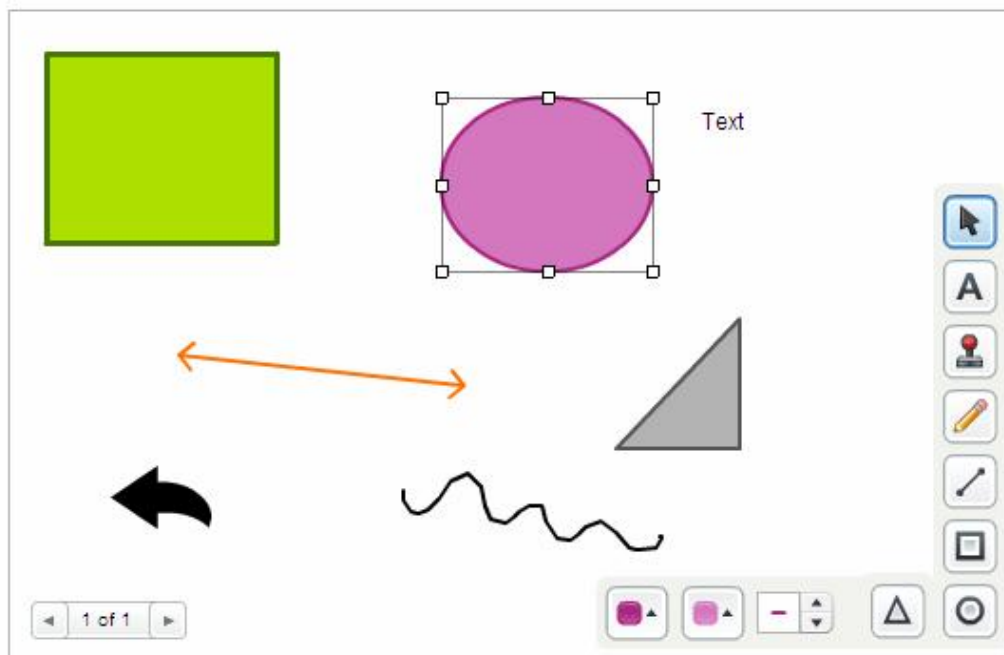


Whiteboard Component

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Introduction and overview

This is a flash media server / flash communication server component. It includes a client side component which can be dragged and dropped directly into any application. For more functionality it can be extended with custom tools, custom editors etc.



Requirements

Server

Any version of flash media server or flash communication server will be capable of running the whiteboard component.

Client

This component will work in flash player 7 and above, the drop shadow on dragged shapes will only work in player 8 and above however the code will still compile for 7 and work.

Features

Selector

The selector tool can be used to select multiple shapes at once, by clicking on the stage and then dragging over the shapes. If all the shapes selected are of the same type the toolbar for that shape will be visible, so specific shape properties such as fill, line etc can be edited at once. All these shapes can be dragged at the same time and will be moved relatively using this tool.

Text

The text tool allows textual annotation on the board; it features customizable text, font color and font size. To use this tool select it and drag it on the stage, this tool has a minimum size of 40 * 22. Because the text area is selectable the method of dragging this tool is different to other tools, it has a custom editor with a circle handle in the middle for dragging.

Stamp

The stamp tool has a selection of shapes that are useful in diagrams. These shapes can be modified by adding or removing frames from “wb_stamps” found in FLA (Assets > Tools > Stamp) and “wb_stamps_prev” for alignment purposes this movieclip has shapes relatively centred. Also in the class `mx.controls.whiteboard.tools.stamp` the frames must be added or removed from the `mc.stack.dataProvider` array. The stamp tool has a minimum size of 16*16.

Freehand

The freehand tool enables any shape to be drawn, because of the nature of a freehand it has no resizing capabilities, its editor draws a rectangle around the shape to make it obvious when it's selected.

Line

The line tool is an important tool; it is great for flow charts or some kind of visual model for any represented schedule or flow diagram. It not only draws straight lines but also has two arrow endings to choose from on either side. This shape is completely resizable with customizable thickness and color.

Rectangle

A fundamental shape for drawing, data visualization etc, its variables include fill color, line color and line thickness and is completely resizable.

Oval

The oval tool is another fundamental shape. It also includes fill color, line color and line thickness as customizable properties.

Triangle

A basic shape with similar properties to rectangle and oval, fill color, line color and line thickness however it also includes the type of triangle. It can be an equilateral triangle or a right angled triangle.

Shortcut Keys

Keys can be used to move shapes on the whiteboard, up, down, left and right can be used (together e.g. up and right) to move one shape or a selection of shapes. By using the shift key the shapes will move 10 pixels instead of 1 single pixel. To delete a shape you can also use the delete key to remove a shape or a selection of shapes.

Multi-Page

The whiteboard supports multiple pages which can be navigated through using the navigator. Each page has its own shared object and only one page may be visible at any time, everybody sees the same page. If a page does not exist it is created. It is optional and can be disabled (see showTools property)

Properties

page:Number (Get / Set)

This is the current page; it can only be set to a page that exists already.

pageCount:Number (Get)

The number of pages there currently are.

showTools:Boolean (Get / Set)

This will show or hide the toolbar, likely used along with canEdit = false;

pageNavigation:Boolean (Get / Set)

Shows or hides the page navigator.

canEdit:Boolean (Get / Set)

If false the client will be unable to draw new shapes or modify existing ones.

selectedTool:Number (Get / Set)

This returns the ID of the selected tool, the ID's are in order the tools appear in the navigation, e.g Selector = 0

selectedToolLabel:String (Get)

Similar to selected tool however it returns the “name” of the tool, e.g. Stamp, Rectangle etc.

Methods

connect(nc:NetConnection):Void

Like all flashcom components, this is used to connect the board to the server; it should pass a netconnections which is connected or connecting to an application that has loaded whiteboard.asc.

copy():Void

Puts the current selection of shapes into the clipboard (local flash app only)

paste():Void

Pastes what is in the clipboard (set with copy method) onto the current page.

clear():Void

Will clear the shapes from the current page.

clearPages():Void

This will clear all pages from the whiteboard and remove them.

print():Void

Sends the current page to the printer, assuming the user accepts the print dialog.

addPage():Void

Creates a new page and sets it as the currently selected page.

undo():Void

Undoes the last event that took place (this is remote not local, 1 client can undo the actions of another)

redo():Void

Redoes the actions which were undone using the undo method.

Events

pageEvent

Sent when a new page is added/removed or if the current page changes.

Event Structure ({target: whiteboard instance, length: total number of pages, current: currently selected page})

setTool

Called when the tool is changed.

Event Structure ({target: whiteboard instance, id: id of selected tool, name: string name of the tool})