

INDEX

PART 1. BASICS	3
1.1. SYSTEM REQUIREMENTS	3
1.1.1. Windows Operating System	3
1.1.2. Linux Operating System.....	3
1.1.3. Mac Operating System	3
1.2. SOFTWARE INSTALLATION AND UNINSTALL	3
1.2.1. Installation and Uninstall under Linux System	3
1.2.1.1. Installation.....	3
1.2.1.2. Uninstall.....	4
1.2.2. Installation and Uninstall under Windows and MAC Systems	5
1.2.2.1. Installation.....	5
1.2.2.2. Uninstall.....	5
1.2.3. Notes	5
1.3. PREPARATORY WORK BEFORE USE	5
1.3.1. Connection Check	5
1.3.2. Calibrate	5
1.3.3. Calibration Accuracy Check.....	6
1.3.4. Software Launch	7
1.4. OFF-LINE APPLICATION OF SOFTWARE	7
PART 2. SOFTWARE FUNCTIONS	8
2.1 MENU.....	8
2.1.1 File Menu	8
2.1.2 Edit Menu.....	8
2.1.3 Slide Menu	10
2.1.4 Draw Menu	10
2.1.5 Insert Menu	11
2.1.6 Tool Menu	12
2.1.7 Setting Menu	13
2.1.8 Help.....	15
2.2 TOOLBAR, SIDEBAR AND STATUSBAR	16
2.2.1 Slide Toolbar	16
2.2.2 Pen Toolbar	17
2.2.3 Text Box Toolbar.....	19
2.2.4 Insert Toolbar	20
2.2.5 Paint Bucket	21
2.2.6Shape Toolbar.....	23
2.2.7 Math Toolbar.....	24
2.2.8 General Toolbar.....	26
2.2.9 Sidebar	26
2.2.9.1 Page Indexing Panel.....	27

2.2.9.2 Resource Panel	27
2.2.9.3 Property Browser Panel.....	28
2.2.9.4 Switch Sidebar	29
2.2.10 Statusbar	29
2.2.11 General Tools Introduction.....	29
2.2.11.1 Clock	29
2.2.11.2 Calculator	30
2.2.11.3 Curtain.....	30
2.2.11.4 Spotlight.....	31
2.2.11.5 Magnifier.....	32
2.2.11.6 Image Capture	33
2.2.11.7 Record	34
2.2.11.8 On-screen Keyboard.....	35
2.2.11.9 Paint Bucket	35
PART 3.COMMON OPERATIONS.....	37
3.1 SELECT.....	37
3.2 MOVE.....	37
3.3 ROTATE	38
3.4 ZOOM	38
3.5 CUT, COPY AND PASTE	38
3.6 DELETE	38
3.7 CLONE.....	38
3.8 DRAG CLONING.....	39
3.9 LOCK.....	39
3.10 GROUP AND UNGROUP	40
3.11 VISIBLE	40
3.12 FLIP	41
3.13 MIRROR.....	41
3.14 PROPERTY BROWSER.....	42

PART 1. Basics

1.1. System Requirements

1.1.1. Windows Operating System

Pentium 4 or higher processor
1GB of RAM (2GB recommended)
1GB of free hard disk space for minimum installation
Windows XP SP3、 Windows 7 SP1 or Windows 8 OS
JRE 1.4.2 or later

1.1.2. Linux Operating System

Pentium 4 or higher processor
1GB of RAM (2GB recommended)
1GB of free hard disk space for minimum installation
Ubuntu-12.04-desktop-i386 (Kernel version: 3.2.0-23-generic-pae)
Ubuntu-12.10-desktop-i386 (Kernel version: 3.5.0-17-generic)
ALT Linux 6.0.0 Kdesktop (Kernel version: 3.0.3-std-def-alt0.M60P.1)
ALT Linux 6.0.1 Kdesktop (Kernel version: 3.0.24-std-def-alt0.M60P.2)

1.1.3. Mac Operating System

Intel Core 2 Duo Processor or later
1GB of RAM (2GB recommended)
1GB of free hard disk space for minimum installation
Mac OS X 10.6、 Mac OS X 10.7 or Mac OS X 10.8

1.2. Software Installation and Uninstall

1.2.1. Installation and Uninstall under Linux System

1.2.1.1. Installation

- In the context menu of installation package, select “Properties” to revise “Permissions”. Check “Is executable” under ALT system, as shown in Fig. 1- 1 Properties for ALT . Check “Allow executing file as program” under Ubuntu system as shown in Fig. 1- 2 Properties for Ubuntu Installation Package.



Fig. 1- 1 Properties for ALT Installation Package

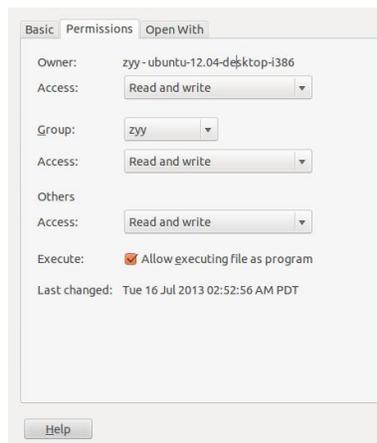


Fig. 1- 2 Properties for Ubuntu Installation Package

- Double click the installation package and complete the software installation as instructed.
- Ubuntu need open the terminal and execute the command as follows:
`gsettings set com.canonical.Unity.Panel systray-whitelist "[board_driver]"`
- Restart the computer.

1.2.1.2. Uninstall

Open the terminal to execute the command as follows:

```
/usr/local/WhiteBoard/uninstall  

/usr/local/board_driver /uninstall
```

1.2.2. Installation and Uninstall under Windows and MAC Systems

1.2.2.1. Installation

Double click the installation package to conduct the installation.

1.2.2.2. Uninstall

Mac: To delete it directly from “Applications”.

Windows: To uninstall with its uninstall shortcut in the “Start” menu (alternatively, just uninstall from “Programs and Features”).

1.2.3. Notes

- Before applying PPT import and export function, please make sure that Java Virtual Machine(JVM) is fixed.

Installation Methods:

Linux: In the context of networking, input the command (root) on the terminal:

```
apt-get install default-jre
```

Mac: In the context of networking, apply PPT import and export function and the system will install Java Virtual Machine (JVM) automatically.

- If part of video fails to play, please update the video decoder accordingly.

1.3. Preparatory Work Before Use

1.3.1. Connection Check

A drive icon will display in the Statusbar upon completion of software installation.



Indicates the device is disconnected or interrupted with the computer.



Indicates the device is under normal connection.

1.3.2. Calibrate

After right clicking the button of “Calibrate” on the drive icon(as shown in Fig. 1- 3 The Drive Context Menu), a calibration configuration interface pops up(as shown in Fig. 1- 4 The Calibration Configuration Interface), and then click the button of “Calibrate” to enter the calibration interface(normally 9-point calibration to be selected), where a calibration interface will display as that in Fig. 1- 5 Calibration Shortcut Keys after having finished calibration 9 points as instructed by the figures along with the cursor. Following the cursor, click the centers of 4 shortcut keys in turn, i.e. top left, lower left, top right and lower right so as to complete the calibration.



Fig. 1- 3 The Drive Context Menu

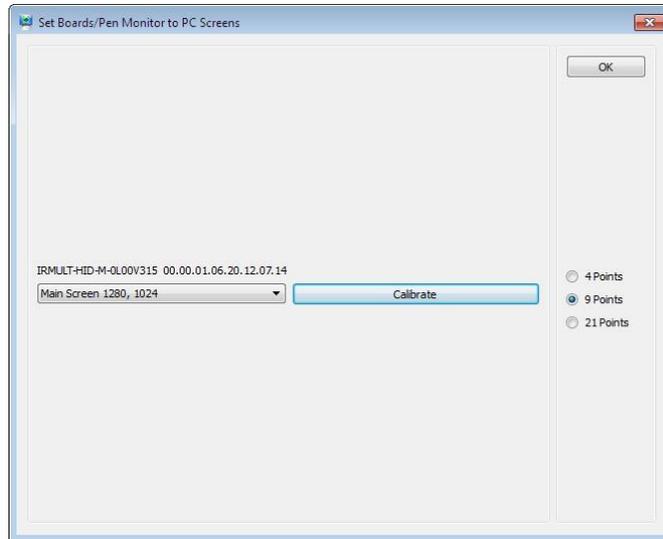


Fig. 1- 4 The Calibration Configuration Interface

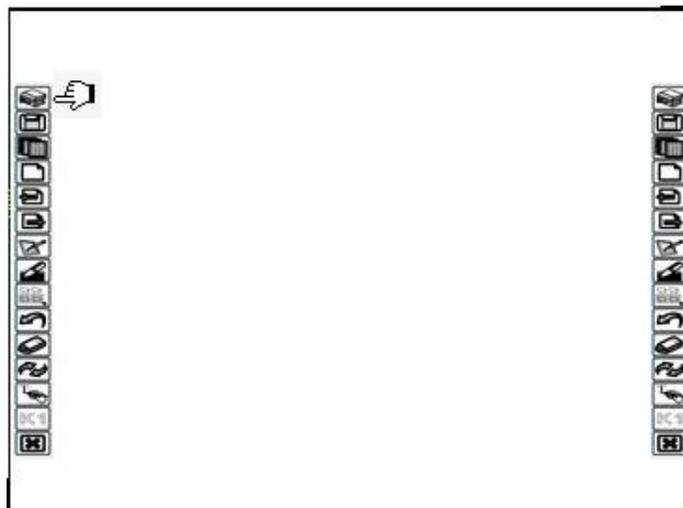


Fig. 1- 5 Calibration Shortcut Keys

1.3.3. Calibration Accuracy Check

Slide your pen on the device to check the cursor trajectory.

1.3.4. Software Launch

Linux: Invoke the Flow!Works launch software under the route of “/usr/local/WhiteBoard/Flow!Works” on the terminal.

Mac: Execute the Flow!Works launch software under “Applications”.

Windows: Launch the software with the shortcut of “Flow!Works”.

1.4. Off-line Application of Software

The software can be applied off-line under the condition of disconnection with the device, its writing interface just as shown in Fig. 1- 6 Off-line Lesson Page.

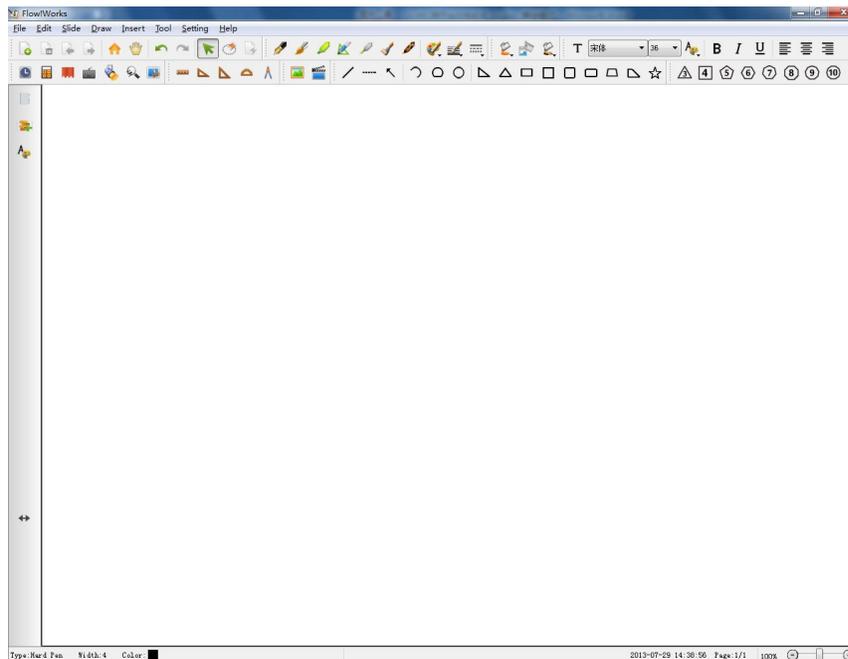


Fig. 1- 6 Off-line Lesson Page

PART 2. Software Functions

2.1 Menu

2.1.1 File Menu

This menu furnishes the users with the functions of New, Open, Save, Save AS, Import, Export, Print and Exit, etc. Click the menu of “File”, with a pop-up as shown in Fig. 2- 1 File Menu.

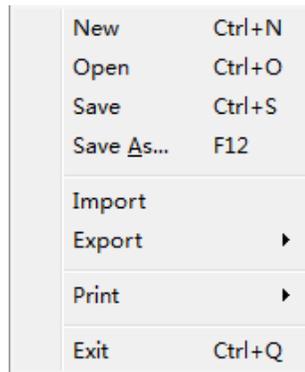


Fig. 2- 1 File Menu

Specific functions as follows:

Button Descriptions	Functions
New	To create a new writing page.
Open	To open a hht file already existed.
Save	To save the hht format file under writing, where the users can select the file names and routes to be saved.
Save As	To save the hht format file under writing, able to select different locations and names for such a save.
Import	To import PPT files.
Export	To export the current writing contents in 3 file export formats, i.e. PPT, photo and PDF.
Print	To furnish with 3 printing modes, i.e.: Print All: to print all contents in the file. Select Print: to print the contents selected in the current page. Print: to print the contents within the file page.
Exit	To exit the software.

2.1.2 Edit Menu

This menu furnishes the users with the functions of Select, Select All, Undo, Redo, Cut, Copy, Paste, Delete, Clone, Drag Cloning, Lock, Group, Visible, Flip, Mirror and Property Browser, etc. Click the menu of “Edit”, with a pop-up as shown in Fig. 2- 2 Edit Menu

Select	Ctrl+Shift+A
Select All	Ctrl+A
Undo	Ctrl+Z
Redo	Ctrl+Y
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Del
Clone	Ctrl+D
Drag Cloning	Ctrl+Shift+D
Lock	
Group	▶
Visible	▶
Flip	▶
Mirror	▶
Property Browser	Alt+R

Fig. 2- 2 Edit Menu

Specific functions as follows:

Button Descriptions	Functions
Select	A single click on this button can switch to the select status so as to achieve the selection on the objects in the page.
Select All	A single click on this button can select all the objects in the current page.
Undo	A single click on this button can undo the previous operation.
Redo	A single click on this button can restore the previous operation.
Cut	A single click on this button can cut the current object.
Copy	A single click on this button can copy the current object.
Paste	A single click on this button can paste the object copied or cut.
Delete	A single click on this button can delete the current object.
Clone	A single click on this button can clone the current object.
Drag Cloning	A single click on this button can drag to clone the current object. When the mouse turns into a cross, more cloning objects can be generated by dragging the mouse.
Lock	A single click on this button can lock the current object, where the object can't be moved under such a locking status.
Group	A single click on this button can combine and break apart the current object.
Visible	A single click on this button can configure the visualizing and hidden property for the current object.
Flip	A single click on this button can flip the current object in a vertical or horizontal way.
Mirror	A single click on this button can conduct a mirroring operation on the current object - up, down, left and right.
Property Browser	A single click on this button can pop up the property box to display the property of current object.

2.1.3 Slide Menu

This menu furnishes the users with the functions of New Slide, Delete Slide, Clear Slide, Previous Slide and Next Slide, Background Color, Background Image and Remove Slide Background, etc. Click the menu of “Slide”, with a pop-up as shown in Fig. 2- 3 Slide Menu:

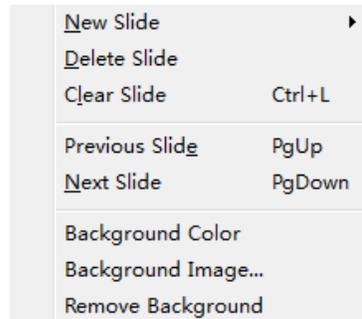


Fig. 2- 3 Slide Menu

Specific functions as follows:

Button Descriptions	Functions
New Slide	To create a blank slide.4 slide formats to be furnished –New White Slide, New Blue Slide, New Black Slide and New Screen Slide, among which, the white slide refers to that in white background, the blue slide as that in blue background, the black slide as that in black background and the screen slide as that in current computer screen.
Delete Slide	To furnish the users with the function to delete the current slide.
Clear Slide	To furnish the users with the function to clear the whole-slide content.
Previous Slide	To furnish the users with the function to slide up.
Next Page	To furnish the users with the function to page down.
Background Color	To furnish the users with the function to configure the background color for the whole page.
Image Background	To furnish the users with the function to configure the background image for the whole page.
Cancel Page Background	To cancel the configuration for the page background.

2.1.4 Draw Menu

This menu furnishes the users with various writing tools and eraser tools, including the normal functions of Hard Pen, Soft Pen, Intellectual Pen, Laser Pen, Fluorescent Pen, Bamboo Pen, Texture Pen and Erase, etc. just as shown in Fig. 2- 4 Draw Menu.

Hard Pen	Ctrl+1
Soft Pen	Ctrl+2
Intellectual Pen	Ctrl+3
Laser Pen	Ctrl+4
Fluorescent Pen	Ctrl+5
Bamboo Pen	Ctrl+6
Texture Pen	Ctrl+7
Erase	Ctrl+8

Fig. 2- 4 Draw Menu

Specific functions as follows:

Button Descriptions	Functions
Hard Pen	To simulate the writing lines of hard pen.
Soft Pen	To simulate the writing lines of writing brush.
Intellectual Pen	The intellectual pen is able to conduct an intellectual identification on the hand-drawn graphics by the users, whose supporting objects are triangle, rectangle, circle, oval, arrow and line, etc.
Laser Pen	The writing lines of laser pen are under flickering status, to disappear unless the user conduct the next operation.
Fluorescent Pen	To simulate the effect of the highlighter.
Bamboo Pen	To simulate the writing lines of bamboo pen.
Texture Pen	When writing with a texture pen, the user can configure different textures. Besides various types of textures furnished, the user can configure the custom images as the textures.
Erase	To erase the current writing lines or objects.

2.1.5 Insert Menu

This menu furnishes the users with the functions of inserting Text, Video, Picture, Basic Shape and Math Tool, etc. just as shown in Fig. 2- 5 Insert Menu.

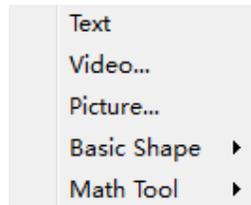


Fig. 2- 5 Insert Menu

Specific functions as follows:

Button Descriptions	Functions
Text	A single click on this button can switch the mouse into the status of edit text, now single click or hold the left mouse button and drag to generate a blank text box within the page so that the user can conduct the text input. Single click to exit

	outside of the text box after having finished the input. Double click the text box to access to edit status anew. Under the edit status, the word can be undone by the shortcut key of Ctrl+Z(Command +Z under Mac)
Video	A single click on this button will pop up a dialog for inserting a video, so the user can select the video to be inserted and play.
Picture	A single click on this button will pop up a dialog for inserting an image, so the user can select the image to be inserted. So far, the supporting image formats are bmp, png, jpg and jpeg.
Basic Shape	A single click on this button will pop up a pull-down menu, so the user can select the basic Shape to be inserted,
Math Tool	A single click on this button will pop up a pull-down menu, so the user can select the mathematic tools to be inserted,

2.1.6 Tool Menu

This menu furnishes the users with the functions of Spotlight, Image Capture, Record, On-screen Keyboard, Calculator, Clock, Magnifier and Paint Bucket, etc. just as shown in Fig. 2- 6 Tool Menu.

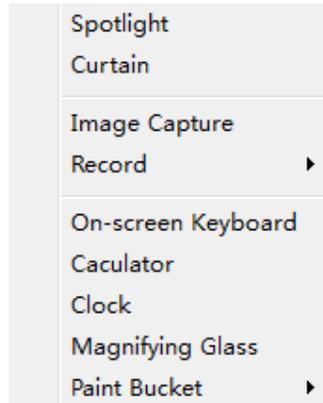


Fig. 2- 6 Tool Menu

Specific functions as follows:

Button Descriptions	Functions
Spotlight	A single click on this button can start the spotlight tool.
Curtain	A single click on this button can start the curtain tool.
Image Capture	A single click on this button can start the screen shot tool.
Record	A single click on this button can pop up the pull-down menu of Record to record, stop, save and play, etc. This record tool can only record the operating contents within the whole writing zone.
On-screen Keyboard	A single click on this button can start the soft keyboard.
Calculator	A single click on this button can start the calculator.
Clock	A single click on this button can start the timer, where the timer can furnish the user with 2 modes-timing mode and clock mode.

Magnifier	A single click on this button can start the Magnifier, where such a Magnifier can furnish the user with 2 X and 4 X magnification.
Paint Bucket	A single click on this button can start the airbrush to be applied for padding the closed area of the object, where there are 3 padding modes to be furnished to the user - texture padding, image padding and color padding.

Note: For time being, Linux system has no “On-screen Keyboard” function while Mac system has no “Curtain” function.

2.1.7 Setting Menu

This menu furnishes the users with the functions of language selection and preference, as shown in Fig. 2- 7 Preferences:

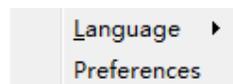


Fig. 2- 7 Preferences

Specific functions as follows:

Button Descriptions	Functions
Languages	Able to switch the language interfaces.
Preferences	Able to achieve the customization of interface elements and shortcut keys. A single click on “Preferences” under the pull-down menu, a configuration dialog will pop up, as shown in Fig. 2-8 General Configuration Dialog, where such a configuration option furnishes the user with 2 operations-general configuration and device configuration.

Specific functions as follows:

Button Descriptions	Functions
 <p>General</p>	A single click on this button will display the general configuration message as shown in Fig. 2-8 General Configuration Dialog, to configure in this page whether to display time and page number on the Statusbar as well as time span and route, etc. to be saved automatically. If the software exits accidentally after starting the automatic save function, the previous file contents shall be restored when being opened once again. Click the left lower default configuration button in the page to restore the default general configuration.
 <p>Device</p>	A single click on this button will display the device configuration message as shown in Fig. 2-9 Device Configuration Dialog. In this page, the configuration related to shortcut keys can be conducted. Click the left lower default configuration button in the page to restore the default device configuration.

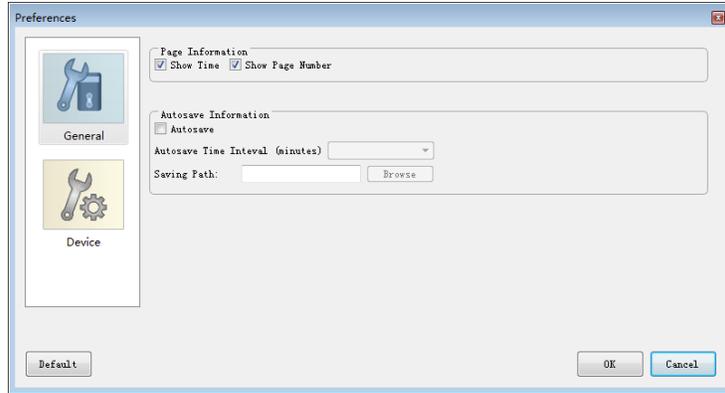


Fig. 2-8 General Configuration Dialog

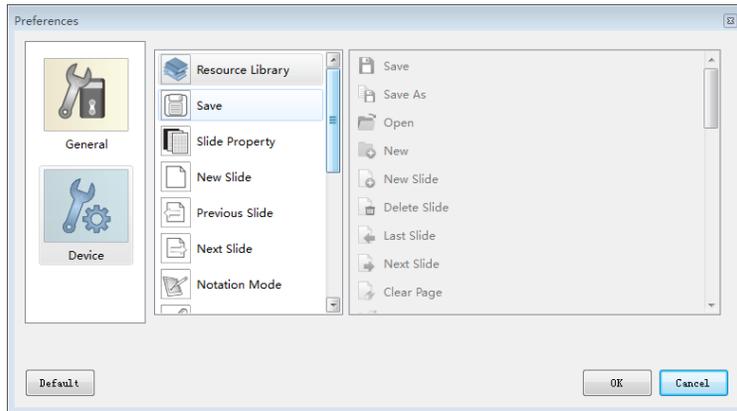


Fig. 2-9 Device Configuration Dialog

The functions in the left-handed list box are in one-to-one correspondence with the hot keys on the device, among which the K1 key is customizable. When pressing the K1 key, the right-handed function selection list box shall be activated. The user can select the function to customize the K1 key accordingly, just as shown in Fig. 2- 10 Customization of K1 Key. In the default, K1 key is to adjust the page scale, where the page scale of 20% per click shall be zoomed in.

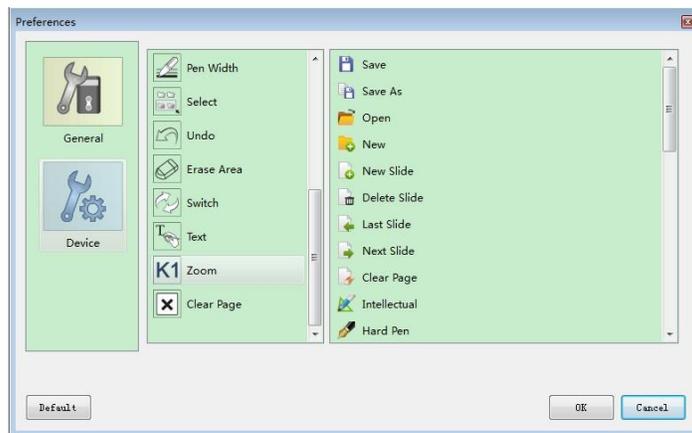


Fig. 2- 10 Customization of K1 Key

2.1.8 Help

This menu furnishes the users with the functions to consult the instruction book, check the update and software version, where the help menu is shown in Fig. 2- 11 Help Menu:



Fig. 2- 11 Help Menu

Specific functions as follows:

Button Descriptions	Functions
Content...	A single click on this button will pop up the instruction book (A PDF reader is required to install)
Update	A single click on this button will pop up a message box in the right lower screen to hint whether the current version applied is the latest or not.
About	A single click on “About” option under the Help Menu will pop up a version message dialog box, as shown in Fig. 2- 12 Version Message Dialog Box, where the user can consult the message about software version.

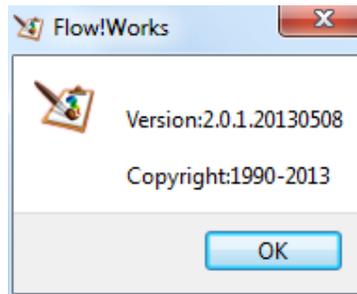


Fig. 2- 12 Version Message Dialog Box

Note: Under Mac system, “About” and “Preferences” options are in correspondence with “About Flow! Works” and “Preference” options of Mac. System menu, as shown in Fig. 2- 13 Mac System Menu.



Fig. 2- 13 Mac System Menu

2.2 Toolbar, Sidebar and Statusbar

2.2.1 Slide Toolbar

Just as shown in Fig. 2- 14 Page Toolbar, the Slide Toolbar furnishes the user with the functions of New White Slide, Delete Slide, Previous Slide, Next Slide, Navigation, Reset, Undo, Redo and Delete, etc.

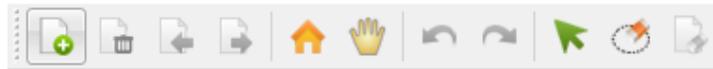


Fig. 2- 14 Page Toolbar

Specific functions as follows:

Button Descriptions	Functions
 New White Slide	To create a blank slide.
 Delete Slide.	To delete the current slide.
 Previous Slide	To furnish the user with the function of slide up.
 Next Slide.	To furnish the user with the function of slide down.
 Reset	The user can restore the slide to the original location with the function of reset.
 Navigation	With a single click on the “Navigation” button, the slide can be moved to the desired location along with the mouse.
 Undo	To undo the previous operation.
 Redo	A single click on this button can restore the operation undone by the “Undo” button.
 Select	A single click on this button can switch into selective status so as to select the objects in the slide.
 Erase.	To delete the current writing lines or objects.

 Clear Slide	<p>A single click on this button can clear all the contents on the current slide.</p>
---	---

2.2.2 Pen Toolbar

As shown in Fig. 2- 15 Pen Toolbar, the pen toolbar furnishes the user with various writing tools, including the functions of Hard Pen, Soft Pen, Intellectual Pen, Laser Pen, Fluorescent Pen, Bamboo Pen, Texture Pen, Pen Color and Pen Width, etc.

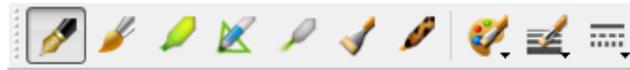
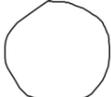
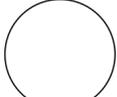
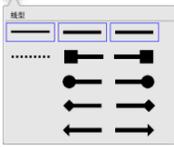


Fig. 2- 15 Pen Toolbar

Specific functions as follows:

Button Descriptions	Functions		
 Hard Pen	<p>To simulate the writing lines of hard-tipped pen, such as ink pen, ball pen and chalk, etc.</p>		
 Soft Pen	<p>To simulate the writing lines of writing brush.</p>		
 Fluorescent Pen	<p>To simulate the effect of highlighter</p> <div style="text-align: center; border: 1px solid green; background-color: #e0ffe0; padding: 5px; display: inline-block;"> <p>Live and learn</p> </div>		
 Intellectual Pen	<p>The intellectual pen can conduct an intelligent identification on the graphics drawn by the user, supporting the objects of single- or double-arrow line, triangle, rectangle, circle and oval</p>	Pre-identified Graphics	Post-identified Graphics
			
			
			
			
			

		
 Laser Pen	<p>The laser pen is under the flickering status, where the writing line will disappear unless the user conducts the next operation.</p>	
 Bamboo Pen	<p>To simulate the writing lines of bamboo pen.</p>	
 Texture Pen	<p>A click on “Texture Pen” will pop up the button for texture selection(as shown in Fig. 2- 16 Texture Selective Button), where to click the pull-down box under this button (as shown in Fig. 2- 17 Texture Pull-down Box) to select the desired texture while clicking the other buttons to select the custom images as the texture in the pull-down box.</p>	 <p>Fig. 2- 16 Texture Selective Button</p>  <p>Fig. 2- 17 Texture Pull-down Box</p>  <p>Fig. 2- 18 Texture Pen Samples</p>
 Color	<p>A click on this button can select the writing color of the pen.</p>	
 Pen Width	<p>A click on this button can select the width of writing line to be drawn.</p>	
 Line Style	<p>This button can select the line style of hard-tipped pen, where a click on this button will pop up the pull-down box to conduct the selections of line heads and tails as shown in Fig. 2- 19 Line Style Pull-down Box.</p>  <p>Fig. 2- 19 Line Style Pull-down Box</p>	

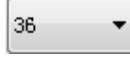
2.2.3 Text Box Toolbar

The text box toolbar furnishes the user the function of text edit as shown in Toolbar. Besides, the software furnishes the user with the function of handwriting identification so as to facilitate him to label when connecting the device.



Fig. 2- 20 Text Box Toolbar

Specific functions as follows:

Button Descriptions	Functions
 Text Box	<p>A single click on this button can switch the mouse into the status of text edit. Meanwhile, a handwriting identification toolbar pops up. Now, single click or hold the left button of the mouse and drag to generate a blank text box on the page, where the user can input the text. Single click outside of such text box to exit when having finished the operation. Double click the text box to access to the edit status again. Under the status of edit, the words can be undone by shortcut key of Ctrl+Z(Command+Z under Mac).</p>
 Font	<p>This button can select the font for the text.</p>
 Font Size	<p>This button can select the font size for the text.</p>
 Font Color	<p>A single click on this button can pop up the pull-down box to select color for the text.</p>
 Boldface	<p>A single click on this button will bold the current text selected.</p>
 Italic	<p>A single click on this button will configure the current text selected as italic type.</p>
 Underline	<p>A single click on this button will add an underline under the current text selected.</p>
 Left Align	<p>A single click on this button will configure the current text selected as the left-aligned type.</p>
 Center Align	<p>A single click on this button will configure the current text selected as the center-aligned type.</p>
 	<p>A single click on this button will configure the current text selected as the right-aligned type.</p>

Right Align	
	
Handwriting Identification	A single click on T button will activate the handwriting identification toolbar, where the software supports 6 languages of Chinese, English, French, German, Russian and Spanish, with its specific functions as shown in the following handwriting identification function list.

The handwriting identification toolbar furnishes the user with the functions of Configure, Add Space, Backspace, Enter and exit, etc. Specific functions as follows:

Button Descriptions	Functions
 Handwriting Recognition.	A single click on this button will activate the handwriting identification function, where the mouse switches into the status of pen.
 Settings.	<p>A click on this button can conduct the configuration on the identification time, selected word display time as well as identification languages, where a pull-down menu pops up by clicking this button as shown in Fig. 2- 21 Handwriting Identification Pull-down Menu.</p> <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Recognizing Interval ▶</p> <p>Alternate Characters Display Time ▶</p> <p>Recognizing Language ▶</p> </div> <p style="text-align: center;">Fig. 2- 21 Handwriting Identification Pull-down Menu</p> <p>The identification time supports the configuration between 1 and 3 seconds. The standby word display time supports the configuration between 1000 and 3000 milliseconds. Currently, the supporting identification languages are Chinese, English, French, German, Russian and Spanish, 6 in total.</p>
 Space	A click on this button will add a space at the current location of the cursor, equivalent to the space bar on the keyboard.
 Backspace	A click on this button will delete the current char before the cursor, equivalent to the Delete key on the keyboard.
 Enter	A click on this button will conduct the operation for a new line, equivalent to the Enter key on the keyboard.
 Exit	A single click on this button will exit the handwriting identification while to exit the edit status of text box.

Note: The handwriting identification function can be applied only when the hardware is under connection.

2.2.4 Insert Toolbar

As shown in Fig. 2- 22 Image & Video Insert Toolbar, the insert toolbar furnishes the user with the functions of image insert and video insert.

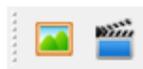
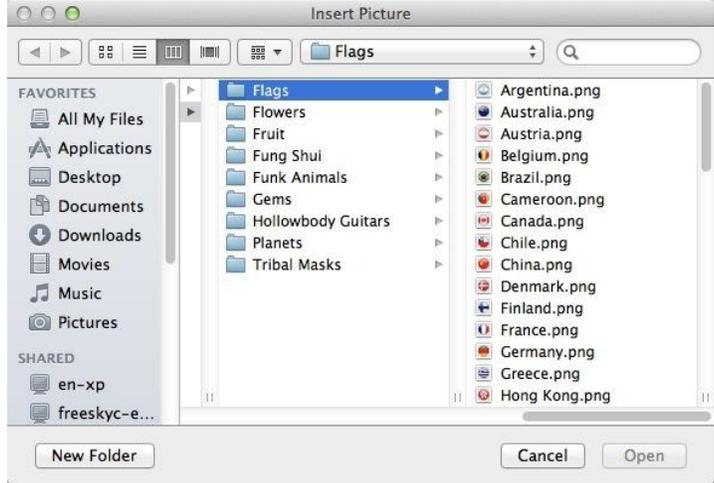
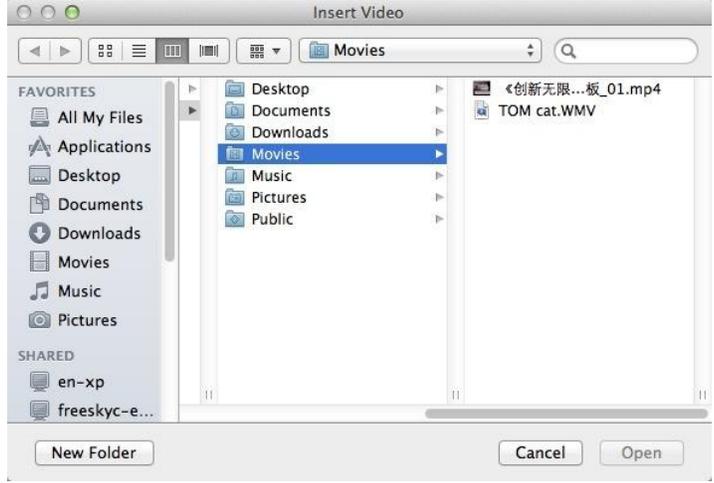


Fig. 2- 22 Image & Video Insert Toolbar

Button Descriptions	Functions
 <p>Insert Picture</p>	<p>A single click on this button will pop up an Image Insert Dialog Box, as shown in Fig. 2- 23 Image Insert Dialog Box, where the image insert location is the left top on the page.</p>  <p style="text-align: center;">Fig. 2- 23 Image Insert Dialog Box</p>
 <p>Insert Video</p>	<p>A single click on this button will pop up a Video Insert Dialog Box, as shown in Fig. 2- 24 Video Insert Dialog Box, where the video insert location is the left top on the page. Double click the video zone to play.</p>  <p style="text-align: center;">Fig. 2- 24 Video Insert Dialog Box</p>

2.2.5 Paint Bucket

The user can apply the padding tools in the Paint Bucket toolbar to pad the closed area on the object, where there are 3 padding modes in the toolbar, i.e. color padding, image padding and texture padding, as shown in Fig. 2- 25 Paint Bucket:



Fig. 2- 25 Paint Bucket

Specific functions as follows:

Button Descriptions	Functions
 <p>Color</p>	<p>A single click on this button will pop up a pull-down box as shown in Box, where the color padding can be conducted on the area selected.</p>  <p style="text-align: center;">Fig. 2- 26 Color Padding Pull-down Box</p>
 <p>Image</p>	<p>A single click on this button will pop up an image selection dialog box, where the image padding can be conducted on the area selected.</p>
 <p>Texture</p>	<p>A single click on this button will pop up a pull-down box as shown in Box, where the texture padding can be conducted on the area selected. Click the other buttons in the pull-down box to select the custom images as texture padding.</p>  <p style="text-align: center;">Fig. 2- 27 Texture Padding Pull-down Box</p>

2.2.6 Shape Toolbar

As shown in Fig. 2- 28 Basic Shape Toolbar, the basic Shape toolbar consists of the general Shape toolbar and polygon toolbar, where these 2 toolbars furnishes the user with the functions of line, dotted line, arrow, curve, circle, triangle, rectangle, polygon as well as graphics color and width.



Fig. 2- 28 Basic Shape Toolbar

Specific functions as follows:

Button Descriptions	Functions
 Line	A single click on this button can draw a line in the software page.
 Dotted Line	A single click on this button can draw a dotted line in the software page.
 Arrow Line	A single click on this button can draw an arrow in the software page.
 Arc	A single click on this button can draw a curve in the software page.
 Closed Arc	A single click on this button can draw a closed curve in the software page.
 Circle	A single click on this button can draw a circle in the software page.
 Right Triangle	A single click on this button can draw a right triangle in the software page.
 Isosceles Triangle	A single click on this button can draw an Isosceles triangle in the software page.
 Rectangle	A single click on this button can draw a rectangle in the software page.
 Square	A single click on this button can draw a square in the software page.
 Rounded Square	A single click on this button can draw a rounded square in the software page.

Round Corner Square	
 Round Edge Rectangle	A single click on this button can draw a rounded rectangle in the software page.
 Isosceles Trapezoid	A single click on this button can draw an isosceles trapezoid in the software page.
 Right Trapezoid	A single click on this button can draw a right trapezoid in the software page.
 Pentagram	A single click on this button can draw a pentagram in the software page.
 Color	Click this button to set the pen color.
 Pen Size	Click this button to choose the pen size.
 Regular Polygon	The Shape furnishes the user with the drawing functions from regular triangle to regular pent decagon, as shown in the left figure; click the single button to draw the regular polygon accordingly.

2.2.7 Math Toolbar

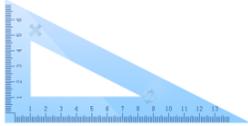
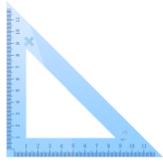
As shown in Fig. 2- 29 Math Toolbar, the mathematic toolbar furnishes the user with the normal teaching tools, including the Ruler, 30°/60°Triangle, 45°Triangle, Protractor and Compasses.



Fig. 2- 29 Math Toolbar

Specific functions as follows:

Button Descriptions	Functions
 Ruler	A single click on this button can call out the ruler (as shown in Fig. 2- 30 Ruler). Single click the close button to close the ruler (as shown in Fig. Fig. 2- 31 Close Button). Single click the rotate button to conduct the rotation of the ruler(as shown in Fig. 2- 32 Rotate Button).
	 Fig. 2- 30 Ruler
	 Fig. 2- 31 Close Button

	 <p>Fig. 2- 32 Rotate Button</p>
 <p>30°/60°Triangle</p>	<p>A single click on this button can call out the 30°/60°triangle (as shown in Fig. 2- 33 30°/60°Triangle).</p>  <p>Fig. 2- 33 30°/60°Triangle</p>
 <p>45°Triangle</p>	<p>A single click on this button can call out the 45°triangle (as shown in Fig. 2- 34 45°Triangle).</p>  <p>Fig. 2- 34 45°Triangle</p>
 <p>Protractor</p>	<p>A single click on this button can call out the protractor (as shown in Fig. 2- 35 Protractor).</p>  <p>Fig. 2- 35 Protractor</p>
 <p>Compasses</p>	<p>A single click on this button can call out the Compasses (as shown in Fig. 2- 36 Compasses). The left buttons of the mouse clicks the left leg of the compasses and drag the mouse to adjust the radius of the circle to be drawn. The left button of the mouse clicks  and drag the mouse to finish the whole circle. Click  to move the location of compasses entirely. Click  on the compasses to close the compasses.</p> 

2.2.8 General Toolbar

The general toolbar furnishes the user with the tools of Clock, Calculator, On-screen Keyboard, Spotlight, Magnifier and Screenshot, as shown in Fig. 2- 37 General Toolbar.



Fig. 2- 37 General Toolbar

Specific functions as follows:

Button Descriptions	Functions
 Clock	A single click on this button can call out the clock.
 Calculator	A single click on this button can call out the calculator.
 Curtain	A single click on this button can call out the curtain.
 On-screen Keyboard	A single click on this button can call out the On-screen Keyboard.
 Spotlight	A single click on this button can call out the spotlight.
 Magnifier	A single click on this button can call out the Magnifier.
 Image Capture	A single click on this button can call out the Image Capture.

Note: There is no function of “On-screen Keyboard” under Linux system while no that of “Curtain” under Mac. System for time being.

2.2.9 Sidebar

The sidebar in the software consists of the panels of Page Indexing, Resource and Property Browser, etc. as shown in Fig. 2- 38 Sidebar.



Fig. 2- 38 Sidebar

2.2.9.1 Page Indexing Panel

With the function of page indexing, the user can browse the contents on the page quickly, as shown in Fig. 2- 39 Page Indexing Panel



Fig. 2- 39 Page Indexing Panel

2.2.9.2 Resource Panel

The resource panel displays the default resource in a tree-type directory, as shown in Fig. 2-40 Resource Panel.



Fig. 2- 40 Resource Panel

2.2.9.3 Property Browser Panel

With the property browser panel, the user can consult the property of current object selected, including two properties of behavior and line type, among which the behavior property includes visible and lock while the line type includes the line color and width, etc. as shown in Fig. 2- 41 Behavior and Fig. 2- 42 Line Appearance:

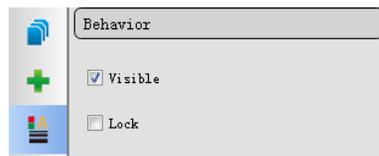


Fig. 2- 41 Behavior

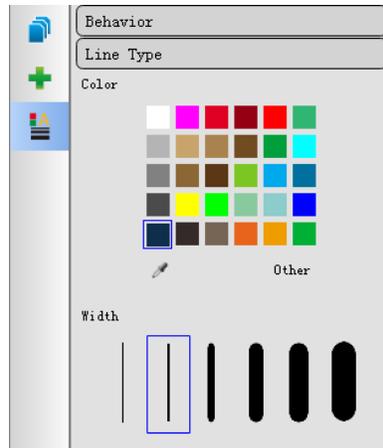


Fig. 2- 42 Line Appearance

2.2.9.4 Switch Sidebar

Besides the aforementioned functions, the sidebar furnishes the user with left-to-right switching and locking functions of the sidebar. Click the double arrow button in the sidebar(as shown in Fig. 2- 43) to switch the position of sidebar left to right while check the property of Auto-hidden to hide the sidebar automatically at its lower part(as shown in Fig. 2- 44 Auto-hide).



Fig. 2- 43 Switch Sidebar

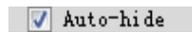


Fig. 2- 44 Auto-hide

2.2.10 Statusbar

The lower part of the software page is the Statusbar, where it displays the current time, page number and page ratio, etc. as shown in Fig. 2- 45 Statusbar.

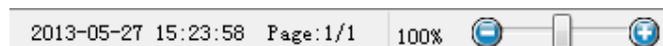


Fig. 2- 45 Statusbar

2.2.11 General Tools Introduction

2.2.11.1 Clock

Single click “Clock” button  to generate a clock on the page, which furnishes the user with the functions of clock and countdown timer, as shown in Fig. 2- 46 Clock.



Fig. 2- 46 Clock

Single click the left button of the mouse on any part of the clock to pop up a control menu as shown in Fig. 2- 47 Control Menu, where the user can select the timing pattern and clock pattern while set up the countdown time and adjust the clock alpha value. Select the function of Exit in the control menu to exit the Clock.

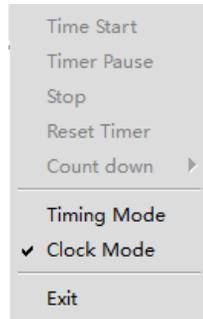


Fig. 2- 47 Control Menu

2.2.11.2 Calculator

Single click the button of Calculator  to pop up the calculator as shown in Fig. 2- 48 Calculator.

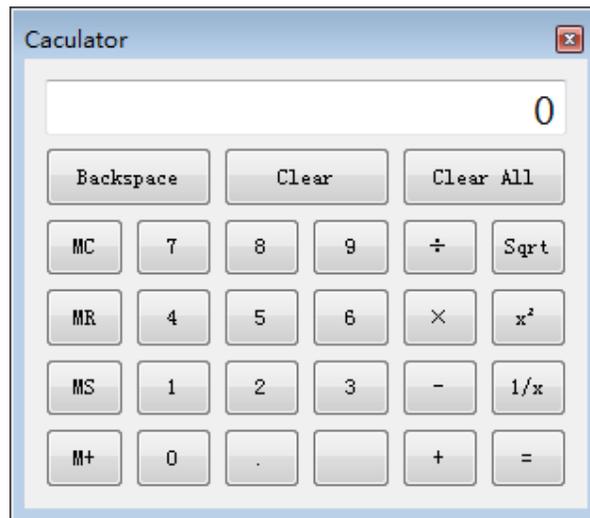


Fig. 2- 48 Calculator

2.2.11.3 Curtain

Single click the button of Curtain  to produce a shading effect on the whole page so as to

have the audience focus on the contents unshaded, as shown in Fig. 2- 49 Shading Effect Picture.

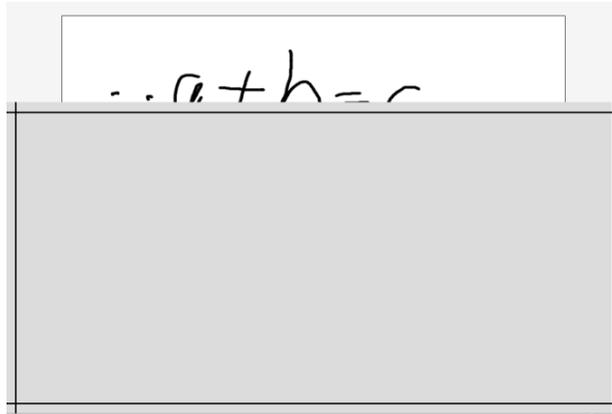


Fig. 2- 49 Shading Effect Picture

Single click any part of the curtain to pop up a control menu as shown in Fig. 2- 50 Control Menu, where the user can select the corresponding functions of curtain color adjustment, image and reset, etc. as required.

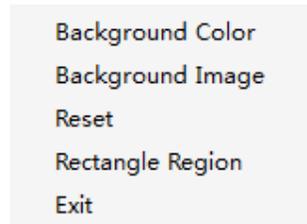


Fig. 2- 50 Control Menu

Note: For time being, there is no such a function under Mac system.

2.2.11.4 Spotlight

Single click the button of Spotlight  to produce a spotlighting effect on the page as shown in Fig. 2- 51 Spotlighting Effect. The spotlight can light up a certain area of the screen so as to have the audience focus on the highlighted part and improve the teaching effect.



Fig. 2- 51 Spotlighting Effect

Single click the grey area outside the spotlight to pop up a control menu of Spotlight, as shown in Fig. 2- 52 Spotlight Control Menu, where the user can change the shape and alpha value of the spotlight , and move, rotate and adjust it, etc. Drag the mouse on its frame to adjust the size.



Fig. 2- 52 Spotlight Control Menu

2.2.11.5 Magnifier

Single click the button of Magnifier  to obtain local magnifying effect. This tool furnishes the user with a calibrated local Magnifier, as shown in Fig. 2- 53 Magnifier.



Fig. 2- 53 Magnifier

The user can magnify the corresponding multiples on the local contents in the windows. Single click the left button of the mouse on any part of the Magnifier to select the corresponding multiples.

2.2.11.6 Image Capture

Single click the button of Image Capture , to pop up a dialog box as shown in Fig. 2- 54 Image Capture Dialog Box, where the user can select one of screenshot modes among the screen, rectangular and irregular captures.

Single click the button of Screen, where the user can capture the current screen contents; Single click the button of Rectangular, where the user can select the rectangular zone to be captured by dragging the mouse across the screen; Single click the button of Irregular, where the user can draw any type of curve to select the zone to be captured.

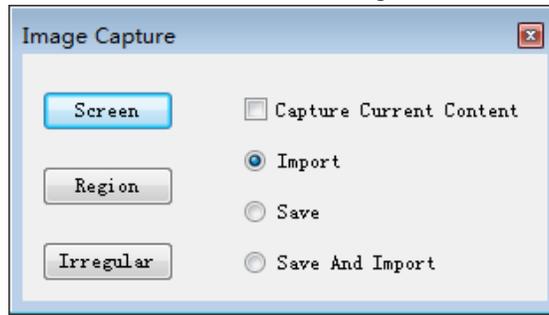


Fig. 2- 54 Image Capture Dialog Box

Take the “Screen” capture as an example, single click the screenshot button to conduct the full-screen capture on the current page displayed, and then drag the mouse on the page- a full-screen image captured by the user will show up, as shown in Fig. 2- 55 Screenshot Effect.

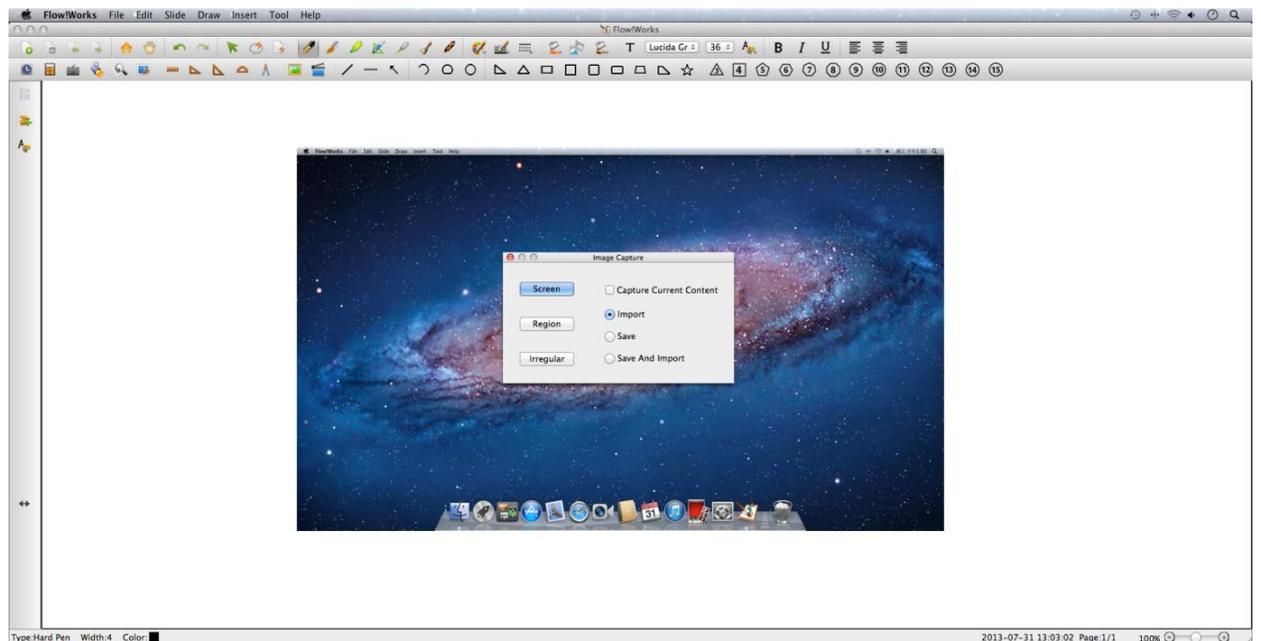


Fig. 2- 55 Screenshot Effect

2.2.11.7 Record

All the operations on the page can be recorded, played and saved.

Click “Record” to record the forthcoming operations, as shown in Fig. 2- 56 Custom Record Menu; Click “Load” to browse and play the previous files recorded.

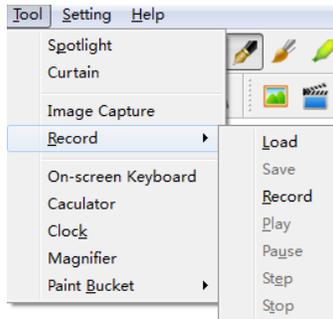


Fig. 2- 56 Custom Record Menu

Click “Stop” to stop the current recording process, as shown in Fig. 2- 57 Stop.

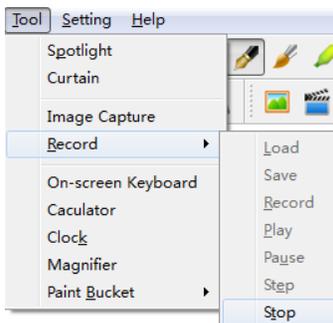


Fig. 2- 57 Stop

When having finished recording, click “Save” to save the file in the format of*.edm, as shown in Fig. 2- 58 Menu.

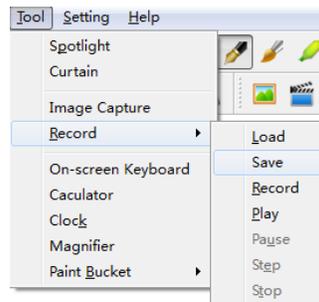


Fig. 2- 58 Menu

When having finished recording, click “Play” to play the file, as shown in Fig. 2- 59 Menu. When playing, “Pause” or “Step” can be single clicked.

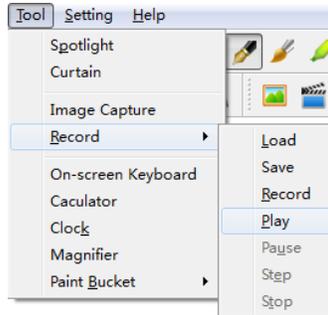


Fig. 2- 59 Menu

2.2.11.8 On-screen Keyboard

Single click the button of “On-screen Keyboard” , to pop up a virtual keyboard, as shown in Fig. 2- 60 On-screen Keyboard. Take Mac system as an example, this tool simulate the system keyboard, which can be clicked to apply directly.



Fig. 2- 60 On-screen Keyboard

Note: For time being, there is no such a function under Linux system while to call out the system keyboard under windows.

2.2.11.9 Paint Bucket

The airbrushing function can be achieved with these 3 buttons  to conduct the padding of texture, image and pure color on the closed objects.

- 1、 Texture: Texture padding on the object, as shown in Fig. 2- 61 Texture Padding, to conduct the padding on the closed objects.

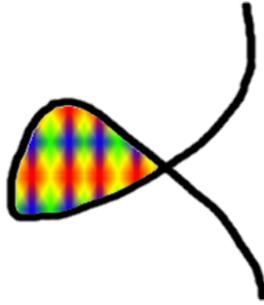


Fig. 2- 61 Texture Padding

- 2、 Image: Image padding on the object, as shown in Fig. 2- 62 Image Padding, to conduct the padding on the closed objects.



Fig. 2- 62 Image Padding

- 3、 Color: Pure color padding on the object, as shown in Fig. 2- 63 Color Padding, to conduct the padding on the closed objects.

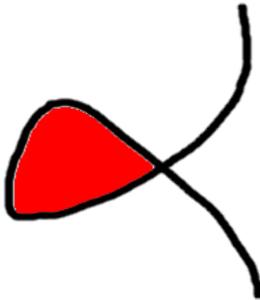


Fig. 2- 63 Color Padding

Part 3.Common Operations

3.1 Select

In the operation of software, if you want to conduct the operation on any object, select the object first. Single click the button of Selection  in the toolbar, the mouse will switch into the status of arrow selection, now cross the object to be selected, which means the object has been selected. For example, select the writing line, as shown in Fig. 3- 1 Selecting the Writing Line.

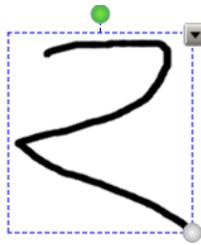


Fig. 3- 1 Selecting the Writing Line

Among which,  is a rotate button,  on the right lower part is a zoom button, and  on the right upper part is an object menu button. Click the button of object menu to pop up, as shown in Fig. 3- 2 Object Menu.

Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Del
Clone	Ctrl+D
Drag Cloning	Ctrl+Shift+D
Lock	
Group	▶
Visible	▶
Flip	▶
Mirror	▶
Property Browser	Alt+R

Fig. 3- 2 Object Menu

3.2 Move

In the status of selected object, drag the current object to any position in the page of software by dragging.

3.3 Rotate

In the status of selected object, single click the rotate button  , to rotate the current object.

3.4 Zoom

In the status of selected object, single click the zoom button  , to zoom the current object by dragging.

3.5 Cut, Copy and Paste

In the object menu for the current object, the options of cut, copy and paste, etc can be selected to conduct the aforementioned operations on the current object respectively.

3.6 Delete

Conduct the deletion on the current object.

3.7 Clone

Clone: after having selected the object, select the option of “Clone” in the object menu to generate the cloned object at the location of current object, as shown in Fig. 3- 3 Cloning the Current Object and Post-cloned Current Object, to conduct various operations on the post-cloned object.



Fig. 3- 3 Cloning the Current Object and Post-cloned Current Object

3.8 Drag Cloning

Select the option of “Drag Cloning” in the object menu on the object, as shown in Fig. 3- 4 Drag Cloning the Current Object.

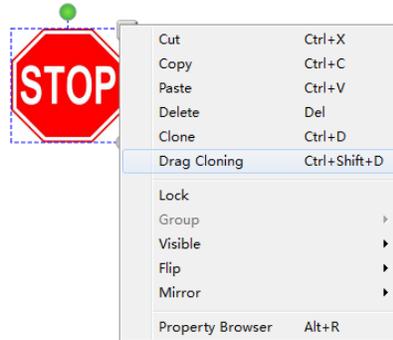


Fig. 3- 4 Drag Cloning the Current Object

After selecting to set the option of “Drag Cloning”, the mouse moves on the original object, where the user can generate more cloning objects by dragging the mouse when such a mouse turns into a cross. As shown in Fig. 3- 5 Drag Cloning, the original object can be dragged to clone infinitely unless the user clicks the option of “Cancel Drag Cloning” to terminate the current operations.

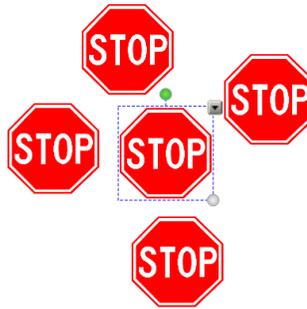


Fig. 3- 5 Drag Cloning

3.9 Lock

The user can conduct a locking operation on the current object, where the locking object can't be moved any more. Select the current object to select the option of “Lock” in the object menu, as shown in Fig. 3- 6 Lock the Object.

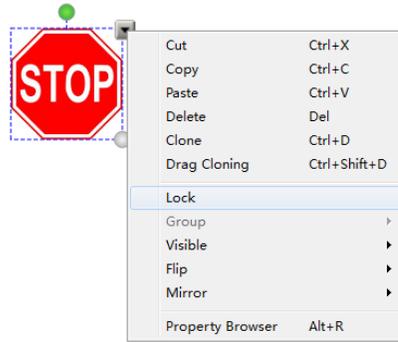


Fig. 3- 6 Lock the Object

The locked object can't be moved any more, single click the option of “Unlock” to restore to the unlocking status as required.

3.10 Group and Ungroup

The user can conduct one-time combination on more than 2 objects to have them become one object, as shown in Fig. 3- 7 Group of Objects whereas the combined object can conduct the “Ungroup” operation to restore to the individual objects.

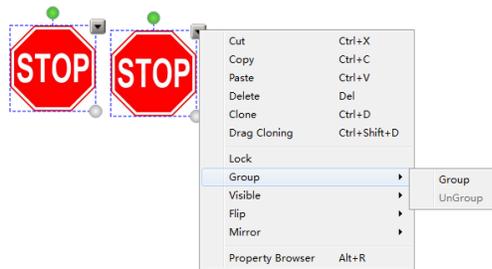


Fig. 3- 7 Group of Objects

3.11 Visible

After selecting the object, select the option of Visualizing in the object menu, as shown in Fig. 3- 8 Set the Visible of the Object.

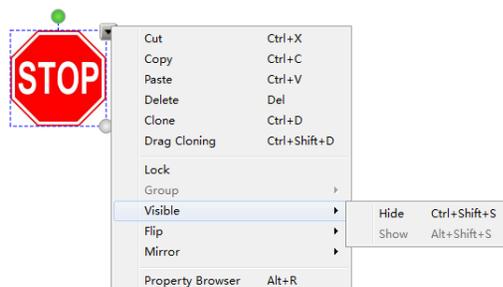


Fig. 3- 8 Set the Visible of the Object

When it is set as “Show”, the current object can be visualized; otherwise, the current object

can't be visualized when setting as "Hide".

3.12 Flip

The user can flip the current object, where the software furnishes with vertical flip and horizontal flip when selecting the option of "Flip" in the object menu, with the vertical flip as shown in Fig. 3- 9 Set Vertical Flip on the Current Object and Post Vertical Flipped Current Object.

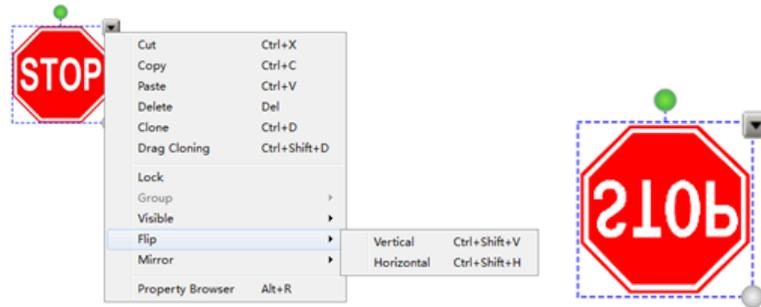


Fig. 3- 9 Set Vertical Flip on the Current Object and Post Vertical Flipped Current Object

The horizontal flip on the current object refers to Fig. 3- 10 Horizontal Flip on the Current Object and Post Horizontal Flipped Current Object.

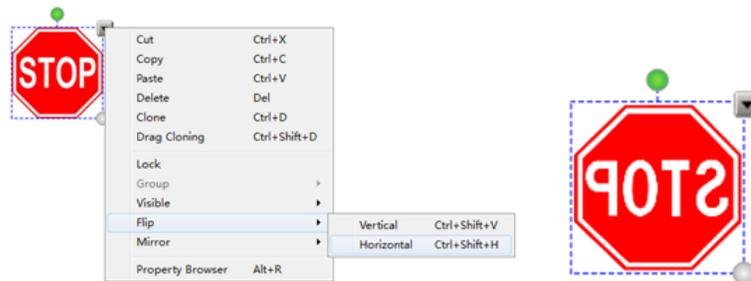


Fig. 3- 10 Horizontal Flip on the Current Object and Post Horizontal Flipped Current Object

3.13 Mirror

The user can make use of the mirroring function to generate the mirroring images on the current object up and down, left and right, as shown in Fig. 3- 11 Set the Left Mirroring Image on the Current Object and Generate the Left Mirroring Image.

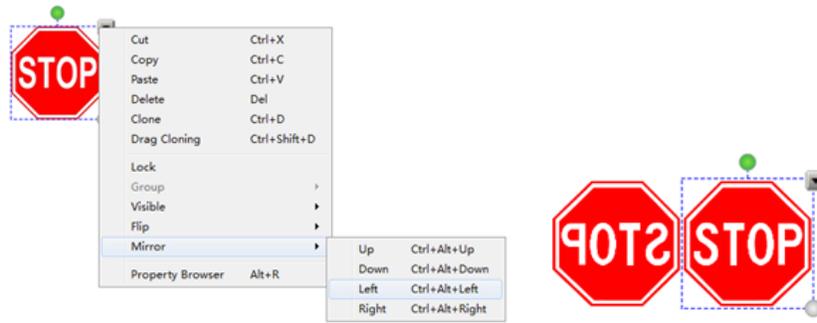


Fig. 3- 11 Set the Left Mirroring Image on the Current Object and Generate the Left Mirroring Image

Similarly, select the options of Right Mirroring Image, Up Mirroring Image and Down Mirroring Image to generate the same, as shown in Fig. 3- 12 Right Mirroring Image, Up Mirroring Image and Down Mirroring Image on the Current Object.

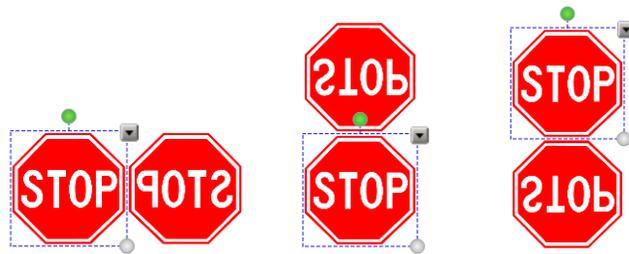


Fig. 3- 12 Right Mirroring Image, Up Mirroring Image and Down Mirroring Image on the Current Object

3.14 Property Browser

The property browser mainly displays the relevant properties on the objects in the page, where the user can configure and modify the properties of the relevant objects on the panel of the property browser.

Single click the button of “Property Browser” in the sidebar to open the panel, as shown in Fig. 3- 13 Property Browser Panel.

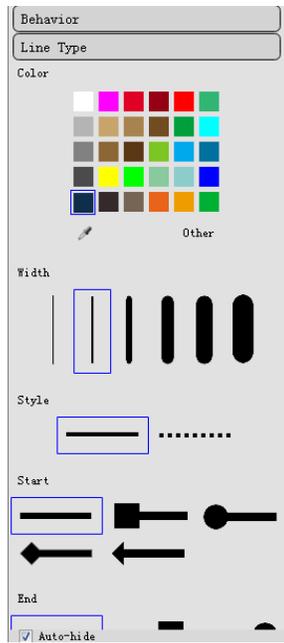


Fig. 3- 13 Property Browser Panel

When selecting any object on the page, the property browser will display its properties accordingly.