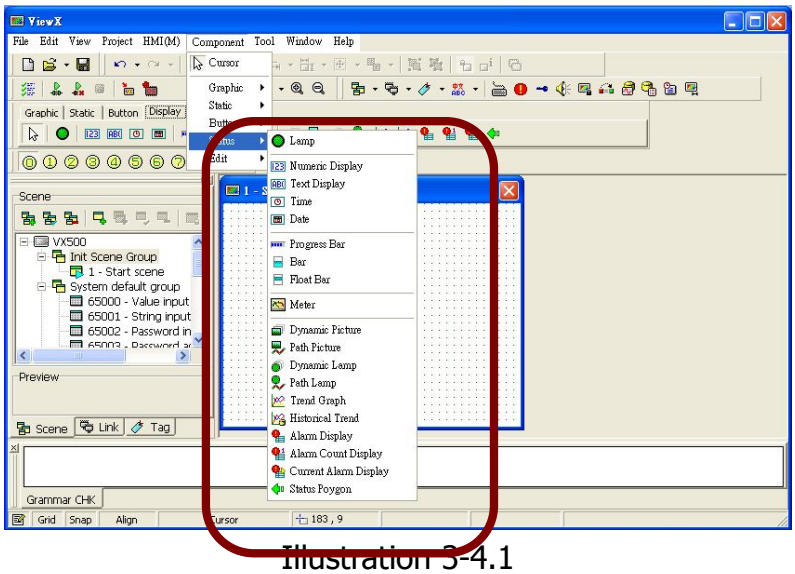


Illustration 3-4.1



Illustration 3-4.2

3-4.1 Lamp

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties. Please refer to 3-3.2 and 3-3.2.

3-4.2 Numeric Display

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.2. Please refer to 3-2.1 and 3-3.2.

Data:

Integer: it means the digit number that you want to display in integer.

Fractional: it means the digit number that you want to display in fractional.

Leading zeros: when the integer setup in 4, the value will be stuffed from 0 to 4 digit number.

HEX: it will turn normal value into hexadecimal value.

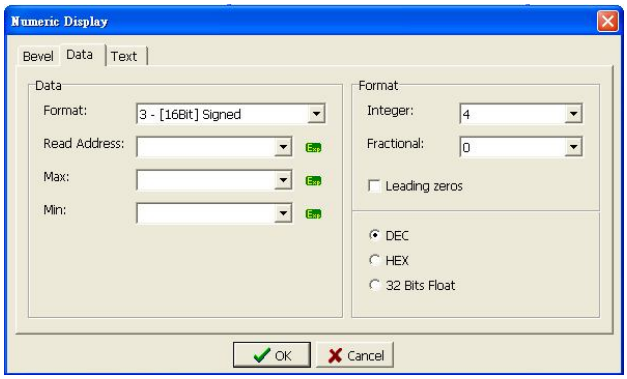


Illustration 3-4.2

3-4.3 Display Text

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.3. Please refer to 3-2.1.

Data form: display texts according to data form.
String length: select how many words you want to display.
Read address: input the position of buffer or system parameter.

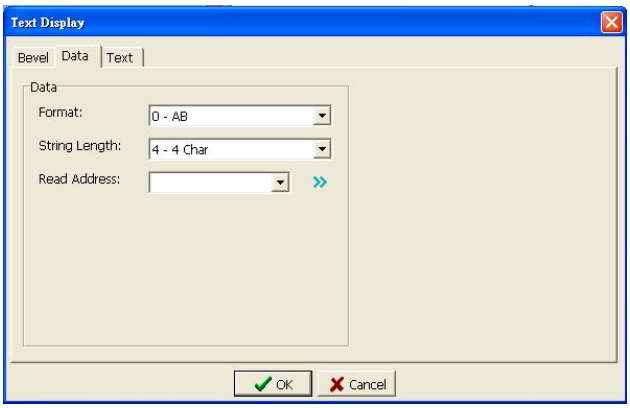


Illustration 3-4.3

3-4.4 Time/Date

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.4. Please refer to 3-2.1. You could input display form on this item as illustration 3-4.4. Display from is as illustration 3-4.5. Please refer to appendix 3 about the display form.

0 self-set form	:	You can display the form (illustration 3-4.4) you set as illustration 3-4.5. Regarding time form, please refer to appendix 3 in manual.
1- hh:mm:ss	:	Time will be displayed hour：minute：second.
2- hh:mm	:	Time will be displayed hour：minute.
3- MM/DD/YY	:	Time will be displayed month/day/year。
4- DD/MM/YY	:	Time will be displayed day/month/year。
5- DD.MM.YY	:	Time will be displayed day.month.year。

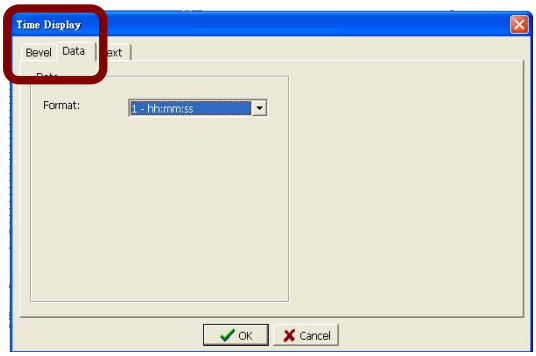


Illustration 3-4.4

Text:

Font: please refer to 3-4.

Preview: you can preview result you set.

Form: xxxx year xx month xx day AM xx hour xx minute xx second

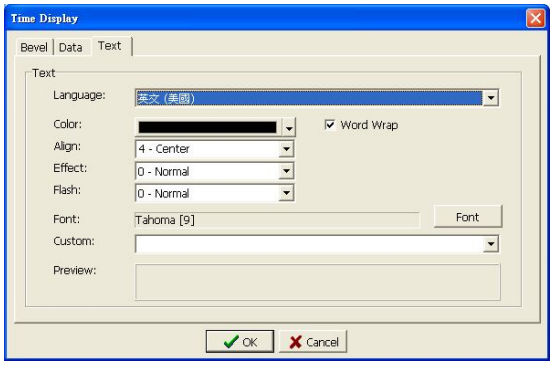


Illustration 3-4.5

3-4.5 Progress Bar

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.5. Please refer to 3-2.1 and 3-3.2.

Option:

Direction: adjust the direction of the progress. The default is vertical.

Grid color: select the grid color of the progress.

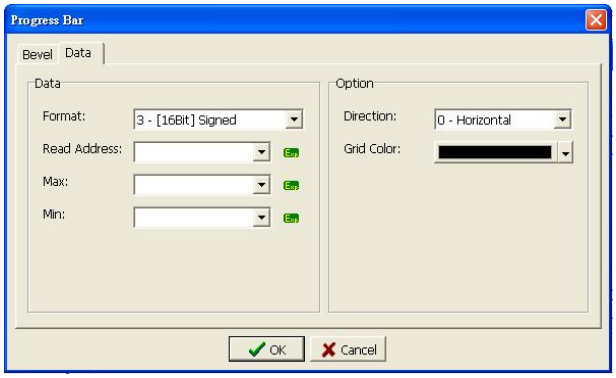


Illustration 3-4.5

3-4.6 Bar/ Float Bar

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.6.1. Please refer to 3-2.1. and 3-3.2.

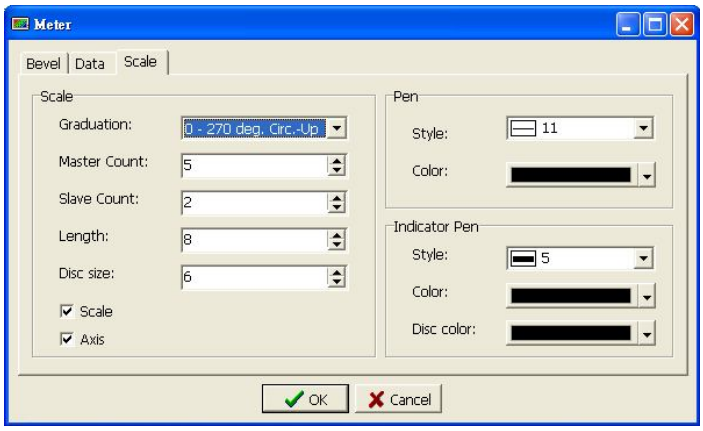


Illustration 3-4.6.1

Option:

Style: select normal pillar or float pillar.

Direction: select a direction of normal pillar or float pillar.

Brush:

Style: select line styles.

Color: select line color.

3-4.7 Meter

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-4.7.1. Please refer to 3-2.1 and 3-3.2.

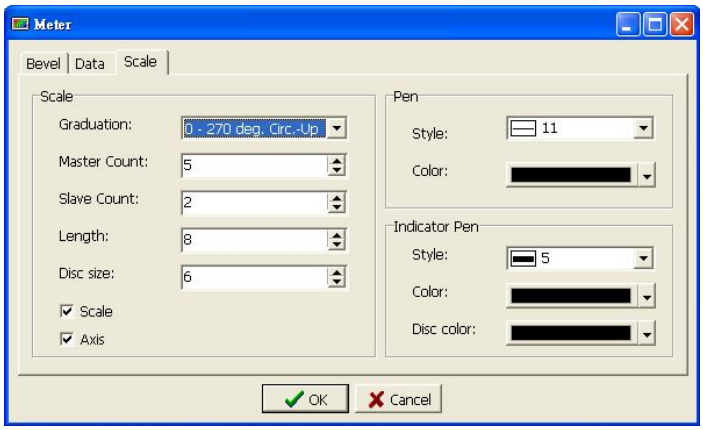


Illustration 3-4.7.1

Scale:

Graduation: select direction and angle of instrument board.
Master Count: select amount of main scale.
Length: select length of scale.
Disc size: select disk size.
Scale: display scale if you mark.
Axis: display positions if you mark.

Pen:

Style: select line styles of scale and positions.
Color: select line color.

Indicator Pen:

Style: select line styles of instrument needle.
Color: select color styles of instrument needle.
Disc color: select disk color.

3-5 Edit

Click【Component】, then clicking 【Edit】 will appear drop-down menu as illustration3-5.1.
Or you could also click this function on the toolbar as illustration 3-5.2.

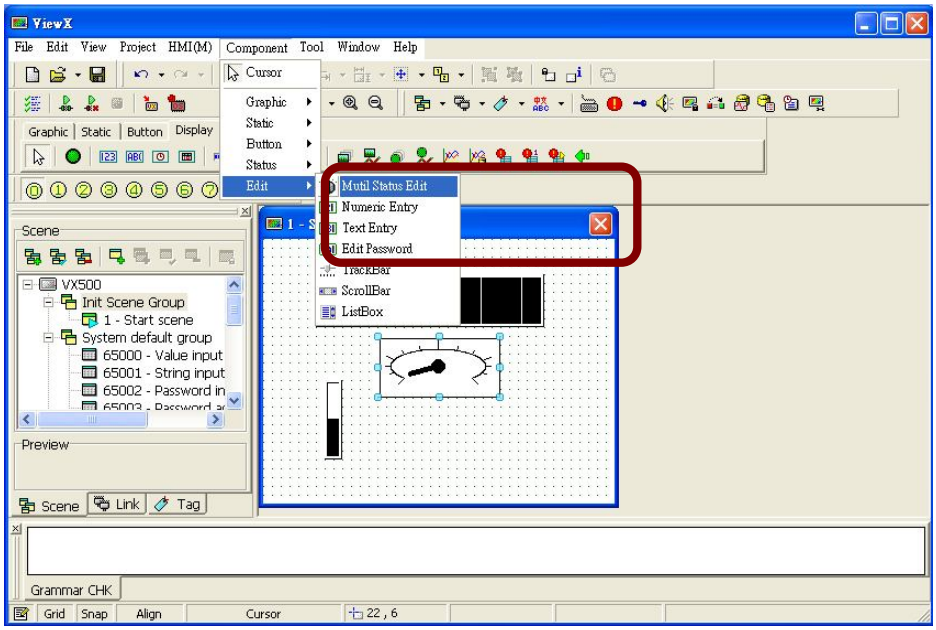


Illustration 3-5.1



Illustration 3-5.2

3-5.1 Multi-status

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-5.1.1. Please refer to 3-2.1, 3-3.1 and 3-3.2.

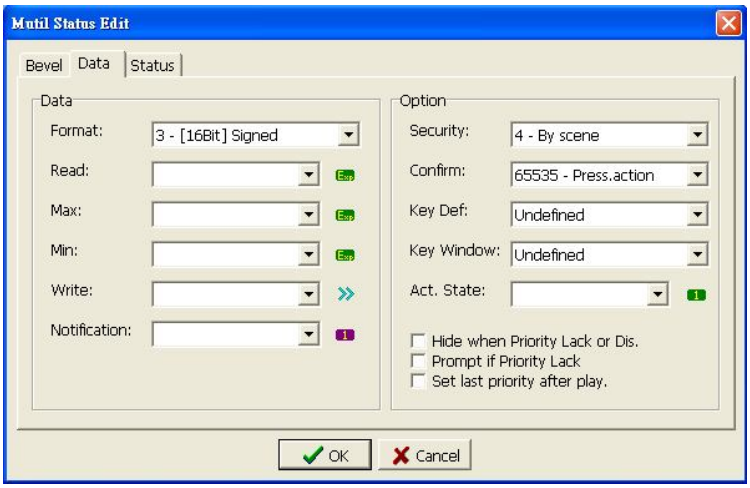


Illustration 3-5.1.1

3-5.2 Numeric Entry

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-5.2.1. Please refer to 3-2.1, 3-3.1, 3-3.2 and 3-4.2.

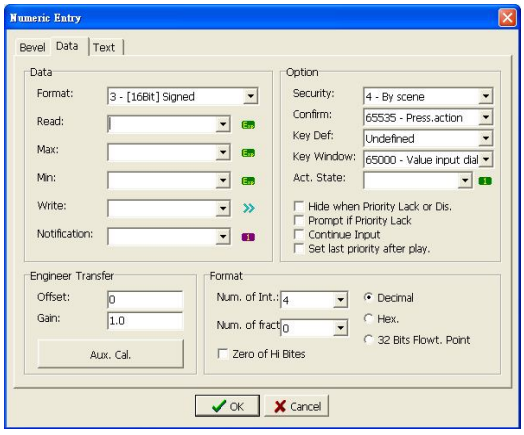


Illustration 3-5.2.1

3-5.3 Text Entry

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-5.3.1. Please refer to 3-2.1 and 3-3.1.

Data:

Form: display texts according to data form.
String length: select how many texts you want to display.
Read address: input the address of buffer or system parameter.
Written address: input the address of buffer or system parameter.

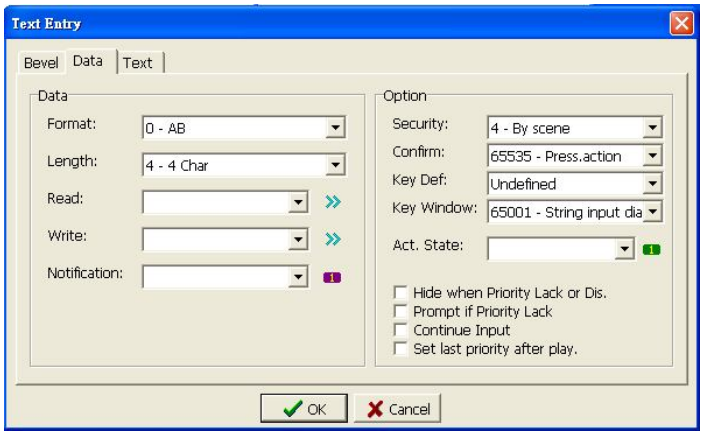


Illustration 3-5.3.1

3-5.4 Password

Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 3-5.4.1. Please refer to 3-2.1.

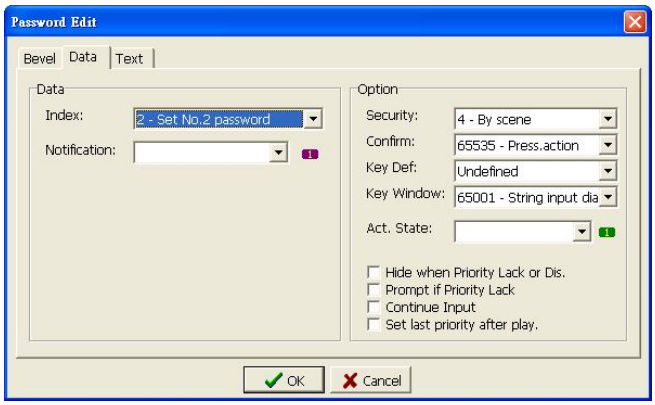


Illustration 3-5.4.1

Data:

Password index: you could set 2 to 8 sets group of password.

Regarding「Keyboard window」 of「Option」, please set up the scene for inputting.（Illustration 3-5.4.2）.

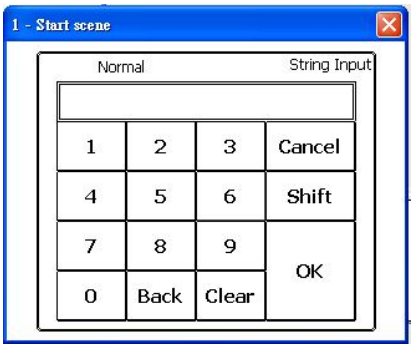


Illustration 3-5.4.2

Please input password in this window.

4. PROFESSINAL MANAGEMENT

4-1 Scene

Scene management let us understand all scenes completely, such as add, edit delete, and preview. Please refer to 2-4.1. You will see as illustration 4-1.1 while you open new file. Scene divide into two parts. One part is scene management. The other part is scene preview.

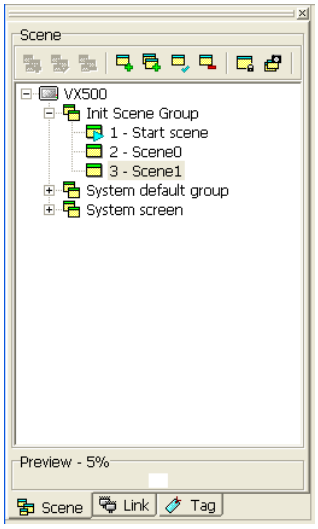


Illustration 4-1.1

1、Scene management: Show the relationship of every level by arborescence.
For example: Start scene group will display scenes of the group

【VX550】 : HMI type
【Start scene group】 : Select the default of start scene group for classification in editing.
【Scene】 : Built groups of scene for edition and browsing.

2、Scene preview: While you click one of scenes, you could adjust scene size in preview. And then you could click the scene in "Scene preview", to preview the graphic that have been selected.

4-2 Communication

You can see one of arborescence as illustration 5-1.1 after clicking communication management. It can let you know which protocol and how many controllers on COM1 and COM2. Pressing right-click on communication protocol or controller can select "add", "edit" and "delete".

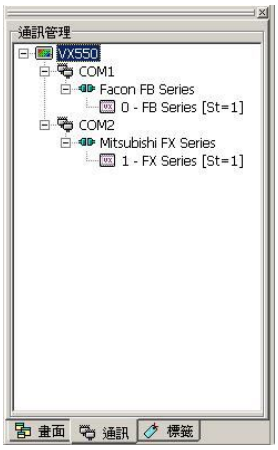


Illustration 4-2.1

【VX550】 : HMI type VX550 is color model, VX500 is Black and White model
【COM1】 : Set what protocol is in COM1
【COM2】 : Set what protocol is in COM2
【Controller】 : Set controllers of the protocol

4-3 Tag

Every connection of communication protocol and every buffer number is not the same in various styles. In order to remember function of connection or buffer number, you could use label management to increase readability. For example, after you add a tag and you name connection X 1 "for testing", you could input "for testing" on read position or written position or click "for testing" on drop-down menu. Therefore, every connection and buffer all can set name for memory.

4-3.1 Tag Example

First step: Click tag as illustration 4-3.1.

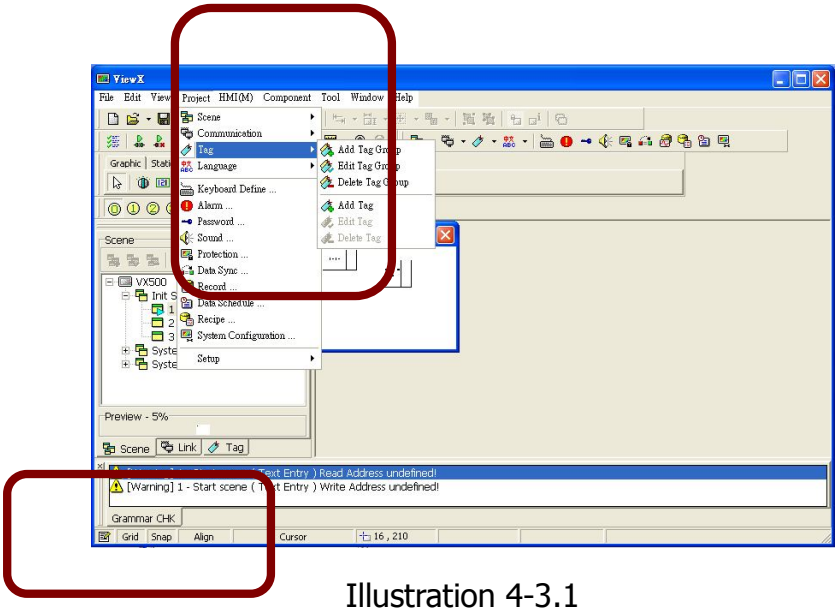


Illustration 4-3.1

Second step: click "add tag" or "add tag group" as illustration 4-3.2.

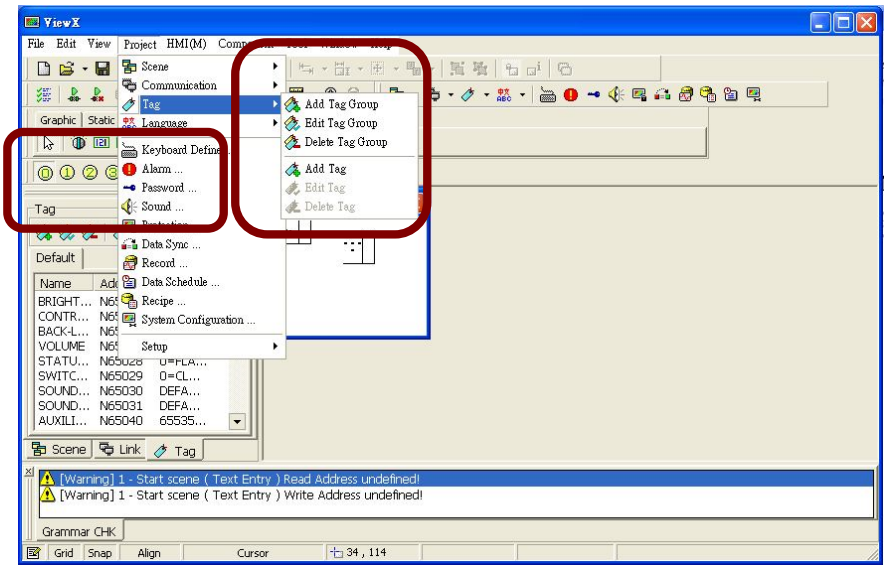


Illustration 4-3.2

Third step: it will appear "add tag group" as illustration 4-3.3 "add tag" as illustration 4-3.4. Input "multi-language tag" on the tag group. Inputting group name is for classifying group.



Illustration 4-3.3

【Tag group】: choose「multi-language tag」. If you did not add a tag group, please add a tag group, and you have to input a name in tag group as illustration 4-3.4. If you have added it, please choose a tag group in this field.。

【Label name】: Input the name for identifying, and input scene language index.

【Address】: input system parameter「N65342」, please refer to appendix 2 "**ViewX system parameter list",** what you need to input that is corrected position of protocol and butter.

【Maximum】: input maximum of the connection range, you may not input.

【Minimum】: input minimum of the connection range, you may not input.

【Description】: input description of the tag, you may not input.

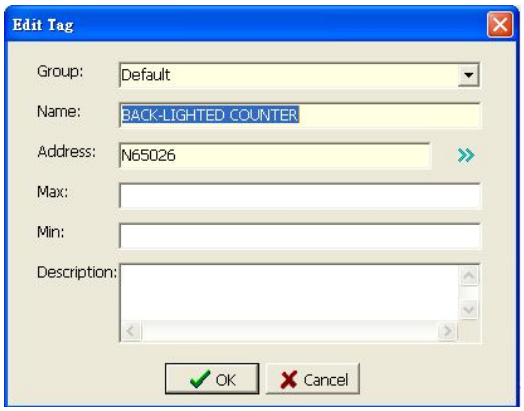


Illustration 4-3.4

Forth step: modify language setup as illustration 4-3.5, which is multi-language scene. Select a language. This is the example of Simplified Chinese.

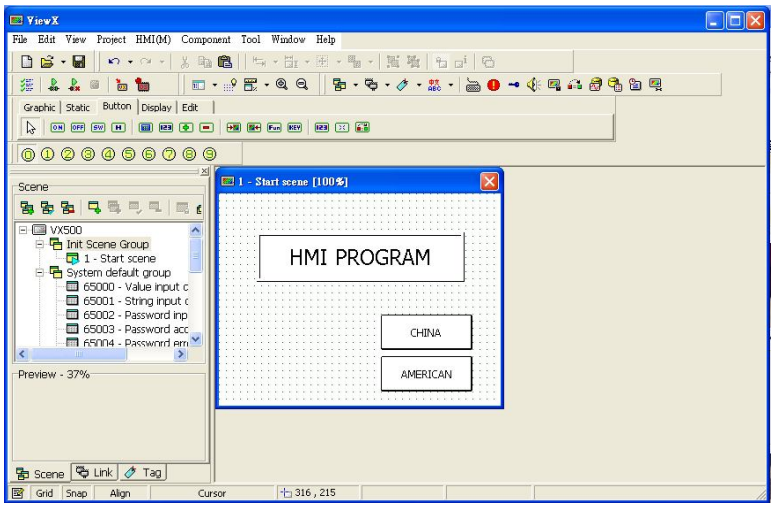


Illustration 4-3.5

Open the properties of this component as illustration 4-3.6. Choose 【Scene language index】at the written position. According to the example of chapter 5, input system parameter "N6342", you could directly choose the text you set. Then press "OK" to complete the setup and press "run" to test the function. The tag is in order to raise identification for operation and reduce mistakes.

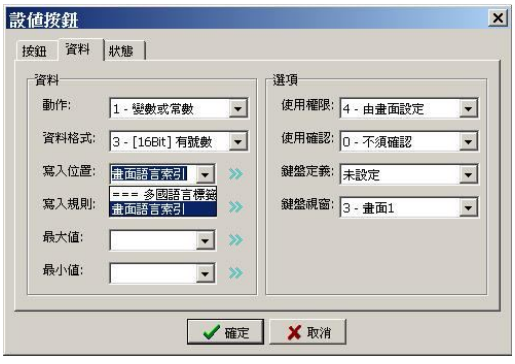


Illustration 6-1.6

5. Multi-language

The multi-language only can be used for figure or texts of component, which you input show in one language.

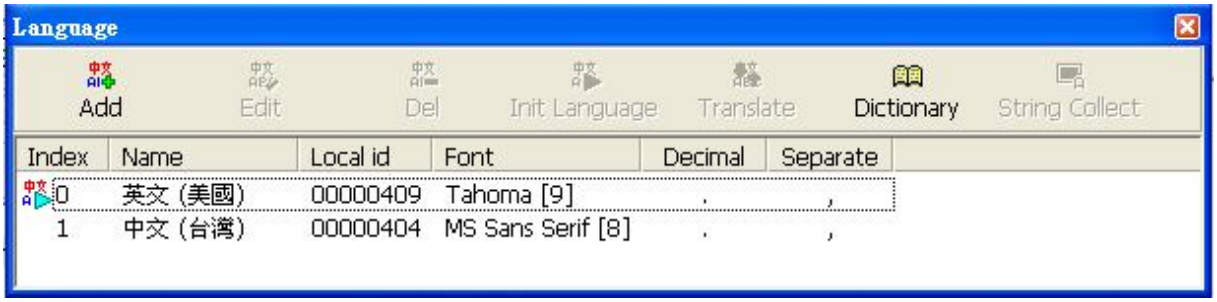


Illustration 5.1

You need to add the language in Multi-language function if you want to add new one as illustration 5.1. In【Text display】of【Display】can be input text and chosen language

5-1 Add, Edit, Delete

Click【Project】, then clicking【Language】will appear 4 items as illustration 5-1.1. Or you could click the scene of Language Management as illustration 5-1.2。

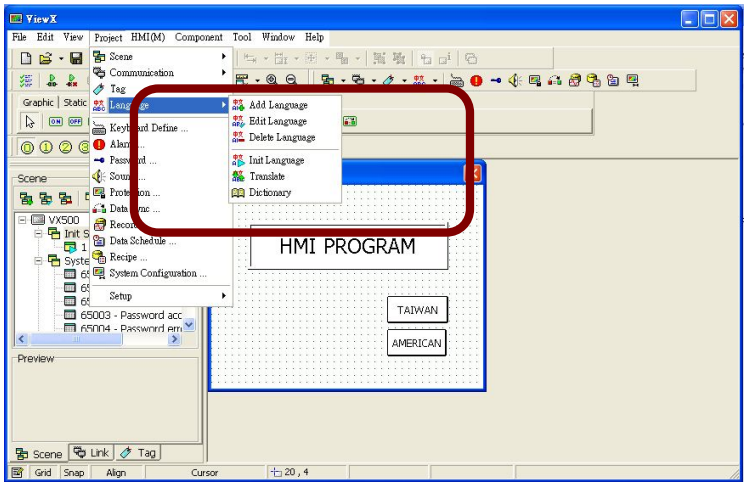


Illustration 5-1.1

【Index】: You can see a field of the index on illustration5-1.2. The index figure is unique. In example 5-3, the figure of written position is the index figure. It means the index figure you input according to the written position switches corresponding language.

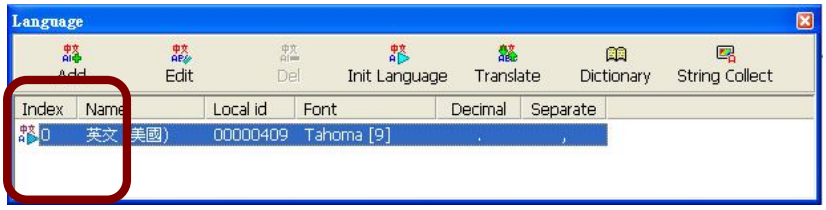


Illustration 5-1.2

Add language: clicking that will appear as illustration 5-1.3.

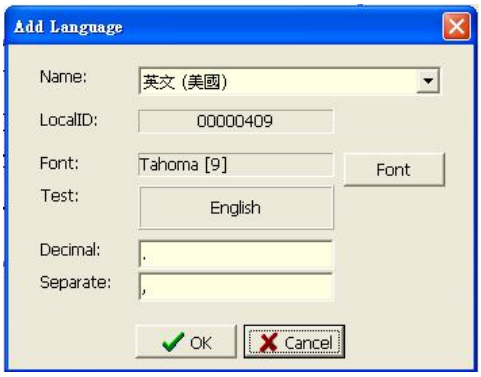


Illustration 5-1.3

Name:	Select a language you want to add.
Local ID:	Display the area code for this language.
Front:	Default front.
Optional front:	Select a usable front in a language
Test:	Display the text of front you chose.
Decimal:	This function decides which a symbol is the decimal point
Separate:	This function decides which a symbol is the separate

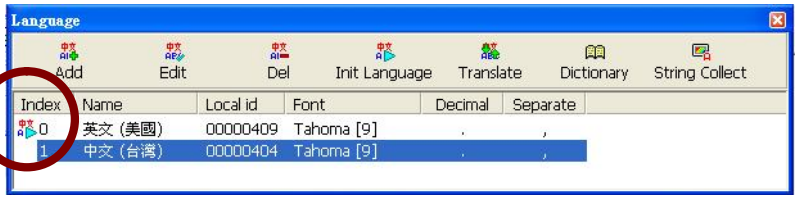


Illustration 5-1.4

2、Edit: Edit the existent language as illustration 5-1.3.

3、Delete language: Delete the existent language

4、Set original language: Set which language is original one as illustration 5-1.4.

5-2 Component Application

You will use two or more language after you add a language, that means the project use the language more than two. Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 5.2.1.

※Notice: You only can use Multi-language on the component to display text or number. Or the properties are as illustration 5-2.1, choose 【Status】【Language】and then you can edit Multi-language.

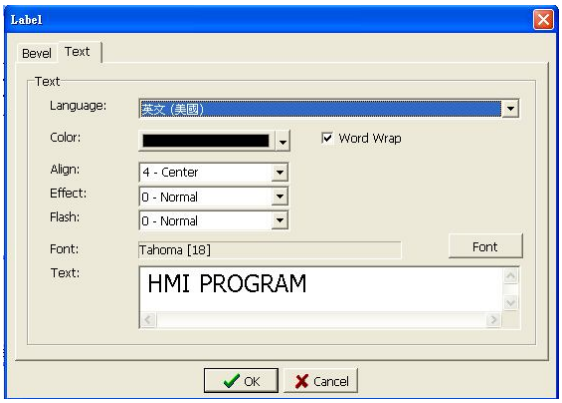


Illustration 5-2.1

5-3 Component Example

First step: Open a new file.

Second step: add a language. Please refer to 5-1. This is the example of Simplified Chinese.

Third step: choose a component on【Start scene】. This is the example of static text as illustration 5-3.1.

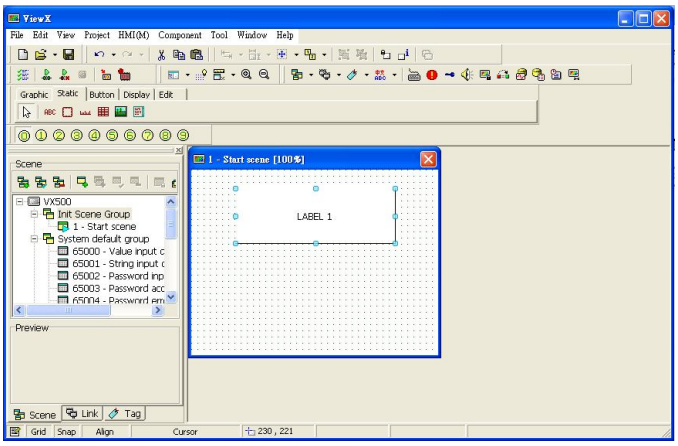


Illustration 5-3.1

Forth: Press right-click on the component, and choose the properties. Or double clicking the component you want to edit will appear the properties as illustration 5.3.2. The language of drop-down menu will appear the language you set in the "project". Here you can see Tradition Chinese and Simplified Chinese.

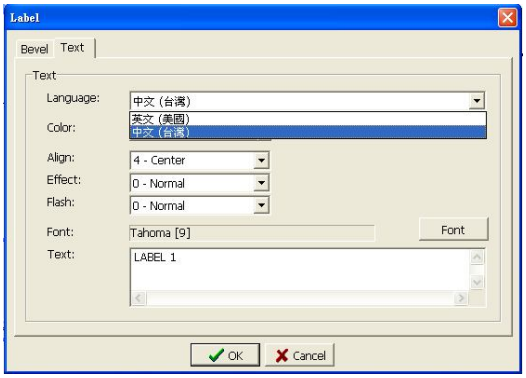


Illustration 5-3.2

Fifth step: choose Tradition Chinese, and input texts you want to display in the【Text】as illustration 5-3.2. Choose Simplified Chinese, and input texts you want to display in the【Text】as illustration 5-3.3.

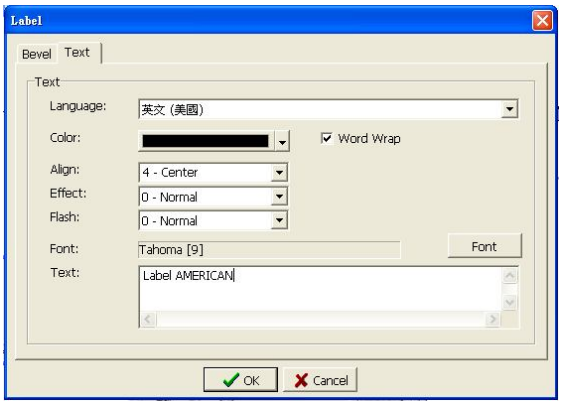


Illustration 5-3.3

Sixth step: please press "OK" after inputting the data of two languages. Pressing static text will display the font of the language.

Seventh step: Add two【Figure button】on start scene as illustration 5-3.4. You can find that in 【Button】. Open the properties of【Set button】. Choose【1-Parameter or constant】,【Written position】 in【Action】input the system parameter "N65342". Please refer to『appendix 2 ViewX system parameter list』 Please input 0 in【Written rules】 "0" means that the index figure is Tradition Chinese by 5-1 chapter as illustration 5-3.5. "1" means that is Simplified Chinese as illustration 5-3.5.

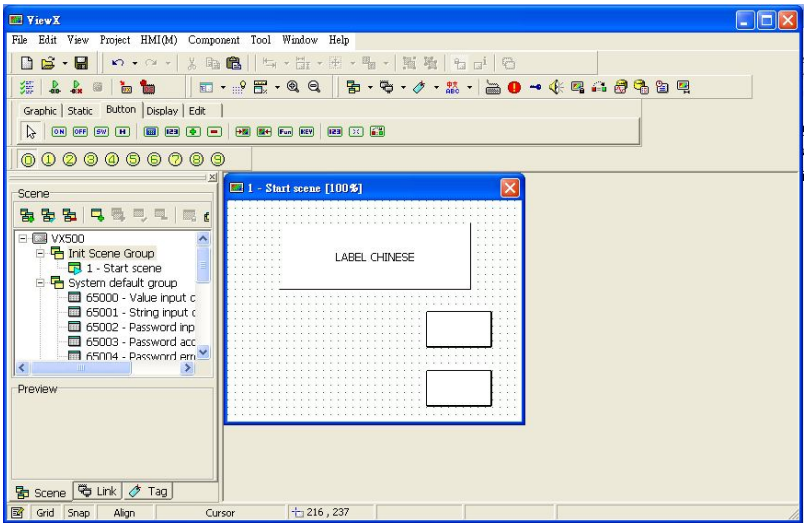


Illustration 5-3.4

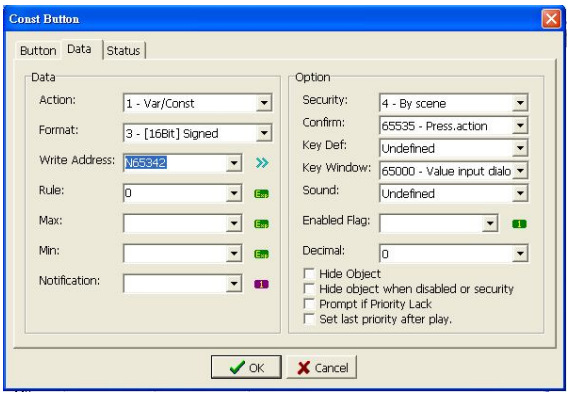


Illustration 5-3.5

Next to chick【Status】,【Language】then choose Tradition Chinese at【Input text】, input Traditional Chinese as illustration 5-3.6. Choose Simplified Chinese at【Input text】, input Simplified Chinese as illustration 5-3.6.

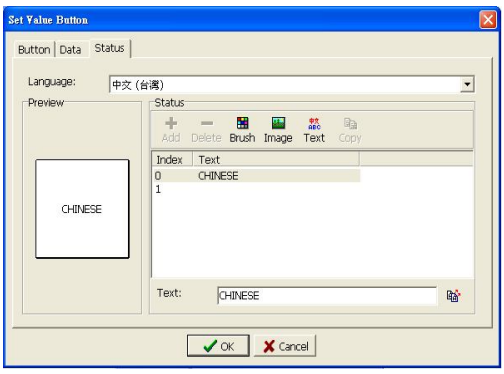


Illustration 5-3.6

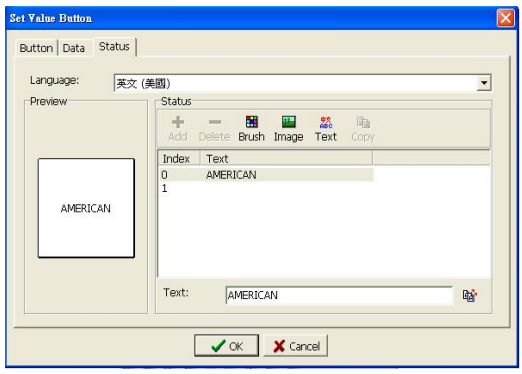


Illustration 5-3.5

When all of the input is done, pressing "OK will appear as illustration5-3.8。

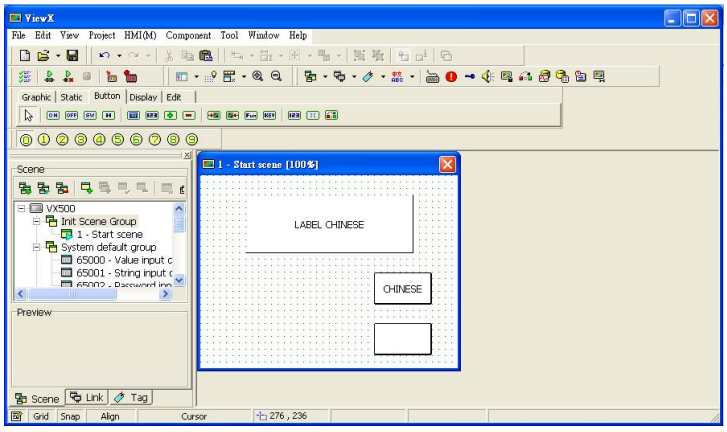


Illustration 5-3.8

Please refer to this step for another【Set button】. Choose【1-Parameter or constant】, 【Written position】in【Action】input the system parameter "N65342". Please refer to『appendix 2 ViewX system parameter list』Please input 1 in【Written rules】 Input Simplified Chinese in【Input Text】and then pressing "OK" will appear as illustration 5-3.9.

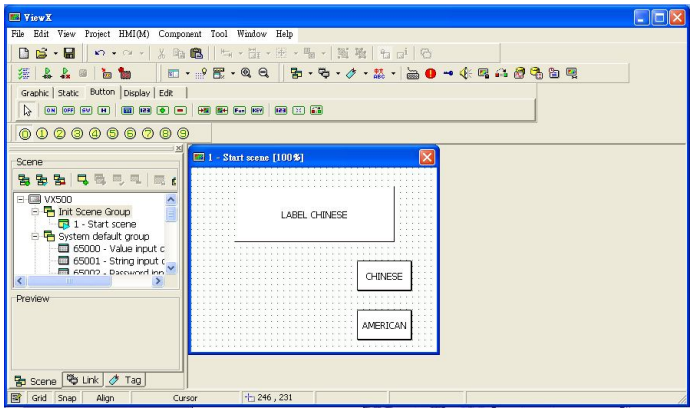


Illustration 5-3.9

Eighth step: if the above steps runs corrected, choose【HMI】on heading line, then choose 【Run】or press【F9】Pressing Traditional Chinese will appear as illustration5-3.10. Pressing Simplified Chinese will appear as illustration5-3.11.

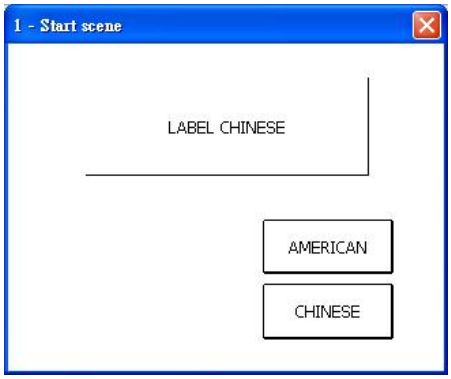


Illustration 5-3.10

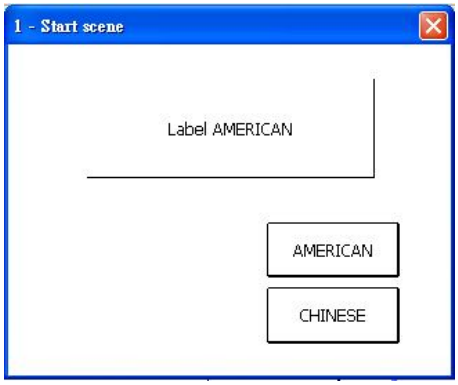


Illustration 5-3.11

Description: according to above example, all of the components which can display texts will display the font by your setup.

6. Dialogue Box

Dialogue Box is used for avoiding artificial mistake while you press a button in operation. Therefore, dialogue box will display a dialogue box first to ask if you OK.

That is in order to avoid pressing a button with incaution.

6-1 Add, Edit, Delete

Click【Project】, then click【Scene】as illustration 6-1.1.

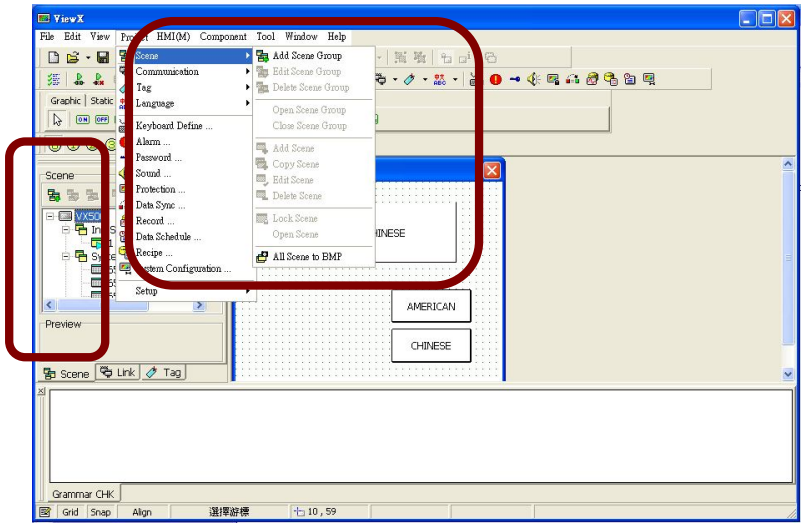


Illustration 6-1.1

Clicking【 Add scene】will appear as illustration 6-1.2. And then click【1.dialogue box】in【scene style】Other setups please refer to 2-4.1. Pressing "OK" will add a dialogue box window.

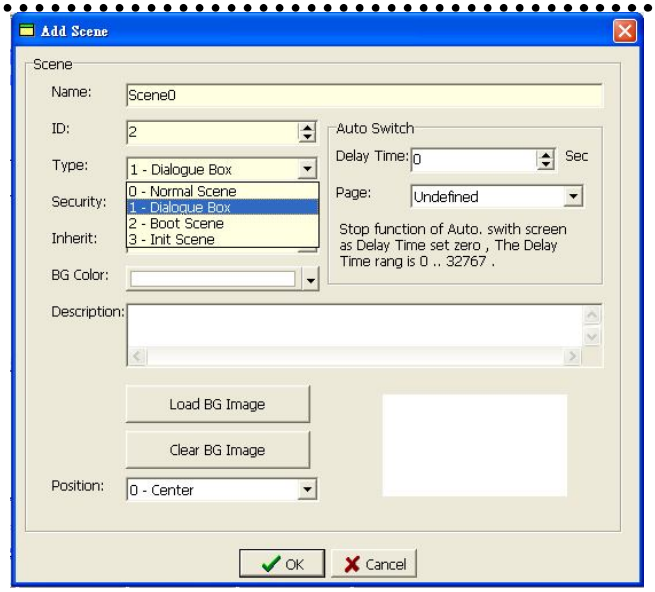


Illustration 6-1.2

Regarding "edit", "delete", you could click【Project】, and then click【Scene】Please refer to illustration 6-1.1.

6-2 Inherit

After adding dialogue box, you could edit the scene of dialogue box as illustration 6-2.1. This example is extended to Chapter 7, so please refer to Chapter 7.

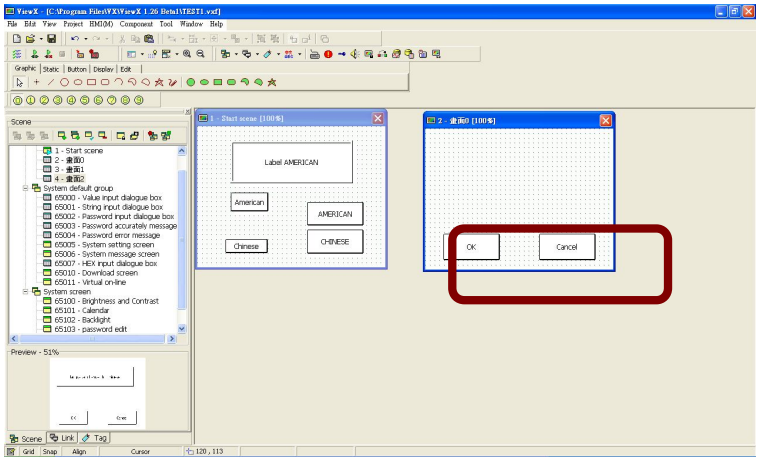


Illustration 6-2.1

First step: you could see【Scene 0】 of dialogue box as illustration 6-2.1. We could take this dialogue for main scene. Click【Picture】, then take【Solid rectangle】for being base map. You could also take pictures as base map.

Second step: click【Button 】, then click【Key button】 as the red part of illustration 6-2.1, those two chosen components which are the "OK" and "Cancel" button.

Third step: choose the "OK" button, and then double-clicking will appear the properties as illustration 6-2.2. Please refer to 3-3.5.

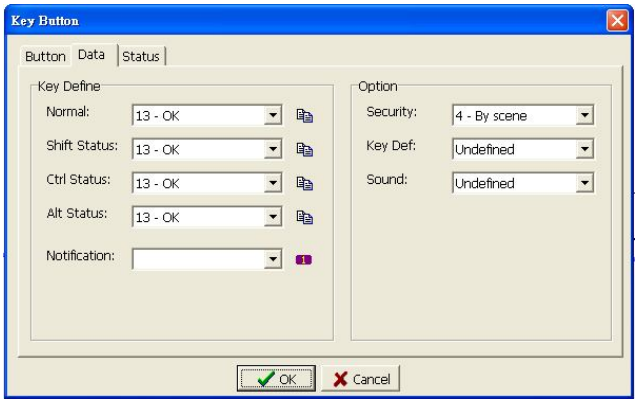


Illustration 6-2.2

Normal key : Run you set as pressing a button
Shift : Run you set as holding "Shift" and pressing a button
Ctrl : Run you set as holding "Ctrl" and pressing a button
Alt : Run you set as holding "Alt" and pressing a button

The five field is as【13-OK】in one of the buttons for example.

Forth step: click 【Status】 as illustration 6-2.3. Because 4 buttons is as OK button, 0~ 3 texts could be entered "OK".

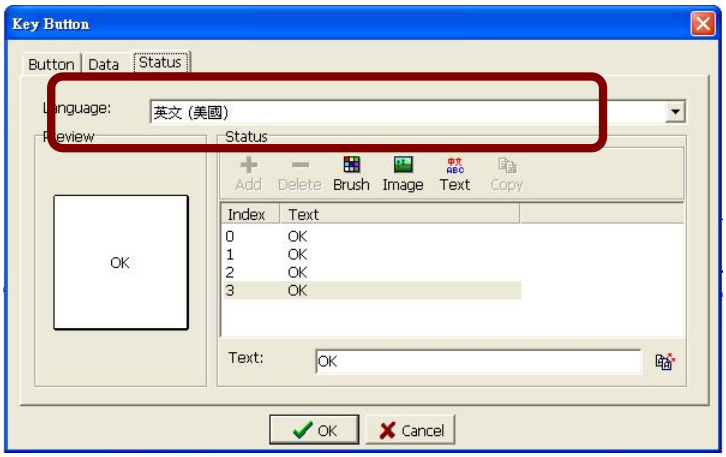


Illustration 6-2.3

Fifth step: another other button set as cancel, the setup procedure as above.

Sixth step: Both of components are been set as illustration 6-2.4. , and then the setup of dialogue box is complete.

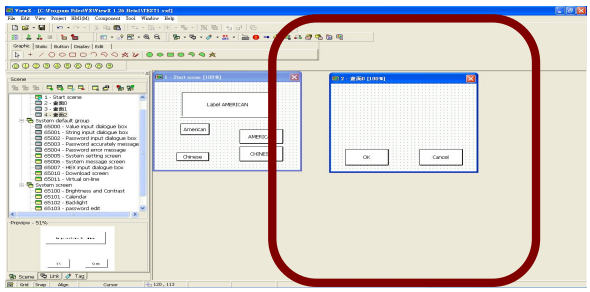


Illustration 6-2.4

Seventh step: add a dialogue box as illustration 6-2.5. You could use inheritance to built main scene of the dialogue box.

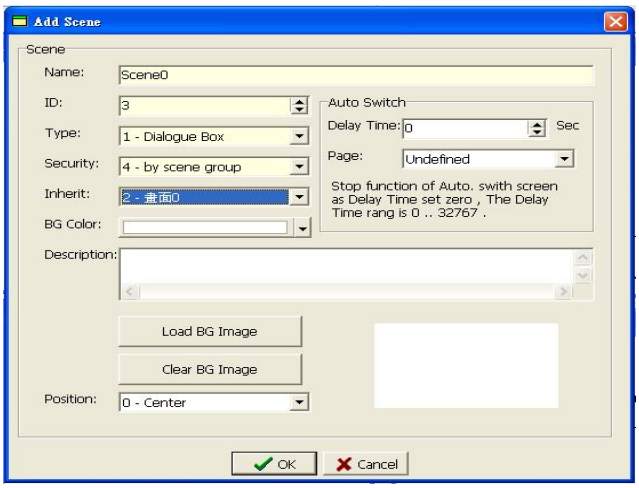


Illustration 6-2.5

choose 【scene 0】（Main scene）as illustration 6-2.6.

※Notice: Inheritance function can inherit every scene you built. Main scene must be modified in main scene, can not be modified in sub-scene

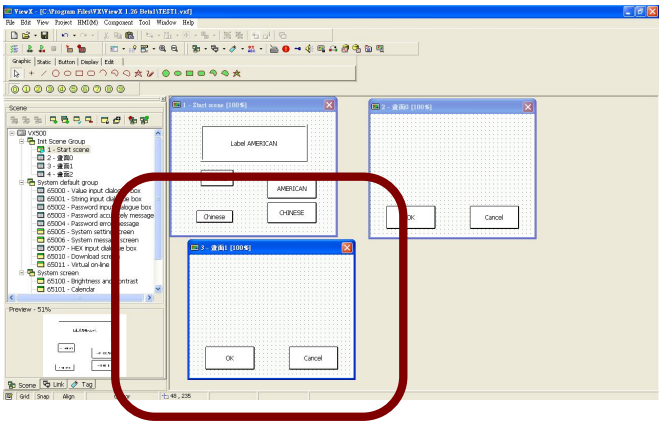


Illustration 6-2.6

You only need to build a main scene of dialogue box, the rest of work could leave to "inheritance".

6-3 Example of dialogue box

Continue for 6-2, the previous front step please refer to 6-2.

Eighth step: add a dialogue box, whose setup as seventh step. Add【Static text】in both dialogue box as illustration 6-3.1.

※Notice: Regarding the language of static text, please refer to seventh step.

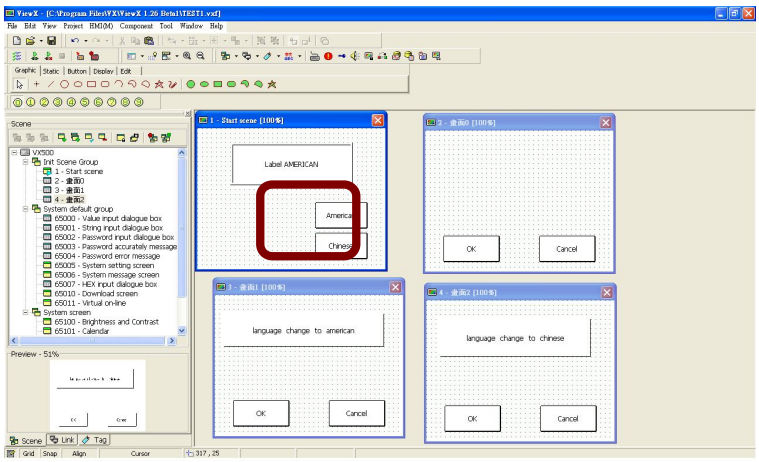


Illustration 6-3.1

Ninth step: choose Traditional Chinese in 【Start scene】as the red circle of illustration 6-3.1. Open the properties of this component as illustration 6-3.2. Choose scene 1 in 【Keyboard windows】.

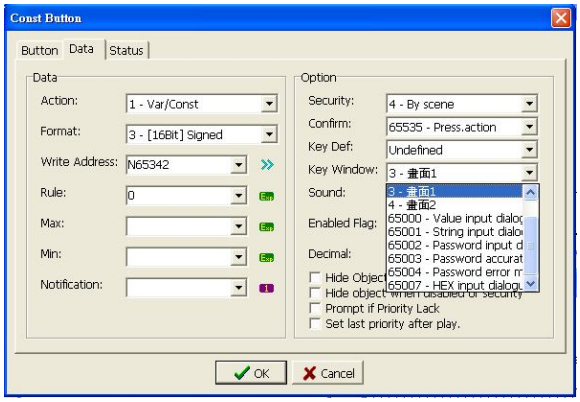


Illustration 6-3.2

Tenth step: run and test scene as illustration 6-3.3. Pressing Tradition Chinese will appear as illustration 6-3.4.

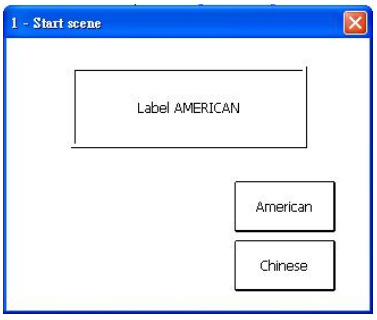


Illustration 6-3.3

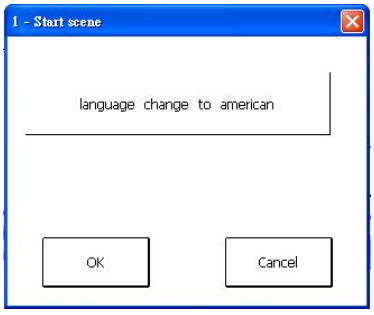


Illustration 6-3.4

Pressing Simplified Chinese will appear as illustration 6-3.5.

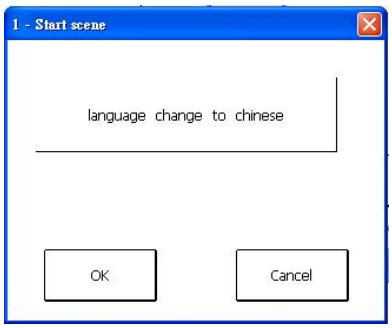


Illustration 6-3.5

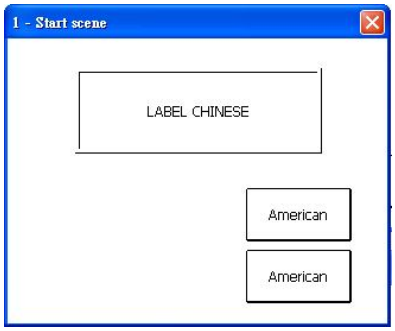


Illustration 6-3.6

This function can avoid pressing buttons by mistake.

7. Alarm and Audio setup

This chapter explains how to set alarm and audio setup.

7-1 Example

First step: add a scene, then please choose dialogue box in the scene style. And edit it according to illustration 7-1.0.

The text is 「static」－＞「Fill rectangle」



Illustration 7-1.0

At the begging of sound setup, you could Click【Project】 in heading line, then click【sound】. Or you could click shortcut on toolbar as illustration 7-1.

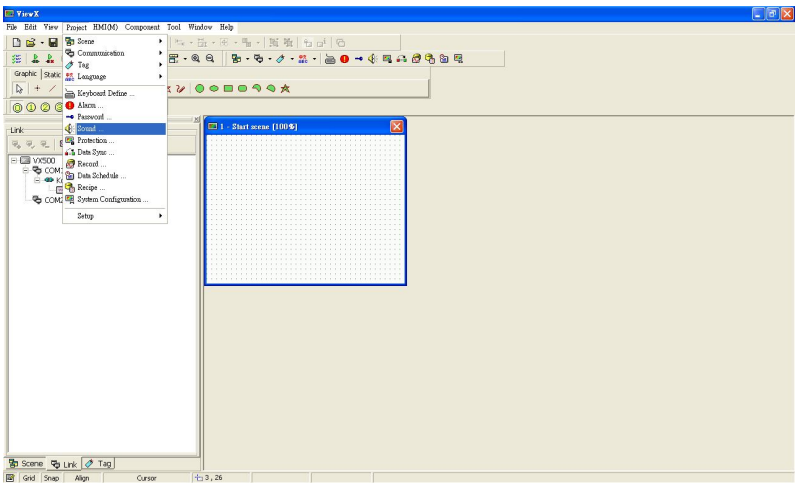


Illustration 7-1

Second step: it would be appear as illustration 7-1.1 after opening "sound". Cause this is the first time to set, you only can select【Add】,【Import】and【Export】。The built-in sounds have the setup of "key button" and "dialogue box". So you need to set alarm sound, or edit the sound of "key button" and "dialogue box".

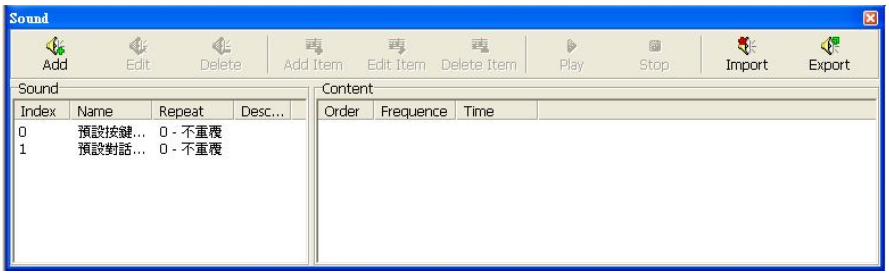


Illustration 7-1.1

pressing【Add】will appear as illustration 7-1.2.

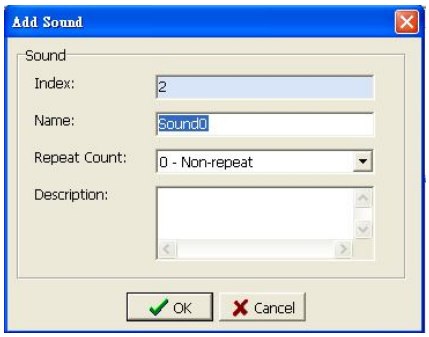


Illustration 7-1.2

Index: index 0 is the sound of key button, index 1 is the sound of dialogue box. If you want make soundless, please set index 0 and index 1 for 0.
Sound name: input「Alarm sound」
Repeat count: choose「no repeat」

Press ok, then illustration 7-1.1 will display added sound as the red circle part of illustration.

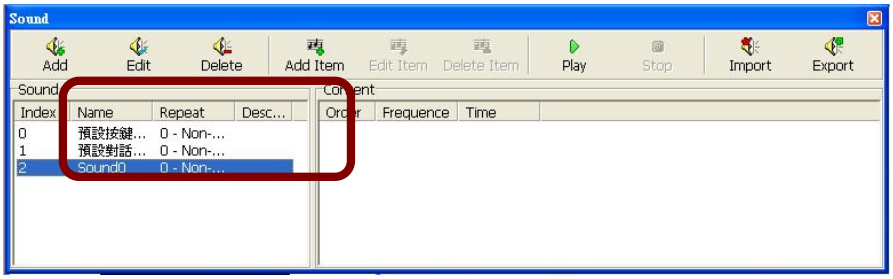


Illustration 7-1.3

Third step: next to choose the Index 2 "alarm sound", and then double-clicking its content will appear as illustration 7-1.4.

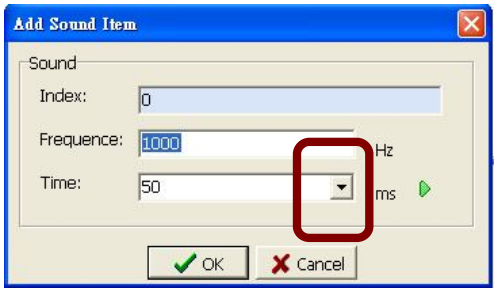


Illustration 7-1.4

On the illustration 7-1.4, the arrow symbol on the inside of the red circle means you could click the arrow symbol to play the sound after the setting of the frequence and time is done. It help user quick to know whether the sound is required of user or not.

※**Remark**：The higher frequent figure will be the higher pitch. The lower frequent figure will be the lower pitch. The time unit is ms，if time is 1000，it will be 1 second.

Choose index 2「alarm sound」

Action 1: press「add item」

Frequence: input「1000」

Time: input「400」

And then "ok"

Action 2: press「add item」

Frequence: input「1500」

Time: input「400」

And then "ok"

Repeat action 1 and action 2 once again. The result is as illustration 7-1.

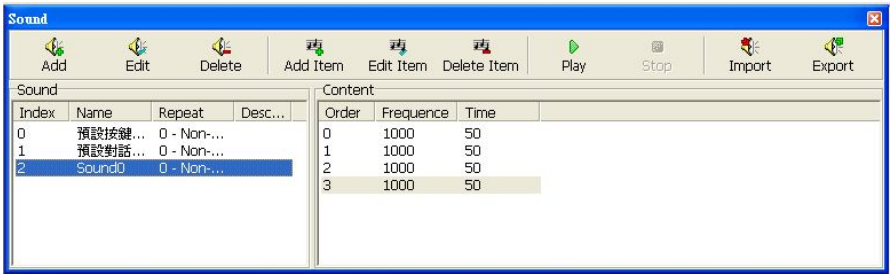


Illustration 7-1.6

Fourth step: to setup the alarm, you could choose【Project】on heading line, and then click【Alarm】. Or you could click the shortcut on the toolbar. Please refer to illustration 7-1.7.

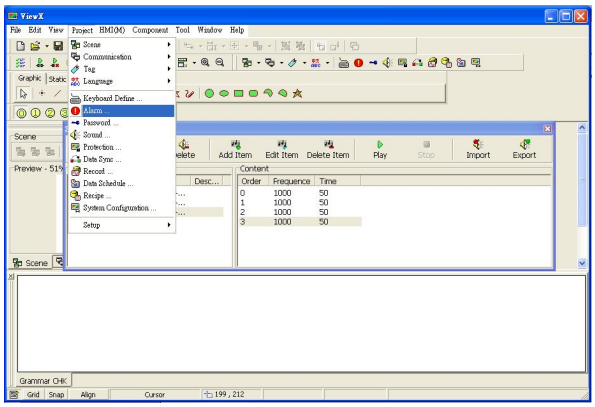


Illustration 7-1.7

Fifth step: clicking it that after last step the screen will appear as illustration 7-1.8. Cause Due to this is the first time to set up the alarm, so the scene only shows【Add】或【Import】、【Export】。

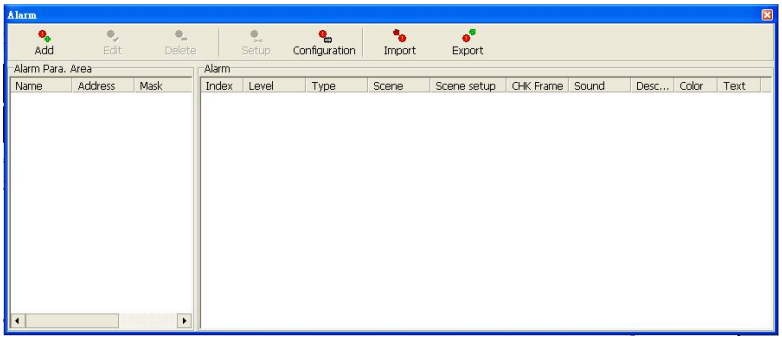


Illustration 7-1.8

Pressing【Add】will appear as illustration7-1.9.

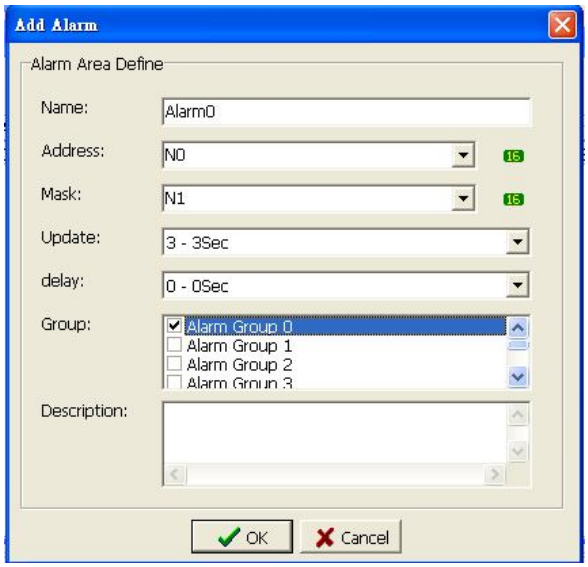


Illustration 7-1.9

Name: input「Urgent」。
Address: input「NO」。
Mask: Input「N1」。
Update: Input「3-3 second」。
Group: mark alarm group 0 and double click to rename it into Urgent area.

Pressing OK will appear as illustration 7-1.10 when the setup is done.

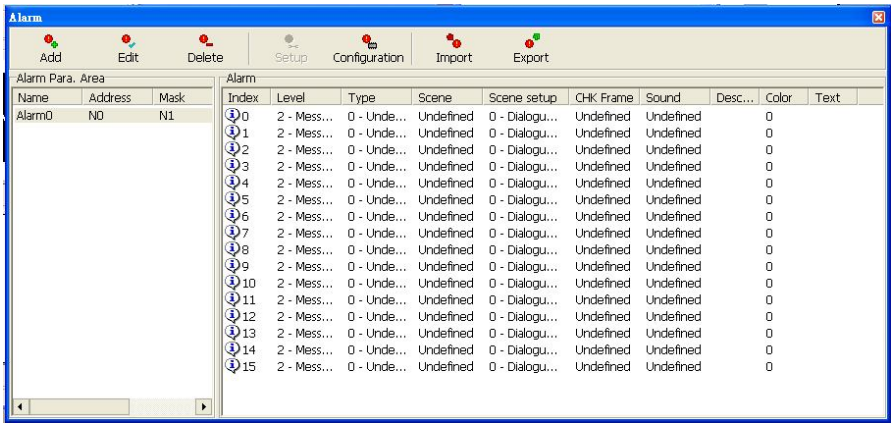


Illustration 7-1.10

In Illustration 7-1.10, the default of 「alarm message」is 15 in the right window.

Sixth step: choose 2 for the index figure, then press「Setup」or double click index 2, the illustration 7-1.11 will be appeared.

(Notice: choose index 2 is an example, which is to explain the relation between the Alarm Trigger and the index figure.

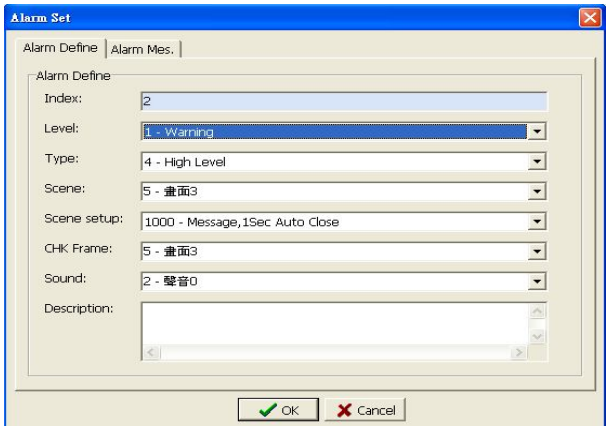


Illustration 7-1.11

Level: choose「Warning」
Style: choose「High level」
Scene: choose「Scene 0」
Scene setup: choose 「1000 – Message, 1Sec Auto Close.
CHK Bevel: choose「Undefined」
Sound: choose「2-alarm sound」

Press ok after the setup is done.

Seventh step: return to start scene, then edit as illustration 7-1.12.

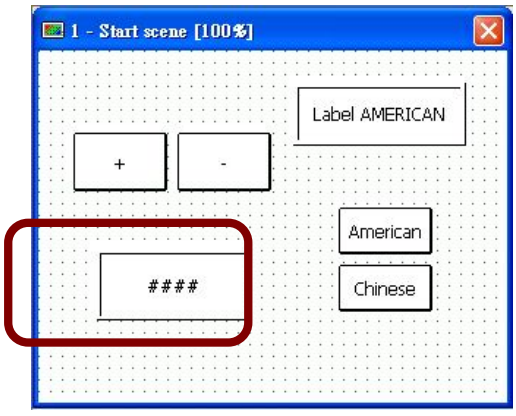


Illustration 7-1.12(Example)

In the illustration, 「＋」 button is setting from 【INC Button】 of 【Button】, as illustration 7-1.13.

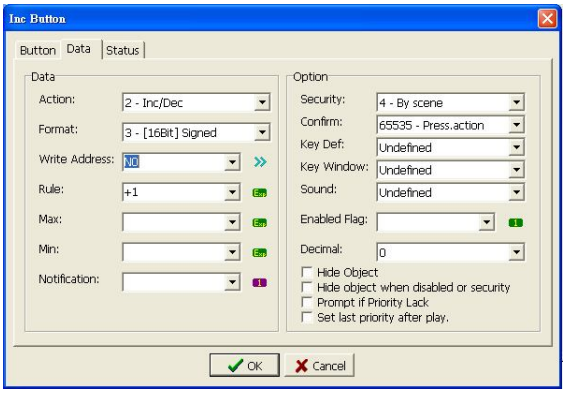


Illustration 7-1.13

Action: choose「2-Inc/dec」
Written address: Input「N0」 (System parameter)
Rule: input「＋1」。
Other setups are use default setting.

In the illustration, 「-」 button is setting from 【DECB Button】 of 【Button】, as illustration 7-1.13. This setup is as the same as trigger alarm, only difference is【Rule】 input「－1」, and then press OK.

The circle part of Illustration 7-1.12 is from 【Numeric Display】 of 【Display】 you only need to input NO in【Read address】, and then press OK.

※Notice: Illustration 7-1.12 has ＋, － that is in 【Button】－>【Text】as illustration 7-1.14.

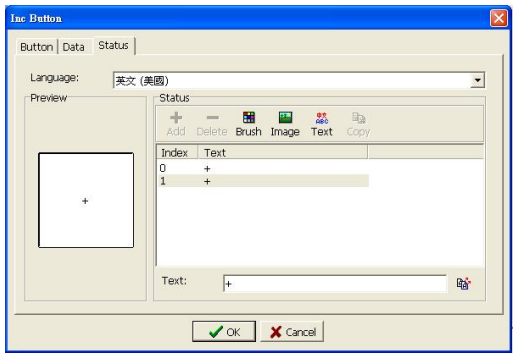


Illustration 7-1.14

8. Added New Function

8-1 For Project

8-1.1 Protection

This function is used in setting password for edited screen on HMI
In the setting screen, there are 3 blank spaces of protection password: upload, download, and edit.

Upload is for uploading password.
Download is for downloading password.
Edit is for editing password after uploading is complete.

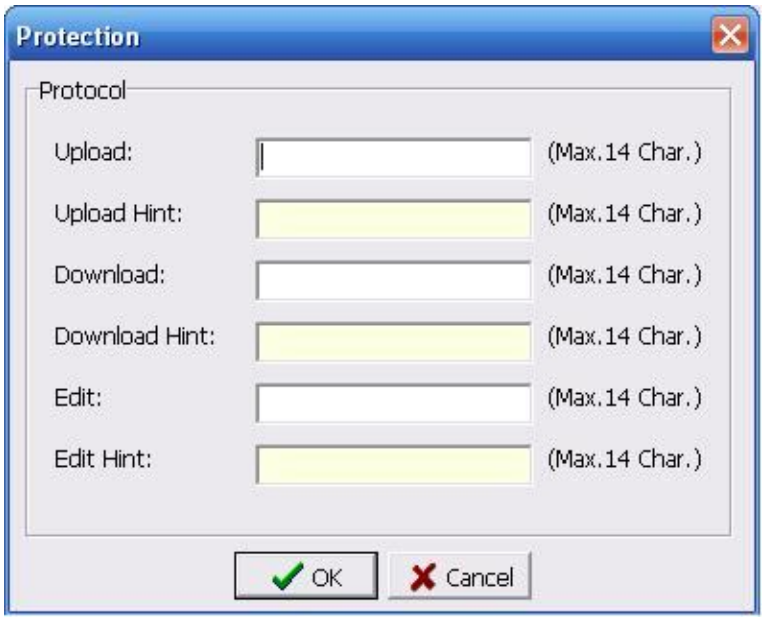


Illustration 8-1.1.1

Every password can be set with a hint. Text string is encoded by Unicode, so the passwords and the hints can be enter Chinese or other languages. The text string can be up to 14 digits at most.
When the field is blank, it means cancelling the protection. For example, if the field of download is blank, it means no need of password is in downloading.

In HMI software, using  to download a program of HMI will ignore the process of detecting password in downloading. But using  to download a program of HMI or using  to upload a program to HMI, when files with passwords, you will have to key in passwords, and then upload/download can work.

8-1.2 Recipe

For example of recipe function

Parameter settings of Recipe as follows:

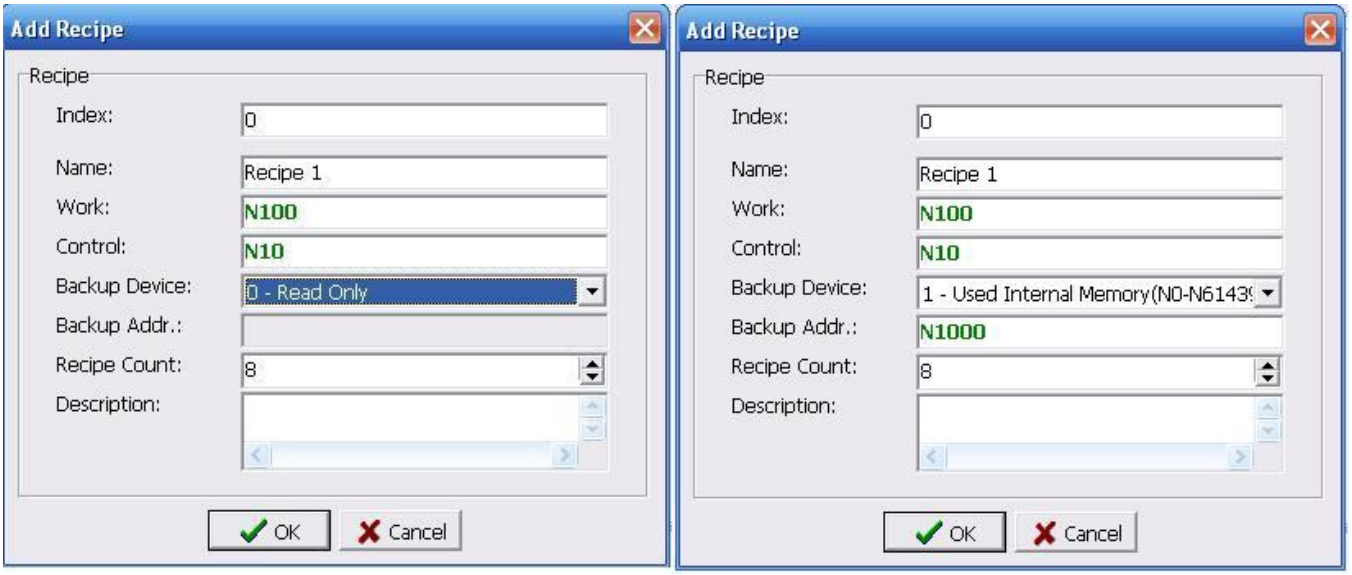


Illustration 8-1.2.1

Recipe Setting	Description
Name	Define name of the recipe
Work	Address of the register in using recipe(one for a group)
Control	Address of action variable of controlling recipe (controlling area is 4 WORD)
Backup Device	Select recipe backup. Currently present 2 options. [0-Read Only] Data is saved in HMI program. [1-use Internal Memory] Data is saved in the variable area, which agrees with read and write
Backup Address	Address of recipe backup
Group Count	Number of recipe group (1 group has how many WORD by setting of editorial screen)
Description	Description for recipe

PS: Above mentioned WORD is 16Bit.

Description of controlling area

Address	Name	Content	Remark
+0	Index0	0.. 65535	
+1	Rev	0	Reserved
+2	Rev	0	Reserved
+3	Control	Bit0=Read.(move from backup area to working area) Bit1=Write.(move from working area to backup area)	Auto set to zero after completed

Recipe parameter settings

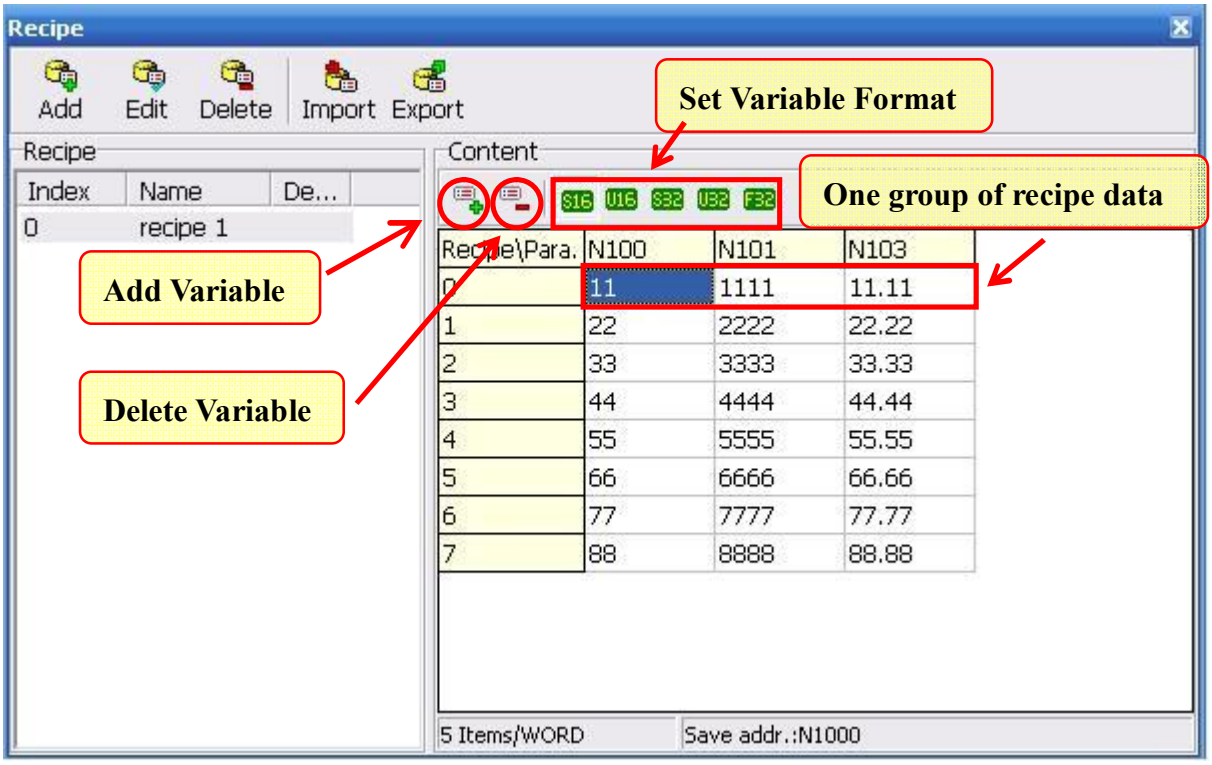
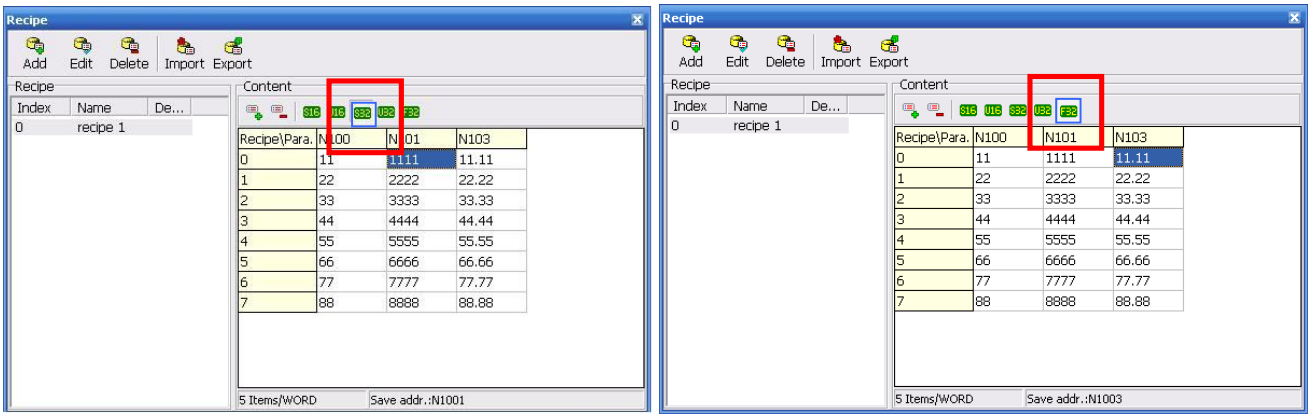


Illustration 8-1.2.2

Add: Click [Add] directly.

Delete: Click the check you want to delete, and then click [Delete].

Edit: Click the check you want to edit, and then click the relational buttons



Means second field is signed number of 32 bit Means third field is floating number of 32 bit

Illustration 8-1.2.3

Recipe action

Recipe action can reach management of controlling recipe by read-write controlling area.

Read recipe action:

Address	Name	Content
+0	Index0	0
+1	Rev	0
+2	Rev	0
+3	Control	Set for 1(Bit0: move from backup area to working area)

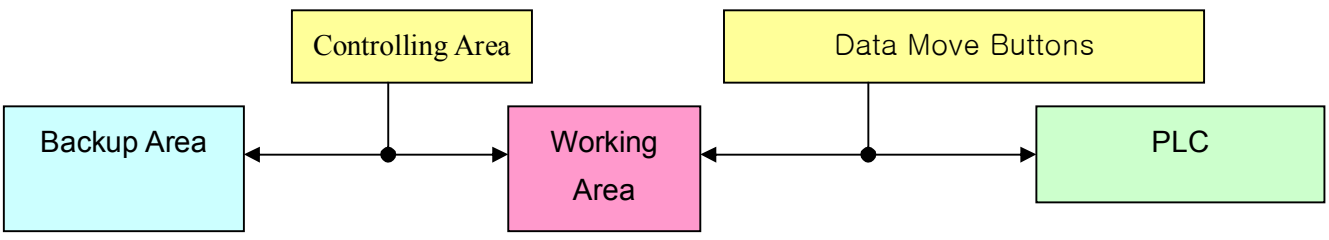
Move from backup area to working area

Write recipe action:

Address	Name	Content
+0	Index0	7
+1	Rev	0
+2	Rev	0
+3	Control	Set for 2(Bit1: move from working area to backup area)

Move from working area to 7th group of backup area

Besides, writing recipe to PLC or reading recipe from PLC should be collocated the Data move buttons



8-1.3 System Configuration

This function is for PLC operation with HMI

The system Configuration supplies screen control item, which is used on an operational screen on HMI by switching PLC.

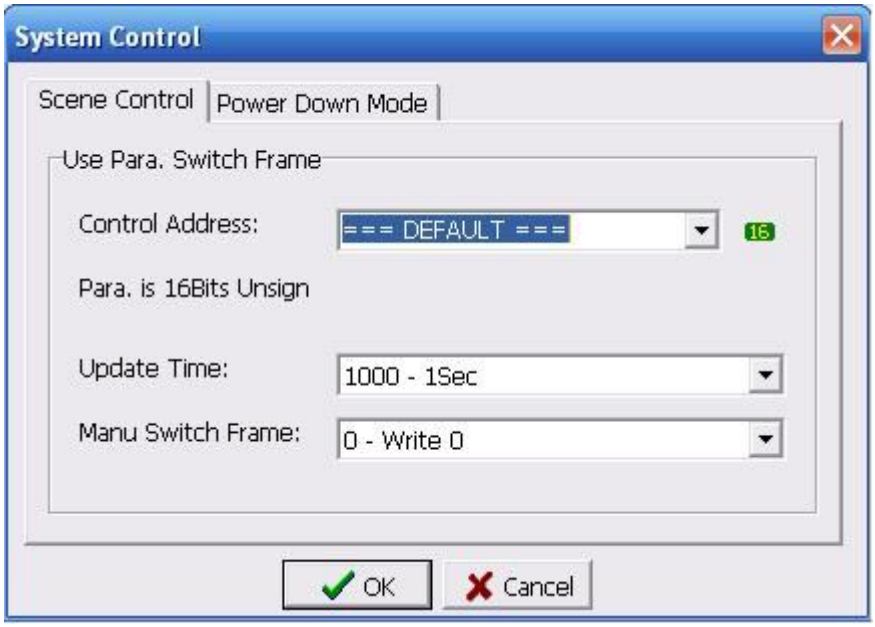


Illustration 8-1.3.1

Control address:

It is for putting a certain valuable of PLC to switch HMI screen.

The type of the valuable is 16 digits without number.

Update time:

It means interval time of reading control valuable.

Option between 0.1 sec to 10 sec.

Manu Switch Frame:

It will write back to control valuable in PLC when user switches the present screen directly.

The valuable of writing back to PLC has two modes.

0 – Write 0 tells PLC, It is already used by switching

1 – Write Screen tells PLC, it is already by switching and PLC knows which the screen.

8-1.4 Macro

INITIAL MACRO

HMI is turned on or reset, and then run Initial Macro, which would only run once. The default setting can run 4096 steps per time

BACKGROUND MACRO

After HMI is turned on or reset, Background Marco will keep running, which seems like background program. The default is 50mS, and can run 1024 steps.

CLOCK Marco

HMI is turned on or reset, and then the program will run after a while. The interval is 500 ms in default, and can run 4096 steps

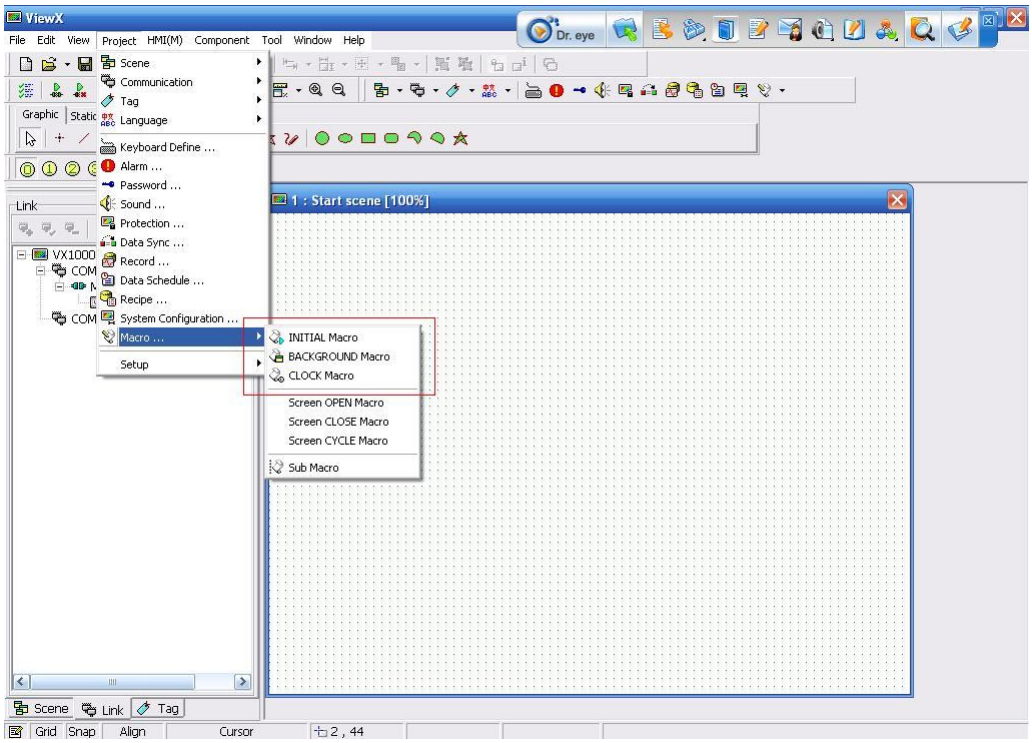


Illustration 8-1.4.1

Screen OPEN Macro

When screen is switched into the present screen, it will run OPEN Macro. Setting once can run 4096 steps.

Screen CLOSE Macro

When screen is switched into the present screen, it will run CLOSE Macro. Setting once can run 4096 steps.

Screen CYCLE Macro

When screen is switched into the present screen, it will run CYCLE Macro. The interval is 500 ms in default, and can run 4096 steps

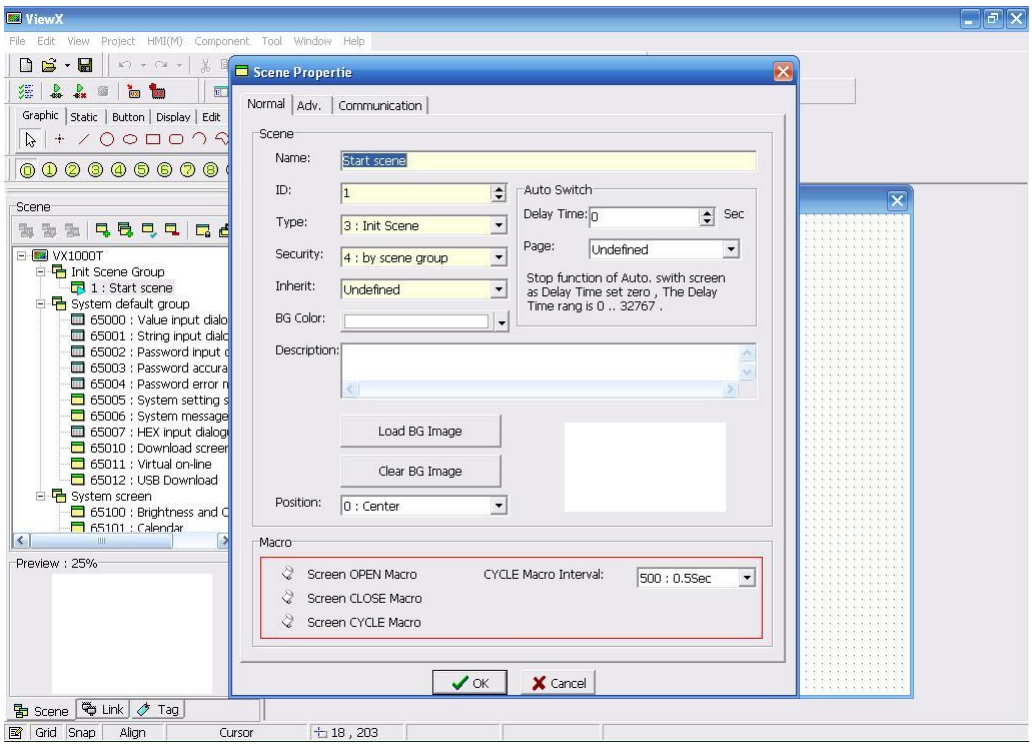


Illustration 8-1.4.2

Component Action Macro (Button and Edit)

When use the button and the edit, it will run the related Marco. Setting once will run 4096 steps.

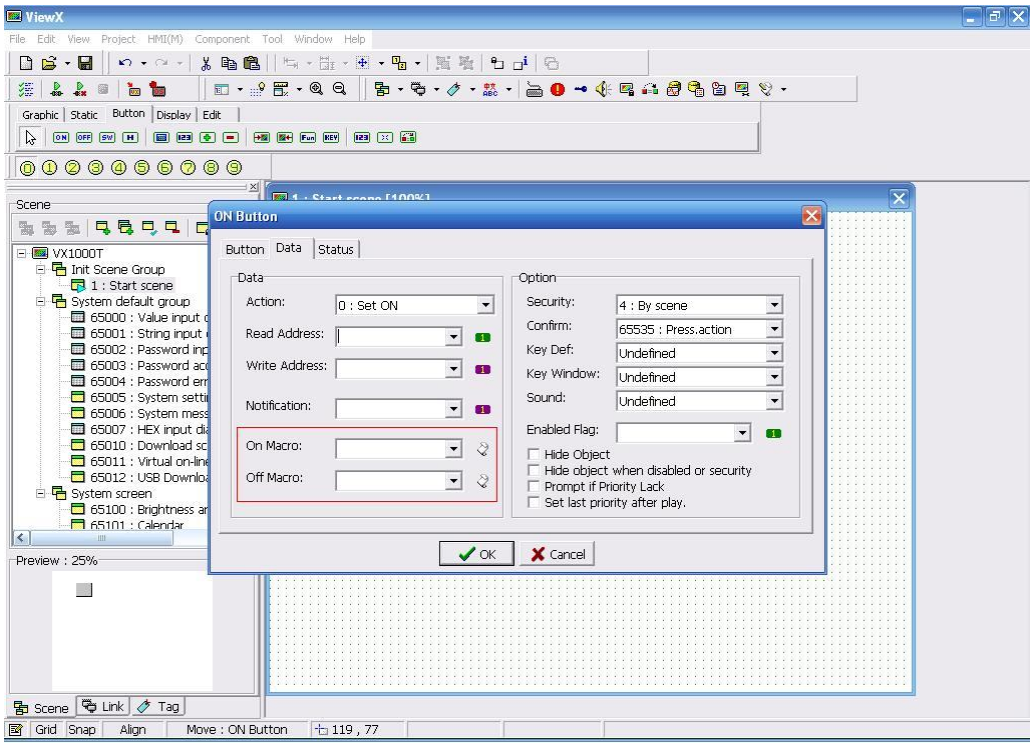


Illustration 8-1.4.3

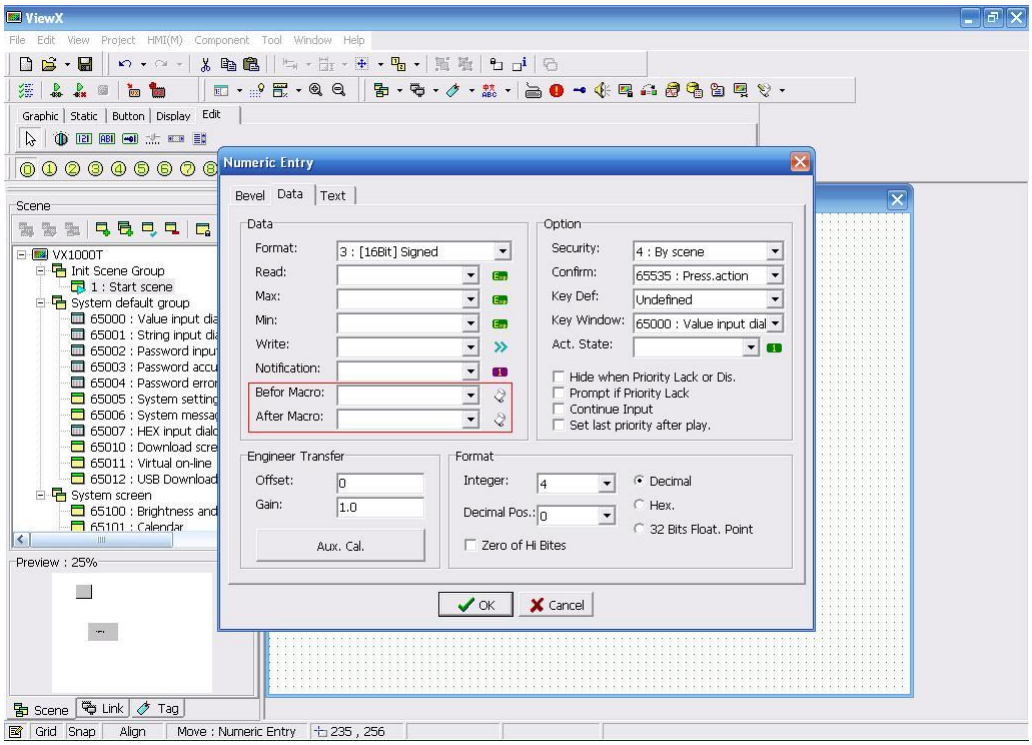


Illustration 8-1.4.4

Sub Macro

That is sub program of the Macro, which supplies with the program from 1 to 512. It can take the functions in common use to write into the sub program for convenience.

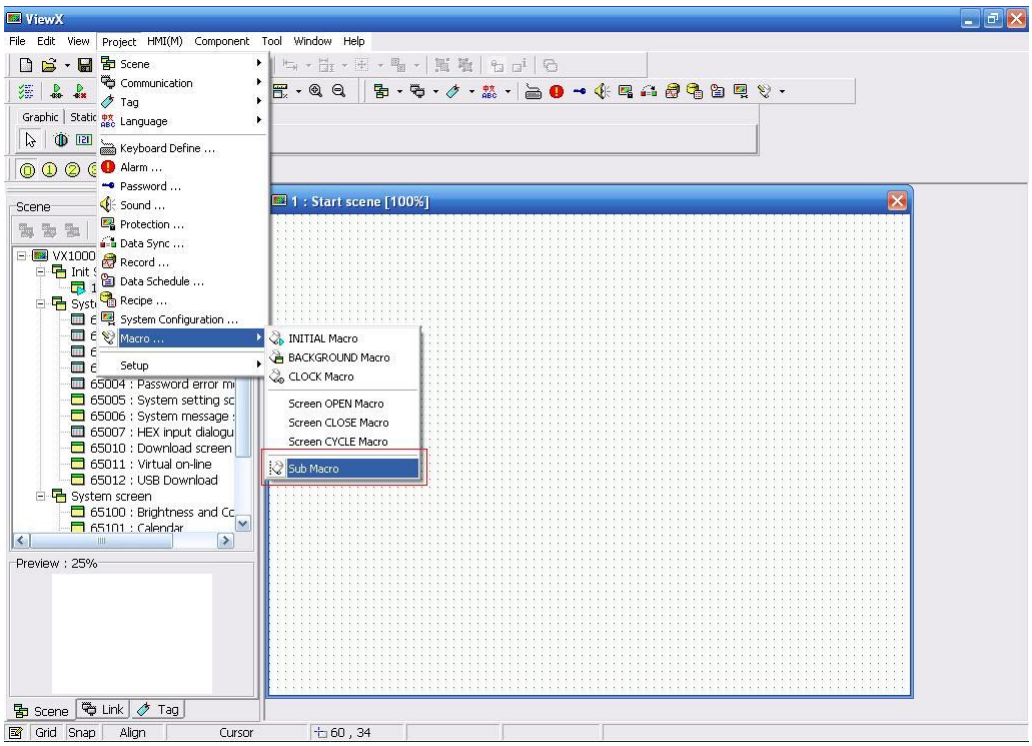


Illustration 8-1.4.5

Macro Edit Screen

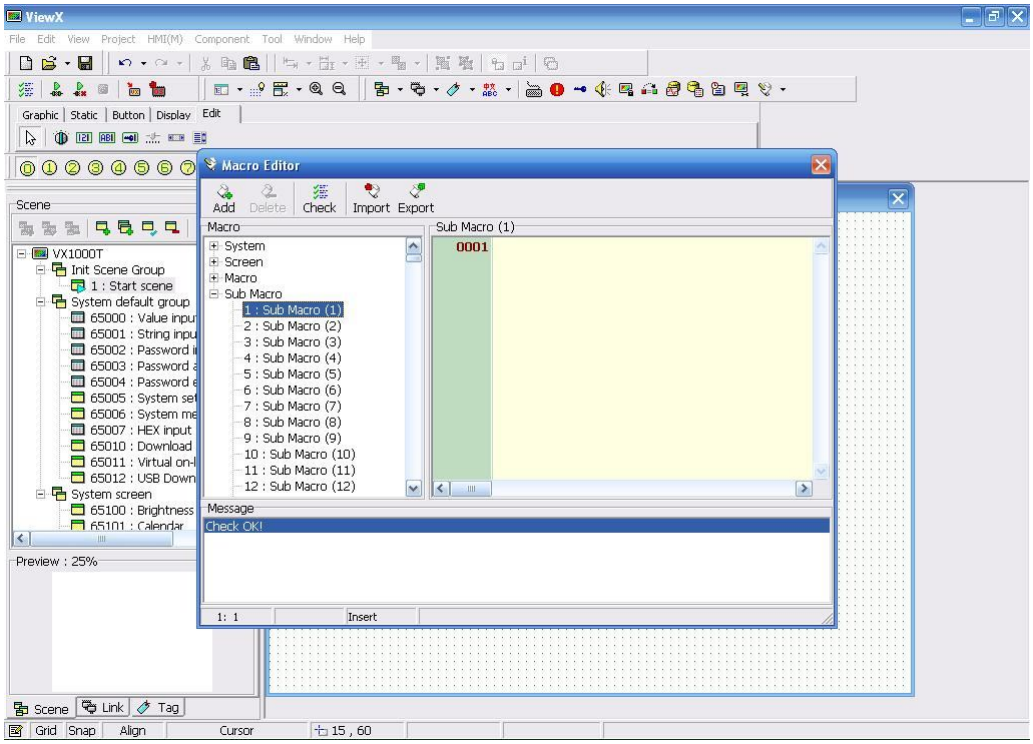


Illustration 8-1.4.6

Upper of the edit screen supplies a tool bar included add, delete, check, import and export.
Add: add one Action Macro
Delete: delete one Action Macro.
Check: check the current Macro whether is correct.
Import: Macro program imported from the file to the current editing, the current editing program will be clear.
Export: take the current edited Macro program saved as a file.

Left of the edit screen supplies a tree diagram of macro program. Showing up all the macro will conveniently be edited and previewed

Right of the edit screen is main body.

Bottom of the edit screen is a dialogue window of check program. When running the checking process, it will pop out. When it happened to errors as checking, it will show content in the window. When double clicking the mouse, edit program will auto quit to the related position.

Introduction of Macro Command Syntax

Data format form

Format	Digit	8 bit with number	8 bit Without number	16 bit with number	16 bit without number	32 bit with number	32 bit without number	32 bit Float point
Definition	BIT	INT8S	INT8U	INT16S or SIGNED	INT16U	INT32S or SIGNED DW	INT32U or DW	FLOAT32 or FLOAT

Operand and setting operand form

Operand	Description
+	Plus
-	Minus
*	Multiple
/	Divide
%	Integer remainder
!	Logic inverse operation
~	Digit inverse operation
==	Equal to
!=	Not equal to
<	Less than
<=	Less than or equal to
>	More than
>=	More than or equal to
||or "OR"	Logic or operation
&& or "AND"	Logic and operation
&	Digit and operation
^	Digit Exclusion oroperation
|	Digit or Operation
<<	Left shift operation
>>	Right shift operation

Operand	Description
=	Setting
+=	Plus setting
-=	Minus setting
*=	Multiple setting
/=	Divide setting
%=	Integer remainder setting
<<=	Left shift setting
>>=	Right shift setting
&=	Digit and setting
^=	Digit exclusion or setting
|=	Digit or setting

Command list

Command	Description
LABEL <constant>	Program positional label (constant range from 0-65535)
GOTO <constant>	Unconditional quitting to the program positional label (constant range from 0-65535)
CALL <operated equation>	Calling sub macro (serial numbers1-512)
RET	Return position of the calling sub macro
IF <operated equation> THEN GOTO LABEL <Constant>	When variable condition is true (not equal to 0), quit to the positional label, otherwise go on next command
IF < operated equation > THEN DO	When variable condition is true (not equal to 0), go on next command, otherwise quit to next discrimination (ELIF) or(ELSE DO) go on next command of ENDIF
ELIF < operated equation > THEN DO	When variable condition is true (not equal to 0), go on next command, otherwise quit to next discrimination (ELIF) or(ELSE DO) go on next command of ENDIF
ELSE DO	Go along with IF and ELIF command, indicates the running position when variable condition is true (not equal to 0)
ENDIF	Go along with IF and ELIF command, indicate the jumping position when variable condition is true (not equal to 0)
FOR < operated equation >	Program circuit, run a few circuits by variable value, program range is "FOR" to the corresponding in the middle of "NEXT" program
NEXT	Go along with "FOR" command, indicates range of the circuit
END	End the macro program
SETB <bit variable address>	Set bit variable
CLRB < bit variable address >	Erase bit variable
INVB < bit variable address >	Anti-phrase bit variable

System Variable N0-N65535

The variables which HMI has marked out have 65536 WORD (16Bits), defined the name of N0-N65535.

When the data format is DWORD, the system will auto read a WORD behind the serial code, to change Hi WORD added up the definition code Lo WORD, to make up DWORD. For example: N0, N0 is Lo WORD, N1 is Hi WORD, to make up DWORD.

When data format is WORD, it will directly define the name of N0-N65535.

When using the fixed bit position, add up " " symbol and add up bit position 0~15 behind the bit definition name. For example: 5th bit of N0 could be wrote into "N0.5", 11th bit of N100 could be wrote into "N100.11".

Instruction Description

LABEL <Constant>

Program position label (constant range is 0-65535)
The label position can be any row in the programming language.

```
N0=100
LABEL 10
N1=200
...
GOTO LABEL 10
...
GOTO LABEL 20
...
LABEL 20
```

GOTO <Constant>

Unconditional go to the program position label (range: 0-65535)

```
N0=100
LABEL 10
N1=200
...
...
GOTO LABEL 10
```

CALL <Variable/ Constant/ Operand>

Call on sub macro (serial code:1-512)

Call on sub macro to change variable, constant or operand

```
N0=100
# CALL <Variable>
CALL N0
...
# CALL <Constant>
```

```
CALL 100
...
# CALL <Operand>
CALL 100+N0
```

RET

Return to the called position

IF <Variable> THEN GOTO LABEL <Constant>

When variable condition is true (not equal to 0), go to the program position label, otherwise go on next command.

```
LABEL 10
...
# When variable N0+N1 is equal to 200, go to label 10
IF (N0+N1)==200 THEN GOTO LABEL 10
```

IF <Variable> THEN DO

When variable condition is true (not equal to 0), go on next command, otherwise quit to next discrimination (ELIF) or (ELSE DO) go on next command of ENDIF. IF and ENDIF Cellular structure is 16 levels at most.

```
#When variable N0 is not equal to 100, run N1=1000
IF N0!=100 THEN DO
N1=1000
# IF .. THEN DO which must go along with ENDIF
ENDIF
```

ELIF <Variable> THEN DO

When variable condition is true (not equal to 0), go on next command, otherwise quit to next discrimination (ELIF) or (ELSE DO) go on next command of ENDIF.

```
# When variable N0 is equal to 100, run N1=1000
# When variable N10 is equal to 200, run N1=2000
IF N0==100 THEN DO
```

```
N1=1000
# ELIF must be behind IF THEN DO
ELIF N0==200 THEN DO
N1=2000
ENDIF
```

ENDIF

Go along with IF and ELIF command, indicate the jumping position when variable condition is true (not equal to 0), supplying Cellular structure is 16 levels at most.

```
#When variable N0 is not equal to 100, run N1=1000.
IF N0!=100 THEN DO
N1=1000
# IF THEN DO must go along with ENDIF
ENDIF
```

FOR <Variable>

Program circuit, run a few circuits by variable value, program range is "FOR" to the corresponding in the middle of "NEXT" program, supplying Cellular structure is 16 levels at most.

```
#Figure out sum of the variable from 1 to 10
N0=0
N1=1
FOR 10
N0+=N1
N1+=1
NEXT
```

NEXT

Go along with FOR, indicates range of program circuit, supplying Cellular structure is 16 levels at most.

```
# Figure out sum of the variable from 1 to 50
N0=0
N1=1
```

```
FOR 50
N0+=N1
N1+=1
NEXT
```

END

End Marco program

SETB <Bit Variable Address>

Set bit variable

```
# set 5 bit of N100 for 1
SETB N100.5
```

CLRB <Bit Variable Address>

Erase bit variable

```
#set 12th bit of N10 for 0
CLRB N10.12
```

INVB < Bit Variable Address >

Anti-phase bit variable

```
#set 15th bit of N1 to be anti-phase (0 for 1,1 for 0).
INVB N1.15
```

In Macro, except instruction usage, there are 2 of important syntax:
Operand syntax and Set operand.

Operand syntax

Supply math operand and logic operand in among of variable. The operand will supply 20 kinds of the formula. The Formula will mainly go along with Operand type of syntax and instruction type of syntax.

Example:

Simple Formula
(N0+N1)/2
(N0+100)

Go along with the operand
N0=(N1<<2)
N0+=(N1+N2)/2

Go along with the instruction
IF (N0==100) && (N1==200) THEN GOTO LABEL 10
...
ENDIF

CALL (N0+100)

Set operand syntax
We have supplied 11 kinds of formula.

Example:
N0=100
N0=(N1+N2)/2
N0+=100
N0*=2
N0<<=2

Data format setting

Variable /Operand
The default of the system variable is 16 bits without number. If needs other data format to figure, you will have to add up the data format setting. That is added up the date and the brackets. For example, (INT32S) N0 means using 32 位元 with number, and the data address is in N0.

Example:

#Bit address and setting
N0.3=(BIT)N10.4 && (BIT)N10.5(BIT)
# If the same row of the operand data format is the same, you can appoint the data format (setting operand)
N0.3 = N10.4 && N10.5(BIT)
#32 bits operation with numbers
N0=N2+N4(INT32S)
N0=N2+N4(SIGNED DW)
#32 bits operation with float point
N0=N2+N4(FLOAT)

8-2.1 Multi-Connection

The connections of device, which get more and more for control machine, one piece of RS485 cable line can be connected to multi-machines. Based on this connection structure, each controller is distinguished by station numbers, read each controller's data by connection. When each controller is in normal condition, the communication will be in normal operation.

In some certain circumstances, it is unnecessary that users turn on all the controllers. Otherwise that will make HMI keep trying to connect with the turn-off controllers, which will affect speed of the connection.

According to the above mentions, View X has the solution of this application for that, and add up [Multi-Connection] function.

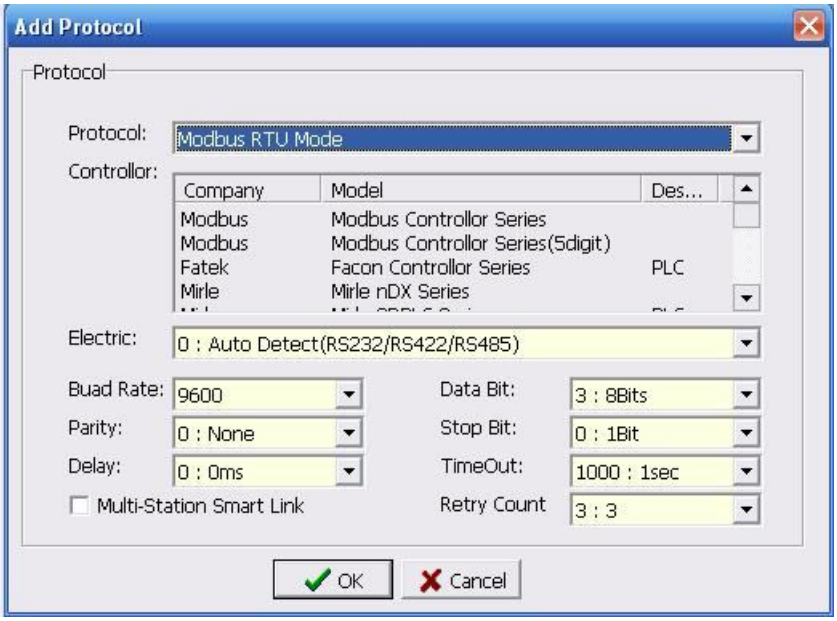


Illustration 8-2.1.1

In the screen of communication protocol, the [Multi-connection] function is added on the bottom. [Multi-connection] function will record the connection status for each controller, and adjust the communication parameters, in order to improve communication speed.

On collocation of the station numbers for controller, the station number is between 0~31, and the status of controller can be got from system variable (COM1=N65352, COM2=N65354). The corresponding bit, 0= the controller on line, 1= the controller off line

COM1

Variable	N65353																N65352													
Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Station number	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

COM2

Variable	N65355																N65354													
Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Station number	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Remark: [Multi-connection]only support the controller with the station communication Protocol.

Appendix 1 Definition for keyboard

Keyboard	Action	Remark
Ctrl+Z	Return to the last action.	
Ctrl+Shift+Z	Cancel returning.	
Ctrl+X	Cut	
Ctrl+C	Copy	
Ctrl+V	Paste	
Ctrl+Del	Delete	
Del	Delete	
Ctrl+A	Full select	
Up	Adjust up	
Down	Adjust down	
Left	Adjust to the left	
Right	Adjust to the right	
Shift+Up	Move up	
Shift+Down	Move down	
Shift+Left	Move to the left	
Shift+Right	Move to the right	
Ctrl+Up	Less Height	
Ctrl+Down	More Height	
Ctrl+Left	Less width	
Ctrl+Right	More width	
ESC	Choose [Select Cursor]	
G	Group	
U	Cancel grouping	
I	Zoom-in	
O	Zoom-out	
L	Lock	
Space	Edit	

Appendix 2 System Parameter List

Code	Data	Description	Default	Read/Write
N65024	Screen Brightness	0 .. 100	70	R/W
N65025	Screen Contract	0 .. 100	50	R/W
N65026	Back Lighting Counter	Unit: second, 30 .. 65535, 65535= off	65535	R/W
N65027	Sound Volume	0 .. 100	100	R/W
N65028	Power LED Status display	0= flicker,1= stop	0	R/W
N65029	Switcher of Signal Generator	0=off,1=on	0	R/W
N65030	Index of Button Sound	65535=off	0	R/W
N65031	Index of Dialogue Box Sound	65535=off	1	R/W
N65040	Auxiliary Cursor	65535=off	65535	R/W
N65041	Color of Auxiliary Cursor		0	R/W
N65044	Mask of Dialogue Box	dialogue mask 0x0001, 0x0002 Omit background	1	R/W
N65048	Increase Speed of Screen Brightness	1.. 20	10	R/W
N65049	Decrease Speed of Screen Brightness	1.. 20	2	R/W
N65050	Power Saving ratio for Back lightness	0.. 100	0	R/W
N65056	Time region	-32768... 32767	0	
N65072	Com 1 Connects to Equipment	0 – auto identify RS232/RS422/RS485 1 - RS232 2 – RS422 3 – RS485	0	
N65073	Com 1 Speed Ratio	0 - 150 1 - 300 2 - 600 3 - 1200 4 - 2400 5 - 4800 6 - 9600 7 - 19200 8 - 38400 9 - 57600 10 - 115200	10	
N65074	Com 1 Data Bits	0 – 5 bits 1 – 6 bits 2 – 7 bits 3 – 8 bits	3	
N65075	Com 1 Parity Check	0 – null 1 – Odd Parity 2 – Even Parity 3 - Mark 4 – Blank	0	

N65076	Com 1 Stop Bits	0 – 1 bit 1 – 2 bits	0	
N65077	Com 1 Delay	unit: millisecond	20	
N65078	Com 1 Timeout	unit: millisecond, minimum = 1000	1000	
N65080	Com 2 Connects to Equipment	the same setting as N65072	0	
N65081	Com 2 Speed Ratio	the same setting as N65073	10	
N65082	Com 2 Data Bits	the same setting as N65074	3	
N65083	Com 2 Parity Check	the same setting as N65075	0	
N65084	Com 2 Stop Bits	the same setting as N65076	0	
N65085	Com 2 Delay	unit: millisecond	20	
N65086	Com 2 Timeout	unit: millisecond, minimum = 1000	1000	
N65088	Com 3 Connects to Equipment	the same setting as N65072	0	
N65089	Com 3 Speed Ratio	the same setting as N65073	10	
N65090	Com 3 Data Bits	the same setting as N65074	3	
N65091	Com 3 Parity Check	the same setting as N65075	0	
N65092	Com 3 Stop Bits	the same setting as N65076	0	
N65093	Com 3 Delay	unit: millisecond	20	
N65094	Com 3 Timeout	unit: millisecond, minimum = 1000	1000	
N65096	Com 4 Connects to Equipment	the same setting as N65072	0	
N65097	Com 4 Speed Ratio	the same setting as N65073	10	
N65098	Com 4 Data Bits	the same setting as N65074	3	
N65099	Com 4 Parity Check	the same setting as N65075	0	
N65100	Com 4 Stop Bits	the same setting as N65076	0	
N65101	Com 4 Delay	unit: millisecond	20	
N65102	Com 4 Timeout	unit: millisecond, minimum = 1000	1000	
N65104	Flicker time setting 1	unit: millisecond	1000	
N65105	Flicker time setting 2	unit: millisecond	500	
N65106	Flicker time setting 3	unit: millisecond	200	
N65107	Flicker time setting 4	unit: millisecond	100	
N65112	Dialogue box input effect	0=off,1=on	1	
N65264	Last Booted Status	0=normal,!=0 fault	0	

Appendix 3 Backlight Counter

The backlight counter/ the power saving mode: when the HMI is under the condition of unmanned operation after setting up the time, the system will enter into the power saving mode, the brightness of backlight will turn down brightness or turn off. This action can save power and prolong life of the backlight.

The registers of relevant backlight counter/ the power saving mode as below:

Code	Name	Description	Default	Remark
N65026	Time of backlight counter	0 or 65535= turn off 30-65534 Sec	65535	Minimum value: 30(S)
N65050	Power saving Ratio	0-100 The percentage of brightness	0	
N65051	The mask options	Bit0= Mask [resume normal mode when an alarm occurred] Bit1= Mask [resume normal mode when PLC switches the screen]	0	
N65052	Screen ID	0=Close	0	
N65053	Screen option	Bit0=Mask of switched screen Bit1=Set up to the lowest authority Bit2=Mask of quitting to the original screen	0	
N65347	Counter control	Bit0=Update the present backlight counter	0	

Time of backlight counter (N65026 unit: sec.) Default : 65535

Set for 0 or 65535 = turn off [backlight counter/ power saving mode]

Set for 30-65534= set time of backlight counter for 30-65534 sec

The minimum setting for HMI operation is 30sec.

Ratio of backlight power saving (N65050) Default: 0

[Backlight/ Power saving mode, which can be set the percentage of the brightness or turned off.

Mask option of the backlight power saving (N65051) Default: 0

From the power saving mode to the normal mode (backlight ON or Higher brightness), the power saving mode is switched to normal mode when the following situations occur:

1. Touch on the HMI screen or button
2. When alarms happen according to your setting.
3. When PLC switch the screen

When N65051 Bit0 = 1, the motion is turned off [Resume the normal mode when alarms happen] When N65051 Bit1 = 1, the motion is turned off [Resume the normal mode when PLC switch the screen]

Appendix 4 HMI FAQ

When problems happen to HMI, you can learn what problems may be from RUN lamp:

RUN lamp	HMI Status	Possible conditions	How to deal with
Orange	BOOT	OS error in downloading	Download OS again
Red	STOP	HMI program error in downloading	Download the program again.
Green blink	RUN	Normal	NO
Orange blink	SLEEP	Normal	NO

Question: when shift happens in the touch screen, which cannot be adjusted.
Ans: turn off the power of HMI, and then keep pressing the touch screen and open turn on the power of HMI until the buzzer make 3 sounds (This action is for setting back to default)

Question: when the screen does not show anything and the background is dark.
Ans: Please make sure whether HMI status is in RUN mode. If not, please enter RUN mode, and then adjust contrast to 50% and adjust brightness to 100%. (TFT type does not need adjusting)

Question: when HMI is connected through communicating cable, Link lamp will be lighting all the time.
Ans: Please make sure the electronic equipment can be for RS232, RS422 or RS 485. The connector of HMI has multi-communication. Please make sure the electronic equipment connects a corresponding cable. Otherwise that will get into confusion. The definition of communicating connector is as following:

Communicating connector (DB9)

Pin	Description	Pin	Description
1	RS422 RX+	6	RS422 RX-
2	RS232 RX	7	RS232 RTS
3	RS232 TX	8	RS232 CTS
4	RS485 TX+	9	RS485 TX-
5	GND		

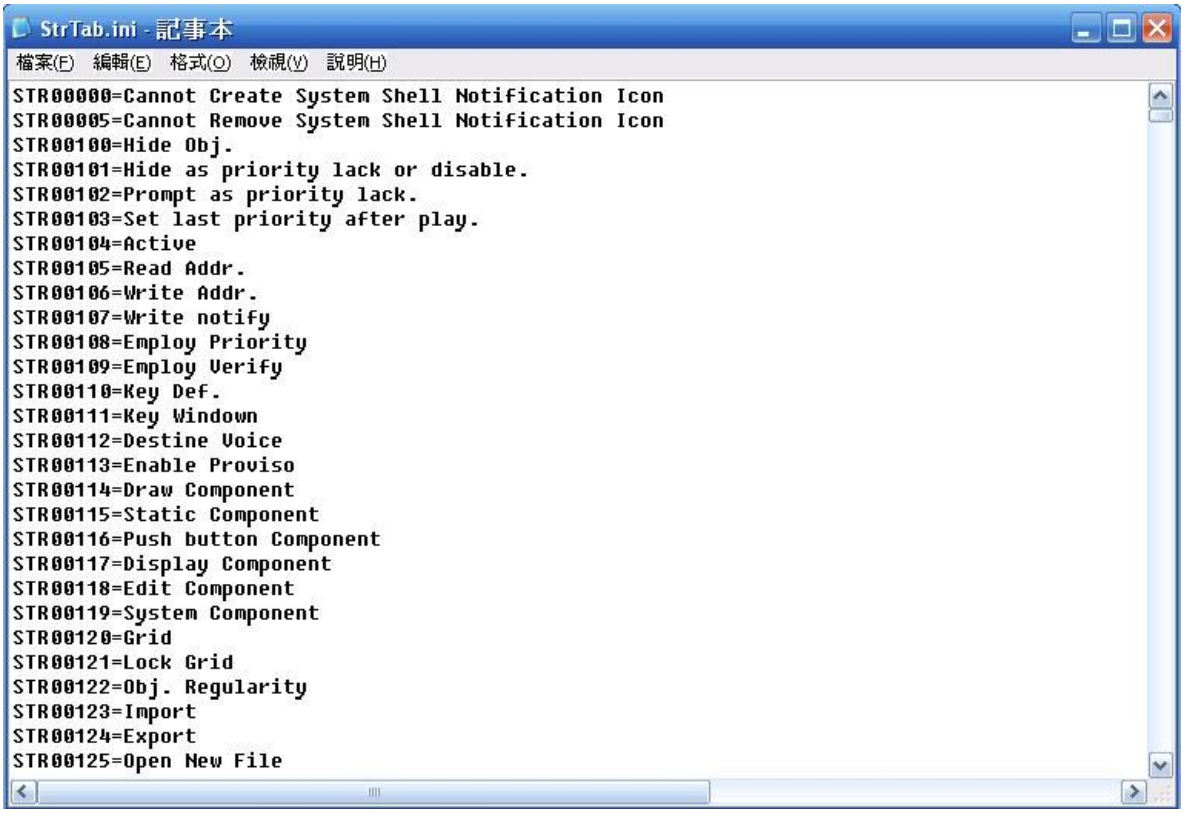
Appendix 5 Replace with other language

This HMI software supplies a method of replacing with other language in the system.

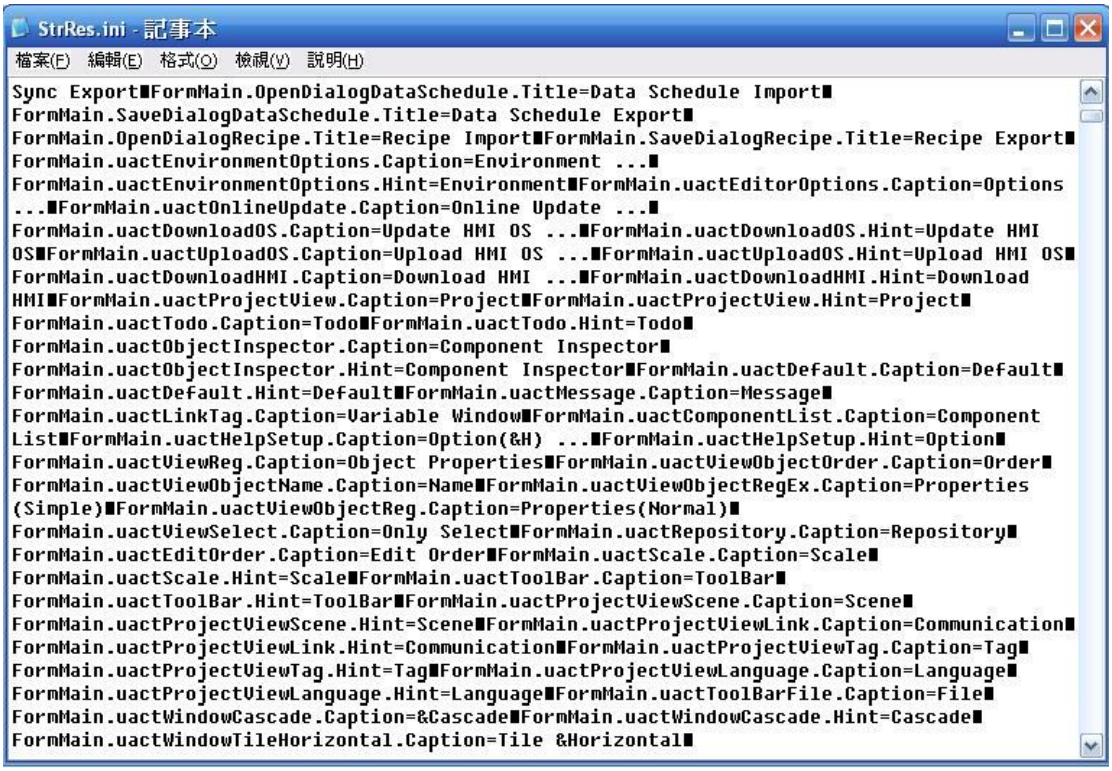
To begin with, please download "vxNation.exe" on the website. And then please run the "vxNation.exe" to see which code is for your country.

Take Thailand Country (the code is 1053) for example as below:

1. Please enter C:\Program Files\VX\ViewX 1.31.1, and then add a new folder named "1053".
2. Please enter C:\Program Files\VX\ViewX 1.31.1\1033, and then copy "StrTab.ini" and "StrRes.ini" 2 files to C:\Program Files\VX\ViewX 1.31.1\1053.
3. Open "StrTab.ini" and "StrRes.ini" Please translate English words into Thailand words, and then edit the description on the right of the equal marks.

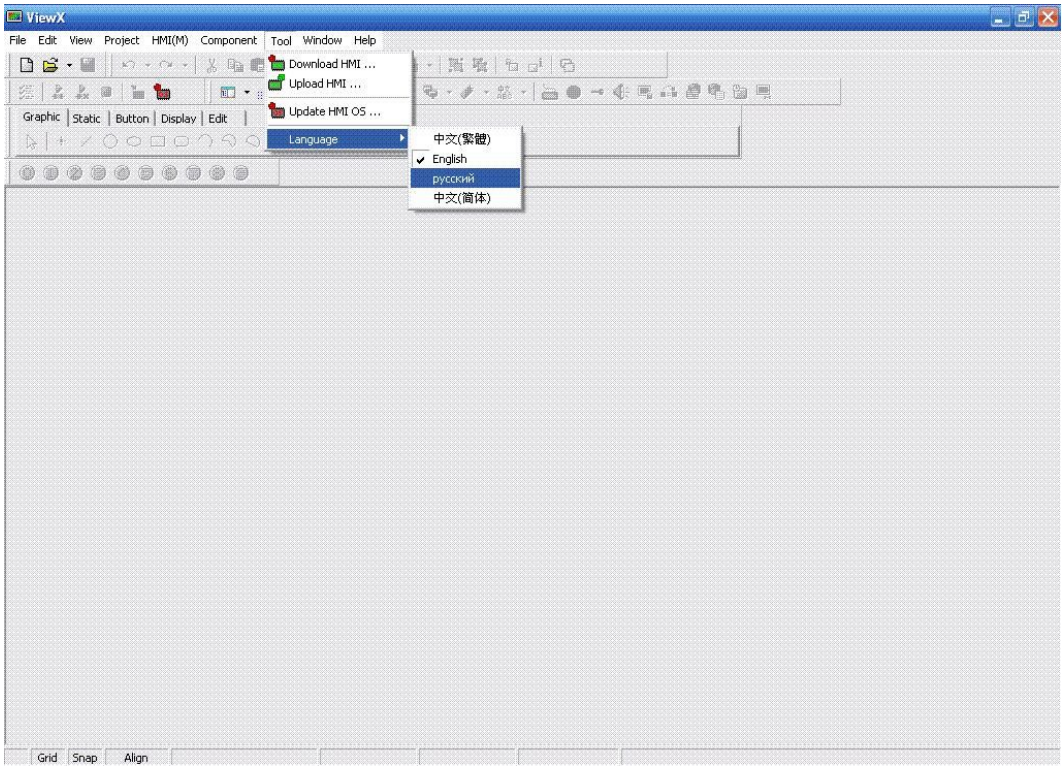


Picture 1: StrTab.ini



Picture 2: StrRes.ini

4. After you have edited "StrTab.ini" and "StrRes.ini" completely, please run the HMI software, and choose Thailand vision as the following picture:



Picture 3: Select Language

5. To edit the description of every HMI type, please enter C:\Program Files\VX\ViewX 1.31.1, open "Models.ini" as the following picture:



Picture 4: Models.ini

6. Please add up DESCRIPTION_RUS = "……." for every HMI type.

For example:

[VX301]

NAME = VX301

UID = 0x3010

DESCRIPTION = "3.3 吋液晶 16 灰階顯示螢幕解析度爲 160*160 2 個通訊埠(RS232 & RS422/RS485)."

DESCRIPTION_CHT = "3.3 吋液晶 16 灰階顯示螢幕解析度爲 160*160 2 個通訊埠(RS232 & RS422/RS485)."

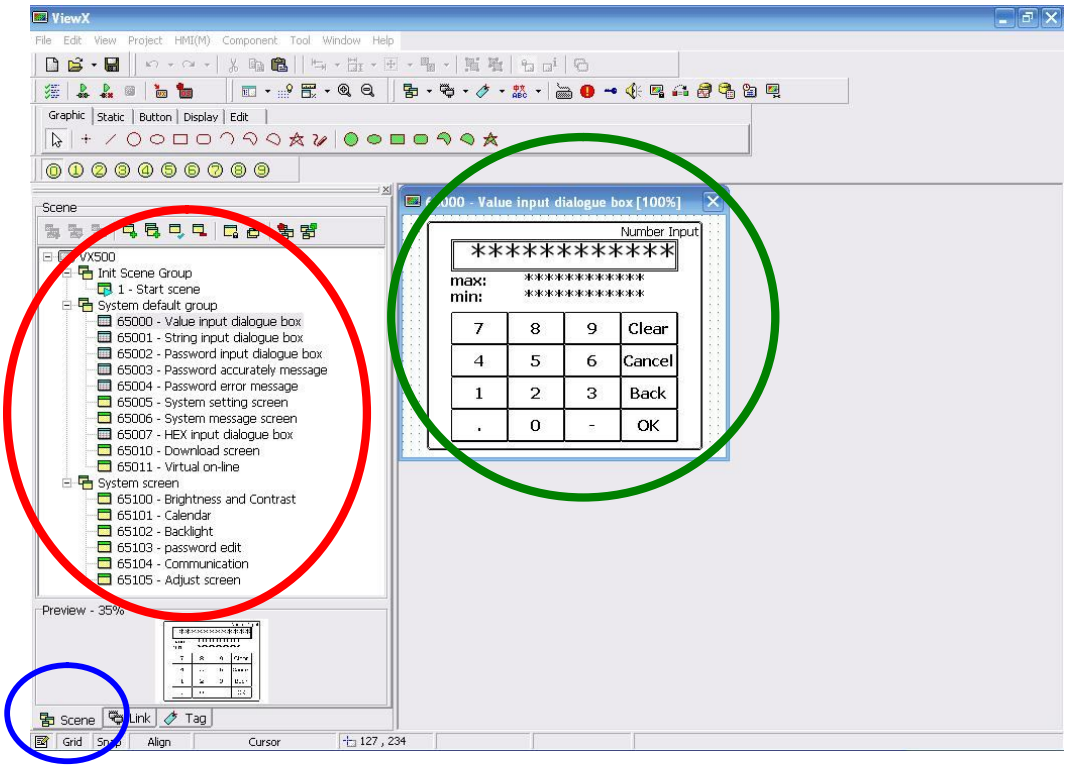
DESCRIPTION_CHS = "3.3 吋液晶 16 灰阶显示屏幕分辨率为 160*160 2 个通讯串口(RS232 & RS422/RS485)."

DESCRIPTION_ENU = "3.3" Mono STN LCD,16 gray levels, 160*160 pixels, COM1(RS232),COM2(RS422/RS485)."

DESCRIPTION_RUS = "……." (Please translate the upper English description into Thailand one)

SCREENSIZE = 330

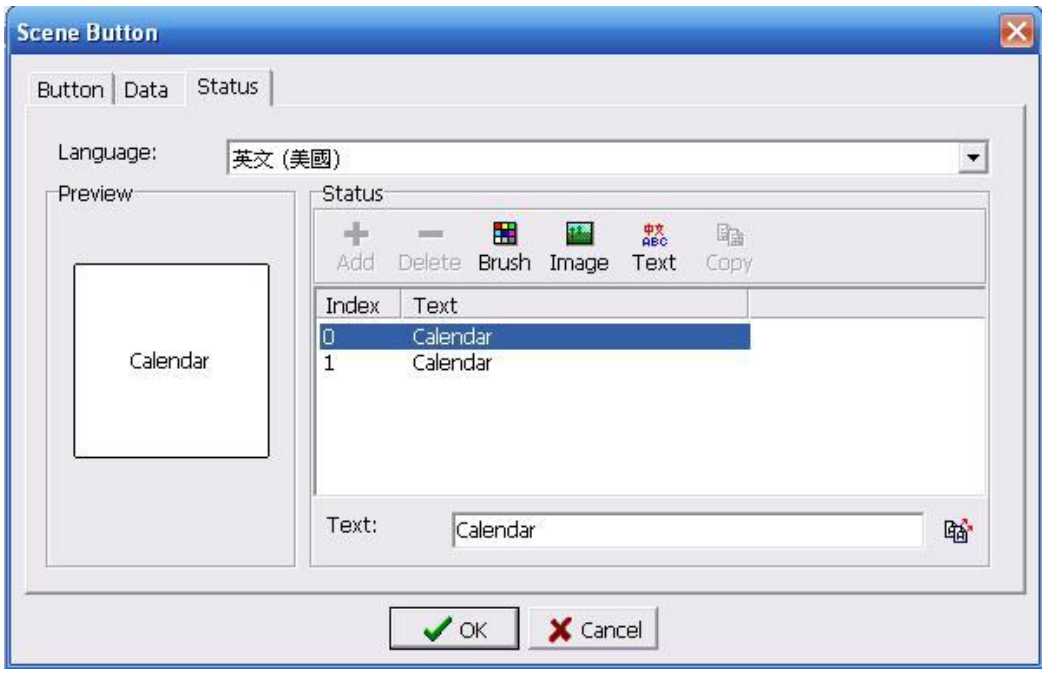
7. In HMI software, please open new file, and click "Scene" shown as the blue circle of the following picture:



Picture 5: Scene

8. Please double click every item (65000 to 65010 and 65100 to 65105) shown as the red circle. Every item will show a window like the green circle in the Picture 5.

9. In the every item, please double click every object with English words in the texts. For example: When you double click item 65005, and click "status", and change "Calendar" in the Text into the Thailand words.



Picture 6: 65005 of Calendar

10. When you change all the English words into Thailand for the Scene. Please choose “File” and “Export”. Please save the file into C:\Program Files\VX\ViewX 1.31.1\1053. The name of the file should be VX???H.sce (??? is the code of type) For example: if the type of HMI is SP301, the name should be VX301H.sce