Boardmaker Studio
User Guide

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1 Introduction

Boardmaker Studio is the newest addition to the Boardmaker Software Family. Equipped with powerful on-screen interactive templates, time-honored print templates, an efficient new user interface, and a host of time-saving features, Boardmaker Studio gives you the tools you need to quickly meet your user's needs.

Use Boardmaker Studio to create interactive learning activities for users with learning and language challenges.

Boardmaker Studio contains two interfaces: Boardmaker Studio Connect to "connect" to your Boardmaker Online account and Boardmaker Studio Designer, to create, edit, and play your learning activities.

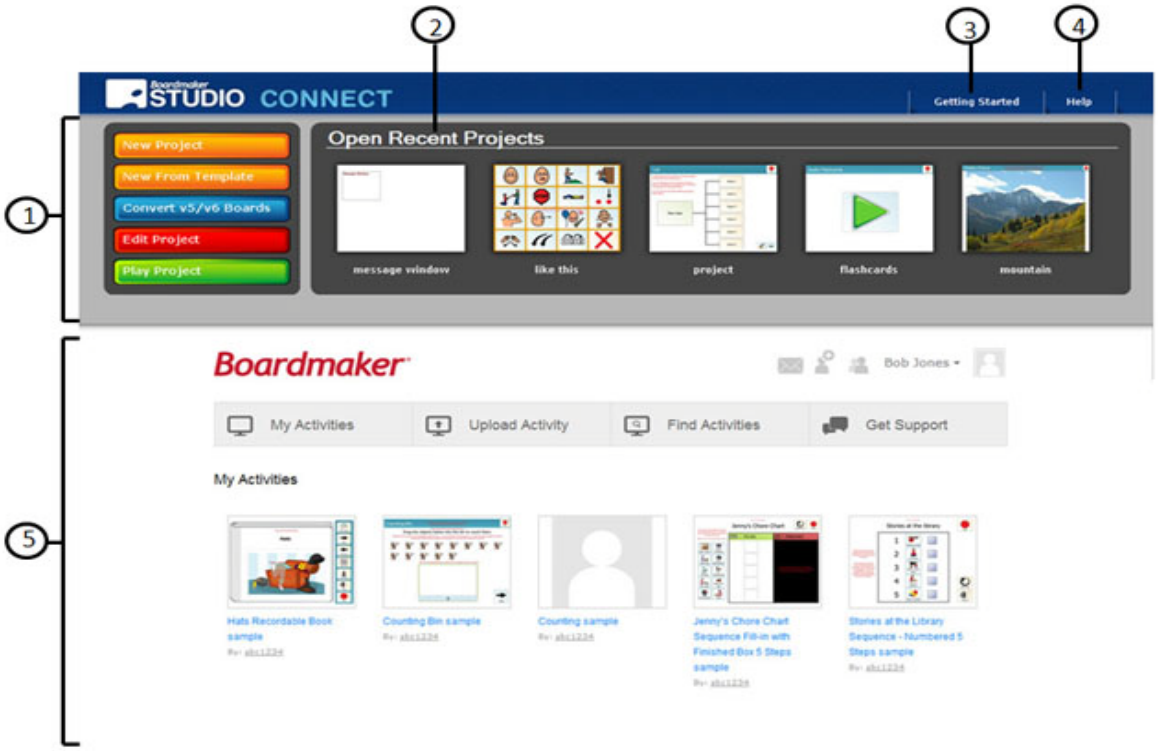
This chapter covers the following topics:

- ***Boardmaker Studio Connect***
- ***Boardmaker Studio Designer***
- ***The Boardmaker Online Web Site***

BOARDMAKER STUDIO CONNECT

When you launch Boardmaker Studio, the Boardmaker Studio Connect screen opens. The Connect screen is a dashboard, enabling you to quickly access the most common Boardmaker Studio tasks as well as to connect to your Boardmaker Online account.

THE BOARDMAKER STUDIO CONNECT SCREEN



1 **Project buttons -** Select a button to create, convert, edit, or play a project.

2 **Open Recent Projects -** Displays your most recent projects. To edit or play a project, select the project and then select **Play** or **Edit.**

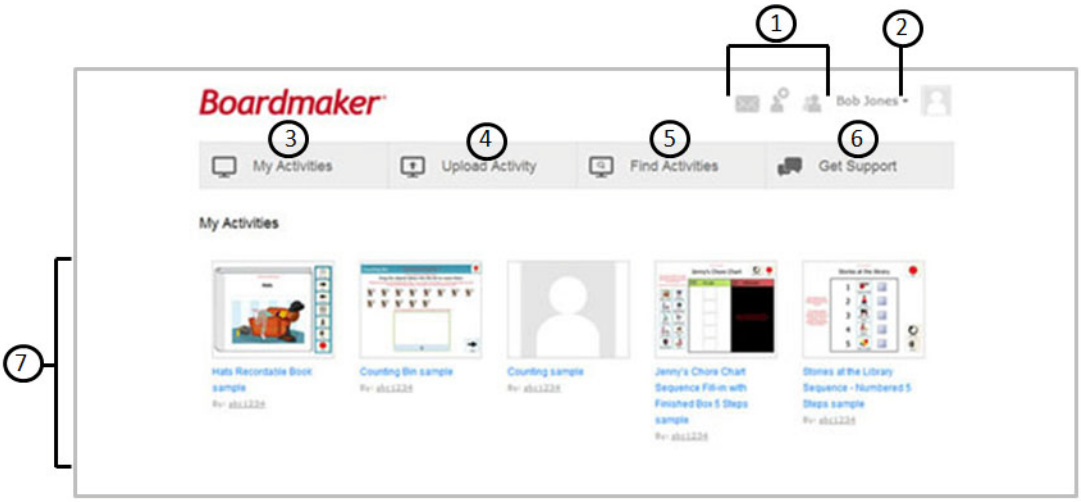
3 **Getting Started link -** Select this link to view tutorial videos to help you get started with Boardmaker Studio.

4 **Help link -** Select this link to access the Boardmaker Studio a PDF version of this User Guide as well as online tutorials and videos.

5 **Boardmaker Online Content -** This section of the Connect screen displays the home page of your *BoardmakerOnline.com* account.

The Boardmaker Online section of the Connect screen "connects" you to your Boardmaker Online account.

Boardmaker Online Section of the Connect Screen



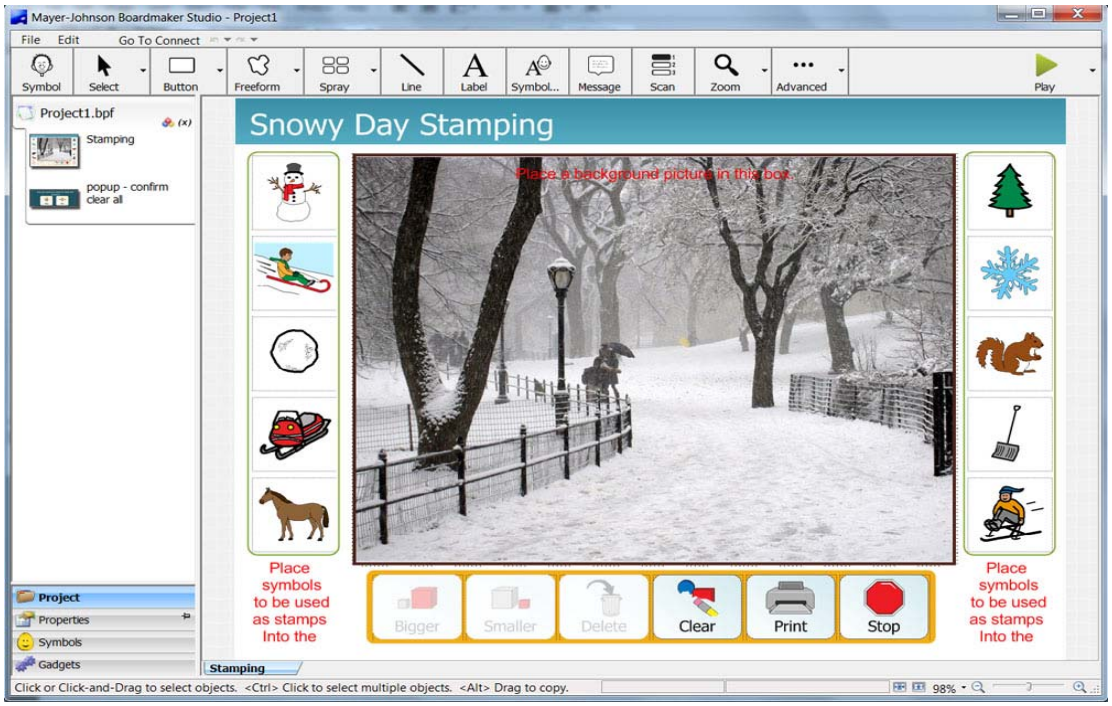
1. **Account status -** Displays icons indicating new mail, new friend request, and new group update from the Boardmaker Online community. Icons will be grayed out if you have no new status updates.
2. **Account drop-down menu -** Opens a drop-down menu giving you access to and enabling you to update your Boardmaker Online account settings and profile information.
3. **My Activities -** Opens your Boardmaker Online activity list.
4. **Upload Activity -** Upload activities you have created using v5 or v6 of Boardmaker or using Boardmaker Studio. These activities will be uploaded to your Boardmaker Online activity list.
5. **Find Activities -** Opens the *Find Activities and Boards* page on *BoardmakerOnline.com*. Search through the activities shared by the community by details or by educational standards.
6. **Get Support -** Opens the *Help area* which contains the Boardmaker Online User Guide and tutorials and videos on how to use the site in the Help & Training Center.
7. **My Activities -** Displays your most recent activities on Boardmaker Online. You can select an activity to view it on Boardmaker Online.

BOARDMAKER STUDIO DESIGNER

Boardmaker Studio Designer is the primary workspace for Boardmaker Studio. You use it to create, edit, and play your learning activities.

REFERENCE
For more information about the Designer workspace, see *The Designer Workspace at a Glance*.

THE BOARDMAKER STUDIO DESIGNER



With the Boardmaker Studio Designer, you can:

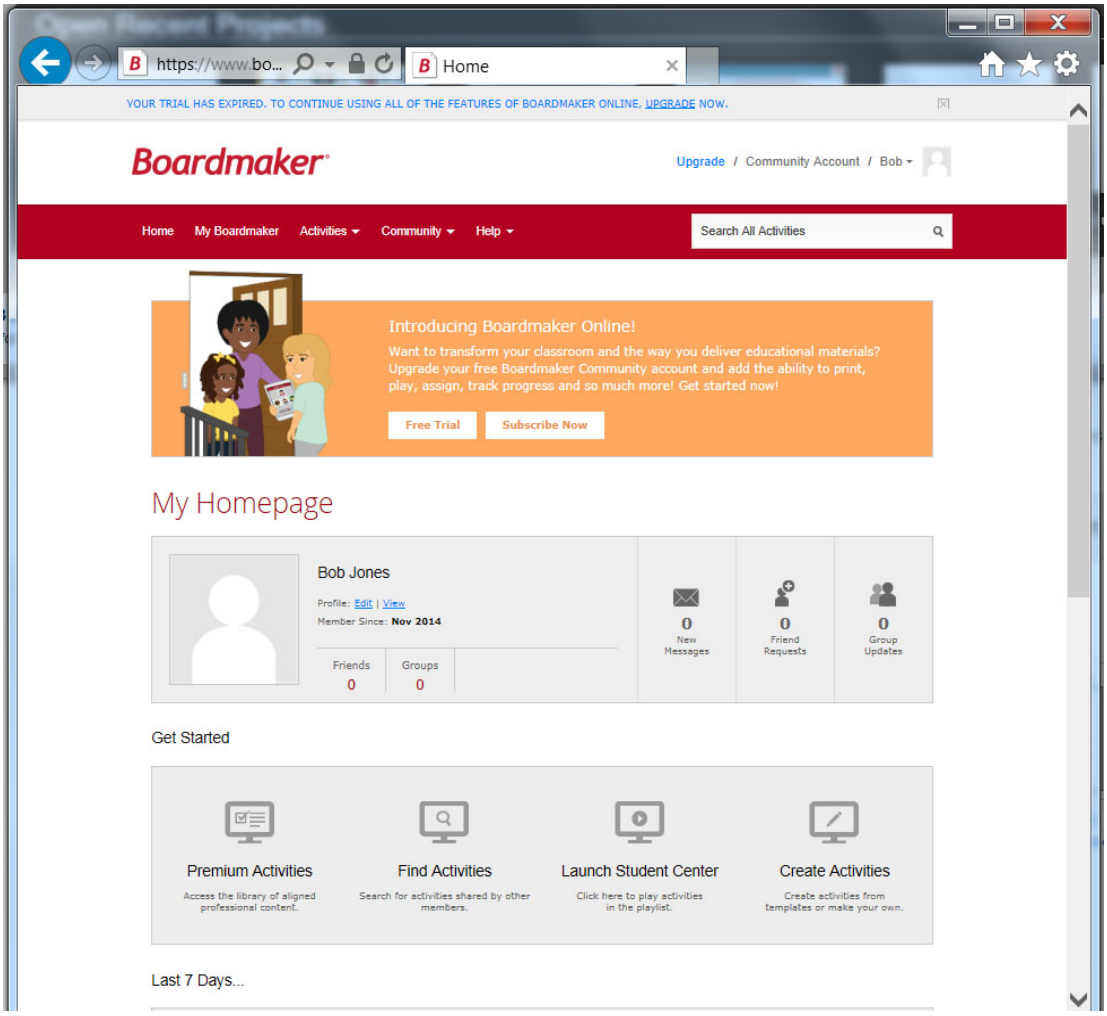
- Organize your learning activities by creating activities and pages all within the same project file.
- Design interactive pages with buttons, message windows, lines, text boxes, hot spots, radio buttons and check boxes, multimedia, and group boxes.
- Use interactive Studio Starter templates to create engaging activities fast.
- Use pre-programmed buttons and objects (called gadgets) to quickly enhance an activity.
- Customize and further enhance your learning activities by programming objects on your pages.

The Boardmaker Online Web Site

Boardmaker Online is an online community for finding and sharing thousands of activities on hundreds of topics - all created with the Boardmaker Software Family. With Boardmaker Online, you can:

- Connect with hundreds of teachers, therapists, or parents just like you, and ask questions about what works and what doesn't.
- Connect to a large collection of free, shared materials. Don't forget that you can convert Boardmaker v5 and v6 files into Boardmaker Studio files.
- Connect to public groups to share activities and ideas and learn from others.
- Connect to articles with tips, picks from the web, success stories, and more.

The Boardmaker Online Web Site



2 Getting Started

This chapter provides an overview of how to get started using the Boardmaker Studio software.

This chapter covers the following topics:

- ***Opening Boardmaker Studio***
- ***Basic Software Techniques***

Opening Boardmaker Studio

After installing the Boardmaker Studio software, you can open it. The first time you open it, you must register the software to use the full version.

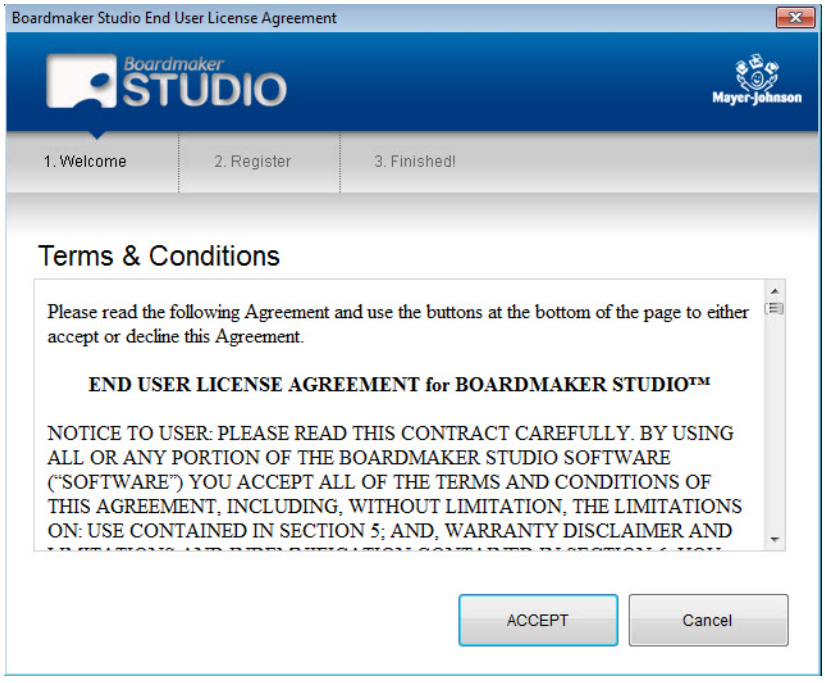
Open Boardmaker Studio for the First Time

When you open Boardmaker Studio for the first time, you must accept the *End User License Agreement* and register the software before you can begin using it. You only need to complete this process once.

> **Note**
> If you reinstall Boardmaker Studio, then you will need to complete the registration process again the first time you open it.

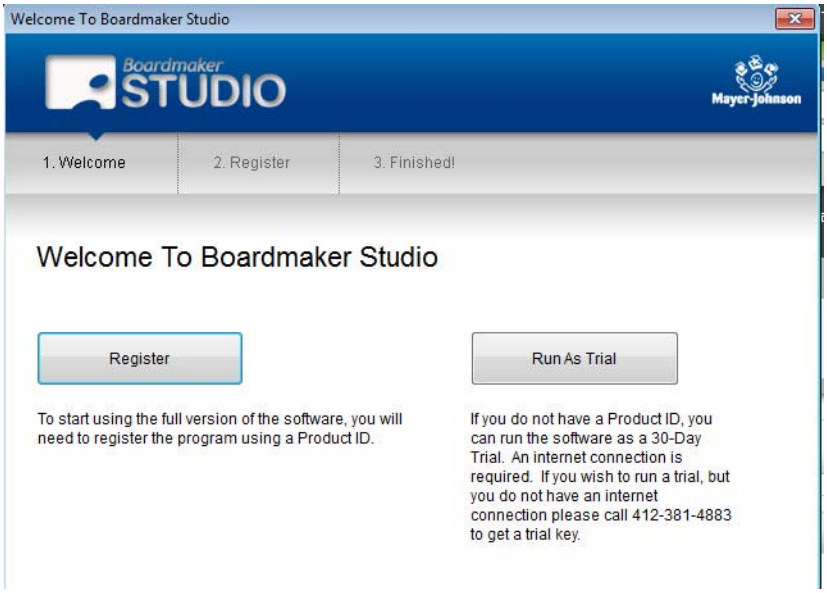
1. Double-click the Boardmaker Studio icon on your desktop. Boardmaker Studio will open, and the *Boardmaker Studio End User License Agreement* will open.

Boardmaker Studio End User License Agreement



2. Select **Accept**. The *Welcome to Boardmaker Studio* dialog will appear.

WELCOME TO BOARDMAKER STUDIO DIALOG



3. To register and use the full version of the Boardmaker Studio software on your computer, select **Register**.

> **NOTE**
> You must have a valid license key to register and use the full version of Boardmaker Studio. If you don't have a license key, or if you want to use the software on a trial basis, then you can select Run as Trial to use Boardmaker Studio for 30 days.

4. Complete the following fields:

   - **Product ID -** Enter the product ID that you received with the Boardmaker Studio software. If you installed the software from a CD or DVD, then you can find the product ID on the back of the CD/DVD case. If you purchased the software online, then you can find the product ID in the e-mail message that was sent to you when you bought the software.

> **NOTE**
> If you misplace the product ID, you can also access it from your account on *http://store.mayer-johnson.com*.

   - First Name
   - Last Name
   - Email
   - Organization

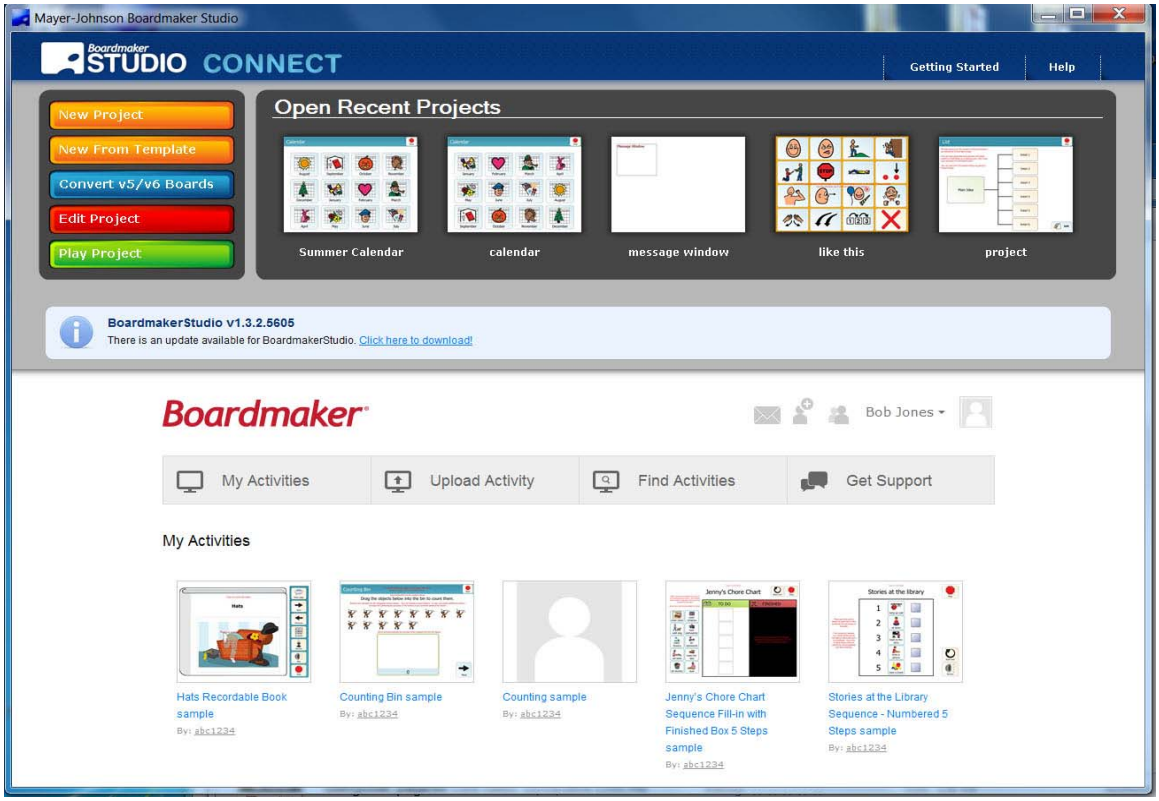
5. Select **Register**. Boardmaker Studio is registered.

6. Select **Launch Studio** . The *Boardmaker Studio Connect* screen will open. (For more information about the Connect screen, see ***Boardmaker Studio Connect***.)

Open Boardmaker Studio After the First Time

You only need to register Boardmaker Studio the first time you open it. After registering, when you open Boardmaker Studio, a splash screen will open as the software loads. When Boardmaker Studio has loaded, the *Boardmaker Studio Connect* screen will open, and you can begin using the software.

The Boardmaker Studio Connect Screen

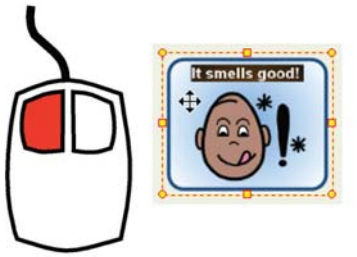


Basic Software Techniques

To take advantage of all the many features of Boardmaker Studio, it is important that you are familiar with basic software techniques. Following is a quick review of the basic skills that are used repeatedly throughout this guide.

Click

Press the left mouse button to select objects (buttons, text, lines, symbols, folders, etc.).



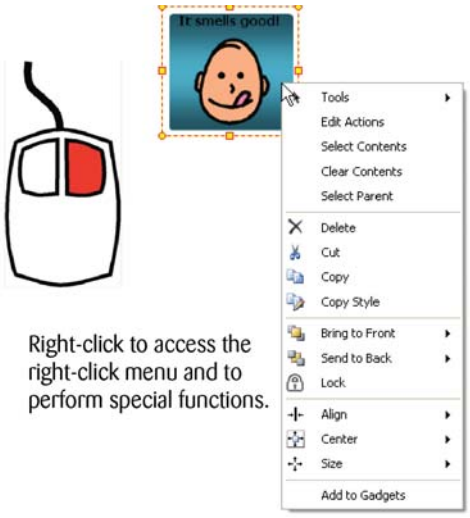
Click to select objects like buttons.

Right-click

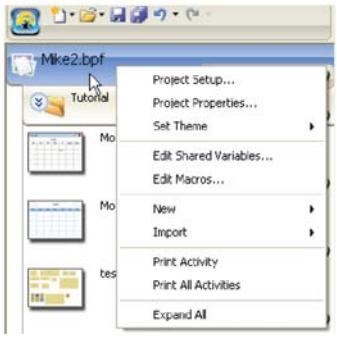
Press the right mouse button to access right-click menus and perform special functions.

In Boardmaker Studio, right-clicking on most objects will provide access to a menu containing commands that are specific to the object or objects that are selected and that provide a quick way to perform common tasks like copying, pasting, aligning, setting properties, and more.

Right-clicking in the Project panel will open a menu specific to the selected project, activity, or page.



Right-click to access the right-click menu and to perform special functions.



Double-click

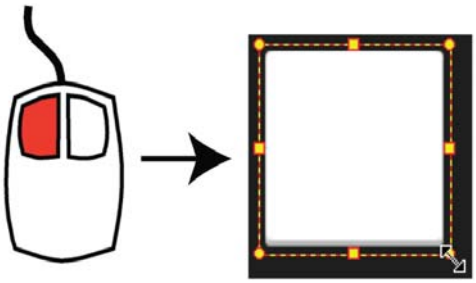
Click twice, quickly, with the left mouse button on a programmable object to open the *Action Editor*. Double-click on any folder to open it.

Double-click on a programmable object to open the Action Editor. Double-click on a folder to open it.

Click and Drag

Click and hold the left mouse button down while moving the mouse in the appropriate direction.

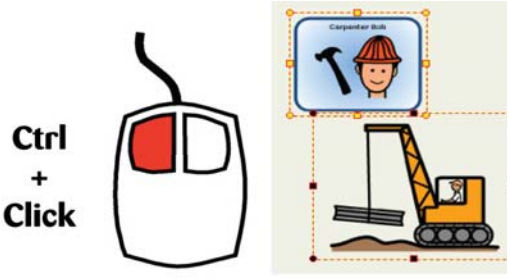
Click and drag is used to draw, resize, and move objects or items.



Click and drag to draw, move, or resize an object.

Ctrl + click

Use **Ctrl** + click to select multiple objects. Click on the first object, hold the **Ctrl** key down, and then click on the next object or objects. Each object you **Ctrl** + click will be added to the selection group. **Ctrl** + click an object that is part of a selection group to de-select it.

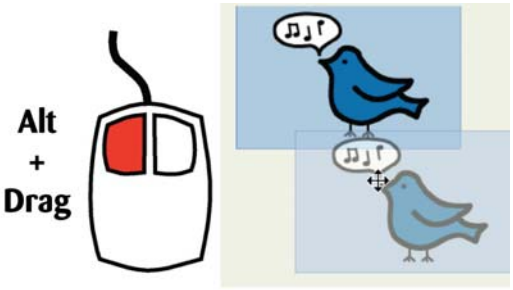


Ctrl+click on objects to add them to the selection group.

Alt + drag

Use Alt + drag to copy an object and drag the copy anywhere in the workspace.

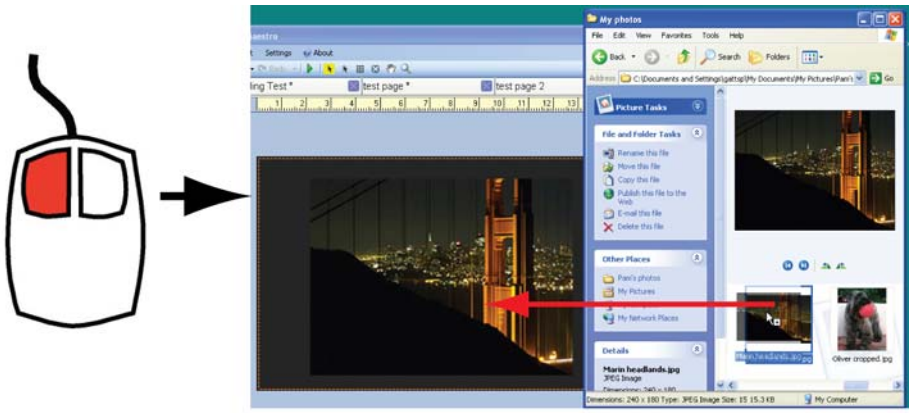
Click on the object you want to copy. Hold down the Alt key and the left mouse button, and drag the copy to the area of the workspace where you want to place it.



Click on the object, then hold down the **Alt** key and the left mouse button and drag the copy where you want it.

Drag-and-drop

You can drag pictures, sound, and video files from outside Boardmaker Studio - from Windows Explorer or a web page - to your workspace. You can also drag-and-drop a SmartSym from the Symbols panel; a gadget from the Gadgets panel; or a tool from the toolbar directly onto a page. Click on the object. Hold down the left mouse button and drag the object to your Boardmaker Studio workspace. Release the left mouse button to place the object in the workspace.



Hold down the left mouse button, and drag and drop an object from outside Boardmaker Studio to the workspace.

Mouse Over

In Boardmaker Studio, briefly resting the mouse pointer ("mousing over") over an item in the toolbar will display a short description of the item.

Briefly rest the mouse pointer over an item in the toolbar to see a description of the item.

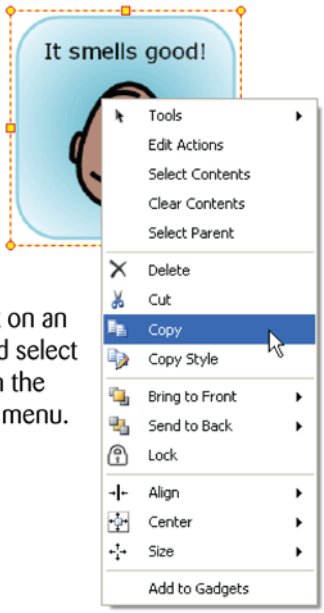
Copy

When you copy an object in the workspace, it will be saved to the Windows clipboard and can be pasted back onto the page or onto another page. There are two ways you can copy an object:

Right-click on the object, then select **Copy** from the right-click menu.

or

Click on the object, then hold down **Ctrl** + **C** on your keyboard.



Right-click on an object, and select **Copy** from the right-click menu.

Cut

When you "cut" an object from the workspace, it will be saved to the Windows clipboard and can be pasted back onto the page or onto another page. There are two ways you can cut an object from the workspace:

Right-click on the object, then select **Cut** from the right-click menu.

or

Click on the object, then hold down **Ctrl** + **X** on your keyboard.

Right-click on an object, and select **Cut** from the right-click menu.

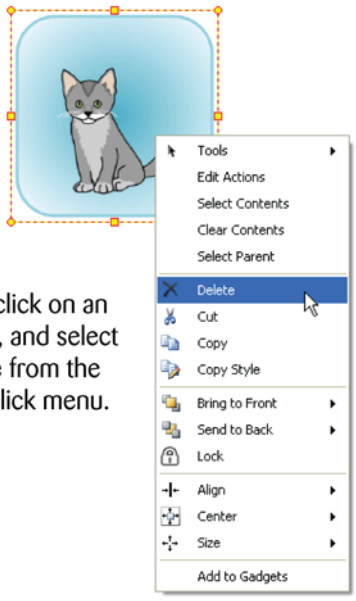
Delete

Deleting an object permanently removes the object - it cannot be pasted back onto the page. There are two ways you can delete an object:

Right-click on the object, then select **Delete** from the right-click menu.

or

Click on the object, then press the **Delete** key on your keyboard.



Right-click on an object, and select **Delete** from the right-click menu.

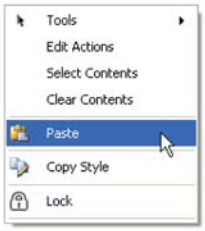
Paste

When you have copied or cut an object from the workspace, it is saved to the Windows clipboard. You can then "paste" the object back onto the page or onto another page.

There are two ways to paste an object:

Right-click in an empty area on the page. Select **Paste** from the right-click menu.
or
Click in an empty area on the page, then hold down **Ctrl** + **V** on your keyboard.

Click and drag to move the object where you want to place it.



Right-click in the workspace to open the right-click menu, and select **Paste**.

Undo / Redo

Boardmaker Studio supports multiple levels of "undos" and "redos."

To undo any operation:

Select **Undo** from the toolbar. (Recent operations are listed - you can select more than one operation to undo.)
or
Hold down **Ctrl** + **Z** on your keyboard).

To "redo" the operation:

Select **Redo** from the toolbar. (Recent operations are listed - you can select more than one operation to redo.)
or
Hold down **CTRL** + **Shift** + **Z** on your keyboard).

You can undo or redo multiple times until you close the page.

Select **Undo** (or **Redo**) from the toolbar.Then select the operation or operations you want to undo (or redo).

3 Boardmaker Studio Overview

This chapter is an overview to help familiarize you with Boardmaker Studio.

This chapter covers the following topics:

- ***The Designer Workspace at a Glance***
- ***Modifying the Workspace***
- ***Boardmaker Studio Software Modes***

The Designer Workspace at a Glance

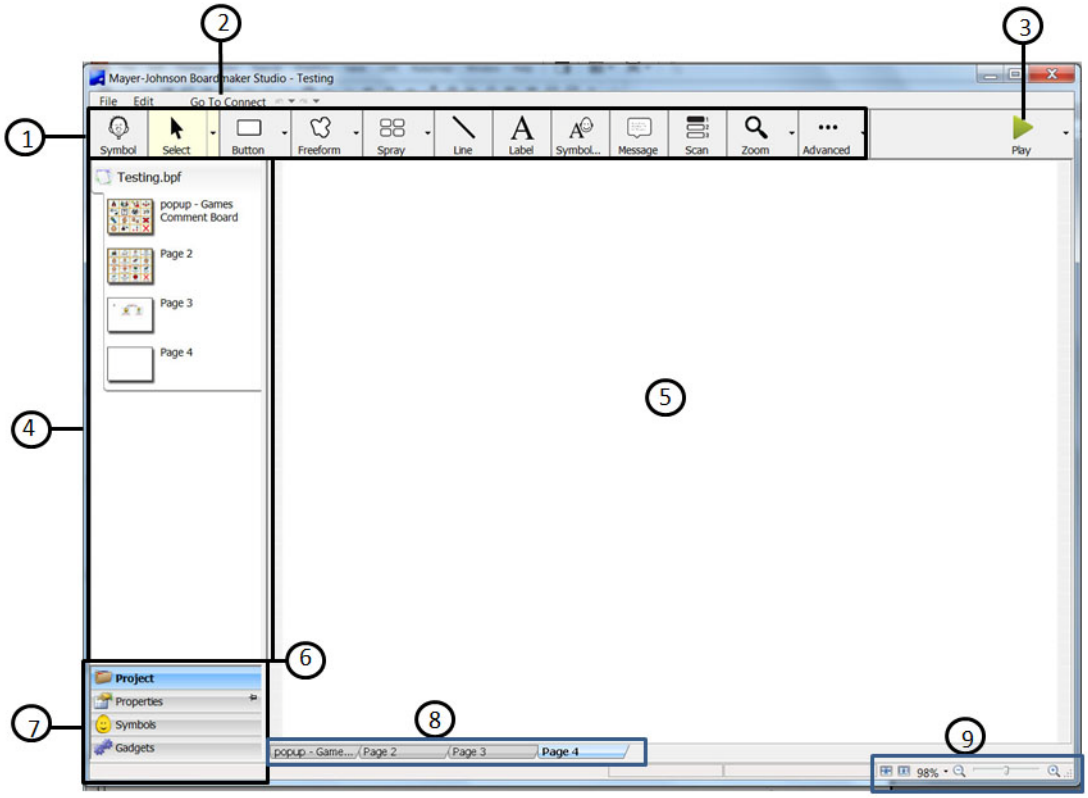
The Boardmaker Designer is the primary workspace you will use for designing interactive content.

Reference

You can customize the workspace - show gridlines and rulers, set the grid and spray spacing, etc. - using the *General* settings on the *Settings* dialog. See *General Settings - Modify the Workspace*.

Boardmaker Studio Designer at a Glance

Boardmaker Studio Designer



1 **Toolbar -** Contains the page design, and drawing tools. (See ***Toolbar at a Glance***.)

2 **Go To Connect button -** Closes the current project and opens the *Boardmaker Studio Connect* screen. (See ***Boardmaker Studio Connect***.)

3 **Mode button -** Drop-down menu to change to Preview or Play modes. (In Preview and Play modes, this button will change to the Stop icon. Select this icon to return to Design Mode.) (See ***Boardmaker Studio Software Modes***.)

4 **Navigation pane -** Displays the Project, Properties, Symbols, or Gadgets panels.

5 **Designer workspace -** Area in which you create and edit pages. (See ***Designing a Page***.) (You can customize the appearance of the workspace - show or hide rulers and grid lines, change the spray and grid spacing, etc. through the *Settings* dialog. (See ***General Settings - Modify the Workspace***.)

6 Pins ("docks") the Properties panel to the right of the workspace. (See ***"Pinning" the Properties Panel***.)

7 **Navigation buttons -** Open the *Project*, *Properties*, *Symbols,* or Gadgets panel. (See ***Properties Panels at a Glance***.)

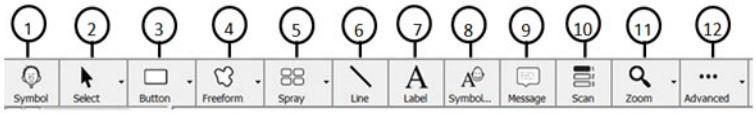
8 **Page tabs -** Represent each page that is open in the current project. Selecting a page tab will open that page for editing. (Selecting the Close icon that appears when you mouse over the page tab will close that page.)

9 **Zoom controls -** Adjust the size the page is displayed.

Toolbar at a Glance

The Studio toolbar contains all of the tools you will need for accessing help; for opening, closing, and saving projects; for choosing the system settings; and for creating and editing your projects and pages.

Boardmaker Studio Designer Toolbar



1 **Symbol -** Open the Symbol panel to search the symbol library and add symbols to a page. (See ***Working with Symbols***.)

2 **Select/Quick Select -** Using the Select tool, mouse over an object and click the left mouse button to select that object. To select multiple objects with the Select tool, hold down on the left mouse button and mouse over the objects you want to choose.

Use the Quick Select tool to select and move a single object with one mouse click. Click on the Quick Select tool and then select an object. You can immediately drag the object to a new position in the workspace.

3 **Button -** Select a button style. Draw a rectangular ("standard") button, a group button, symbolate button, word predictor button, target button or hotspot in the workspace. (See ***Working with Buttons***.)

4 **Freeform -** Create a freeform button or hotspot. (See ***Working with Freeform Objects***.)

5 **Spray -**Spray out copies of a selected object to make a rectangular or circular grid of id entical objects. (See ***Creating a Grid of Objects*.)**

6 **Line -** Draw a horizontal, vertical or diagonal line. (See

7 **Label -** Create a new text label. (See ***Working with Labels***.)

8 **Symbolate -** Create a symbolate button. (See ***Word Lists***.)

9 **Message -** Create a Message Window. (See ***Working with Message Windows***.)

10 **Scan Order Tool -** Set the order in which the objects on the page will scan.(See ***Setting the Scan Order for an Individual Page***.)

11 **Zoom/Pan -** Select the Zoom tool and click anywhere on the page to zoom in. Click repeatedly to increase the zoom.

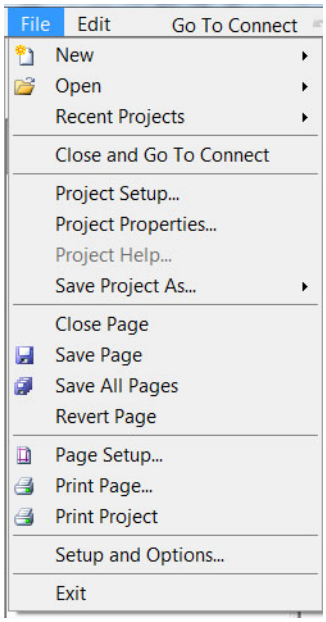
Select the Pan tool to move the page in any direction without changing its scale. If the page is too large to be viewed in its entirety, select the Pan tool, click on the page and (while holding down the left mouse button) move the page up or down or to the right or left.

12 **Advanced -** Choose an advanced feature. Add a video box, a group box, a check box, a radio button, a text box, or a tab control to the workspace. (See ***Working with Video Boxes***, ***Working with Group Boxes***, ***Working with Radio Buttons and Check Boxes***, ***Working with Text Boxes***, and ***Working with Tab Controls***.)

File Menu at a Glance

The File Menu contains commands for creating a new project, opening a saved project, page setup, printing, and for accessing the *Settings* dialog and accessing help.

File Menu



New - Create a new project or page, project or page from a template, or import Boardmaker boards to create a new project. (See ***Creating Original Content***, ***Creating Content Using***

Templates, and ***Create a New Project from Boardmaker Conversion***.)

Open - Open a saved project or a page.

Recent Projects - Display a list of projects that have been opened most recently. Select a project from this list to reopen it.

Close and Go to Connect - Close the currently open project and open Boardmaker Studio Connect.

Project Setup - Open the *Project Setup* dialog to define the project settings - the settings that control how the project, activity, or page will work. (See ***Set the Project Settings***.)

Project Properties - Open the *Project Template Properties* dialog. (See ***Setting the Project Template Properties***.)

Project Help - Open a popup displaying project help text. (This command will be grayed out if no help text has been entered in the *Project Template Properties* dialog. See ***Enter Custom Help Text***.)

Save Project As - Save a copy of the currently open project as a new project or a template.

Close Page - Close the page that is currently open.

Save Page - Save all changes you have made to the currently open page.

Save All Pages - Save all changes you have made to pages in the currently open project.

Revert Page - Cancel all the changes you made to the currently open page since it was last saved. (This command will be grayed out if no changes have been made to the page.)

Page Setup - Change the sizing, width, height, and orientation of the currently open page.

Print Page - Open the *Print Setup* dialog to select setup options and print a page from the currently open project. (See ***Printing a Page From Your Project***.)

Print Project - Print all of the pages (or selected pages) of the currently open project. (See ***Printing an Activity or Project***.)

Setup and Options - Open the *Settings* dialog to choose your interface settings - access method settings, text to speech settings, and your symbol and language settings.

Help - Access a PDF version of this User Guide, online tutorials, and Boardmaker Studio version information.

Exit - Close Boardmaker Studio.

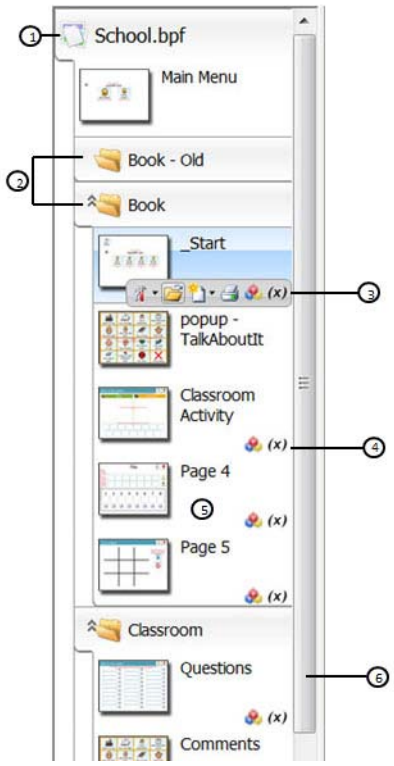
NOTE

An abbreviated version of the File Menu - including the *Stop, Project Setup, Print, Setup and Options,* and *Exit* commands - is available in Preview and Play modes.

Project Panel at a Glance

The *Project* panel displays the activities and pages in the currently open project.

PROJECT PANEL



NOTE

Right-click menus are available at the project, activity, and page levels. Right-click on the project name, activity name, or page to open the menus. Use these menus to edit project or activity properties, edit shared variables or macros, set themes, and import other Boardmaker Studio projects or Boardmaker boards. See *Right-Click Menus at a Glance* for information on using these menus.

1 **Project folder -** Top level (project-level) folder.

2 **Activity folders -** Activity-level folders. Select the arrow to open a folder and display the pages in it. (Note that the activity contains shared macros and variables at the activity level.

3 **Floating toolbar -** Displayed when you mouse over the project folder, a page, or an activity folder. The toolbar contains tools for editing the project/activity/page, for printing, and for editing shared variables and macros.

4 **Floating toolbar -** Displayed when you mouse over the project folder, a page, or an activity folder. The toolbar contains tools for editing the project/activity/page, for printing, and for editing shared variables and macros.

5 **Pages -** Thumbnails of each page within the activity or project. (Icons will appear if there are any shared macros and/or variables at the page level.) Double-click a page icon to open the page.

6 **Scroll bar -** Scroll down to view all the activities/pages in the project.

Properties Panels at a Glance

Use the Properties panel is to assign properties (content, programming, symbols, shape, style, audio cue, drag-and-drop and target properties, etc.) to an object.

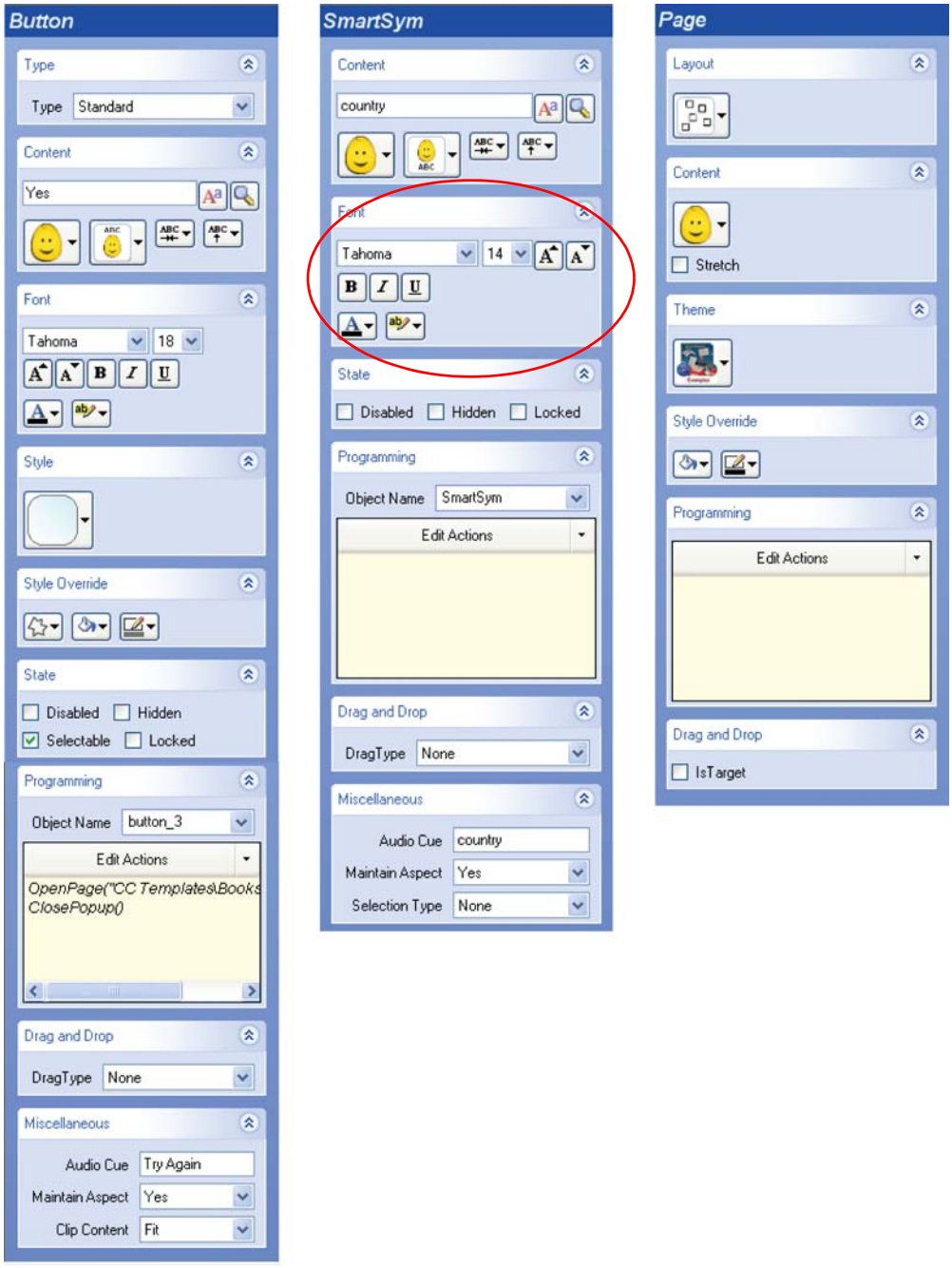
Whenever an object in the workspace – or a page itself – is selected, the Properties panel for that object will open. The controls in the Properties panel will vary depending on the object selected.

The Properties panels are divided into Properties groups, which are arranged by function (such as *Content, Font*, *Programming*, *Style*, *Drag-and-Drop*, etc.)

REFERENCE

See the *Designing a Page* chapter for step-by-step instructions for using the various Properties panels to assign properties to a newly created object or to edit the properties of an existing object.

PROPERTIES PANELS (EXAMPLES - WITH FONT PROPERTY GROUP CIRCLED)



NOTE

By default, when you draw an object, the Properties panel will open on the left side of the workspace. It will close when another Navigation button is selected (*Project*, *Symbols*, or *Gadgets*). If you want to keep the Properties panel open, you can "pin" it to the right side of the workspace. (See *"Pinning" the Properties Panel*.)

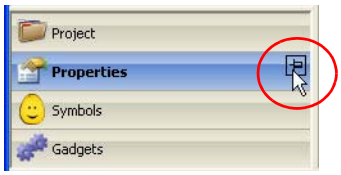
"Pinning" the Properties Panel

By default, when you draw an object, the Properties panel for that object will open on the left side of the workspace. The Properties panel will close when another Navigation button is selected (*Project*, *Symbols*, or *Gadgets*), or when another object on the page is selected.

This may be inconvenient when you are designing pages, so Boardmaker Studio provides the option of moving the Properties panel to the right side of the workspace and "pinning" it (or "docking" it) there so that it is always available.

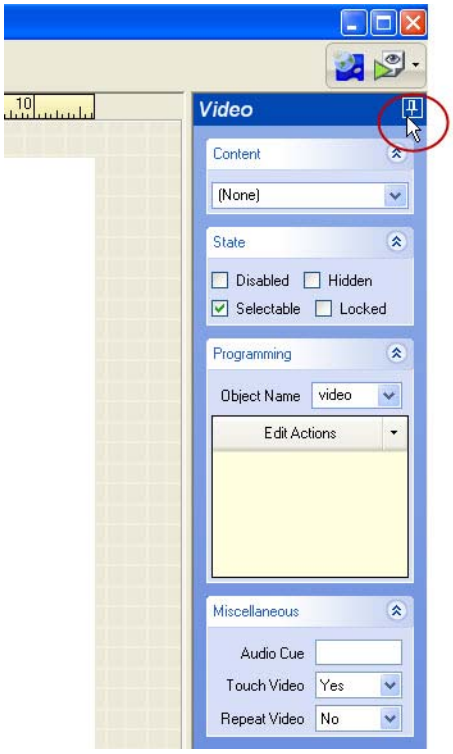
To pin the Properties panel to the right side of the workspace, select the horizontal pin icon [] on the **Properties** button in the Navigation Pane.

Properties Button in Navigation Pane (showing horizontal pin icon)



The Properties panel will move to the right of the workspace, and a vertical pin icon [] will appear at the top right corner of the panel.

"Pinned" Properties Panel (showing vertical Pin icon)



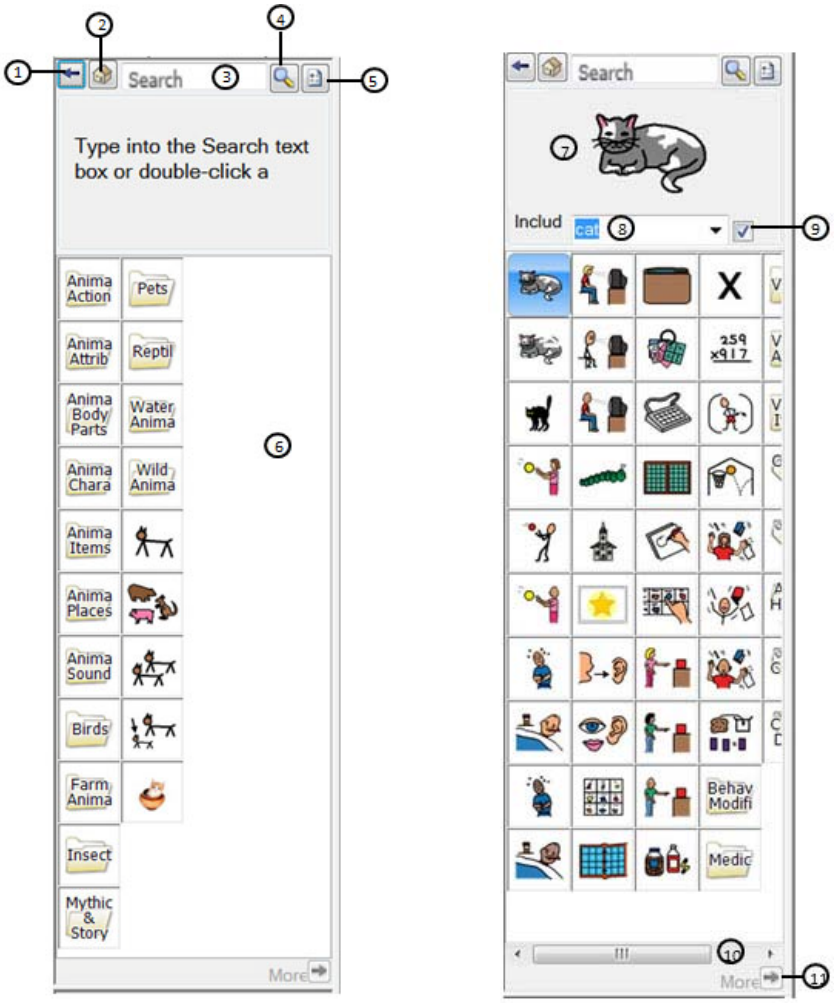
To "unpin" the Properties panel, select the vertical pin icon [] in the top right corner of the panel. The panel will return to its original position on the left side of the workspace.

Symbols Panel at a Glance

SmartSyms" are symbol/label pairs that behave as a single object. You can place a SmartSym directly on a page, on an object on a page, or use a SmartSym as the page background. SmartSyms can also be assigned actions.

Use the Symbols panel to quickly search for a symbol (SmartSym), choose its label, and then drag it onto an object on a page or onto the page itself. The symbol can be placed on an object on a page or can be used as the page background - made non-selectable and have other objects placed on top of it - or multiple symbols can be placed on a page - made selectable and movable and programmed with actions.

Symbols Panel (top and second levels)



1 **Back arrow button -** Move backward through the browsing history in your symbol search.

2 **Home button -** Display the top level of symbol category folders in the symbols pane.

3 ***Search*** **text box -** Enter your search criteria in this field.

4 **Symbol search button -** Search for items that match the search criteria you have entered in the *Search* text box.

5 **Symbols and Language button -** Provides quick access to label and search language settings and symbol preferences.

6 **Symbols pane -** Displays icons for the available folders for each symbol category. Double-click on a folder or subfolder to display the symbols it contains. Drag-and-drop any symbol into the workspace.

7 **Preview area -** Dynamically displays the selected symbol. Drag-and-drop the symbol from the preview area into the workspace.

8 ***Label*** **drop-down list -** Display the label(s) for the currently selected symbol. You can edit the symbol label or enter a new label in the text field.

9 **Include label check box -** Select this box to include a label(s) for the selected symbol. (Deselecting this check box will gray out the label text box and no label will be displayed or included when you drag the SmartSym onto a button.)

10 **Scroll bar -** Select this bar and drag it to display more symbol choices in the symbols pane. (The scroll bar will only appear when the number of available symbols exceeds the display space in the symbols pane.)

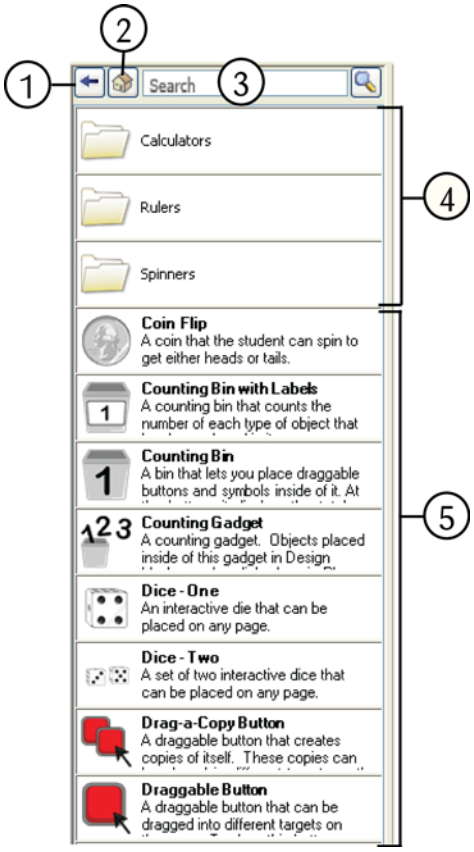
11 ***More*** **button -** Expands the symbols pane into the workspace so that all available symbols are displayed. (This button will be grayed out if there is room in the symbols pane to display all available symbols.)

Gadgets Panel at a Glance

Gadgets are pre-programmed objects and groups of objects you can use to construct interactive activities. Use the *Gadgets* panel to browse through the gadgets and add them to your pages. The gadgets are organized into categories and subcategories so that you can quickly locate the one that you need.

REFERENCE
See *Working with Gadgets* for step-by-step instructions for browsing for, using, and managing gadgets.

GADGETS PANEL (WITH MATHEMATICS CATEGORY EXPANDED)



1 **Back arrow button -** Move up one level in the gadget folder hierarchy.

2 **Home button -** Display the top level gadget category folders.

3 **Search text box -** To search for a gadget, enter your search criteria and then select the Search icon.

4 **Categories -** Double-click a category folder to open it and browse the gadgets and subcategories inside.

5 **Gadgets -** To place a gadget on the page, select the gadget and drag it onto the page.

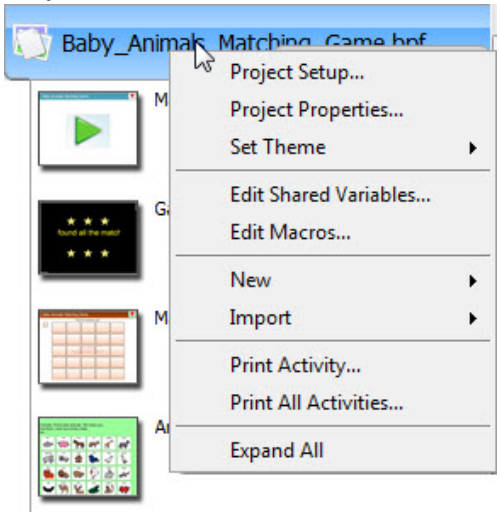
Right-Click Menus at a Glance

Right-click menus are available from both the *Project* panel and from any object on the page, including the page itself.

Project Right-Click Menu

When you right-click on the project name in the *Project* panel, a menu will open.

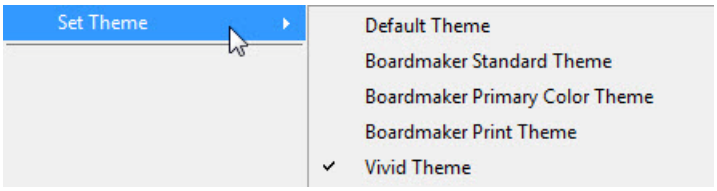
PROJECT RIGHT-CLICK MENU



Project Setup — Open the *Project Setup* dialog to define the project settings - the settings that control how the project will work. (See ***Set the Project Settings***.)

Project Properties — Open the *Project Properties* dialog to set the project properties, including adding a project description, tags, categories, help text, and more. (See ***Set the Properties***.)

Set Theme — Set the theme for all pages in the project.

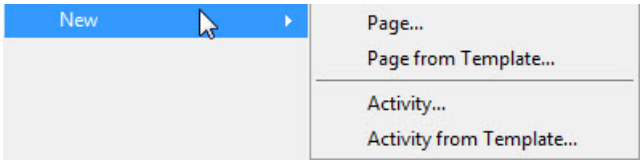


Edit Shared Variables — Open the *Edit Shared Variables* dialog. (See ***Working with Shared Variables***.)

Edit Macros — Open the *Project Macros* dialog. (See ***Working with Macros***.)

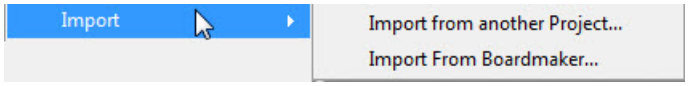
New

Create a new page or activity for the currently open project.



Import

Import other projects from Boardmaker Studio or boards from Boardmaker into the currently open project. (See ***Combine Projects***.)



Print Activity

Print all pages in the project. (Pages within activity folders will not be printed.)

Print All Activities

Print all pages in the project, including pages in activity folders and sub folders.

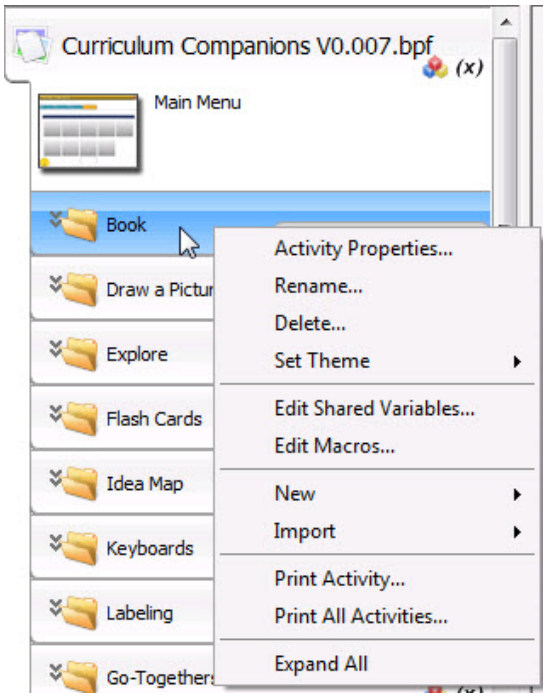
Expand All

Expand all activity folders and sub folders so that all pages in the project are displayed.

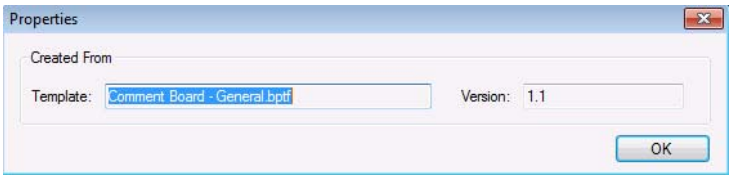
Activity Right-Click Menu

When you right-click on the activity name in the *Project* panel, a menu will open.

ACTIVITY RIGHT-CLICK MENU



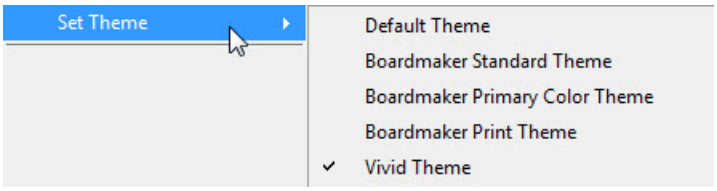
Activity Properties — Open the *Activity Properties* dialog. If the activity has been created from a template, the dialog will display the name and version of the template from which it was created.



Rename — Open the *Activity Name* dialog to rename the selected activity.

Delete — Delete the selected activity from the project.

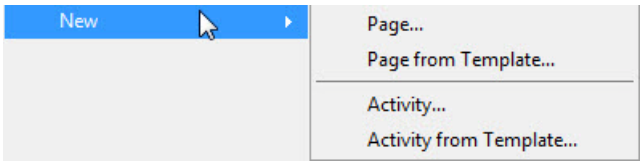
Set Theme — Set the theme for all pages in the activity.



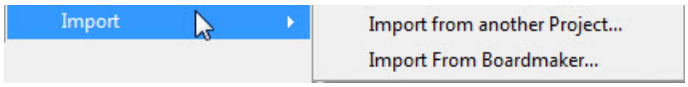
Edit Shared Variables — Open the *Edit Shared Variables* dialog. (See ***Working with Shared Variables***.)

Edit Macros Open the *Project Macros* dialog. (See ***Working with Macros***.)

New Create a new page or activity for the selected activity.



Import Import other projects from Boardmaker Studio or boards from Boardmaker into the selected activity. (See ***Combine Projects***.)



Print Activity Print all pages in the activity. (Pages within sub folders will not be printed.)

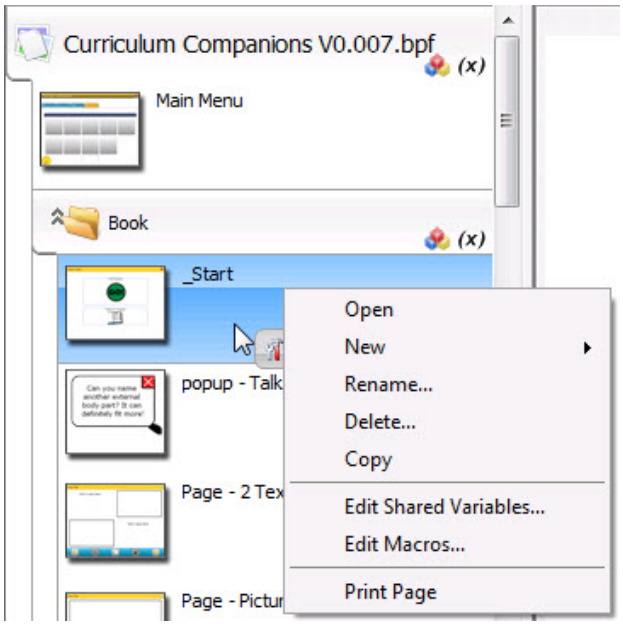
Print All Activities Print all pages in the activity.

Expand All Expand all sub folders so that all pages in the selected activity are displayed.

Page Right-Click Menu

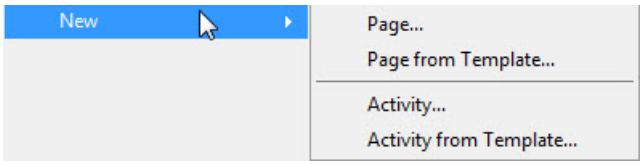
When you right-click on a page name in the *Project* panel, a menu will open.

PAGE RIGHT-CLICK MENU



Open — Open the selected page.

New — Create a new activity sub folder or a new page at the same level that the page is located.



Rename — Open the *Page Name* dialog so you can rename the selected page.

Delete — Delete the selected page from the project.

Copy — Copy the selected page. (As soon as you copy a page, the *Paste* command will appear on the right-click menu.)

Edit Shared Variables — Open the *Edit Shared Variables* dialog. (See ***Working with Shared Variables***.)

Edit Macros — Open the *Project Macros* dialog. (See ***Working with Macros***.)

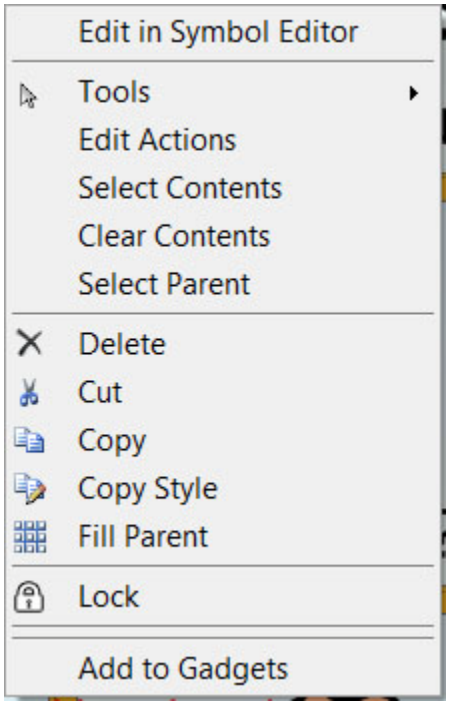
Print Page — Print the selected page.

Object Right-Click Menu

A menu will open when you right-click on any object on a page or on the page itself. These right-click menus enable you to quickly access the design, selection, spray, and zoom tools; to modify, copy, delete, and adjust the position of the selected object; to edit the action script programmed on the object; and to save the object as a gadget.

Several of the options on the right-click menus will vary, depending upon the object on which you have right-clicked.

Object Right-Click Menu (Showing Button Options)



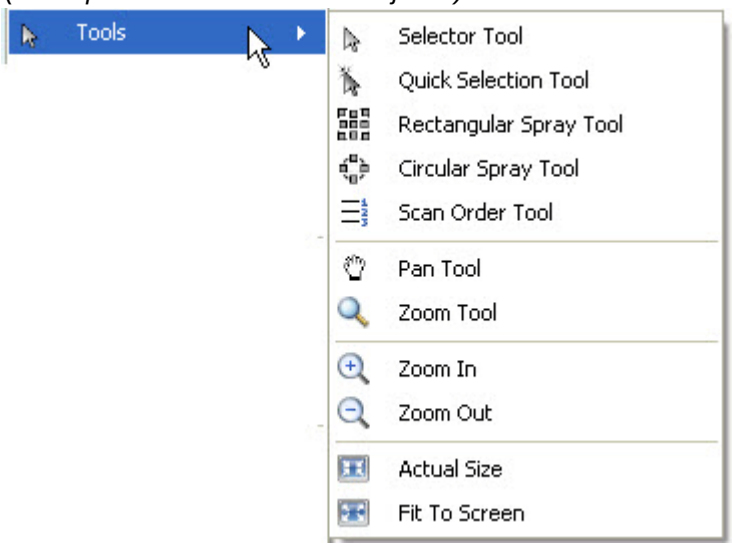
Following is a complete list of options available through the right-click menus for various objects. This list specifies the options available for each selected object.

Note
The right-click menu for pages contains only the *Tools, Edit Actions, Select Contents, Clear Contents, Copy Style,* and *Lock* options.

Edit in Image Editor	Open your computer's default image editing software. *(This option is available only for SmartSyms.)*
Add Tab	Adds an additional tab to a tab control object. *(This option is available only for tab controls.)*

Edit in Symbol Editor
Open the *Symbol Editor*.
(This option is available for symbols and symbol buttons.

Tools
Access the design, selection, spray, and zoom tools.
(This option is available for all objects.)



Edit Actions
Open the *Action Editor*.
(This option is available for all objects.)

Select Contents
Select all content (including label, symbol, actions, audio cue, and all objects in a group button or group box) in the selected object.
(This option is available for pages, all buttons, including group and freeform buttons, message windows, and group boxes.)

Clear Contents
Remove all content (including label, symbol, actions, audio cue, and all objects in a group button or group box) from the selected object.
(This option is available for pages, all buttons, including group and freeform buttons, message windows, and group boxes.)

Select Parent
Change the selection to contain the "parent" object of the object that was originally selected. For example, if a label on a button is selected, the "parent" of the label would be the button.
(This option is available for all objects except pages.)

Delete
Remove the object from the page.
(This option is available for all objects except pages.)

Cut
Cut the selected object to the system clipboard. (You can then paste the object in a new location.)
(This option is available for all objects except pages.)

Copy
Copy the selected object to the system clipboard. (You can then paste the object in a new location.)
(This option is available for all objects except pages.)

Paste

Paste an object that has been cut or copied.

(This option is available for all objects except pages.)

Copy Style

Copy the style properties of the object to the system clipboard. (Use the *Paste Style* option to duplicate the object's style on another object of the same type.)

(This option is available for all objects, including pages.)

Paste Style

Paste the copied style properties onto another object of the same type

(This option is available for all objects, including pages.)

Swap

Exchange the position of two selected objects of the same type. (The contents of the objects will also be swapped.)

(This option is available for all objects except pages, but is most useful for swapping the positions of standard buttons.)

Shuffle

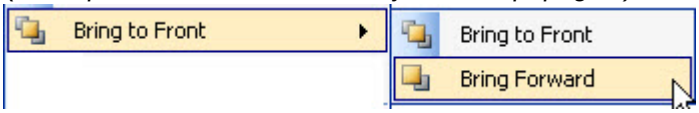
Exchange the position of three of more selected objects of the same type. (The contents of the objects will also be swapped.)

(This option is available for all objects except pages, but is most useful for swapping the positions of standard buttons.)

Bring to Front

Objects on a page are layered and can overlap. Selecting this option opens a drop-down menu that enables you to move the selected object up through layers.

(This option is available for all objects except pages.)

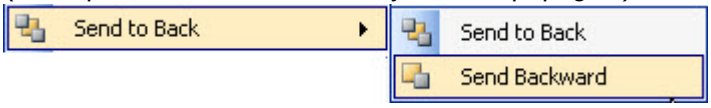


- *Bring to Front* – Reposition the selected object on the top layer.
- *Bring Forward* – Move the selected object up one layer.

Send to Back

Objects on a page are layered and can overlap. Selecting this option opens a drop-down menu that enables you to move the selected object down through layers.

(This option is available for all objects except pages.)



- *Send to Back* – Reposition the selected object on the bottom layer.
- *Send Backward* – Move the selected object down one layer.

Lock

"Lock" an object so that it will not be selectable in any mode by a normal mouse click or drag.

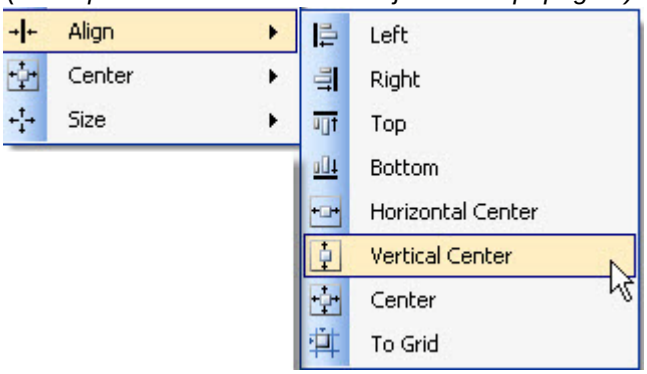
(This option is available for all objects.)

Unlock

Unlock an object that is locked.
(This option is available for all objects.)

Align

Adjust the relative positions of multiple selected objects on the page.
(This option is available for all objects except pages.)

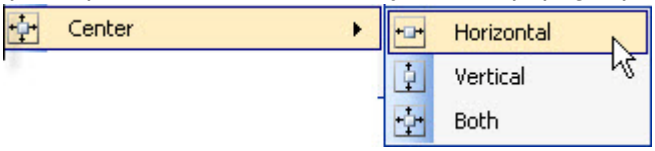


- *Left* – Align the selected objects with the point in the selected group that is farthest left on the workspace. (Use this option for objects in a vertical column.)
- *Right* – Align the selected objects with the point in the selected group that is farthest right on the workspace. (Use this option for objects in a vertical column.)
- *Top* – Align the selected objects with the point in the selected group that is highest on the workspace. (Use this option for objects in a horizontal row.)
- *Bottoms* – Align the selected objects with the point in the selected group that is lowest on the workspace. (Use this option for objects in a horizontal row.)
- *Horizontal Center* – Align the center points of selected objects. (Use this option for objects in a vertical column.)
- *Vertical Center* – Align the center points of selected objects. (Use this option for objects in a horizontal row.)
- *Center* – Place the selected object in the center of the page.
- *To Grid* – Align the edge of a selected object with the gridline. (This will work whether or not the grid is showing.)

Center

Center the selected objects horizontally, vertically, or both horizontally and vertically in the workspace.

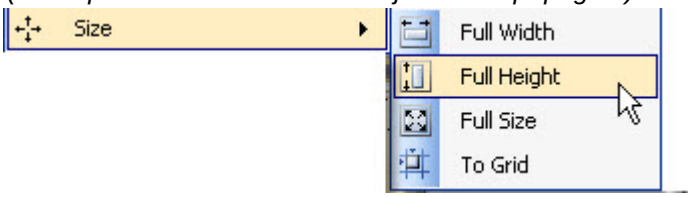
(This option is available for all objects except pages.)



Size

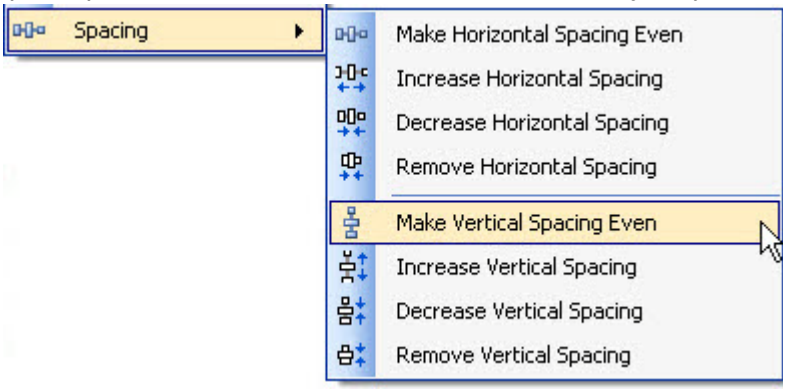
Resize all of the selected objects to the same width, same height, same size, or to fit within the background gridlines. The resulting size is based upon the first object selected. (That is, all objects will be resized to match the size of the first object you selected.)

(This option is available for all objects except pages.)



Spacing

Adjust the distance between selected objects on the page. *(This option is available for three or more selected objects.)*

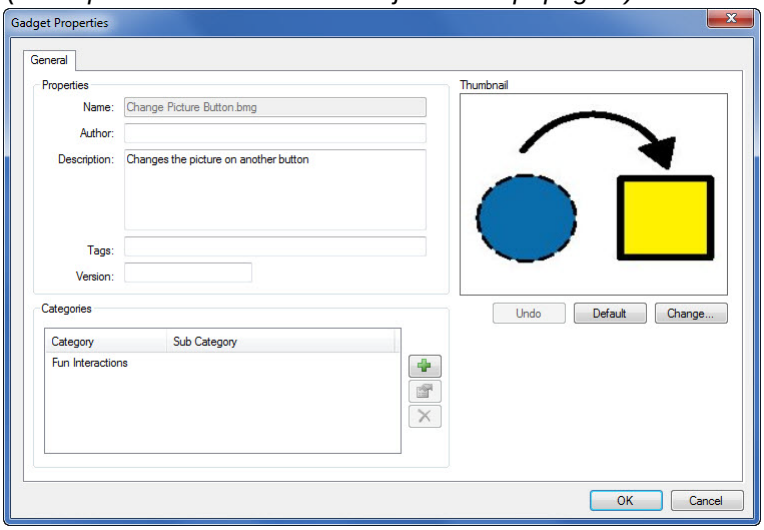


- *Make Horizontal Spacing Even* – Place the selected objects equidistant from one another on a horizontal axis.
- *Increase Horizontal Spacing* – Move the selected objects farther apart in small increments along a horizontal axis.
- *Decrease Horizontal Spacing* – Move the selected objects closer together in small increments along a horizontal axis.
- *Remove Horizontal Spacing* – Remove all horizontal spacing between the selected objects.
- *Make Vertical Spacing Even* – Place the selected objects equidistant from one another on a vertical axis.
- *Increase Vertical Spacing* – Move the selected objects farther apart in small increments along a vertical axis.
- *Decrease Vertical Spacing* – Move the selected objects closer together in small increments along a vertical axis.
- *Remove Vertical Spacing* – Remove all vertical spacing between the selected objects.

Add to Gadgets

Save the selected object as a new gadget. When you select this option, the *Gadget Properties* dialog will open, so you can define the gadget properties and select a category and subcategory for the gadget.

(This option is available for all objects except pages.)



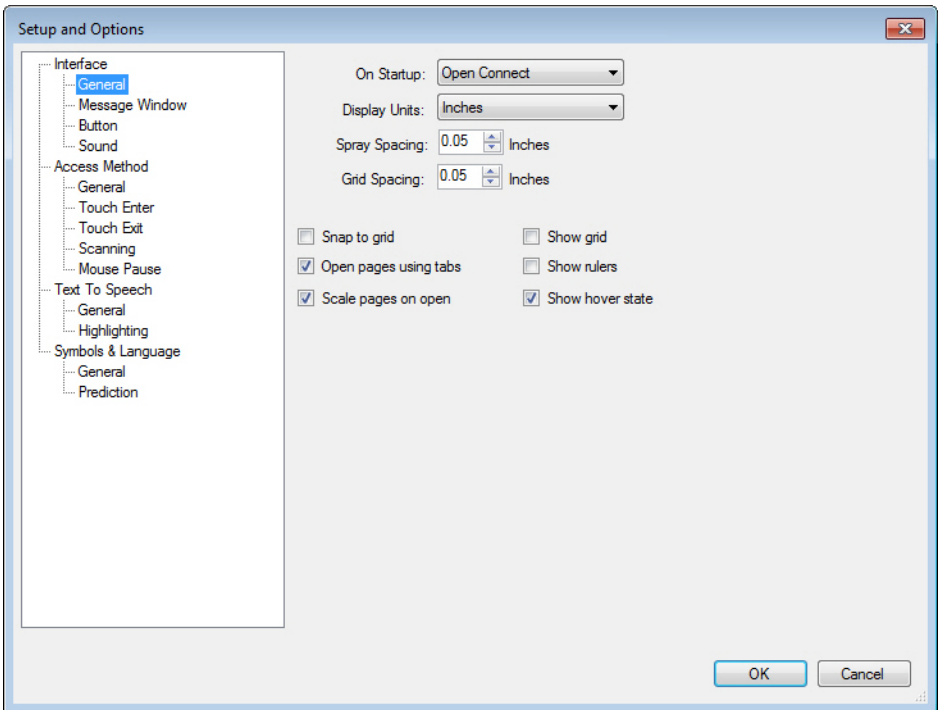
MODIFYING THE WORKSPACE

You can customize the Designer workspace. You can select the quality of your screen display; choose to show or to hide gridlines and rulers and have your page objects snap to the grid; select display units. You can set the grid and spray tool spacing and units of measure. You can also choose whether to display page tabs at the bottom of each page and scale your pages to fit the workspace.

Modify the workspace using the *General* settings on the *Settings* dialog:

1. Select **File Menu > Setup and Options**. The *Settings* dialog will open.
2. Select **Interface > General** from the navigation pane.

GENERAL SETTINGS



3. Use the controls in the *General* settings to customize the workspace settings.

REFERENCE
See *General Settings - Modify the Workspace* for step-by-step instructions for using the *Settings* controls to customize the Designer workspace.

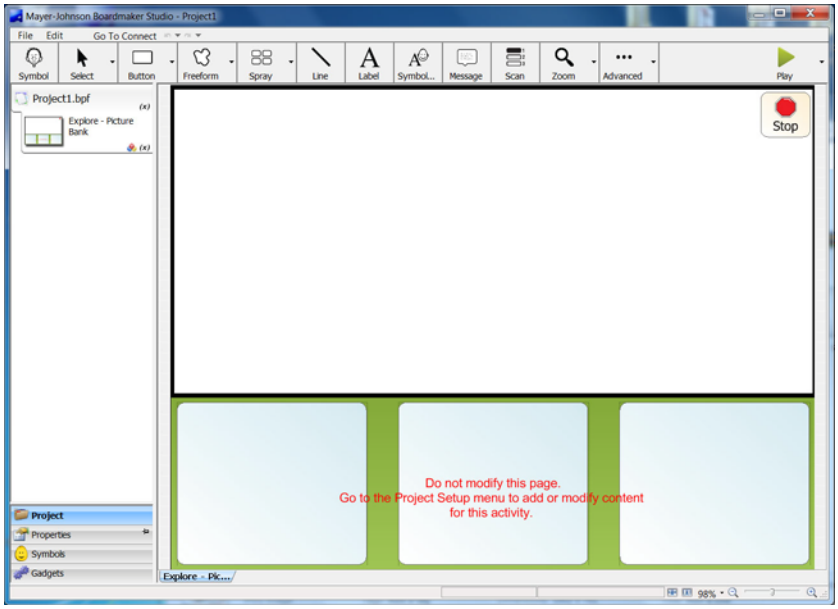
Boardmaker Studio Software Modes

The Boardmaker Studio Designer includes four different modes that enable you to design, test, and play your projects and pages: Design, Play, Play Full Screen, and Preview Page.

Design Mode

Design mode is the default mode in the Designer. It enables you to create your learning activities by building and adding content to projects, activities, and pages.

Design Mode (example)

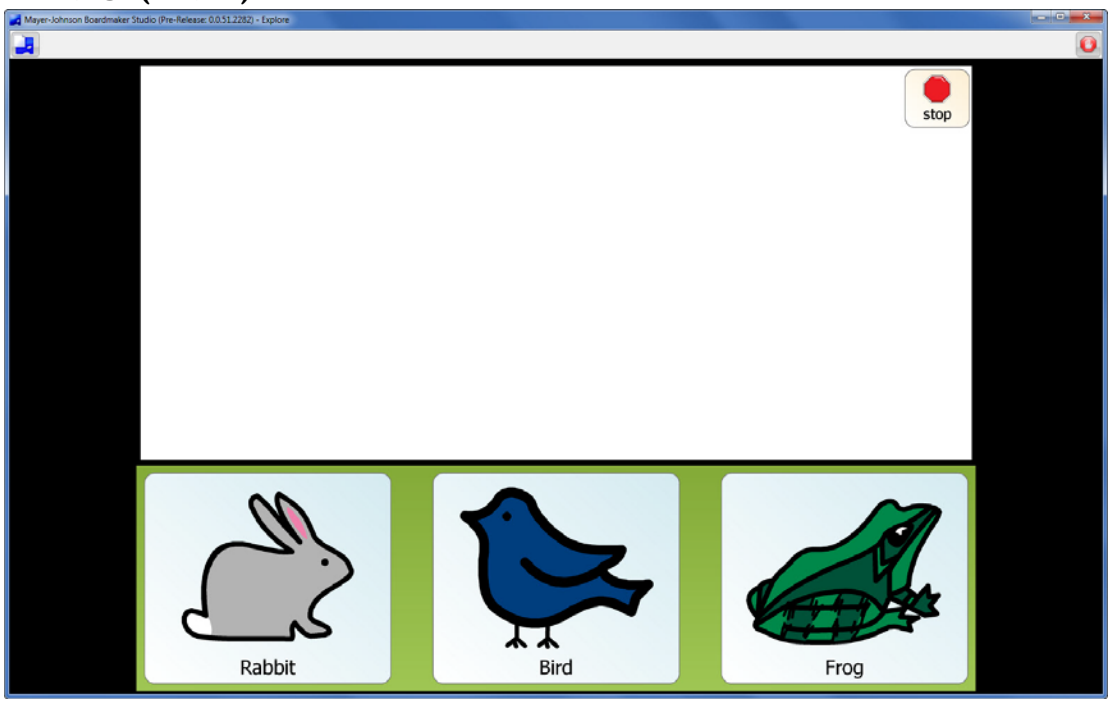


Play Mode

Play mode enables your users to play an activity in a program window that can be resized, maximized, and minimized. When you select Play mode, the project will play from the first page (not necessarily the page that is open). You can play a project from the Connect screen or from the Designer.

NOTE
If you want to test a page, then you should use Preview Page mode. (See *Preview Page Mode*.)

PLAY MODE (EXAMPLE)



Play a Project

While in Design mode, select the arrow next to the Mode button ( ), and then select **Play.**

Use the File Menu in Play Mode

While playing a project, you can select the File Menu ( ) to do any of the following:

- Set the project settings. (See ***Set the Project Settings***.)
- Print a page or the entire project. (See ***Printing***.)
- Change the Boardmaker Studio settings. (See ***Settings***.)

> **NOTE**
> Selecting File Menu > Exit will exit Boardmaker Studio, not just the project that you are previewing or playing.

Stop a Project

While playing a project or page, the Mode button enables you to stop the activity and return to Design mode.

To switch to Design mode, while in Play mode, select Stop [ ] or press **Esc**. The activity will stop playing, and you will return to the Designer.

> **NOTE**
> You can also select File Menu > Stop.

Play Full Screen Mode

Play Full Screen mode plays the activity in a program window that fills the screen. In Play Full Screen mode, the project will be played across the full screen of the monitor, and you won't be able to resize, maximize, or minimize the program window.

Play a Project in Full Screen

While in Design mode, select the arrow next to the Mode button ( ), and then select *Play Full Screen.*

Stop a Project

To stop a project and return to the Designer, press **Esc**.

Preview Page Mode

Preview Page mode enables you to test your activities. When you select Preview Page mode, the current page will be played in Play mode.

> **NOTE**
> Preview Page mode plays the project from the current page, whereas Play mode always plays the project from the first page in the project.

Preview a Page

While in Design mode, select the arrow next to the Mode button ( ), and then select *Preview Page.*

Use the File Menu in Preview Page Mode

While playing a project, you can select the File Menu ( ) to do any of the following:

- Set the project settings. (See ***Set the Project Settings***.)
- Print a page or the entire project. (See ***Printing***.)
- Change the Boardmaker Studio settings. (See ***Settings***.)

> **NOTE**
> Selecting File Menu > Exit will exit Boardmaker Studio, not just the project that you are previewing or playing.

Stop a Project

While previewing a page, the Mode button enables you to stop the activity and return to Design mode.

To switch to Design mode, while in Preview Page mode, select Stop [ ] or press **Esc**. The activity will stop playing, and you will return to the Designer.

> **NOTE**
> You can also select File Menu > Stop.

4 Settings

Use the *Setup and Options* dialog to customize Boardmaker Studio. Choose your interface settings - general settings (the interface to open at startup, display units, grid spacing, etc.), message window settings, button usage settings and animation, recording device settings, access method settings, text to speech settings, and your symbols and language settings.

This chapter covers the following topics:

- ***Interface Settings***
- ***Access Method Settings***
- ***Text to Speech Settings***
- ***Symbol and Language Settings***
- ***Word Lists***

Interface Settings

Use the *Interface* settings on the *Setup and Options* dialog to choose:

- **General settings -** The interface to open at startup (Connect, Last Project, or Designer), the display quality and units of measure, spray and grid spacing; etc.
- **Message window settings -** Message window symbolate properties, clear after speech, auto-capitalize and auto-speech properties, and print settings for the *PrintMessageWindow* action.
- **Button settings -** Symbol animation and button usage settings.
- **Sound settings -** Select and test the recording device connected to your computer.

General Settings - Modify the Workspace

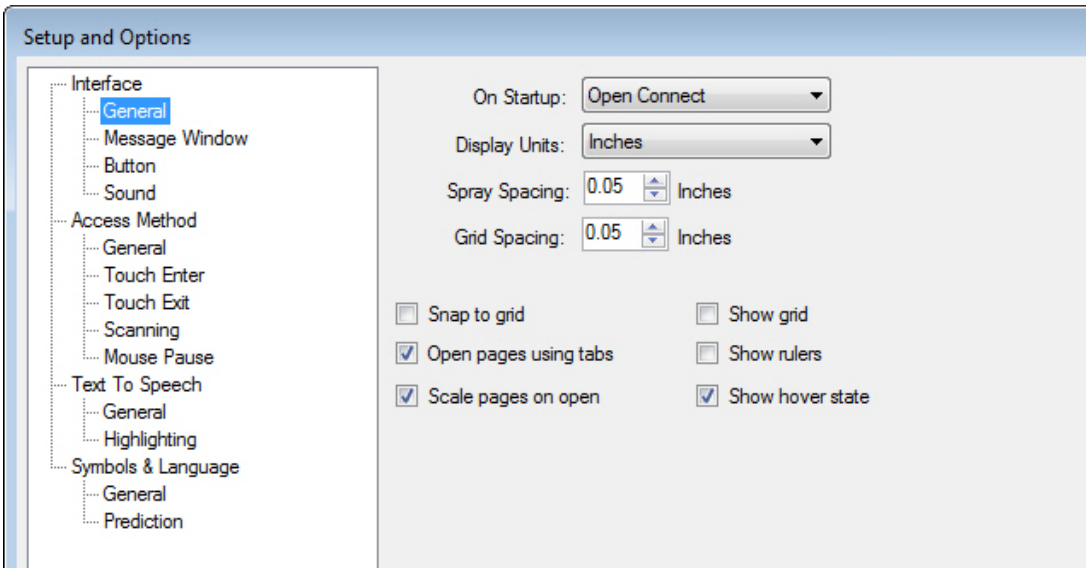
You can customize your workspace using the *General* settings on the *Setup and Options* dialog. You can choose to show or to hide gridlines and rulers. You can set the grid and spray tool spacing and units of measure. You can also select startup options and display quality, enable "hover state," and choose whether to open the Connect or Designer interface when you start Boardmaker Studio.

Access the General Settings

To access the *General* settings:

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Interface > General** from the navigation pane.

Setup and Options Dialog



Open at Startup

From the *On Startup* drop-down list, select the interface that you want to open automatically when you start Boardmaker Studio:

- **Connect -** The Boardmaker Studio Connect screen will open (this is the default setting).
- **Last Project -** Your last project will open in the Designer workspace.
- **Designer -** The Designer workspace will open. The workspace will be blank (no projects will be open).

Set the Display Units

From the *Display Units* drop-down list, select **Inches**, **Centimeters**, **Millimeters**, **Pixels**, or **Printer.**

> **NOTE**
> The Printer setting uses standard printer units of 100 pixels per inch.

Set the Spray Spacing

Use the *Spray Spacing* drop-down list to select the amount of space between the objects you are spraying out to form a rectangular or circular grid. (See ***Creating a Grid of Objects***.)

> **NOTE**
> The spray spacing units will reflect your choice of display units. (For example, if you have chosen Inches as the display unit, the spray spacing units will display in inches.)

Grid Settings

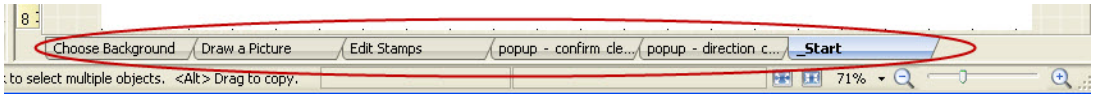
Use the *Grid Spacing* drop-down list to select the amount of space between the grid lines.

> **NOTE**
> The grid spacing units will reflect your choice of display units (inches, pixels, etc.).

Open Pages Using Tabs

Select the **Open pages using tabs** check box to choose whether to display page tabs at the bottom of each page. The page tabs represent each page that is open in the project. Select a tab to reopen that page.

PAGE TABS IN WORKSPACE



Scale Pages on Open

Select the **Scale pages on open** check box if you want your pages to be scaled to fit the workspace.

Show the Grid

By default, the background grid is not visible on the workspace. To make the grid visible, select the **Show grid** check box.

Snap to Grid

Activating the *Snap to Grid* option will automatically line up new objects in the workspace with the background grid. To enable the *Snap to Grid* option, select the **Snap to Grid** check box.

Show Rulers

When the *Show Rulers* option is active, rulers appear at the top and to the left of the workspace. To show the rulers, select the **Show Rulers** check box.

Show Hover State

With the *Show Hover State* feature enabled, when the cursor is moved over a button, the button will be highlighted. Select the **Show Hover State** check box to enable this feature.

> **NOTE**
> The *Show Hover State* feature will only be active in Preview and Play modes.

When you have finished selecting your general settings, select **OK** to close the *Setup and Options* dialog and save your changes.

Message Window Settings

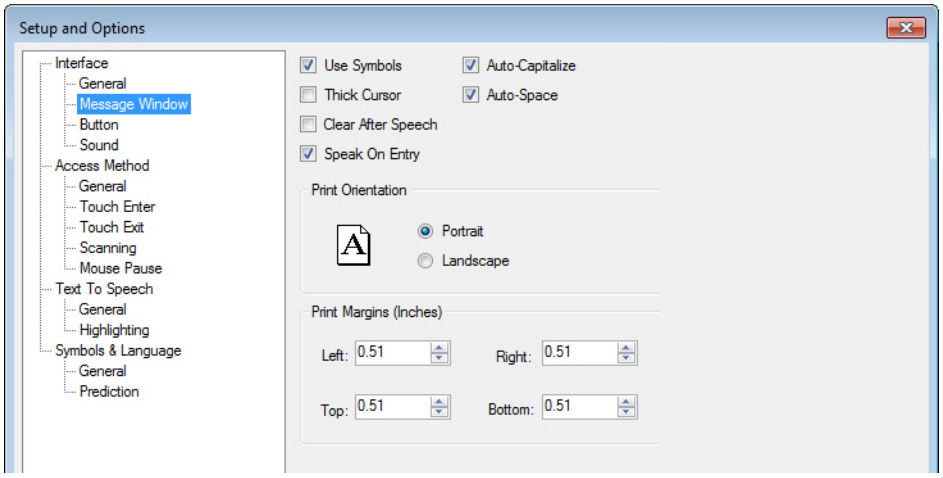
You can use the *Message Window* settings on the *Setup and Options* dialog to customize the way your message windows react. Choose whether to symbolate the message window text, speak on entry, automatically capitalize and space, clear after speech, and select a thick cursor. You can also select your print settings for the *PrintMessageWindow* action.

Access the Message Window Settings

To access the *Message Window* settings:

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Interface > Message Window** from the navigation pane.

MESSAGE WINDOW SETTINGS



Customize Message Window Settings

Select the appropriate check boxes to customize your message window settings:

- **Use Symbols -** Symbolate the message window text.

> **NOTE**
> The selection you make in the *Symbolate Mode* drop-down list in the *Message Window* Properties panel will override your selection in the *Setup and Options* dialog (for the selected message window only).

- **Thick Cursor -** The cursor will be wider and easier to see.
- **Clear After Speech -** After the text is spoken, the message window will clear.
- **Speak on Entry -** Text will be spoken as it is entered.
- **Auto Capitalize -** Capitalize the first word in the message window and the first word in each sentence.

- **Auto Space -** Automatically put a space between each word in the message window.

Set Print Settings for the *PrintMessageWindow* Action

1. Select **Portrait** or **Landscape** under *Print Orientation*.
2. Use the drop-down lists under *Print Margins* to set the left, right, top, and bottom print margins.

When you have finished selecting your message window settings, select **OK** to close the *Setup and Options* dialog and save your changes.

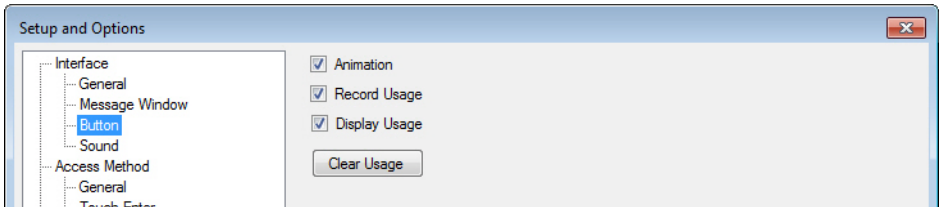
Button Settings

You can use the *Button* settings on the *Setup and Options* dialog to enable symbol animation (for symbols that have animation properties) and to record button usage.

Access the Button Settings

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Interface > Button** from the navigation pane.

BUTTON SETTINGS



Animate Symbols

Select the **Animation** check box to enable the symbol animation feature.

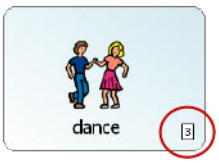
NOTE
Only the PCS: Animations symbol library has a built-in animation feature. Visit *www.mayer-johnson.com* to purchase this symbol library.

Record and Display Button Usage

Usage counts let you to track how often each button on every page has been selected.

- Select the **Record Usage** check box to record the number of times each button has been selected.
- Select the **Display Usage** check box to dynamically display the usage counts for each button. In Preview and Play modes, the count will be displayed on each button. (See the illustration below.)

USAGE COUNT DISPLAYED ON BUTTON (EXAMPLE)



- Select the **Clear Usage** button to clear all of the recorded usage count data for each button on every page.

When you have finished selecting your button settings, select **OK** to close the *Setup and Options* dialog and save your changes.

Sound Settings

Use the *Interface* > *Sound* settings on the *Setup and Options* dialog to select and test the recording device connected to your computer.

To access the *Interface* > *Sound Window* settings:

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Interface > Sound** from the navigation pane.

SOUND SETTINGS

3. Select the **Recording Device** drop-down list to choose from the available sound recording devices.
4. Use the buttons below the *Recording Device* drop-down list to test the recording device:
   - **Circle (far right) -** Select this button to start making a test recording.
   - **Square (middle) -** Select this button to stop making a test recording.
   - **Triangle (far left) -** Select this button to play back the test recording.

REFERENCE
For details on the actions you can use to program objects to make recordings and play sounds in Play mode, see *Sound* in *Appendix C*.

Access Method Settings

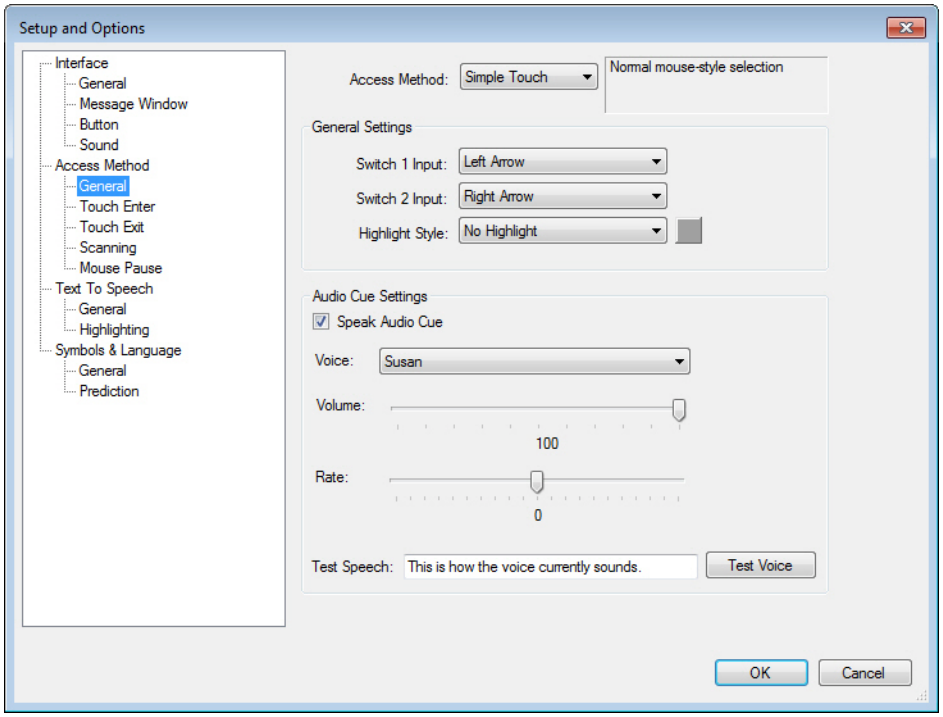
Boardmaker Studio is designed to be accessible to people with a wide spectrum of physical and cognitive needs. Direct Touch is the default access method, but you can select from four alternate access methods - each of which can be customized to meet your specific needs.

Select an Access Method

Simple Touch is the default access method. Use the *Access Method* settings in the *Setup and Options* dialog to choose an alternate access method, switch input, highlight style and color, and audio cue settings.

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Access Method > General** from the navigation pane.

General Access Method Settings



3. Select an access method from the *Selection Method* drop-down list.

> **Note**
> After you select your access method, you can customize it using the specific access method settings for the method you have chosen. See *Customize Your Access Method*.

Access Methods

Simple Touch

This is the default setting for the software. The object is immediately selected when you click it.

Touch Enter

As with the Simple Touch access method, an object is selected when it is clicked. With Touch Enter, though, you can adjust the hold and release times to prevent accidental selections for motor movement support.

This is a good access method for a student whose motor skills are impaired.

Touch Exit

You click an object, hold down the mouse button for a specified period of time (hold time), and then release the mouse button. The object is selected when the mouse button is released. You may also adjust the release time for this access method.

This is a good access method for a student whose motor skills are impaired.

Scanning

If your motor skills prevent you from using one of the touch selection methods, Scanning is the ideal selection method. When Scanning is active, the objects on the screen will be highlighted in a specific pattern.

Two options are available - Autoscan and 2 Switch scanning. With Autoscan, the software automatically scans the page at the speed and using the scan pattern you have selected. (See ***Customize Scanning Settings***.) With the 2 Switch method, one switch (a keyboard key or mouse button) is used to advance the scan highlight, and a second switch (keyboard key or mouse button) is used to make selections. (See ***Switch Input*** and ***Customize Scanning Settings***.)

REFERENCE
You can select the order in which objects on your pages will scan. See *Setting the Scan Order for an Individual Page*.

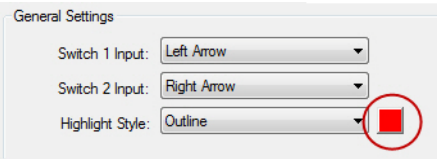
Mouse Pause

Select an object by moving the cursor over the object and pausing for a set period of time. When the allotted time has passed, and the cursor remains paused on the object, the object is selected. This is a good access method option if you can maneuver a mouse but have difficulty pressing down on the mouse button to make a selection.

The Mouse Pause access method also includes an option for using a switch (keyboard key or mouse button) to make a selection.

General Access Method Settings

Access Method General Settings (with Highlight Color Button Circled)



Switch Input

If you are setting up the software to use the Scanning or Mouse Pause (with switch) access method, select a switch input.

> **Note**
> The default switch inputs are the left arrow for switch 1 and the right arrow for switch 2.

For Autoscan and Mouse Pause (with switch):

Select the **Switch 1 Input** drop-down list to choose the keyboard key or mouse button that will provide a switch input to signal the software to make a selection.

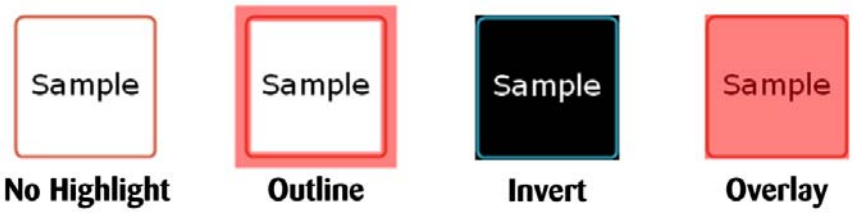
For 2 Switch Scanning:

1. Select the **Switch 1 Input** drop-down list to choose the keyboard key or mouse button that will provide a switch input to signal the software to advance the scan highlight.
2. Select the **Switch 2 Input** drop-down list to choose the keyboard key or mouse button that will provide a switch input to signal the software to make a selection.

Highlight Style and Color

1. Use the *Highlight Style* drop-down list to select how a selected object(s) will visually stand out on the page.

Highlight Styles



2. Select the Color button. The *Color Selector* dialog will open. Select a highlight color. (You can also create a custom color using the *Color Selector* dialog.)

Audio Cue

An audio cue is a single word or short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object. You can select a different voice to speak audio cues than the voice you use for activities and choose the volume and speech rate for that voice.

NOTE
The audio cue is normally the object's label. You can assign a unique audio cue to an object using the *Audio Cue* text box in the object's Properties panel (*Miscellaneous* properties group).

REFERENCE
See *General Settings - Select a Speaking Voice and Rate of Speech* for information on selecting general voice settings to be used for activities.

1. Select the *Speak Audio Cue* check box to enable audio cues.
2. Select a voice for audio cues from the **Voice** drop-down list.
3. Use the **Volume** slider to set the volume from 0 (mute) to 100 (loudest).
4. Use the **Rate** slider to adjust the speaking rate. Dragging the slider from left to right increases the speech rate.

   Select **Test Voice** to hear how the voice and rate of speech you have selected sounds. You can change the voice and increase or decrease the rate of speech until you are happy with the voice and the speaking rate you have chosen for the audio cue.

NOTE
The default text in the *Test Speech* text box is, "This is how the voice currently sounds." To change the text in the text box, select it and enter your own personalized message.

When you have completed the selection of your general access method settings, you should customize the access method settings to meet your specific needs. See ***Customize Your Access Method***.

NOTE
If you do not wish to make any changes to the default access method settings, select OK to save your general settings and close the *Setup and Options* dialog.

Customize Your Access Method

After you have selected an access method using the *Access Method* settings (see ***Select an Access Method***), you can customize these settings to meet your specific needs.

> **NOTE**
> The following procedures for customizing your access method assume that the *Setup and Options* dialog is currently open. If it is not open, select File Menu > Setup and Options to open it.

Simple Touch

Simple Touch is the default access method for the software. It is automatically enabled, and, if you want to use this method, you do not need to define any custom settings.

Touch Enter

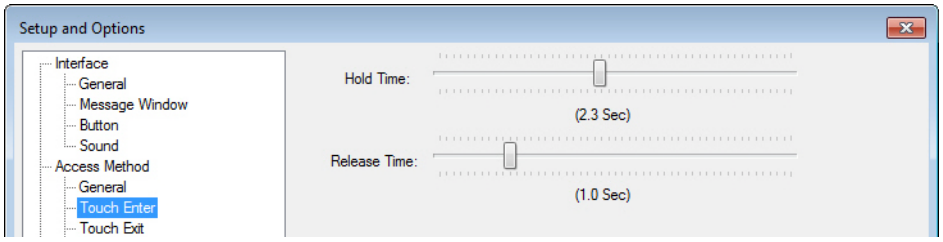
You can adjust the hold and release times for the Touch Enter access method - this will help to prevent accidental selections.

- **Hold Time -** To prevent making unintended selections, you click an object and hold down the mouse button for a specified period of time (hold time) to select the object. Hold Time is the length of time that you must maintain contact with a screen object (hold down the mouse button) before the object is selected.
- **Release Time -** Release time is the window of time after a screen object is selected during which the software will not accept a new selection. This can help prevent accidental selections. The release time countdown starts when the mouse button is released. If another object is selected before the release time window closes, the clock will start over again.

Customize Touch Enter Access Settings

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Access Method > Touch Enter** from the navigation pane.

ACCESS METHOD - TOUCH ENTER SETTINGS



3. Select and slide the **Hold Time** slider bar to adjust the hold time for selections.
4. Select and slide the **Release Time** slider bar to adjust the window of time after a selection that the software will not access a new selection.
5. Select **OK** to save your settings and close the *Setup and Options* dialog.

Touch Exit

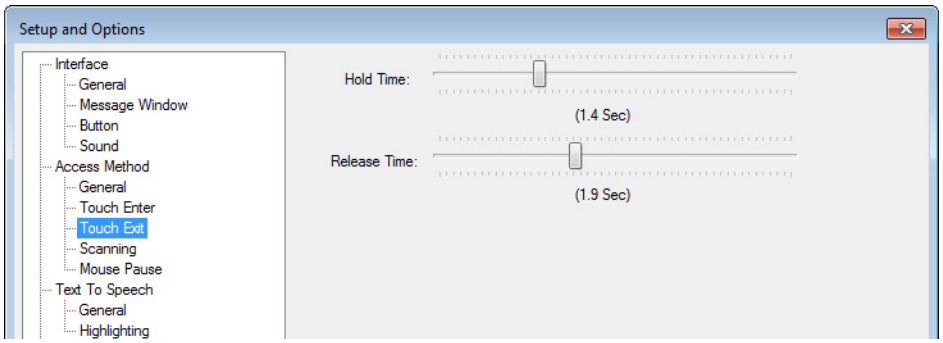
With the Touch Exit access method, you can adjust the hold and release times. Hold Time is the length of time that you must maintain contact with a screen object (hold down the mouse button) before the object is selected. When you release the mouse button, the object is selected.

You can adjust the Release Time for the Touch Exit access method. Release time is the window of time after a screen object is selected during which the software will not accept a new selection.

Customize Touch Exit Access Settings

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Access Method > Touch Exit** from the navigation pane.

ACCESS METHOD - TOUCH EXIT SETTINGS



3. Select and hold the **Hold Time** slider bar to adjust the hold time for selections.
4. Select and hold the **Release Time** slider bar to adjust the release time for selections.
5. Select **OK** to save your settings and close the *Setup and Options* dialog.

Scanning

The Scanning selection method will systematically highlight all of the objects on a page. When the desired object is highlighted, a selection can be made by activating a "switch" (keyboard key or mouse button).

You can select either of the following scan types:

- **Autoscan -** The software will automatically scan the page. You select the speed of the scan, its pattern, and the number of passes the scan will make before it rests.
- **2 Switch -** Two separate keyboard keys or mouse buttons are used as switches. Switch 1 advances the scan, and Switch 2 makes the selection. You select the scan pattern.

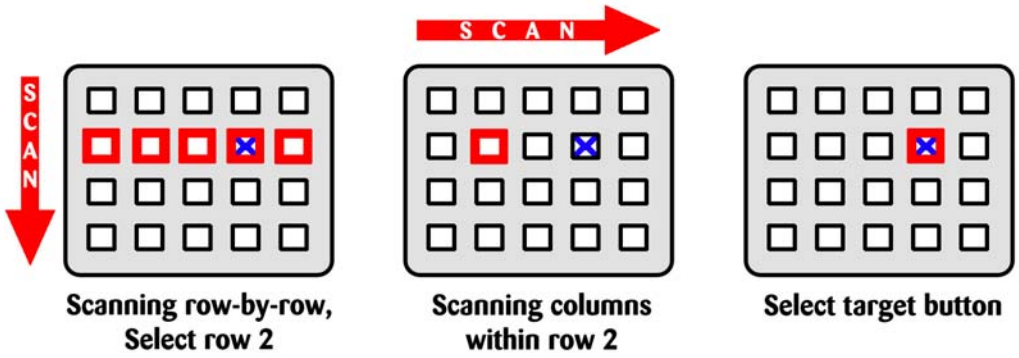
REFERENCE
Select the keyboard key(s) or mouse button(s) you want to use as switches when you set your General Access Method settings. See ***Switch Input***.

Scanning Features

- **Scan Speed -** the speed at which the scan highlight will move through the objects on the page. *(Autoscan only)*
- **Scan Pattern -** the order in which objects will be scanned – either by rows, by columns, or linearly (starting in the top left corner, moving to the right, and then down).

  In the example shown below, the target button is marked with an "X", and the scan pattern is set to Row/Column. The objects on the page will first be scanned row-by-row. Select the switch when the desired row of buttons is highlighted. Then the scanning highlight will move column-by-column within that row. Select the switch when the desired button is highlighted.

Row/Column Scanning (example)



Note
If there is a group button or group box on the page, the "parent" object -the group button or group box - will be scanned as a single object. When the group button or group box is selected, the scan order will move through the objects inside the "parent" object.

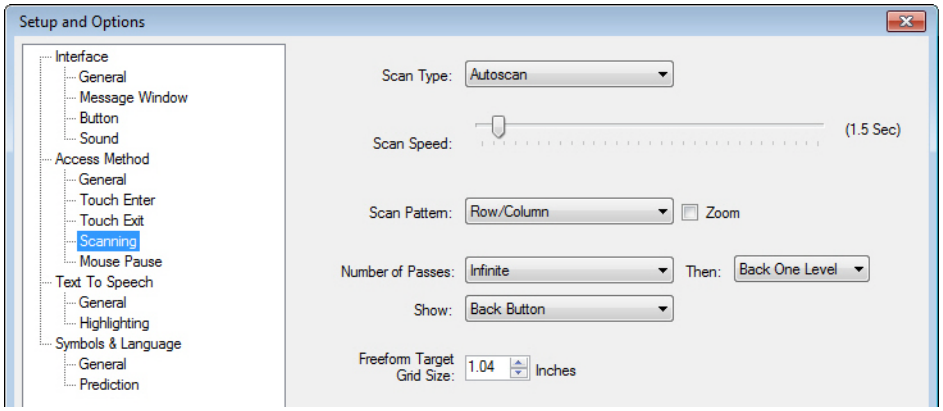
Note
Keep your eye on the target - each time the target is highlighted, select the switch.

- **Zoom -** increases the size of each item as it is scanned.
- **Number of Passes -** the number of times the software will scan through the objects on the page before stopping. *(Autoscan only)*
- **Up One Level** will move the scan pattern "up" to the previous level.
- **Reset** will restart the scan.

Customize Scanning Settings

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Access Method > Scanning** from the navigation pane.

ACCESS METHOD - SCANNING SETTINGS



3. Select **Autoscan** or **2 Switch** from the Scan Type drop-down list.
4. *(Autoscan only)*Select and hold the **Scan Speed** slider bar to adjust the speed of the scanning highlight.
5. Select the **Scan Pattern** drop-down list and choose a scan pattern option.
6. Select the **Zoom** check box if you want to automatically enlarge each object as it is scanned.
7. *(Autoscan only)* Select the **Number of Passes** drop-down list and choose the number of times the scan pattern will repeat before stopping. (The options are *One*, *Two*, *Three*, *Four,* and *Infinite*.)
8. Select the **Then** drop-down list to choose what the scan will do after it has completed the selected number of passes:
   - **Back One Level** will move the scan pattern "up" to the previous level.

NOTE
If this feature is selected, the scan pattern will move "up" to the previous level (that is, if you are using Row/Column scanning, and the scan pattern is scanning the individual objects in a row, selecting the Up button would move the highlight back to scanning row by row).

   - **Reset** will restart the scan.
9. Select the buttons you want to display onscreen from the *Show* drop-down list. (The options are **None**, **Up Button**, **Reset Button** or **Both**.)
10. Select a grid size from the **Freeform Target Grid Size** drop-down list to define a target area for a freeform object that is not laid out on a grid.
11. Select **OK** to save your settings and close the *Setup and Options* dialog.

REFERENCE
You can change the scan order for any page using the Scan Order Tool. See *Setting the Scan Order for an Individual Page*.

Mouse Pause

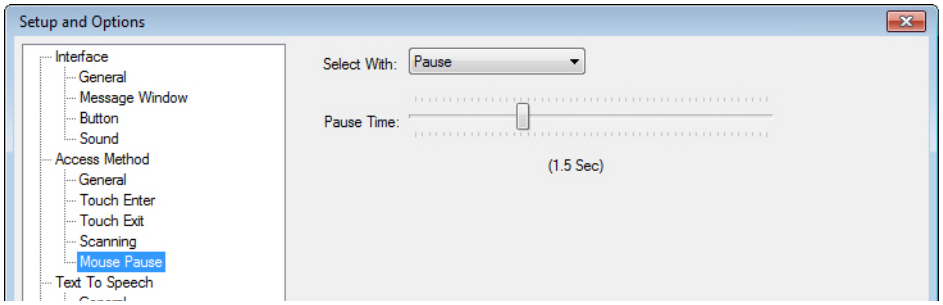
With the Mouse Pause access method, you have the option of selecting an object by pausing on the object for a set period of time or by using a switch (keyboard key or mouse button) for selection.

> **NOTE**
> If you select Pause from the *Select With* drop-down list, you can adjust the period of time that the cursor must remain on the object before a selection is made.

Customize Mouse Pause Features

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Access Method > Mouse Pause** from the navigation pane.

ACCESS METHOD - MOUSE PAUSE SETTINGS



3. Make a selection from the *Select With* drop-down list:
   - Select **Pause** if you want the selection to take place if the movement of the cursor is stopped on an object for a specified amount of time. (You will select a pause time in the next step.)
   - Select **Switch** if you want to use a keyboard key or mouse button to activate the selection.
4. *(Pause method only)* Select and hold the **Pause Time** slider bar to adjust the amount of time that the cursor must remain on the object before the object is selected.

> **NOTE**
> The *Pause Time* slider bar will be grayed out if you have selected Switch as your access method.

5. Select **OK** to save your settings and close the *Setup and Options* dialog.

Text to Speech Settings

Boardmaker Studio provides a range of voices suitable for men, women, children, and teens. Use the *General Text to Speech* settings on the *Setup and Options* dialog to select a speaking voice and the rate at which the voice will speak. Then you can test the voice and adjust the settings to meet your preferences.

Use the *Highlighting Text to Speech* settings to choose how text in the message window will appear when it is selected - whether words, symbols, and/or sentences will be highlighted - and the highlight color and style. You can also select to have no highlight appear when the message window is selected.

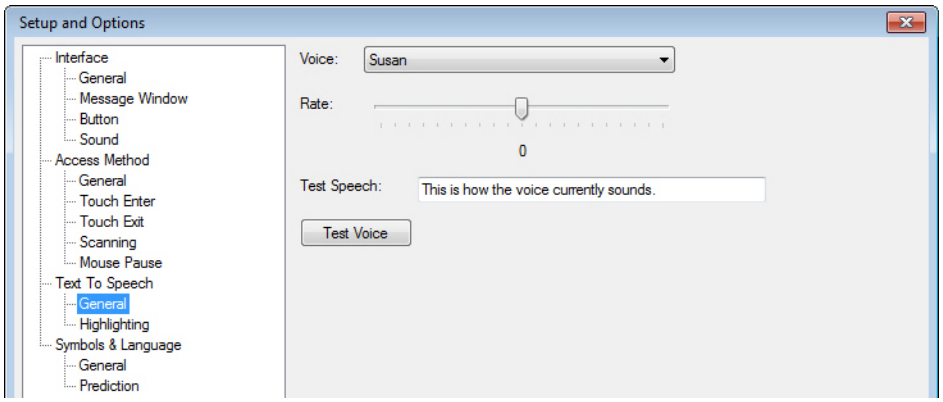
General Settings - Select a Speaking Voice and Rate of Speech

Use the *Text to Speech General* settings to select a speaking voice and the rate at which it will speak.

> **Note**
> You can select a different voice to speak audio cues. (See *Audio Cue*.)

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Text to Speech > General** from the navigation pane.

Text to Speech General Settings



Select a Voice

Select a speaking voice from the *Voice* drop-down list. You can listen to the different voices by selecting **Test Voice**.

Set the Speech Rate

Use the **Rate** slider to adjust the speaking rate. Dragging the slider from left to right increases the speech rate from -10 (far left - very slow) to +10 (far right - very fast).

Test the Speaking Voice

Select **Test Voice** to hear how the voice and rate of speech you have selected sounds. You can change the voice and increase or decrease the rate of speech until you are happy with the voice and the speaking rate you have chosen.

> **NOTE**
> The default text in the *Test Speech* text box is "This is how the voice currently sounds." You can change the text in the text box to anything you want. (Select the text and enter your own personalized message.)

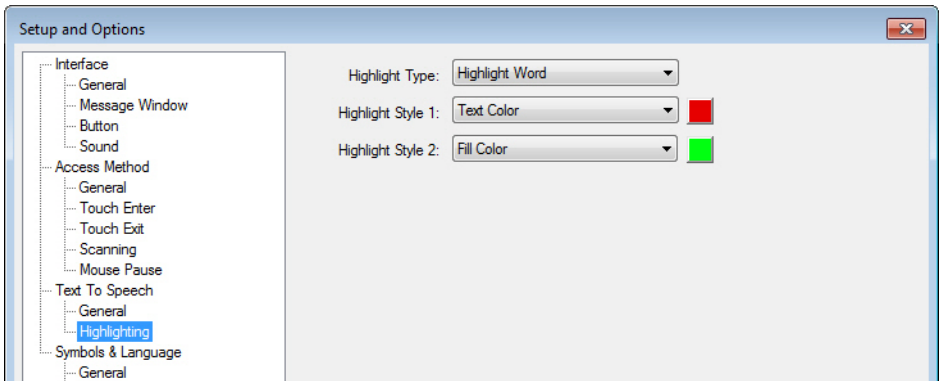
When you have finished selecting your general speech settings, select **OK** to save your changes and close the *Setup and Options* dialog.

Highlighting Settings

You can choose whether or not you want text in the message window to be highlighted when it is selected. If you want the text highlighted, you can select a highlight style and color:

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Text to Speech > Highlighting** from the navigation pane.

TEXT TO SPEECH HIGHLIGHTING SETTINGS



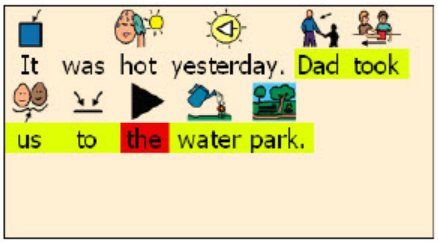
Select a Highlight Type

Use the *Highlight Type* drop-down list to choose what you want highlighted when the message window is selected:

- **None -** Nothing will be highlighted when the message window is selected.
- **Highlight Word -** Each word will be highlighted as it is spoken.
- **Highlight Word and Symbol -** Each word and its corresponding symbol will be highlighted as the word is spoken.
- **Highlight Sentence -** Each sentence will be highlighted as it is spoken.

- **Highlight Sentence and Word -** Each sentence will be highlighted (with Highlight Style 2) as it is spoken. Each word will be highlighted (with Highlight Style 1) as it is spoken. (See the illustration below.)

HIGHLIGHT SENTENCE AND WORD (EXAMPLE)



Select a Highlight Style and Color

Use the *Highlight Style 1* and *Highlight Style 2* drop-down lists to choose the style of highlighting when the message window text when it is spoken. Use the Color button to select colors for the different highlight styles.

NOTE
Highlight Style 2 will only apply when you select the Highlight Sentence and Word option in the *Highlight Type* drop-down list.

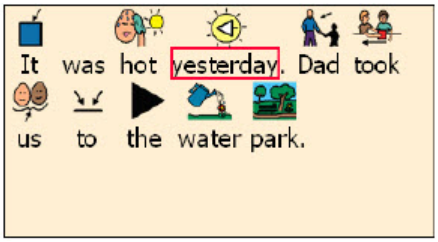
1. Select from the following highlight styles:

   - **Fill Color -** The word (or sentence) will be highlighted with the color you choose.

FILL COLOR HIGHLIGHT STYLE

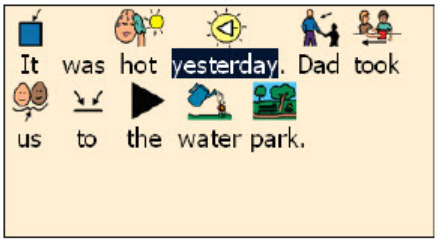
   - **Outline Color -** The word (or sentence) will be outlined with the color you choose.

OUTLINE COLOR HIGHLIGHT STYLE



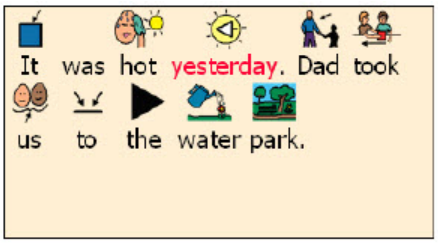
   - **Invert -** The text and the text background color will switch. (For example, if the text is black, and the background is white, the text will appear white and the text background, black.)

INVERT HIGHLIGHT STYLE



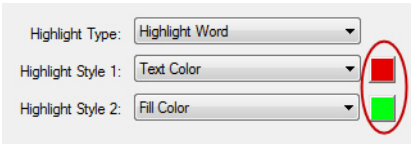
- **Text Color -** The text in the word or sentence will change to the selected color as it is spoken.

TEXT COLOR HIGHLIGHT STYLE



2. Choose a color for Highlight Styles 1 and 2.

COLOR BUTTON



a. Select the Color button (see the illustration above) to the right of the *Highlight Style 1* drop-down list. The *Color Selector* dialog will open.

b. Select a color for the highlight from the Color Selector dialog.

> **NOTE**
> You can choose a color from the *Standard Colors* drop-down list on the *Color Selector* dialog, or you can use the *Intensity* and *Opacity* and the red, green, and blue slider bars to create a custom color.

c. Select **OK** to close the *Color Selector* dialog and save your color choice.

d. Select the Color button to the right of the *Highlight Style 2* drop-down list. Repeat steps b and c above to choose a color for Highlight Style 2.

When you have finished selecting your highlighting settings, select **OK** to save your changes and close the *Setup and Options* dialog.

Symbol and Language Settings

Use the *Symbols & Language* settings on the *Setup and Options* dialog to set your symbol preferences, to manage the symbols in your My Symbols library, and to access the *Dictionary Manager* - Boardmaker Studio's alphabetized catalog of every word, name, and phrase that is stored in the software's vocabulary database. You also use the *Symbols & Language Settings* to define word prediction settings.

Manage the symbols in your My Symbols library using the *Symbol Manager*. You can add new symbol categories, import your own digital pictures to use as symbols, and then use the *Symbol Editor* to select labels, tags, and categories for your new symbols. You can also choose which symbol libraries to activate for your symbol searches.

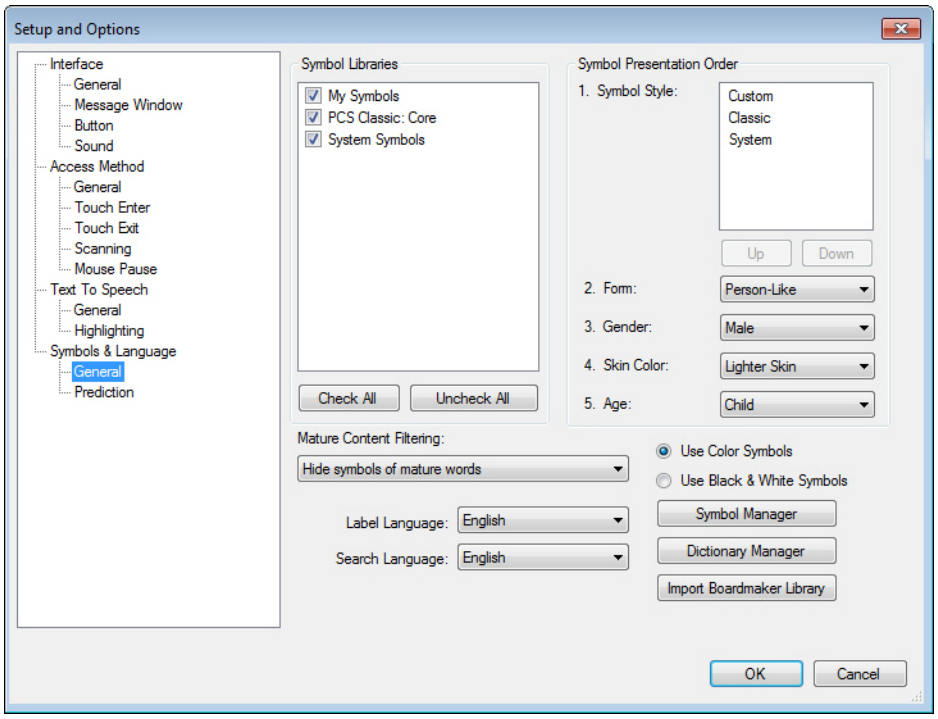
Use the *Prediction* settings to show or hide symbols on word prediction buttons and to choose whether each word will be predicted only once or a number of times.

General Settings

Use the *Symbols & Language General Settings* dialog to set your symbol preferences and your label and search languages. You also have the option of filtering mature content in your symbol searches and importing your Boardmaker custom symbol libraries.

The *Symbols & Language Settings* dialog also gives you access to the *Symbol Manager* and *Dictionary Manager*.

Symbols & Language General Settings



NOTE
You can also access the Symbols & Language settings by selecting the Symbols and Language button [ ] on the Symbols Panel.

Symbol Preferences

You can set your symbol preferences, including which symbol libraries to activate, the order in which symbols will be presented in your symbol searches, mature content filtering, and the languages you want to use for your symbol searches and as your symbol labels using the *Symbol & Language General* settings.

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols & Language > General** from the navigation pane.
3. Set your symbol preferences.

REFERENCE
Detailed instructions for setting your simple preferences, including activating symbol libraries, symbol presentation order, mature content filtering, symbol and search languages, and importing Boardmaker custom libraries can be found in *Set Your Symbol Preferences* in Chapter 9, *Working with Symbols*.

The Symbol Manager

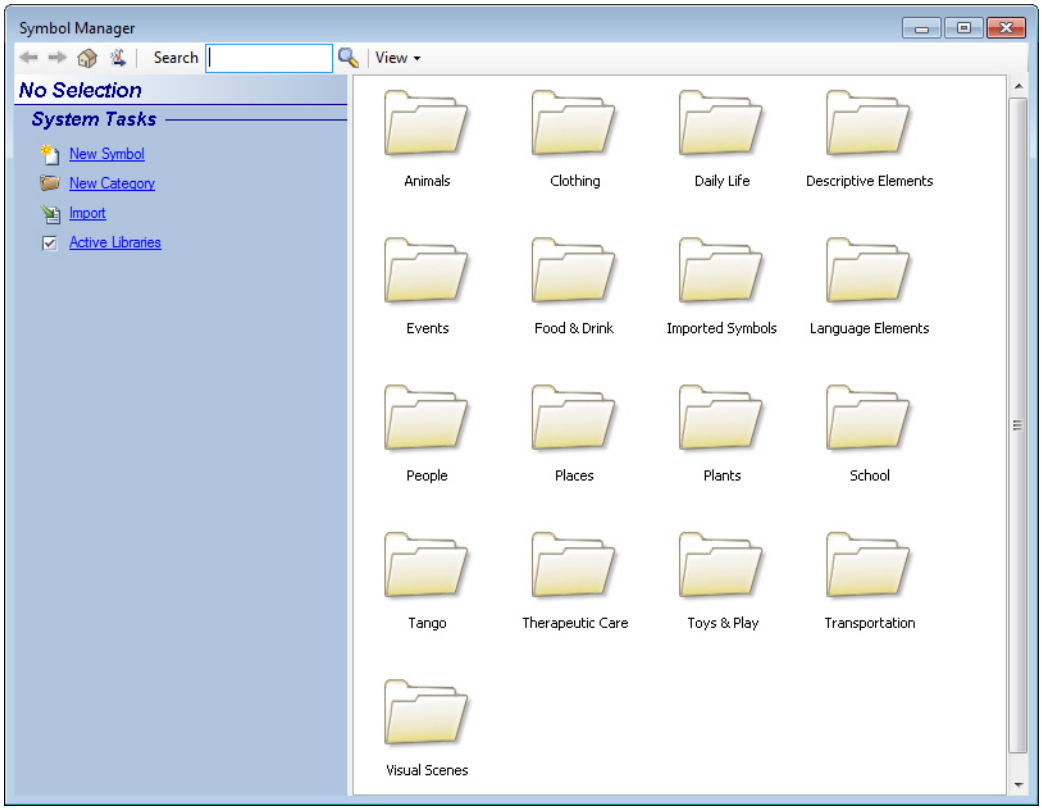
Manage the symbols in your My Symbols library using the *Symbol Manager*. You can add new symbol categories, import your own digital pictures to use as symbols and then use the *Symbol Editor* to select labels, tags, and categories for your new symbols. You can also choose which symbol libraries to activate for your symbol searches.

Open the Symbol Manager

The *Symbol Manager* is accessed through the File Menu.

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols and Language** from the navigation pane.
3. Select the **Symbol Manager** button. The *Symbol Manager* will open.

SYMBOL MANAGER (TOP LEVEL)



REFERENCE
See *The Symbol Manager* for step-by-step instructions for adding a new symbol or symbol category, activating symbol sets, editing a symbol, and editing symbol tags.

The Dictionary Manager

The Boardmaker Studio dictionary is an alphabetized catalog of every word, name, and phrase that is stored in the software's vocabulary database. The dictionary is organized by category - each category contains related words.

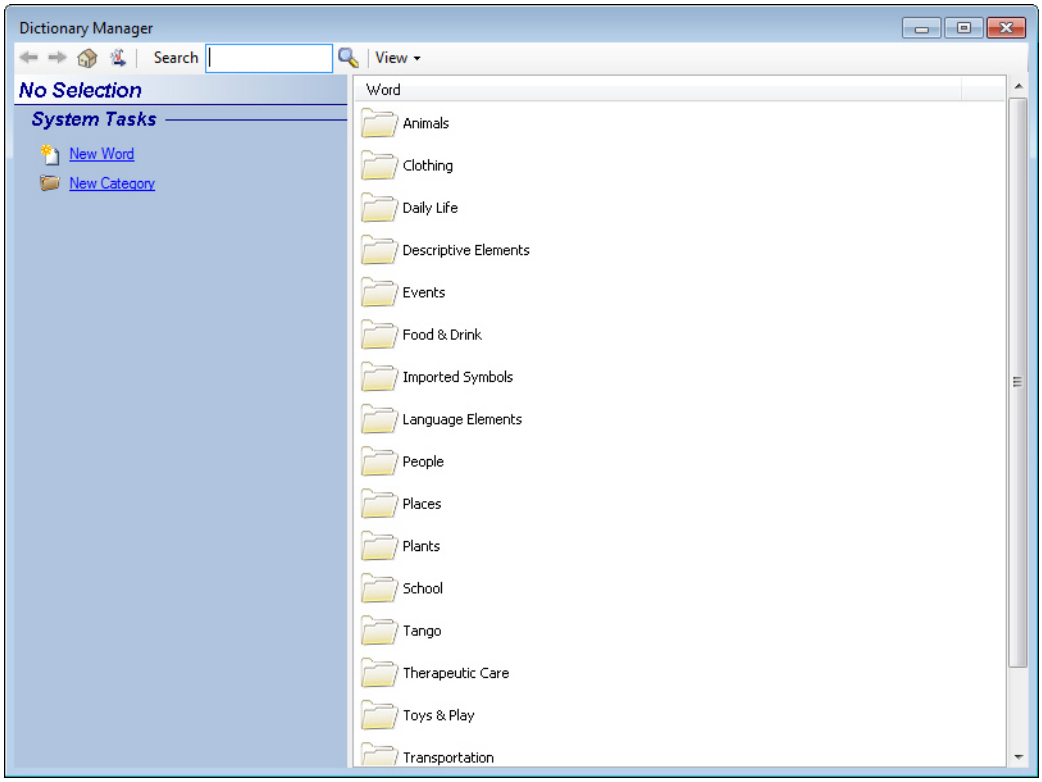
You can add new words to the dictionary, as well as edit existing words. The word prediction feature of the software draws its options from the dictionary entries - so it is very important that you add your own words to the dictionary.

Open the Dictionary Manager

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols and Language** from the navigation pane.
3. Select the **Dictionary Manager** button. The *Dictionary Manager* will open.

NOTE
If the *Tasks* panel is not open, select Toggle Tasks Panel [ ] to open it.

DICTIONARY MANAGER (TOP LEVEL)



Add a Dictionary Category

The Boardmaker Studio dictionary organizes entries by assigning them to categories - collections of related words. Assigning a category to a dictionary entry makes it easier to find.

You can assign multiple categories to the same dictionary entry (see ***Add or Edit a Dictionary Word***). This makes the dictionary entry more accessible to searches and to the software's word prediction feature.

The dictionary provides an extensive list of categories and subcategories for organizing words. You can also create custom categories to group the dictionary entries (both your custom entries and those provided in the software).

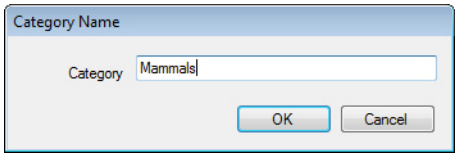
To add a category to the dictionary:

1. Open the *Dictionary Manager*. (See ***Open the Dictionary Manager***.)

> **NOTE**
> If you want to create a new subcategory to an existing category first double-click to open the "parent" folder. (For example, if you want to add the subcategory "Mammals" to the "Animals" category, you would open the "Animals" folder before performing step 2 below.

2. Select **New Categor**y in the *System Tasks* panel. The *Category Name* dialog will open.

CATEGORY NAME DIALOG



3. Enter a name for the new dictionary category in the *Category Name* text box. Then select **OK**. A folder for your new category will appear in the *Dictionary Manager.*

4. Add words to your new category folder. See ***Add or Edit a Dictionary Word***.

Add or Edit a Dictionary Word

You can easily add new words (or edit existing words) in the dictionary. The software's word prediction feature is based on vocabulary found in the dictionary. So it is essential that you add your own words and phrases. Be sure to add names, questions, and statements that you often use in conversation.

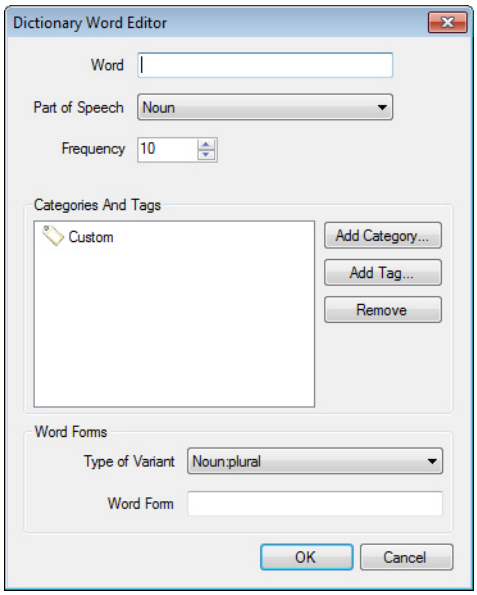
1. Open the *Dictionary Manager.* (See ***Open the Dictionary Manager***.)

2. Select the category folder into which you want to add the new word or that contains the word you want to edit, and then, in the *System Tasks* panel, select **Open** (under *Category Tasks)*. (If necessary, navigate through the category folders until you find the subcategory folder you want.)

SHORTCUT
Double-click a folder to open it.

3. When the words in the proper category (or subcategory) are displayed, from the *System Tasks* panel, select **New Word** (to add a new word), or, **Edit** (to edit an existing word). The *Dictionary Word Editor* will open.

DICTIONARY WORD EDITOR



4. Select the **Word** text box, and enter the word, name, or phrase you want to add to the dictionary or edit the existing text.

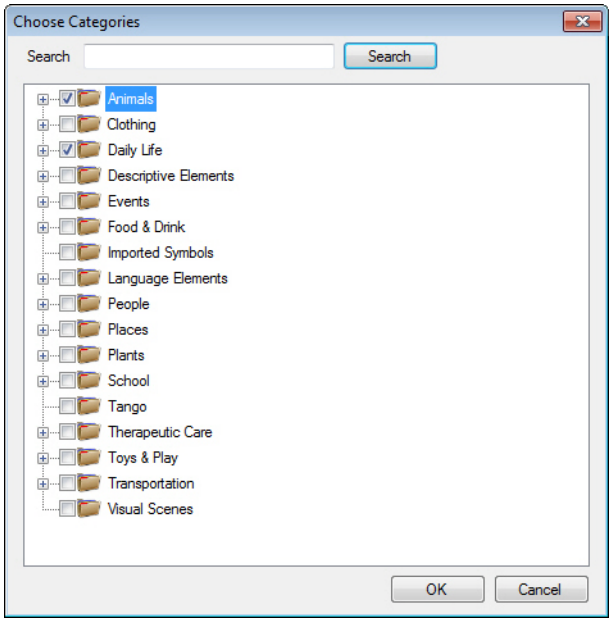
5. Select the **Part of Speech** drop-down list and choose the option that applies to the dictionary entry.

6. The *Frequency* setting affects how quickly this dictionary entry will be predicted by the word prediction feature. The default value is 10, and the range is from 1 – 100 (100 is reserved for entries that will be used most often). To change the *Frequency* value, select the number in the **Frequency** text box and enter a new number (or use the arrows to the right of the text box to increase or decrease the value).

7. Assign a category to the new dictionary entry to associate it with a group of similar vocabulary items.

    a. Select **Add Category** on the *Dictionary Word Editor*. The *Choose Categories* dialog will open.

CHOOSE CATEGORIES DIALOG



    b. Mark the check box next to each category and subcategory you want to assign to the dictionary entry (scroll down if necessary). You can select the expansion box [+] to the left of a category name to display any subcategories it contains.

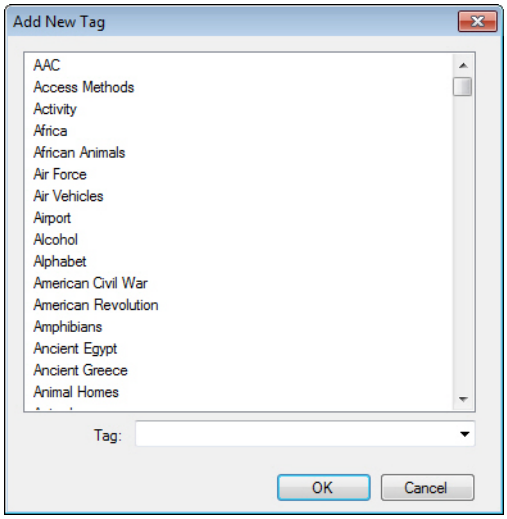
> **NOTE**
> Use the *Search* text box and Search button to search for a category or subcategory.

    c. Select **OK**. The tag will appear under *Categories and Tags* in the *Dictionary Word Editor*.

8. Add tags to the new dictionary entry.

    a. Select **Add Tag** on the *Dictionary Word Editor*. The *Add New Tag* dialog will open.

ADD NEW TAG DIALOG



b. Select the tag that you want to assign to the dictionary entry (scroll if necessary).

c. Select **OK**. The tag will appear under *Categories and Tags* in the *Dictionary Word Editor*.

d. To add more tags, repeat steps a - c.

NOTE
To remove a category or tag from the dictionary entry, simply select it in the *Dictionary Word Editor*, and then select Remove. Removing a category or tag from a dictionary item does not delete the category or tag from the dictionary. It simply removes it from the entry that you are editing.

9. The items under *Word Forms* on the *Dictionary Word Editor* give you an opportunity to review any word form variations that apply to the new dictionary entry (for example, "colder" and "coldest" for the adjective "cold").

   - The *Type of Variant* drop-down list offers a list of variation types that are associated with the part of speech that is assigned to the new vocabulary item.
   - The *Word Form* text box displays an example of the dictionary entry when the variant form that is selected in the *Variant* drop-down list is applied. If one of the word forms presented in this text box must be corrected, select the text box, and enter the corrected form of the dictionary entry.

10. Select **OK** to close the *Dictionary Word Editor*.

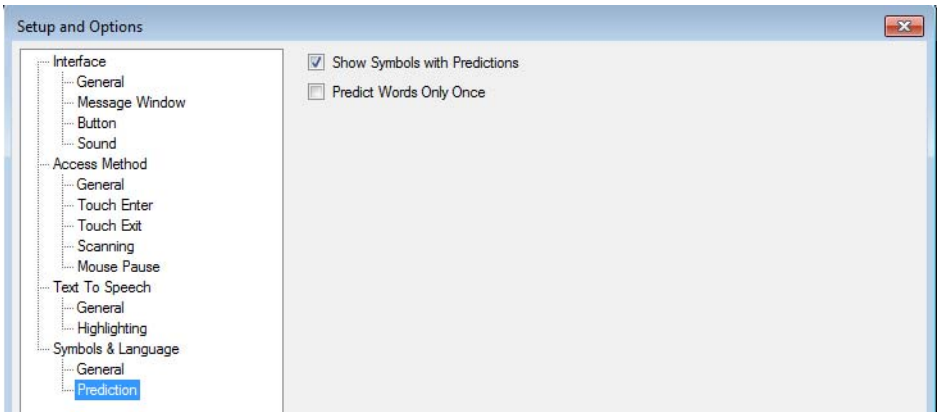
When you have finished working with dictionary entries, select Close [ ] to close the *Dictionary Manager*.

Prediction Settings

You can change the way that word predictor buttons react when text is typed into a message window.

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols and Language** > **Prediction** from the navigation pane.

PREDICTION SETTINGS



3. Select the **Show Symbols with Predictions** check box if you want symbols to be displayed with the predicted words.
4. Select the **Predict Words Only Once** check box if you want the predicted word to be replaced if it is not immediately selected. (For example, if you type the letter "T" into the message window, the first word predictor button will display the word, "the." If you have the *Predict Words Only Once* check box selected, the word "the" will be replaced as soon as you type the letter "h." If the check box is not selected, the word "the" will continue to be displayed on the word predictor button until you type the entire word, "the."
5. Select **OK** to close the *Setup and Options* dialog.

Word Lists

Word lists can help enhance your curriculum-related activities by enabling symbol-supported text. You can create customized vocabulary lists that are associated with a message window or symbolate button. You can save your word lists to be used with other pages, activities, or projects.

When you are defining message window or symbolate button properties, you can create a word list, (or load a saved word list) and then choose to symbolate only words on the list - or words not on the list. When the user enters text into the message window or symbolate button, only the words on the list (or not on the list) will be symbolated.

Create a Word List

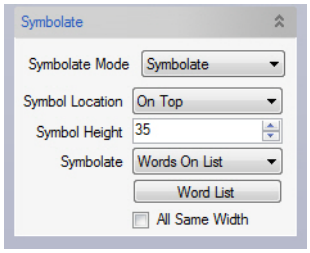
Word lists are created using the *Word List* button in the *Symbolate* Properties group on the Properties panel for message windows and symbolate buttons.

1. Select the message window or symbolate button you want to associate with a word list. (Or draw a new message window or symbolate button in the workspace.) The Properties panel for the selected object will open.

2. Select **Words on List** or **Words Not on List** from the *Symbolate* drop-down list. The *Word List* button will become selectable.

> **Note**
> The *Word List* button will be grayed out and not selectable unless the selection in the *Symbolate* drop-down list is Words on List or Words Not on List.

Symbolate Properties Group (in message window Properties panel)



3. Select the **Word List** button. The *Edit Words* dialog will open.

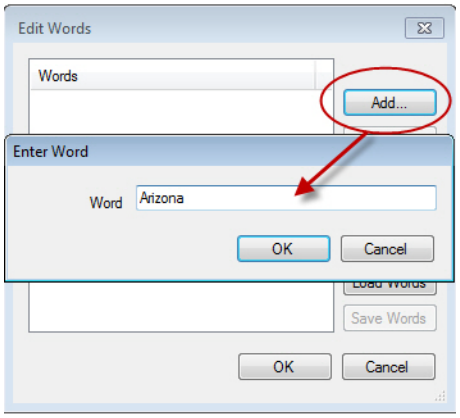
EDIT WORDS DIALOG

NOTE

If the *Edit Words* dialog is already populated, you will have to remove the word list that is currently loaded. **Ctrl + click** to select all the words on the list and then select **Remove**. (This will not delete the word list permanently, it will only remove the word list from the *Edit Words* dialog so you can enter a new list.)

4. Select **Add**. The *Enter Word* dialog will open.

ENTER WORD DIALOG



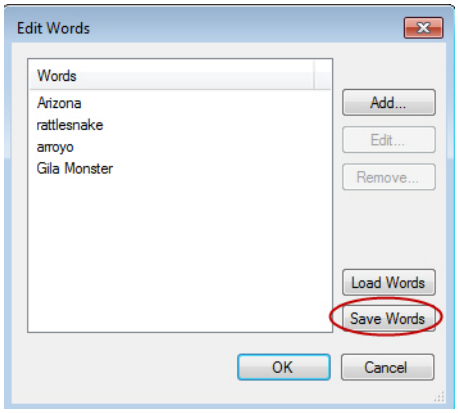
5. Enter a word that you want to add to your word list.
6. Select **OK** on the *Enter Word* dialog. The dialog will close.
7. Repeat steps 5 and 6 to add more words.
8. Select **OK** to close the *Edit Words* dialog or select **Save Words** to save the word list. (See ***Save a Word List***.)

Save a Word List

You can save your word lists to use again with other message windows or symbolate buttons on various pages in your projects.

1. Create your word list. (See ***Create a Word List***.)
2. Select **Save Words** on the *Edit Words* dialog. A browser will open.

EDIT WORDS DIALOG (SAVE WORDS BUTTON)



3. Navigate to the place on your computer where you want to save your word list.

> **NOTE**
> You might want to create a new folder in your *Boardmaker Studio* folder (in your *My Documents* folder) in which to save all of your word lists.

4. Enter a unique name for your word list, and then select **Save** on the browser. The word list will be saved in the folder you have selected.

> **NOTE**
> If you are editing a saved word list, select the name of the word list in the browser and, when prompted, replace the file with the edited file.

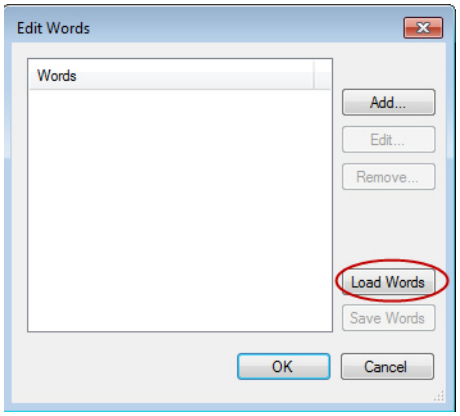
5. Select **OK** to close the *Edit Words* dialog.

Load a Word List

You can use your saved word lists to use on any message window or symbolate button in any project.

1. Select the message window or symbolate button you want to symbolate with words from a saved word list. The Properties panel for the selected object will open.
2. Select **Words on List** or **Words Not on List** from the *Symbolate* drop-down list. The *Word List* button will become selectable.
3. Select the **Word List** button. The *Edit Words* dialog will open.
4. Select **Load Words** on the *Edit Words* dialog. A browser will open.

Edit Words Dialog (Load Words Button)



5. Navigate to the folder on your computer where your word lists are stored.
6. Select the word list you want to load.
7. Select **Open** on the browser. The word list will appear in the *Edit Words* dialog.

> **Note**
> The word list you have loaded will replace any currently loaded word list.

8. Select **OK** to close the *Edit Words* dialog.

Edit a Word List

You can add, remove, and edit the words on any of your word lists. The word list you want to edit must be open in the *Edit Words* dialog.

Open the Edit Words Dialog

To open the *Edit Words* dialog if it is not currently open:

1. Select the message window or symbolate button associated with the word list you want to edit. The Properties panel for the selected object will open.
2. Select **Words on List** or **Words Not on List** from the *Symbolate* drop-down list. The *Word List* button will become selectable.
3. Select the **Word List** button. The *Edit Words* dialog will open.
4. If the word list you want to edit is not currently loaded, select **Load Words**. (See ***Load a Word List***.)
5. Add a word to the list, remove a word, or edit any word on the word list.

> **NOTE**
> If you edit a saved word list, you must save the list (select Save Words), or your changes will be lost.

Add a Word to a Word List

1. Select **Add** on the *Edit Words* dialog. The *Enter Word* dialog will open.
2. In the text box, enter a word that you want to add to your word list.
3. Select **OK** on the *Enter Word* dialog. The dialog will close.
4. Repeat steps 1 - 3 to add more words.
5. Select **OK** to close the *Edit Words* dialog or select **Save Words** to save the word list. (See ***Save a Word List***.)

Edit a Word on a Word List

1. Select the word that you want to edit in the *Edit Words* dialog.
2. Select **Edit**. The *Enter Word* dialog will open.
3. Make your changes in the *Word* text box.
4. Select **OK** on the *Enter Word* dialog. The dialog will close, and the edited word will appear in the dialog.
5. Repeat steps 1 - 4 to edit more words.

6. Select **OK** to close the *Edit Words* dialog or select **Save Words** to save the word list. (See ***Save a Word List***.)

Remove a Word from a Word List

1. Select the word that you want to delete from the *Edit Words* dialog.
2. Select **Remove**. A *Verify Remove* dialog will open.
3. Select **Yes** on the dialog. The word will be removed from the word list.

> **NOTE**
> The word will only be removed from the current list. It will not be removed from the saved word list unless you select Save Words on the *Edit Words* dialog after you have removed the word(s).

4. Select **OK** to close the *Edit Words* dialog or select **Save Words** to save the word list. (See ***Save a Word List***.)

5 Project Organization

Boardmaker Studio is organized into three components: projects, activities, and pages. This chapter describes each of these components.

This chapter covers the following topics:

- ***Projects, Activities, and Pages***
- ***Using the Project Panel***

PROJECTS, ACTIVITIES, AND PAGES

In Boardmaker Studio, you will work with three different components: projects, activities, and pages.

- **Projects** are collections of pages that you can use as a group. You can think of a project as a book that contains chapters and pages.
- **Activities** are collections of pages within a project. They are represented as folders, and you can use them to categorize related pages in a project into separate learning activities. In this way, activities are like chapters in a book. Just as a chapter in a book can contain sections and subsections, activities can contain other activities.
- **Pages** are the primary components of projects and activities. Boardmaker Studio pages are like the pages of a book - they contain the content that the users will read (or interact with). In Boardmaker Studio, this content consists of objects such as buttons, message windows, symbols, and so on. (For more information about working with and designing pages, see ***Designing a Page***.)

REFERENCE

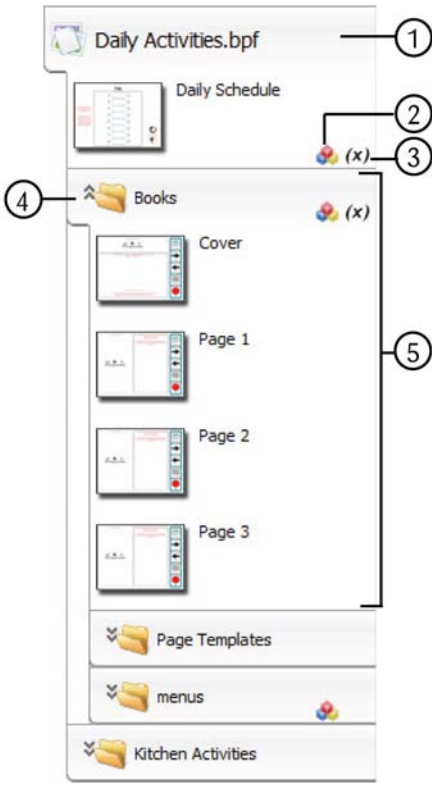
For more information about how projects, activities, and pages are displayed in Boardmaker Studio, see *The Project Panel*.

Using the Project Panel

In Boardmaker Studio, you use the *Project* panel to work with the project and its activity folders and pages. While working in the *Project* panel, you can use the floating toolbar or the right-click menus to quickly perform common actions.

The Project Panel

Project Panel with Activities and Pages (example)



1 **Project Folder -** Top level folder. Right-click on the project name to open the project-level right-click menu. (See ***Project Right-Click Menu*.**)

2 **Macro icon -** Indicates that this project component includes one or more macros. (See Working with Macros.)

3 **Shared Variable icon -** Indicates that this project component includes one or more shared variables. (See ***Working with Shared Variables***.)

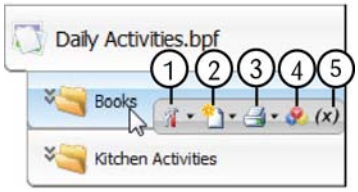
4 **Activity folder** (expanded to show pages)

5 **Page -** Shows a thumbnail of each page within the activity or project. Right-click on the thumbnail to open the page-level right-click menu. (See ***Page Right-Click Menu***.)

The Floating Toolbar

When working in the *Project* panel, you can use the floating toolbar to quickly perform a number of actions on the project, an activity, or a page.

THE FLOATING TOOLBAR



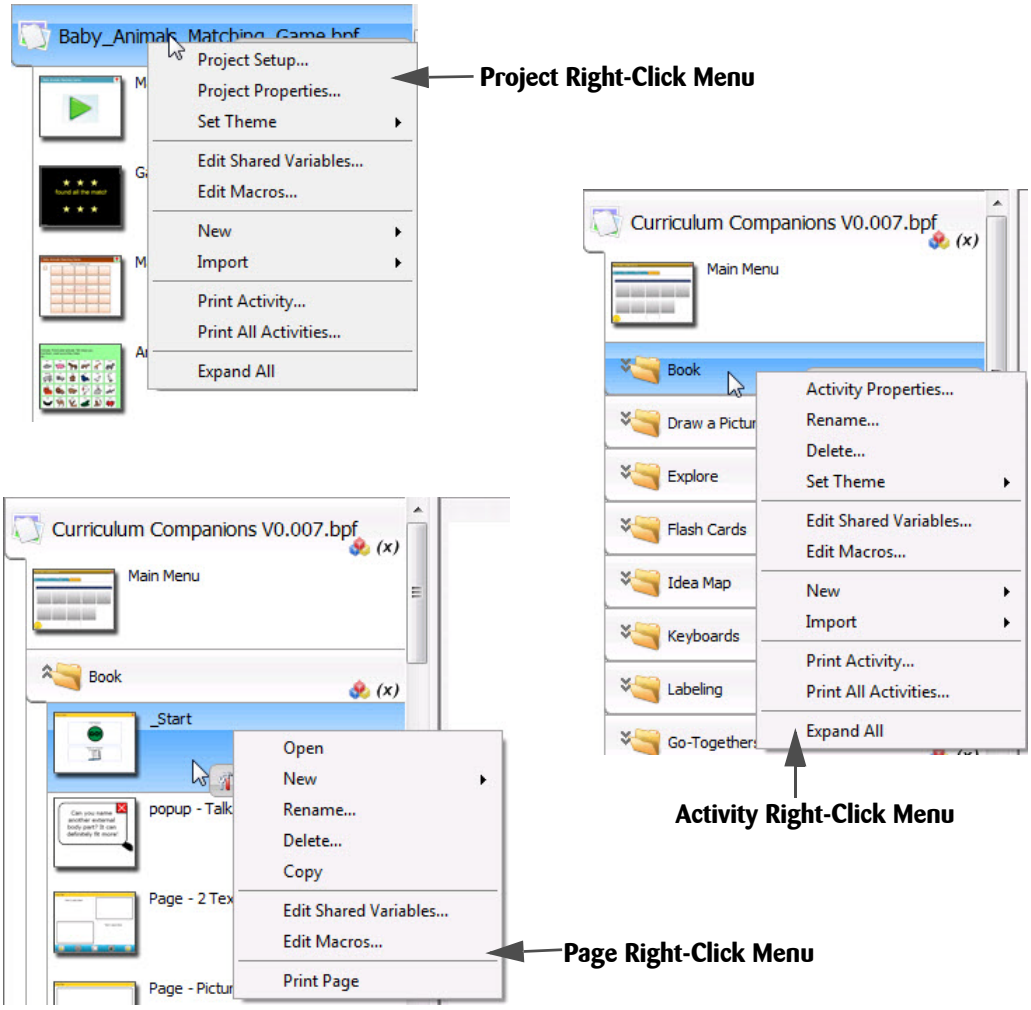
1. **Tools icon -** Opens a dialog from which you can choose any of the available actions for the activity or page.
2. **New Page/Activity icon -** Create a new page or activity, either from scratch or from a template. (See ***Creating Content Using Templates*** or ***Creating Original Content***.)
3. **Print Activity icon -** Print either this activity or all activities in the project. (See ***Printing***.)
4. **Edit Macros icon -** Opens the *Project Macros* dialog and enables you to create and edit macros for the activity or page. (See ***Working with Macros***.)
5. **Edit Shared Variables icon -** Opens the *Edit Shared Variables* dialog and enables you to create and edit the shared variables for the activity or page. (See ***Working with Shared Variables***.)

To use the floating toolbar, mouse over the project, an activity, or a page. The floating toolbar will appear, and you can select one of the icons.

Project Panel Right-Click Menus

Right-click menus are available at the project, activity, and page levels. These menus enable you to edit project or activity properties, edit shared variables or macros, set themes, and import other Boardmaker Studio projects or Boardmaker boards.

Project, Activity, and Page Right-Click Menus



Reference
See *Right-Click Menus at a Glance* for information on using the right-click menus in the *Project* panel.

Note
You can use the Project and Activity right-click menus in the *Project* panel to import other Boardmaker Studio projects and Boardmaker boards into the project that is currently open in the Designer workspace. See *Combine Projects*.

Moving Activities and Pages

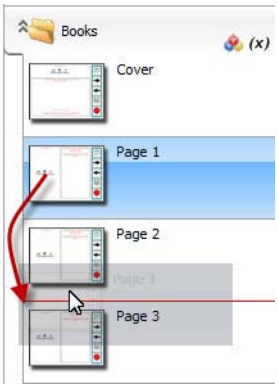
You can change the order of a project's activities and pages as they appear in the *Project* panel. When you play a project in Play mode, the pages will typically play in the order in which they appear in the *Project* panel.

Move an Activity or Page

To move an activity folder or page, in the *Project* panel, select and drag the page or activity to a new location. A red line will appear to indicate where the item will be placed.

In this example, in the Books activity folder, Page 1 is being moved after Page 2.

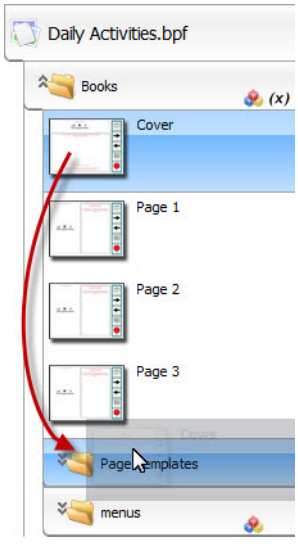
Moving a Page Down in an Activity (example)



Move an Activity or Page to an Activity Folder

To move an activity or page into an activity folder, in the *Project* panel, select and drag the page or activity to an activity folder. The folder will expand and the activity or page will be placed in it.

Moving a Page to an Activity Folder (example)



NOTE
You can use the Project and Activity right-click menus in the *Project* panel to import other Boardmaker Studio projects and Boardmaker boards into the project that is currently open in the Designer workspace. See *Combine Projects*. Imported activities and pages can be moved in the *Project* panel as detailed above.

Opening Activities and Pages

You can use the *Project* panel to open your activities and pages.

Open an Activity

In a project, an activity is represented as a folder, and the pages are contained within it. To open an activity and view the pages and activities within it, double-click the activity.

SHORTCUT
You can also open an activity by clicking the [ ] icon to the left of the activity folder.

Open a Page

1. Mouse over the page you want to open.
2. On the floating toolbar, select the Open Page icon [ ]. The page will open in the Designer.

SHORTCUT
You can also open a page by double-clicking it.

Delete Activities and Pages

1. Mouse over the activity or page that you want to delete.
2. On the floating toolbar, select the Tools icon [ ], and then select **Delete**.

SHORTCUT
You can also select an activity or page and then press the Delete key.

A dialog will open asking you if you want to delete the activity or page.

3. Select **Yes**. The activity or page will be deleted.

6 Creating Content Using Templates

A template is a page or a set of pages that has been designed for a specific type of activity. They save you time, because rather than designing an activity from scratch, you can just populate the template with your content and start the activity.

You can use templates to create new projects, activities, and pages for both onscreen and print-based learning activities.

This chapter covers the following topics:

- ***Templates at a Glance***
- ***Create a New Project from a Template***
- ***Create a New Activity from a Template***
- ***Create a New Page from a Template***
- ***Add Content to a Template***
- ***Create New Templates***
- ***Setting the Project Template Properties***

TEMPLATES AT A GLANCE

You can use two different types of templates: onscreen and print. Both of these types of templates are organized by activity type and instructional area so that you can quickly find the template that best fits your scenario, whether you have a specific activity in mind, or if you want to browse based on the type of instruction you need to provide.

Many of the onscreen templates can also track student performance. These “performance enabled” templates are indicated by a red “P” icon and can report back results when the activities are used by students in a Boardmaker Online subscription account.(For more information go to www.boardmakeronline.com.)

Sample templates (indicated by the word *SAMPLE* at the end of the name and a green "S" icon) are available as fully populated samples. You can use them to see how a template works and how you can use it instructionally.

Template Activity Types

The onscreen and print templates are organized by activity type. You can use templates to create the following types of activities:

- **Art and Creativity -** Develop creativity and artistic expression.
- **Books and Presentations -** Develop reading skills and present new information.
- **Calendars -** Review upcoming events and develop mathematical and time-based skills.
- **Classroom Routines -** Templates for daily classroom attendance and student sign in.
- **Communication and Participation -** Communication displays to help users participate at home, at school, and at extracurricular activities.
- **Device Overlays -** Create overlays for a wide range of digitized communication devices.
- **Explore -** Explore new information, pictures, and symbols through errorless activities.
- **Flashcards -** Build and master vocabulary.
- **Games -** Reinforce concepts and knowledge in fun and engaging formats.
- **Graphic Organizers -** Create cycles, list maps, storyboards, trees, and webs to visually display relationships.
- **Labeling -** Label the parts of the whole.
- **Matching -** Match words to related pictures or items.
- **Mathematics -** Build mathematical skills in areas such as counting, patterns, money, and graphs.
- **Question and Answer -** Reinforce and assess knowledge in a given area.
- **Sequencing -** Sequence items in the correct order.

- **Sorting -** Sort items into two, three, or four groups.
- **Visual Schedules and Sequences -** Introduce and review daily events and planned transitions.
- **Word Study -** Develop knowledge of letters and their corresponding sounds, and understanding of how groups of letters and sounds make words.
- **Writing -** Develop beginning composition and syntax skills.

Onscreen vs. Print Templates

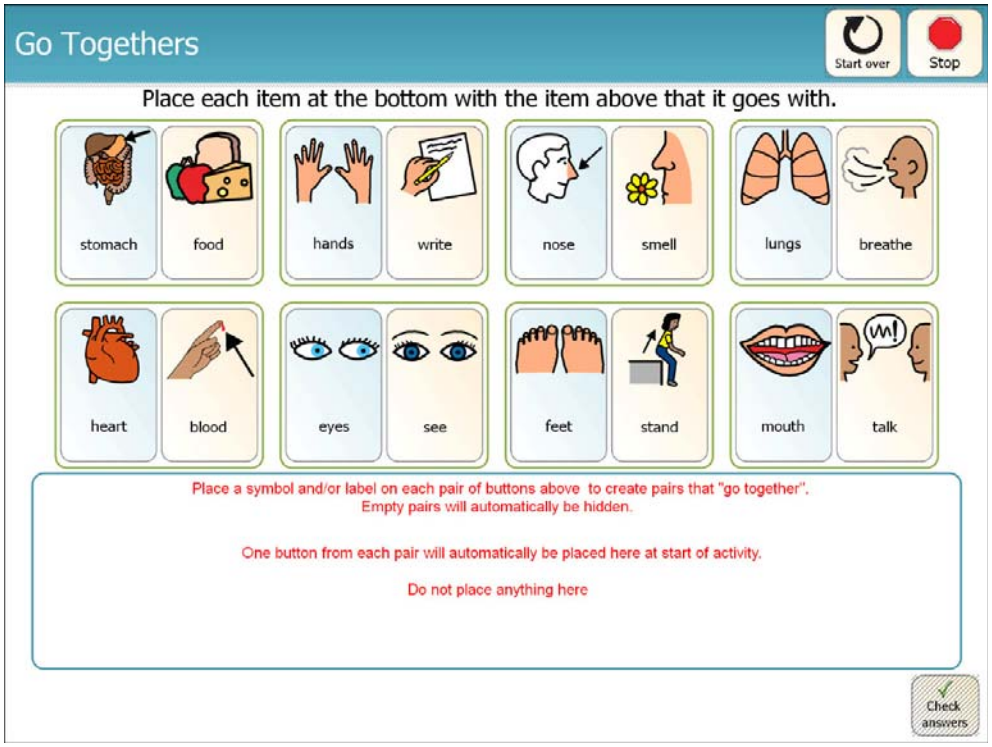
Within each activity type and instructional area, you can access two different types of templates: onscreen and print. The type you choose will depend on the type of learning activity you are creating.

Onscreen Templates

Onscreen templates enable you to create activities in which your users will interact with the computer. To add your content, you modify the objects on the pages, set the project settings, or both.

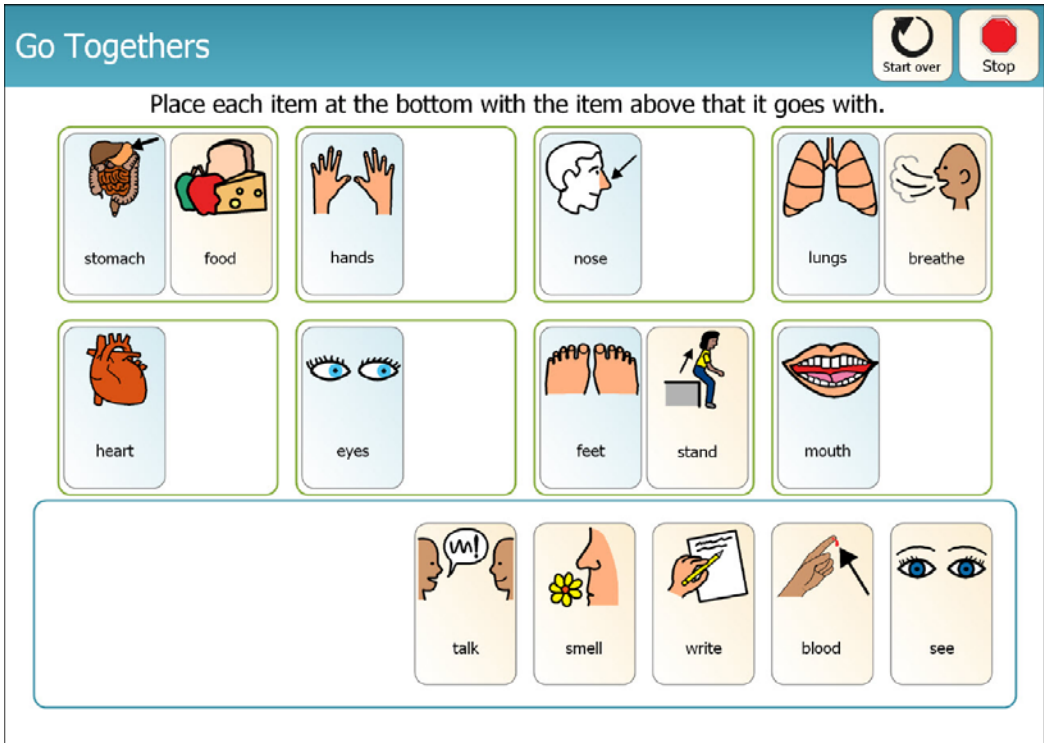
For example, *Go-Togethers - 8 Pairs* is an onscreen matching template in which the user can match eight pairs of items. To add your content, you place a symbol and/or label on each pair of buttons.

Go Togethers Template (example with Content Added)



In Preview and Play modes, one button from each pair is placed in random order in the box at the bottom. The user can then drag each button next to its matching pair. If the user drags a button to the wrong item, it will snap back to its original location.

GO TOGETHERS TEMPLATE IN PLAY MODE (WITH SOME PAIRS MATCHED)



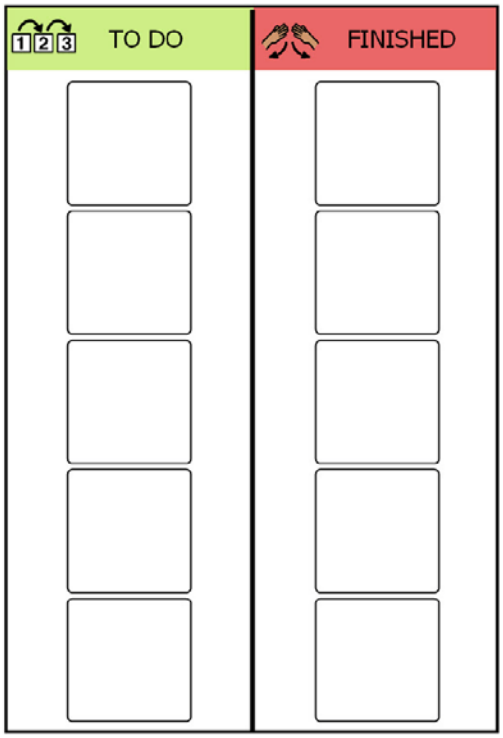
Print Templates

Print templates enable you to create print-based activities. There are two different types of print templates available:

- **Print -** Use for Letter sized paper (8.5 x 11 in.)
- **Print A4 -** Use for A4 sized paper (210 x 297 mm)

For example, *Sequence - Finished Box 5 Steps Vert* is a visual schedule or sequence print template in which the user can move items from the *To Do* column to the *Finished* column as they're completed.

Sequence - Finished Box 5 Steps Vert (example)



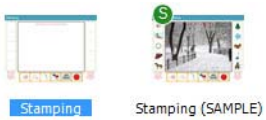
Some print templates also include additional pages to provide you with everything you need to support the activity. For example, in the *Sequence - Finished Box 5 Steps Vert* template, in addition to the Sequence page, a Symbols page is included to help you add the symbols that are needed to create the sequence.

Symbols Page in the Sequence - Finished Box 5 Steps Vert Template

Sample Templates

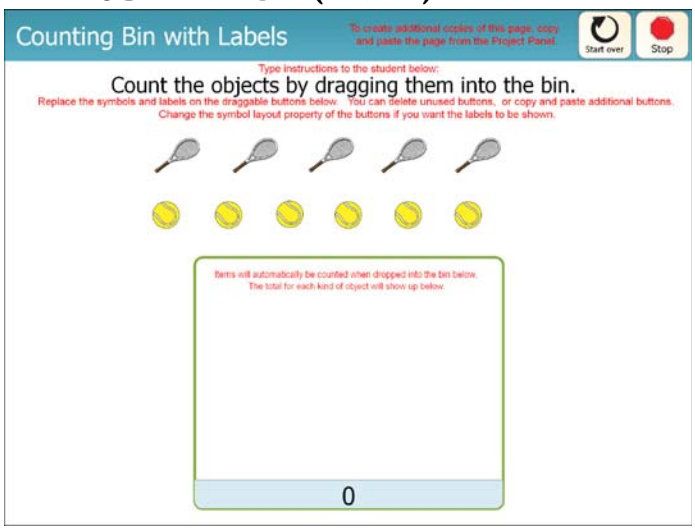
Many of the onscreen templates include sample templates, which include sample content. You can use them to see how a template works and how you can use it instructionally. All sample templates include the word *SAMPLE* in parentheses after the template name and include a "S" icon. The following figure shows the Stamping template next to the sample Stamping template.

Stamping Sample Template (example)



For example, the *Counting Bin with Labels* template contains 20 blank draggable buttons that the user can drag into a counting bin. To create an activity from the template, you would need to add a symbol to each button. If you wanted more or less than 20 buttons, then you would also need to add or delete them. Instead, to see an example of how the template works, you could use the *Counting Bin with Labels (SAMPLE)* template. This template is the same as *Counting Bin with Labels* except that instead of including 20 blank draggable buttons, the buttons have had sample symbols (tennis rackets and tennis balls) added to them. You could then preview the activity to test it and see how it works.

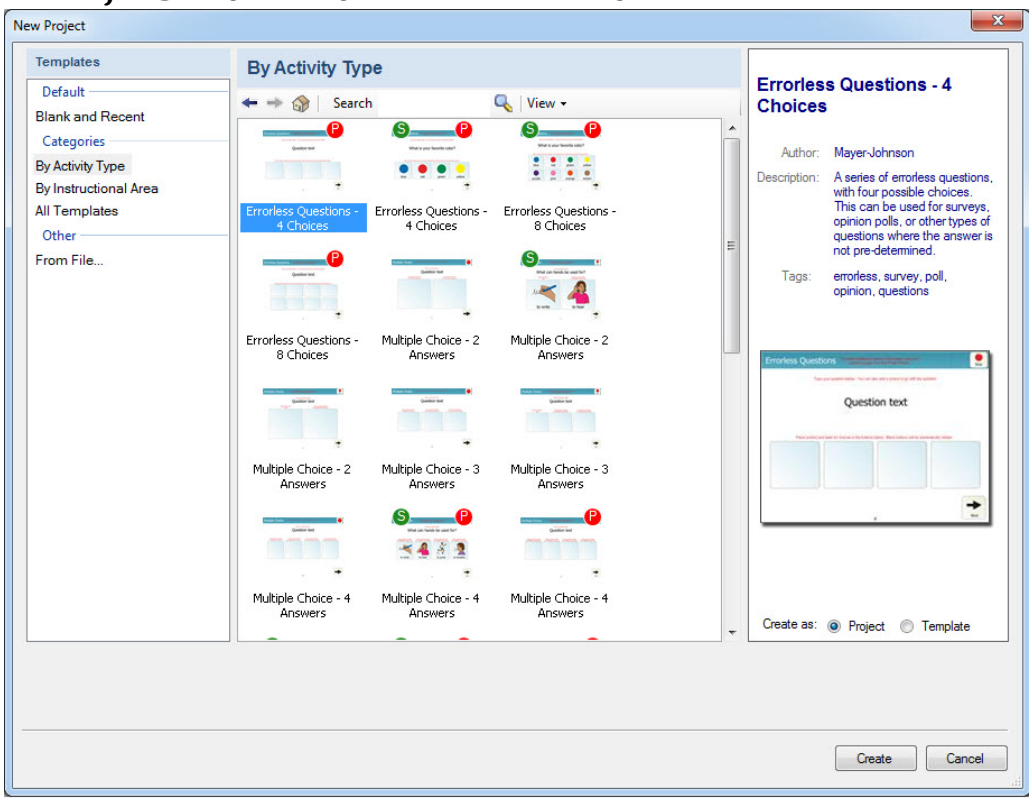
Counting Bin with Labels (SAMPLE) Template



Performance Tracking Templates

Many of the onscreen templates (and matching samples) can also track student performance, and, when the activities are used by students in a Boardmaker Online subscription account, report back results.The “performance enabled” templates are indicated by a red “P” icon.

New Project Dialog Showing Performance Tracking Templates



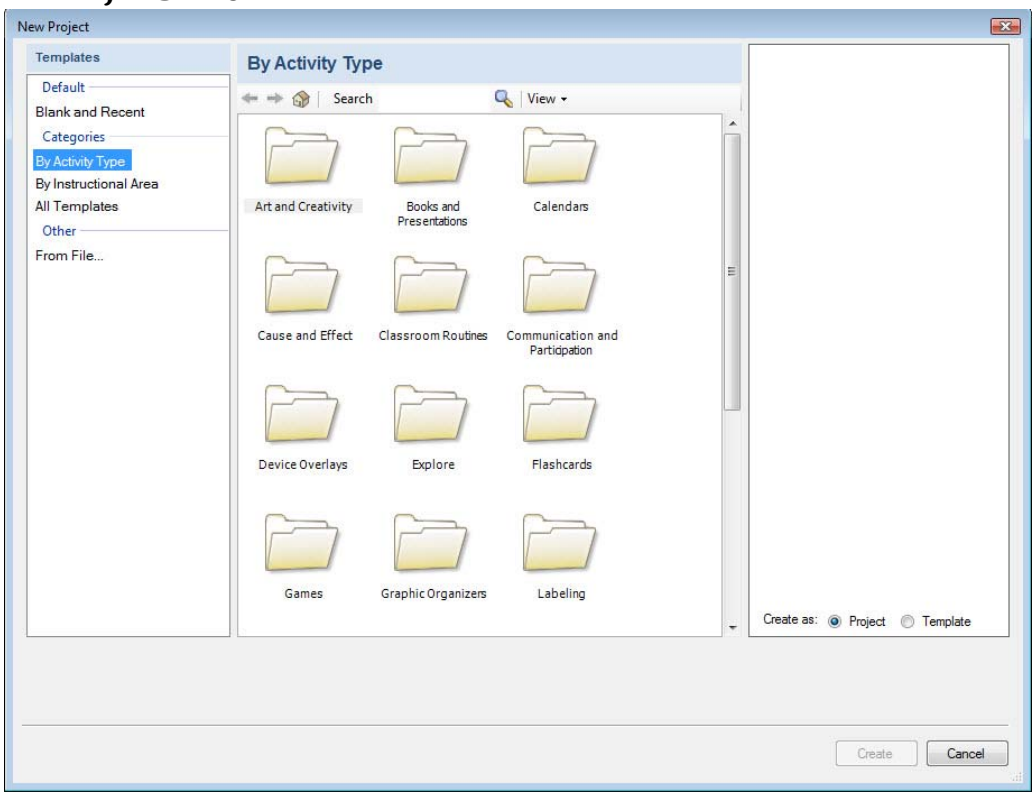
CREATE A NEW PROJECT FROM A TEMPLATE

When you create a new project from a template, a new project will be created in Boardmaker Studio, and the pages included in the template will be added to it.

NOTE
This section describes how to create a new project based on an existing template. For instructions on how to create a new blank project, see *Create a New Project*.

1. Select **File Menu > New > Project from Template**. The *New Project* dialog will open.

NEW PROJECT DIALOG



2. In the *Templates* panel, select one of the following:

   - **By Activity Type -** This option groups the templates by activity type. If you choose this option, then double-click one of the activity type folders to display the templates available for that category. (For more information about each type of template, see ***Template Activity Types***.)

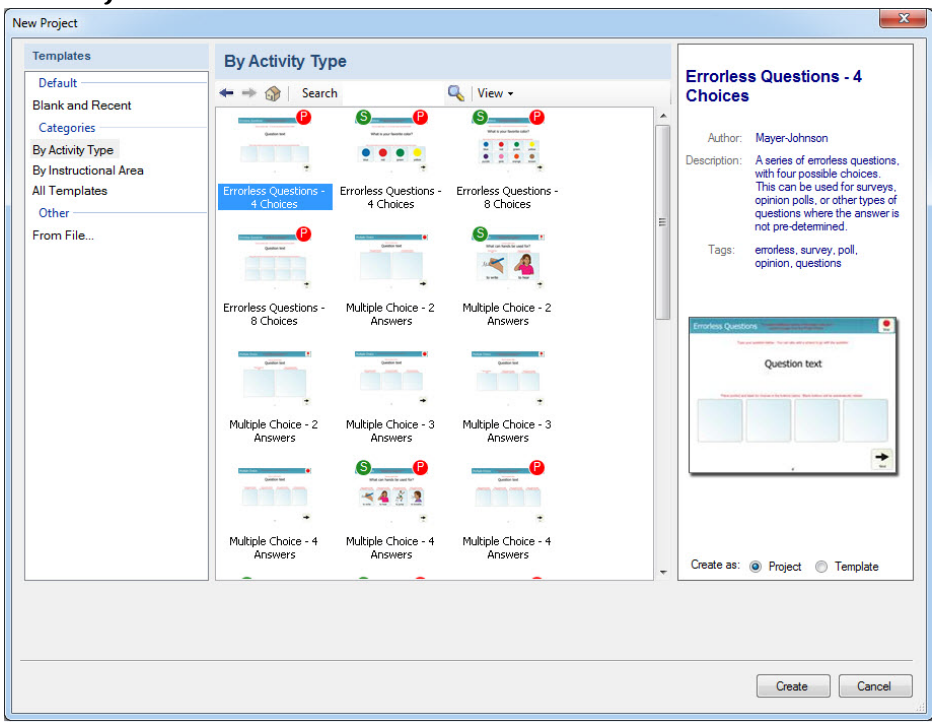
   - **By Instructional Area -** This option groups the templates by instructional area, which is helpful if you're looking for ideas but don't have a specific activity in mind. If you choose this option, then double-click one of the instructional area folders to display the templates available for that category. (This option includes the *English Language Learners* templates.)

- **All Templates -** This option displays all available templates in alphabetical order. All Boardmaker Studio templates with a file name extension of *.bptf* that are located in the default Boardmaker Studio Templates folder will be displayed in the list.
- **From File -** This option enables you to choose a template saved on your computer. If you choose this option, a browser will open, and you can navigate to the template that you want to open.

3. In the list of templates, select a template. A thumbnail and information for the template will be displayed on the right side of the *New Project* dialog.

> **NOTE**
> Sample templates (indicated by the word *SAMPLE* in parentheses at the end of the template name) are available as fully populated samples. You can use them to see how a template works and how you can use it instructionally. (See *Sample Templates*.)

NEW PROJECT DIALOG WITH PERFORMANCE TRACKING TEMPLATE SELECTED



4. In the *Create as* field, select one of the following:
   - **Project -** Choose this option if you want to create a new project based on the template you selected.
   - **Template -** Choose this option if you want to create a new template based on the template you selected. If you select this option, then the project will be saved as a Boardmaker project template file (*.bptf*).
5. Select **Create** to create the project. The pages that are included in the template are added to the project and will appear in the *Project* panel.

NOTE
If the template includes settings that you need to set, then the *Project Setup* dialog will open.

6. If necessary, set the project settings. (See ***Set the Project Settings***.)
7. To save the new project, select **File Menu > Save Project As > New Project**. The *Save As* dialog will open.
8. Navigate to the location where you want to save the project.
9. In the *File name* field, enter a file name for the project.
10. Select **Save**. The project is saved as a project file e with a *.bpf* file name extension.
11. If necessary, add your content to the page(s) in the template. (See ***Add Content to a Template***.)

Create a New Activity from a Template

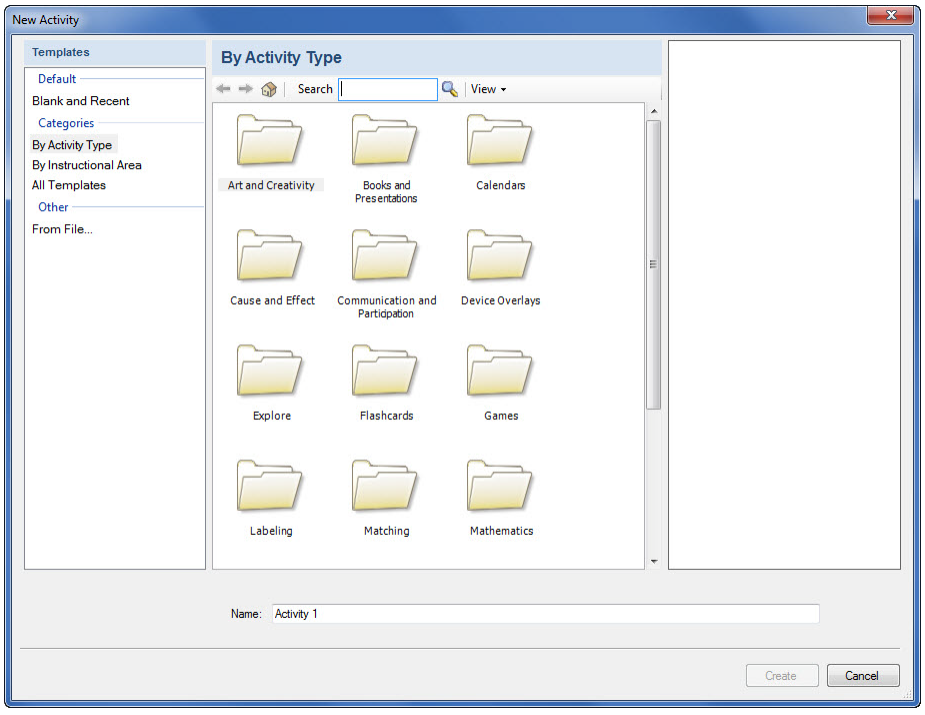
Groups of related pages are called activities. You can create new activities from scratch, or you can create new activities from templates. (For more information about activities, see ***Projects, Activities, and Pages***.)

When you create a new activity, a folder will be added to the open project, and all of the pages included in the template will be added to the activity. You can also create new activities within an activity folder.

Note
This section describes how to create a new activity based on an existing template. For instructions on how to create a new blank activity, see *Create a New Activity*.

1. In the *Project* panel, mouse over the project.
2. In the floating toolbar, select the New Page/Activity icon [], and then select *Activity from Template*. The *New Activity* dialog will open.

New Activity Dialog



Shortcut
You can also right-click the project, and then select New > Activity from Template.

3. In the *Templates* panel, select one of the following:

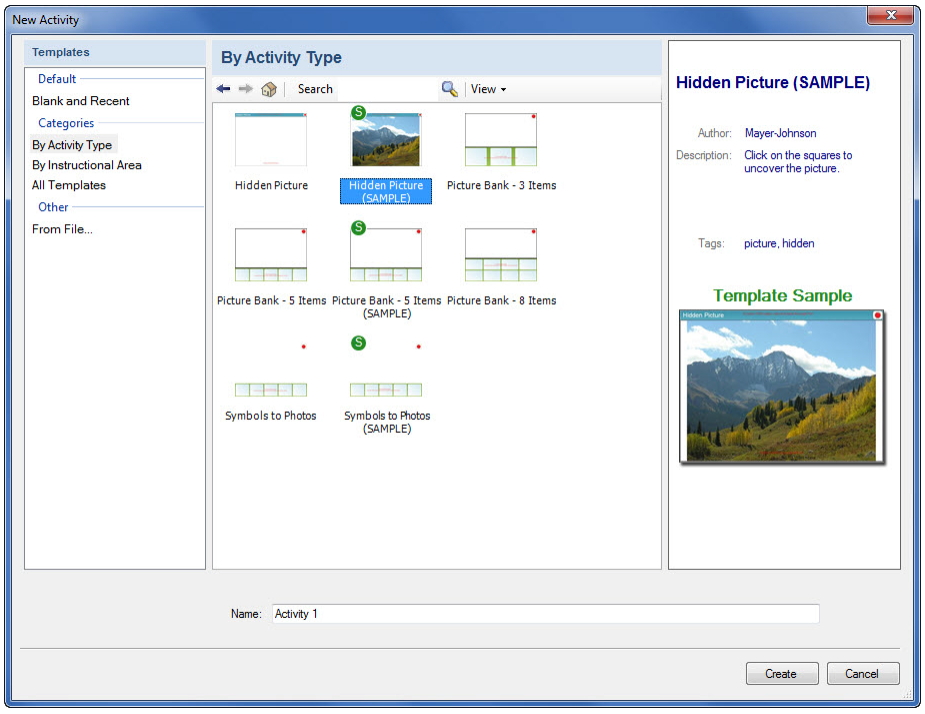
   - **By Activity Type -** This option groups the templates by activity type. If you choose this option, then double-click one of the activity type folders to display the templates available for that category. (For more information about each type of template, see ***Template Activity Types***.)
   - **By Instructional Area -** This option groups the templates by instructional area, which is helpful if you're looking for ideas but don't have a specific activity in mind. If you choose this option, then double-click one of the instructional area folders to display the templates available for that category.
   - **All Templates -** This option displays all available templates in alphabetical order. All Boardmaker Studio templates with a file name extension of *.bptf* that are located in the default Boardmaker Studio Templates folder will be displayed in the list.
   - **From File -** This option enables you to choose a template saved on your computer. If you choose this option, then a browser will open, and you can navigate to the template that you want to open.

4. In the list of templates, select a template. A thumbnail and information for the template will be displayed on the right side of the *New Activity* dialog.

NOTE

Sample templates (indicated by the word *SAMPLE* in parentheses at the end of the template name) are available as fully populated samples. You can use them to see how a template works and how you can use it instructionally. (See *Sample Templates*.)

NEW ACTIVITY DIALOG WITH SAMPLE TEMPLATE SELECTED



5. In the *Name* field, enter a name for the activity.
6. Select **Create**. The activity folder is created. The pages that are included in the template will appear in the activity's folder in the *Project* panel. To view these pages, double-click the activity folder.

> **NOTE**
> If the template includes settings that you need to set, then the *Project Setup* dialog will open.

7. If necessary, set the project settings for the activity. (See ***Set the Project Settings***.)
8. To save the project, select **File Menu > Save Page**.
9. If necessary, add your content to the page(s) in the activity. (See ***Add Content to a Template***.)

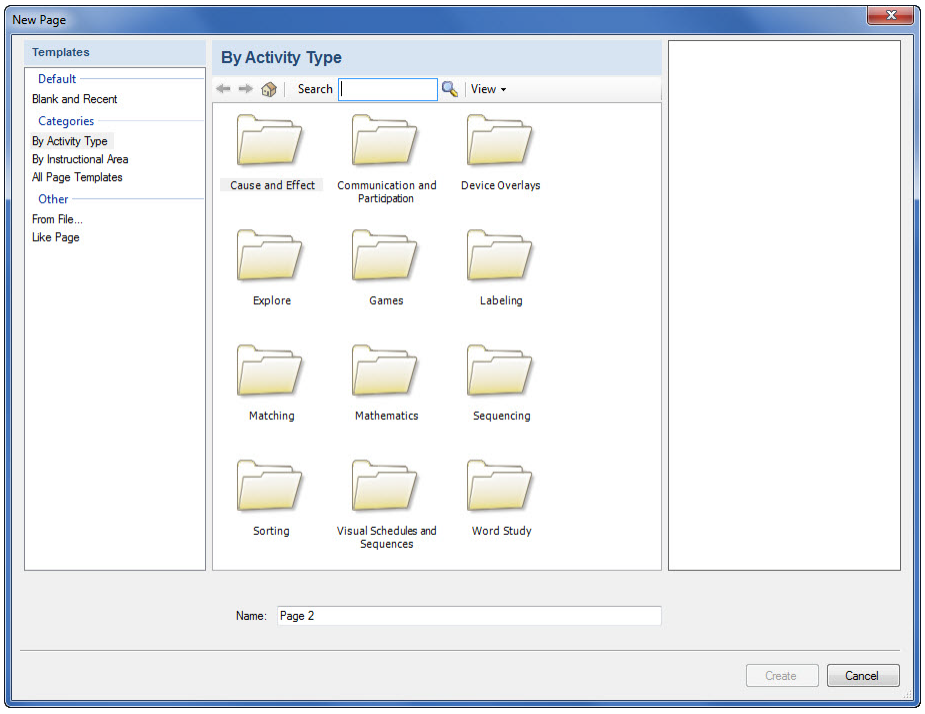
CREATE A NEW PAGE FROM A TEMPLATE

When you create a new page from a template, you will only be able to choose from the templates that consist of a single page. If you can't find the page template you're looking for, try creating a new activity from a template. (See ***Create a New Activity from a Template***.)

NOTE
This section describes how to create a new page based on an existing template. For instructions on how to add a blank page to your project, see *Create a New Page*.

1. In the *Project* panel, mouse over the page after which you want to insert the page.
2. In the floating toolbar, select the New Page/Activity icon [], and then select **Page from Template**. The *New Page* dialog will open.

NEW PAGE DIALOG



SHORTCUT
You can also right-click a page, and then select New > Page from Template.

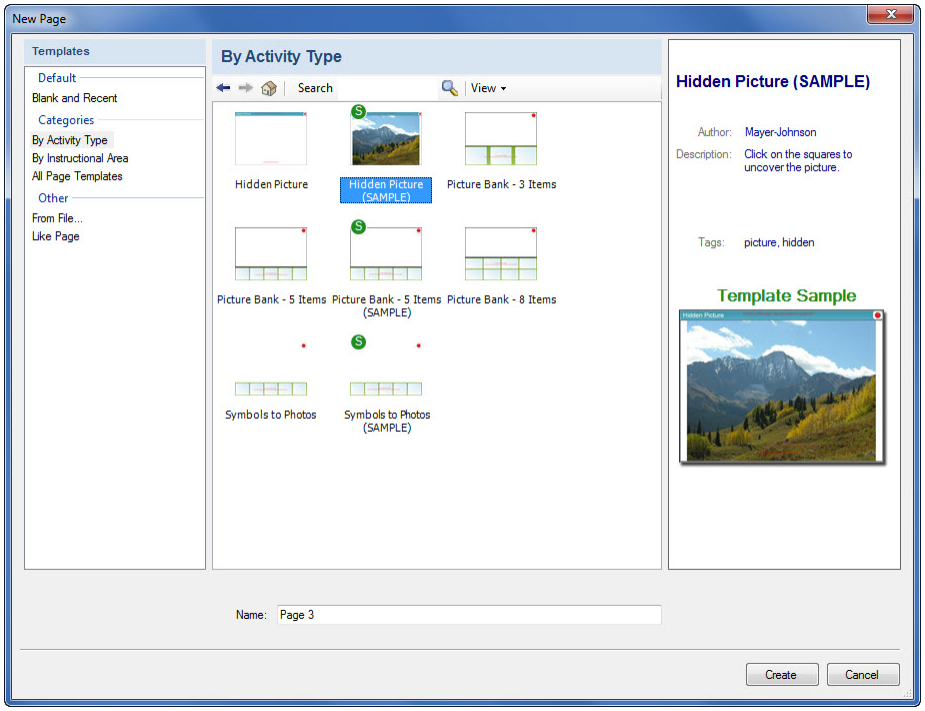
3. In the *Templates* list, select one of the following:
   - **By Activity Type -** This option groups the templates by activity type. If you choose this option, then double-click one of the activity type folders to display the templates available for that category. (For more information about each type of template, see ***Template Activity Types***.)

- **By Instructional Area -** This option groups the templates by instructional area, which is helpful if you're looking for ideas but don't have a specific activity in mind. If you choose this option, then double-click one of the instructional area folders to display the templates available for that category.
- **All Templates -** This option displays all available templates in alphabetical order. All Boardmaker Studio templates with a file name extension of *.bptf* that are located in the default Boardmaker Studio Templates folder will be displayed in the list.
- **From File -** This option enables you to choose a template saved on your computer. If you choose this option, a browser will open, and you can navigate to the template that you want to open.

4. In the list of templates, select a template. A thumbnail and information for the template will be displayed on the right side of the *New Page* dialog.

NOTE
Sample templates (indicated by the word *SAMPLE* in parentheses at the end of the template name) are available as fully populated samples. You can use them to see how a template works and how you can use it instructionally. (See *Sample Templates*.)

NEW PAGE DIALOG WITH SAMPLE TEMPLATE SELECTED



5. In the *Name* field, enter a name for the page.
6. Select **Create**. The page is created and will appear in the *Project* panel.

NOTE
If the template includes settings that you need to set, then the *Project Setup* dialog will open.

7. If necessary, set the project settings for the page. (See ***Set the Project Settings***.)
8. To save the page, select **File Menu > Save Page**.
9. If necessary, add your content to the page. (See ***Add Content to a Template***.)

Add Content to a Template

After creating a new project, activity, or page from a template, you can add your content to it.

View Project Help

You can use the project help to view tips for using the current template.

To view project help, select **File Menu > Project Help**.

> **Note**
> If the *Project Help* option is disabled, then there is no project help for this template. For instructions on how to add content to the template, use the project settings and the instructional text on the pages contained in the template.

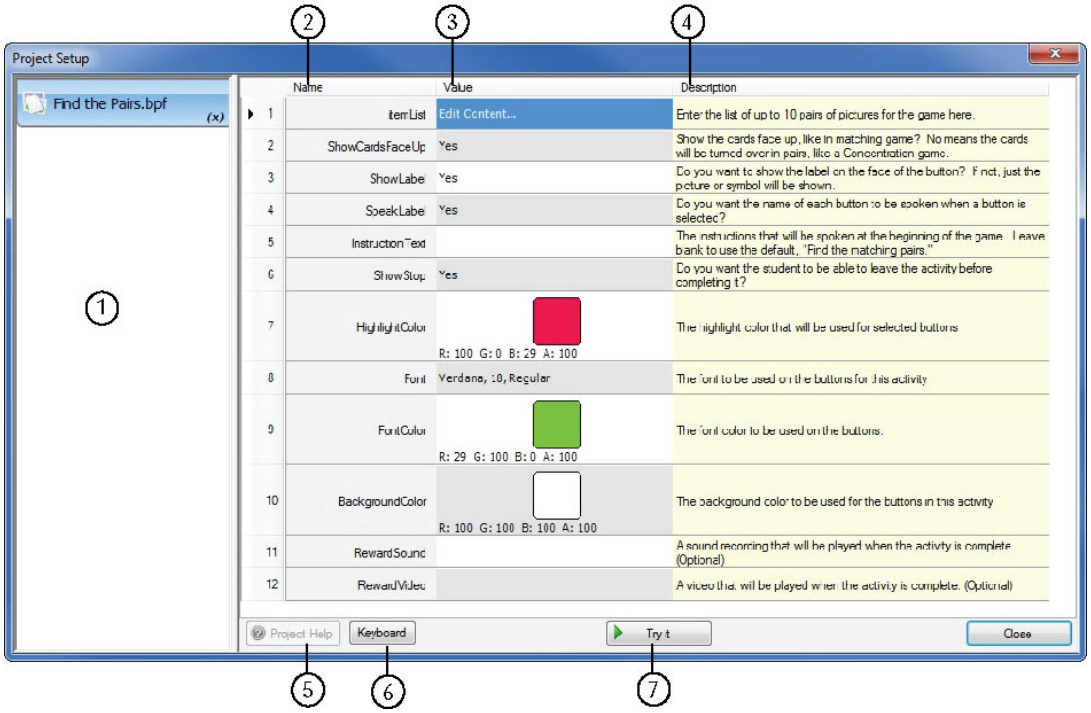
Set the Project Settings

Some onscreen templates include project settings that you can set to control how the project, activity, or page will work. The project settings often contain many useful options. In some cases, you also edit the project settings (rather than the actual pages) to add your content.

You use the *Project Setup* dialog to set the project settings. In most cases, if the template includes project settings that you must set in order to add content to the template, then the *Project Setup* dialog will automatically open after you create a project, activity, or page from the template. Even if the *Project Setup* dialog does not open, you can still access it at any time to adjust the settings as necessary.

1. To open the *Project Setup* dialog, select **File Menu > Project Setup**.

PROJECT SETUP DIALOG



1	**Project Panel**	Displays the activities and pages in your project. Click an activity or page to view its settings.
2	***Name* column**	Displays the name of each project setting.
3	***Value* column**	Displays the current value for each project setting.
4	***Description* column**	Displays a description of each project setting. You can use this description to learn how the project setting is used in the template so that you can set it properly.
5	**Project Help button**	Select this button to display tips for using this template. If the button is disabled, then project help does not exist for the template. (See ***Enter Custom Help Text***.)
6	**Keyboard button**	Select this button to open the On-Screen Keyboard. This keyboard lets you enter text when you are not physically at your computer (for example, if you are using a whiteboard).
7	**Try it button**	Select this button to preview the project and test the project settings. When you're done testing it, the *Project Settings* dialog will still be open in case you need to make any adjustments.

2. For each project setting, select the *Value* column to enter a value.

NOTE
Use the *Description* column to learn how each setting is used in the project. If available, you can select **Project Help** to see tips for using the template. If this button is disabled, then there is no project help for the template.

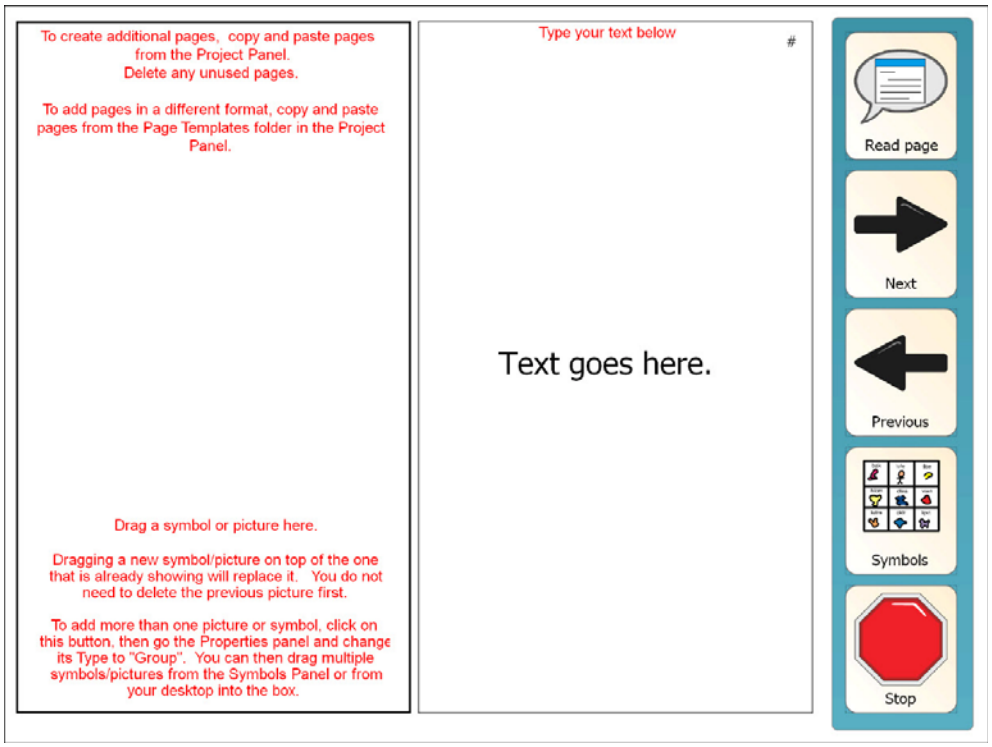
3. To test your settings in Preview mode, select **Try it**.
4. Select **Close**. Your project settings are saved.

Add Additional Content to a Template

Each template includes red instructional text on each page instructing you how to add your content. You can follow these directions to add your content.

For example, the *Book - Text on Right* template includes instructional text to help you add symbols and text to a page. It also describes how to add, move, and delete pages in the book.

BOOK - TEXT ON RIGHT TEMPLATE



NOTE
If you need additional assistance to see how the template is supposed to work, try using a sample template. (See *Sample Templates*.)

REFERENCE
For more information about editing the objects on a page, see *Designing a Page*.

CREATE NEW TEMPLATES

While Boardmaker Studio includes many templates for you to use, you can also create your own templates. Creating a new template enables you to create new projects, activities, and pages based on it. You can also share the template with other Boardmaker Studio users so that they can create their own projects based on the template.

You can create new templates in the following ways:

- Create the template from an existing project.
- Create the template from scratch.
- Create the template from an existing template.

To create a new template:

1. Do one of the following:
    - To create a template from an existing project, open the project.
    - To create a template from scratch, create a new project and select the Create as Template option. (See ***Create a New Project***.)
    - To create a template from an existing template, create a new project from a template and select the Create as Template option. (See ***Create a New Project from a Template***.)
2. Add and design the page or pages that you want to include in the template. (See ***Designing a Page***.)
3. Set the properties for the template. (See ***Setting the Project Template Properties***.)
4. Select **File Menu > Save Project As > Template**. The *Save As* dialog will open.

> **NOTE**
> If you created the template from an existing template, then you don't need to save the project as a template. Instead, you can just click the Save icon on the toolbar.

5. Navigate to the location where you want to save the template.

> **NOTE**
> By default, the template will be saved in the *Templates* folder in the Boardmaker Studio directory (*C:\Documents and Settings\[LOCAL USER NAME]\My Documents\Boardmaker Studio\Templates* in Windows XP or *C:\Users\[LOCAL USER NAME]\Documents\Boardmaker Studio\Templates* in Windows 7.). If you save the template here, then it will be listed in the *All Templates* category when creating a new project from a template.

6. In the *File name* field, enter a file name for the template.
7. Select **Save**. The project is saved as a project template file with a *.bptf* file name extension.

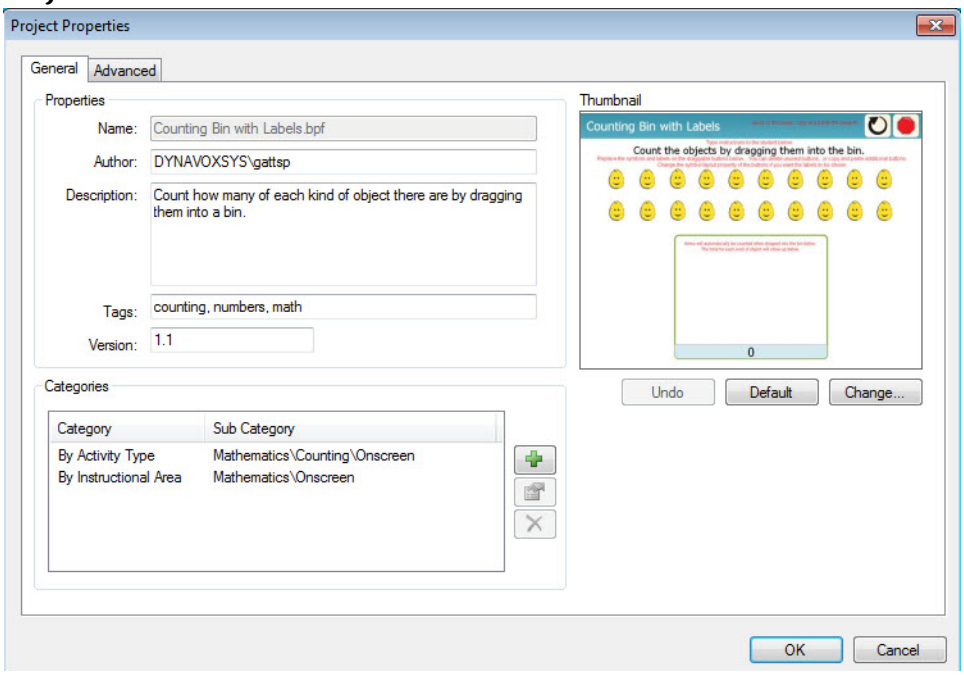
SETTING THE PROJECT TEMPLATE PROPERTIES

You can set the project properties for a template to control how it works as well as to help other Boardmaker Studio users use it. To set the project template properties, you first open the *Project Properties* dialog and then edit the properties on the general and advanced tabs.

You use the *Project Properties* dialog to edit the project properties for a template. To open it, in the *Project* panel, right-click the project and select **Project Properties**.

NOTE
You can also select File Menu > Project Properties to open the *Project Properties* dialog.

PROJECT PROPERTIES DIALOG



Edit the General Properties

You can edit the general properties of a template to set its name, change its thumbnail, and assign it to a category.

Set the Properties

To set the properties for the template, in the *Properties* section, complete any of the following fields:

- **Name -** This field displays the file name of the project. You can not edit the name in this field. If you want to rename the project, then save the project with a different file name.
- **Author -** If necessary, enter your name. This field is optional, but if you plan on sharing the template with other users or using other users' templates, then you might want to add your name so that you can quickly identify the template in the future.
- **Description -** Enter a description for the template. If you plan on sharing the template with other users, then make sure to include a description of what the template does. The description you enter is the description that will be displayed when selecting the template in the *New Project*, *New Activity*, and *New Page* dialogs.
- **Tags -** Enter one or more search tags to help you or other Boardmaker Studio users find the template in a search. If you enter more than one tag, then enter a comma (,) to separate them. For example, if the template is for a book about common school activities, then you could enter the following tags: book,school,math.

  Search tags make it easier for you and other Boardmaker Studio users to find templates. When searching for templates in Boardmaker Studio or on *Boardmakershare.com*, the search will return all templates that have tags that closely match the search criteria.

  When choosing tags for the template, try to include tags that describe the scenario, or type of activity, in which a user would want to use the template. You can also include synonyms for the template's name.
- **Version -** *(Optional)* Enter a version number for the template.

> **NOTE**
> When entering a tag, you can use letters, numbers, and underscores (_). You can't use spaces or punctuation.

Change the Thumbnail Image

The thumbnail image is the image that will be displayed for the template in the *New Project*, *New Activity*, and *New Page* dialogs. By default, the thumbnail is a small picture of the first page in the project, but you can change it to be any image.

1. In the *Thumbnail* section, select **Change**. A browser will open.
2. Navigate to the image you want to use for the thumbnail, and then select **Open**.

NOTE
If you want to change the thumbnail back to the default image, then select **Default**.

Assign the Template to a Category

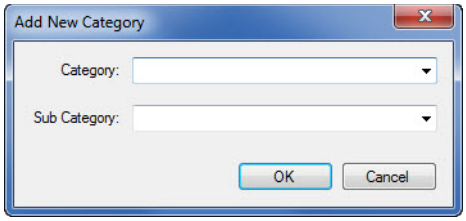
The *Categories* section enables you to define the category in which you want the template to be located. You can assign the template to a new category, or to a sub category within the *By Activity Type* and *By Instructional Area* categories.

The category and sub category to which you assign a template dictates where it will be located when creating a new project, activity, or page from it. If no category is assigned, then the template will only appear in the *All Templates* section.

Assign a Template to a New Category

1. Select the Add icon [ ]. The *Add New Category* dialog will appear.

ADD NEW CATEGORY DIALOG



2. In the *Category* field, either:
   - To assign the template to a new category, enter the name of the category,
   - Or, to assign the template to an existing category, select the drop-down list and select the category.
3. If you want to assign the template to a sub category, then in the *Sub Category* field:
   - To assign the template to a new sub category, enter the name of the sub category,
   - Or, to assign the template to an existing sub category, select the drop-down list and select the sub category.

NOTE
The list of sub categories includes all existing sub categories, not just the sub categories that currently exist for the category you selected. If you assign the gadget to a sub category that doesn't exist for the category you selected, then the sub category will be created within that category.

4. Select **OK**. The template is assigned to the category and, if applicable, the sub category.
5. If you want to assign the template to another category, then repeat steps 1-4.

NOTE
If you assign a template to more than one category, then it will be displayed in each category to which it's assigned.

Assign a Template to a Different Category

If a template is already assigned to a category, and you want to switch it to a different category, then you can edit the category assignment.

1. In the *Categories* section, select the category that you want to change.
2. Select the Edit icon [ ]. The *Edit Category* dialog will appear.
3. Choose a new category and, if necessary, sub category. (For more information about choosing categories, see ***Assign a Template to a New Category***.)

Edit the Advanced Properties

You can edit the advanced properties of a template to set what will happen when a project is created from this template as well as to enter text to help other users use your template.

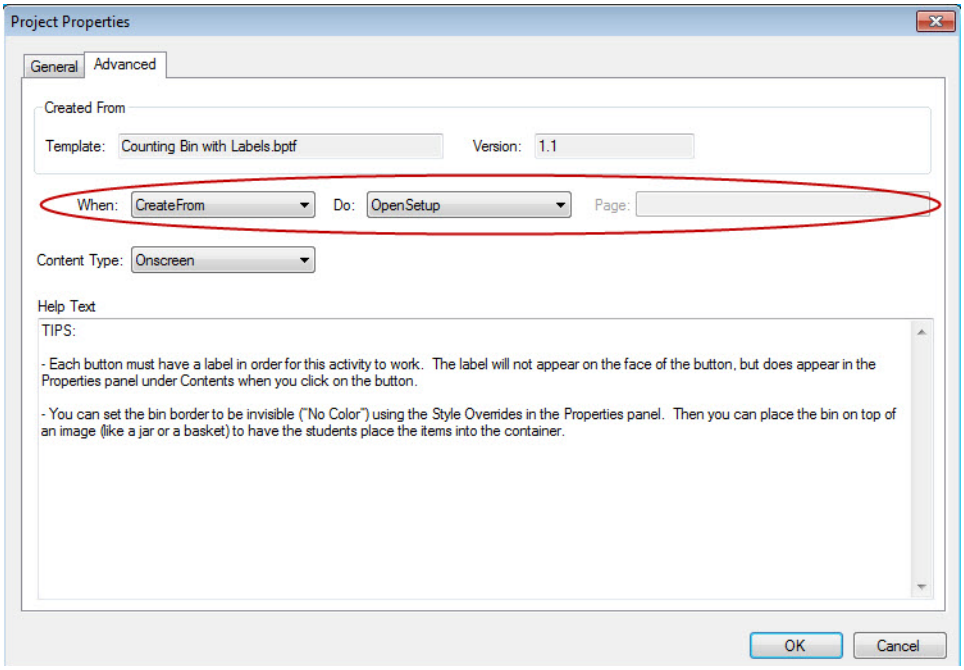
NOTE
The *Created From* section is for informational purposes only. It lists the template and version number, if any, from which the current project was originally created.

Set the Template Rule

Setting a template rule enables you to designate what will open, and when, when a user creates a new project based on this template.

For example, the following rule designates that when a project is first created from this template, the *Project Setup* dialog will open.

SETTING A TEMPLATE RULE (EXAMPLE)



1. Select the *Advanced* tab.
2. Select the *When* drop-down list and select one of the following:
   - **OpenProject -** Whenever the project that is created from this template is opened, the action in the *Do* drop-down list will be performed. The action will be performed every time the project is opened, not just the first time it is created.
   - **CreateFrom -** When a project is first created from this template, the action in the *Do* drop-down list will be performed. The action will only be performed this one time, not every time the project is opened.

> **NOTE**
> The *Never* option is available in case you need to remove the rule.

3. Select the *Do* drop-down list and select one of the following:
   - **OpenSetup -** When the event in the *When* drop-down list occurs, the *Project Setup* dialog will be opened. If your template includes shared variables that need to be initialized, then you should choose this option so that the user can initialize them properly. (See ***Set the Project Settings***.)
   - **OpenFirstPage -** When the event in the *When* drop-down list occurs, the first page in the template will be opened.
   - **OpenPage -** When the event in the *When* drop-down list occurs, a particular page in the template will be opened. If you choose this option, then in the *Page* field, enter the name of the page that should be opened.

Select the Content Type

Selecting a content type enables you to designate whether the template is for print or onscreen activities. This content type will be displayed with the template on *BoardmakerShare.com* so that other users can quickly see for what type of activity the template is intended to be used.

1. Select the **Advanced** tab.
2. Select the **Content Type** drop-down list and select an option.

Enter Custom Help Text

Entering help text enables other users to understand how to use this template. When a project is created based on this template, the help text that you enter will be displayed in the *Project Help* dialog (**File Menu > Project Help**).

1. Select the **Advanced** tab.
2. In the *Help Text* field, enter your instructions.

7 Creating Original Content

In the Boardmaker Studio Designer software, a project is a collection of related pages that you can use as a group. You can create a project, and create pages and activities for your project. You can also import other Boardmaker Studio projects and projects from previous versions of Boardmaker and combine them with the project that is currently open.

Activity folders are used to categorize the pages of a project, making it easier for you to find a group of pages.

This chapter covers the following topics:

- ***Create a New Project***
- ***Create a New Project from Boardmaker Conversion***
- ***Open an Existing Project***
- ***Create a New Activity***
- ***Create a New Page***
- ***Combine Projects***

CREATE A NEW PROJECT

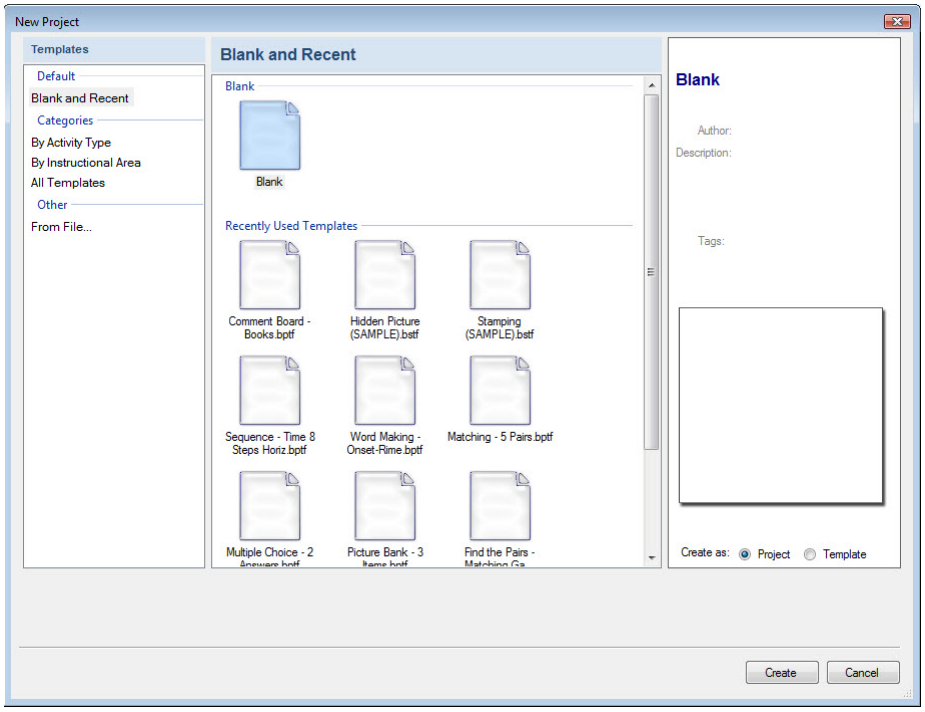
You can create a new Boardmaker Studio project from scratch.

NOTE
This section describes how to create a new blank project. For instructions on how to create a new project based on an existing template, see *Creating Content Using Templates*.

REFERENCE
For more information about how projects are organized in Boardmaker Studio, see *Project Organization*.

1. Select **File Menu > New > Project**. The *New Project* dialog will open.

NEW PROJECT DIALOG



2. Select the **Blank** option.
3. Make a selection in the *Create as* field:
   a. To create a new project, select **Project.**
   b. To create the project as a template, select ***Template.***

NOTE
If you select the *Template* option, then the project will be saved as a Boardmaker project template file (*.bptf*). (See *Create New Templates*.)

4. Select **Create**. A dialog will open asking you if you want to create a new page for the project.
5. Select **Yes**. The *New Page* dialog will open.
6. Continue creating (or importing) pages and activities for the new project. (For more information about creating new pages, see ***Creating Pages***. Also see ***Create a New Activity*** and ***Combine Projects***.)
7. To save the new project, select **File Menu > Save Project As > New Project**. The *Save As* dialog will open.
8. Navigate to the location where you want to save the project.
9. In the *File name* field, enter a file name for the project.
10. Select **Save**. The project is saved as a project file with a *.bpf* file name extension.

Setting the Project Properties

Use the *Project Properties* dialog to edit the project properties for a new (or existing) project. Setting the project properties will make it easier to find the project for you and others with whom you plan to share it.

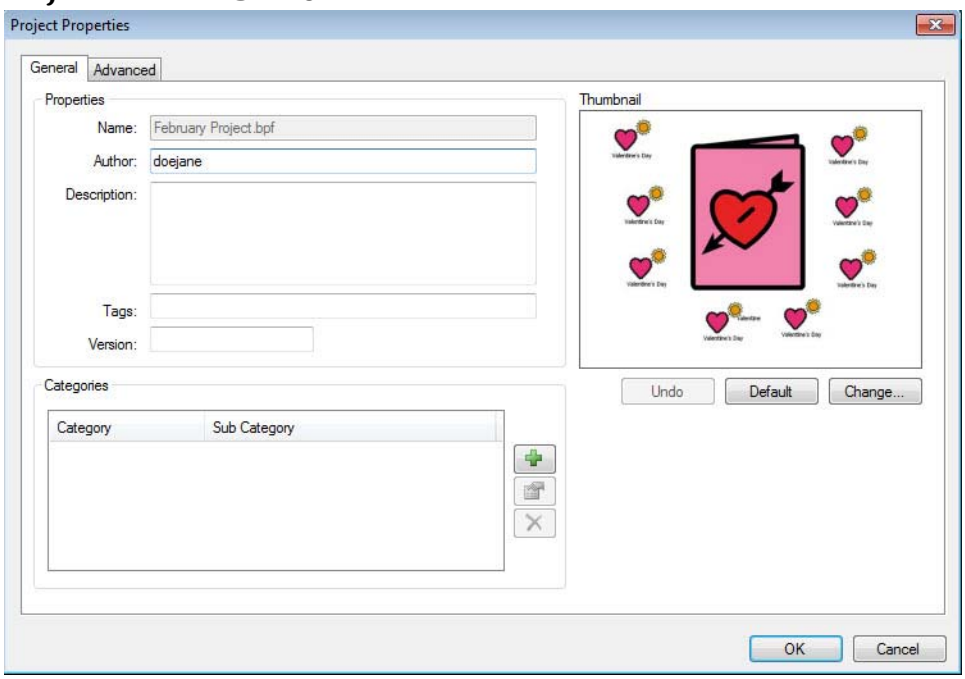
The *Project Properties* dialog enables you to:

- Add a description of the project.
- Enter search tags.
- Change the thumbnail image displayed for the project.
- Assign categories and sub categories.
- Set a rule to designate what will happen when the project opens.
- Identify whether the project is for print or onscreen activities.
- Enter help text.

To open the *Project Properties* dialog, in the *Project* panel, right-click the project and select *Project Properties*.

NOTE
You can also select File Menu > Project Properties to open the *Project Properties* dialog.

PROJECT PROPERTIES DIALOG



Set up the General Properties

You can set the general properties of a project to change its thumbnail, add a description and tags, and assign it to a category or categories and sub categories. Select the **General** tab on the *Project Properties* dialog.

Set the Properties

To set the general properties for the project in the *Properties* section, complete the following fields:

- **Name -** This field displays the file name of the project. You cannot edit the name in this field. If you want to rename the project, you must save the project with a different file name.
- **Author -** This field is optional, but if you plan on sharing the project with other users, you might want to add your name so that you can quickly identify the project in the future.
- **Description -** Enter a description of the project, especially If you plan on sharing it with other users.
- **Tags -** Enter one or more search tags to help you or other Boardmaker Studio users find the project in a search. If you enter more than one tag, then enter a comma (,) to separate them.
- **Version -** *(Optional)* Enter a version number for the project.

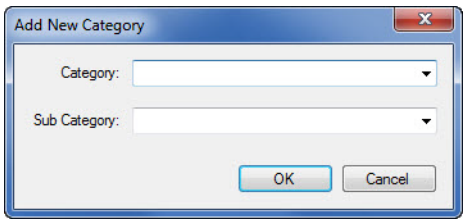
NOTE
When entering a tag, you can use letters, numbers, and underscores (_). You can't use spaces or punctuation.

Assign A Category and Sub Categories to the Project

Assign categories and sub categories to the project in the *Categories* section of the *Project Properties* dialog:

1. Select the Add icon [ ]. The *Add New Category* dialog will appear.

ADD NEW CATEGORY DIALOG



2. In the *Category* drop-down list, select either **By Activity Type** or **By Instructional Area**.
3. If you want to assign the project to a sub category, then in the *Sub Category* field, either:
   - Select the drop-down list and select an existing sub category
   - Or, enter the name of a new sub category,

> **NOTE**
> The list of sub categories includes all existing sub categories, not just those for the category you selected. If you assign the project to a sub category that doesn't exist for the category you selected, then the sub category will be created within that category.

4. Select **OK**. The project is assigned to the category and sub category you have selected.
5. Repeat steps 1-4 to assign additional categories and sub categories.

> **NOTE**
> To edit a category or sub category, select the category you want to change. Then select the Edit icon [ ]. The *Edit Category* dialog will appear. Make your changes, and then select OK.

> **NOTE**
> To delete a category, select the category you want to delete. Then select the Delete icon [ ]. The *Verify Remove* dialog will appear. Select Yes.

Change the Thumbnail Image

By default, the thumbnail image is a small picture of the first page in the project, but you can change it to any image.

1. In the *Thumbnail* section, select **Change**. A browser will open.
2. Navigate to the image you want to use for the thumbnail, and then select **Open**.

> **NOTE**
> If you want to change the thumbnail back to the default image, select Default.

Edit the Advanced Properties of the Project

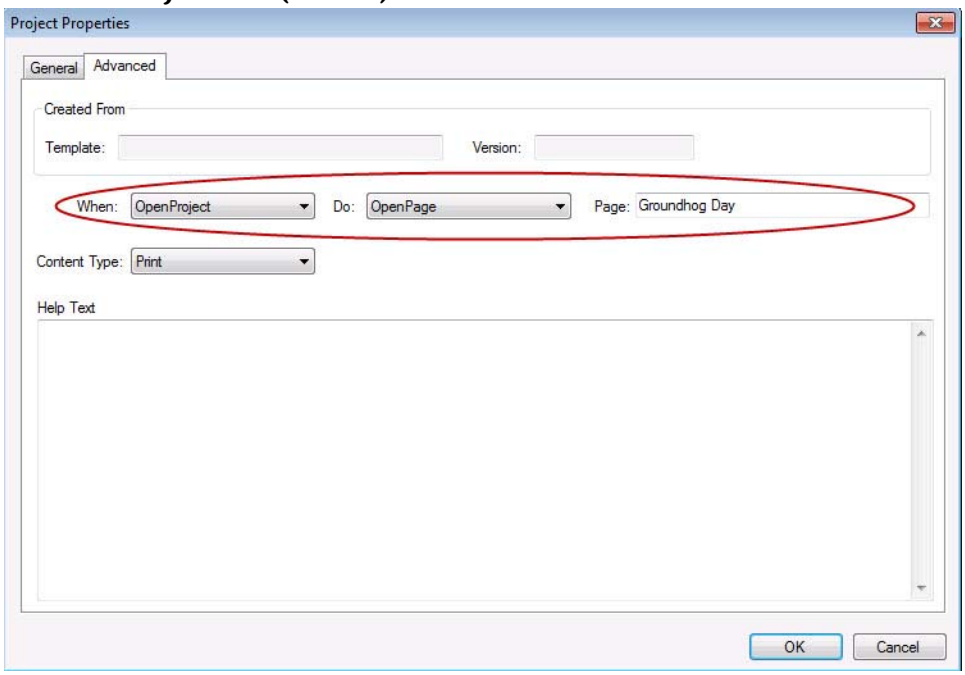
REFERENCE
The *Advanced* tab enables you to edit the advanced properties of a project. The *Created From* section of the dialog applies to projects created from templates. See *Set the Template Rule* for detailed instructions on editing the advanced properties of a project created from a template.

Set a Project Rule

Setting a project rule enables you to designate what will occur when a user first opens this project.

For example, the following rule designates that when this project is first opened, the page, *Groundhog Day* (the second page of the project) will open.

SETTING A PROJECT RULE (EXAMPLE)



1. Select the **Advanced** tab.
2. Select the **When** drop-down list and select one of the following:
   - **OpenProject -** Whenever the project is opened, the action in the *Do* drop-down list will be performed. The action will be performed every time the project is opened.
   - **CreateFrom -** When a new project is created from this project, the action in the *Do* drop-down list will be performed. The action will only be performed only when the project is created, not every time the project is opened.

NOTE
The *Never* option is available in case you need to remove the rule.

3. Select the **Do** drop-down list and select one of the following:

    - **OpenSetup -** When the event in the *When* drop-down list occurs, the *Project Setup* dialog will open. If your project includes shared variables that need to be initialized, you should choose this option so that the user can initialize them properly. (See ***Set the Project Settings*** in chapter 6.)

    - **OpenFirstPage -** When the event in the *When* drop-down list occurs, the first page in the project will open.

    - **OpenPage -** When the event in the *When* drop-down list occurs, a page that you specify in the *Page* field will open. Enter the name of the page that should be opened.

Select a Content Type

Select a content type to designate whether the project you have created is for print or onscreen activities.

1. Select the **Advanced** tab.
2. Select the **Content Type** drop-down list and select an option.

Enter Help Text

Entering help text enables other users to understand how to use this project. The help text that you enter will be displayed in the *Project Help* dialog (**File Menu > Project Help**).

1. Select the **Advanced** tab.
2. In the *Help Text* field, enter your instructions.

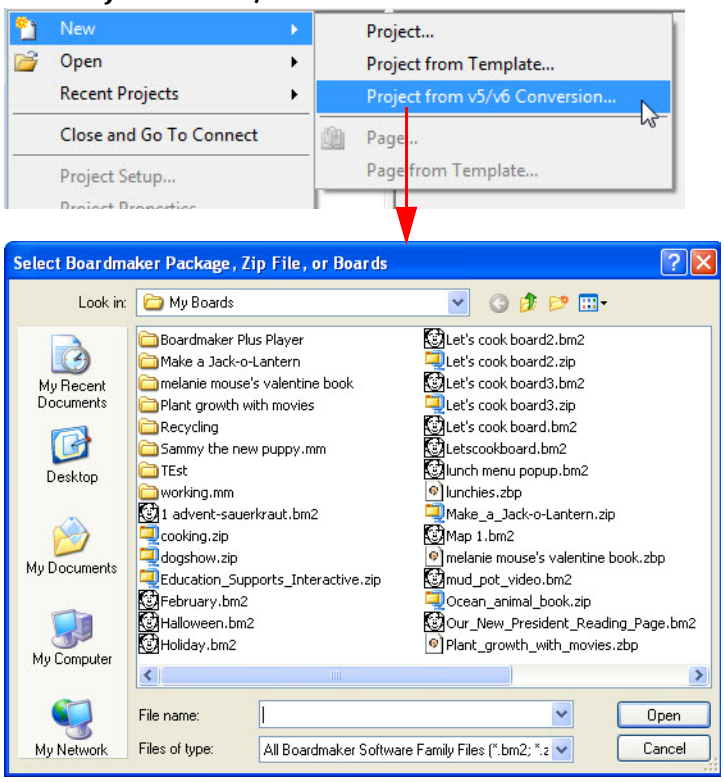
Create a New Project from Boardmaker Conversion

The Boardmaker Studio software enables you to convert boards from previous versions of Boardmaker. You can convert boards, board packages, and *.zip* files that were created in Boardmaker version 5 or above and save them as new projects to edit in Boardmaker Studio.

1. Select **File Menu > New > Project from v5/v6 Conversion.** Your *My Boards* folder will open.

Shortcut
Select the Convert v5/v6 Boards button on the *Connect* screen.

New Project from v5/v6 Conversion

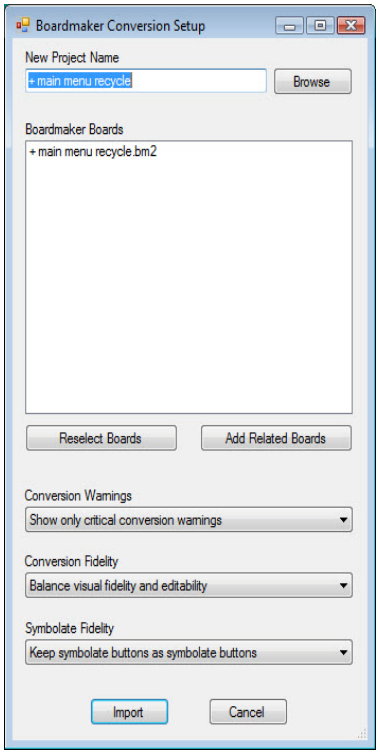


2. Select the *.bm2*, *.zbp*, or *.zip* files you want to convert into a Boardmaker Studio project.

Note
Ctrl + click to select multiple individual files.

3. Select **Open**. The *Boardmaker Conversion Setup* dialog will open.

BOARDMAKER CONVERSION SETUP DIALOG



NOTE

You can return to your *My Boards* folder to reselect boards or to add boards by selecting Reselect Boards or Add Related Boards on the *Conversion Setup* dialog.

4. (Optional) Select Conversion Warnings, Conversion Fidelity, and Symbolate Fidelity settings from the drop-down lists.

5. Select **Import**.

NOTE

If you have selected Show All Conversions Warnings in the *Conversion Setup Dialog*, the *Conversion Warnings* dialog will open, stating that the files have been successfully converted and listing any inconsistencies in the conversion process. Select OK to close the *Conversion Warning* dialog.

The new project will be saved in your *Boardmaker Studio Project* file and will open in the workspace.

Open an Existing Project

1. Select **File Menu > Open > Project**. A browser will open.
2. Navigate to the location where the project is located.
3. Select the project you want to open, and then select **Open**. The project is opened.

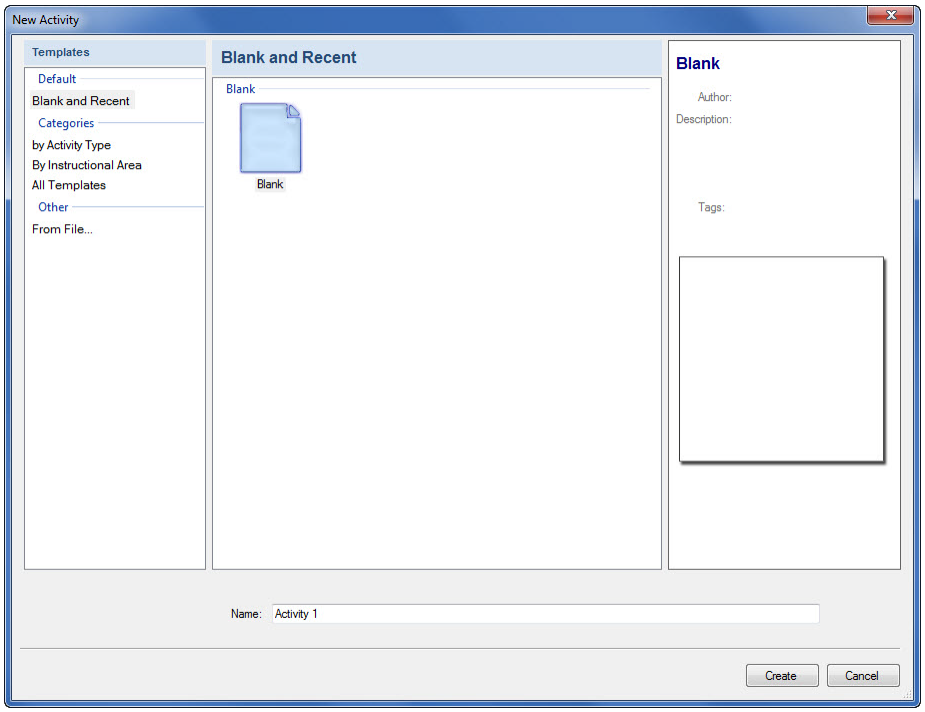
Create a New Activity

Groups of related pages are called activities. In a project, an activity is a folder that can hold a number of pages. (For more information about activities, see ***Projects, Activities, and Pages***.)

> **Note**
> This section describes how to create a new blank activity. For instructions on how to create a new activity based on an existing template, see *Create a New Activity from a Template*.

1. In the *Project* panel, select the page after which you want to insert the activity.
2. In the floating toolbar, select the New Page/Activity icon [], and then select **Activity**. The *New Activity* dialog will open.

New Activity Dialog



SHORTCUT
You can also right-click a page, then select New, and then select Activity.

3. Select the **Blank** option.
4. In the *Name* field, enter a name for the activity.
5. Select **Create**. The activity is created and is displayed as a folder in the *Project* panel.
6. To save the project, select **File Menu > Save Page**. The project is saved. You can now add pages to the activity. For more information, see ***Creating Pages***.

NOTE
If the project already has other activities, then the new activity will appear as the last activity in the *Project* panel. To move an activity to another position in the project, select the activity and drag it to a new position.

CREATE A NEW PAGE

Pages are the primary components of Boardmaker Studio projects. To add a new page to your project, you first create the page, and then edit the page properties to define how the page will function. After setting the properties, you can design the page and add objects to it. (For instructions on how to create a new page, see ***Creating Pages***.)

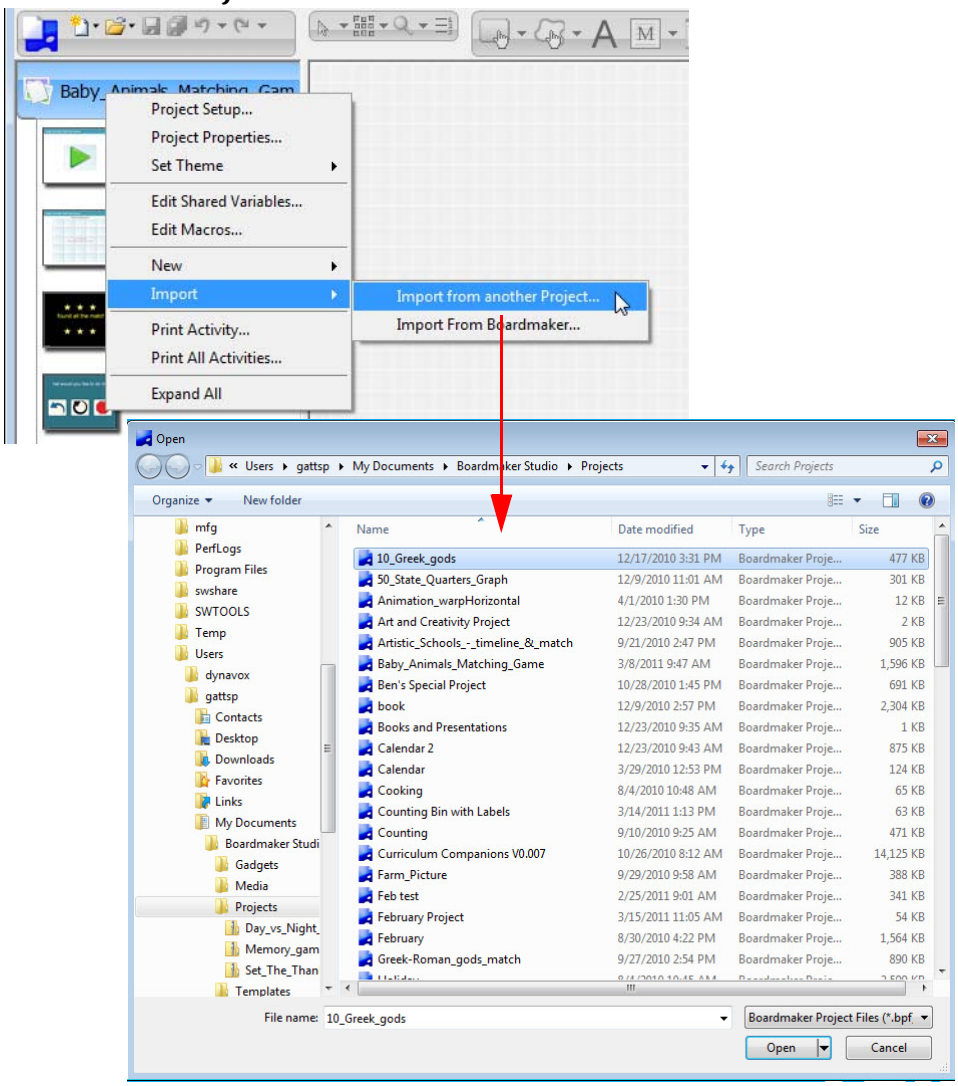
COMBINE PROJECTS

You can import other projects from Boardmaker Studio or Boardmaker (version 5 or above) and combine them with the project that is currently open in the Designer workspace.

Import a Studio Project

1. In the *Project* panel, right-click on the project name.
2. Select **Import > Import from another Project**. Your *Projects* folder will open.

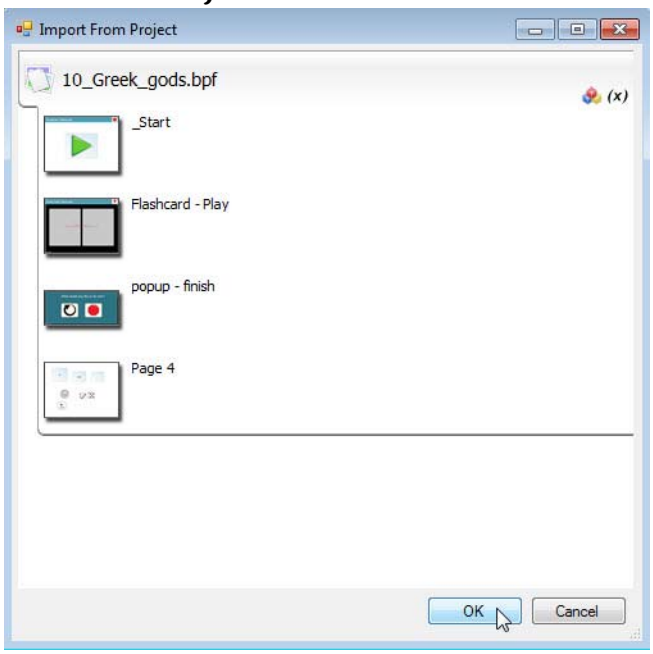
IMPORT STUDIO PROJECT



3. Select the project that you want to import.

4. Select **Open**. The *Import from Project* dialog will open, showing all the activities and pages in the project you have chosen to import.

IMPORT FROM PROJECT DIALOG



5. Select **OK.** The project will be imported into the currently open project.

NOTE
You can change the order of the activities and pages. Select the activity or page you want to move, and drag it up or down in the *Project* panel.

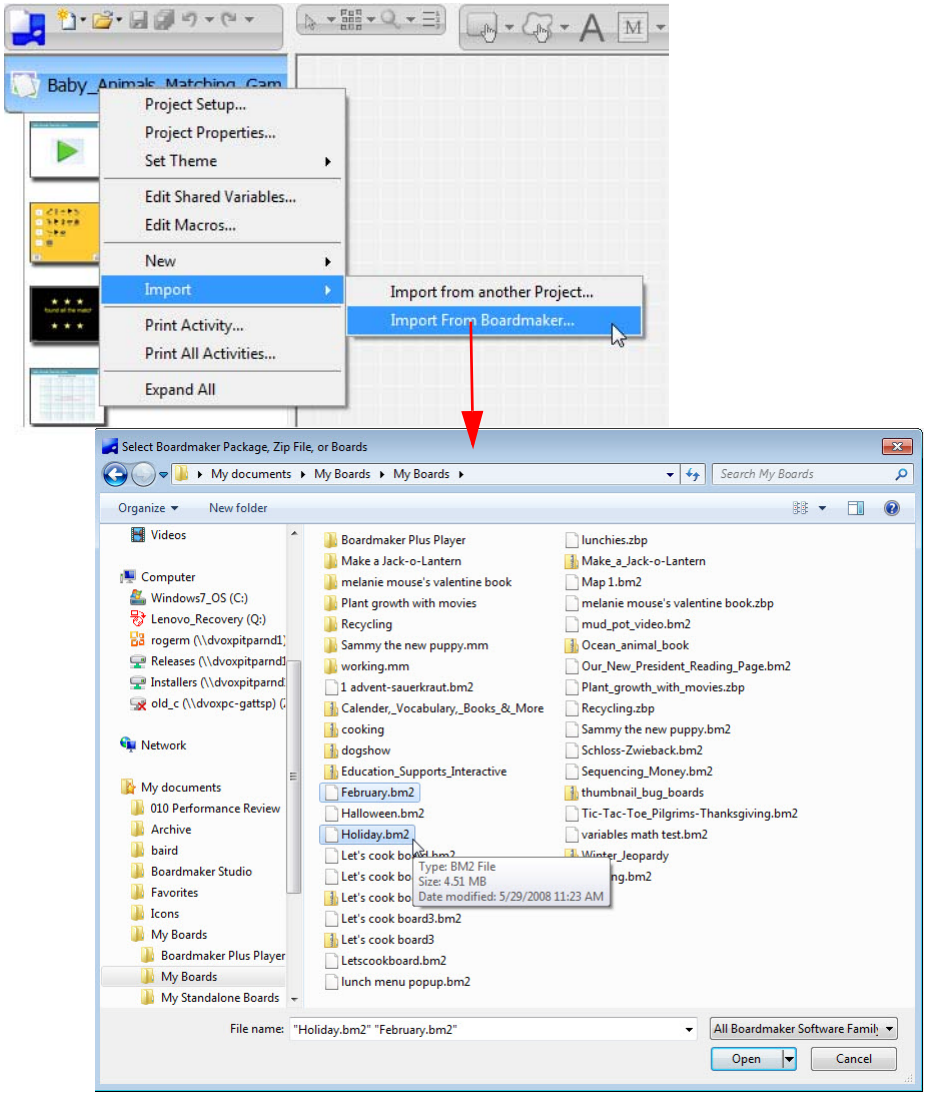
Import Boardmaker Boards

You can import boards, board packages, and *.zip* files that were created in Boardmaker (version 5 or above) into the currently open Boardmaker Studio project.

1. In the *Project* panel, right-click on the project name.

2. Select **Import > Import from Boardmaker**. Navigate to the location on your computer in which your Boardmaker projects are located - normally your *My Boards* folder.

IMPORT BOARDMAKER PROJECT

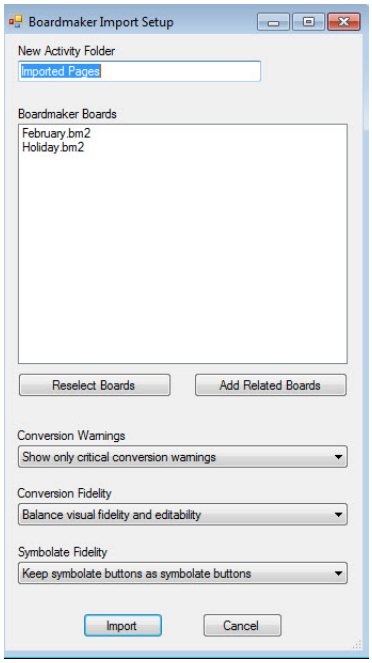


3. Select the Boardmaker package, zip file, or boards you want to import.

NOTE
Ctrl + click to select multiple individual files.

4. Select **Open**. The *Boardmaker Import Setup* dialog will open.

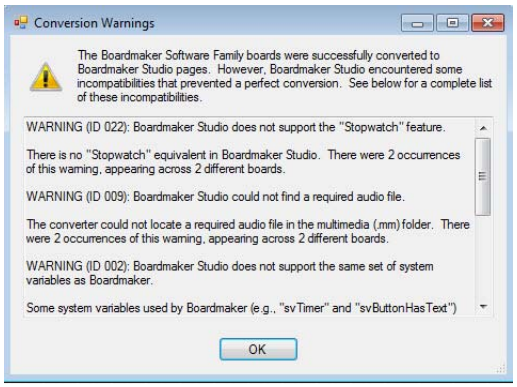
BOARDMAKER IMPORT SETUP DIALOG



NOTE
You can reselect or add more boards by selecting Reselect Boards or Add Related Boards on the *Import Setup* dialog.

5. Select **Import**. The *Conversion Warnings* dialog will open, stating that the files have been successfully converted and listing any inconsistencies in the conversion process.

CONVERSION WARNINGS DIALOG



6. Select **OK** to close the *Conversion Warnings* dialog. The board(s), board packages, or *.zip* files you have selected will be imported into the currently open project.

NOTE
You can change the order of the boards in the *Project* panel. Select the board you want to move, and drag it up or down in the Project panel.

8 Designing a Page

Boardmaker Studio includes very powerful tools for creating custom page content. The numerous design tools included with the software make it easy to create engaging print and interactive activities.

Simply select any drawing tool from the toolbar to add an object to your page - a button (there are multiple types from which to choose, including standard and group buttons), hot spot, freeform object label, message window, text box, line, video box, radio button or a checkbox. Then use the *Properties* panel to assign content, programming, symbols, shape, style, audio cue, drag-and-drop and target properties, etc.) to the object you have drawn.

You can quickly drag a symbol from the *Symbols* panel onto an object on the page, or use it as the page background. Drag a gadget - a pre-programmed object - from the *Gadgets* panel onto your page to quickly build or enhance an activity.

When you have finished designing your page, you can easily "test" it - simply put the software in Preview mode to display your page as the user will see it.

This chapter covers the following topics:

- ***Creating Pages***
- ***Working with Buttons***
- ***Working with Freeform Objects***
- ***Working with Labels***
- ***Working with Lines***
- ***Working with Video Boxes***
- ***Working with Message Windows***
- ***Working with Text Boxes***
- ***Working with Radio Buttons and Check Boxes***
- ***Working with Group Boxes***
- ***Working with Tab Controls***

- ***Using the Rich Text Editor***
- ***Working with Movable Objects***
- ***Creating a Grid of Objects***
- ***Setting the Scan Order for an Individual Page***

CREATING PAGES

Pages are the primary components of Boardmaker Studio projects. To add a new page to your project, you first create the page, and then edit the page properties to define how the page will function. After setting the properties, you can design the page and add objects to it.

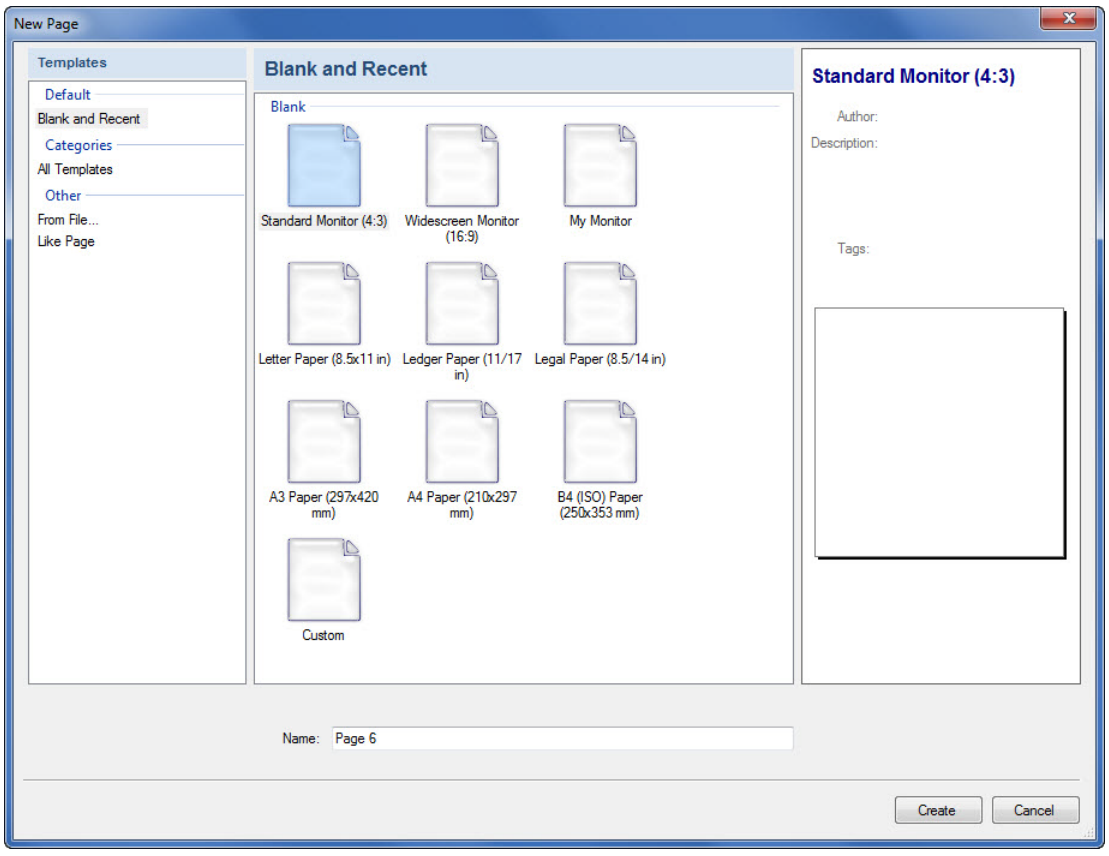
Create a New Page

This section describes how to create a new blank page. (For instructions on how to create a new page based on an existing template, see ***Create a New Page from a Template***.)

1. In the *Project* panel, select the page after which you want to insert the page.

1. In the floating toolbar, select the New Page/Activity icon [], and then select **Page**. The *New Page* dialog will open.

NEW PAGE DIALOG



2. Select a page size from the *Blank and Recent* pane.

NOTE
You can also create a new page based on an existing page in the project. Select **Like Page**, and then select a page.

REFERENCE
You can still change the size and orientation of the page after creating it. For more information, see *Change the Page Setup*.

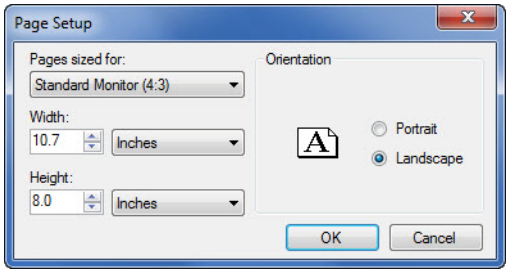
3. In the *Name* field, enter a name for the page.
4. Select **Create**. The page is created and added to the project.

Change the Page Setup

Changing the page setup enables you to change the size and orientation of the page.

1. Select **File Menu > Page Setup**. The *Page Setup* dialog will open.

PAGE SETUP DIALOG



2. To change the page size, do one of the following:
   - To choose a standard page size, select *Pages sized for*, and then choose an option.
   - To adjust the page width manually, in the *Width* field, select the up or down arrow.
   - To adjust the page height manually, in the *Height* field, select the up or down arrow.

NOTE
The page width and height are defined in inches, but you can use the drop-down lists next to the *Width* and *Height* fields to use other measurements, such as centimeters or pixels.

NOTE
If you manually adjust the page width and height, the option in the *Pages sized for* drop-down list will automatically adjust to match your selections.

3. To change the page orientation, select either *Portrait* or *Landscape*.
4. Select **OK**.

Edit Page Properties

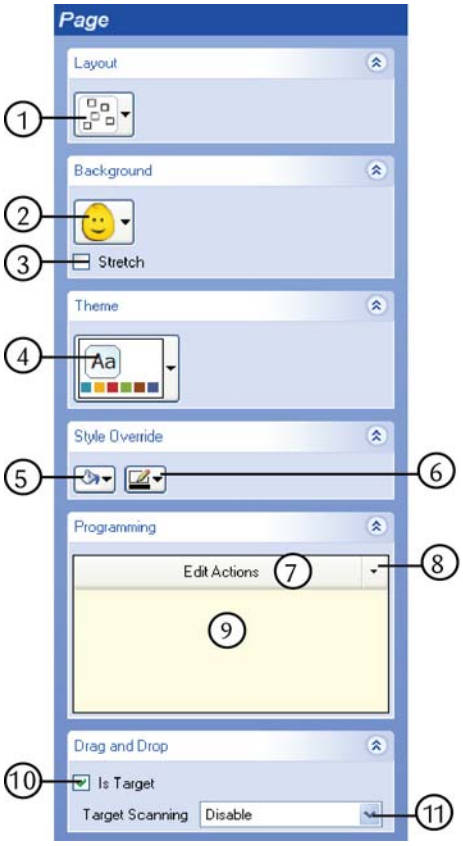
Use the *Page* Properties panel to assign or edit the properties (layout, content, theme, and style) of the page.

Open the Page Properties Panel

Select the page whose properties you want to define or change. The *Page* Properties panel will open.

> **NOTE**
> Before you begin editing page properties, make sure that all the Properties groups in the *Page* Properties panel are expanded. To expand (open) a Properties group, select the arrow [»] at the top right of the group title bar.

PAGE PROPERTIES PANEL



1 **Layout button**

2 **Symbol button**

3 ***Stretch* check box**

4 **Theme button**

5 **Fill Color button**

6 **Border Color button**

7 ***Edit Actions* button**

8 **Expand button (opens and closes the assigned actions list)**

9 **Assigned actions list**

10 ***Is Target* check box**

11 ***Target Scanning* drop-down list**

Select the Page Layout

Setting the layout enables you to control how objects will be placed on the page. Select the Layout button and choose a layout from the available options.

NOTE
The layout options for the page are the same as the layout options for group boxes. For more information about selecting the layout, see *Select the Group Box Layout*.

You can choose from five different layouts:

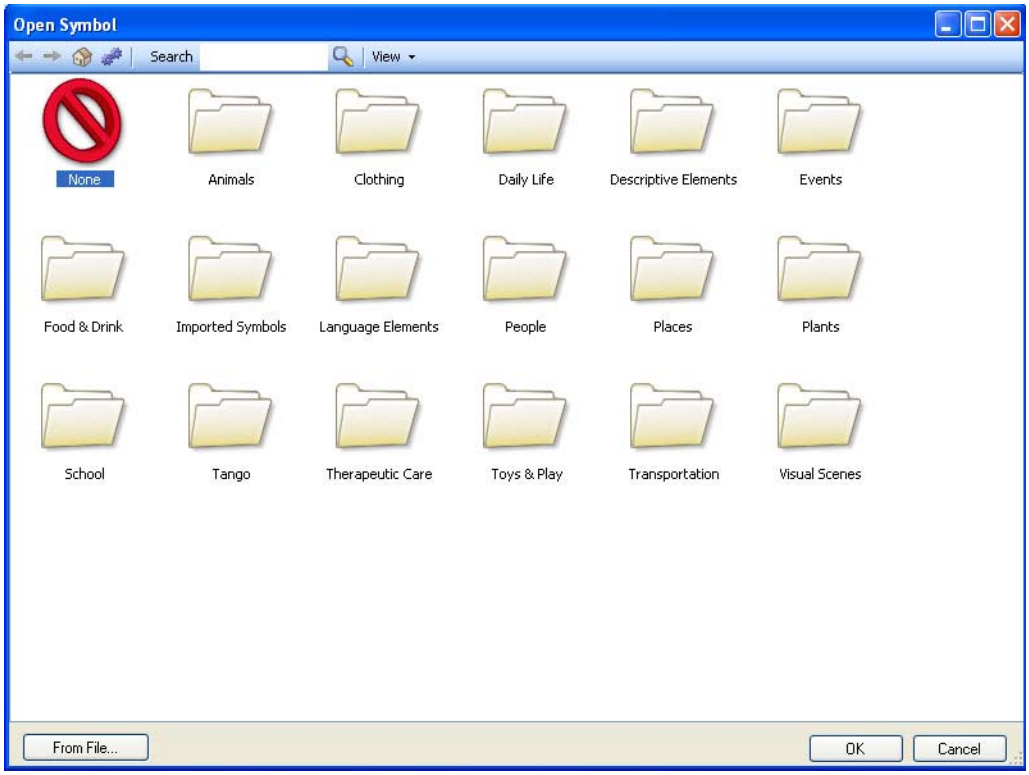
- **Freeform -** objects will be arranged the way you place them when you drag them onto the page. (For more information about this layout option, see ***Freeform Layout***.)
- **Auto Center -** objects will be arranged in rows or columns and centered on the page. (For more information about this layout option, see ***Auto Center Layout***.)
- **Auto Grid -** as objects are dragged onto the page, they will be arranged in rows or columns beginning at the top left corner. (For more information about this layout option, see ***Auto Grid Layout***.)
- **Auto Circular -** objects will be arranged in a circular grid. (For more information about this layout option, see ***Auto Circular Layout***.)
- **Grid -** enables you to create a custom grid on the page with a specified number of horizontal and vertical cells. Objects can be placed in any cell in the grid. (For more information about this layout option, see ***Grid Layout***.)

Select the Page Background

Select a symbol to use as the page background.

1. Select the Symbol button. The *Open Symbol* window will open.

OPEN SYMBOL WINDOW



2. To select a symbol, do one of the following:
   - Browse for a symbol: Double-click a symbol category folder to open it, and continue navigating through the folders until you find the symbol you want to use. (See ***Browse for a Symbol***.)
   - Search for a symbol**:** In the *Search* field, enter your search criteria, and then select the Search icon [ ]. Navigate through the search results until you find the symbol you want to use. (See ***Browse for a Symbol***.)
   - Use a digital picture as a symbol. (See ***Use a Digital Picture as a Symbol***.)
3. Select **OK**. The symbol will be placed on the page.
4. If you want to make the symbol stretch to fit the entire page, select the **Stretch** check box.

Select the Page Theme

You can set the page theme so that the page has a particular look and feel.

To select the page theme, select the Theme button, and then select a theme.

Override the Page Theme

Use the *Style Override* buttons to choose custom fill and border colors for the page theme.

Set the Page Fill Color

You can set the page fill color to change the background color on the page.

1. Select the Fill Color button, and then either:
   - To choose a standard color, in either the *Theme Colors* or *Standard Colors* section, select a color.
   - Or, to choose a custom color, select *More Colors*. The *Color Selector* dialog will open.
2. If you want to add a gradient to the page, then do the following:
   a. Select *Gradient*, and then select a gradient type.
   b. To make the gradient a different color than the page fill color, select *Gradient Color*, and then select a color.

NOTE
To reset the page to its default color, select the Fill Color button, and then select *Use Default*. To remove a gradient, select the Fill Color button, then select *Gradient*, and then select *No Gradient*.

Set the Page Border Color

You can set the page border color to change the color, style, and thickness of the page border.

1. Select the Border Color button, and then select a color. (For more information about how to choose a color, see ***Set the Page Fill Color***.)
2. To set the line thickness or line style of the border, select *Thickness* or *Style*, and then select an option.

Assign Actions to the Page

You can use the *Programming* properties to assign actions to the page. All actions currently assigned to the page will be displayed in the Actions viewport.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the button.

REFERENCE
See *Working with Actions* for information on adding and editing page actions.

Select the Drag and Drop and Target Scan Properties for the Page

Designate the Page as a Target

You can define the page as a target so that, in Preview and Play modes, it will accept objects that are dragged into it.

To designate a page as a target, select the **Is Target** check box.

> **NOTE**
> If you do not designate the page as a target, in Preview and Play modes, an object moved onto it will snap back to its original position.

To remove the target designation from a page, clear the **Is Target** check box.

Select the Target Scan Type

When an access method other than Simple Touch is used, you can define how the scan highlight will react. (See ***Working with Movable Objects***.)

> **NOTE**
> The *Target Scanning* drop-down list will appear only when the Is Target check box is selected.

Select a scan type from the Target Scanning drop-down list:

- **Scan** will scan the entire page as one target object. The object moved onto the page will be placed in the next available position as defined by the page's layout.

> **NOTE**
> This scan type is the default scan type for all layouts other than the grid layout.

- **ScanAndPosition** will move the scan inside the page (through the grid in a grid layout) to a specific position as defined by the layout style.
- Select **Disable** if you do not want the page to be scanned as a target object

> **NOTE**
> This is the default setting for pages.

Working with Buttons

Buttons are the most commonly used objects on pages. Use the Button tool to draw a rectangular (or "standard") button, a word predictor button, a group or target button, or rectangular hot spot. Then use the Properties panels to designate the button type, add a label and symbol to the button, change the button's appearance and determine its behavior, and assign actions to it.

Note

The controls in your Properties panels may not appear exactly as in the illustrations in this section. The appearance of the Properties panels is dependent on your computer's operating system, and the layout of the controls is dependent on the panel width and the size of your monitor.

Reference

You can also create freeform buttons and freeform hot spots. See *Working with Freeform Objects*.

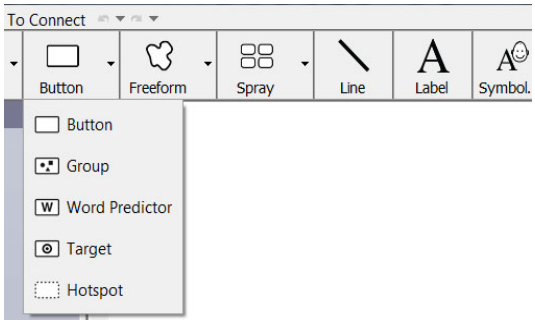
Standard Buttons

Of the many button types offered by Boardmaker Studio, the "standard" - or rectangular - button is the most common. A standard button offers a great deal of potential for design in that it is "blank" when first drawn on a page - it has no preassigned properties, so you can completely customize the button's appearance and behavior and add whatever labels, symbol, and actions you like.

Draw a Standard Button

1. Select the arrow to the right of the Button tool in the toolbar. Then select **Standard Button** from the drop-down list.

Button Drop-Down List



2. Move the pointer into the area in the workspace where you want to place the button.
3. Hold down the mouse button, and drag diagonally. (To draw a square button, hold down the **Shift** key while you are dragging.)

4. Release the mouse button when the new button is the desired size and shape.

SHORTCUT
You can also quickly add a button to the page by selecting the Button tool and dragging it onto the page - or you can select the Button tool and click anywhere on the page.

Once you have drawn the button, you can resize it or move it:

- To resize the button, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the button is the size and shape you want.
- To move the button, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the button will open a menu from which you can quickly modify the button and its position on the page. (See *Right-Click Menus at a Glance*.)

REFERENCE
To create a grid of identical buttons, see *Creating a Grid of Objects*.

5. To save your changes, select **File > Save Page**.

Edit Button Properties

Use the *Button* Properties panel to assign or edit the properties (label, symbol, appearance, behavior, and actions) of the button.

Open the Button Properties Panel

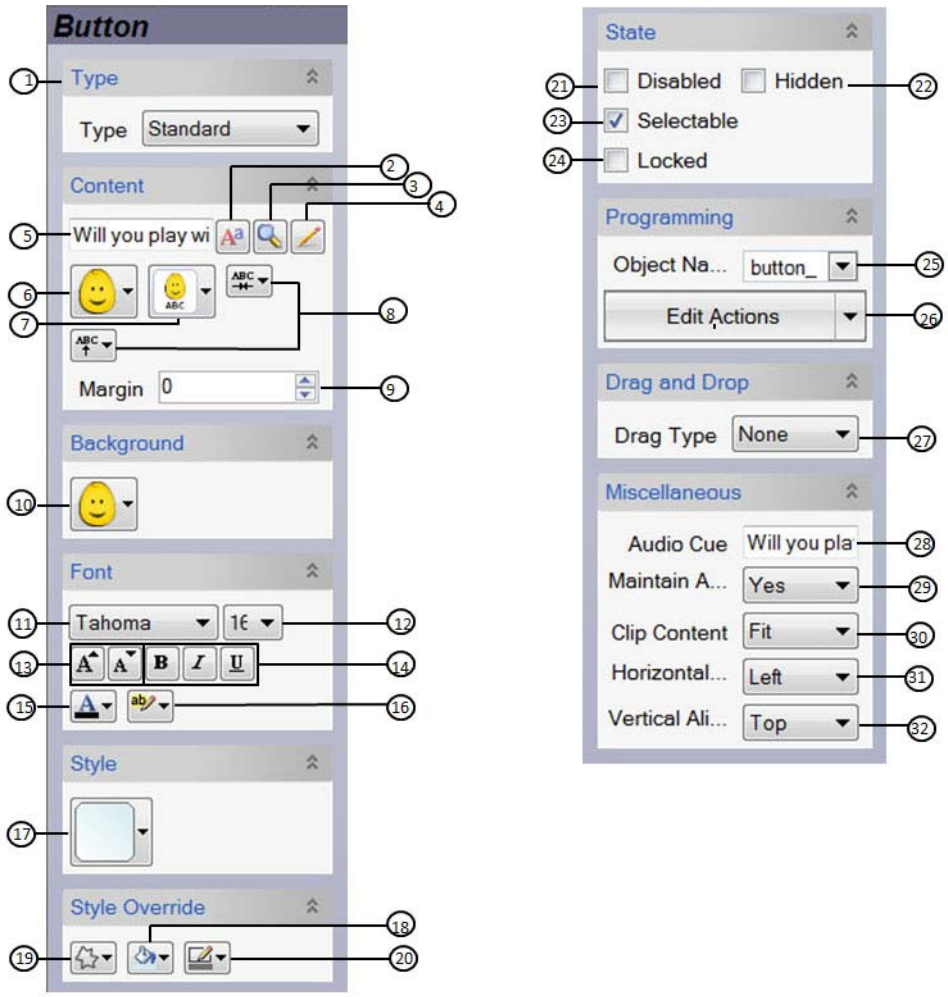
Select the button you want to define or change. The *Button* Properties panel will open.

SHORTCUT
You can select multiple buttons and change all of their properties at the same time. (Ctrl + Click or use the mouse to draw a selection box around multiple buttons.)

NOTE
Before you begin editing button properties, make sure that all the Properties groups in the *Button* Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

Button Properties Panel



1 Button *Type* drop-down list
2 Label text box
3 Rich Text Editor button
4 Symbol Search button
5 Edit Image button
6 Symbol button
7 Layout button
8 Text justification buttons
9 *Margin* drop-down list
10 *Background* image button
11 Font drop-down list

12 **Font size drop-down list**

13 **Increase/decrease font size buttons**

14 **Font style buttons**

15 **Text color button**

16 **Text background color button**

17 ***Style* button**

18 **Shape override button**

19 **Fill color override button**

20 **Border override button**

21 ***Disabled* check box**

22 ***Hidden* check box**

23 ***Selectable* check box**

24 ***Locked* check box**

25 ***Object Name* text box**

26 ***Edit Actions* button**

27 ***Drag Type* drop-down list**

28 ***Audio Cue* text box**

29 ***Maintain Aspect* drop-down list**

30 ***Clip Content* drop-down list**

31 ***Horizontal Alignment* drop-down list**

32 ***Vertical Alignment* drop-down list**

NOTE

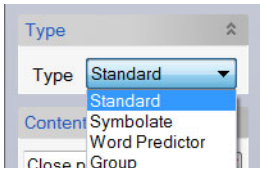
.As you make changes to the button's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Button Type

The Button *Type* drop-down list will display "Button" ("standard" button) as the button type.

> **NOTE**
> If you wish, you can change the button to a word predictor, symbolate, or group button. (See the *Word Prediction*, *Symbolate Buttons*, and *Group and Target Buttons* sections of this chapter.)

BUTTON TYPE PROPERTIES



1 Button type drop-down list

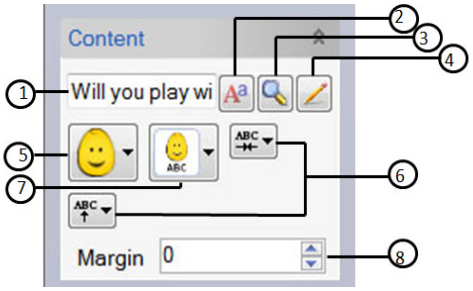
Edit Button Content

Using the Button Content Properties panel, you can edit the button's label, symbol, and layout.

The Button Content Properties Panel

You use the Button Content Properties panel to edit button content.

BUTTON CONTENT PROPERTIES



2 Label text box

3 Rich Text Editor button

4 Symbol search button

5 Edit image button

6 Symbol button

7 Layout button

8 Text Justification buttons

Add/Edit the Button Content

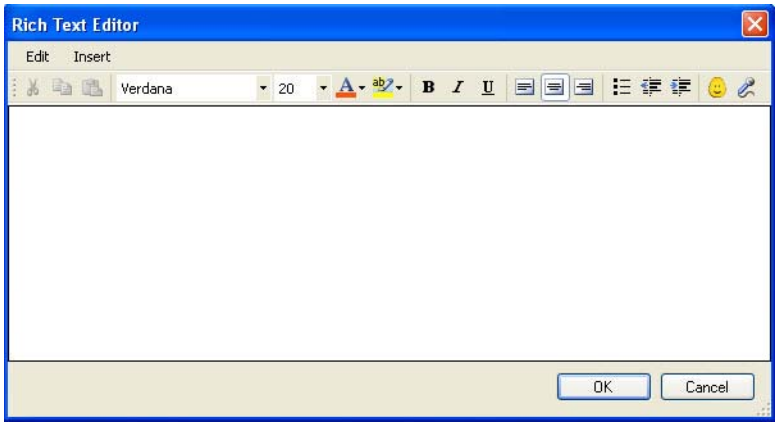
1. Select the label text box.
2. Enter a new text label.

Define Button Content Using the Rich Text Editor

You can use the *Rich Text Editor* to format text - to quickly and easily place multiple phrases or sentences on an object, use different font families and variously sized and colored fonts, and symbolate text. You can also change speech style settings and insert pauses, sound files, images, expressions, and keyboard keys into the text.

1. Select the Rich Text Editor button. The *Rich Text Editor* will open.

RICH TEXT EDITOR



2. Use the *Rich Text Editor* to define the button content (label, font, font color, alignment, symbolate properties, etc.) See ***Using the Rich Text Editor***.

NOTE
You can also use the controls in the *Font* Properties group to format the label text, however, all formatting you have made using the *Rich Text Editor* will be overridden when you use the controls in the *Font* Properties group.

Search for a Symbol That Matches the Button Label

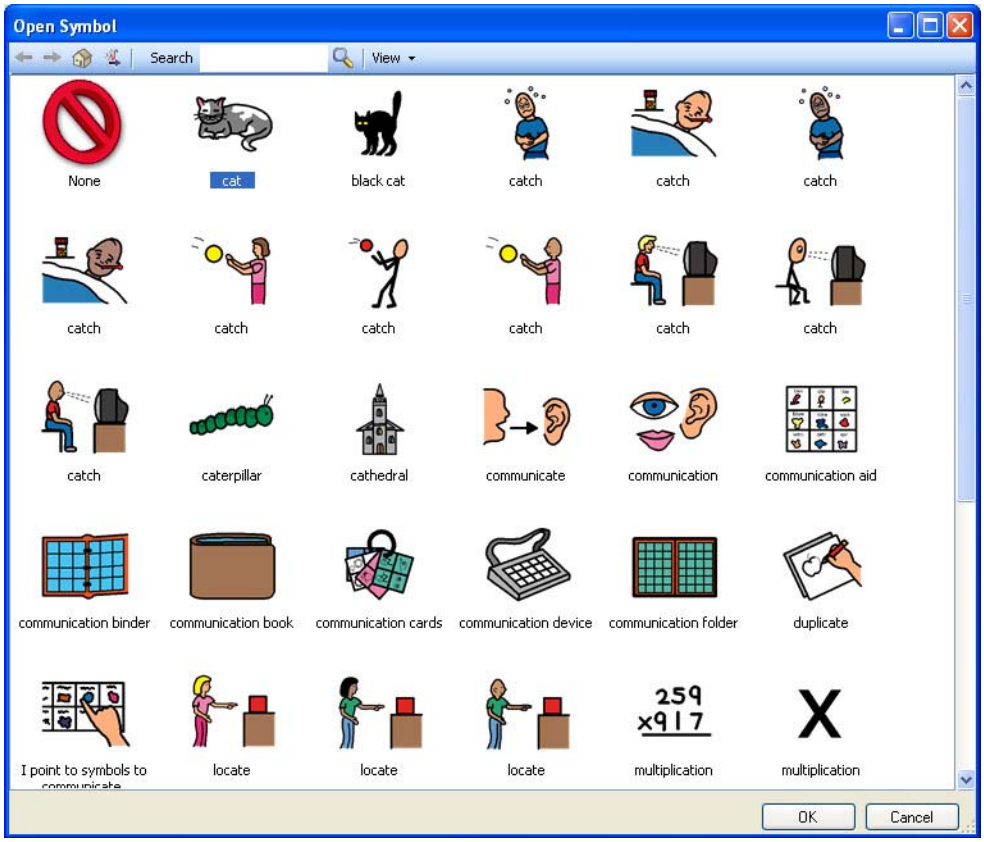
The procedure for searching for and placing a symbol on the button will differ depending on whether or not you have entered a label for the button in the label text box. If you have not entered a label for the button, see ***Search for a Symbol for a Button Without a Label***.

NOTE
You can only place one symbol on a standard button - if you place another symbol onto a button that already contains a symbol, the symbol will be replaced. (To place multiple symbols on a button, you must convert the standard button to a group or target button. See *Button Type*.)

1. Select the Symbol search button. The *Open Symbol* window will open.

   All of the symbols that match the label text - or whose names contain the label text - will be displayed. (For example, if you have assigned the label "cat" to the button, among the symbols that will be displayed are "cat," "black cat," "cat bowl," catcher," and "caterpillar.") (If necessary, scroll to look through all of the available symbols.)

OPEN SYMBOL WINDOW (EXAMPLE WHEN LABEL HAS BEEN ASSIGNED)



NOTE

If you don't want to use any of the symbols that are displayed, select Home [ ] on the toolbar of the *Open Symbol* window to display the symbol category folders. Navigate through the layers of folders until you find a symbol that you would like to use.

2. Select the symbol that you want to use.
3. Select **Open** (or double-click the symbol). The symbol will be placed on the button.

Search for a Symbol for a Button Without a Label

The procedure for searching for and placing a symbol on the button will differ depending on whether or not you have entered a label for the button in the label text box. If you have entered a label for the button, see ***Search for a Symbol That Matches the Button Label***.

NOTE

You can only place one symbol on a standard button - if you place another symbol onto a button that already contains a symbol, the symbol will be replaced. (To place multiple symbols on a button, you must convert the standard button to a group or target button. See *Button Type*.)

1. Select the Symbol button. The *Open Symbol* window will open and folders representing all of the symbol categories will be displayed.

NOTE
To see which symbol libraries are currently available for your search, select Toggle Task Panel [ ] in the *Open Symbol* window to open the *Symbol Tasks* panel. Select Active Libraries (under *System Tasks*). The *Symbol Library Settings* dialog will open. Select the set(s) you want to use in your symbol search (or deselect the libraries you don't want to use). When you have finished, select OK.

NOTE
The "None" [ ] option is always available in the *Open Symbol* window. If you select this option, the button will have no symbol.

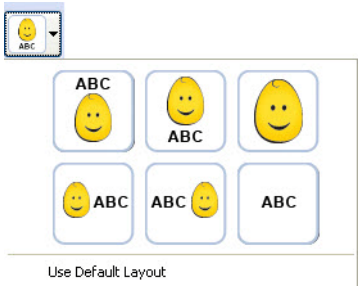
2. Search for a symbol:
   - Double-click on a symbol category folder to open it. Continue navigating through the layers of folders, double-clicking on folders until you find the symbol you want to use. (If necessary, scroll to look through all of the available categories and the symbols in each category.)
   - Use the search box to browse for a specific symbol. (See ***Browse for a Symbol***.)
   - Use a digital picture as a symbol. (See ***Use a Digital Picture as a Symbol***.)
3. Select the symbol (or digital picture) you want to use.
4. Select **Open** on the *Open Symbol* window (or double-click on the symbol). The symbol will be placed on the button.

NOTE
You can also quickly drag a symbol from the *Symbols* Panel and drop it onto the button. (See *The Symbols Panel - Overview*.)

Select the Button Layout

Select the Layout Button and choose a layout from the available options. You can choose from six different layouts.

BUTTON LAYOUTS



NOTE
The default layout has the symbol centered in the button, and the label centered on top of the symbol.

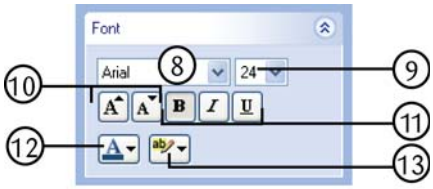
Justify the Button Label Text

1. Select the Text Justification button on the left to choose the label's horizontal justification on the button (left, center or right.)
2. Select the Text Justification button on the right to choose the label's vertical justification the button (top, center, or bottom.)

TEXT JUSTIFICATION OPTIONS

Edit the Button Label Font

BUTTON FONT PROPERTIES



8 Font drop-down list

9 Font size button

10 Font size adjustment buttons

11 Font style options buttons

12 Text color button

13 Text background color button

NOTE

If you have formatted the label text using the *Rich Text Editor*, all of your formatting will be overridden when you use the controls in the *Font* Properties group. If you wish to preserve the formatting that you have done using the *Rich Text Editor*, do not use the controls in the *Font* Properties group.

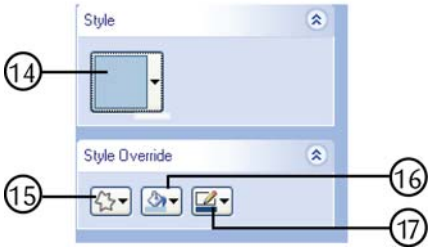
1. From the Font drop-down list, select a font family.
2. Select a font size from the Font size drop-down list, or select the increase or decrease font size adjustment buttons.
3. Select the Bold, Italic, or Underline button to change the font style.
4. Select the Text color button. Choose from the swatches on the *Theme Colors* or *Standard Colors* palettes.

5. Select the Text background color button, and select a color (if desired) for the font text background from the swatches on the *Theme Colors* or *Standard Colors* palettes.

> **NOTE**
> You may also create a custom color for the text or for the font text background. When defining either color, select More Colors and use the *Color Selector* dialog to choose a custom color.

Select the Button Style

STYLE AND STYLE OVERRIDE PROPERTIES



14 **Style button**

15 **Shape override button**

16 **Fill color override button**

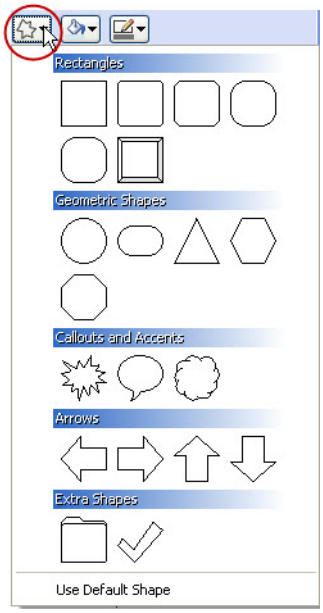
17 **Border override button**

1. Select the Style button. Choose a button style from the available options.

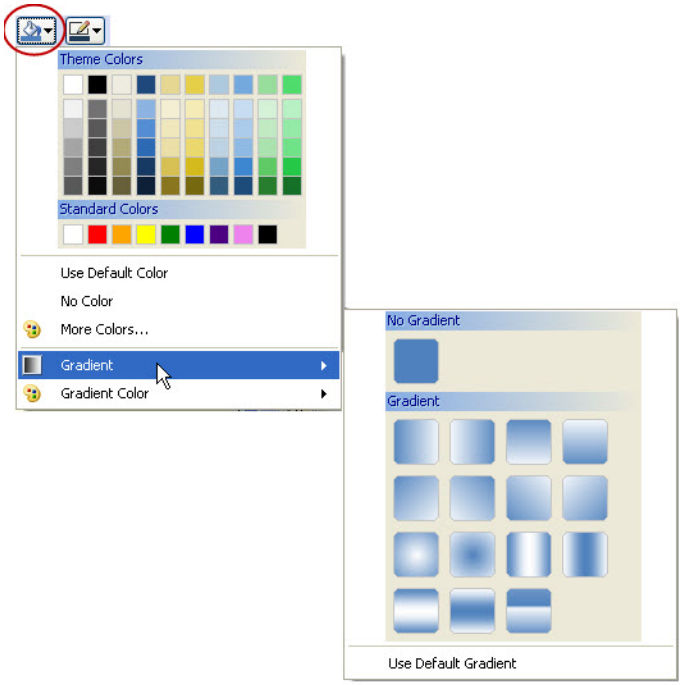
STYLE OPTIONS

2. If you want to customize the button style, select the Shape, Fill color, or Border override buttons. Choose a shape, fill color, or border style from the available options.

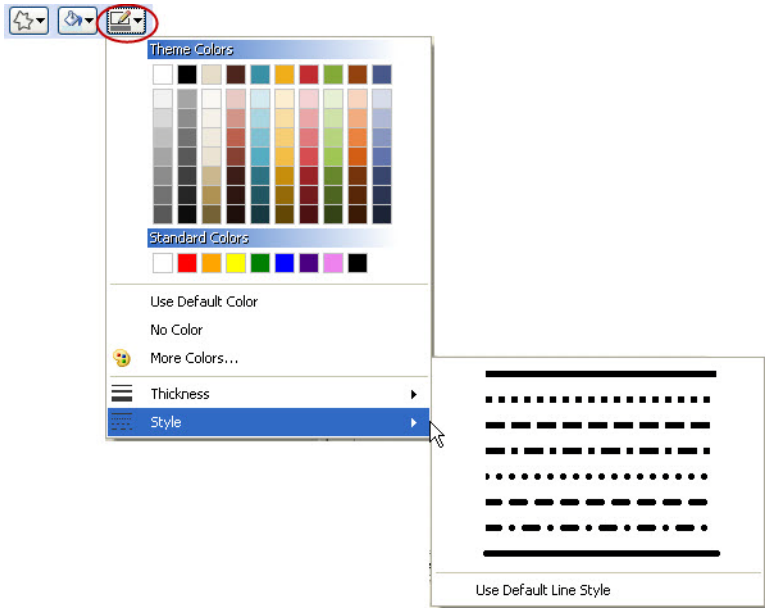
Shape Override Options



Fill Color Override Options



BORDER OVERRIDE OPTIONS



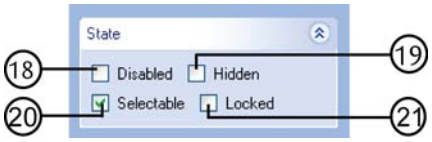
Set the Button State

Button "state" refers to the properties of the button (disabled, hidden, or selectable) when the software is in Preview or Play modes. A button can also be in a "locked" state in Design mode.

NOTE
Locking a button will not affect its behavior in Play or Preview mode.

You use the Button State Properties panel to set the button state.

BUTTON STATE PROPERTIES



18 ***Disabled*** **check box**

19 ***Hidden*** **check box**

20 ***Selectable*** **check box**

21 ***Locked*** **check box**

Disable the Button

A "disabled" button will appear "grayed out" and will not be selectable in Preview or Play modes.

To disable the button, select the **Disabled** check box.

Hide the Button

You can "hide" a button from view. A hidden button will not be visible in Preview or Play modes (it will be shaded in Design mode), and no action will take place when you select the place occupied by the hidden button.

To hide the button, select the **Hidden** check box.

Make the Button Not Selectable

A button that you have designated as "Not Selectable" will appear normal on the page in Preview or Play modes, but it cannot be selected.

To make the button not selectable, clear the **Selectable** check box.

Lock the Button

A button that you have locked will not be selectable by left click in Design mode. This protects the button from being moved or otherwise edited inadvertently.

NOTE
Locking a button will not affect its behavior in Play or Preview mode.

To lock the button, select the **Locked** check box.

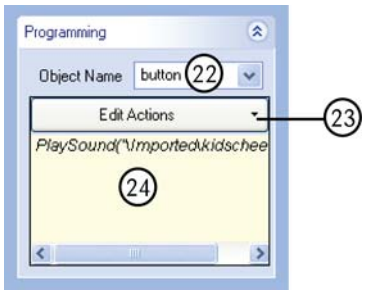
To unlock the button, right-click on the button in the workspace, and select **Unlock** from the menu.

NOTE
A locked button will not follow the layout rules of its parent object. For example, if a locked button is in a group button or group box (with a layout other than freeform), the locked button will retain its original proportions and position when other objects are placed in the group button or group box.

Program the Button

You can set the Button Programming properties to assign an object name to the button, or to assign actions to the button.

BUTTON PROGRAMMING PROPERTIES



22 Object Name text box

23 Edit Actions button

24 Expand button

Assign an Object Name to the Button

An object name is a unique property (different from button text or a button label) that identifies an object on a page for programming purposes. The software will automatically name each object that you draw on the page. For example, if you have drawn four new buttons and two new hot spots on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," 'button_3," "hotspot," and "hotspot_1."

To make it easier to program actions, assign unique names to the objects that you draw. (For example, if you are programming actions for a button [object name of "Big_Bad_Wolf"], you could assign the *SetPosition()* action to the button so that another button [with the object name of "Little_Pig _1"] will move to a specified area in the workspace when the "Big_Bad_Wolf" button is selected.)

To assign a unique object name to the button:

1. Select the **Object Name** text box or the drop-down arrow to the right of the text box. The *Object Name* dialog will open.
2. Enter a new name for the object in the *New Name* text box (do not use spaces - use an underscore between words), and select **OK**.

Assign Actions to the Button

All actions currently assigned to the button will be displayed in the Assigned actions list.

> **NOTE**
> If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

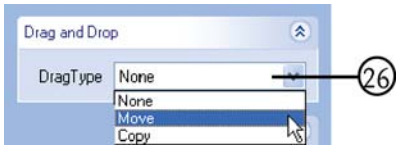
1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the button.

> **REFERENCE**
> See *Working with Actions* for information on adding and editing button actions.

Define the Drag-and-Drop Properties of the Button

You can assign drag-and-drop properties to a button so that it can be moved to another position on the page. (See ***Working with Movable Objects***.)

DRAG-AND-DROP BUTTON PROPERTIES



26 *Drag Type* drop-down list

> **NOTE**
> The drag-and-drop properties you assign to the button will be enabled in Preview and Play modes.

Use the *Drag Type* drop-down list to select whether the button can be moved to a new position:

- Select **None** if you want the button to remain stationary (not "movable") when it is selected.
- Select **Move** if you want to enable the button to be moved to a new position.
- Select **Copy** if you want the button to duplicate itself when it is moved. The original button will remain in place, and an identical copy of the button will be moved.

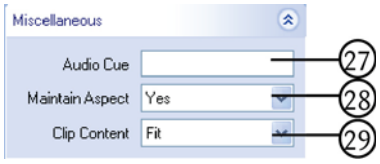
Assign Miscellaneous Properties to the Button

Assigning miscellaneous properties enables you to assign audio cues, set the aspect ratio, and scale symbols on the button.

The Miscellaneous Panel

You use the Miscellaneous panel to set the miscellaenous properties for the button.

MISCELLANEOUS BUTTON PROPERTIES



27 ***Audio Cue*** **text box**

28 ***Maintain Aspect*** **drop-down list**

29 ***Clip Content*** **drop-down list**

NOTE
The miscellaneous properties you assign to the button will be enabled in Preview and Play modes.

Select an Audio Cue for the Button

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue - normally the button label).

Maintain the Button Aspect When it is Resized

Use the *Maintain Aspect* drop-down list to select whether the contents of the button will scale when the button is resized:

- Select **Yes** to maintain the scale.

INITIAL BUTTON

RESIZED BUTTON - MAINTAIN ASPECT (YES)

- Select **No** to allow the contents of the button to resize.

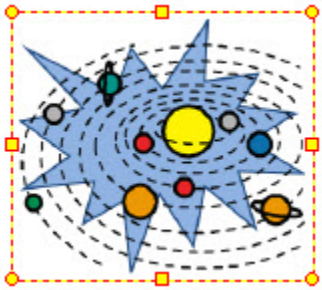
RESIZED BUTTON - MAINTAIN ASPECT (NO)

Clip the Button Content

Use the *Clip Content* drop-down list to scale the button symbol.

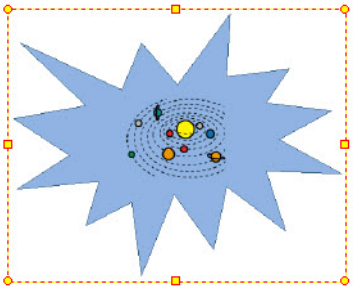
- Select **None** to make the entire symbol visible. (If the symbol is too large to fit on the button, it will display outside the button borders.)

SYMBOL IN BUTTON (CLIP CONTENT (NONE)



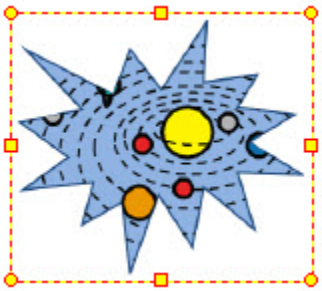
- Select **Fit** to scale the symbol to fit inside the button.

SYMBOL IN BUTTON (CLIP CONTENT (FIT)



- Select **Fill** to make the symbol occupy all available space on the button. (If the symbol is too large to fit the button, it will be cut off at the button borders.)

SYMBOL IN BUTTON (CLIP CONTENT (FILL)



NOTE
When you have finished making changes to the button's properties, be sure to save your work. Select File Menu > Save Page.

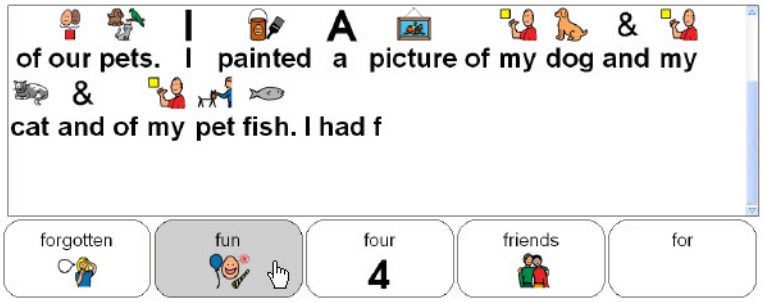
Word Prediction

Word prediction can be very useful in helping users with the writing process. Boardmaker Studio uses natural language prediction, which examines the previous two words entered into the message window and then predicts the next word based on words that would commonly follow the two words the user has entered.

As the user composes a message in the message window, the word prediction feature anticipates the user's word choices and displays various options in word predictor buttons. The user can then select a word predictor button, and the word on the button will be immediately sent to the message window.

The word prediction feature saves time and effort by freeing the user from having to type each letter of each word into the message window.

Message Window with Word Predictor Buttons (in Preview Mode)



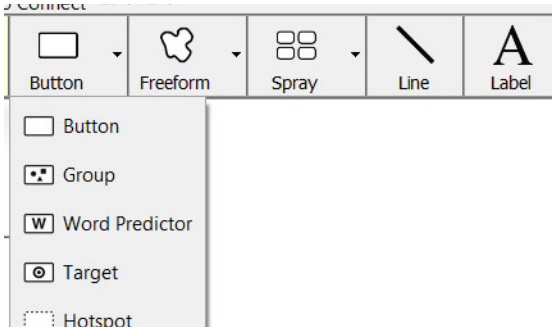
Word predictor buttons are normally used in conjunction with message windows. For information on drawing a message window and defining its properties, see ***Working with Message Windows***.

Draw a Word Predictor Button

You will normally want to put four or five word predictor buttons on a page, located directly above, beneath, or to the side of a message window. First you should create the initial word predictor button and define its properties, and then you can make as many copies of the button as you like - the copies will have the same appearance and properties as the initial button you create. (See ***Create Duplicate Word Predictor Buttons***.)

1. Select the arrow to the right of the Button tool in the toolbar. Then select **Word Predictor Button** from the drop-down list.

BUTTON DROP-DOWN LIST



2. Move the pointer into the area below or beside the message window where you want to place the first button. (You don't have to be precise - you can move the button later.)
3. Hold down the mouse button, and drag diagonally. (To draw a square button, hold down the **Shift** key while you are dragging.)
4. Release the mouse button when the button is the desired size and shape.

SHORTCUT

You can also quickly add a word predictor button to the page by selecting the Word Predictor Button tool and dragging it onto the page - or you can select the Word Predictor Button tool and click anywhere on the page.

Once you have drawn the button, you can resize it or move it:

- To resize the button, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the button is the size and shape you want.
- To move the button, select it, then drag it to the spot where you want to locate the first button.

5. Select **File Menu > Save Page**.

After you have created the initial word predictor button, use the *Button* Properties panel to assign properties to it (appearance, font, style, actions, and behavior). Then use the Spray Tool to spray out identical copies of the button directly beneath or to the side of the initial button. (See ***Create Duplicate Word Predictor Buttons***.)

Define Word Predictor Button Properties

About Word Predictor Button Properties

Word predictor button properties, including type, font, style, state, programming, and drag-and-drop properties, are defined in the same manner as the properties of a standard button.

See ***Edit Button Properties*** for step-by-step instructions for editing these properties.

The content and miscellaneous properties of a word predictor button differ, however, in the following ways:

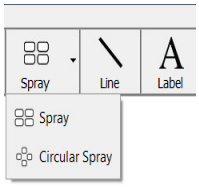
- Content Properties
  - You cannot add a label to a word predictor button because the "content" (label) of the button is the predicted word. (You can only define the layout and the text justification of the predicted word.)
  - You cannot add a symbol to a word predictor button.
- Miscellaneous Properties
  - You cannot assign an audio cue to a word predictor button.
  - You cannot maintain the aspect of a word predictor button when it is resized, and you cannot clip the content of the word predictor button symbol.

Create Duplicate Word Predictor Buttons

After you have drawn your initial word predictor button and defined its properties, you can use the Spray Tool to create any number of identical word prediction buttons with the same appearance and properties as the initial button.

1. Select the Spray Tool in the toolbar. Then select the **Spray Tool**.

SPRAY TOOL

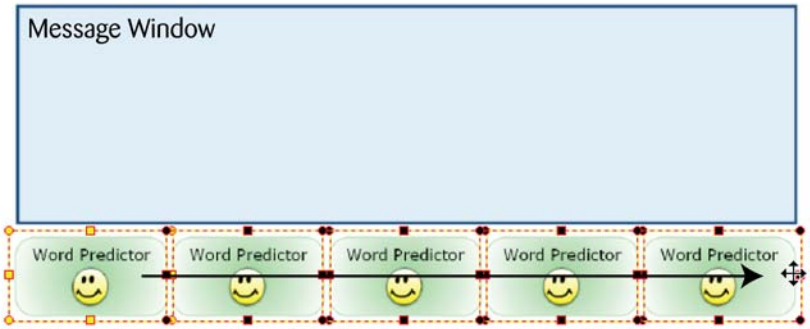


2. Move the Spray Tool over the initial word predictor button.
3. Click and drag horizontally or vertically to spray out a grid of duplicate word predictor buttons.

NOTE

You can change the spacing between the objects in the grid. Select File Menu > Setup and Options. The *Setup and Options* dialog will open. Select Interface > General from the navigation panel. Then use the arrows in the *Grid Spacings* box to select a number for the grid spacing. (See *General Settings - Modify the Workspace*.)

USING THE SPRAY TOOL TO CREATE DUPLICATE WORD PREDICTOR BUTTONS



Move Spray Tool on top of initial button - click and drag to spray out copies.

4. Release the selection when the desired number of word predictor buttons has been sprayed out.

5. When you have finished, select **File Menu > Save Page**.

Symbolate Buttons

Symbolate buttons provide an easy way to quickly create symbol-adapted sentences, stories, and other instructional materials. As you type text into a symbolate button, appropriate symbols will appear. Use the *Button* Properties panel to define the symbolate button's appearance, set the symbol location on the button (above or below the text), select the symbol and text height, and designate which text to symbolate. You can add actions to the symbolate button, including any of the *ReadAndHighlight* actions.

After you have created a symbolate button and defined its properties, you can use the *Symbolate Candidates* dialog to change the symbol for word-symbol pairings and to customize the list of symbol candidates for any word.

Create a Symbolate Button

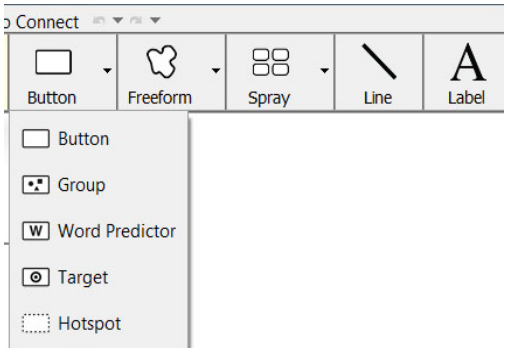
There are four ways you can create a symbolate button:

- Draw the button using the Symbolate Button tool.
- Select an existing button and convert it to a symbolate button.
- Select the **Symbolate Button** tool and drag it onto the page.
- Select the **Symbolate Button** tool and click anywhere on the page.

Draw a Symbolate Button

1. Select the arrow to the right of the Button tool in the toolbar. Then select **Symbolate Button** from the drop-down list.

BUTTON DROP-DOWN LIST



2. Move the pointer into the area in the workspace where you want to place the button.
3. Hold down the mouse button, and drag diagonally.
4. Release the mouse button when the new button is the desired size and shape.

   Once you have drawn the button, you can resize it or move it:

- To resize the button, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the button is the size and shape you want.

NOTE
Select **Fit** in the *Clip Content* drop-down list in *Miscellaneous* properties to expand the button to fit the symbolated text as you type.

- To move the button, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the button will open a menu from which you can quickly modify the button and its position on the page. (See *Right-Click Menus at a Glance*.)

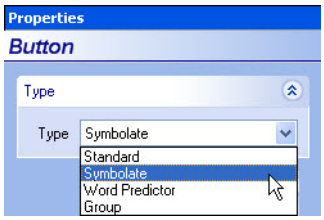
5. To save your changes, select **File Menu > Save Page**.

Convert a Button to a Symbolate Button

You can convert a standard, word predictor, group, or target button into a symbolate button.

1. Select the button you want to make into a symbolate button.
2. In the *Button* Properties panel, select **Symbolate** from the button *Type* drop-down list.

BUTTON TYPE DROP-DOWN LIST (SYMBOLATE SELECTED)



3. To save your changes, select **File Menu > Save Page**.

Drag a Symbolate Button onto the Page

1. Select the Symbolate Button tool.
2. Drag the tool onto the page.
3. To save your changes, select **File Menu > Save Page**.

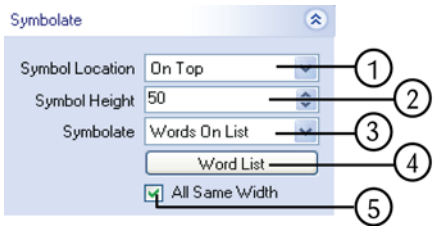
Define Symbolate Button Properties

About the Symbolate Button Properties

Symbolate button properties, including font, style, state, programming, drag and drop, and miscellaneous properties, are defined in the same manner as the properties of a standard button. (See ***Edit Button Properties***.)

Unique symbolate button properties, however, including symbol location, symbol height and width, and the choice of which words to be symbolated, are defined using the controls in the *Symbolate* Properties group that appears in the *Button* Properties panel when a symbolate button is selected.

SYMBOLATE PROPERTIES



1 ***Symbol Location*** **drop-down list**

2 ***Symbol Height*** **drop-down list**

3 ***Symbolate*** **drop-down list**

4 ***Word List*** **check button**

5 ***All Same Width*** **check box**

NOTE
As you make changes to the symbolate button's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Symbol Location

Use the *Symbol Location* drop-down list to choose where the symbol will display in relation to the word with which it is paired - on top of the word or on the bottom of the word.

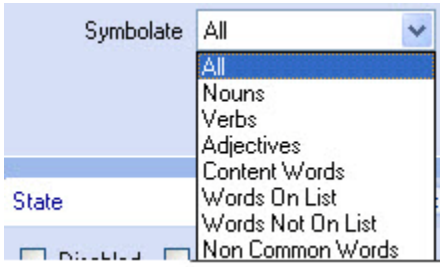
Select the Symbol Height

Use the *Symbol Height* drop-down list to select the size at which the symbol will be displayed. (Or enter a number from 10 to 100 - 10 is the smallest number of pixels at which the symbol can display - 100 is the largest.)

Select the Type of Words to be Symbolated

Use the *Symbolate* drop-down list to select the type of words you want to symbolate:

SYMBOLATE DROP-DOWN LIST



- **All -** each word (for which there is a matching symbol) will be symbolated as you type.
- **Nouns, Verbs, Adjectives -** parts of speech (nouns, verbs, or adjectives). Appropriate symbols will appear only when you type a word that is the part of speech you have selected.
- **Content Words -** "Content Words" will be symbolated. Content words include nouns, verbs, adjectives, and some common adverbs such as "quickly" and "slowly."
- **Words On List -** words from a Word List you have selected will be symbolated (See ***Word Lists***.)
- **Words Not On List -** words that are not on the Word List you have selected will be symbolated. (See ***Word Lists***.)

NOTE
When you select the Words On List or Words Not On List option from the *Symbolate* drop-down list, the *Word List* button will be enabled. (It will be grayed out if neither of these options is selected.) Selecting Word List will open the *Edit Words* dialog to allow you to edit the Word List. (See *Word Lists*.)

- **Non Common Words -** words that are not on the list of Common Words will be symbolated. (See the appendix, ***Common Words***.)

Select the Width of the Symbols

Select the **All Same Width** check box to display each symbol at the same width.

In the figure below, the top illustration shows a symbolate button displaying symbols at their default widths (the *All Same Width* check box has not been selected). In the bottom illustration, the *All Same Width* check box has been selected.

SYMBOLATE BUTTONS (ALL SAME WIDTH OPTIONS)

NOTE

Select **Fit** in the *Clip Content* drop-down list in *Miscellaneous* properties to expand the button to fit the symbolated text as you type.

The Symbol Candidates Dialog

Boardmaker Studio uses predefined word-symbol pairings. The symbol that appears when a word is typed in the symbolate button may not always be appropriate for the context of the word. You can use the *Symbolate Candidates* dialog to change the symbol for a word-symbol pairing and to customize the list of symbol candidates.

NOTE

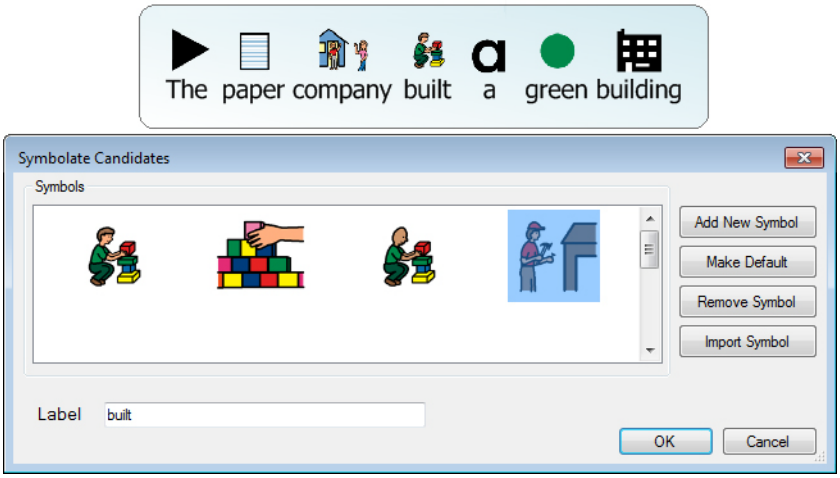
To see which symbol libraries are currently available for your candidate searches, select **File Menu** > **Setup and Options** > **Symbols & Language**. Select the libraries you want to use in symbol searches (or deselect the libraries that you don't want to use) under *Symbol Libraries*, then select **OK** to close the *Setup and Options* dialog.

Change the Symbol for a Word-Symbol Pairing

You can use the *Symbolate Candidates* dialog to change the word-symbol pairing. You can change the symbol for only the current instance of the word, or you can make the new symbol the default symbol for the word.

1. Right-click on the symbol - or on the space where the symbol would appear - (not on the word) that you want to change. The *Symbol Candidates* dialog will open. Appropriate candidate symbols will be displayed in the viewport. (If necessary, scroll to view all the available symbols.)

Change Symbol for Word-Symbol Pairing (example showing candidates for "built")



2. Select the symbol that you want to use.

    - To change the symbol only for this incidence of the word, select **OK**. (Or double-click on the symbol.)
    - To make this symbol the new default for the word, select **Make Default**. The symbol you have chosen will become the default symbol for the word or phrase.

Changed Symbol for Word-Symbol Pairing (example showing new pairing)

Add a Symbol to the Candidate Symbols

You can add symbols from any available symbol category to use as symbol candidates, or you can import a digital picture to be available as a candidate symbol for a specific word or phrase. The new symbol will appear in the viewport of the *Symbolate Candidates* dialog each time you do a candidate search for that word or phrase.

Add a Symbol from Another Symbol Category

You can add a symbol to the candidate symbols from any available symbol set.

1. Right-click on the symbol in your symbolate button to which you would like to add another candidate. The *Symbol Candidates* dialog will open.
2. Select **Add New Symbol**. The *Open Symbol* window will open. Folders representing all of the symbol categories will be displayed.
3. Use the *Search* text box to search for an appropriate symbol, or navigate through the layers of folders, double-clicking on folders until you find the folder containing the symbol you want to use.
4. When you have found the symbol you want to use, select it, then select **Open** on the *Open Symbol* window. The symbol will be added to the candidate symbols for the word or phrase and will be available for all your candidate searches.

NOTE
Remember to save your work on a regular basis. Select File Menu > Save Page.

Import a Symbol to Use as a Symbol Candidate

You can import an digital picture to use as a candidate symbol in your symbol searches.

1. Right-click on the symbol in your symbolate button that is associated with the symbol that you want to import. The *Symbol Candidates* dialog will open.
2. Select **Import Symbol**. A browser will open.
3. Navigate through the levels of folders to find the folder that contains the image you want to import.
4. Select the image you want to import.
5. Select **Open** (or double-click the image). The image will be added to the candidate symbols for the word or phrase and will be available for all your candidate searches.

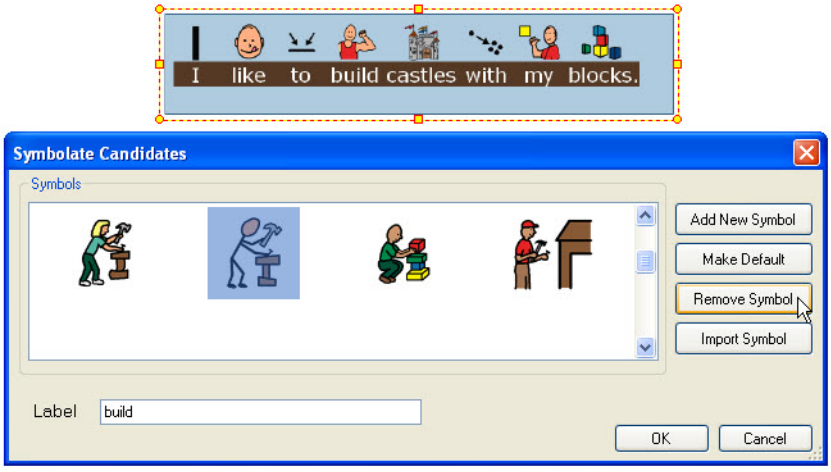
NOTE
The image will also be added to your *My Symbols* folder in the symbol libraries.

Remove a Symbol from the Candidate Symbols

You can remove a candidate symbol and prevent it from appearing in future candidate searches.

1. Right-click on the symbol in your symbolate button that is associated with the candidate symbol that you want to remove. The *Symbol Candidates* dialog will open.

REMOVE SYMBOL FROM SYMBOL CANDIDATES (EXAMPLE SHOWING CANDIDATES FOR "BUILD")



2. Select the candidate symbol that you want to remove.
3. Select **Remove Symbol**. The candidate symbol will be permanently removed from future candidate searches.

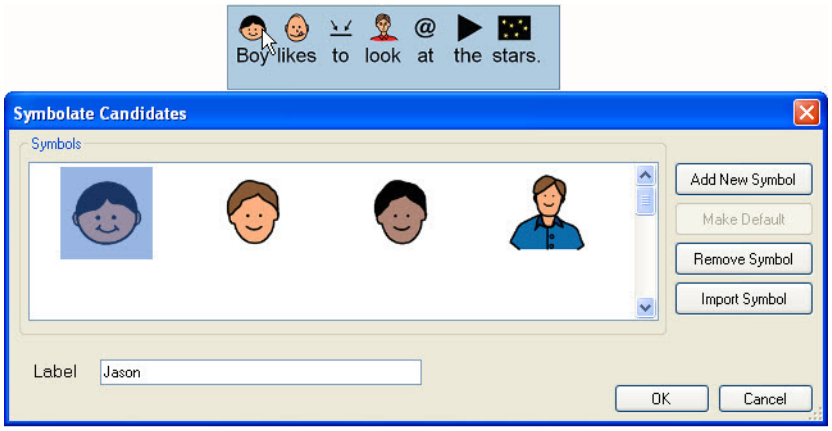
NOTE
The symbol will be removed from the specific candidate search, but it will not be removed from the symbol libraries.

Change the Text for a Word-Symbol Pairing

You can make a temporary change to words and phrases in existing word-symbol pairs.

1. Right-click on the symbol for the word that you want to change. The *Symbol Candidates* dialog will open.

CHANGE TEXT FOR WORD-SYMBOL PAIRING (EXAMPLE SHOWING THE CHANGE FROM WORD "BOY")



2. Enter the new word or phrase for the symbol in the *Label* text field.
3. Select **OK**. The new text will replace the original text for this instance of the word only.

TEXT CHANGED FOR WORD-SYMBOL PAIRING

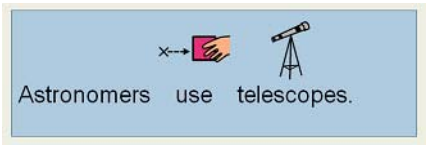
NOTE
Changes to the text in a word-symbol pair are temporary and only apply to this specific instance of the word-symbol pair.

Make a New Word-Symbol Pairing

You have access to a large number of PCS symbols that have been pre-loaded with the software, but there will be words that will not have any paired symbols. You can use the *Symbolate Candidates* dialog to make a new word-symbol pairing.

(In the illustration below, there is no symbol associated with the word, "astronomer." You will need to make a new word-symbol pairing.)

WORD WITHOUT PAIRED SYMBOL (EXAMPLE - "ASTRONOMER")

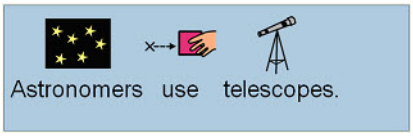


1. Right-click above the word in the space where the symbol would appear. The *Symbol Candidates* dialog will open.
2. Select the **Add New Symbol** button. The *Open Symbol* window will open. Folders representing all of the symbol categories will be displayed.
3. Use the *Search* text box to search for an appropriate symbol, or navigate through the layers of folders, double-clicking on folders until you find the folder containing the symbol you want to use.

> **NOTE**
> Use the asterisk [*] as a generic "wildcard" character. For example, entering "Spa*" in the search text box will find all symbols whose labels begin with the letters "spa." Similarly, entering "*ed" will find symbols whose labels end in "ed."

4. When you have found the symbol you want to use, select **Open**.
5. Select **OK** on the *Symbol Candidates* dialog. The symbol will be paired with the word for future candidate searches.

NEW WORD-SYMBOL PAIR (EXAMPLE - "ASTRONOMER")



Group and Target Buttons

Group buttons can add new dimensions to the activities you create in Boardmaker Studio. A group button is a button into which you can place other objects (a "multi-object" button). A target button is identical to a group button except that its properties as a "target" have been predefined to help you quickly and easily create activities using movable objects.

A target button is a group button with the *Is Target* property preassigned. It is drawn the same way as a group button and shares all of the same properties as a group button - the only difference between a group button and a target button is that the *Is Target* checkbox (under *Drag and Drop* in the *Button* Properties panel) has been preselected.

If you designate the group button as a target - or if you draw a target button - you can create activities in which the user can move other objects on the page into the button. You could, for example, design an activity in which the user matches shapes or colors by dragging objects of a specific shape or color into a group button. Then you could program the group button with actions to play a sound or speak a phrase when the user moves the object into the button (*trumpet* - "That's a square, good for you!" or "Sorry, try again.")

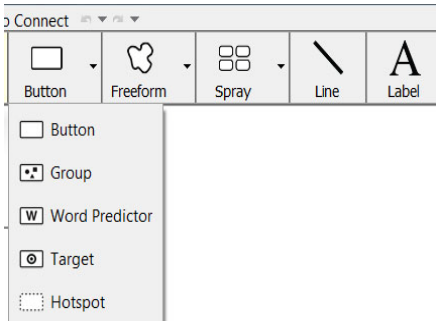
NOTE
You can place multiple symbols on a group or target button.

Draw a Group or Target Button

NOTE
A target button is drawn the same way as a group button.

1. Select the arrow to the right of the Button tool in the toolbar. Then, from the drop-down list, select **Group Button** to draw a group button or **Target Button** to draw a target button.

BUTTON DROP-DOWN LIST



2. Move the pointer into the area in the workspace where you want to place the button.
3. Hold down the mouse button, and drag diagonally. (To draw a square button, hold down the **Shift** key while you are dragging.)

4. Release the mouse button when the new button is the desired size and shape.

SHORTCUT
You can also quickly add a group or target button to the page by selecting the Group Button tool or Target Button tool and dragging it onto the page - or you can select the Group Button tool or Target Button tool and click anywhere on the page.

Once you have drawn the button, you can resize it or move it:

- To resize the button, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the button is the size and shape you want.
- To move the button, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the button will open a menu from which you can quickly modify the button and its position on the page. (See *Right-Click Menus at a Glance*.)

NOTE
To save your changes, select File Menu > Save Page.

NOTE
You can also draw a standard button, and select Group from the *Button Type* drop-down list to change the standard button to a group button.

Edit Group or Target Button Properties

The properties of a group or target button, including type, style, state, and programming properties are defined in the same manner as the properties of a standard button.

Layout properties, however, are unique to group and target buttons and are defined using the *Layout* button in the *Button* Properties panel.

Unlike standard and freeform buttons, you can place multiple symbols on group and target buttons.

NOTE
To place multiple symbols on a group or target button, drag the symbols onto the button from the *Symbols* panel.

Group buttons are also unique in that they can be designated as "targets" and will accept other page objects moved or copied into them. (A target button will automatically be designated as a target.) Target properties of a group button are defined using the *Drag-and-Drop* Properties group in the *Button* Properties panel. (See ***Working with Movable Objects***.)

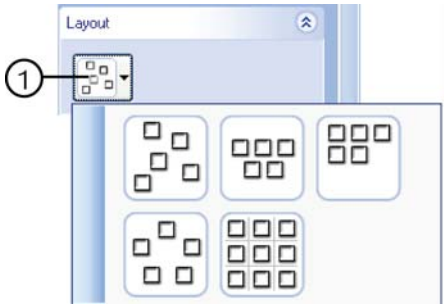
In addition, the Clip Content properties react differently for the objects in a group or target button than for a standard button.

See ***Edit Button Properties*** for step-by-step instructions for editing type, style, state, and programming properties. Procedures for editing layout, drag-and-drop, and clip content properties follow.

NOTE
Group and target buttons are identical - except that the target button has predefined target properties. The properties of group and target buttons are edited in the same way - using the *Button* Properties panel. Procedures for editing a group button are also applicable to editing target buttons.

Select the Group Button Layout

GROUP BUTTON LAYOUT PROPERTIES



1 Layout button

Select the Layout button. Then choose one of the available options to arrange the objects in the group button and define their behavior as they are placed in the button. You can choose from five different layouts.

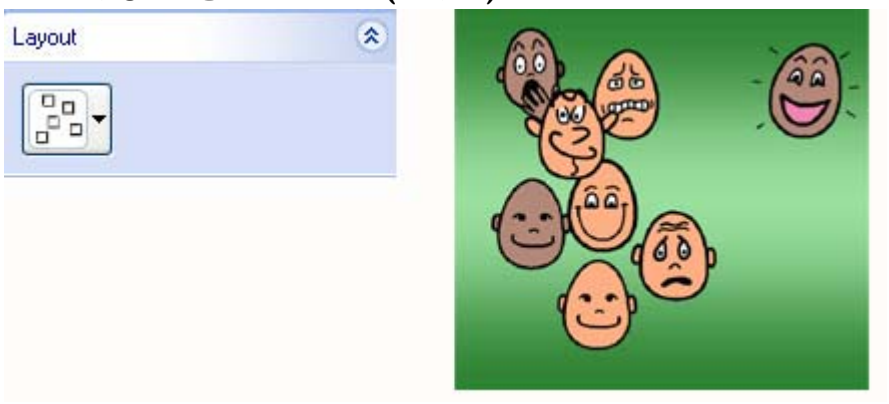
NOTE
To move objects into a group button in Preview and Play modes, the group button must first be designated as a target. (The *Is Target* property of a target button has been preassigned.) See *Assign Miscellaneous Properties to the Group Button* and *Working with Movable Objects*.

NOTE
You can place multiple symbols, "SmartSyms," in a group or target button. The illustrations below depicting different layouts show a number of SmartSyms placed in a group button. (Symbols must be dragged into the button from the *Symbols* panel.)

Group Button - Freeform Layout

In the freeform layout, objects are arranged the way you place them when you move them into the button. This is the default layout for group buttons.

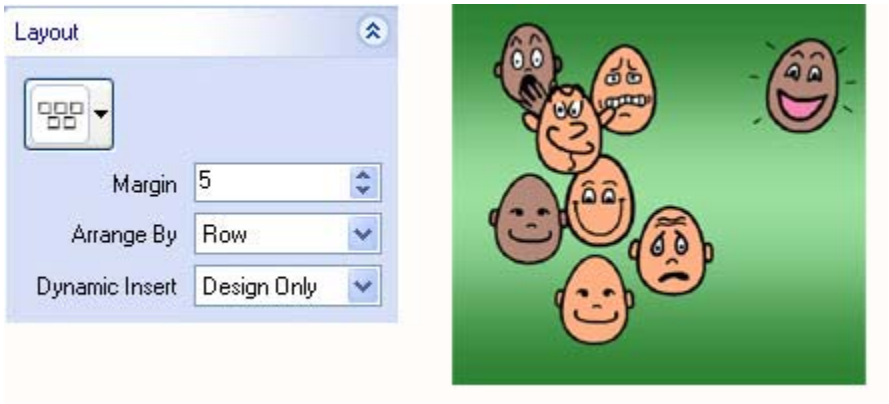
FREEFORM GROUP BUTTON LAYOUT (EXAMPLE)



Group Button - Auto Center Layout

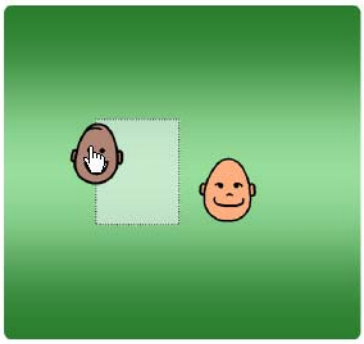
In the auto center layout, objects will be arranged in rows or columns and centered in the group button.

AUTO CENTER GROUP BUTTON LAYOUT (EXAMPLE)

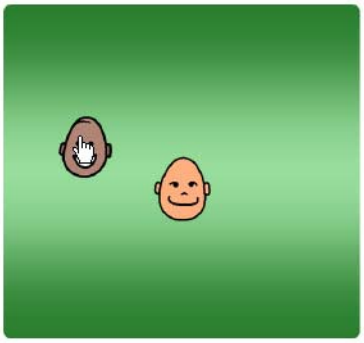


1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the button - between 0 and 500 pixels.
2. Use the *Arrange By* drop-down list to arrange the objects by row or by column. (The objects in the illustration above are arranged by row.)
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped. The following illustrations show the same object being moved into a group button in Preview mode with **Dynamic Insert - Always** selected and **Dynamic Insert - Never** selected.

Dynamic Insert - Always Selected



Dynamic Insert - Never Selected

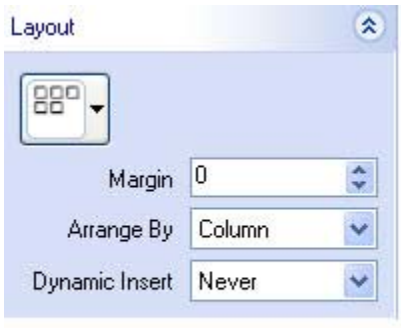


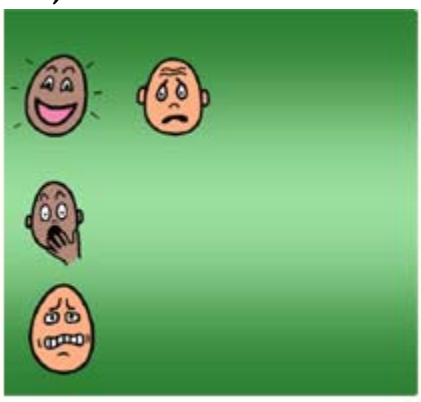
- **Design Only -** The preview bounding box will be displayed only in Design mode.
- **Always -** The preview bounding box will be displayed in all modes.
- **Never -** The preview bounding box will not be displayed in any mode.

Group Button - Auto Grid Layout

When objects are placed in the button, they will fill in rows or columns beginning at the top left corner.

Auto Grid Group Button Layout (example)





1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the group button - between 0 and 50 pixels.

2. Use the *Arrange By* drop-down list to fill the objects by row or by column. The first object will be placed in the top left corner of the button. If the objects are arranged by row, subsequent objects will be placed to the right of the first object until the first row is full. The second row will begin filling from the left and so on, until all the objects have been placed on the button.

   If the objects are arranged by column, the second object will be placed directly below the first object. When the first column is full, the second column will begin filling from the top to the right of the first object and so on, until all the objects have been placed in the button. (The objects in the illustration above are arranged by column)

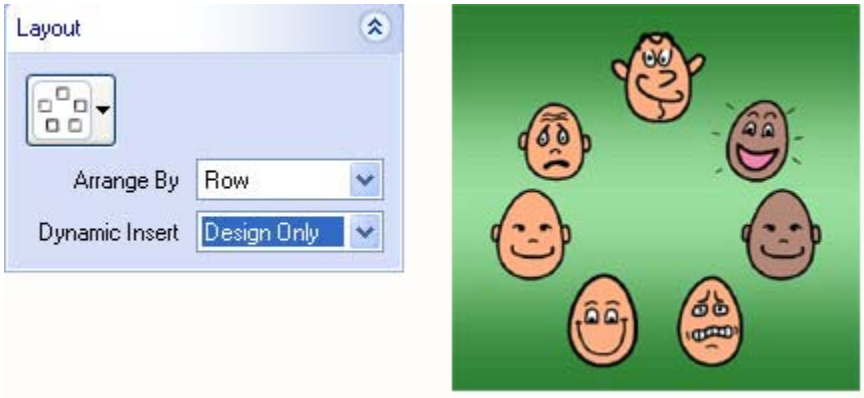
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.

   - **Design Only -** The preview bounding box will be displayed only in Design mode.
   - **Always -** The preview bounding box will be displayed in all modes.
   - **Never -** The preview bounding box will not be displayed in any mode.

Group Button - Auto Circular Layout

When a number of objects are placed in the button, they will be arranged in a circular grid. The first object will be placed in the center of the button, and, as additional objects are added, a circular grid will be formed.

Auto Circular Group Button Layout (example)



1. Use the *Arrange By* drop-down list to align the objects by row or by column as they are placed in the button. As objects are added to the button, the rows or columns will eventually form a circular grid.

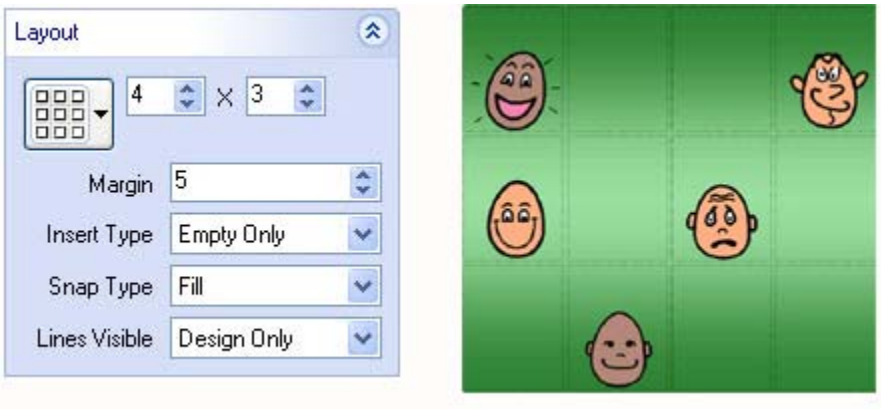
2. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.

   - **Design Only -** The preview bounding box will be displayed only in Design mode.
   - **Always -** The preview bounding box will be displayed in all modes.
   - **Never -** The preview bounding box will not be displayed in any mode.

Group Button - Grid Layout

The grid layout enables you to create a custom grid with a specified number of horizontal and vertical cells. Objects can be placed in any cell in the grid.

Grid Group Button Layout (example)



1. Select the layout for the grid. Use the drop-down boxes to the right of the layout icon to set the number of horizontal and vertical cells in the grid. (In the illustration above, margins are set to 5 pixels, grid lines are visible, and the layout is set to 4 cells wide by 3 cells high.)

2. Use the *Margin* drop-down list to designate the amount of space you want between the cells in the grid - between 0 and 50 pixels.

3. Use the *Insert Type* drop-down list to select the way in which new objects will be handled when they are placed in the button:

    - **Empty Only -** An object can only be placed in an empty cell of the group button. (If you attempt to place an object on a cell that already holds an object, the object you attempt to place will snap back to its original location in the workspace.)

    - **Shift Right -** When an object is placed in a cell that already holds an object, the original object will shift one cell to the right. (The sequence will move from left to right and top to bottom.)

    - **Shift Down -** When an object is placed in a cell that already holds an object, the original object will shift one cell down. (The sequence will move from top to bottom and left to right.)

    - **Replace -** If an object is placed in a cell that already holds an object, the new object will replace the original object.

    - **Swap -** When an object is placed in a cell that already holds an object, the new object will change locations with the original object, leaving all other objects in the grid unaffected.

4. Use the *Snap Type* drop-down list to designate the way the objects will appear when they are placed in a cell.

    - **Center -** Objects will be centered in the cell.

    - **Fill -** Objects will automatically resize to fill the entire cell.

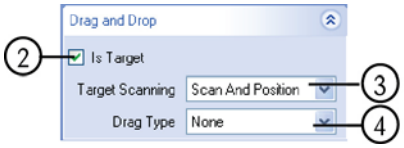
5. Use the *Lines Visible* drop-down list to designate in which modes the grid lines in the group button will be visible.

   - **Design Only -** Grid lines will be visible only in Design mode.
   - **Always -** Grid lines will be visible in all modes.
   - **Never -** Grid lines will not be visible in any mode.

Define the Drag and Drop and Target Properties of the Group Button

You can designate a group button as a target, so that it will accept other objects that are dragged into it. (A target button is automatically designated as a target.) The group or target button itself can be made movable. (See ***Working with Movable Objects***.)

DRAG AND DROP GROUP BUTTON PROPERTIES



2 ***Is Target*** **check box**

3 ***Target Scanning*** **drop-down list**

4 ***Drag Type*** **drop-down list**

NOTE
The drag-and-drop and target properties you assign to the group button will be enabled in Preview and Play modes.

Designate the Group Button as a Target

A group button that is designated as a "target" will accept other page objects moved or copied into it in Preview and Play modes. A target button will automatically be designated as a target.

To designate a group button as a target, select the **Is Target** check box.

NOTE
If you do not designate the group button as a target, in Preview and Play modes, an object moved onto it will snap back to its original position.

To remove the target designation from a group button, deselect the **Is Target** check box.

Select the Target Scan Type

When using access methods other than Simple Touch, you can define how the scan highlight will react. (See ***Working with Movable Objects***.)

> **NOTE**
> The *Target Scanning* drop-down list will appear only when the Is Target check box is selected.

Select a scan type from the **Target Scanning** drop-down list:

- **Scan** will scan the entire group button as one target object. The object moved into the group button will be placed in the next available position as defined by the group button's chosen layout.

> **NOTE**
> This scan type is the default scan type for all layouts other than the grid layout.

- **ScanAndPosition** will move the scan inside the group button (through the grid in a grid layout) to a specific position as defined by the layout style.

> **NOTE**
> This is the default scan type for the grid layout. With other layout types, Scan and Position will enable you to place the object being moved into the group button between objects already present in the button (or it will place the object in the next available position).

- Select **Disable** if you want the scan to pass over the group button.

Select the Drag Type for the Group Button

Use the *Drag Type* drop-down list to select whether the button can be moved to a new position:

- Select **None** if you want the group button to remain stationary (not "movable") when it is selected.
- Select **Move** if you want to enable the group button to be moved to a new position.
- Select **Copy** if you want the group button to duplicate itself when it is moved. (When the button is moved to a new position, the original button will remain in place, and an identical copy of the button will be moved.)

Assign Miscellaneous Properties to the Group Button

MISCELLANEOUS GROUP BUTTON PROPERTIES

5 ***Audio Cue*** **text box**

6 ***Clip Content*** **drop-down list**

NOTE
The miscellaneous properties you assign to the group button will be enabled in Preview and Play modes.

Select an Audio Cue for the Group Button

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

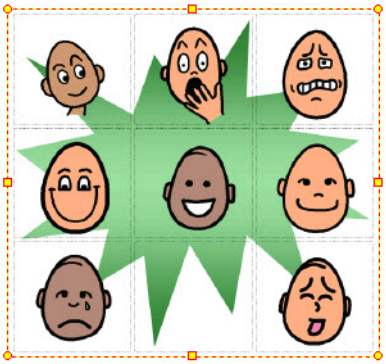
1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

Clip the Group Button Content

Use the *Clip Content* drop-down list to scale the objects that are placed in the group button.

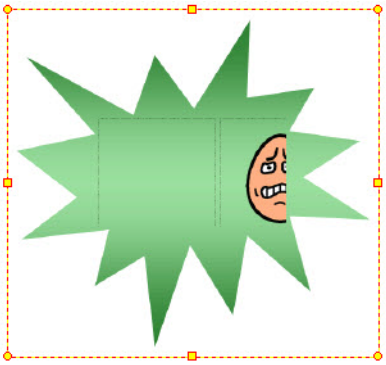
- Select **None** to make the objects visible in their entirety. (If the objects are too large to fit on the group button, they will display outside the button borders.)

"None" Selected in Clip Content Drop-down List



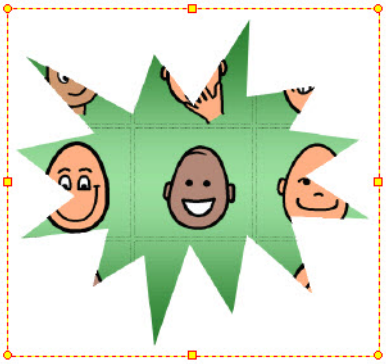
- Select **Fit** to scale the objects to fit inside the button.

"Fit" Selected in Clip Content Drop-down List



- Select **Fill** to make the objects occupy all available space in the group button. (If the objects are too large to fit, they will be cut off at the button's borders.)

"Fill" Selected in Clip Content Drop-down List



Note

When you have finished making changes to the group or target button properties, be sure to save your work. Select File Menu > Save Page.

Hot Spots

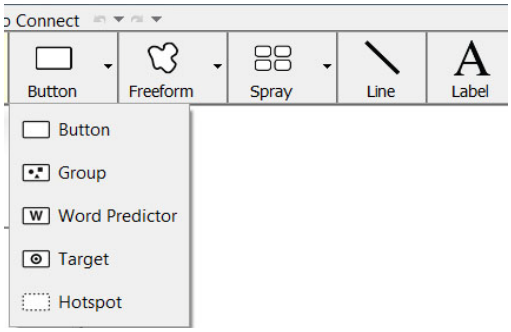
Use the Hot Spot tool in the Button drop-down list to create a rectangular "hot spot." A hot spot can have actions assigned to it, but it is invisible in Preview and Play modes – it has no borders, color, symbol, or other visible characteristics.

Hot spots are usually placed over images or scenes on a page. The the hot spot can then be programmed so that when it is selected, an action will be performed (for example, a sound can be played, a message can be spoken, or a page can open).

Draw a Rectangular Hot Spot

1. Select the arrow to the right of the Button tool in the toolbar. Then select **Hot Spot** from the drop-down list.

BUTTON DROP-DOWN LIST



2. Move the pointer into the area in the workspace where you want to place the hot spot.
3. Hold down the mouse button, and drag diagonally. (To draw a square hot spot, hold down the **Shift** key while you are dragging.)
4. Release the mouse button when the new hot spot is the desired size and shape.

SHORTCUT
You can also quickly add a hot spot to the page by selecting the Hot Spot tool and dragging it onto the page.

Once you have drawn the hot spot, you can resize it or move it:

- To resize the hot spot, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the hot spot is the size and shape you want. (Hold down the **Ctrl** key to maintain the hot spot's proportions while you are dragging.)
- To move the hot spot, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the hot spot will open a menu from which you can quickly modify the hot spot and its position on the page. (See *Right-Click Menus at a Glance*.)

5. To save your changes, select **File Menu > Save Page**.

Edit Hot Spot Properties

Use the *Hot Spot* Properties panel to assign or edit the properties of a rectangular hot spot. You can "disable" the hot spot, so that it will not be selectable in Preview or Play modes; you can assign or edit the hot spot's actions; and you can assign it an audio cue.

Open the Hot Spot Properties Panel

Select the hot spot whose properties you want to define or change. The *Hot Spot* Properties panel will open.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on your computer's operating system you are using, the panel width, and the size of your monitor.

HOT SPOT PROPERTIES PANEL

1 ***Disabled*** **check box**

2 ***Object Name*** **text box**

3 ***Edit Actions*** **button**

4 **Expand button (opens and closes Assigned actions list)**

5 **Assigned actions list**

6 ***Audio Cue*** **text box**

NOTE
As you make changes to the hot spot's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Enabling and Disabling the Hot Spot

If a hot spot is enabled, then it can be selected in Preview and Play modes. If it's disabled, then it can't be.

HOT SPOT STATE PROPERTIES

1 ***Disabled*** **check box**

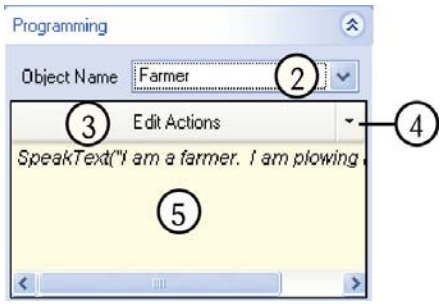
NOTE
Hot Spot "state" refers to the properties of the hot spot when the software is in Preview or Play modes.

To enable the hot spot, unselect the **Disabled** check box. To disable the hot spot, select the **Disabled** check box.

Program the Hot Spot

Programming the hot spot enables you to assign an object name or assign actions to it.

HOT SPOT PROGRAMMING PROPERTIES



2 ***Object Name*** **text box**

3 ***Edit Actions*** **button**

4 **Expand button**

5 **Assigned actions list**

Assign an Object Name to the Hot Spot

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new buttons and two new hot spots on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," "button_3," "hotspot," and "hotspot_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the hot spot:

1. Select the *Object Name* text box or the drop-down arrow to the right of the text box. The *Object Name* dialog will open.
2. Enter a new name for the object in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Hot Spot

All actions currently assigned to the button will be displayed in the Assigned actions list.

NOTE
If the Actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the hot spot.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Assign Miscellaneous Properties to the Hot Spot

Assigning miscellaneous properties to the hot spot enables you to set an audio cue.

MISCELLANEOUS HOT SPOT PROPERTIES

6 ***Audio Cue*** **text box**

NOTE
The miscellaneous properties you assign to the hot spot will be enabled in Preview or Play modes.

Select an Audio Cue for the Hot Spot

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

NOTE
When you have finished making changes to the hot spot, be sure to save your changes. Select File Menu > Save Page.

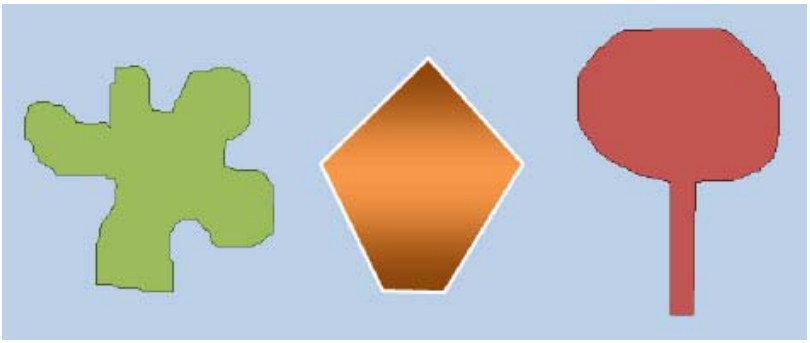
Working with Freeform Objects

Use the Freeform tool to draw buttons or hot spots of any shape. You can use this tool to create buttons with unique shapes; to create hot spots over parts of a background picture; to emphasize certain buttons by giving them a different look from other page objects; or simply to create fun new shapes.

Freeform Buttons

You can draw buttons of any shape using the Freeform Button tool. You can also draw polygonal buttons and buttons having both straight and freeform sides.

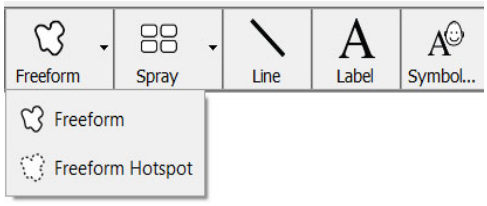
Freeform Button, Polygonal Button, and Button with Both Straight and Freeform Sides



Draw a Freeform Button

1. Select the arrow to the right of the Freeform tool in the toolbar. Then select **Freeform Button**.

Freeform Tool



2. Move the pointer into the workspace.
3. Hold down the mouse button, and drag around the workspace until the button is the shape you want.
4. Release the mouse button to automatically close off the button with a straight line between the current mouse position and the point where you started drawing the button.
    - To draw a polygonal button:

Select the arrow to the right of the Freeform tool in the toolbar. Then select **Freeform Button**. Hold down the **Ctrl** key, and click to set the button corner. Continue holding down the **Ctrl** key, and click again to set each corner of the polygon. Release the **Ctrl** key when the polygon is the desired shape.

- To draw a freeform button with both straight and freeform sides:

  Select the arrow to the right of the Freeform tool in the toolbar. Then select **Freeform Button**. Hold down the **Ctrl** key, and draw the first side straight of the polygon. Continue holding down the **Ctrl** key, and click again to set the next corner of the polygon (if desired). Release the **Ctrl** key and drag around to complete the freeform portion of the button. Release the mouse button when the button is the desired shape.

5. Once you have drawn the freeform button, you can resize it or move it:

   - To resize the freeform button, move the pointer over any edge or corner of the selected button until the double arrow appears. Click and drag the edge or corner until the freeform button is the size and shape you want. (To maintain the shape of the button, hold down the **Shift** key while you are dragging.)
   - To move the button, select it, then drag it to any position in the workspace.

> **NOTE**
> Right-clicking on the freeform button will open a menu from which you can quickly modify the button and its position on the page. (See *Right-Click Menus at a Glance*.)

6. To save your changes, select **File Menu > Save Page**..

Edit Freeform Button Properties

Use the *Freeform Button* Properties panel to assign or edit the properties of a freeform button. The *Freeform Button* Properties panel is identical to the *Button* Properties panel, and the properties of a freeform button (type, content, appearance, state, programming, and miscellaneous properties) are defined in the same manner as the properties of a standard button.

See ***Edit Button Properties*** for step-by-step instructions for editing the properties of a freeform button.

Freeform Hot Spots

Freeform hot spots are usually placed over portions of images or visual scenes on a page. Then the hot spot is programmed so that when it is selected, an action will be performed (for example, a sound or video file can be played, a message can be spoken, or a page can open). A freeform hot spot can have actions assigned to it, but it is invisible – it has no borders, color, symbol, or other visible characteristics.

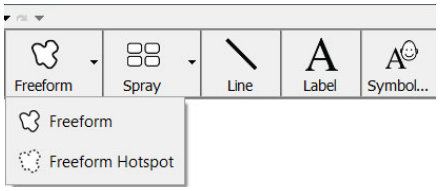
Following are procedures for drawing a freeform hot spot and editing its properties.

REFERENCE
See *Working with Buttons* for information on drawing a rectangular hot spot and editing its properties.

Draw a Freeform Hot Spot

1. Select the arrow to the right of the Freeform tool in the toolbar. Then select **Freeform Hot Spot** from the drop-down list.

FREEFORM TOOL



2. Move the pointer into the workspace.
3. Hold down the mouse button, and drag around the workspace until the hot spot is the shape you want.
4. Release the mouse button to automatically close off the hot spot with a straight line between the current mouse position and the point where you started drawing the hot spot.

You can also draw a polygonal hot spots:

1. Select the arrow to the right of the Freeform Tool in the toolbar. Then select **Freeform Hot Spot** from the drop-down list.
2. Move the pointer into the workspace.
3. Hold down the **Ctrl** key, and click to set the hot spot corner.
4. Continue holding down the **Ctrl** key, and click again to set each corner of the polygon.
5. Release the **Ctrl** key when the polygon is the desired shape.

   Once you have drawn the freeform hot spot, you can resize it or move it:

   - To resize the hot spot, move the pointer over any edge or corner of the selected hot spot until the double arrow appears. Click and drag the edge or corner until the hot spot is the size and shape you want.

NOTE
To maintain the shape and proportions of the hot spot, hold down the Shift key while you are dragging.

   - To move the hot spot, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the freeform hot spot will open a menu from which you can quickly modify the hot spot and its position on the page. (See *Right-Click Menus at a Glance*.)

6. To save your changes, select *File Menu* > *Save Page*.

Edit Freeform Hot Spot Properties

Use the *Freeform Hot Spot* Properties panel to assign or to edit properties of a freeform hot spot. You can "disable" the freeform hot spot, so that it will not be selectable in Play modes; you can assign or edit its actions; and you can assign it an audio cue.

Open the Freeform Hot Spot Properties Panel

Select the freeform hot spot whose properties you want to define or change. The *Freeform Hot Spot* Properties panel will open.

FREEFORM HOT SPOT PROPERTIES PANEL

1 ***Disabled*** **check box**

2 ***Object Name*** **text box**

3 ***Edit Actions*** **button**

4 **Expand button (opens and closes Assigned actions list)**

5 **Assigned actions list**

6 ***Audio Cue*** **text box**

NOTE
As you make changes to the freeform hot spot's properties, be sure to save your work. Select File Menu > Save Page.

Enabling and Disabling the Freeform Hot Spot

If a hot spot is enabled, then it can be selected in Preview and Play modes. If it's disabled, then it can't be.

Freeform Hot Spot State Properties

1 *Disabled* check box

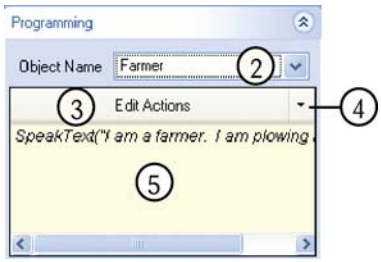
> **Note**
> Hot Spot "state" refers to the properties of the hot spot (disabled or enabled) when the software is in Play modes.

To enable the hot spot, unselect the **Disabled** check box. To disable the hot spot, select the **Disabled** check box.

Program the Freeform Hot Spot

Programming the hot spot enables you to assign an object name or assign actions to it.

Hot Spot Programming Properties



2 *Object Name* text box

3 *Edit Actions* button

4 Expand button

5 Assigned actions list

Assign an Object Name to the Freeform Hot Spot

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new buttons and two new freeform hot spots on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," "button_3," "freeformHotSpot," and "freeformHotSpot_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the freeform hot spot:

1. Select the *Object Name* text box or the drop-down arrow to the right of the text box. The *Object Name* dialog will open.
2. Enter a new name for the object in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Freeform Hot Spot

All actions currently assigned to the hot spot will be displayed in the Assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

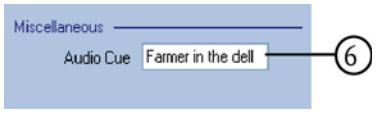
1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the hot spot.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Assign Miscellaneous Properties to the Freeform Hot Spot

Assigning miscellaneous properties to the hot spot enables you to set an audio cue.

MISCELLANEOUS HOT SPOT PROPERTIES



6 *Audio Cue* text box

NOTE
The miscellaneous properties (audio cue) you assign to the freeform hot spot will be enabled in Play modes.

Select an Audio Cue for the Freeform Hot Spot

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

NOTE
When you have finished programming the freeform hot spot, be sure to save your changes. Select File Menu > Save Page.

WORKING WITH LABELS

Use the Label tool to place text anywhere on a page. You can use a label to put a title on a page or object or to give instructions. You can assign actions to a label, choose whether to symbolate the label text, make the label non-selectable, and much more.

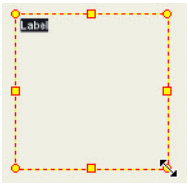
Draw a Label

1. Select the Label tool in the toolbar.

LABEL TOOL

2. Move the pointer into the area in the workspace where you want to place the label.
3. Hold down the mouse button, and drag diagonally to draw a bounding box for the label text.

LABEL TEXT BOUNDING BOX



4. Release the mouse button when the bounding box is the desired size and shape.

SHORTCUT

You can also quickly add a label to the page by selecting the Label tool and dragging it onto the page - or you can select the Label tool and click anywhere on the page.

NOTE

When you draw the label bounding box, the text, "Label," will automatically appear. Use the *Rich Text Editor* to customize the label text. See *Edit Label Properties*.

Once you have drawn the bounding box, you can resize it or move it:

- To resize the bounding box, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the box is the size and shape you want.

NOTE
To automatically resize the bounding box to fit the text, make a selection from the *Auto Grow* drop-down list in *Miscellaneous* properties. (See *Select "Auto Grow" Properties*.)

- To move the bounding box, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the label bounding box will open a menu from which you can quickly modify the label and its position on the page. (See *Right-Click Menus at a Glance*.)

5. To save your changes, select **File Menu > Save Page**.

Edit Label Properties

Use the *Label* Properties panel to add and format the label text and to assign properties to the label.

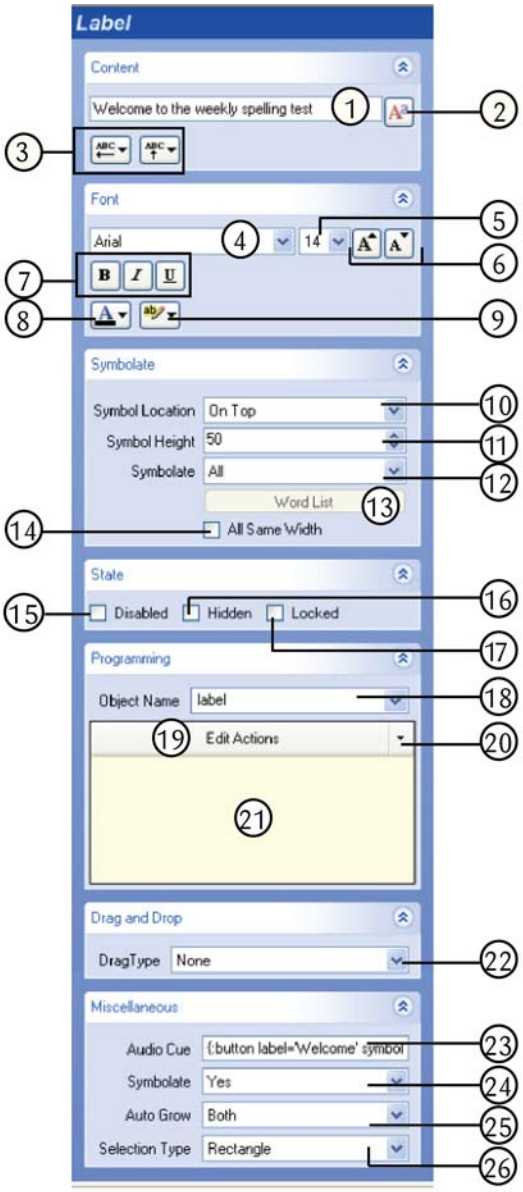
Open the Label Properties Panel

Select the bounding box for the label whose text and properties you want to define or change. The *Label* Properties panel will open.

NOTE
Before you begin editing the object's properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

LABEL PROPERTIES PANEL



1 **Label text box**

2 **Rich Text Editor button**

3 **Text justification drop-down buttons**

4 **Font drop-down list**

5 **Font size button**

6 **Font size adjustment buttons**

7 **Font style options buttons**

8 **Text color button**

9 **Text background color button**

10 ***Symbol Location* drop-down list**

11 ***Symbol Height* drop-down list**

12 ***Symbolate* drop-down list**

13 ***Word List* button**

14 ***All Same Width* check box**

15 ***Disabled* check box**

16 ***Hidden* check box**

17 ***Locked* check box**

18 ***Object Name* text box**

19 ***Edit Actions* button**

20 **Expand button (opens and closes Assigned actions list)**

21 **Assigned actions list**

22 ***Drag Type* drop-down list**

23 ***Audio Cue* text box**

24 ***Symbolate Type* drop-down list**

25 ***Auto Grow* drop-down list**

26 ***Selection Type* drop-down list**

NOTE
As you make changes to the label's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Edit Label Content

Editing label content enables you to add and format the label text.

The Label Content Properties Panel

You use the Label Content Properties panel to edit label content.

LABEL CONTENT PROPERTIES

1 **Label text box**

2 **Rich Text Editor button**

3 **Text justification buttons**

Add and Format the Label Text

Use the *Rich Text Editor* to enter and format the label text. You can use multiple phrases or sentences as a label and format each word separately. You can symbolate individual words or all words in the label, change speech style settings, and insert pauses, sound files, images, expressions, and keyboard keys into the label text.

1. Select the Rich Text Editor button. The *Rich Text Editor* will open.
2. Select the text, **"Label,"** in the *Rich Text Editor*.
3. Enter your new label text and use the *Rich Text Editor* to format it. (See ***Using the Rich Text Editor***.) As you type new text into the *Rich Text Editor*, the text will appear in the Label text box in the *Label* Properties panel.
4. Select **OK** to save your changes and close the *Rich Text Editor.*

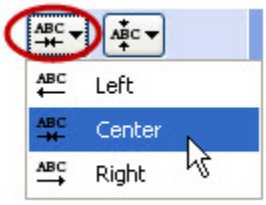
NOTE
You must select Yes in the *Symbolate* drop-down list in *Miscellaneous* properties for the label text to symbolate.

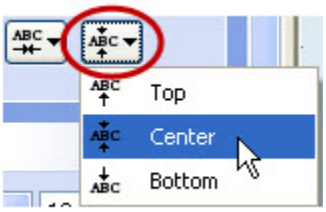
NOTE
Make a selection in the *Auto Grow* drop-down list in Miscellaneous properties to have the label bounding box automatically resize to fit the text. (See ***Select "Auto Grow" Properties***.)

Justify the Label Text

1. Select the Text Justification button on the left to select an option for the label's horizontal justification (left, center or right.)
2. Select the Text Justification button on the right to select an option for the vertical justification of the label (top, center, or bottom.)

TEXT JUSTIFICATION OPTIONS





Format the Label Font

If you wish, you can use the controls in the *Font* Properties group to select a font, font size, font style and color for the label text.

NOTE
It is suggested that you use the *Rich Text Editor* to format the label text. If you format the label text using the *Rich Text Editor* and then use the controls in the *Font* Properties group, all of your formatting will be overridden. If you want to preserve the formatting that you have done using the *Rich Text Editor*, do not use the controls in the *Font* Properties group.

Define the Label Symbolate Properties

You can use symbols in your label text. You can define symbol location, symbol height and width, and choose which words in the label text to symbolate.

LABEL SYMBOLATE PROPERTIES

10 ***Symbol Location*** **drop-down list**

11 ***Symbol Height*** **drop-down list**

12 ***Symbolate*** **drop-down list**

13 ***Word List*** **button**

14 ***All Same Width*** **check box**

NOTE
You must select Yes in the *Symbolate* drop-down list in *Miscellaneous* properties for the label text to symbolate.

Select the Symbol Location

Use the *Symbol Location* drop-down list to choose where the symbol will display in relation to the word with which it is paired - on top of the word or on the bottom of the word.

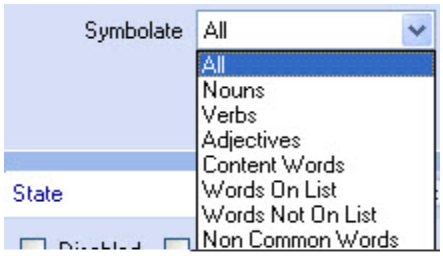
Select the Symbol Height

Use the *Symbol Height* drop-down list to select a height (in pixels) at which the symbols will display.

Select the Type of Words to be Symbolated

Use the Symbolate drop-down list to select the type of words you want to symbolate in the label text:

SYMBOLATE DROP-DOWN LIST



- **All -** each word (that has a matching symbol) will be symbolated as you type.

- **Nouns, Verbs, Adjectives -** a symbol will appear for the part of speech that you select.
- **Content Words -** "Content Words" will be symbolated. Content words include nouns, verbs, adjectives, and some common adverbs such as "quickly" and "slowly."
- **Words On List -** words from a Word List you have selected will be symbolated (See ***Word Lists***.)
- **Words Not On List -** words that are not on the Word List you have selected will be symbolated. (See ***Word Lists***.)

NOTE
When you select the Words On List or Words Not On List option, the *Word List* button will be enabled. (Otherwise it will be grayed out.) Selecting the Word List button will open the *Edit Words* dialog to allow you to edit the Word List. (See *Word Lists*.)

- **Non Common Words -** words that are not on the list of Common Words will be symbolated. (See the appendix, ***Common Words***.)

NOTE
Double-clicking on a symbol in the label text will open the *Symbol Candidates* dialog. Use this dialog to change the symbol or text for a word-symbol pairing, make a new word-symbol pairing, or add or import a symbol. See *Symbolate Buttons*.

Select the Width of the Symbols

Select the **All Same Width** check box to display each symbol at the same width in the label bounding box.

Set the Label State

Setting the label state enables you to control how the label will be visible in Preview and Play modes.

The Label State Properties Panel

You use the Label State Properties panel to set the label state.

LABEL STATE PROPERTIES

15 ***Disabled*** **check box**

16 ***Hidden*** **check box**

17 ***Locked*** **check box**

NOTE
Label "state" refers to the properties of the label (disabled or hidden) when the software is in Preview or Play modes. A label can also be in a "locked" state in Design mode.

Disable the Label

A "disabled" label will appear "grayed out" and will not be selectable in Preview or Play modes.

To disable the label, select the **Disabled** check box.

Hide the Label

You can "hide" a label from view. A hidden label will not be visible in Preview or Play modes (only an outline will appear in Design mode), and no action will take place when you select the place on the page occupied by the hidden label in Preview or Play modes.

To hide the label, select the **Hidden** check box.

Lock the Label

To prevent a label from accidentally being selected and then altered or moved, you can "lock" it. A label that you have locked can only be selected in Design mode by right-clicking on it. You might want to lock a label that contains the instructions for an activity, for example.

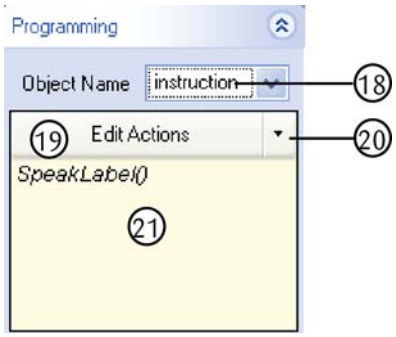
> **NOTE**
> Locking a label will not affect its behavior in Play or Preview mode.

- To lock the label, select the **Locked** check box.
- To unlock the label, right-click on the label in the workspace, and select **Unlock** from the menu.

Program the Label

Programming the label enables you to assign an object name and actions to the label.

LABEL PROGRAMMING PROPERTIES



18 ***Object Name*** **text box**

19 ***Edit Actions*** **button**

20 **Expand button**

21 **Assigned actions list**

Assign an Object Name to the Label

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new buttons and two new labels on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," "button_3," "label," and "label_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the label:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the label in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Label

Actions assigned to a label will be performed when the page containing the label is opened - not when the label is selected.

All actions currently assigned to the label will be displayed in the assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the label.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Select the Drag Type for the Label

LABEL DRAG AND DROP PROPERTIES

22 *Drag Type* drop-down list

Use the *Drag Type* drop-down list to select whether the label and its bounding box can be moved to a new position:

- Select **None** if you want the label to remain stationary (not "movable") when it is selected.
- Select **Move** if you want to enable the label to be moved to a new position.

- Select **Copy** if you want the label to duplicate itself when it is moved. (When the label is moved to a new position, the original label will remain in place, and an identical copy of the label will be moved to the new position.)

> **NOTE**
> The drag type you assign to the label will be enabled in Preview and Play modes.

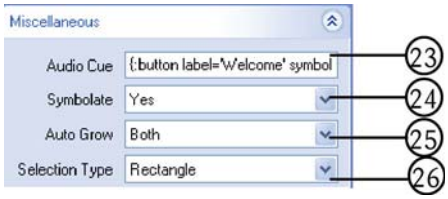
Assign Miscellaneous Properties to the Label

Assigning miscellaneous properties to the label enables you to set an audio cue, symbolate and autogrow properties, and assign a selection area.

The Miscellaneous Label Properties Panel

You use the Miscellaneous Label Properties panel to assign miscellaneous properties.

MISCELLANEOUS LABEL PROPERTIES



23 ***Audio Cue*** **text box**

24 ***Symbolate*** **drop-down list**

25 ***Auto Grow*** **drop-down list**

26 ***Selection Type*** **drop-down list**

Select an Audio Cue for the Label

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

> **NOTE**
> The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

> **NOTE**
> Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue - normally the label content).

Symbolate the Label

Use the *Symbolate* drop-down list to symbolate the text.

- Select **No** to desymbolate the label text.
- Select **Yes** to symbolate the label text.

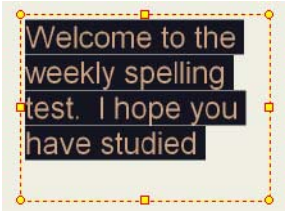
> **NOTE**
> Symbolate properties you have defined using the *Rich Text Editor* will not be enabled until you select Yes in the *Symbolate* drop-down list.

Select "Auto Grow" Properties

Use the Auto Grow drop-down list to select the way the label text fits into the label bounding box.

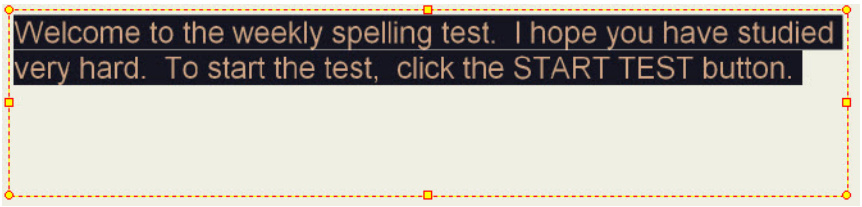
- Select **None** if you want to manually adjust the label bounding box to fit the label text.

AUTO GROW - NONE SELECTED



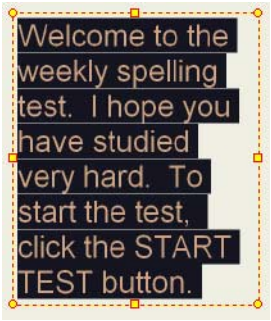
- Select **Width** if you want the label bounding box to increase in width to fit the label text.

AUTO GROW - WIDTH SELECTED



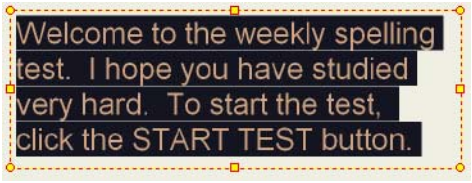
- Select **Height** if you want the label bounding box to increase in height to fit the label text.

AUTO GROW - HEIGHT SELECTED



- Select **Both** if you want the label bounding box to increase in both width and height to fit the label text.

AUTO GROW - BOTH (WIDTH AND HEIGHT) SELECTED



Assign a Selection Area to the Label

- Select **None** to make the entire label, including both the label text and the label bounding box, not selectable.
- Select **Rectangle** to make the label bounding box selectable.
- Select **Content** to make only the label text selectable.

> **NOTE**
> The selection area you assign to the label will be enabled in Preview and Play modes.

When you have finished making changes to the label's properties, be sure to save your work. Select **File Menu > Save Page**.

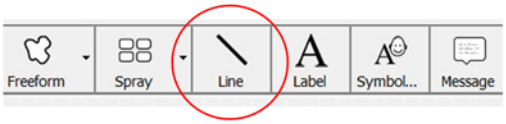
Working with Lines

Use the Line tool to draw a straight or diagonal line. A line can have actions assigned to it; you can define its color, weight, and style; and can lock it, disable it, or hide it on the page.

Draw a Line

1. Select the Line tool in the Toolbar.

Line Tool

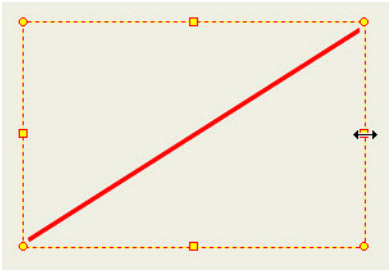


2. Move the pointer into the area in the workspace where you want to draw the line.
3. Hold down the mouse button, and drag out the line.
4. Release the mouse button when the new line is the length you want.

Shortcut
You can also quickly add a line to the page by selecting the Line tool and dragging it onto the page - or you can select the Line tool and click anywhere on the page.

Once you have drawn the line, you can change its angle, resize it, or move it. Select the line - a bounding box will display around your selection.

Selected Line Object Showing Bounding Box with Handles



- To resize the line or change its angle, select the line, then move the pointer over a handle on the bounding box. A double arrow will appear. Click and drag until the line is the length and angle you want.
- To move the line, click inside the bounding box, then drag the line to any position in the workspace.

NOTE
Right-clicking on the line will open a menu from which you can quickly modify the line and its position on the page. (See *Right-Click Menus at a Glance*.)

REFERENCE
To create a grid of identical lines, see *Creating a Grid of Objects*.

5. To save your changes, select **File Menu > Save Page**.

Edit Line Properties

Use the *Line* Properties panel to assign or edit the properties of a line.

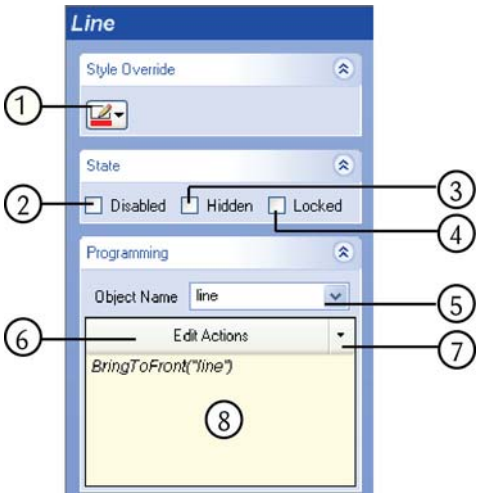
Open the Line Properties Panel

Select the line you want to define or change. The *Line* Properties panel will open.

NOTE
Before you begin editing the line properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on your computer's operating system, the panel width, and the size of your monitor.

LINE PROPERTIES PANEL



1 Style Override button

2 *Disabled* check box

3 ***Hidden*** **check box**

4 ***Locked*** **check box**

5 ***Object Name*** **text box**

6 ***Edit Actions*** **button**

7 **Expand button (opens and closes the Assigned actions list)**

8 **Assigned actions list**

NOTE

As you make changes to the line, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Line Style

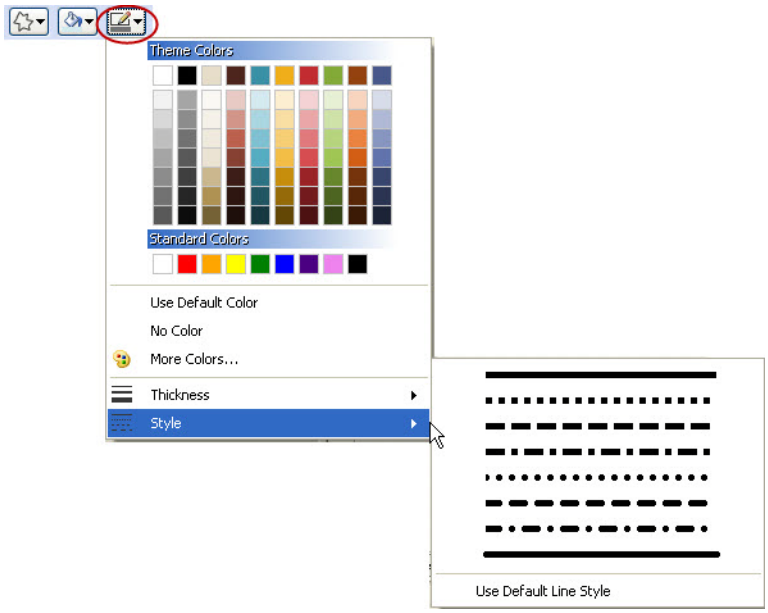
Using the Style Override Properties panel, you can set a color, weight, and style for the line.

STYLE OVERRIDE PROPERTIES

1 **Style Override button**

Select the Style Override button and choose from the available options to select a color, weight, and style for the line.

STYLE OVERRIDE OPTIONS



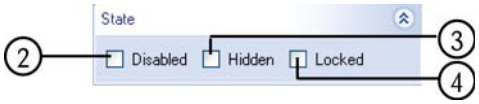
Set the Line State

Setting the line state enables you to disable or hide the line in Preview and Play modes, or to lock it in Design mode.

The Line State Properties Panel

You use the Line State Properties panel to set the line state.

LINE STATE PROPERTIES



2 ***Disabled*** **check box**

3 ***Hidden*** **check box**

4 ***Locked*** **check box**

NOTE
Line "state" refers to the properties of the line(disabled or hidden) when the software is in Preview or Play modes. A line can also be in a "locked" state in Design mode.

Disable the Line

A "disabled" line will appear "grayed out" and will not be selectable in Preview or Play modes.

To disable the line, select the **Disabled** check box.

Hide the Line

You can "hide" a line from view. A hidden line will not be visible in Preview or Play modes (only an outline will appear in Design mode), and no action will take place when you select the place on the page occupied by the hidden line in Preview or Play modes.

To hide the line, select the **Hidden** check box.

Lock the Line

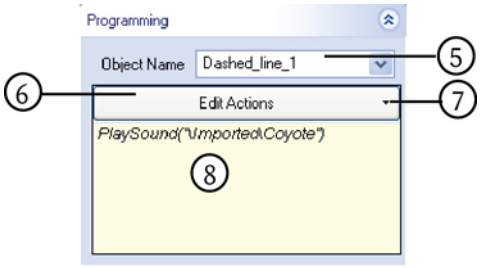
To prevent the user from accidently selecting and altering or moving a line, you can "lock" it. A locked object can only be selected in Design mode by right-clicking on the object.

- To lock the line, select the **Locked** check box.
- To unlock the line, right-click on the line, and select **Unlock** from the menu.

Program the Line

Programming the line enables you to assign an object name and actions to the line.

LINE PROGRAMMING PROPERTIES



5 ***Object Name* text box**

6 ***Edit Actions* button**

7 **Expand button**

8 **Assigned actions list**

Assign an Object Name to the Line

An object name is a unique property that identifies an object on a page for programming. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new buttons and two new lines on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," "button_3," "line," and "line_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the line:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the line in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Line

Actions assigned to a line will be performed when the page containing the line is opened - not when the line is selected.

All actions currently assigned to the line will be displayed in the Assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the line.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

NOTE
The most commonly used actions for programming lines are the *MoveLine()* actions found in the *Lines* category of the *Screen Objects* category group.

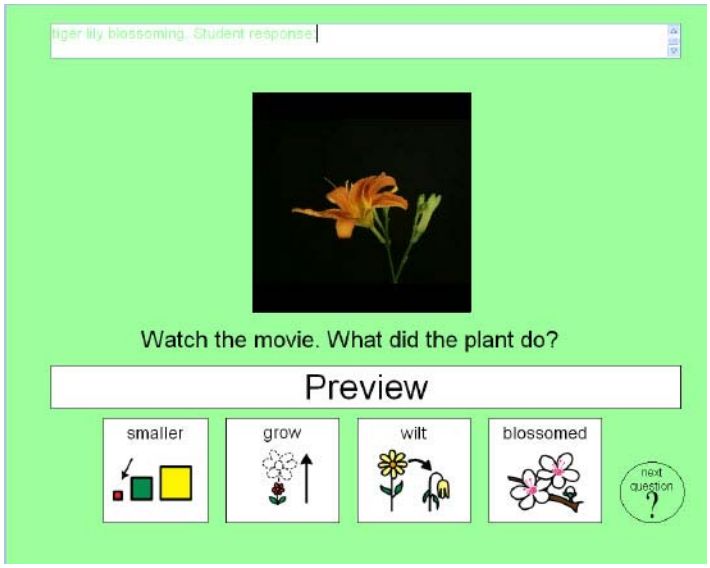
NOTE
When you have finished making changes to the line's properties, be sure to save your work. Select File Menu > Save Page.

Working with Video Boxes

Adding a video to a page can give new dimensions to your activities.

In the example shown below, the video box plays a video of a tiger lily blossoming. The user is instructed to watch the video and select the correct answer to the question, "What did the plant do?"

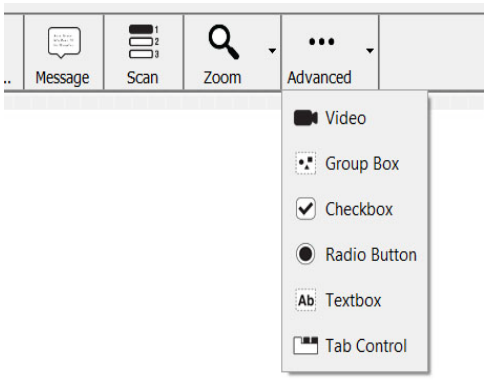
Video Box on Page (example)



Draw a Video Box

1. Select the arrow to the right of the Advanced tool in the toolbar. Then select **Video** from the drop-down list.

Advanced Drop-Down List



2. Move the pointer into the area in the workspace where you want to place the video box.

3. Hold down the mouse button, and drag diagonally.
4. Release the mouse button when the video box is the desired size and shape.

> **SHORTCUT**
> You can also quickly add a video box to the page by selecting the Video tool and dragging it onto the page - or you can select the Video tool and click anywhere on the page.

Once you have drawn the video box, you can resize it or move it:

- To resize the video box, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the video box is the size and shape you want.
- To move the video box, select it, then drag it to any position in the workspace.

> **NOTE**
> Right-clicking on the video box will open a menu from which you can quickly modify the video box and its position on the page. (See *Right-Click Menus at a Glance*.)

5. To save your changes, select **File Menu > Save Page**.

Edit Video Box Properties

Use the *Video* Properties panel to assign or edit the properties (video to be played, state, actions, etc.) of a video box.

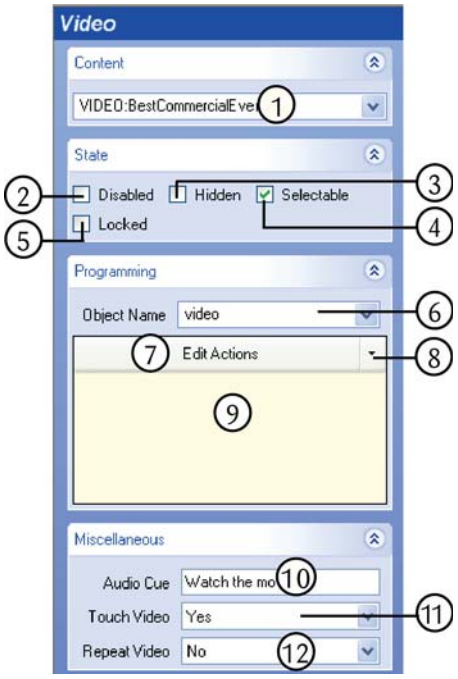
Open the Video Properties Panel

Select the video box. The Properties panel will open.

> **NOTE**
> Before you begin editing the object's properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

> **NOTE**
> The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

VIDEO PROPERTIES PANEL



1 **Content button**

2 ***Disabled* check box**

3 ***Hidden* check box**

4 ***Selectable* check box**

5 **Locked check box**

6 ***Object Name* text box**

7 ***Edit Actions* button**

8 **Expand button (opens and closes Assigned actions list)**

9 **Assigned actions list**

10 ***Audio Cue* text box**

11 ***Touch Video* drop-down list**

12 ***Repeat Video* drop-down list**

NOTE
As you make changes to the video box's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Video

Video Content Properties

1 Content button

Note
Boardmaker Studio includes a library of ten short, funny animations that you can add to your video boxes.

Note
You can play videos in the *.wmv* format. (Media files in other formats must be converted to the *.wmv* format using third-party software.

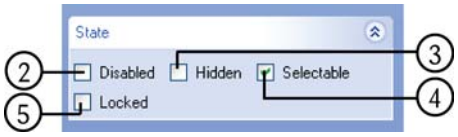
Select the video that you want to play:

1. Make a selection anywhere on the *Content* button - on the text field or on the arrow to the right of the text field. A browser will open.
2. Navigate through the levels of folders to find the folder that contains the video you want to import.
3. Select **Open**. The title of the video you chose will appear in the text field of the *Content* button.

Shortcut
You can also drag a video file from outside the workspace and drop it onto the video box.

Set the Video Box State

Video State Properties



2 *Disabled* check box

3 *Hidden* check box

4 *Selectable* check box

***5* *Locked* check box**

Note
Video "state" refers to the properties of the video (disabled, hidden or selectable) when the software is in Preview or Play modes. A video can also be in a "locked" state in Design mode.

Disable the Video Box

A "disabled" video box will appear "greyed out" and will not be selectable in Preview or Play modes.

To disable the video box, select the **Disabled** check box.

Hide the Video Box

You can "hide" a video box from view. A hidden video box will not be visible in Preview or Play modes (only an outline will appear in Design mode), and no action will take place when you select the place on the page occupied by the hidden video box in Preview or Play modes.

To hide the video box select the **Hidden** check box.

Make the Video Box Not Selectable

A video box that you have designated as "Not Selectable" will appear normal on the page in Preview or Play modes, but it cannot be selected.

To make the video box not selectable, clear the **Selectable** check box.

Lock the Video Box

A video box that you have locked can only be selected in Design mode by right-clicking on it.

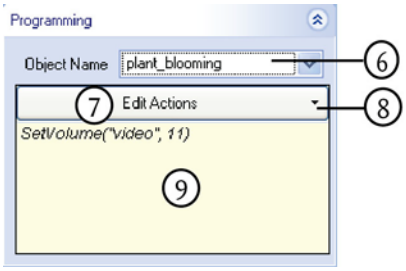
> **NOTE**
> Locking a video box will not affect its behavior in Preview or Play modes.

To lock a video box, select the **Locked** check box.

To unlock a video box, right-click on it, and select **Unlock** from the menu.

Program the Video Box

VIDEO PROGRAMMING PROPERTIES



6 **Object Name text box**

7 ***Edit actions* button**

8 **Expand button**

9 **Assigned actions list**

Assign an Object Name to the Video Box

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn two new video boxes on a blank page, the objects will automatically be named - in the order that they have been drawn - "video," and "video_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw. (For example, you could assign the *StopVideo(object)* action to a button with the label, "Blooming," so that the video (object name of "Plant_Blooming) will stop playing when that button is selected.

To assign a unique object name to the video box:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box.) The *Object Name* dialog will open.
2. Enter a new name for the object in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Video Box

All actions currently assigned to the video box will be displayed in the Assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

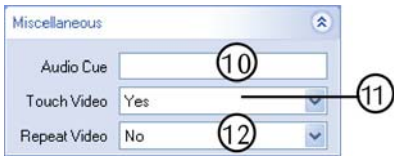
NOTE
Actions most commonly used to program video boxes are found in the *Audio/Video/Speech* action category.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the video box.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Assign Miscellaneous Properties to the Video Box

Video Miscellaneous Properties



10 ***Audio Cue*** **text box**

11 ***Touch Video*** **drop-down list**

12 ***Repeat Video*** **drop-down list**

Note
The miscellaneous properties you assign to the video box will be enabled in Preview or Play modes.

Select an Audio Cue for the Video

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

Note
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

Note
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

Enable / Disable Touch Video

You can use the Touch Video feature to start playing a video simply by selecting the video box. The video stops playing when the video box is selected again.

Select **Yes** from the *Touch Video* drop-down list to enable Touch Video.

Enable / Disable Repeat Video

If you select **Yes** in the *Repeat Video* drop-down list, the video will continue to replay until the video box is selected again. (If **Yes** is not selected, the video will play only once.)

Note
When you have finished making changes to the video box's properties, be sure to save your work. Select File Menu > Save Page.

Working with Message Windows

On the most basic level, the message window displays text messages entered by keyboard input. Buttons and other objects can be programmed with a wide variety of actions (such as *InsertText*, *InsertSymbol*, or *ClearMessage Window*) that will send text, symbols, sound files, labels, etc. to the message window or control its behavior.

You can define the symbolate properties of the message window so that as text is entered, appropriate symbols will appear. You can even select which words in the message window should be symbolated.

Boardmaker Studio also includes an optional Save in Use Mode feature that can permanently save the contents of the message window when the program is closed. When the program is reopened, the contents of the message window are automatically restored.

You can use word predictor buttons in conjunction with a message window to assist the user in the writing process. As the user enters a message into the message window, the word prediction feature will anticipate the user's word choices and display various options on the word prediction buttons. Selecting the word predictor button will immediately send the predicted word to the message window. (See ***Word Prediction***.)

Use the Message Window tool to place a message window - or multiple message windows - anywhere on a page. Then use the *Message Window* Properties panel to change the appearance (both the appearance of the message window and of the message window text); symbolate the message window text; speak the message window text; determine the behavior of the message window; and assign actions to it.

Draw a Message Window

1. Select the Message Window tool in the toolbar.

Message Window Tool

2. Move the pointer into the area in the workspace where you want to place the message window.
3. Hold down the mouse button, and drag diagonally to draw the message window.

> **Note**
> To create a square message window, hold down the **Shift** key while you are dragging.

4. Release the mouse button when the message window is the desired size and shape.

SHORTCUT
You can also quickly add a message window to the page by selecting the Message Window tool and dragging it onto the page - or you can select the Message Window tool and click anywhere on the page.

NOTE
You can have more than one message window on a page.

Once you have drawn the message window, you can resize it or move it:

- To resize the message window, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until it is the size and shape you want.
- To move the message window, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the message window will open a menu from which you can quickly modify the message window and change its position on the page. (See *Right-Click Menus at a Glance*.)

5. To save your changes, select **File Menu > Save Page**.

Edit Message Window Properties

Use the *Message Window* Properties panel to assign or edit the properties (font, symbolate properties, appearance, status, actions, and more) of a message window.

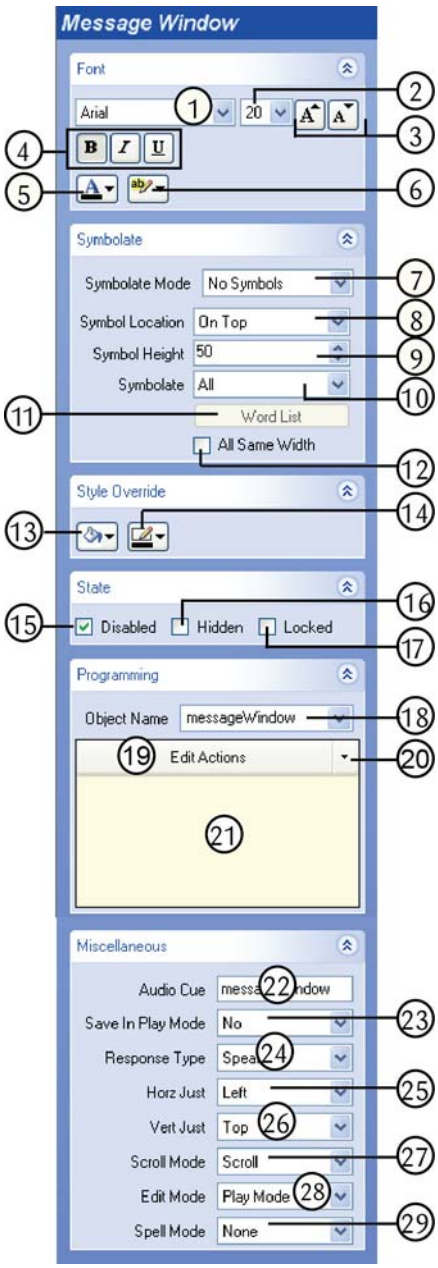
Open the Message Window Properties Panel

Select the message window whose properties you want to define or change. The Properties panel will open.

NOTE
Before you begin editing the message window properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on your computer's operating system, the panel width, and the size of your monitor.

Message Window Properties Panel



1 **Font drop-down list**

2 **Font size button**

3 **Font size adjustment buttons**

4 **Font style options buttons**

5 **Text color button**

6 **Text background color button**

7 ***Symbolate Mode* drop-down list**

8 ***Symbol Location* drop-down list**

9 ***Symbol Height*** **drop-down list**

10 ***Symbolate*** **drop-down list**

11 ***Word List*** **button**

12 ***All Same Width*** **check box**

13 **Fill color override button**

14 **Border override button**

15 ***Disabled*** **check box**

16 ***Hidden*** **check box**

17 ***Locked*** **check box**

18 ***Object Name*** **text box**

19 ***Edit Actions*** **button**

20 **Expand button (opens and closes the Assigned actions list)**

21 **Assigned actions list**

22 ***Audio Cue*** **text box**

23 ***Save in Play Mode*** **drop-down list**

24 ***Response Type*** **drop-down list**

25 ***Horizontal Justification*** **drop-down list**

26 ***Vertical Justification*** **drop-down list**

27 ***Scroll Mode*** **drop-down list**

28 ***Edit Mode*** **drop-down list**

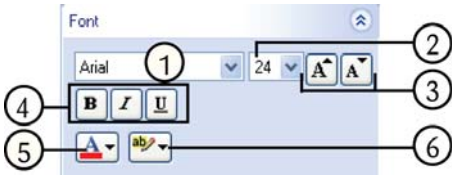
29 ***Spell Mode*** **drop-down list**

NOTE

As you make changes to the object's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Message Window Font

MESSAGE WINDOW FONT PROPERTIES



1 Font drop-down list

2 Font size button

3 Font size adjustment buttons

4 Font style options buttons

5 Text color button

6 Text background color button

1. Select the Font drop-down list and choose a font from the available options.
2. Select the arrow to the right of the Font size button and choose a font size, or select the increase or decrease Font size adjustment buttons.
3. Select the Bold, Italic, or Underline button to change the font style.
4. Set the color of the font:

   Select the Text color button, and choose a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.
5. If desired, to select a color for the font text background, select the Text background color button, and then select a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.

NOTE

You may also create a custom color for the font or for the font text background. When defining either color, select More Colors. The *Color Selector* dialog will open and you can choose a custom color.

Define the Symbolate Properties of the Message Window

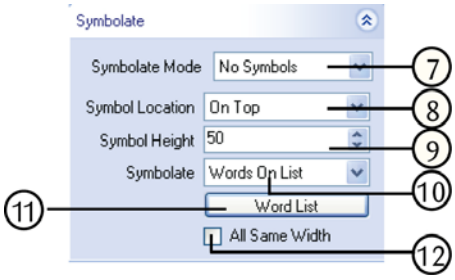
You can add symbolate properties to the message window - as the user types text into the message window, or as text is sent to the message window, appropriate symbols will appear. These "picture sentences," provide an easy way to build communication skills.

NOTE

Double-clicking on a word or symbol in the message window will open the *Symbol Candidates* dialog. Use this dialog to change the symbol or text for a word-symbol pairing, make a new word-symbol pairing, or to add or import a symbol. See *The Symbol Candidates Dialog*.

You can define symbol location, symbol height and width, and choose which words in the text to symbolate.

MESSAGE WINDOW SYMBOLATE PROPERTIES



7 ***Symbolate Mode*** **drop-down list**

8 ***Symbol Location*** **drop-down list**

9 ***Symbol Height*** **drop-down list**

10 ***Symbolate*** **drop-down list**

11 ***Word List*** **button**

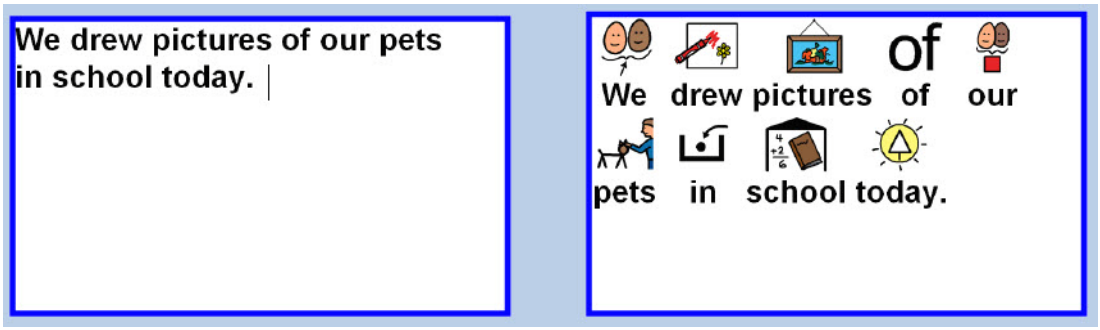
12 ***All Same Width*** **check box**

Symbolate the Message Window Text

Use the *Symbolate Mode* drop-down list to activate (or deactivate) the symbolate properties of the text in the message window.

- Select **No Symbols** if you do not want symbols to be displayed with the text in the message window.
- Select **Symbolate** to symbolate the message window text.

MESSAGE WINDOW WITH NON-SYMBOLATED AND SYMBOLATED TEXT - EXAMPLE



Select the Symbol Location

Use the *Symbol Location* drop-down list to choose where the symbol will display in relation to the word with which it is paired - on top of the word or on the bottom of the word.

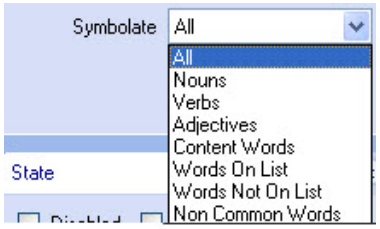
Select the Symbol Height

Use the *Symbol Height* drop-down list to select a height (in pixels) at which the symbols will display.

Select the Type of Words to be Symbolated

Use the *Symbolate* drop-down list to select the type of words you want to symbolate as they are entered into the message window:

SYMBOLATE DROP-DOWN LIST



- **All -** each word (for which there is a matching symbol) will be symbolated.
- **Nouns, Verbs, Adjectives -** a symbol will appear for the part of speech that you select.
- **Content Words -** "Content Words" will be symbolated. Content words include nouns, verbs, adjectives, and some common adverbs such as "quickly" and "slowly."
- **Words On List -** words from a Word List you have selected will be symbolated.
- **Words Not On List -** words that are not on the Word List you have selected will be symbolated. (See ***Word Lists***.)

> **NOTE**
> When you select the Words On List or Words Not On List option, the *Word List* button will be enabled. (It will be grayed out if neither of these options is selected.) Selecting the Word List button will open the *Edit Words* dialog to allow you to edit the Word List. (See *Word Lists*.)

- **Non Common Words -** words that are not on the list of Common Words will be symbolated. (See the appendix, ***Common Words***.)

Select the Width of the Symbols

Select the **All Same Width** check box to display each symbol at the same width in the message window.

Customize the Message Window Style

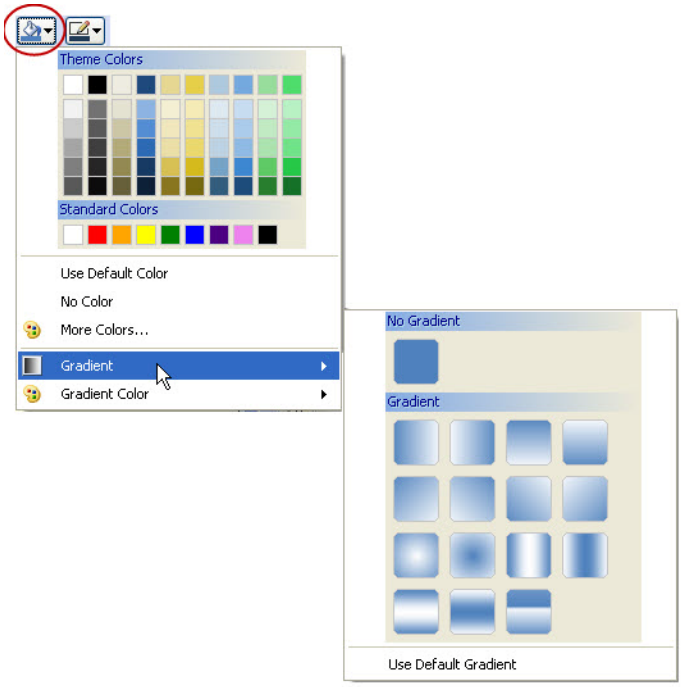
STYLE AND STYLE OVERRIDE PROPERTIES

13 Fill color override button

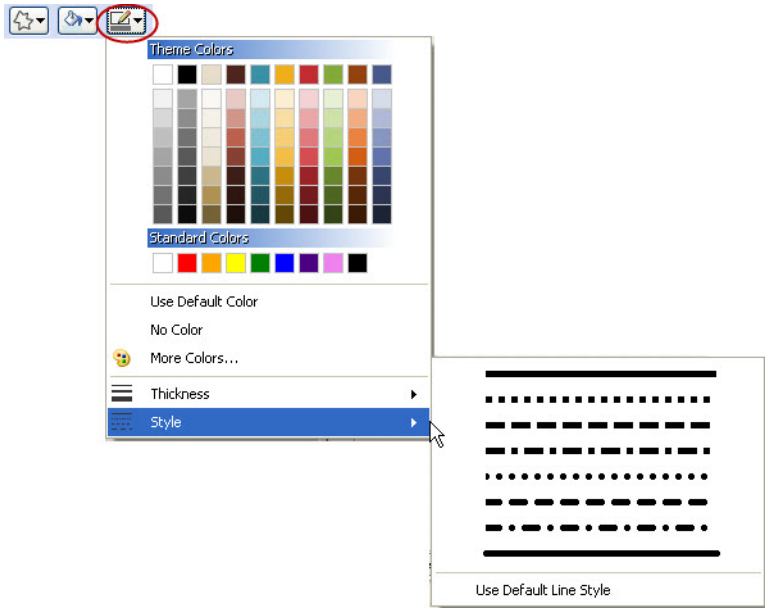
14 Border override button

If you want to customize the style of the message window, use the Style Override buttons (fill color and border) and select an option.

Fill Color Override Options

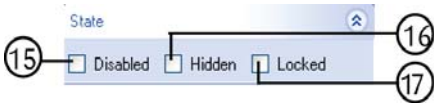


Border Override Options



Set the Message Window State

MESSAGE WINDOW STATE PROPERTIES



15 ***Disabled*** **check box**

16 ***Hidden*** **check box**

17 ***Locked*** **check box**

NOTE
The "state" of the message window refers to its disabled or hidden status when the software is in Preview or Play modes. A message window can also be in a "locked" state in Design mode.

Disable the Message Window

A "disabled" message window will not be selectable, and text cannot be entered in it in Preview or Play modes.

To disable the message window, select the **Disabled** check box.

Hide the Message Window

You can "hide" a message window from view. A hidden message window will not be visible in Preview or Play modes (it will appear shaded in Design mode); text cannot be entered in it; and no action will take place when you select the place on the page occupied by the hidden message window in Preview or Play modes.

To hide the message window, select the **Hidden** check box.

Lock the Message Window

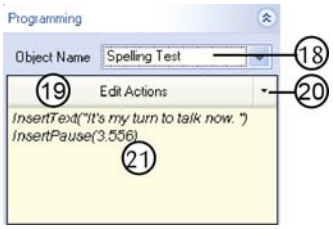
You can "lock" a message window to prevent it from being accidentally selected, moved, or resized. It can only be selected in Design mode by right-clicking on it.

NOTE
Locking the Message Window will not affect its behavior in Preview or Play mode.

- To lock the message window, select the **Locked** check box.
- To unlock the message window, right-click on it and select **Unlock** from the menu.

Program the Message Window

Message Window Programming Properties



18 **Object Name text box**

19 **Edit Actions button**

20 **Expand button**

21 **Assigned actions list**

Assign an Object Name to the Message Window

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn two message windows on a page, the software will name the first message window, "messageWindow," and the second message window, "messageWindow_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the message window:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the message window in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Message Window

Any actions currently assigned to the message window will be displayed in the Assigned actions list.

Note
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select the **Edit Actions** button. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the message window.

Reference
See *Working with Actions* for information on adding and editing actions.

NOTE
Actions commonly assigned to message windows - including the *SaveText* actions - can be found in the *Message Window* action category. Additional actions - to send text, symbols, sound, etc. to the message window - are found in the *Buttons* action category.

Assign Miscellaneous Properties to the Message Window

MISCELLANEOUS MESSAGE WINDOW PROPERTIES

22 ***Audio Cue*** **text box**

23 ***Save in Use Mode*** **drop-down list**

24 ***Response Type*** **drop-down list**

25 ***Horizontal Justification*** **drop-down list**

26 ***Vertical Justification*** **drop-down list**

27 ***Scroll Mode*** **drop-down list**

28 ***Edit Mode*** **drop-down list**

29 ***Spell Mode*** **drop-down list**

Select an Audio Cue for the Message Window

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

Save in Play Mode

Select **Yes** in the *Save in Play Mode* drop-down list to save the contents of the message window when Boardmaker Studio is closed. When the project is reopened, the contents of the message window will be restored automatically. This property is very useful - especially for general writing projects and projects using multiple message windows.

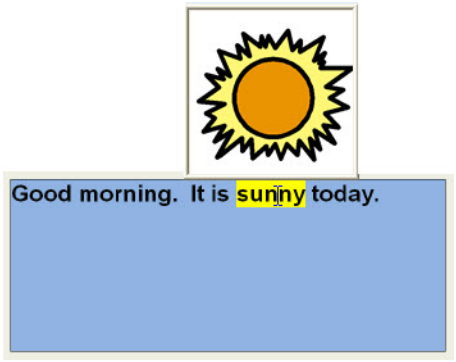
> **NOTE**
> When the program is closed, the contents of the message window will not be saved unless you use the Save in Play Mode property (or use one of the *SaveText()* actions).

Select the Response Type

Use the *Response Type* drop-down list to determine the way the message window reacts when it is selected:

- **Speak -** All of the text in the message window will be spoken aloud when the message window is selected.
- **Move Cursor -** The cursor will move to the selected place in the text.
- **Speak Word -** When a word is selected in the message window, it will be spoken aloud.
- **Show Symbol -** When a word is selected in the message window, its corresponding symbol will appear. (See the illustration below.)

MESSAGE WINDOW - SHOW SYMBOL RESPONSE SELECTED



Select the Message Window Text Justification

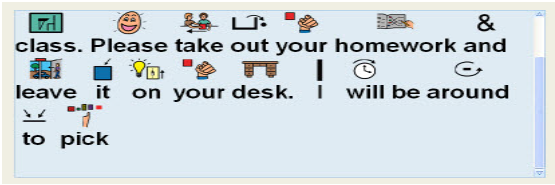
- Select **Left**, **Center**, **Right**, **or None** from the *Horizontal Justification* drop-down list to set the horizontal justification for the text in the message window.
- Select **Top**, **Center**, **Bottom**, or **None** from the *Vertical Justification* drop-down list to set the vertical justification for the text in the message window.

Select the Message Window Scroll Mode

Use the *Scroll Mode* drop-down list to define the method by which the message window scrolls.

- Select **Scroll** if you want the message window to display a scroll bar on the right side when the length of the text exceeds the boundaries of the message window.

MESSAGE WINDOW - SCROLL MODE SELECTED



- Select **Page** if you want the message window to open a new window when the length of the text exceeds the boundaries of the message window. (Use the up and down arrow keys to view the text.)

Select the Message Window Editing Mode(s)

Use the *Edit Mode* drop-down list to select the software mode(s) in which text can be entered into the message window.

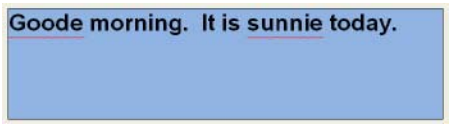
- Select **Play Mode** to allow text to be entered into the message window only when the program is in Preview or Play modes.
- Select **Design Mode** to allow text to be entered into the message window only when the program is in Design mode.
- Select **Play And Design Mode** to allow text to be entered into the message window in all software modes (Design, Preview, and Play).

Select the Spell Mode for Message Window Text

Use the *Spell Mode* drop-down list to select how spell check is handled for text in the message window.

- Select **None** if you don't want spell check enabled for text in the message window.
- Select **Show** if you want the text in the message window to be checked for spelling errors. Misspelled words will be underlined in red.

MESSAGE WINDOW - SPELL CHECK ENABLED

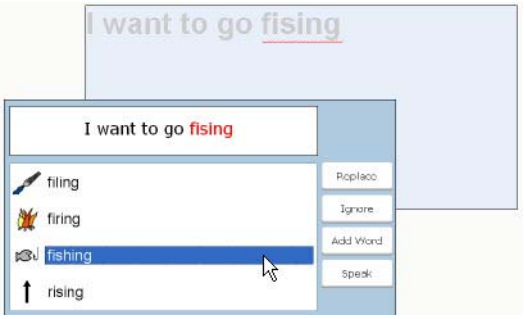


- Select **Show And Suggest** to check the text in the message window for errors and to open a dialog with suggested replacements for the misspelled word.

  The software will behave differently depending on whether you are entering text in Design mode or in Preview or Play modes:

  - In Preview or Play mode, select the misspelled word. A dialog will open. Select a replacement word. Then select **Replace**, **Ignore**, or **Add to Dictionary**. To hear the word spoken, select **Speak.**

Message Window (Preview mode) - Show and Suggest Selected



- In Design mode, right-click on the misspelled word, and the *Suggestions For...* dialog will open. Select **Replace**, **Ignore**, or **Add to Dictionary**.

Message Window (Design mode) - Show and Suggest Selected

When you have finished making changes to the message window properties, be sure to save your work. Select **File Menu > Save Page**.

Working with Text Boxes

Text boxes are similar to message windows in that they display text messages entered by keyboard input. They differ from message windows, however, in that text boxes are used for short text entries - only one word or line of text. They are designed to be used for creating forms for teachers to input text - not as a student tool.

Text boxes also differ from message windows in that they do not have symbolate properties.

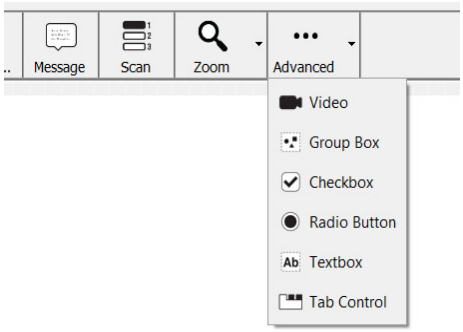
Text boxes can be programmed with actions; their appearance can be customized; and they can be disabled, hidden, or locked.

Use the Text Box tool to place a text box - or multiple text boxes - anywhere on a page. Then use the *Text Box* Properties panel to format the text inside the text box; disable, hide, or lock the text box; assign actions to it; and designate the alphanumeric characters that the text box will accept.

Draw a Text Box

1. Select the arrow to the right of the Advanced tool in the toolbar. Then select **Text Box** from the drop-down list.

Advanced Drop-Down List



2. Move the pointer into the area in the workspace where you want to place the text box.
3. Hold down the mouse button, and drag diagonally to draw the text box.
4. Release the mouse button when the text box is the desired size and shape.

Shortcut
You can also quickly add a text box to the page by selecting the Text Box tool and dragging it onto the page - or you can select the Text Box tool and click anywhere on the page.

Once you have drawn the text box, you can resize it or move it:

- To resize the text box, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until it is the size and shape you want.

- To move the text box, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the text box will open a menu from which you can quickly modify it and change its position on the page. (See *Right-Click Menus at a Glance*.)

NOTE
Use the Spray Tool to create a grid of identical text boxes. (See *Creating a Grid of Objects*.)

5. To save your changes, select **File Menu > Save Page**.

Edit Text Box Properties

NOTE
Text box settings are defined using the Message Window options in the *Setup and Options* (File Menu > Setup and Options> Message Window.) Text boxes, however, cannot use symbols - they do not have symbolate properties.

Use the *Text Box* Properties panel to assign or edit the properties (font, status, actions, and more) of a text box.

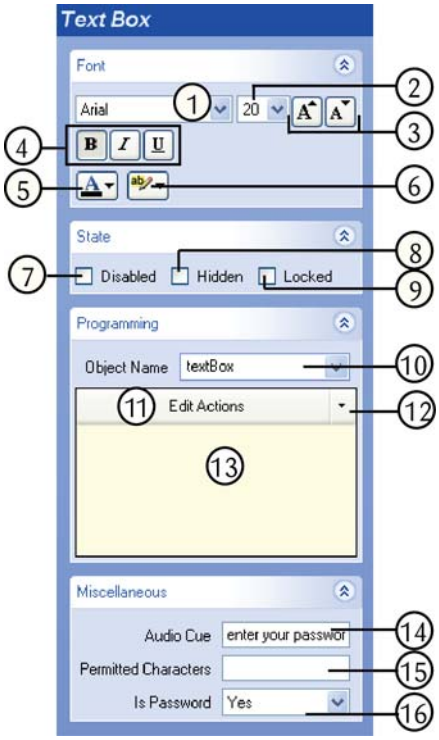
Open the Text Box Properties Panel

Select the text box whose properties you want to define or change. The Properties panel will open to the right of the workspace.

NOTE
Before you begin editing the text box properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on your computer's operating system, the panel width, and the size of your monitor.

TEXT BOX PROPERTIES PANEL



1 **Font drop-down list**

2 **Font size button**

3 **Font size adjustment buttons**

4 **Font style options buttons**

5 **Text color button**

6 **Text background color button**

7 ***Disabled* check box**

8 ***Hidden* check box**

9 ***Locked* check box**

10 ***Object Name* text box**

11 ***Edit Actions* button**

12 **Expand button (opens and closes the Assigned actions list)**

13 **Assigned actions list**

14 ***Audio Cue* text box**

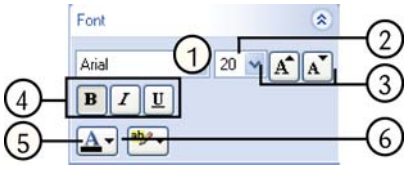
15 ***Permitted Characters* text box**

16 ***Is Password* drop-down list**

NOTE
As you make changes to the object's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Font for the Text

TEXT BOX FONT PROPERTIES



1 Font drop-down list

2 Font size button

3 Font size adjustment buttons

4 Font style options buttons

5 Text color button

6 Text background color button

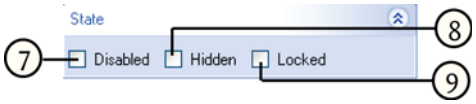
1. Select the Font drop-down list and choose a font from the available options.
2. Select the arrow to the right of the Font size button and choose a font size, or select the increase or decrease Font size adjustment buttons.
3. Select the Bold, Italic, or Underline button to change the font style.
4. To set the color of the font, select the Text color button, and choose a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.
5. To Select a color (if desired) for the font text background, select the Text background color button. Select a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.

NOTE

You may also create a custom color for the font or for the font text background. When defining either color, select More Colors. The *Color Selector* dialog will open and you can choose a custom color.

Set the Text Box State

TEXT BOX STATE PROPERTIES



7 ***Disabled*** **check box**

8 ***Hidden*** **check box**

9 ***Locked*** **check box**

NOTE
The "state" of the text box refers to its disabled or hidden status when the software is in Preview or Play modes. A text box can also be in a "locked" state in Design mode.

Disable the Text Box

A "disabled" text box will not be selectable, and text cannot be entered into it.

To disable the text box, select the **Disabled** check box.

Hide the Text Box

You can "hide" a text box from view. A hidden text box will not be visible in Preview or Play modes (it will be shaded in Design mode); text cannot be entered in it; and no action will take place when you select the place on the page occupied by the hidden text box in Preview or Play modes.

To hide the text box, select the **Hidden** check box.

Lock the Text Box

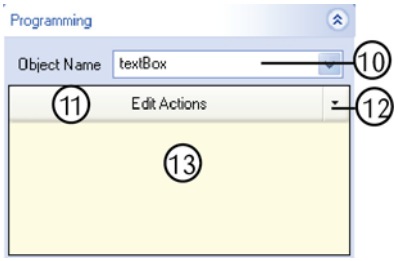
A locked text box is not selectable by left click in Design mode. This protects the text box from being accidentally selected and then moved or resized.

NOTE
Locking a text box will not affect its behavior in Preview or Play mode.

- To lock the text box, select the **Locked** check box.
- To unlock the text box, right-click on it and select **Unlock** from the menu.

Program the Text Box

Text Box Programming Properties



10 **Object Name text box**

11 **Edit Actions button**

12 **Expand button**

13 **Assigned actions list**

Assign an Object Name to the Text Box

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn two text boxes on a page, the software will name the first text box, "textBox" and the second text box, "textBox_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the text box:

1. Select the **Object Name** text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the text box in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Text Box

Any actions currently assigned to the text box will be displayed in the Assigned actions list.

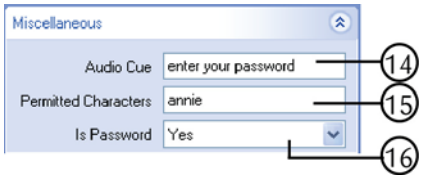
Note
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the text box.

Reference
See *Working with Actions* for information on adding and editing actions.

Assign Miscellaneous Properties to the Text Box

MISCELLANEOUS TEXT BOX PROPERTIES



14 ***Audio Cue*** **text box**

15 ***Permitted Characters*** **text box**

16 ***Is Password*** **drop-down list**

Select an Audio Cue for the Text Box

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue).

Designate Permitted Characters to be Entered in the Text Box

You can designate the entries that the text box will accept. If you leave the *Permitted Characters* text box blank, the user can enter any alphanumeric character(s) into the text box. If, for example, you want to limit the accepted text to numbers, enter 0 through 9 into the *Permitted Characters* text box. If you want to ensure that only one word is entered, you could restrict the permitted characters to "abcdefghijklmnop" (no spaces).

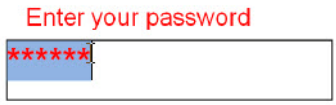
To limit the characters that the user can enter in the text box:

1. Select the **Permitted Characters** text box.
2. Enter the specific characters to which you want to limit the text box entry.

Use the Text Box for a Password Entry

Text boxes are often used for password entries. When you designate the text box as a "password," asterisks will be displayed when text is entered (to "hide" the password - see the illustration below.)

Text Box Used for Password (Preview mode)



Reference

If you want to limit the password entry to specific alphanumeric characters, see *Designate Permitted Characters to be Entered in the Text Box*.

To use the text box for a password entry, select **Yes** from the *Is Password* drop-down list.

To save your changes, select **File Menu > Save Page**.

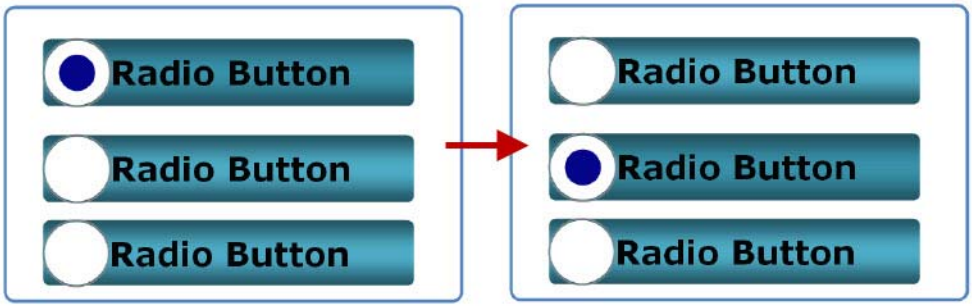
Working with Radio Buttons and Check Boxes

Radio buttons and check boxes allow you to easily create interactive activities. You can use radio buttons and check boxes to create checklists, question-and-answer activities, simple forms, and much more. By default, each radio button/check box includes a frame in which a symbol will appear when it is selected. You can use the default symbols, ([●] for a radio button or [✔] for a check box), or you can select custom symbols to indicate both "checked" and "unchecked" states.

Radio buttons and check boxes are drawn in exactly the same manner and share the same properties. The major difference between them is that in each group of radio buttons, only one selection is allowed. That is, each time a radio button is checked in one group (in a group button or group box or on a page) the other radio buttons will revert to an unchecked state.

In the illustration below, all three of the radio buttons in the group button use the default "checked" symbol [●] and the default "unchecked" symbol (blank). When the top radio button is selected ("checked"), the "checked" symbol appears. Then, when the second radio button is selected, the "checked" symbol on the top radio button reverts to "unchecked" (goes blank), and the "checked" symbol appears on the second radio button.

Radio Buttons (examples showing top button checked then second button checked)



Radio buttons are very useful for simple "yes/no" questions or for any activity (especially multiple choice activities) in which there is only one correct answer.

Check boxes, however, work independently of one another and are useful when multiple selections are allowable. In the illustration below, all four of the check boxes use the default "checked" symbol [✔]. Note that three of the check boxes have been checked and one is unchecked - selecting one check box does not affect the other check boxes.

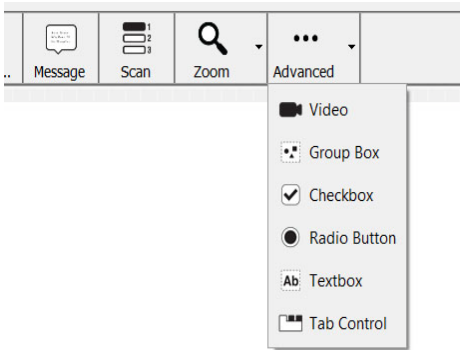
Check Box (example showing three of four check boxes checked)

NOTE
Both radio buttons and check boxes are normally drawn in groups (in a group button or group box) but both can be drawn as individual page objects.

Draw a Radio Button or Check Box

1. Select the arrow to the right of the Advanced tool in the toolbar. Then select either **Radio Button** or **Check Box**.

ADVANCED DROP-DOWN LIST



2. Move the pointer into the area in the workspace where you want to place the radio button or check box.

NOTE
Check boxes and radio buttons are normally drawn in group buttons or group boxes, but can be drawn on the page itself.

NOTE
Radio buttons drawn in group buttons or group boxes will function as independent groups. All radio buttons drawn on a single page will also function as an independent group.

3. Hold down the mouse button, and drag diagonally.
4. Release the mouse button when the radio button or check box is the desired size and shape.

SHORTCUT
You can also quickly add a radio button or check box to the page by selecting the Radio Button or Check Box tool and dragging it onto the page - or you can select the Radio Button or Check Box tool and click anywhere on the page.

NOTE
By default, radio buttons and check boxes include a placeholder (frame) for symbols to indicate whether they have been checked (selected). You can use the default checked symbol, you can search for a symbol that matches the label, or you can choose a custom symbol (see *Search for Symbols for Radio Buttons/Check Boxes*).

Once you have drawn the radio button or check box, you can resize it or move it:

- To resize the radio button/check box, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the object is the size and shape you want.
- To move the radio button or check box, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the radio button or check box will open a menu from which you can quickly modify the object and its position on the page. (See *Right-Click Menus at a Glance*.)

5. Repeat steps 1 - 4 for each radio button or check box you want to draw.

SHORTCUT
Use the Spray Tool to create a number of identical radio buttons or check boxes. see *Creating a Grid of Objects*.

NOTE
To align multiple radio buttons or check boxes, select the objects (Ctrl + click to select multiple objects) and right-click. Select Align from the right-click menu.

6. To save your changes, select **File Menu > Save Page**.

Edit Radio Button or Check Box Properties

Use the *Radio Button* (or *Check Box*) Properties panel to assign or edit the properties of a radio button or check box. You can add a unique label; format the label text; choose different symbols to indicate when the radio button or check box has been selected; select a style and layout for each radio button or check box; hide, lock, or disable it; assign actions to it; etc.

Open the Radio Button or Check Box Properties Panel

Select the radio button or check box whose properties you want to define or change. The Properties panel will open.

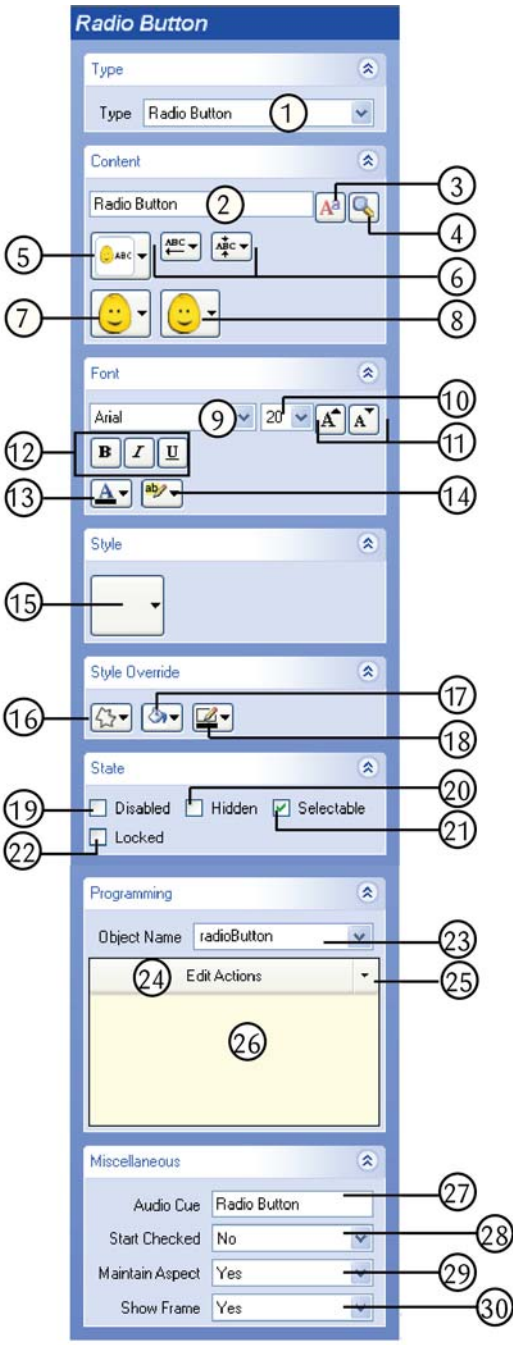
NOTE
The controls on the *Radio Button* and the *Check Box* Properties panels are identical. (The *Radio Button* Properties panel is shown in the illustration below.)

NOTE
Before you begin editing the object's properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE

The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

RADIO BUTTON (AND CHECK BOX) PROPERTIES PANEL



1 ***Type*** **drop-down list**

2 **Label text box**

3 **Rich Text Editor button**

4 **Symbol Search button**

5 **Layout button**

6 **Text justification buttons**

7 **Checked Symbol button**

8 **Unchecked Symbol button**

9 **Font drop-down list**

10 **Font size drop-down list**

11 **Font size adjustment buttons**

12 **Font style options buttons**

13 **Text color button**

14 **Text background color button**

15 **Style button**

16 **Shape override button**

17 **Fill color override button**

18 **Border color override button**

19 ***Disabled*** **check box**

20 ***Hidden*** **check box**

21 **Selectable check box**

22 ***Locked*** **check box**

23 ***Object Name*** **text box**

24 ***Edit Actions*** **button**

25 ***Expand button*** **(opens and closes the Assigned actions list)**

26 **Assigned actions list**

27 ***Audio Cue*** **text box**

28 ***Start Checked*** **drop-down list**

29 ***Maintain Aspect*** **drop-down list**

30 ***Show Frame*** **drop-down list**

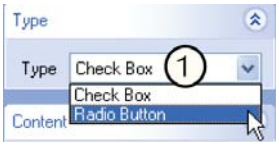
NOTE
As you make changes to the object's properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Edit Radio Button/Check Box Type

The *Type* drop-down list will display "Check Box" if you have drawn a check box, and "Radio Button" if you have drawn a radio button.

You can change the object to either a check box or radio button using the *Type* drop-down list.

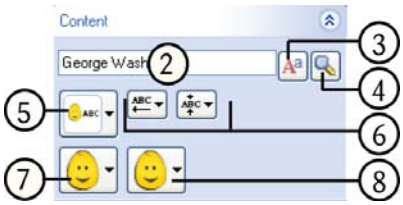
Radio Button/Check Box Type Properties



1 Type drop-down list

Edit Radio Button/Check Box Content

Radio Button/Check Box Content Properties



2 Label text box

3 Rich Text Editor button

4 Symbol Search button

5 Layout button

6 Text justification buttons

7 Checked Symbol button

8 Unchecked Symbol button

Add/Edit the Radio Button/Check Box Label

The "label" is the text on the radio button or check box.

1. Select the label text box.
2. Highlight the text in the label text box (it will read "Radio Button" for a newly drawn radio button, or "Check Box" for a newly drawn check box).
3. Enter a new label.

Define the Radio Button/Check Box Label Content Using the Rich Text Editor

You can use the *Rich Text Editor* to format text - to quickly and easily place multiple phrases or sentences on an object, use different font families and variously sized and colored fonts, and symbolate text. You can also change speech style settings and insert pauses, sound files, images, expressions, and keyboard keys into the text.

1. Select the Rich Text Editor button. The *Rich Text Editor* will open.
2. Use the *Rich Text Editor* to define the label content (label text, font, font color, alignment, symbolate properties, etc.) See ***Using the Rich Text Editor***.

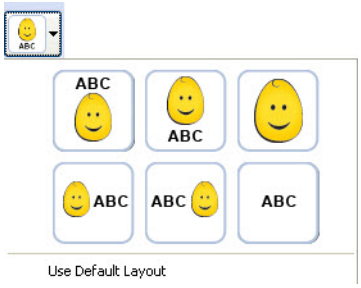
> **NOTE**
> You can also use the controls in the *Font* Properties group to format the label text. However, all formatting you have made using the *Rich Text Editor* will be overridden when you use the controls in the *Font* Properties group.

Select the Radio Button/Check Box Layout

Use the Layout button to select a layout style for the radio button/check box label and its symbol. You can choose from six different layouts.

> **NOTE**
> The default layout has the frame for the symbol to the left of the label.

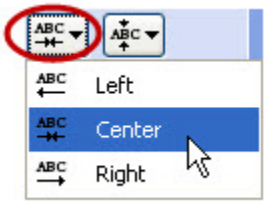
BUTTON LAYOUT OPTIONS AND DEFAULT LAYOUT (EXAMPLE)

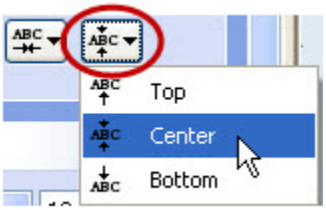


Justify the Radio Button/Check Box Label Text

Use the Text Justification buttons to set the label's horizontal justification (left, center or right) in the radio button/check box and vertical justification (top, center, or bottom) in the radio button/check box.

TEXT JUSTIFICATION DROP-DOWN LISTS





Search for Symbols for Radio Buttons/Check Boxes

Radio buttons and check boxes include placeholders (frames) for symbols that indicate whether the radio button or check box has been selected (or "checked").

To use the default checked symbols ([●] for a radio button or [✓] for a check box), do nothing. (Do not search for a symbol.)

NOTE
There is no default unchecked symbol for radio buttons/check boxes - the symbol frame is left blank.

NOTE
Use the Symbol Search button to search for a "checked" symbol that matches the label text.

Use the Checked Symbol and Unchecked Symbol buttons to select custom symbols to indicate whether a radio button/check box has been selected:

1. Select the Checked Symbol button or the Unchecked Symbol button. The *Open Symbol* window will open, and folders representing all of the symbol categories will be displayed.

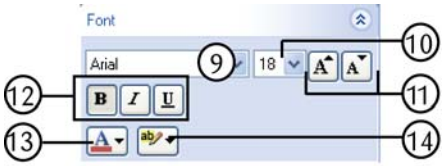
NOTE
To see which symbol sets are currently available for your search, select Toggle Task Panel [ ] in the *Open Symbol* window toolbar to open the *Symbol Tasks* panel. Select Active Libraries (under *System Tasks*). The *Symbol Library Settings* dialog will open. Select the set(s) you want to use in your symbol search (or deselect the sets you don't want to use). When you have finished, select OK.

2. Search for a symbol:
   - Double-click on a symbol category folder to open it. Continue navigating through the layers of folders, double-clicking on folders until you find the symbol you want to use. (If necessary, scroll to look through all of the available categories and the symbols in each category.)
   - Use the search box to browse for a specific symbol. (See ***Browse for a Symbol***.)
   - Use a digital picture as a symbol. (See ***Use a Digital Picture as a Symbol***.)
3. Select the symbol you want to use.
4. Select **Open** on the file browser (or double-click on the symbol).

NOTE
You cannot drag a symbol from the *Symbols* Panel into the symbol frame on a radio button or check box.

Edit the Radio Button/Check Box Label Font

Radio Button/Check Box Font Properties



9 **Font drop-down list**

10 **Font size button**

11 **Font size adjustment buttons**

12 **Font style options buttons**

13 **Text color button**

14 **Text background color button**

Note

If you have formatted the label text using the *Rich Text Editor*, all of your formatting will be overridden when you use the controls in the *Font* Properties group. If you wish to preserve the formatting that you have done using the *Rich Text Editor*, do not use the controls in the *Font* Properties group.

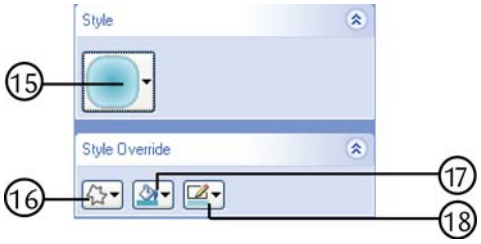
1. From the Font drop-down list, select a font family.
2. Select a font size from the Font size drop-down list, or select the increase or decrease font size adjustment buttons.
3. Select the Bold, Italic, or Underline button to change the font style.
4. Select the Text color button. Choose from the swatches on the *Theme Colors* or *Standard Colors* palettes.
5. Select the Text background color button, and select a color (if desired) for the font text background from the swatches on the *Theme Colors* or *Standard Colors* palettes.

Note

You may also create a custom color for the text or for the font text background. When defining either color, select More Colors and use the *Color Selector* dialog to choose a custom color.

Select the Radio Button/Check Box Style

Radio Button/Check Box Style and Style Override Properties



15 **Style button**

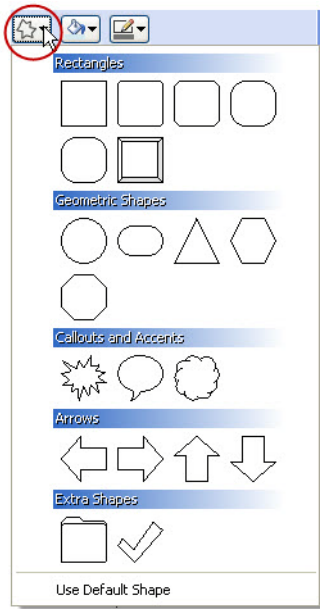
16 **Shape override button**

17 **Fill color override button**

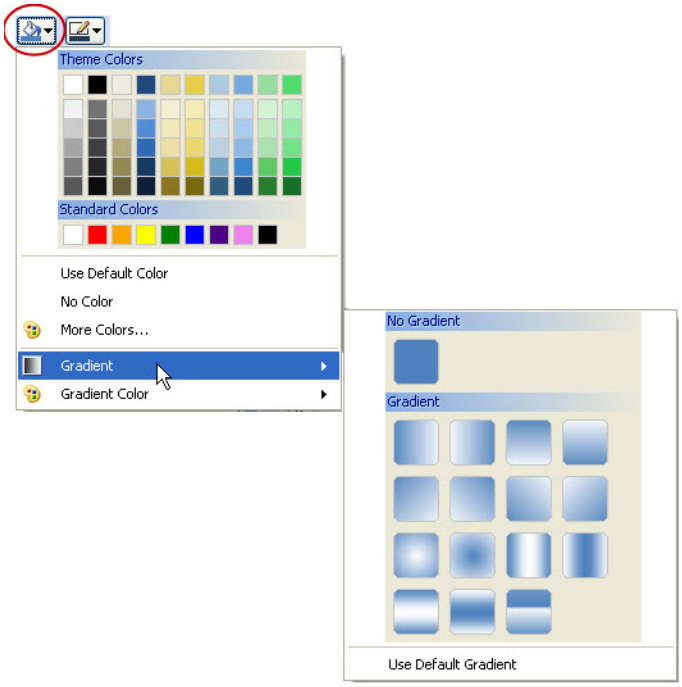
18 **Border color override button**

1. Select the Style button. Choose a button style from the available options.
2. If you want to customize the style, use the *Style Override* buttons (shape, fill color, and border).

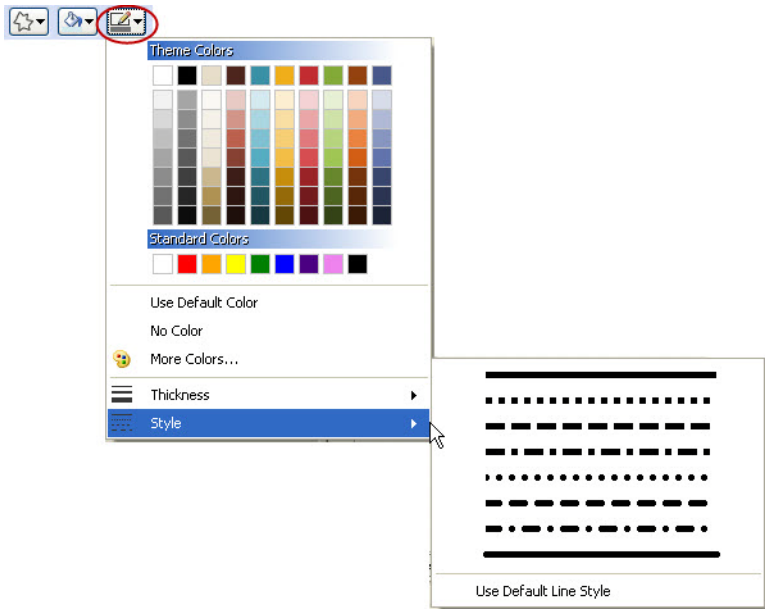
Shape Override Options



Fill Color Override Options

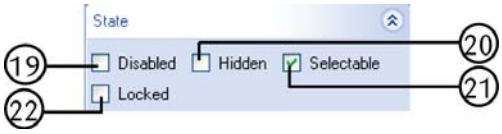


Border Override Options



Set the Radio Button/Check Box State

Radio Button/Check Box State Properties



19 ***Disabled*** **check box**

20 ***Hidden*** **check box**

21 **Selectable check box**

22 ***Locked*** **check box**

Note
"State" refers to the properties of the radio button/check box (disabled, hidden, or selectable) when the software is in Preview or Play modes. The radio button/check box can also be in a "locked" state in Design mode.

Disable the Radio Button/Check Box

A "disabled" radio button/check box will appear "grayed out" and will not be selectable in Preview or Play modes.

To disable the radio button/check box, select the **Disabled** check box.

Hide the Radio Button/Check Box

You can "hide" a radio button/check box from view. A hidden radio button/check box will not be visible in Preview or Play modes (only an outline will appear in Design mode), and no action will take place when you select the place on the page occupied by the hidden object in Preview or Play modes.

Note
Hiding radio boxes or check boxes might be useful if you are creating question-and-answer activities in which the number of questions will increase as the user's skill level improves.

To hide the radio button/check box, select the **Hidden** check box.

Make the Radio Button/Check Box Not Selectable

To make the radio button/check box not selectable, clear the **Selectable** check box.

Note
The default setting for all radio buttons and check boxes is selectable.

Lock the Radio Button/Check Box

A radio button/check box can be "locked" to prevent it from being accidentally selected and changed. A locked object can only be selected in Design mode by right-clicking on the object.

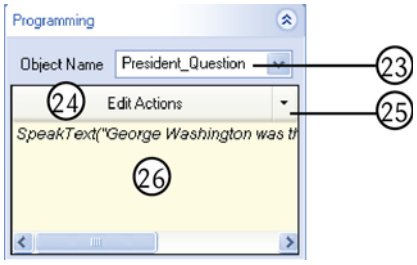
> **NOTE**
> Locking a radio button/check box will not affect its behavior in Preview or Play mode.

- To lock the radio button/check box, select the **Locked** check box.
- To unlock a radio button/check box, right-click on it, and select **Unlock** from the menu.

> **NOTE**
> A locked object will not follow the layout rules of its parent object. For example, if a locked radio button/check box is in a group button or group box (with a layout other than freeform), the locked object will retain its original proportions and position when other objects are placed in the group button or group box.

Program the Radio Button/Check Box

RADIO BUTTON/CHECK BOX PROGRAMMING PROPERTIES



23 ***Object Name*** **text box**

24 ***Edit Actions*** **button**

25 **Expand button**

26 **Assigned actions list**

Assign an Object Name to the Radio Button/Check Box

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new radio buttons and two new check boxes on a blank page, the objects will automatically be named - in the order that they have been drawn - "radioButton," "radioButton_1," "radioButton_2," "radioButton_3," "checkBox," and "checkBox_1."

To make it easier to program actions, it is suggested that you assign unique names to the objects that you draw.

To assign a unique object name to the radio button/check box:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the radio button/check box in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Radio Button/Check Box

Any actions currently assigned to the radio button/check box will be displayed in the Assigned actions list. As you assign new actions, they will appear in the order in which they are added.

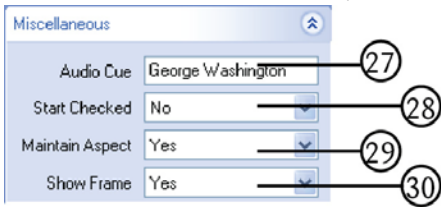
NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the radio button/check box.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Assign Miscellaneous Properties to the Radio Button/Check Box

MISCELLANEOUS RADIO BUTTON/CHECK BOX PROPERTIES



27 ***Audio Cue*** **text box**

28 ***Start Checked*** **drop-down list**

29 ***Maintain Aspect*** **drop-down list**

30 ***Show Frame*** **drop-down list**

Select an Audio Cue for the Radio Button/Check Box

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue - normally the radio button/check box label).

Select the Status of the Radio Button/Check Box at Startup

You can choose to show the radio button/check box in a checked state when the software is put into Preview or Play Modes. The default status is unchecked.

Select **Yes** from the *Start Checked* drop-down list if you want the radio button/check box to be checked when the page is opened in Preview or Play modes.

Maintain the Aspect of the Radio Button/Check Box When it is Resized

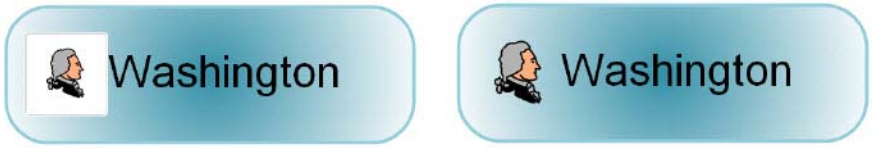
Use the *Maintain Aspect* drop-down list to select whether the contents of the radio button/check box will scale when it is resized:

- Select **Yes** to maintain the scale.
- Select **No** to allow the contents to resize.

Show or Hide the Frame of the Radio Button/Check Box Symbol

You can select whether you want the symbol frame to be displayed. The illustration below shows the same check box in Preview mode with the symbol frame shown and not shown.

CHECK BOX WITH FRAME SHOWN AND NOT SHOWN (IN PREVIEW MODE)



Use the *Show Frame* drop-down list to select whether the symbol frame will display.

- Select **Yes** to display the frame.
- Select **No** to hide the frame.

NOTE
The selection you make from the *Show Frame* drop-down list will apply to both checked and unchecked symbols.

When you have finished editing the radio button/check box properties, select **File Menu > Save Page**.

Working with Group Boxes

A group box acts as a "container" for groups of buttons, check boxes, radio buttons, or other objects. Objects in the group box - either drawn in the box or moved into it - retain their individual properties, but will move as a unit when the group box is moved.

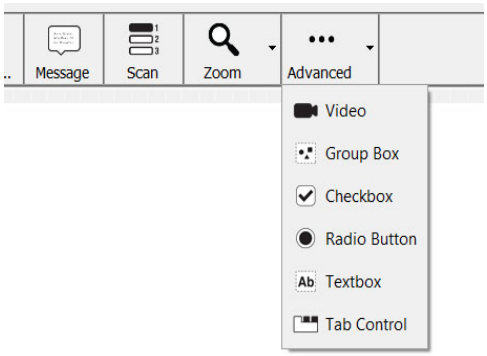
Group boxes can be designated as targets, and other objects can be moved into them - enabling you to create challenging interactive activities.

One of the primary uses for group boxes is to create scanning groups - a collection of buttons (or other objects) can be grouped together within the group box. When the user selects the group box, the scan pattern will work its way through all the objects in it in the scan order you have designated.

Draw a Group Box

1. Select the arrow to the right of the Advanced tool in the toolbar. Then select **Group Box** from the drop-down list.

Advanced Drop-Down List



2. Move the pointer into the area in the workspace where you want to place the group box.
3. Hold down the mouse button, and drag diagonally.

Note
To create a square group box, hold down the **Shift** key while dragging.

4. Release the mouse button when the group box is the desired size and shape.

Shortcut
You can also quickly add a group box to the page by selecting the Group Box tool and dragging it onto the page - or you can select the Group Box tool and click anywhere on the page.

Once you have drawn the group box, you can resize it or move it:

- To resize the box, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the box is the size and shape you want.
- To move the box, select it, then drag it to any position in the workspace.

NOTE
Right-clicking on the group box will open a menu from which you can quickly modify the group box and its position on the page. (See *Right-Click Menus at a Glance*.)

5. Draw in the objects you want to include in the group box. If the objects are already present on the page, select them and drag them into the group box.

NOTE
Objects are drawn in a group box in the same manner as they are drawn directly on a page.

6. To save your changes, select **File Menu > Save Page**.

Edit Group Box Properties

Use the *Group Box* Properties panel to assign or edit the properties (layout, label, style, state, programming, and target designation) of a group box.

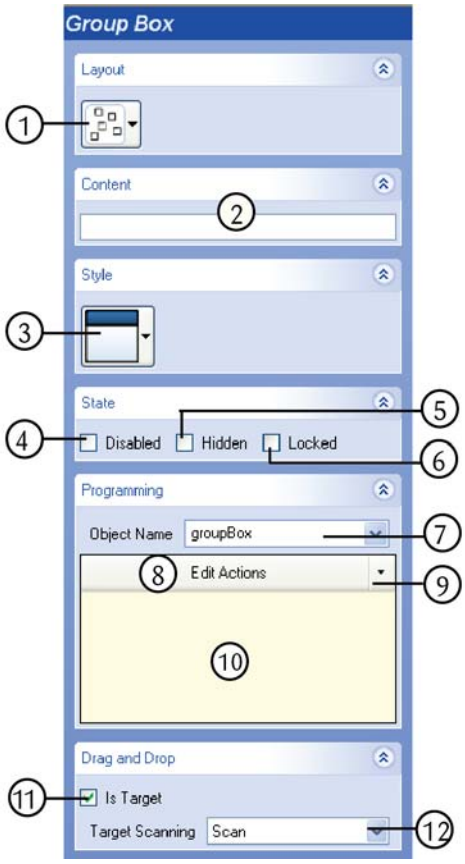
Open the Group Box Properties Panel

Select the group box. The *Group Box* Properties panel will open .

NOTE
Before you begin editing group box properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

GROUP BOX PROPERTIES PANEL



1 **Layout button**

2 **Label text box**

3 **Style button**

4 ***Disabled* check box**

5 ***Hidden* check box**

6 ***Locked* check box**

7 ***Object Name* text box**

8 ***Edit Actions* button**

9 **Expand button (opens and closes the Assigned actions list)**

10 **Assigned actions list**

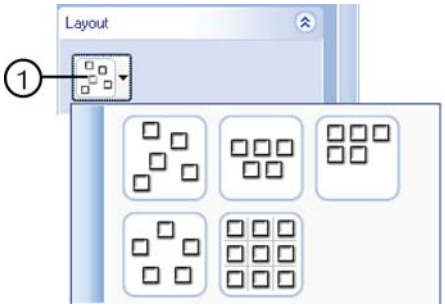
11 ***Is Target* check box**

12 ***Target Scanning* drop-down list**

NOTE
As you make changes to the group box properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Group Box Layout

Group Box Layout Properties



1 Layout button

Select the Layout button and choose from the available options to arrange or rearrange the objects in the group box. You can choose from five different layouts.

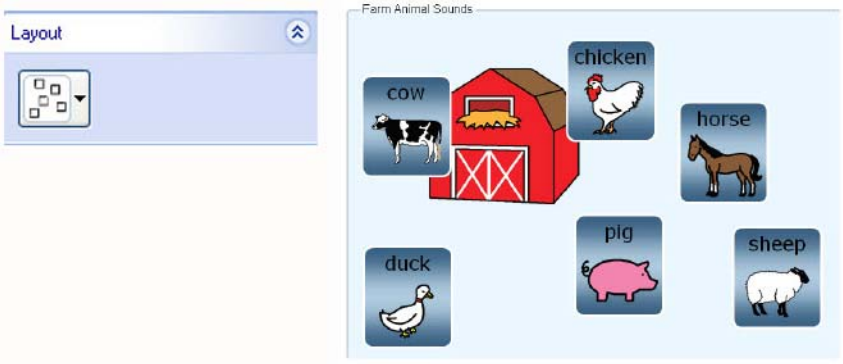
Note
To drag objects into a group box in Preview or Play modes, the group box must first be designated as a target (see *Define the Drag-and-Drop and Target Properties of the Group Box*), and the drag-and-drop properties of the objects must be designated as Move or Copy.

Note
A locked object placed in the group box will not follow the layout rules of the group box. For example, if a locked button is in a group box (having a layout other than freeform), the locked button will retain its original proportions and position when other objects are placed in the group box.

Freeform Layout

In the freeform layout, objects are arranged the way you place them when you drag them into the group box. This is the default layout for group boxes.

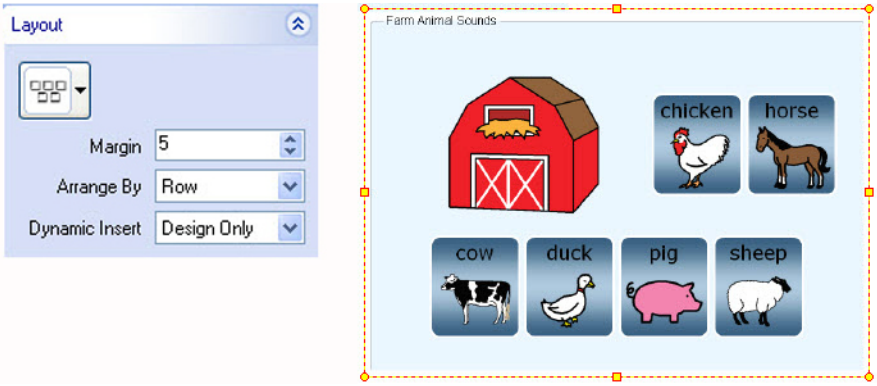
Freeform Group Box Layout (example)



Auto Center Layout

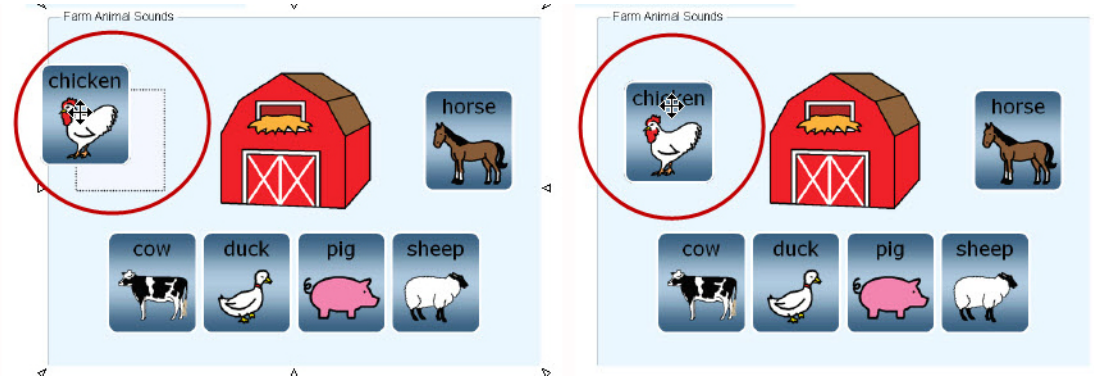
In the auto center layout, objects are arranged in rows or columns and centered in the group box.

Auto Center Group Box Layout (example)



1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the group box (in pixels).
2. Use the *Arrange By* drop-down list to arrange the objects by row or by column. (The objects in the illustration above are arranged by row.)
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped. The following illustrations show the same object being moved into a group box in Design mode with **Always** selected and **Never** selected in the *Dynamic Insert* drop-down list.

Dynamic Insert - Always Selected and Never Selected

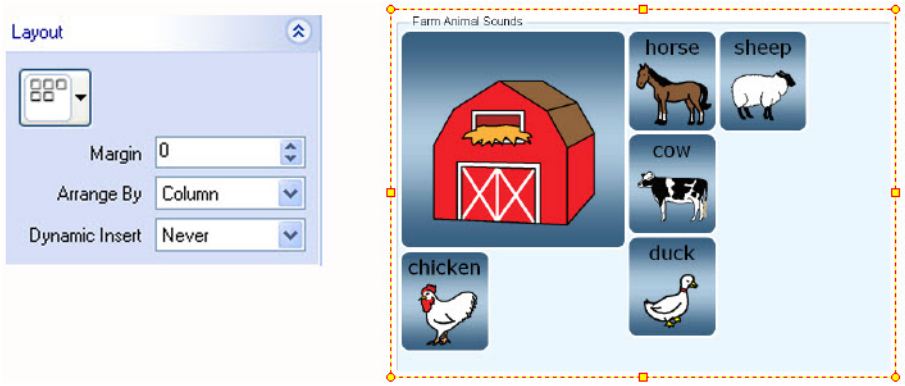


- **Design Only -** The preview bounding box will be displayed only in Design mode.
- **Always -** The preview bounding box will be displayed in all modes.
- **Never -** The preview bounding box will not be displayed in any mode.

Auto Grid Layout

When objects are dragged into the group box, they will fill the box in rows or columns beginning at the top left corner of the box.

Auto Grid Layout (example)

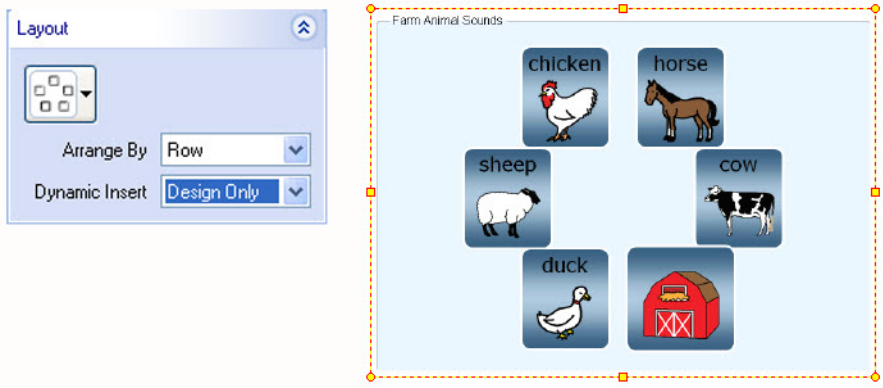


1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the group box (in pixels).
2. Use the *Arrange By* drop-down list to fill the objects by row or by column. The first object will be placed in the top left corner of the group box.
    - If the objects are arranged by row, subsequent objects will be placed to the right of the first object until the first row is full. The second row will begin filling from the left and so on, until all the objects have been placed in the group box.
    - If the objects are arranged by column, the second object will be placed directly below the first object. When the first column is full, the second column will begin filling from the top and so on, until all the objects have been placed on the group box. (The objects in the illustration above are arranged by column)
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.
    - **Design Only -** The preview bounding box will be displayed only in Design mode.
    - **Always -** The preview bounding box will be displayed in all modes.
    - **Never -** The preview bounding box will not be displayed in any mode.

Auto Circular Layout

Objects in the group box will be arranged in a circular grid. The first object will be placed in the center of the box, and, as additional objects are dragged into the group box, a circular grid will be formed.

Auto Circular Layout (example)

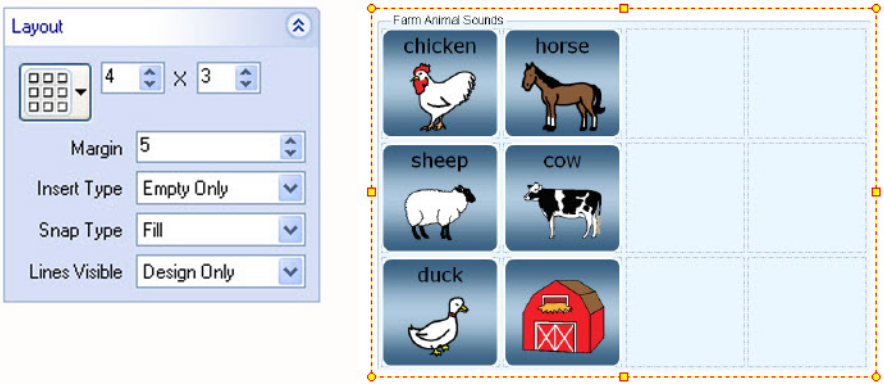


1. Use the *Arrange By* drop-down list to align the objects by row or by column as they are dragged into the group box. As objects are added, the rows or columns will eventually form a circular grid.
2. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.
    - **Design Only -** The preview bounding box will be displayed only in Design mode.
    - **Always -** The preview bounding box will be displayed in all modes.
    - **Never -** The preview bounding box will not be displayed in any mode.

Grid Layout

The grid layout enables you to create a custom grid with a specified number of horizontal and vertical cells. Objects can be dragged into any cell in the grid.

Grid Layout (example)



1. Select the layout for the grid. Use the drop-down lists to the right of the layout icon to set the number of horizontal and vertical cells in the grid. (In the illustration above, the layout is set to four cells wide by three cells high.)
2. Use the *Margin* drop-down list to designate the amount of space you want between the cells in the grid (in pixels).
3. Use the *Insert Type* drop-down list to select the way new objects will be handled when they are dragged into the group box:
    - **Empty Only -** An object can only be placed in an empty cell of the group box. (If you attempt to place an object on a cell that already holds an object, the object you attempt to place will snap back to its original location in the workspace.)
    - **Shift Right -** When an object is placed in a cell that already holds an object, the original object will shift one cell to the right. (The sequence will move from left to right and top to bottom.)
    - **Shift Down -** When an object is placed in a cell that already holds an object, the original object will shift one cell down. (The sequence will move from top to bottom and left to right.)
    - **Replace -** If an object is placed in a cell that already holds an object, the new object will replace the original object.
    - **Swap -** When an object is placed in a cell that already holds an object, the new object will change locations with the original object, leaving all other objects in the grid unaffected.
4. Use the *Snap Type* drop-down list to designate the way the objects will appear when they are placed in a cell.
    - **Center -** Objects will be centered in the cell.
    - **Fill -** Objects will automatically resize to fill the entire cell.
5. Use the *Lines Visible* drop-down list to designate in which modes the grid lines in the group box will be visible.
    - **Design Only -** Grid lines will be visible only in Design mode.
    - **Always -** Grid lines will be visible in all modes.
    - **Never -** Grid lines will not be visible in any mode.

Select the Group Box Style

GROUP BOX STYLE PROPERTIES

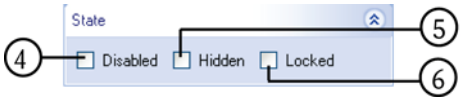
3 Style button

Select the Style button and then choose a style for the group box from the available options.

Set the Group Box State

"State" refers to the properties of the group box (disabled or hidden) when the software is in Preview or Play modes.

GROUP BOX STATE PROPERTIES



4 *Disabled* check box

5 *Hidden* check box

6 *Locked* check box

Disable the Group Box

A "disabled" group box will not be selectable in Preview or Play modes. Although the group box itself is disabled, objects may be dragged into the box in all modes if you have designated it as a target. (See ***Define the Drag-and-Drop and Target Properties of the Group Box***.)

To disable the group box, select the **Disabled** check box.

Hide the Group Box

A hidden group box will not be visible in Preview or Play modes (it will be shaded in Design mode), and no action will take place when you select the place on the page occupied by the hidden group box in Preview or Play modes.)

NOTE

If you have designated the group box as a target, objects can be dragged into it in all modes ([See *Define the Drag-and-Drop and Target Properties of the Group Box*]), but in Preview or Play modes, the object that is dragged into the box will also be hidden. (These hidden objects will reappear inside the group box when the software is returned to Design mode.)

To hide the group box, select the **Hidden** check box.

Lock the Group Box

You can lock a group box to prevent it from being accidentally moved or edited. A locked object can only be selected in Design mode by right-clicking on the object.

> **NOTE**
> Locking a group box will not affect its behavior in Preview or Play mode.

- To lock the group box, select the **Locked** check box.
- To unlock the group box, right-click on it, and select **Unlock** from the menu.

Program the Group Box

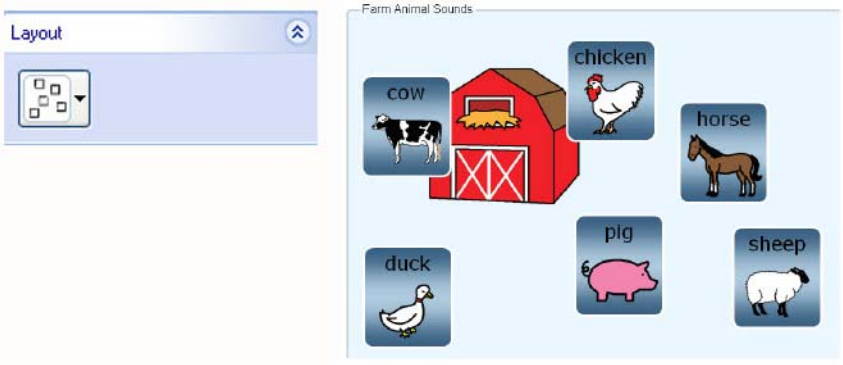
Actions programmed for the group box will take place when the page containing it is opened - not when the group box is selected.

> **NOTE**
> It is important to remember that each object in the group box retains its individual properties and can be programmed independently of the group box.

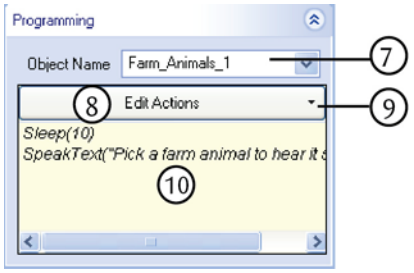
For example, in the illustration below, the group box has been programmed with a *Sleep()* action and a *SpeakText()* action. When the page containing this group box is opened, after a pause ("Sleep"), the text, "Pick a farm animal to hear it speak" will be spoken.

> **NOTE**
> Each button in the group box in the illustration below has been programmed with the *PlaySound()* action - so that when the chicken is selected, for example, a "cluck, cluck" sound will be played, and so on for each button in the group box.

GROUP BOX - FARM ANIMAL SOUNDS (EXAMPLE)



GROUP BOX PROGRAMMING PROPERTIES



7 Object Name text box

8 *Edit Actions* button

9 Expand button

10 Assigned actions list

Assign an Object Name to the Group Box

An object name is a unique property that identifies an object on a page when you are programming actions for it. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new group boxes on a blank page, the boxes will automatically be named - in the order that they have been drawn - "groupBox", "groupBox_1", "groupBox_2," and "groupBox_3."

NOTE
If you have more than one group box on a page, the action(s) assigned to the group boxes will take place in consecutive order when the page is opened - groupBox, groupBox_1,groupBox_2, etc.

To make it easier to distinguish each object as you program it, it is suggested that you assign unique names to the all objects that you draw.

To assign a unique object name to the group box:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the group box in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Group Box

Actions assigned to the group box will be performed when the page containing it is opened - not when the group box is selected.

Any actions currently assigned to the group box will be displayed in the Assigned actions list.

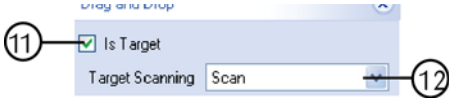
NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the group box.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Define the Drag-and-Drop and Target Properties of the Group Box

GROUP BOX TARGET PROPERTIES



11 ***Is Target*** **check box**

12 ***Target Scanning*** **drop-down list**

Designate the Group Box as a Target

NOTE
The target properties you assign to the group box will be enabled in Preview or Play modes.

A group box that is designated as a "target" will accept other page objects dragged into or copied into it in Preview and Play modes.

To designate a group box as a target, select the **Is Target** check box.

NOTE
If you do not designate the group box as a target, an object moved onto it in Preview and Play modes will snap back to its original position.

To remove the target designation from a group box, clear the **Is Target** check box.

REFERENCE
See *Working with Movable Objects* for more information on target objects.

Select the Target Scan Type

When using access methods other than Simple Touch, you can define how the scan highlight will react. (See ***Working with Movable Objects***.)

> **NOTE**
> The *Target Scanning* drop-down list will appear only when the Is Target check box is selected.

Select a scan type from the **Target Scanning** drop-down list:

- **Scan** will scan the entire group box as one target object. The object moved into the group box will be placed in the next available position as defined by the group box's chosen layout.

> **NOTE**
> This scan type is the default scan type for all layouts other than the grid layout.

- **ScanAndPosition** will move the scan inside the group box (through the grid in a grid layout) to a specific position as defined by the layout style.

> **NOTE**
> This is the default scan type for the grid layout. With other layout types, Scan and Position will enable you to place the object being moved into the group box between objects already present (or it will place the object in the next available position).

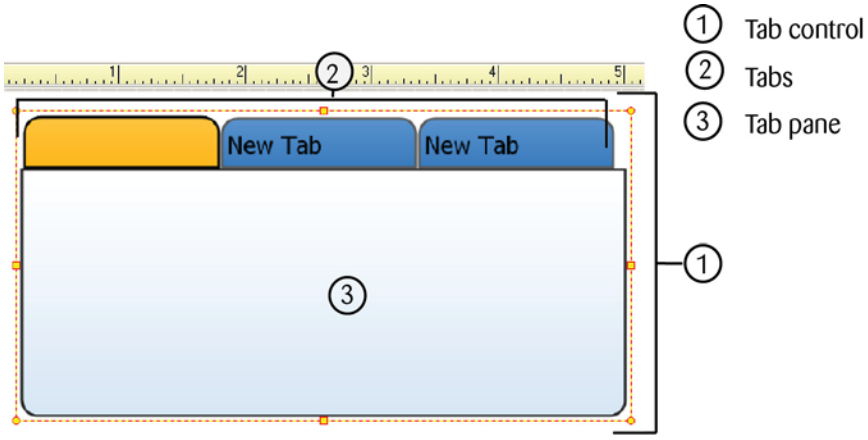
- Select **Disable** if you want the scan to pass over the group box.

When you have finished making changes to the group box properties, be sure to save your work. Select **File Menu > Save Page**.

Working with Tab Controls

Use the Tab Control tool to create a new tab control on a page. Tab controls are very similar to file folder tabs and enable you to create multiple layers ("or panes"). You can place objects, such as symbols, buttons, or labels, in the tab pane for each tab in the tab control, and you can choose a unique style for each tab - each tab can have a different layout, label, symbol, and audio cue.

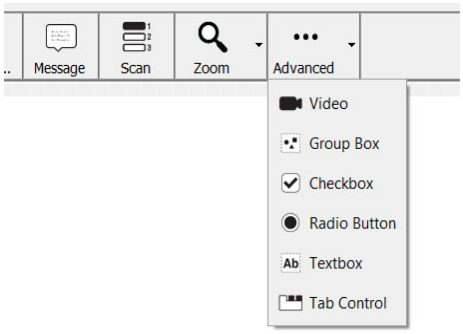
Tab Control in Page Workspace



Draw a Tab Control

1. Select the arrow to the right of the Advanced tool in the toolbar. Then select **Tab Control** from the drop-down list.

Advanced Drop-Down List



2. Move the pointer into the area in the workspace where you want to place the tab control.
3. Hold down the mouse button, and drag diagonally to draw a tab control.

NOTE
There will be only one tab on the tab control when you draw it. You can easily add tabs after the object is placed on the page (see below). (Use the *Tab Control* properties panel to customize the height and width of all tabs. [See *Assign Miscellaneous Properties to the Tab Control*.])

4. Release the mouse button when the tab control is the desired size and shape.

SHORTCUT
You can also quickly add a tab control to the page by selecting the Tab Control tool and dragging it onto the page - or you can select the Tab Control tool and click anywhere on the page.

Once you have drawn the tab control, you can resize it or move it and you can add tabs.

- To resize the tab control, select it, then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the tab control is the size and shape you want.
- To move the tab control, select it, then drag it to any position in the workspace.
- To add a tab, right-click anywhere in the tab control and select **Add Tab** from the right-click menu.

5. To save your changes, select **File Menu > Save Page**.

Add Tabs to the Tab Control

1. Right-click on the tab control.
2. Select **Add Tab** from the right-click menu.

REFERENCE
See *Assign Miscellaneous Properties to the Tab Control* for information on using the *Tab Control* properties panel to customize the height and width of the tabs.

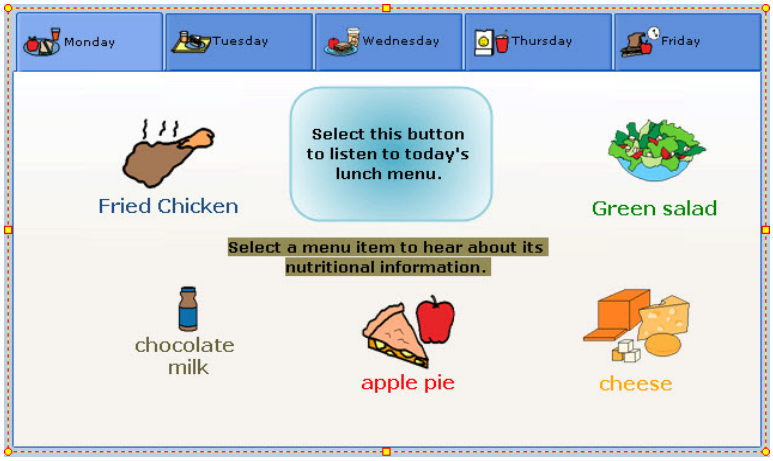
NOTE
You can also delete tabs by selecting Remove Tab from the right-click menu.

Add Content to the Tab Panes

Each pane in the tab control acts very much like a group button in that other objects, such as buttons, SmartSyms, labels, etc. can be dragged or drawn in the pane. Objects inside a tab pane retain their individual properties, which can be edited independently of the tab pane itself.

For example, in the illustration below, five tabs have been added to the tab control. Each tab is labeled with a day of the week, and, when selected, will open a tab pane with the day's lunch menu.

TAB CONTROL (EXAMPLE SHOWING CONTENT ADDED TO A TAB PANE)



A button that has been programmed with a *SpeakText(text)* action has been added to the tab pane. When the button is selected, it will speak the day's menu. A (locked) label has been added with instructions for the user to select a menu item to hear its nutritional information. SmartSyms representing menu items have been dragged onto the tab pane and programmed to speak text regarding nutritional information for the selected item.

Edit Tab Control Properties

Use the *Tab Control* Properties panel to select the layout for each tab pane; to set the label, symbol, label font style, size, and color for each tab; and to set the style, status, programming, and drag-and-drop properties for the tab control object as a whole. Use the *Miscellaneous* Properties group to select a uniform width and height for each tab.

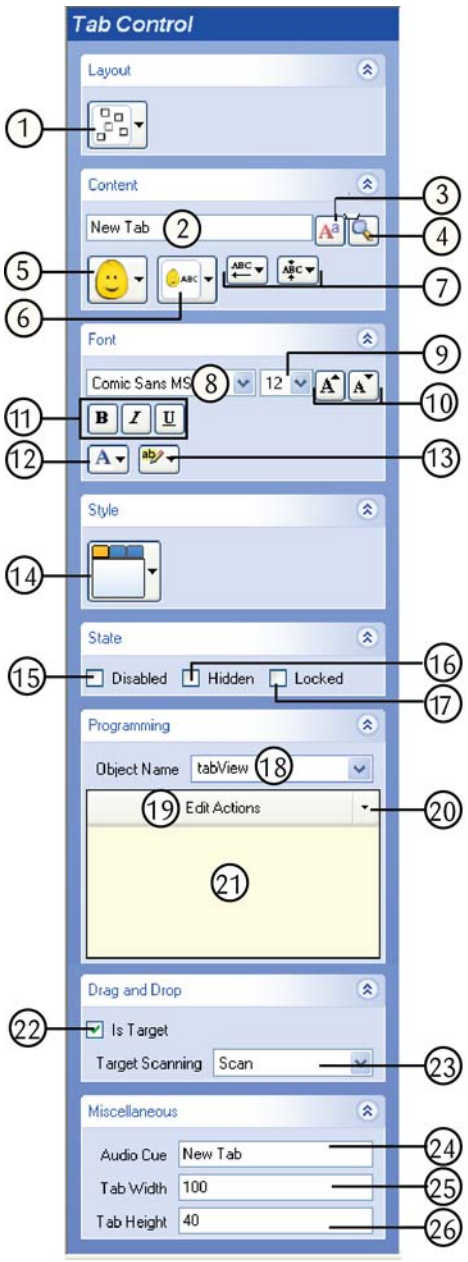
Open the Tab Control Properties Panel

Select the tab control. The *Tab Control* Properties panel will open.

NOTE
Before you begin editing the object's properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select the arrow [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the operating system you are using, the panel width, and the size of your monitor.

TAB CONTROL PROPERTIES PANEL



1 **Layout button**

2 **Label text box**

3 **Rich Text Editor button**

4 **Symbol search button**

5 **Symbol button**

6 **Layout button**

7 **Text justification buttons**

8 **Font list**

9 **Font size button**

10 **Font size adjustment buttons**

11 **Font style options buttons**

12 **Text color button**

13 **Text background color button**

14 **Style button**

15 ***Disabled* check box**

16 ***Hidden* check box**

17 ***Locked* check box**

18 ***Object Name* text box**

19 ***Edit Actions* button**

20 **Expand button (opens and closes the Assigned actions list)**

21 **Assigned actions list**

22 ***Is Target* check box**

23 ***Target Scanning* drop-down list**

24 ***Audio Cue* text box**

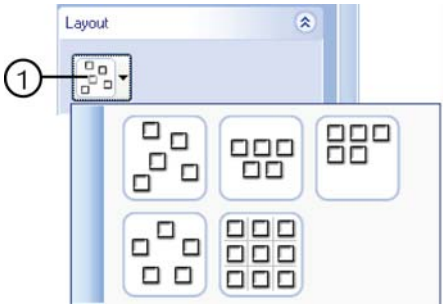
25 ***Tab Width* text box**

26 ***Tab Height* text box**

NOTE
As you make changes to the tab control properties, be sure to save your work on a regular basis. Select File Menu > Save Page.

Select the Layout for Each Tab Pane

Tab Pane Layout Properties



1 Layout button

Select the Layout button and choose a layout to arrange the objects in each tab pane and to define the behavior of the objects as they are placed - or drawn - in the pane. You can choose from five different layouts.

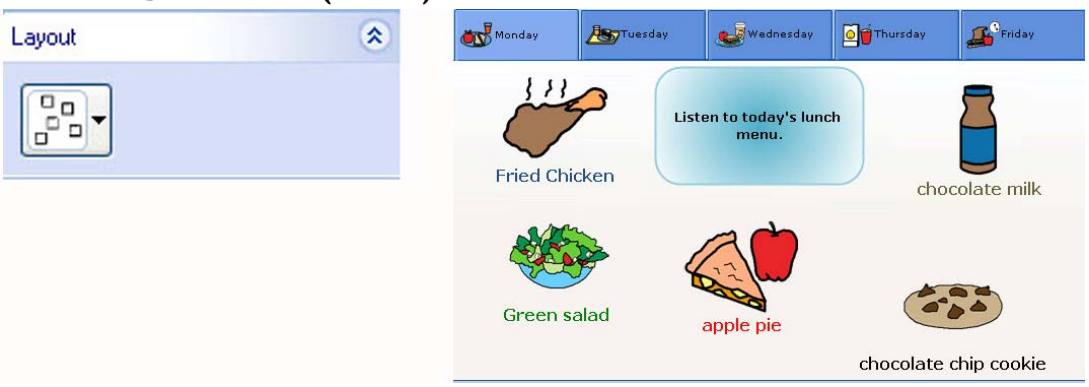
> **Note**
> To move objects into a tab pane in Preview and Play modes, the tab control must first be designated as a target. See *Select the Drag-and-Drop and Target Properties of the Tab Control*.

1. Select the tab for the tab pane that you want to format.
2. Select the Layout button.
3. Select a layout from the available options.

Freeform Layout

In the freeform layout, objects are arranged the way you place them when you move them into the tab pane (or draw them in the tab pane). This is the default layout for tab panes.

Freeform Tab Pane Layout (example)



Auto Center Layout

In the auto center layout, objects will be arranged in rows or columns and centered in the tab pane.

Auto Center Tab Pane Layout (example)

1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the tab pane - between 0 and 50 pixels.
2. Make a selection in the *Arrange By* drop-down list to arrange the objects by row or by column. (The objects in the illustration above are arranged by row.)
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped. The following illustrations show the same object being moved into a tab pane button in Preview mode with **Always** selected and **Never** selected in the *Dynamic Insert* drop-down list.

Dynamic Insert - Always and Never Selected

- **Design Only -** The preview bounding box will be displayed only in Design mode.
- **Always -** The preview bounding box will be displayed in all modes.
- **Never -** The preview bounding box will not be displayed in any mode.

Auto Grid Layout

When objects are placed in the tab pane, they will fill in rows or columns beginning at the top left corner.

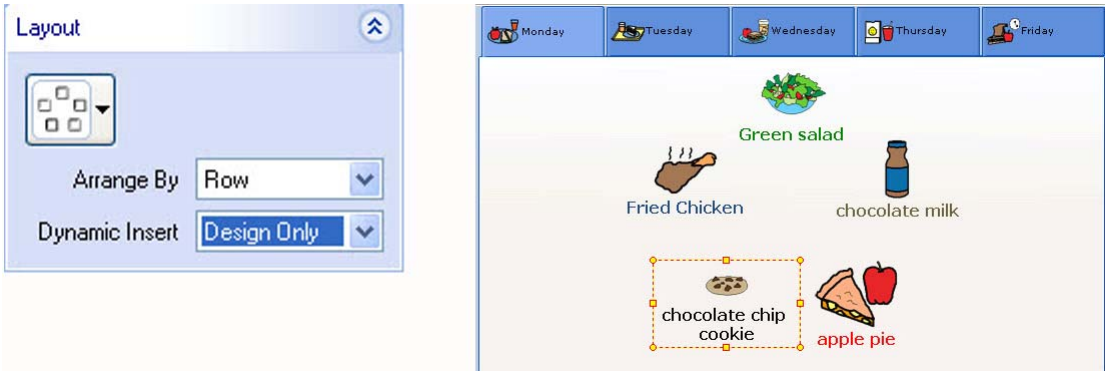
Auto Grid Tab Pane Layout (example)

1. Use the *Margin* drop-down list to designate the amount of space you want between the objects in the tab pane (in pixels).
2. Make a selection from the *Arrange By* drop-down list to fill the objects by row or by column. The first object will be placed in the top left corner of the tab pane:
   - If the objects are arranged by row, subsequent objects will be placed to the right of the first object until the first row is full. The second row will begin filling from the left and so on, until all the objects have been placed on the tab pane.
   - If the objects are arranged by column, the second object will be placed directly below the first object. When the first column is full, the second column will begin filling from the top to the right of the first object and so on, until all the objects have been placed in the tab pane. (The objects in the illustration above are arranged by column.)
3. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.
   - **Design Only -** The preview bounding box will be displayed only in Design mode.
   - **Always -** The preview bounding box will be displayed in all modes.
   - **Never -** The preview bounding box will not be displayed in any mode.

Auto Circular Layout

When a number of objects are placed in the tab pane, they will be arranged in a circular grid. The first object will be placed in the center of the tab pane, and, as additional objects are added, a circular grid will be formed.

Auto Circular Tab Pane Layout (example)



1. Make a selection from the *Arrange By* drop-down list to align the objects by row or by column as they are placed in the tab pane. As objects are added to the tab pane, the rows or columns will eventually form a circular grid.
2. Use the *Dynamic Insert* drop-down list to display a preview bounding box at the point where the object will be placed if it is dropped.
   - **Design Only -** The preview bounding box will be displayed only in Design mode.
   - **Always -** The preview bounding box will be displayed in all modes.
   - **Never -** The preview bounding box will not be displayed in any mode.

Grid Layout

The grid layout enables you to create a custom grid with a specified number of horizontal and vertical cells. Objects can be placed in any cell in the grid.

Grid Group Button Layout (example)

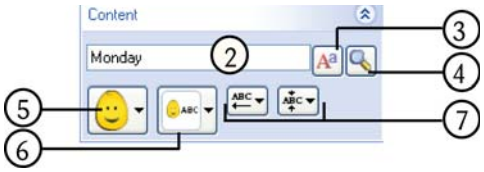
1. Select the layout for the grid. Use the drop-down lists to the right of the layout icon to set the number of horizontal and vertical cells in the grid. (In the illustration above, the layout is set to 3 cells wide by 2 cells high.)

2. Use the *Margin* drop-down list to designate the amount of space you want between the cells in the grid - between 0 and 50 pixels.
3. Use the *Insert Type* drop-down list to select the way in which new objects will be handled when they are placed in the button:
    - **Empty Only -** An object can only be placed in an empty cell of the group button. (If you attempt to place an object on a cell that already holds an object, the object you attempt to place will snap back to its original location in the workspace.)
    - **Shift Right -** When an object is placed in a cell that already holds an object, the original object will shift one cell to the right. (The sequence will move from left to right and top to bottom.)
    - **Shift Down -** When an object is placed in a cell that already holds an object, the original object will shift one cell down. (The sequence will move from top to bottom and left to right.)
    - **Replace -** If an object is placed in a cell that already holds an object, the new object will replace the original object.
    - **Swap -** When an object is placed in a cell that already holds an object, the new object will change locations with the original object, leaving all other objects in the grid unaffected.
4. Use the *Snap Type* drop-down list to designate the way the objects will appear when they are placed in a cell.
    - **Center -** Objects will be centered in the cell.
    - **Fill -** Objects will automatically resize to fill the entire cell.
5. Use the *Lines Visible* drop-down list to designate in which modes the grid lines in the group button will be visible.
    - **Design Only -** Grid lines will be visible only in Design mode.
    - **Always -** Grid lines will be visible in all modes.
    - **Never -** Grid lines will not be visible in any mode.

Add a Label to the Tab

Use the controls in the *Content* properties group to add (or edit) the label on each tab; search for and add a symbol to the label, format the label text, and select the label layout.

TAB CONTENT PROPERTIES



2 **Label text box**

3 **Rich Text Editor button**

4 **Symbol search button**

5 **Symbol button**

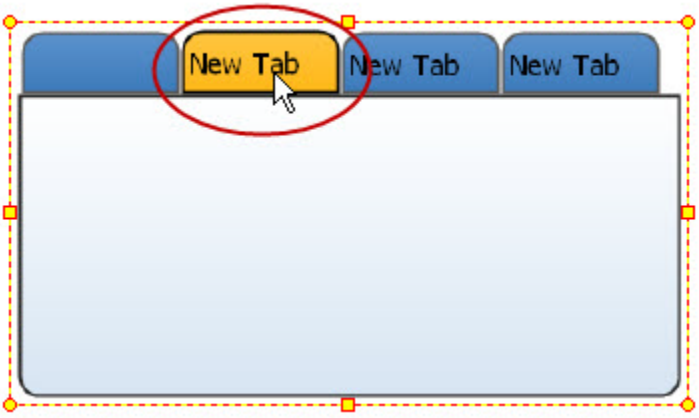
6 **Layout button**

7 **Text justification buttons**

Select a Tab to Format

First, select the tab whose label you want to format.

TAB CONTROL WITH TAB SELECTED (DESIGN MODE)



Add a Label to the Tab

1. Select the label text box.
2. Enter a text label for the tab.

Define Tab Content Using the Rich Text Editor

You can use the *Rich Text Editor* to format the tab content to quickly and easily place multiple phrases or sentences on the tab, use different font families and use variously sized and colored fonts.

1. Select the Rich Text Editor button. The *Rich Text Editor* will open.
2. Use the *Rich Text Editor* to define the tab label content (label, font, font color, alignment, symbolate properties, etc.) (See ***Using the Rich Text Editor***.)

> **NOTE**
> You can also use the controls in the *Font* Properties group to format the label text. However, all formatting you have made using the *Rich Text Editor* will be overridden when you use the controls in the *Font* Properties group.

Search for a Symbol That Matches the Tab Label

The procedure for searching for and placing a symbol on the tab will differ depending on whether or not you have entered a label for the tab in the label text box. If you have entered a tab label:

1. Select the Symbol search button. The *Open Symbol* window will open.

   All of the symbols that match the label text - or whose names contain the label text - will be displayed. (If necessary, scroll to look through all of the available symbols.)

> **NOTE**
> If you don't want to use any of the symbols that are displayed in the viewport, select Home [ ] on the toolbar of the *Open Symbol* window to display the symbol category folders. Navigate through the layers of folders until you find a symbol that you would like to use.

2. Select the symbol that you want to use.
3. Select **OK** (or double-click the symbol). The symbol will be placed on the tab.

Browse for a Symbol for a Tab

The procedure for searching for and placing a symbol on the tab will differ depending on whether or not you have entered a label for the tab in the label text box. If you have not entered a tab label:

1. Select the Symbol button. The *Open Symbol* window will open and folders representing all of the symbol categories will be displayed.

> **NOTE**
> To see which symbol libraries are currently available for your search, select Toggle Task Panel [ ] in the *Open Symbol* window to open the *Symbol Tasks* panel. Select Active Libraries (under *System Tasks*). The *Symbol Library Settings* dialog will open. Select the set(s) you want to use in your symbol search (or deselect the libraries you don't want to use). When you have finished, select OK.

> **NOTE**
> The "None" [ ] option is always available in the *Open Symbol* window. If you select this option, the tab will have no symbol.

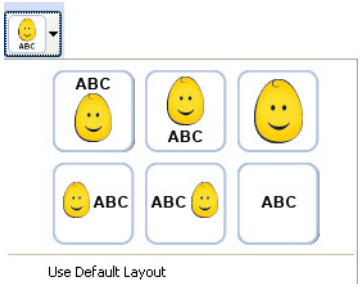
2. Search for a symbol:
   - Double-click on a symbol category folder to open it. Continue navigating through the layers of folders, double-clicking on folders until you find the symbol you want to use. (If necessary, scroll to look through all of the available categories and the symbols in each category.)
   - Use the search box to browse for a specific symbol. (See ***Browse for a Symbol***.)
   - Use a digital picture as a symbol. (See ***Use a Digital Picture as a Symbol***.)
3. Select the symbol or digital picture you want to use.
4. Select **Open** on the file browser. The symbol will be placed on the tab.

> **NOTE**
> You can also drag a symbol from the *Symbols* Panel and drop it onto the tab.

Select the Tab Layout

Select the Layout button. You can choose from six different layouts for the tab.

LAYOUT OPTIONS

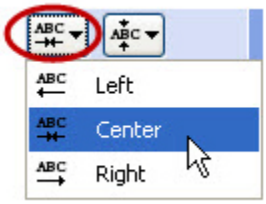


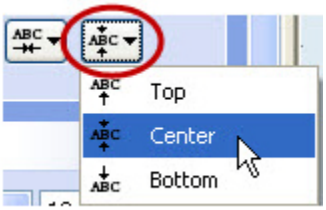
NOTE
The default layout has the symbol centered on the tab, and the label centered on top of the symbol.

Justify the Tab Label Text

Use the Text Justification buttons to set the tab label horizontal justification (left, center or right) and vertical justification (top, center, or bottom.)

TEXT JUSTIFICATION OPTIONS





Format the Tab Label Font

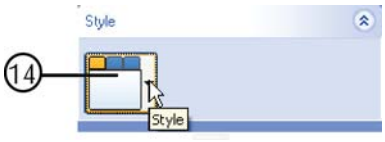
If you wish, you can use the Font and Font Size and Font style options buttons in *Font* properties to select a font, font size, font style and color for the label text.

NOTE
It is suggested that you use the *Rich Text Editor* to format the label text. If you format the label text using the *Rich Text Editor* and then use the controls in the *Font* Properties group, all of your formatting will be overridden. If you want to preserve the formatting that you have done using the *Rich Text Editor*, do not use the controls in the *Font* Properties group.

Define the Tab Control Style

NOTE
This procedure applies to the entire tab control object.

TAB CONTROL STYLE PROPERTIES



14 Style button

Select the Style button and choose a style for the tab control object.

Set the Tab Control State

NOTE
This procedure applies to the entire tab control object.

TAB CONTROL STATE PROPERTIES

15 *Disabled* check box

16 *Hidden* check box

17 *Locked* check box

NOTE
Tab control "state" refers to the properties of the label (disabled or hidden) when the software is in Preview or Play modes. A tab control can also be in a "locked" state in Design mode.

Disable the Tab Control

A "disabled" tab control will appear "grayed out" and will not be selectable in Preview or Play modes.

To disable the tab control, select the **Disabled** check box.

Hide the Tab Control

You can "hide" a tab control from view. A hidden tab control will not be visible in Preview or Play modes (it will be shaded in Design mode), and no action will take place when you select the place on the page occupied by the hidden tab control in Preview or Play modes.

To hide the tab control, select the **Hidden** check box.

Lock the Tab Control

You can lock a tab control so that it cannot be inadvertently selected, moved, or resized. A locked object can only be selected in Design mode by right-clicking on it.

NOTE
Locking a tab control will not affect its behavior in Preview or Play mode.

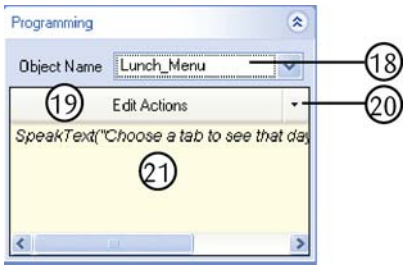
- To lock the tab control, select the **Locked** check box.
- To unlock the tab control, right-click on the tab control in the workspace, and select **Unlock** from the menu.

Program the Tab Control

NOTE
Programming properties you assign will apply to the entire tab control object.

NOTE
Objects placed on the tab control panes (symbols, buttons, labels, etc.) retain their individual properties and can be programmed independently of the tab control.

TAB CONTROL PROGRAMMING PROPERTIES



18 Object Name text box

19 Edit Actions button

20 Expand button

21 Assigned actions list

Assign an Object Name to the Tab Control

An object name is a unique property that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you have drawn four new buttons and two new tab controls on a blank page, the objects will automatically be named - in the order that they have been drawn - "button," "button_1," "button_2," "button_3," "tab control," and "tab control_1."

To simplify programming actions, you should assign unique names to the objects you draw.

To assign a unique object name to the tab control:

1. Select the *Object Name* text box (or the drop-down arrow to the right of the text box). The *Object Name* dialog will open.
2. Enter a new name for the tab control in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Tab Control

Actions assigned to the tab control apply to the tab control object as a whole. All actions currently assigned to the tab control will be displayed in the Assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

1. Select **Edit Actions**. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the tab control.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

Select the Drag-and-Drop and Target Properties of the Tab Control

Each tab on the tab control can be assigned different drag-and-drop and target properties.

REFERENCE
See *Working with Movable Objects*.

TAB CONTROL DRAG-AND-DROP PROPERTIES

22 ***Is Target*** **check box**

23 ***Target Scanning*** **drop-down list**

Designate the Tab as a Target

A tab that is designated as a "target" will accept other page objects moved or copied into it in Preview and Play modes. (See ***Working with Movable Objects***.)

1. Select the tab that you want to designate as a target.
2. Select the **Is Target** check box.

NOTE
If you do not designate the tab as a target, in Preview and Play modes, an object moved onto it its tab pane will snap back to its original position.

3. To remove the target designation from a tab, clear the **Is Target** check box.

Select the Target Scan Type

When using access methods other than Simple Touch, you can define how the scan highlight will react. (See ***Working with Movable Objects***.)

> **NOTE**
> The *Target Scanning* drop-down list will appear only when the Is Target check box is selected.

Select a scan type from the **Target Scanning** drop-down list:

- **Scan** will scan the entire tab pane as one target object. The object moved into the tab pane will be placed in the next available position as defined by the tab pane's chosen layout.

> **NOTE**
> This scan type is the default scan type for all layouts other than the grid layout.

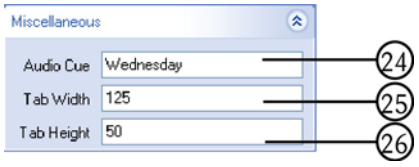
- **ScanAndPosition** will move the scan inside the tab pane (through the grid in a grid layout) to a specific position as defined by the layout style.

> **NOTE**
> This is the default scan type for the grid layout. With other layout types, Scan and Position will enable you to place the object being moved into the tab pane between objects already present (or it will place the object in the next available position).

- Select **Disable** if you want the scan to pass over the tab pane.

Assign Miscellaneous Properties to the Tab Control

MISCELLANEOUS TAB CONTROL PROPERTIES



24 ***Audio Cue*** **text box**

25 ***Tab Width*** **text box**

26 ***Tab Height*** **text box**

Select an Audio Cue for Each Tab

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the tab to which you want to assign an audio cue.
2. Select the **Audio Cue** text box.
3. Enter a new audio cue (or edit the current audio cue - normally the tab label).

Assign a Width to the Tabs in the Tab Control

NOTE
The width you assign to the tab control will apply to all of the tabs in the tab control.

1. Select the *Tab Width* text box.
2. Enter a width (in pixels) for the tabs.

Assign a Height to the Tabs in the Tab Control

NOTE
The height you assign to the tab control will apply to all of the tabs in the tab control.

1. Select the *Tab Height* text box.
2. Enter a height (in pixels) for the tabs.

When you have finished making changes to the tab control properties, be sure to save your work. Select **File Menu > Save Page**.

Using the Rich Text Editor

Use the *Rich Text Editor* to format text - to quickly and easily place multiple phrases or sentences on an object, use different font families and variously sized and colored fonts, and symbolate text. You can also add bulleted lists, change speech style settings, and insert pauses, sound files, images, expressions, and keyboard keys into the text.

The *Rich Text Editor* includes a viewport where text can be selected and formatted. The *Rich Text Toolbar* is an abbreviated version of the *Rich Text Editor* and is designed to allow you to edit text "on the fly." The *Rich Text Toolbar* does not include a viewport (text is dynamically displayed on the object being edited); there are no *Edit* or *Insert* drop-down lists, nor does the *Rich Text Toolbar* include cut, copy, and paste or Symbolate and Speech Style functions.

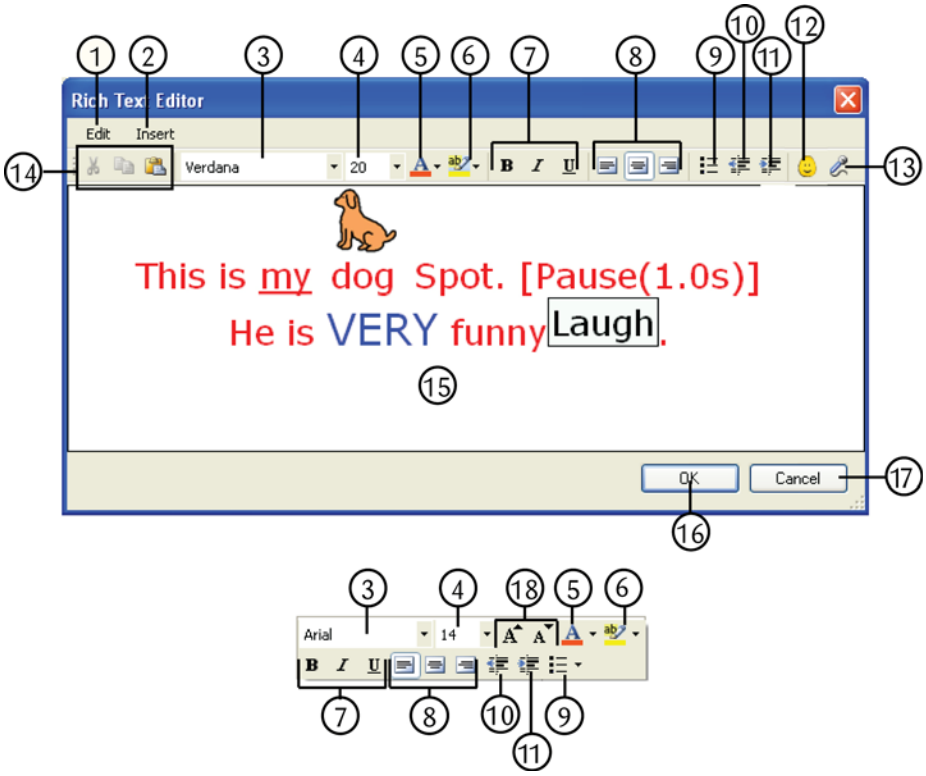
The *Rich Text Editor* will open when you select the Rich Text Editor button [ ] in the Properties panel for the following objects:

- SmartSyms (Symbols)
- Buttons ("standard" and symbolate buttons and freeform buttons)
- Labels
- Check boxes and radio buttons
- Tab controls

The *Rich Text Toolbar* will open automatically when you enter text (or select existing text) for any of the following objects:

- Message windows
- Labels (both on objects and on pages themselves)
- Symbolate buttons

RICH TEXT EDITOR



1 **Edit Menu -** Edit or justify text (horizontally or vertically) or select a bullet style for bulleted lists. (Not present on the *Rich Text Toolbar*.)

2 **Insert Menu -** Place the cursor at the appropriate spot in the text, and use this menu to insert a speech effect, pause, sound file, image, expression, or keyboard key. (Not present on the *Rich Text Toolbar*.)

NOTE
When you select Speech Effect, Sound File, Image, or Expression from the *Insert* menu, the appropriate dialog will open to allow you to select an item to insert.

NOTE
Programming expressions in the *Rich Text Editor* is done in the same manner as in the *Action Editor*. (See *Entering Expressions and Variables*.) One important difference, however, is that when you add an expression in the *Rich Text Editor*, the text becomes "dynamic." Dynamic text is text that is continuously updated in Play modes, causing the text to change as the expression changes. For example, inserting the *Now()* action as an expression would create text that appears in Play modes as a dynamic clock.

NOTE
Formatting options described below will apply to all the text in the *Rich Text Editor* display area. To format only portions of the text, select only the text you want to format.

3 **Font list -** Choose a font family for the text.

4 **Font size button -** Set a font size for the text.

5 **Font color button -** Choose a font color for the text from the *Theme Colors* or *Standard Colors* swatches.

NOTE
You may also create a custom color for the font. Select More Colors and define a custom color.

6 **Text Background Color button -** Choose the background color for the text from the *Theme Colors* or *Standard Colors* swatches (or create a custom color for the font.)

7 **Font style options buttons -** Select the Bold, Italic, or Underline button to change the font style.

8 **Font alignment options buttons -** Select the Right, Center, or Left button to change the justification of the text.

9 **Bullets button -** Create a bulleted list.

10 **Decrease indent button -** Place the cursor in front of the text, and select the Decrease indent button to Incrementally decrease the indentation.

11 **Increase indent button -** Place the cursor in front of the text, and select the Increase indent button to incrementally increase the indentation.

12 **Symbolate button -** Symbolate the selected text. (Not present on the *Rich Text Toolbar*.)

13 **Speech Style button -** Opens the *Speech Style Editor* so you can change speech settings for the selected text. (Not present on the *Rich Text Toolbar*.)

14 **Cut/Copy/Paste buttons -** Cut, copy, or paste the selected text. (Not present on the *Rich Text Toolbar*.)

15 **Text display area -** Dynamically displays the text as it is edited. (Not present on the *Rich Text Toolbar* - the text is dynamically displayed on the object you are editing.)

16 **OK button -** Saves all changes you have made to the text in the display area. (Not present on the *Rich Text Toolbar.*)

17 **Cancel button -** Cancels all changes you have made to the text in the display area. (Not present on the *Rich Text Toolbar.*).

18 **Font size adjustment buttons -** Increase or decrease the font size. (Present only on the *Rich Text Toolbar*.)

CAUTION
When you have finished using the *Rich Text Editor* to edit your text, be sure to select OK to save your changes (or all of your changes will be lost.) (Changes you make using the *Rich Text Toolbar* will automatically be saved.)

CAUTION
Text formatting that you set using the *Rich Text Editor* will be overridden if you later use the controls in the *Font* Properties group (in the Properties panel).

Working with Movable Objects

Moveable objects can add new dimensions to the activities you create in Boardmaker Studio. A moveable object is an object to which "drag-and-drop" properties have been assigned so that it can be moved to another position on the page. You can assign drag-and-drop properties to all types of buttons and to labels, SmartSyms, and group boxes.

You can also designate "target" objects - group buttons, target buttons, tab controls, group boxes, and pages themselves - into which you can drag-and-drop moveable objects. Moveable and target objects can be programmed with actions to create dynamic activities for sorting, matching, counting, sequencing, and more.

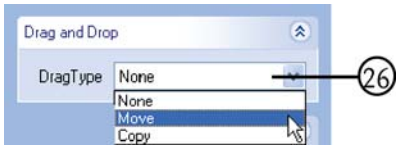
When using Simple Touch (the default access method) you simply select the moveable object, and then drag-and-drop it onto the target object. When using any other access method (Touch Enter, Touch Exit, Scanning, or Mouse Pause), however, dragging and dropping a moveable object involves making two selections. First select the moveable object - it will begin to flash. Then select the target object. The moveable object will move onto the target object.

Boardmaker Studio also includes a number of *Draggable Button* gadgets that include *Matching* and *Sorting* gadgets - pre-programmed movable buttons and target buttons that you can simply drag onto your page to quickly and easily create your own custom matching and sorting activities.

Create a Moveable Object

You create a moveable object using the *Drag Type* drop-down list in the *Drag and Drop* properties group of the Properties panel.

Drag Type Drop-down List (example from Button Properties panel)



Note
The drag-and-drop properties you assign to the object will be enabled in Preview and Play modes.

1. Select the button (standard, symbolate, word predictor, group, or freeform) or the SmartSym or group box you want to make moveable. The Properties panel for that object will open.
2. Make a selection from the *Drag Type* drop-down list (under *Drag and Drop*):
   - Select **Move** to enable the object to be moved to a new position.
   - Select **Copy** if you want the object to duplicate itself when it is moved. The original object will remain in place, and an identical copy of the object will be moved.

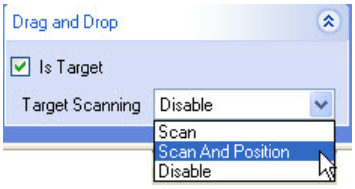
3. (Optional) Use the Properties panel to add a label, symbol, and designate a style for the moveable object.
4. Repeat steps 1 - 3 for each moveable object you want to create.
5. To save your changes, select **File Menu > Save Page**.

Create a Target Object

You can designate a group button, group box, or tab on a tab control as a "target" object - an object that will accept other objects that are dragged into it. (A target button has pre-assigned target properties and will, by default, act as a target.) You can also designate a page as a target, so objects can be dragged and dropped anywhere on the page - or dragged from one target object onto the page itself.

NOTE
If you want to drop objects directly onto a page, select the *Is Target* check box on the *Page* Properties panel.

IS TARGET CHECK BOX AND TARGET SCANNING (EXAMPLE FROM GROUP BOX PROPERTIES PANEL)



NOTE
The target properties you assign to the object will be enabled in Preview and Play modes.

Designate the Target Object

1. Select the group button, group box, tab, or page you want to make a target. The Properties panel for that object will open.
2. Select the *Is Target* check box (under *Drag and Drop*).
3. (Optional) Use the Properties panel to add a label, symbol, and designate a style for the target object.
4. Repeat steps 1 - 3 for each object you want to designate as a target.

Define the Target Object's Scanning Properties

When using access methods other than Simple Touch, you can define how the scan highlight will react.

The *Target Scanning* drop-down list will appear only when the **Is Target** check box is selected.

Select a scan type from the **Target Scanning** drop-down list:

- **Scan** will scan the entire target object as a single object. The object moved into the target object will be placed in the next available position as defined by the target object's chosen layout.
- **ScanAndPosition** will move the scan inside the target object (through the grid in a grid layout) to a specific position as defined by the layout style.
- Select **Disable** if you want the scan to pass over the target object.

To save your changes, select **File Menu > Save Page**.

Program the Actions for Movable and Target Objects

System Events - Movable and Target Objects

Movable and target objects are programmed using system events. (See ***Working with Events***.)

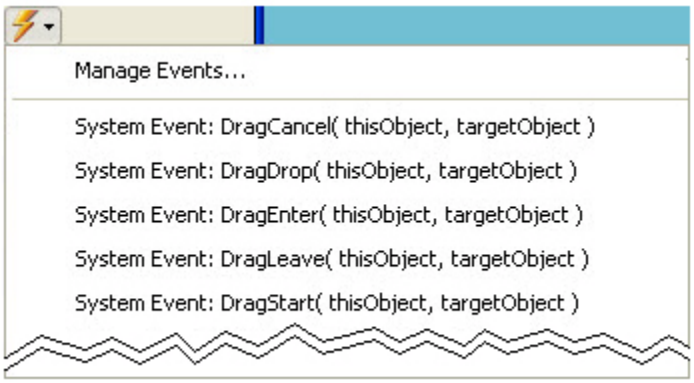
You can determine when the actions programmed on a movable or target object should take place. You can choose what "triggers" those actions by assigning a system event to the movable or target button.

You can assign a system event to a movable or target object to determine the circumstances under which its programmed actions will take place. For example, you can choose to "trigger" the object's actions when the page is opened or closed, when the movable object enters the target, is dropped on the target object, etc.

Following are brief descriptions of the events available for movable objects and for target objects.

Events Available for Movable Objects

Events Drop-Down List - System Events Available for Movable Objects



System Event: DragCancel(thisObject, target Object) - The actions will be performed when the user stops dragging the object (when the drag is "cancelled") before reaching the target object.

System Event: DragDrop(thisObject, target Object) - The actions will be performed when the object is dropped on the target object.

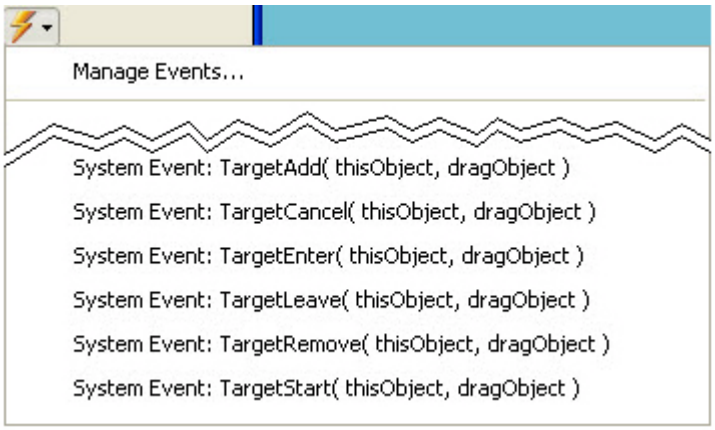
System Event: DragEnter(thisObject, target Object) - The actions will be performed when the object is dragged into the target object (when it enters the target object before it is dropped).

System Event: DragLeave(thisObject, target Object) - The actions will be performed when the object is dragged out of the target object (when it is dragged over the target object without being dropped.)

System Event: DragStart(thisObject, target Object) - The actions will be performed when the user begins dragging the object.

Events Available for Target Objects

Events Drop-Down List - System Events Available for Target Objects



System Event: TargetAdd(thisObject, dragObject) - The actions will be performed when a movable object is dropped into the target object.

System Event: TargetCancel(thisObject, dragObject) - The actions will be performed when the user stops ("cancels") dragging a movable object out of the target object (either by pressing **Esc** or by dragging the object to an area of the page where there is no target object).

System Event: TargetEnter(thisObject, dragObject) - The actions will be performed when a movable object is dragged into the target object (when it enters the target object - before it is dropped).

System Event: TargetLeave(thisObject, dragObject) - The actions will be performed when a movable object that has been dropped into the target object is dragged out of the target object.

System Event: TargetRemove(thisObject, dragObject) - The actions will be performed when a movable object that has been dropped into the target object is dragged out of the target object and dropped on another target object.

System Event: TargetStart(thisObject, dragObject) - The actions will be performed when the user begins dragging a movable object that has been dropped in the target object.

Program Movable and Target Objects

To program a movable or target object:

1. Select the movable or target object you have created. The Properties panel for the object will open.
2. Select **Edit Actions** under *Programming*). The *Action Editor* will open.

> **SHORTCUT**
> Double-click the object to open the *Action Editor*.

3. Select Events [] from the toolbar. The Events drop-down list will open. (See ***Events Available for Movable Objects*** and ***Events Available for Target Objects***.)
4. Select an event from the Events drop-down list. The event will appear on the first line of the **Action Editor**.
5. Use the *Action Editor* to assign actions to the object. (See ***The Action Editor***.) The actions will be performed when the event is triggered.
6. Repeat steps 1 through 5 to program additional moveable and target objects.
7. To save your changes, select **File Menu > Save Page**.

> **REFERENCE**
> For detailed information on events and on programming objects in general, see *Working with Events* and *The Action Editor*.

Draggable Button Gadgets

Boardmaker Studio includes a folder of *Draggable Button* gadgets that can be dragged onto a page to quickly create interactive activities. Within the *Draggable Button* folder are two subfolders - *Matching* gadgets and *Sorting* gadgets.

REFERENCE
See *Working with Gadgets* for step-by-step instructions for using gadgets to quickly create unique interactive activities.

Matching Gadgets

Matching gadgets are a collection of movable buttons ("matching buttons") and target buttons ("matching targets"). The matching buttons and target buttons are each numbered. The buttons have been pre-programmed so that each button can only be dragged into its corresponding target - "Matching Button #8," for example, can only be dragged into "Matching Target #8."

The user will be given auditory feedback when the movable button is dragged into a target button ("That's right, [item label] belongs here" or "no [item label] does not belong here"). You can easily change the label and symbol on each button to quickly create a matching activity.

REFERENCE
See *Working with Gadgets* for step-by-step instructions for using *Matching* gadgets.

Sorting Gadgets

These gadgets include objects with pre-defined properties - there are movable objects ("sorting objects") and target objects ("sorting bins").

The objects have been pre-programmed with system events and with actions. When a sorting object is dragged into a sorting bin, the user will be given auditory feedback as to whether the object was placed in the correct bin. An incorrect placement will cause the object to snap back to its original place on the page.

REFERENCE
See *Working with Gadgets* for step-by-step instructions for using *Sorting* gadgets.

Creating a Grid of Objects

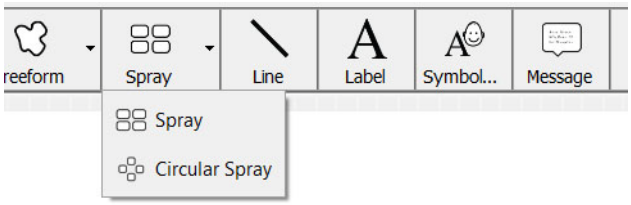
Use the Spray Tool or Circular Spray Tool to spray out copies of a selected object to form a rectangular or circular grid. This is very useful if you want to quickly populate a page (or a group box, group button, or tab pane) with a number of identical objects.

Note
You can spray out a grid from any type of object on the page.

Create a Rectangular Grid

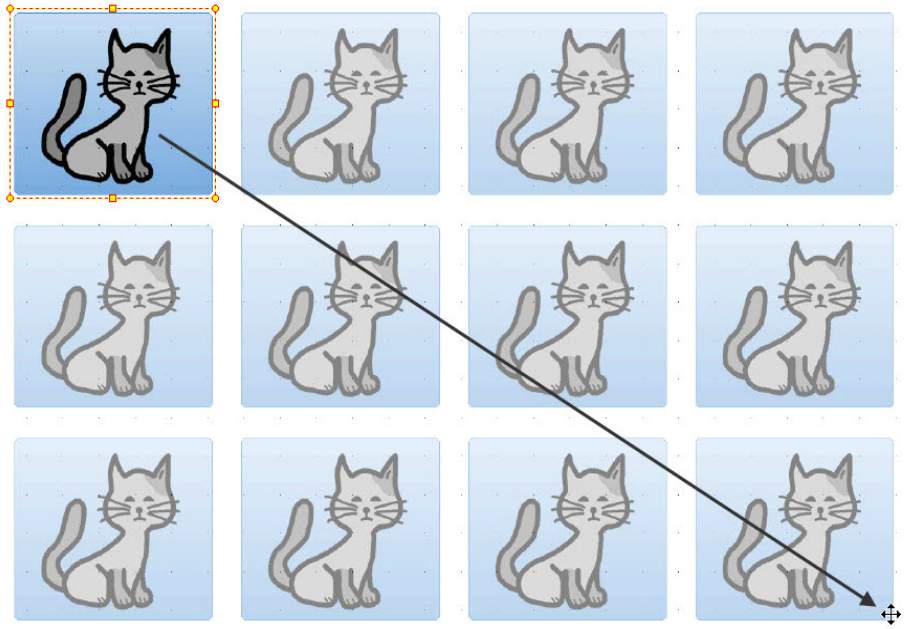
1. Select the arrow to the right of the Spray Tool in the toolbar. Then select **Spray**.

Spray Tool



2. Move the Spray Tool over the object you want to duplicate.
3. Click and drag diagonally to spray out a rectangular grid of identical objects.

Rectangular Grid of Buttons Being Sprayed Out on a Page



NOTE
You can change the spacing between the objects in the grid. Select File Menu > Setup and Options. The *Setup and Options* dialog will open. Select Interface > General from the navigation panel. Then use the arrows in the *Grid Spacing* drop-down list to select a number for the grid spacing. (See *Grid Settings*.)

4. Release the selection when the grid is the size you want.

NOTE
You can reposition the entire grid in the workspace while all of its objects are still selected.

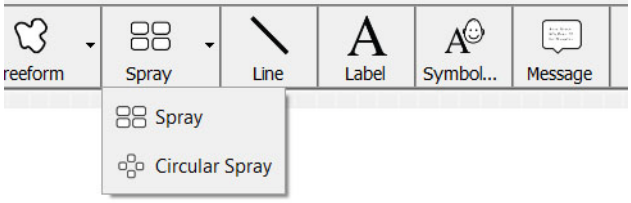
NOTE
If you have assigned properties to the object (content, symbol, style, actions, etc.), the object's properties will be copied when you create the grid of objects.

5. When you have finished, select the **File Menu > Save Page**.

Create a Circular Grid

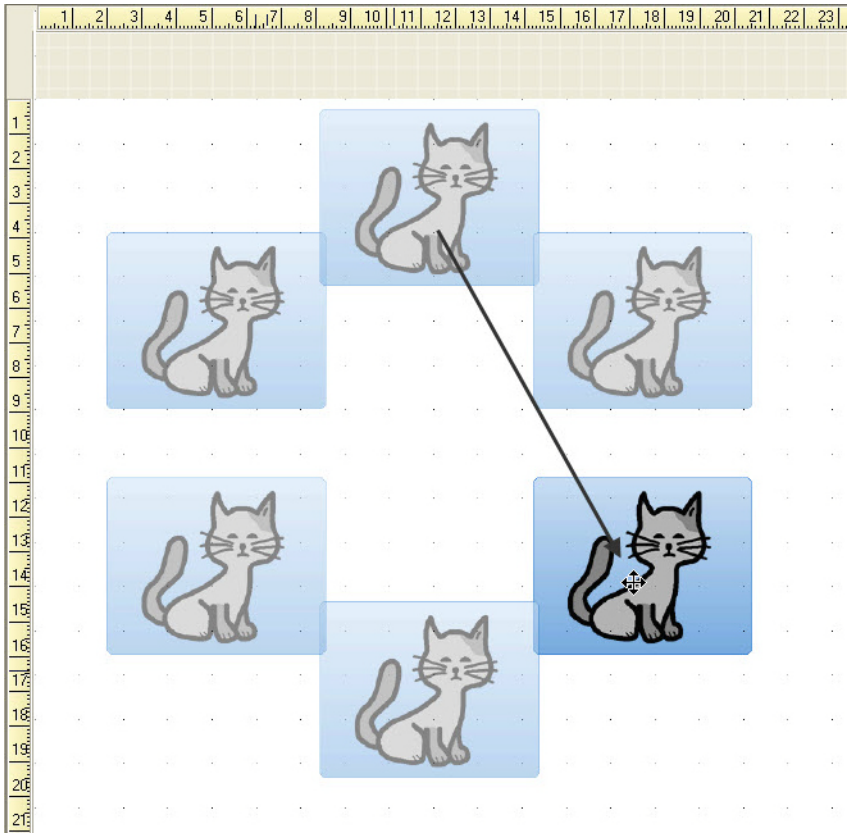
1. Select the arrow to the right of the Spray Tool in the toolbar. Then select **Circular Spray**.

CIRCULAR SPRAY TOOL



2. Move the Circular Spray Tool over the object you want to duplicate.
3. Click and drag diagonally to spray out a circular grid of identical objects. As you drag diagonally, the circle will increase in circumference.

CIRCULAR GRID OF BUTTONS BEING SPRAYED OUT ON A PAGE



NOTE

You can change the spacing between the objects in the grid. Select File Menu > Setup and Options. The *Setup and Options* dialog will open. Select Interface > General from the navigation pane. Then use the arrows in the *Grid Spacing* drop-down list to select a number for the grid spacing. (See *Grid Settings*.)

4. Release the selection when the circular grid is the size you want.

NOTE

You can reposition the entire circular grid on the workspace while all of its objects still selected.

NOTE

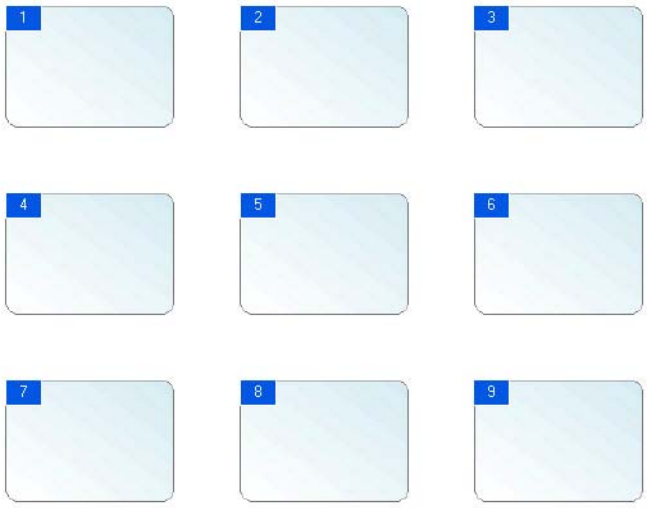
If you have assigned properties to the object (content, symbol, style, actions, etc.), the object's properties will be copied when you create the grid of objects.

5. When you have finished, select the **File Menu > Save Page**.

Setting the Scan Order for an Individual Page

When Scanning is the chosen selection method, the software will, by default, use the Row/Column scanning order. The objects on the page will first be scanned row-by-row, from left to right, and then from top to bottom.

Default Scanning Order



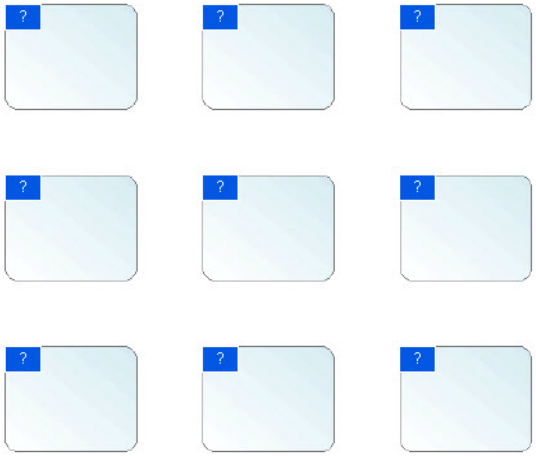
You can set the scanning order for all of your Boardmaker Studio projects using the *Access Method Settings* on the *Setup and Options* dialog. (See ***Access Method Settings***.) If you want to change the scanning pattern for an individual page, use the Scan Order Tool in the toolbar.

1. Select the Scan Order tool in the toolbar.

Scan Order Tool

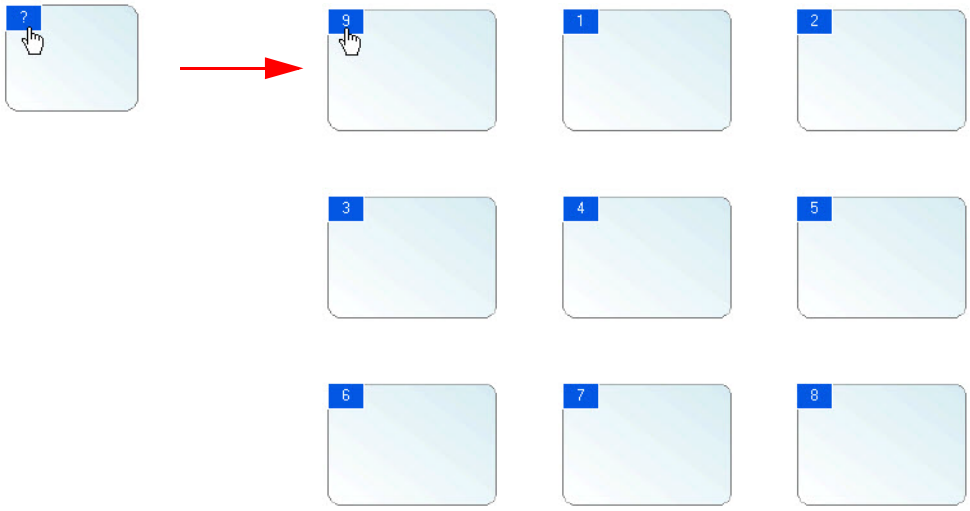
Boxes with question marks will appear in the upper left corner of the page objects. (See the illustration below.)

SCAN ORDER TOOL SELECTED (EXAMPLE)



2. Place the cursor (it will change to a pointing finger) on the question mark box, and click the left mouse button. A scan order number will appear and increase by one each time you click (to a maximum number equal to the number of objects on the page). The scan order numbers of the other object on the page will be adjusted to reflect your change. (See the illustration below. In this example, we are reversing the default scan order.)

CHANGING THE SCANNING ORDER



3. Repeat step 2 to change the scanning order of the other page objects.

NOTE

The scan order for objects inside a group button or group box can be changed the same way you change the scan order for multiple objects on a page. (The scan order overlay for groups will be colored red rather than blue.) (Select the group button or group box and follow the instructions in step 2 above.)

> **NOTE**
> Right-clicking on a page object will bring up a menu with the options to disable or reset the scan order.

4. To save your changes, select **File Menu > Save Page**.
5. Select any other tool on the toolbar. The numbers will disappear from the page objects, but the scanning order will be saved with the page.

9 Working with Symbols

One of the most exciting features of Boardmaker Studio is the "SmartSyms" feature. SmartSyms are symbol/label pairs that can be programmed with actions. You can place a SmartSym directly on a page, on an object on a page, or use a SmartSym as a page background.

Boardmaker Studio includes the PCS Classic: Core symbol library - a collection of over 4,500 Picture Communication Symbols (PCS), familiar to all Boardmaker users. You can also import digital pictures into your personal My Symbols library. In addition, Boardmaker users can import their existing custom symbol libraries into Boardmaker Studio.

SmartSyms labels have been translated into many different languages. You can choose the language in which the label is displayed and the language in which to search, select a label in a different language, enter your own unique label, or you can choose not to display any label.

This chapter covers the following topics:

- ***Overview of Symbols***
- ***Set Your Symbol Preferences***
- ***The Symbols Panel***
- ***Edit SmartSym Properties***
- ***The Symbol Editor***
- ***The Symbol Manager***

Overview of Symbols

In Boardmaker Studio, you can use symbols in the following ways:

- Use the *Symbols & Language* settings on the *Setup and Options* dialog to set your symbol preferences - symbol libraries to use in your searches, order in which the symbols will be presented (symbol style, human form, gender, skin color, and age); and label and search languages. The *Symbols & Language* settings also gives you the option of filtering mature content in your symbol searches.
- Use the *Symbols* panel to search for and then drag an appropriate symbol onto an object on a page or onto the page itself. You can easily add new symbols to objects or replace symbols and choose whether the symbols will appear with or without labels. You can add multiple symbols to an object or page to create your own customized content.
- Use the *Smart Syms* Properties panel to assign or edit the properties (label, behavior, and actions) of a symbol that you have that you have dragged onto a page from the *Symbols* panel.
- Manage the symbols in your My Symbols library using the *Symbol Manager*. You can add new symbol categories, import your own digital pictures to use as symbols and then use the *Symbol Editor* to select labels, tags, and categories for your new symbols. You can also choose which symbol libraries to activate for your symbol searches.

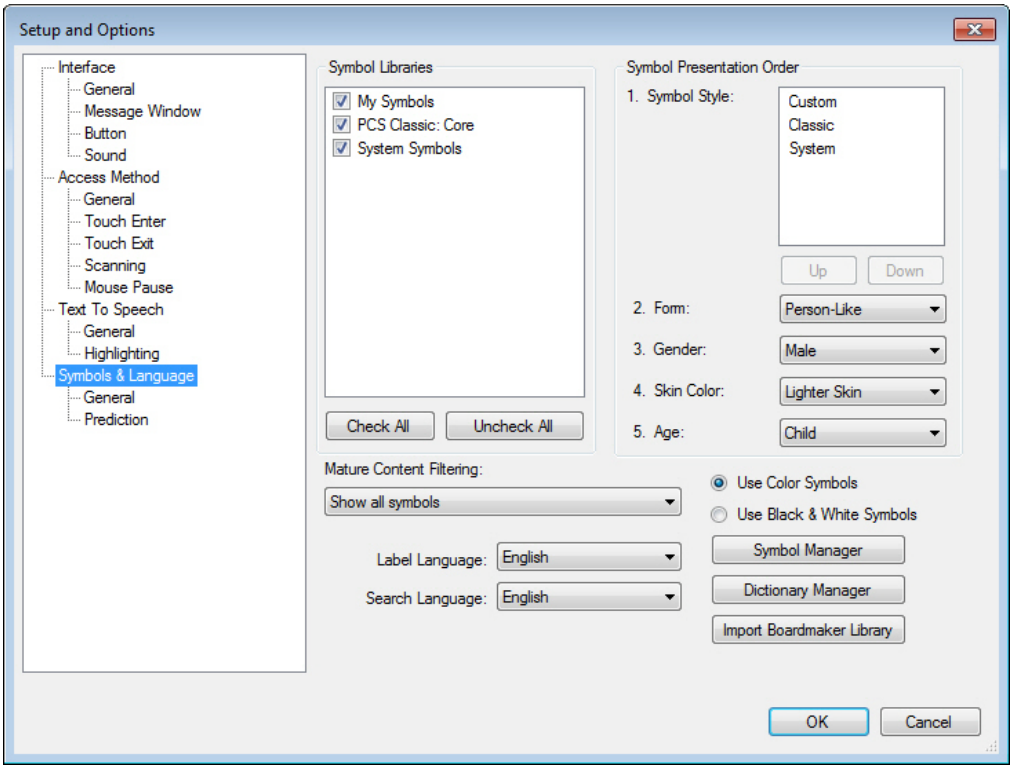
Set Your Symbol Preferences

You can set your symbol preferences, including which symbol libraries to activate, the order in which symbols will be presented in your symbol searches, mature content filtering, and the languages you want to use for your symbol searches and as your symbol labels using the *Symbols & Language* settings on the *Setup and Options* dialog..

Open the Setup and Options Dialog

1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols & Language** from the navigation pane. Options specific to symbol and language settings will be displayed (see the illustration below).

Setup and Options Dialog - Symbols and Language Options



Note

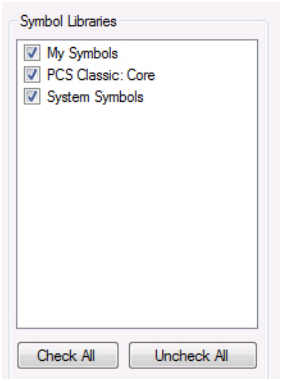
You can also access this dialog by selecting the Symbols and Language button on the Symbols panel. See *The Symbols Panel*.

Activate Symbol Libraries

> **NOTE**
> Only PCS Classic: Core and System Symbols libraries come with Boardmaker Studio. Visit *www.mayer-johnson.com* to purchase additional symbol libraries

1. Open the *Setup and Options* dialog and select **Symbols and Language** from the navigation pane. (See ***Open the Setup and Options Dialog***.)
2. Select the libraries you want to use in symbol searches (or deselect the libraries you don't want to use) under *Symbol Libraries.*

SYMBOL LIBRARIES (SHOWING STANDARD SYMBOL LIBRARIES)



> **NOTE**
> You can also select the Check All or Uncheck All buttons to select or clear symbol libraries.

> **NOTE**
> You can also activate symbol libraries through the *Open Symbol* window or *Symbol Manager.*

Standard Symbol Libraries

When you have finished setting your symbol preferences, select **OK** to save your settings and close the *Setup and Options* dialog.

PCS Classic Core

These are the original symbol libraries of simple, clear drawings - easily recognizable and appropriate for all ages - developed by Mayer-Johnson, LLC for use in augmentative and alternative communication. Users of Boardmaker will be very familiar with this symbol library.

My Symbols

You can import symbols to create a custom library. The symbol will be imported into the *Imported Symbols* folder and included in your My Symbols library. (See ***The Symbol Manager***.)

System Symbols

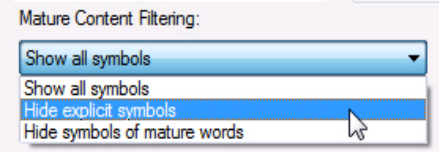
This library primarily contains symbols that are used to indicate navigation and Gadget functionality.

NOTE
Visit *www.mayer-johnson.com* to purchase additional symbol libraries.

Filter Mature Content

You can choose to filter the type of symbols that will be returned in your symbol searches. If you want to restrict symbol searches based on content, make a selection from the *Mature Content Filtering* drop-down list:

MATURE CONTENT FILTERING DROP-DOWN LIST

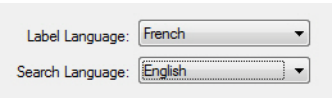


- Select **Show all symbols** if you don't want any restrictions on your symbol searches.
- Select **Hide explicit symbols** to block those symbols in which the representation - the symbol itself - is explicit (clearly and precisely drawn).
- Select **Hide symbols of mature words** to block those symbols that represent mature themes and that would not be appropriate for users of certain ages or cognitive levels.

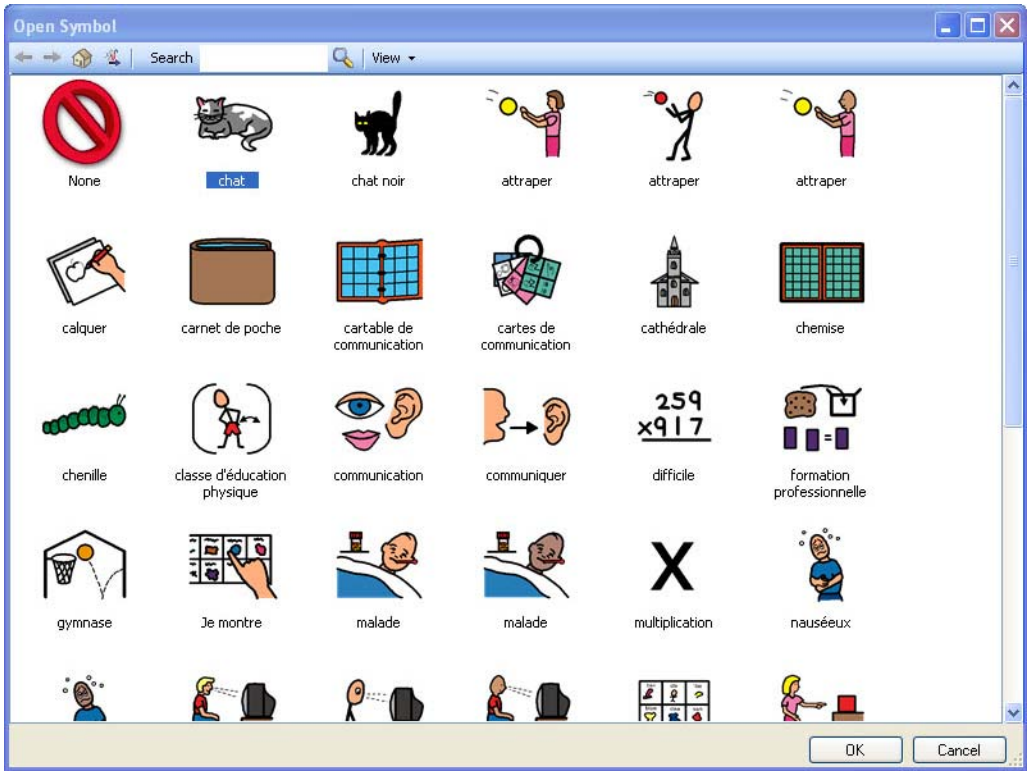
Select a Language for the Symbol Search and Label

You can select a specific language for your symbol searches and for the label displayed with the symbol. You can use different languages for your search and for the label text. For example, you can select **French** from the *Label Language* drop-down list to display the symbol label in French, and select **English** from the *Search Language* drop-down list as your search language. In the illustrations below, English has been selected as the search language and French for the label language. The search was performed for the word "cat."

LANGUAGE SETTINGS (EXAMPLE)



OPEN SYMBOL WINDOW (EXAMPLE - ENGLISH SEARCH FOR "CAT" AND FRENCH LABEL LANGUAGE)



To set your language preferences:

1. Open the *Setup and Options* dialog and select **Symbols and Language** from the navigation pane. (See above.)
2. Use the *Label Language* drop-down list to select the language for the symbol label.

NOTE
The search language will automatically change to match the label language you have selected. If you want to use a different language for your symbol searches, use the *Search Language* drop-down list to select a different language for your symbol searches.

NOTE
Changing the symbol language will not affect symbol labels on existing pages.

NOTE
Whenever you have finished setting your symbol preferences, select OK to save your settings and close the *Setup and Options* dialog.

Set the Symbol Presentation Order

You can choose the order in which the symbols are presented for your symbol searches. You can select a symbol style, human "form," gender, skin color, and age. Symbols that meet your search criteria will appear first in the *Open Symbol* window when the results of your symbol search are returned (if possible, not all of the symbol libraries offer all of the criteria you have chosen for your symbol presentation order).

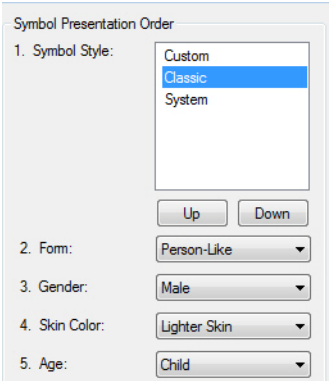
The symbol presentation order you select will be reflected in all symbol searches performed by the software (using the Properties panel, the *Symbol Candidates* dialog, *Symbol Manage*r, etc.)

NOTE
The software will present symbols in the order you have selected, based on availability of symbols that meet your criteria.

1. Open the *Setup and Options* dialog and select **Symbols and Language** from the navigation pane. (See above.) Make your selections under *Symbol Presentation Order*.

NOTE
Preferences under *Symbol Presentation Order* are numbered. These numbers reflect the order in which the presentation order is determined, (the first criteria for presentation order will be the symbol style, then the form, gender, etc.)

SYMBOL PRESENTATION ORDER



NOTE
All of the symbol libraries you have activated will appear in the *Symbol Style* list.

2. Select the symbol style (See ***Standard Symbol Libraries***) that you want to appear at the top of the *Open Symbol* window when the results of your symbol search are displayed. Symbols are displayed in the *Symbol Style* list in the order in which they will be presented.
3. To change the order in which the styles will be displayed:
   a. Make a selection from the *Symbol Style* list.
   b. Use the **Up** and **Down** buttons to move the symbol style up or down in the list.

SHORTCUT
You can also select a symbol style and drag it up or down in the *Symbol Style* list.

4. Select the type of human form to display first:

   Use the *Form* drop-down list to choose the preferred type of illustration depicting the human form.

   You can choose from:

   - No preference
   - Stick Figure
   - Egghead
   - Person-Like

HUMAN FORM SELECTIONS

5. Select the preferred gender for the symbols:

   Use the *Gender* drop-down list to choose the gender of the human symbols you would like to be displayed first.

   You can choose from:

   - No Preference
   - Female
   - Male
   - Neutral

6. Select the preferred skin color for the symbols:

   Use the *Skin Color* drop-down list to choose the skin color of the human symbols you would like to be displayed first.

   You can choose from:

   - No Preference
   - Lighter Skin
   - Darker Skin

7. Select the preferred age for the symbols:

   Use the *Age* drop-down list to choose the preferred age for the human symbols you would like to be displayed first.

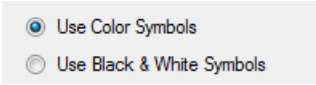
   You can choose from:

   - No Preference
   - Child
   - Adult

Display Color or Black and White Symbols

Select the **Use Color Symbols** or **Use Black & White Symbols** radio button to set your preference for the symbol display.

SYMBOL COLOR OPTIONS



NOTE
When you have finished setting your symbol preferences, select OK to save your settings and close the *Setup and Options* dialog.

Import a Boardmaker Custom Library

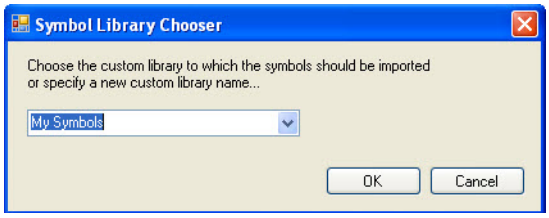
If you have Boardmaker Plus or Boardmaker with SDP installed on your computer, you can import your Boardmaker custom symbols into Boardmaker Studio.

1. Open the *Setup and Options* dialog and select **Symbols and Language** from the navigation pane. (See above.)
2. Select the **Import Boardmaker Library** button. A browser will open to the default *My Symbols* folder in your Boardmaker *Symbols* folder.
3. Select the library that you want to import into Boardmaker Studio.

> **NOTE**
> If you select a symbol library from the *MJ Symbols* or *MJ Symbols - Additional* folders, a dialog will open, recommending that you contact Mayer-Johnson to see if an equivalent library, specifically designed for Boardmaker Studio, is available, and asking if you still want to import the library. Select Yes if you want to import the library.

The *Symbol Library Chooser* will open.

SYMBOL LIBRARY CHOOSER



4. Select the library into which you want to import your symbols:
   - Choose a library from the drop-down list. (The default is your My Symbols library.)
   - Enter a new name for the library.
5. Select the **OK** button to close the *Symbol Library Chooser*.

> **NOTE**
> If you enter a new name for the library, the new symbol library will appear under *Symbol Libraries* - where it can be activated (or deactivated) for your symbol searches.

THE SYMBOLS PANEL

Use the *Symbols* panel to quickly search for a symbol (SmartSym), choose its label, and then drag it onto an object on a page or onto the page itself. The symbol can be placed on an object on a page or can be used as the page background - made non-selectable and have other objects placed on top of it - or multiple symbols can be placed on a page - made selectable and movable and programmed with actions.

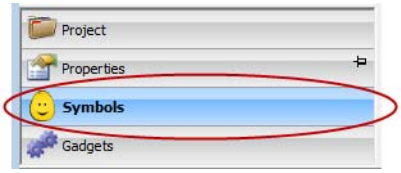
REFERENCE

Before you begin using the *Symbols* panel to search for a symbol and choose its label, you should set your preferences for your symbol searches using the *Setup and Options* dialog. (See *Set Your Symbol Preferences*.)

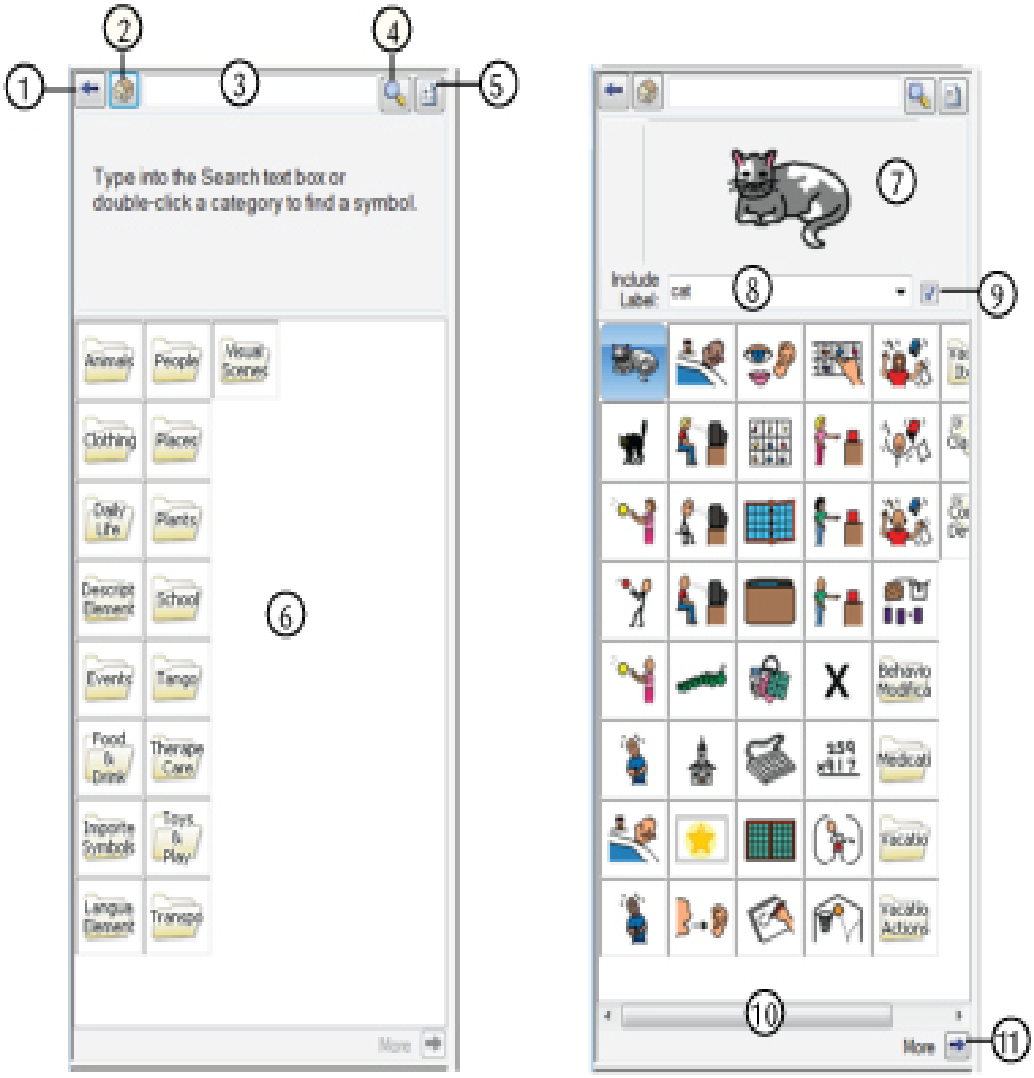
The Symbols Panel - Overview

Select the **Symbols** button in the Navigation Pane to open the *Symbols* panel.

SYMBOLS BUTTON IN NAVIGATION PANE



SYMBOLS PANEL (TOP AND SECOND LEVELS)



1	**Back arrow button**	Move backward through the browsing history in your symbol search.
2	**Home button**	Display the top level of symbol category folders.
3	***Search* text box**	Enter your search criteria in this field.
4	**Symbol search button**	Search for items that match the search criteria you have entered in the *Search* text box.
5	**Symbols and Language button**	Provides quick access to label and search language settings and symbol preferences.
6	**Display pane**	Displays icons for the available folders for each symbol category. Double-click on a folder or subfolder to display the symbols it contains. Drag-and-drop any symbol from the display pane into the workspace.

7	**Preview area**	Dynamically displays the selected symbol. Drag-and-drop the symbol from the preview area into the workspace.
8	***Label* text box**	Displays the label for the currently selected symbol. You can edit the symbol label or enter a new label in the text field.

NOTE
Some symbols have more than one assigned label. Use the drop-down list to the right of the text box to display alternate labels.

9	**Include label check box**	elect this box to include a label(s) for the selected symbol. (Clearing this check box will gray out the label text box and no label will be displayed.)
10	**Scroll bar**	Select this bar and drag it to the right to display more symbol choices. (The scroll bar will only appear when the number of available symbols exceeds the space in the display pane.)
11	***More* button**	Expands the display pane into the workspace so that all available symbols are displayed. (This button will be grayed out if there is room to display all available symbols.)

Browse for a Symbol Using the Symbols Panel

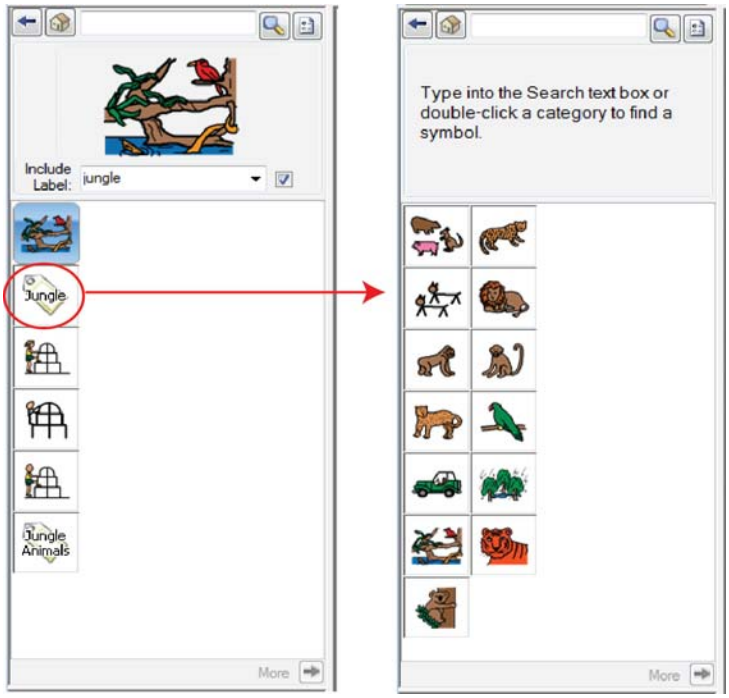
Use the *Symbols* panel to quickly search for a symbol (SmartSym):

- To browse for a symbol, double-click on a symbol category folder in the *Symbols* panel. Continue navigating through the layers of folders, double-clicking on folders until you find the symbol you want to use. (If necessary, use the scroll bar or select the **More** button to look through all of the available categories and the symbols in each category.)
- Use the *Search* text box to find a specific symbol. Enter your search criteria in the *Search* text box and then select the Symbol search button. The software will return all symbols with labels that match your search criteria. It will also return all tags and categories that match your search criteria.

  For example, if you are searching for jungle animals, entering "jungle" (no quotation marks) in the *Search* text box will return all symbols with the word, "jungle," in their label, as well as all tags and categories containing the word, "jungle."

NOTE
To change your symbol preferences, select the Symbols and Language button at the top of the Symbols panel. The *Setup and Options* dialog will open.

SEARCH FOR "JUNGLE" SHOWING RESULTS OF SEARCH (LEFT) & SYMBOLS WITH THE "JUNGLE" TAG (RIGHT)



You can use the following shortcuts to help you find symbols that match your search criteria:

- Use the asterisk [*] as a generic "wildcard" character. For example, entering "**mon***" in the *Search* text box will search from the beginning of the word and find all symbols whose labels begin with the letters "mon." Similarly, entering "***ten**" will search at the end of the word and find symbols whose labels end in "ten."

Wildcard Search (example of search from beginning of word using "mon*")

- Use quotation marks ["] at the beginning and end of a word to return a whole word match. (For example, entering "dog" (using quotation marks) in the *Search* text box will return all symbols in which "dog" is an exact match - it will only return symbols with the exact label, "dog.")
- Use an apostrophe [’] at the beginning and end of a word to return symbols whose name contains the word. (For example, entering ’dog’ (using apostrophes) in the *Search* text box will return symbols whose labels include the word, "dog," including "dog," "dog bed," "dry dog food," etc.

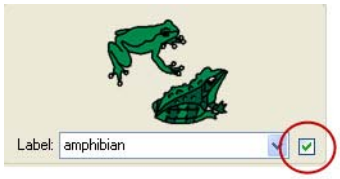
The symbol you select will be displayed in the preview area.

Select a Label for the Symbol

Each of the symbols (SmartSyms) included with Boardmaker Studio is assigned a label.

To include a label with the symbol, select the Include label check box. If you do not want to display a label with the symbol, clear the Include label check box.

INCLUDE LABEL CHECK BOX



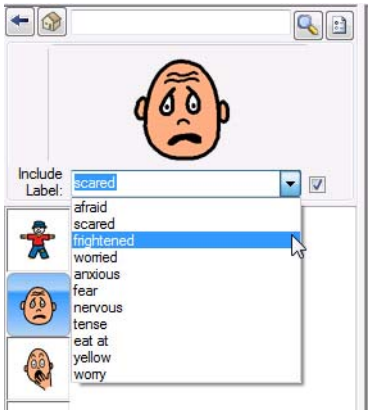
NOTE
Whether or not a label is displayed, the symbol will still act as a SmartSym.

NOTE
You can always add a label to the symbol later using the *SmartSyms* Properties panel. See *Edit Button Properties*.

Use the Symbol Default Label

The symbol you have selected will be displayed in the preview area with its default label. In some cases, a symbol will be assigned more than one default label. (In the illustration below, the drop-down list to the right of the label text box shows three choices for the symbol's label.)

ALTERNATE LABEL CHOICES (FOR THE SYMBOL SEARCH "SCARE")



Change the Symbol Label

You can change the label on the symbol by entering a new label or editing the text in the label text box.

1. Select the label text box.
2. Enter a new text label or edit the default label.

> **NOTE**
> At any time, you can change the symbol's label, or you can enter a unique symbol label using the *SmartSyms* Properties panel. (See ***Add a Label to the Symbol or Change the Symbol Label***.)

Drag the Symbol into the Workspace

When you have selected a label for the symbol (the symbol and its label will be displayed in the preview area), you can simply drag the symbol/label pair from the display pane or from the preview area onto an object on a page or onto the page itself.

You can drag a symbol onto the following objects:

- The page itself
- Buttons (standard, group and target, and freeform buttons)

> **NOTE**
> You can only drag one symbol onto a standard or freeform button. If you drag another symbol onto a button that already contains a symbol, the symbol will be replaced. You can place multiple symbols in group and target buttons.

- Tab control tabs or panes
- Group boxes

> **NOTE**
> You cannot drag a symbol onto a text box, message window, label, check box, or radio button.

1. Select the symbol that you want to move into the workspace. You can make your selection from the display pane or from the preview area.
2. Drag the symbol - it will be surrounded by a bounding box - and drop it where you want it.

> **REFERENCE**
> To maintain the symbol's proportions when it is resized, select Yes in the *Maintain Aspect* drop-down list in the *Miscellaneous* Properties group of the *SmartSyms* Properties panel. (See ***Maintain the Symbol's Aspect When it is Resized***.)

NOTE

You can only drag one symbol onto a standard or freeform button. (If a second symbol is dragged onto the button, it will replace the first symbol.) To place multiple symbols on a standard button, you must convert the button type to group or target.

REFERENCE

Once you have chosen a new symbol, you can select the *Edit Image* button to access tools for editing the appearance of your symbol. For more information, see *The Symbol Editor*.

3. To save your changes, select **File Menu > Save Page**.

EDIT SMARTSYM PROPERTIES

Use the *SmartSym* Properties panel to assign or edit the properties (label, behavior, and actions) of a symbol. You can edit the properties of any symbol that you have dragged onto a group or target button, a group box, tab control, or onto the page itself.

NOTE
You can use the *SmartSym* Properties panel to edit the properties of a symbol that you have dragged onto a group or target button, a group box, label, tab control or onto the page itself. Symbols dragged onto standard or freeform buttons become part of the button object and cannot be edited using the *SmartSym* Properties panel.

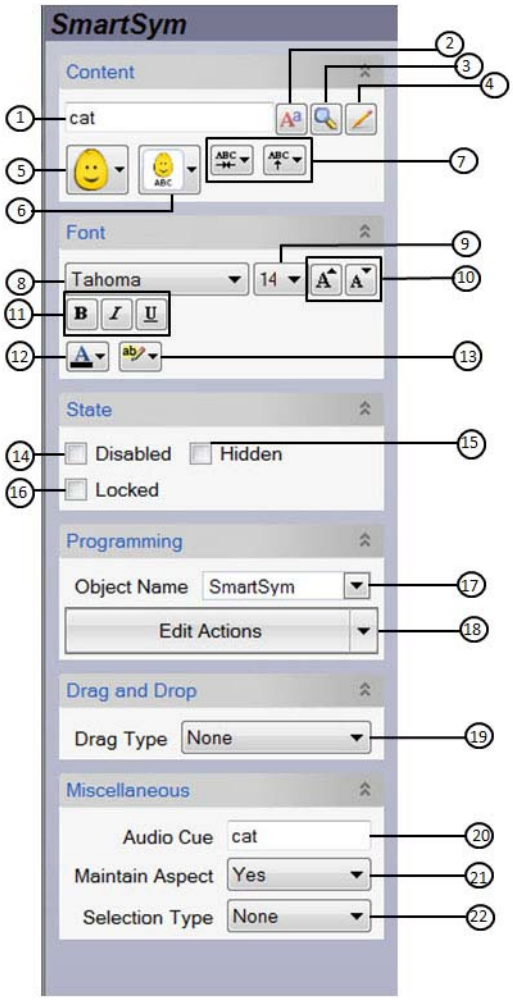
Open the SmartSym Properties Panel

Select the symbol whose properties you want to define or change. The *SmartSym* Properties panel will open.

NOTE
Before you begin editing symbol properties, make sure that all the Properties groups in the Properties panel are expanded. To expand (open) a Properties group, select Expand/Collapse [ ] at the top right of the group title bar.

NOTE
The controls in the Properties panel on your copy of Boardmaker Studio may not appear exactly as in the illustration below - the layout of the controls is dependent on the panel width, your computer's operating system, and the size of your monitor.

SmartSym Properties Panel



1 **Label text box**

2 **Rich Text Editor button**

3 **Symbol Search button**

4 **Edit Image button**

5 **Symbol button**

6 **Layout button**

7 **Text justification buttons**

8 **Font drop-down list**

9 **Font size button**

10 **Font size adjustment buttons**

11 **Font style options buttons**

11 **Text color button**

13 **Text background color button**

14 ***Disabled* check box**

15 ***Hidden* check box**

16 ***Locked* check box**

17 ***Object Name* text box**

18 ***Edit Actions* button**

19 ***Drag type* drop-down list**

20 ***Audio cue* text box**

21 ***Maintain Aspect* drop-down list**

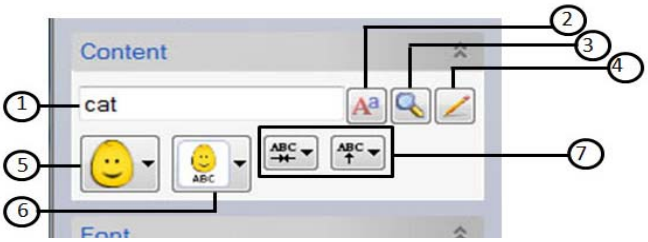
22 ***Selection Type* drop-down list**

NOTE
As you edit the symbol, be sure to save your work regularly. Select File Menu > Save Page.

Edit the Symbol Content

You can add a label to the symbol, format the label text, choose a layout for the symbol and its label, or change the symbol using the options in the *Content* Properties group.

SMARTSYM CONTENT PROPERTIES



1 **Label text box**

2 **Rich Text Editor button**

3 **Symbol Search button**

4 **Edit Image button**

5 **Symbol button**

6 **Layout button**

7 **Text justification buttons**

Add a Label to the Symbol or Change the Symbol Label

1. Select the label text box.
2. Enter a new text label.

Format the Symbol Label

You can use the *Rich Text Editor* to format text - to quickly and easily place multiple phrases or sentences on an object and use different font families and variously sized and colored fonts.

1. Select the Rich Text Editor button. The *Rich Text Editor* will open.
2. Use the *Rich Text Editor* to format the label (font, font size, font color, alignment, etc.). See ***Using the Rich Text Editor***.

> **NOTE**
> You can also use the controls in the *Font* Properties group to format the label text.

Change the Symbol

The procedure for searching for a new symbol will differ depending on whether you have entered a label in the Label text box. You can also browse for a symbol, or you can import a digital photo to use as a symbol.

> **REFERENCE**
> Once you have chosen a new symbol, you can select the *Edit Image* button to access tools for editing the appearance of your symbol. For more information, see *The Symbol Editor*.

Search for a Symbol That Matches the Label

1. Select the Symbol Search button. The *Open Symbol* window will open.

   All of the symbols that match the label text - or whose names contain the label text - will be displayed. (For example, if the label has the label, "cat,", among the symbols that will be displayed are "cat," "black cat," "cat bowl," catcher," and "caterpillar.") If necessary, scroll to look through all of the available symbols.

> **NOTE**
> If you don't want to use any of the symbols that are displayed, select Home [ ] to display the symbol category folders. Navigate through the layers of folders until you find a symbol that you would like to use.

2. Select the symbol that you want to use.
3. Select the **OK** button on the *Open Symbol* window (or double-click the symbol). The symbol will replace the current symbol.

Browse for a Symbol

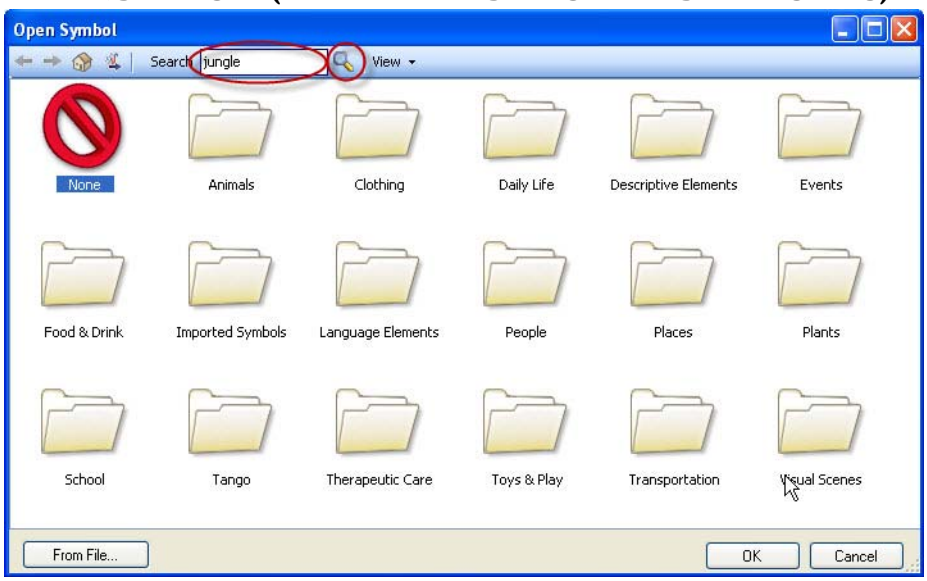
1. Select the Symbol Search button. The *Open Symbol* window will open and folders representing all of the symbol categories will be displayed.

2. Browse for a symbol:

   - Double-click on a symbol category folder to open it. Continue navigating through the layers of folders, double-clicking on folders until you find the symbol you want to use. (If necessary, scroll to look through all of the available categories and the symbols in each category.)

   - Use the *Search* text box to browse for a symbol. Enter your search criteria in the *Search* text box on the toolbar of the *Open Symbol* window, and then select the search button.

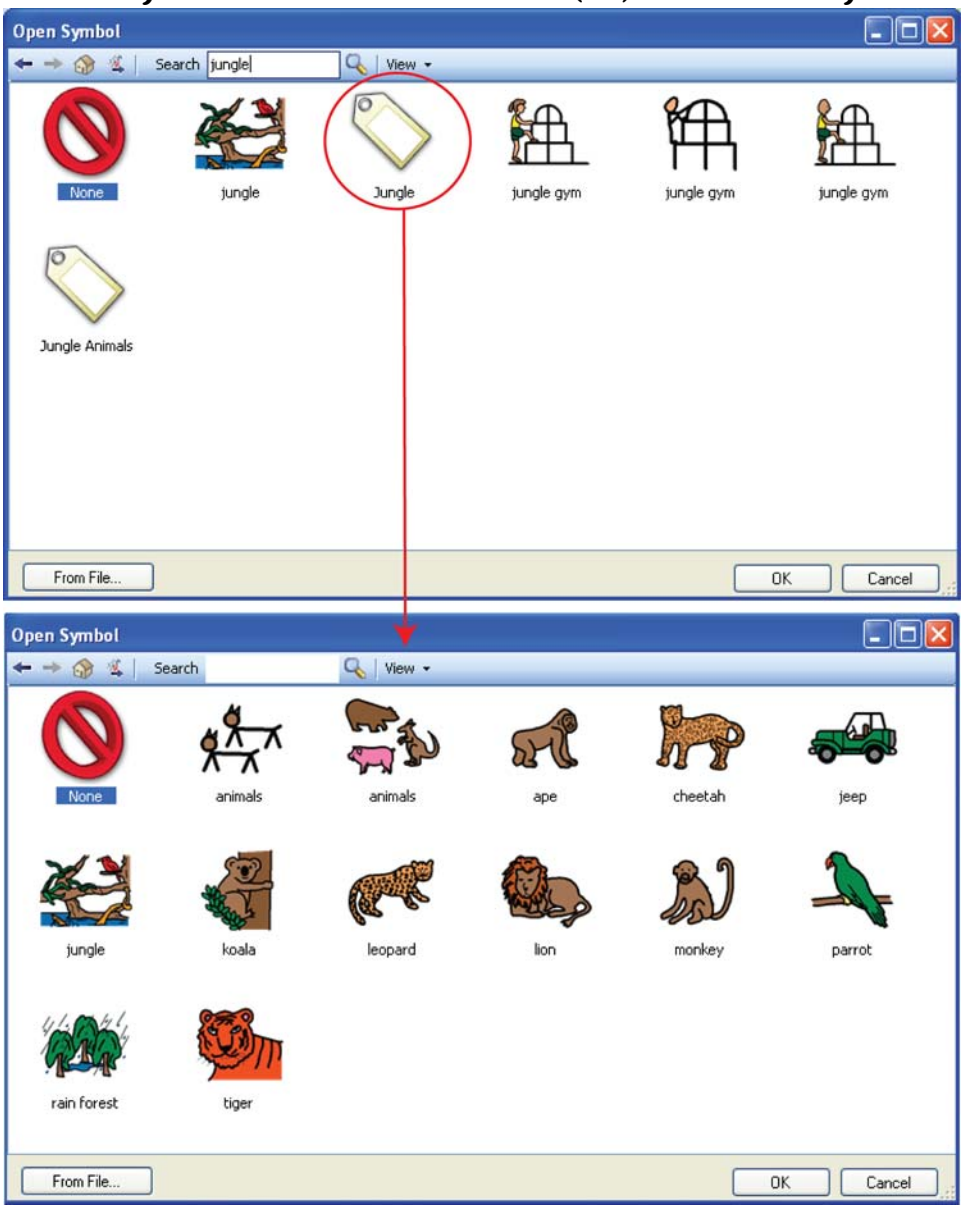
OPEN SYMBOL WINDOW (WITH SEARCH TEXT BOX AND SEARCH BUTTON INDICATED)



The software will return all symbols with labels that match your search criteria. It will also return all tags and categories that match your search criteria.

For example, if you are searching for jungle animals, entering "jungle" (no quotation marks) in the *Search* text box will return all symbols with the word, "jungle," in their label, as well as all tags and categories containing the word, "jungle."

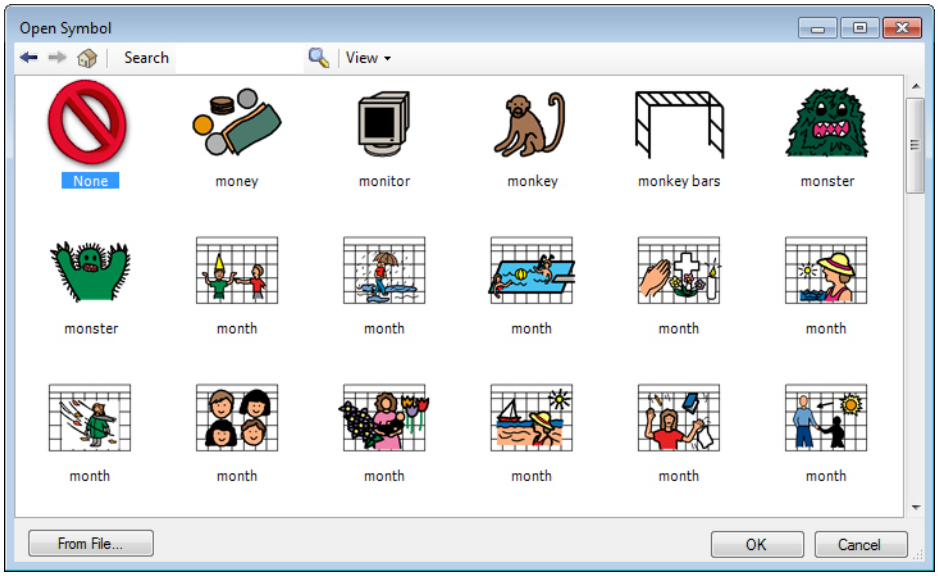
SEARCH FOR "JUNGLE" SHOWING RESULTS OF SEARCH (TOP) & SYMBOLS WITH "JUNGLE" TAG (BOTTOM)



You can use the following shortcuts to help you find symbols that match your search criteria:

- Use the asterisk [*] as a generic "wildcard" character. For example, entering "**mon***" in the *Search* text box will search from the beginning of the word and find all symbols whose labels begin with the letters "mon." Similarly, entering "***ten**" will search at the end of the word and find symbols whose labels end in "ten."

WILDCARD SEARCH (EXAMPLE OF SEARCH FROM BEGINNING OF WORD USING "MON*")



- Use quotation marks ["] at the beginning and end of a word to return a whole word match. (For example, entering "dog" (using quotation marks) in the *Search* text box will return all symbols in which "dog" is an exact match - it will only return symbols with the exact label, "dog.")
- Use an apostrophe [’] at the beginning and end of a word to return symbols whose name contains the word. (For example, entering ’dog’ (using apostrophes) in the *Search* text box will return symbols whose labels include the word, "dog," including "dog," "dog bed," "dry dog food," etc.

Use a Digital Picture as a Symbol

1. Select the **From File** button on the *Open Symbol* window. A browser will open.
2. Navigate through the layers of folders on your computer (or file sharing device), to find the picture you want to use.

> **NOTE**
> The *From File* option on the *Open Symbol* window lets you quickly and easily find a digital picture to use as a symbol. However, the picture you choose will not be saved as a symbol in your My Symbols library. If you want to store the picture in your My Symbols library for future use, you must use the *Symbol Manager* to import the picture (see *The Symbol Manager*.)

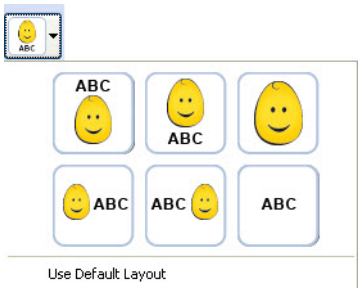
3. Select the picture you want to use.
4. Select the **Open** button on the *Open Symbol* window (or double-click on the symbol). The *Open Symbol* window will close, and the symbol will be placed.

Select the Symbol/Label Layout

You can choose from six different layouts for the symbol and its label.

1. Select the Layout button in the *SmartSym* Properties panel.

SmartSym Layout Options



2. Select a layout style from the available options

Justify the Label Text

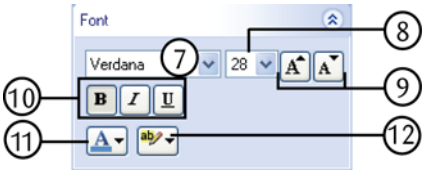
Select the Horizontal Text Justification button to set the label's horizontal justification (left, center or right.) Select the Vertical Text Justification button to set the vertical justification of the label (top, center, or bottom.)

Edit the Symbol Label Font

Note

If you have formatted the label text using the *Rich Text Editor*, all of your formatting will be overridden when you use the controls in the *Font* Properties group. If you wish to preserve the formatting that you have done using the *Rich Text Editor*, do not use the controls in the *Font* Properties group.

SmartSym Label Font Properties .



7 Font drop-down list

8 Font size button

9 Font size adjustment buttons

10 Font style options buttons

11 Text color button

12 Text background color button

NOTE
You may also use the *Rich Text Editor* to edit the label font. All of the options available in the *Font* Properties group are also available from the *Rich Text Editor*. (See ***Using the Rich Text Editor***.)

Change the Font

1. Select a font family from the Font drop-down list.
2. Select the Font size button to select a font size, or select the increase or decrease font size adjustment button.

NOTE
The font size will not change if you resize the symbol.

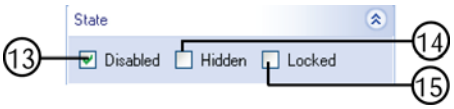
3. Select the Bold, Italic, or Underline button to change the font style.
4. Set the color of the font:
   a. Select the Font color button.
   b. Select a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.
5. Select a color (if desired) for the font text background.
   a. Select the Text background color button.
   b. Select a color from the swatches on the *Theme Colors* or *Standard Colors* palettes.

NOTE
You may also create a custom color for the font or for the font text background. When defining either color, select More Colors and define a custom color.

Set the Symbol State

The symbol's "state" refers to the properties of the symbol (disabled or hidden) when the software is in Preview or Play modes. (A symbol that you have locked will not be selectable by a normal mouse click in any mode.)

SMARTSYM STATE PROPERTIES



13 ***Disabled*** **check box**

14 ***Hidden*** **check box**

15 ***Locked*** **check box**

Disable the Symbol

A "disabled" symbol will appear grayed out and will not be selectable in Preview or Play modes.

To disable the symbol, select the **Disabled** check box.

Hide the Symbol

You can "hide" a symbol from view. A hidden symbol will not be visible in Preview or Play modes (it will be shaded in Design mode), and no action will take place when you select the place on the page occupied by the hidden symbol in Preview or Play modes.

To hide the symbol, select the **Hidden** check box.

Lock the Symbol

A locked symbol is not selectable by left click in Design mode. This protects the symbol from being moved or otherwise edited inadvertently.

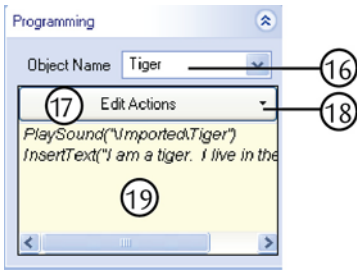
> **NOTE**
> Locking a symbol will not affect its behavior in Play or Preview mode.

- To lock the symbol, select the **Locked** check box.
- To unlock a symbol, right-click on its bounding box, and select **Unlock** from the menu.

Program the Symbol

> **NOTE**
> Symbols you have placed on standard and freeform buttons become part of the button object and cannot be programmed.

SMARTSYM PROGRAMMING PROPERTIES



16 ***Object Name*** **text box**

17 ***Edit Actions*** **button**

18 **Expand button**

19 Assigned actions list

Assign an Object Name to the Symbol

An object name is a unique property (different from the symbol's label) that identifies an object on a page for programming purposes. The software will automatically "name" each object that you draw on the page. For example, if you place four new symbols on a blank page, the objects will automatically be named - in the order that they have been drawn - "SmartSym," "SmartSym_1," "SmartSym_2," and SmartSym_3."

To make it easier to program actions, it is suggested that you assign unique names to the symbols you place on a page:

1. Select the *Object Name* text box or the drop-down arrow to the right of the text box. The *Object Name* dialog will open.
2. Enter a new name for the symbol in the *New Name* text box. Do not use spaces - use an underscore between words.

Assign Actions to the Symbol

You can assign actions to symbols you have placed on a group or target button, a tab control tab or pane, in a group box, or on the page itself. (Symbols you have placed on standard and freeform buttons become part of the button object and cannot be programmed.)

All actions currently assigned to the symbol will be displayed in the Assigned actions list.

NOTE
If the Assigned actions list is not open, select the Expand button (arrow) to the right of the *Edit Actions* button.

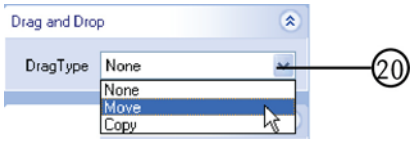
1. Select the **Edit Actions** button. The *Action Editor* will open.
2. Use the *Action Editor* to assign actions to the symbol.

REFERENCE
See *Working with Actions* for information on adding and editing actions.

NOTE
In order for the actions you have programmed on the symbol to work, the symbol must be "selectable" - you must designate its selection type as "Rectangle" or "Content." (See *Assign Miscellaneous Properties to the Symbol*.)

Select the Drag Type for the Symbol

SMARTSYM DRAG-AND-DROP PROPERTIES



20 *Drag Type* drop-down list

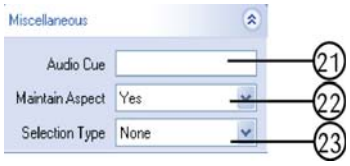
Use the *Drag Type* drop-down list to select whether the symbol can be moved to a new position:

- Select **None** if you want the symbol to remain stationary (not "movable") when it is selected.
- Select **Move** if you want to enable the symbol to be moved to a new position.
- Select **Copy** if you want the symbol to duplicate itself when it is moved. (The original symbol will remain in place, and an identical copy of the symbol will be moved to the new position.)

REFERENCE
Movable objects allow you to create dynamic activities. They can be dragged to other positions on the page to trigger a spoken message or other action(s). See *Working with Movable Objects*.

Assign Miscellaneous Properties to the Symbol

SMARTSYM MISCELLANEOUS PROPERTIES



21 *Audio Cue* text box

22 *Maintain Aspect* drop-down list

23 *Selection Type* drop-down list

NOTE
The miscellaneous properties you assign to the symbol will be enabled in Preview or Play modes.

Select an Audio Cue for the Symbol

An audio cue is a short message that is played through the computer's speakers to identify an object when the cursor (or scanning highlight) moves over the object.

NOTE
The *Speak Audio Cue* check box (under File Menu > Setup and Options > Access Method > General) must be selected to enable audio cues.

NOTE
Audio cues are supported by all selection methods except Touch Enter.

1. Select the **Audio Cue** text box.
2. Enter a new audio cue (or edit the current audio cue - normally the symbol label).

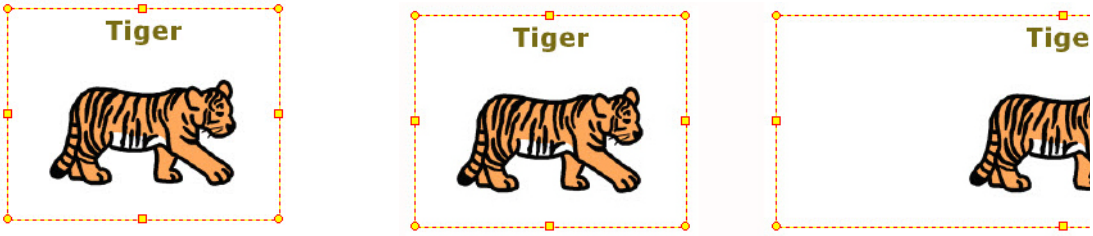
Maintain the Symbol's Aspect When it is Resized

Use the *Maintain Aspect* drop-down list to select scaling options when the symbol is resized:

NOTE
The font size of the symbol label will not change if you resize the symbol. Use the controls in the *Font* Properties group to resize the label font.

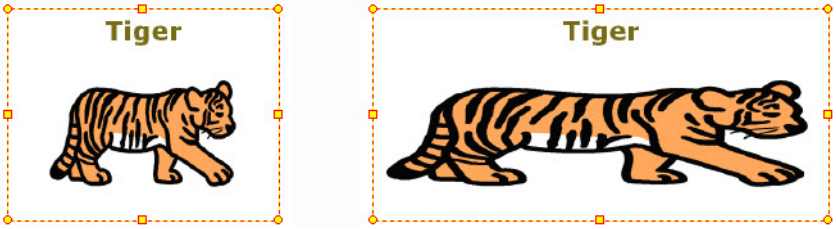
- Select **Yes** to maintain the symbol's scale.

INITIAL SMARTSYM RESIZED SMARTSYM - MAINTAIN ASPECT (YES)



- Select **No** to allow the symbol to stretch.

RESIZED SMARTSYM - MAINTAIN ASPECT (NO)



Designate the Selection Type

- A symbol whose selection type is "None" will appear on the page in Preview and Play modes, but it cannot be selected. To make the symbol not selectable, select **None** from the *Selection Type* drop-down list.

> **NOTE**
> If you have used a symbol as the page background, it is a good idea to set the *Selection Type* to *None* so that it is not selectable.

- Select **Rectangle** from the *Selection Type* drop-down list if you want to include the entire bounding box as the selection area. (In the illustration above, the selection area would be the area inside the dashed lines.)
- Select **Content** from the *Selection Type* drop-down list to confine the selection area to the symbol itself. (In the illustration above, the selection area would be the tiger symbol only.)

The Symbol Editor

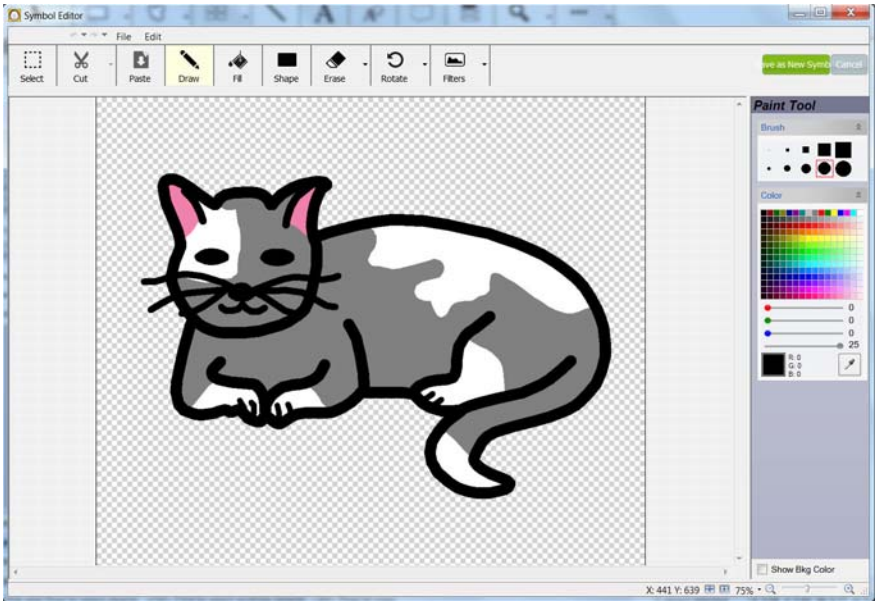
Use the tools in the *Symbol Editor* to make any symbol completely your own. You can change a symbol's color or add a special color filter (like sepia or black and white). You can erase parts of the symbol, use the paint tool to draw on the symbol, delete or paste symbol details, or change the symbol's orientation. Any symbol can be customized, whether it is an image from the symbol library or a digital picture.

Note
When you edit a symbol, you create a new custom symbol. The original symbol will remain unchanged and it will still be available in the symbol library.

Open the Symbol Editor

The *Symbol Editor* is accessed from the *SmartSym* Properties panel.

1. On the page you are customizing, select the symbol you want to edit.
2. Select the **Edit Image** button. The *Symbol Editor* will open.

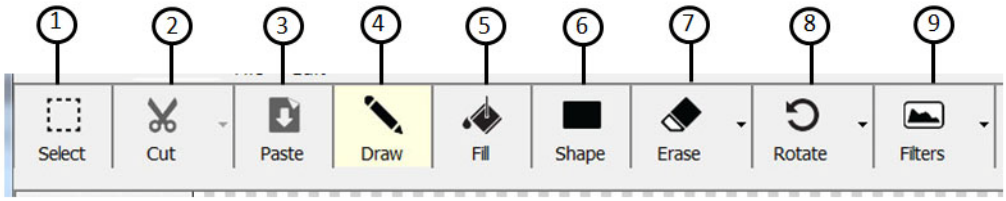


Shortcut
You can also open the *Symbol Editor* by right-clicking on the symbol and then selecting Edit in Symbol Editor.

The Symbol Editor Toolbar

The toolbar at the top of the *Symbol Manager* contains all the tools you need to edit a symbol. The options in the Tool panel on the right side of the *Symbol Editor* window will change to support the tool that is selected.

Symbol Editor Toolbar



1	**Select button**	Select an area of the symbol.
2	**Cut button**	Use the *Cut* tool to remove a selected area of the symbol and add it to the clipboard. Use the *Copy* tool to add a copy of the selected area to the clipboard.
3	**Paste Button**	Paste objects from the clipboard to the symbol.
4	**Draw button**	Use the mouse to draw freeform lines and shapes on the symbol.
5	**Fill button**	Fill a selected area with a new color.
6	**Shape button**	Add a shape to the symbol.
	Erase button	Use the *Erase* tool to delete pixels wherever you draw with the mouse. Use the *Erase Fill* tool to delete every pixel that contains the same color as the pixel you selected. Use the *Erase Shape* tool to draw a shape on the symbol; every pixel within the borders of the shape will be deleted.
	Rotate button	Change the symbol's orientation by flipping it horiontally, vertically, to the left or to the right.
	Filters button	Add a color filter (inverse, gray, sepia, black and white, or polaroid) to the symbol.

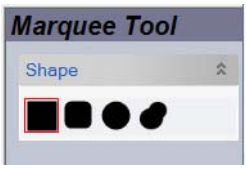
Customize A Symbol

Use the *Symbol Editor* tool bar and the options in the Tool panel to customize the selected symbol.

Cut, Copy and Paste Areas Within the Symbol

1. To cut or copy an area of the symbol, select the **Select** button in the toolbar. Then use the options in the *Marquee Tool* panel to choose the shape of the area you will select.

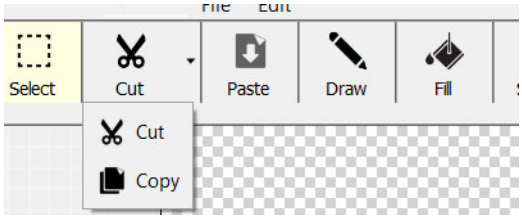
MARQUEE TOOL PANEL



NOTE
If you choose the rounded box as your shape in the *Marquee Tool* panel, you can use the *Radius* option to adjust the curve of the box's corners.

2. Select an area within the symbol and drag out a box around the area you want to cut/copy.
3. Select the arrow to the right of the *Cut* button in the toolbar. Then select **Cut** or **Copy** from the drop-down list.

CUT DROP-DOWN LIST



4. To paste from the clipboard, select the **Paste** button and then select an area within the symbol. The last item that was cut or copied to the clipboard will be placed in the *Symbol Editor*. Use the mouse to drag it into the appropriate position.

Draw a Freeform Shape in a Symbol

1. Select the **Draw** button in the toolbar. Then use the options in the *Paint Tool* panel to customize the shape, thickness and color of the line you will draw.

PAINT TOOL PANELD

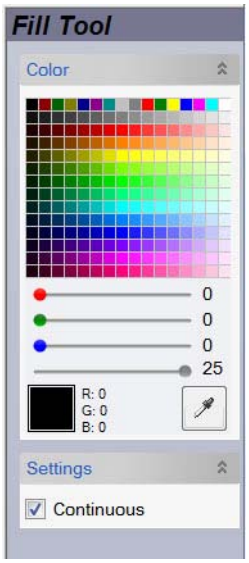
> **NOTE**
> Use the eyedropper tool to extract a color from the symbol and use it as your drawing color. Select the Eyedropper button and then select an area within the symbol. The small box in the lower left corner of the *Paint Tool* Panel will fill with the selected color.

2. Use the mouse to draw on or around the symbol. You can continue to use the *Paint Tool* panel options to customize the lines you are drawing.

Fill a Symbol with Color

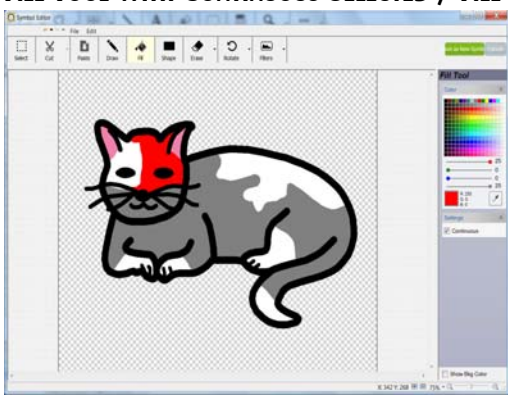
1. Select the **Fill** tool in the toolbar. Use the options in the *Fill Tool* panel to choose a color.

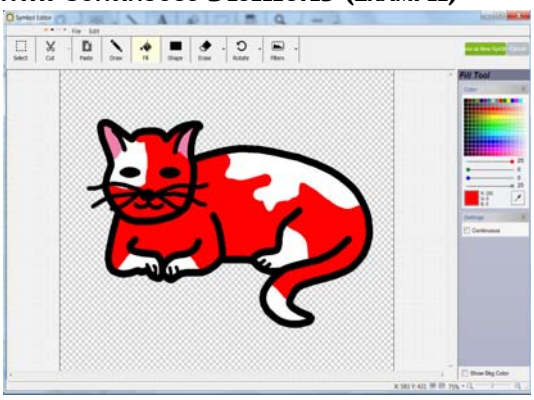
Fill Tool Panel



> **Note**
> Select the Continuous check box if you want to add color only to a selected area within a border. If you deselect the Continuous check box, the color will be added to every pixel that shares the same color as the pixel you select, regardless of bounding.

Fill Tool With Continuous Selected / Fill Tool With Continuous Deselected (Example)





2. Select an area within the symbol. Any pixels that contain the same color as the pixel you select will be filled with the new color.

Add a Shape to a Symbol

1. Select the **Shape** tool in the toolbar. Use the options in the *Shape Tool* panel to choose the shape and color of the shape you want to draw.

SHAPE TOOL PANEL

NOTE
If you choose the rounded box as your shape in the *Shape Tool* panel, you can use the *Radius* option to adjust the curve of the box's corners.

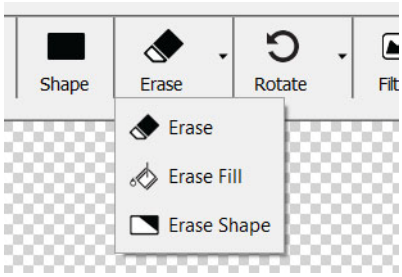
NOTE
Use the eyedropper tool to extract a color from the symbol and use it to fill your new shape. Select the Eyedropper button and then select an area within the symbol. The small box in the lower left corner of the *Shape Tool* Panel will fill with the selected color.

2. Select an area in the symbol and draw out the shape you want.

Erase Part of a Symbol

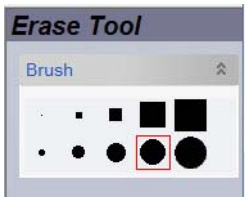
1. Select the arrow to the right of the *Erase* button in the toolbar. Then select an option from the drop-down list.

Erase Drop-Down List



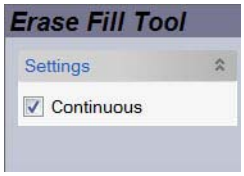
- If you select *Erase*, use the options in the *Erase Tool* Panel to select the shape and width of the eraser.

Erase Tool Panel

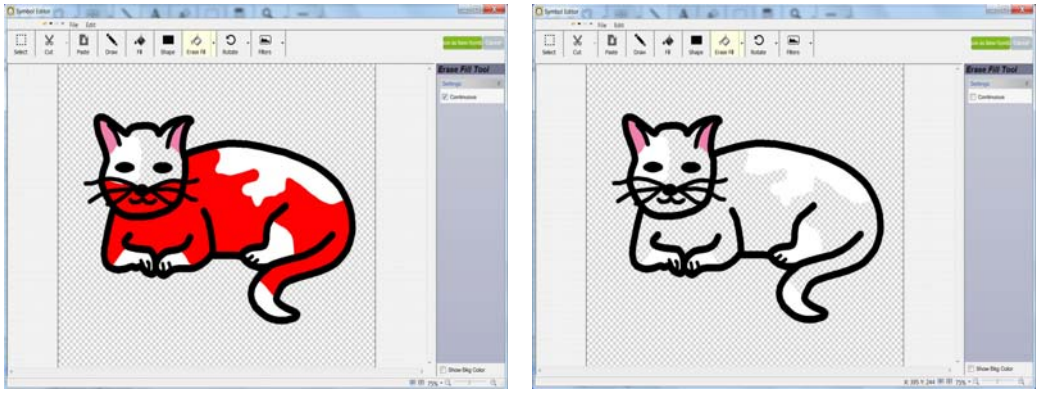


- If you select *Erase Fill*, use the *Erase Fill Tool* Panel to specify whether the tool will be affected by symbol boundaries. Select the **Continuous** check box if you want to erase only a selected area within a border. If you deselect the **Continuous** check box, the tool will delete every pixel that shares the same color as the pixel you select.

Erase Fill Tool Panel

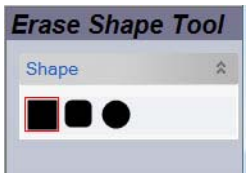


Erase Fill Tool With Continuous Selected / Erase Fill Tool With Continuous Deselected (Example)



- If you select *Erase Shape*, use the options in the *Erase Shape Tool* Panel to select the shape of the area you want to erase.

Erase Shape Tool Panel



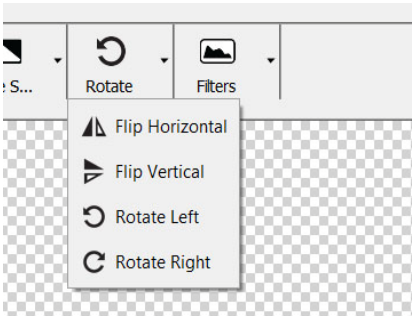
Note
If you choose the rounded box as your shape in the *Erase Shape Tool* panel, you can use the *Radius* option to adjust the curve of the box's corners.

2. Select an area within the symbol and draw out a shape. When you release the mouse button, everything inside the new shape will be deleted.

Rotate a Symbol

1. Select the arrow to the right of the *Rotate* button in the toolbar. Then select an option from the drop-down list.

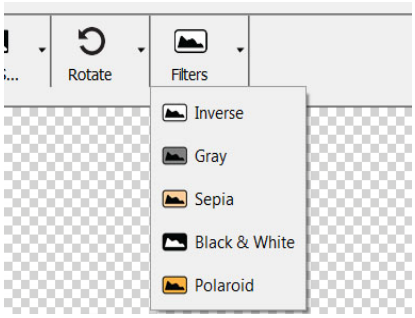
ROTATE DROP-DOWN LIST



Add a Color Filter to a Symbol

1. Select the arrow to the right of the Filters button in the toolbar. Then select an option from the drop-down list.

FILTERS DROP-DOWN LIST



Save a Customized Symbol

When you have finished editing a symbol, you can save it as a new symbol. To do this, simply select the **Save as New Symbol** button or select **File > Save as New Symbol**. The new symbol will be saved under the same name as the original symbol. The original symbol will remain unchanged and it will still be available in the symbol library.

You can also edit the properties of your new symbol, using the *Symbol Editor* to select new search parameters (such as part of speech, labels, tags, and categories) for the symbol. To do this, select **File > Save and Edit Properties** and then use the *Symbol Editor* options.

REFERENCE
For step-by-step instructions on using the *Symbol Editor*, see *Edit a Symbol*.

The Symbol Manager

Use the *Symbol Manager* to manage your symbol libraries. You can add your own personalized symbol categories, import digital pictures to save as symbols in your My Symbols library, export symbols, and edit the symbols in your My Symbols library.

You can also choose which symbol libraries to activate for your symbol searches.

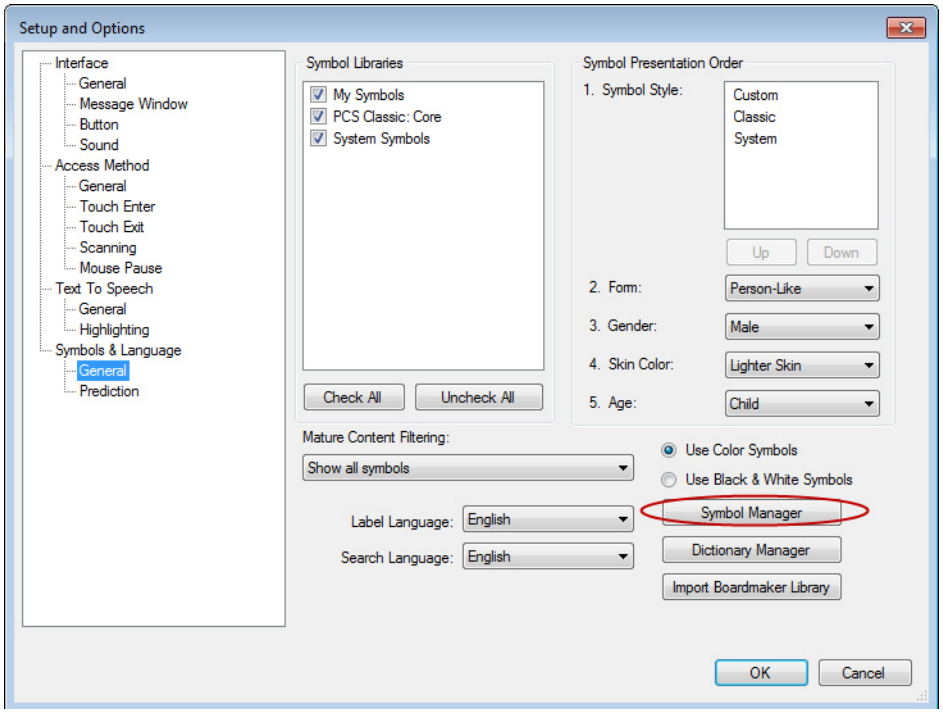
> **Note**
> The *Open Symbol* window has the same functionality as the *Symbol Manager*, however its intended purpose is to enable you to quickly find a symbol to be used on a page or a page object. You can use the *Open Symbol* window to organize your symbol libraries, but it is suggested that you use the *Symbol Manager.*

Open the Symbol Manager

The *Symbol Manager* is accessed through the File Menu.

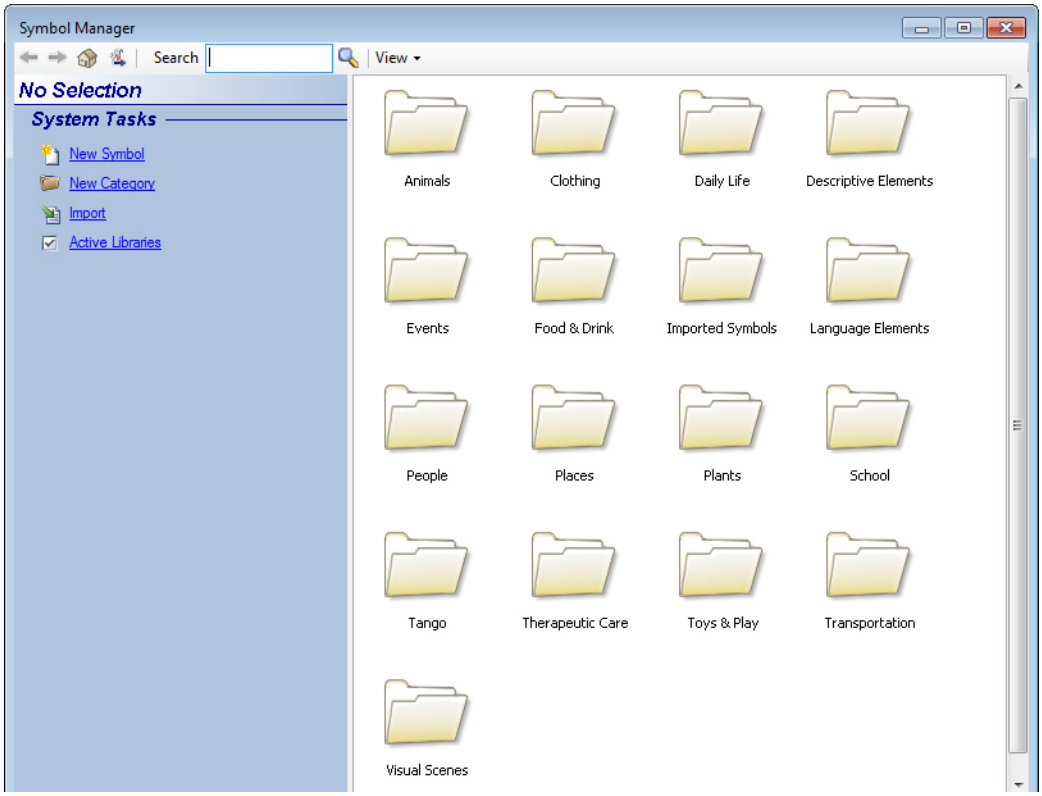
1. Select **File Menu > Setup and Options**. The *Setup and Options* dialog will open.
2. Select **Symbols and Language** from the navigation pane.

Symbol Manager Button on Setup and Options Dialog



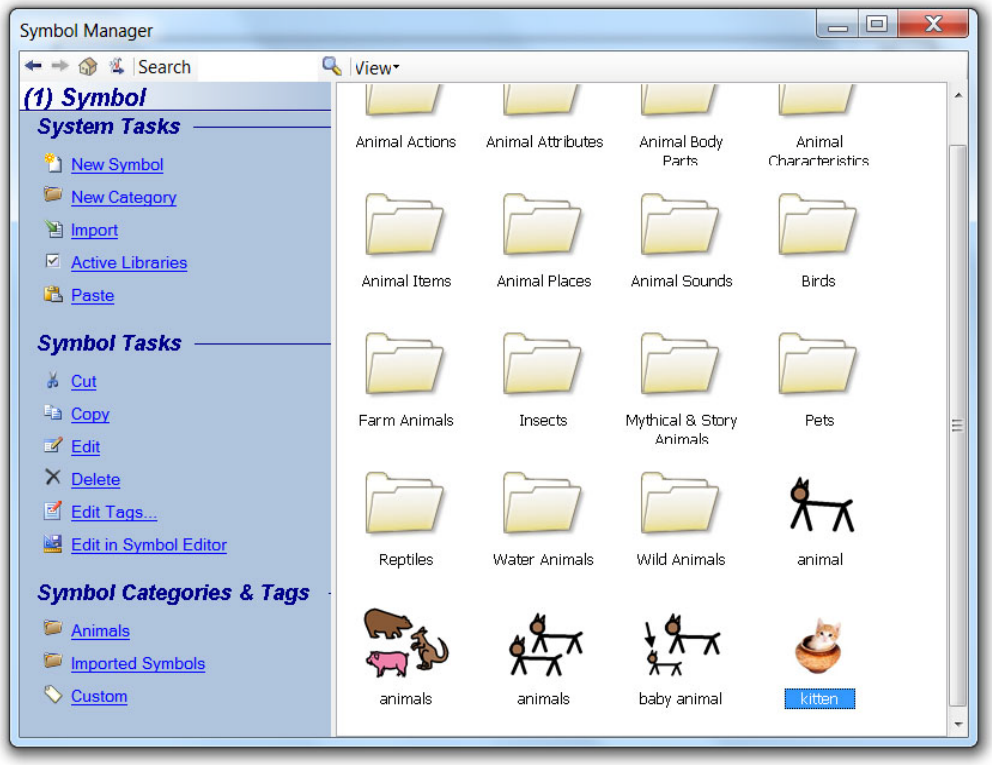
3. Select the **Symbol Manager** button. The *Symbol Manager* will open.

SYMBOL MANAGER (TOP LEVEL)



NOTE
If the *Tasks* panel is not open, select Toggle Tasks Panel [ ] to open it.

SYMBOL MANAGER (WITH IMPORTED SYMBOL SELECTED)



NOTE
The tasks available in the Tasks panel will vary depending on whether a folder, symbol, or imported symbol is selected.

Add a New Symbol

You can add (import) a digital picture into the *Symbol Manager* using either the *New Symbol* task or the *Import* task under *System Tasks.* The picture you add will be imported as a SmartSym and added to your My Symbols library in the symbol category you choose.

NOTE
You can also drag a digital picture from Windows Explorer directly into a folder in the *Symbol Manager.*

NOTE
You can also copy symbols and paste them into different category folders. You can cut and paste and delete only symbols in your Imported Symbols library.

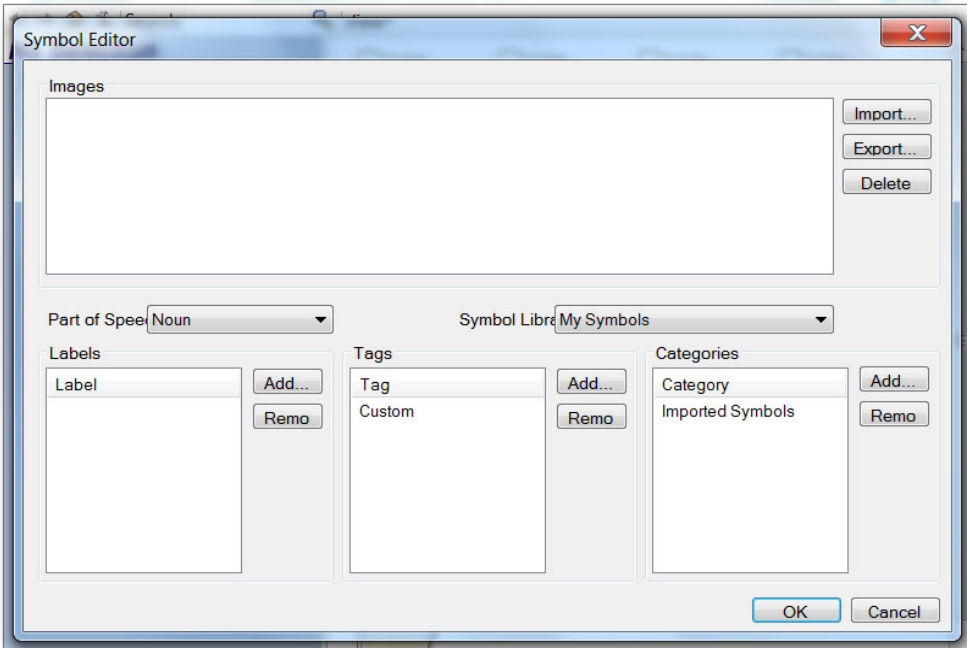
Add a New Symbol Using the New Symbol Task

Using the *New Symbol* task to add a symbol will automatically open the *Symbol Editor* so you

can immediately select a label(s), tag(s), and category(ies) for the new symbol.

1. Open the *Symbol Manager*. (See ***Open the Symbol Manager***.)
2. Select the folder that will contain the new symbol. (If necessary, navigate through the levels of folders until you find the folder you want.)
3. Select **New Symbol** (under *System Tasks)*. The *Symbol Editor* will open.

SYMBOL EDITOR



4. (Optional) If you are adding a picture from a file sharing device (USB flash drive or external hard drive), connect it to a USB port on your computer.
5. Select the **Import** button. A browser will open.
6. Navigate through the levels of folders to find the folder that contains the picture you want to import.
7. Select the picture you want to import.
8. Select the **Open** button. The browser will close, and the selected picture will appear under *Images* in the *Symbol Editor*.

NOTE

(Optional) To make the new symbol easier to find in your searches, select a part of speech designation, label(s), tag(s), and category(ies) for the symbol. (See ***Edit a Symbol*** for information on adding and editing labels, tags, and categories.) By default the new symbol is tagged with Custom and Imported Symbols tags.

9. Select **OK** to close the *Symbol Editor.* The imported picture will be added as a symbol to the selected categories in your My Symbols library.

Add a New Symbol Using the Import Option

You can also use the *Import* option to import a digital picture. This option is quicker than the *New Symbol* option in that the symbol is imported directly into your My Symbols library - if you want to add labels, tags, and categories to the new symbol, you can do so later using the Edit option (under Symbol Tasks) in the Tasks panel.

1. Open the *Symbol Manager* (and the Tasks panel). (See ***Open the Symbol Manager***.)
2. In the *Symbol Manager*, select the folder for the symbol category that will contain the symbol. (If necessary, navigate through the levels of folders until you find the folder you want.)
3. (Optional) If you are importing a picture from a file sharing device (USB flash drive or external hard drive), connect it to a USB port on your computer.
4. Select **Import** (under *System Tasks)*. A file browser will open.
5. Navigate through the levels of folders to find the folder that contains the picture you want to import.
6. Select the picture you want to import.
7. Select the **Open** button. The file browser will close, and the picture will be added as a symbol to the selected category in your My Symbols library.

> **NOTE**
> Use the controls in the *Symbol Editor* to select a label(s), tag(s), and category(ies) for the new symbol. (See *Edit a Symbol*.)

Add a New Symbol Category

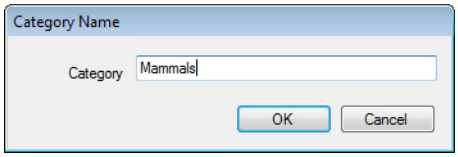
You can create a new category in the *Symbol Manager*. You can import your own digital pictures into the new category folder.

1. Open the *Symbol Manager*. (See ***Open the Symbol Manager***.)

> **NOTE**
> If you want to add a new subcategory to an existing category, first double-click to open the "parent" folder. (For example, if you want to add the subcategory, "Mammals" to the "Animals" category, you would open the "Animals" folder before performing Step 2 below.)

2. Select **New Category** (under *System Tasks*). The *Category Name* dialog will open.

CATEGORY NAME DIALOG



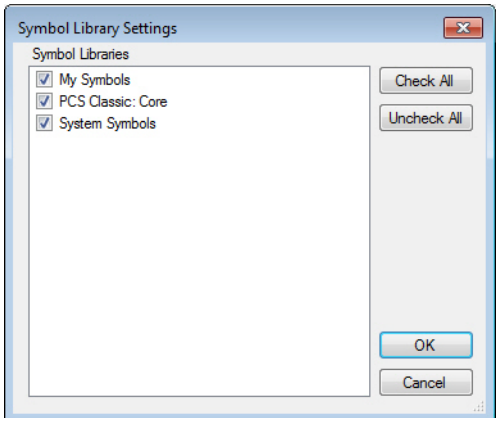
3. Enter a name for the new symbol category in the *Category* text box. Then select the **OK** button. A folder for your new category will appear in the *Symbol Manager*.
4. Import the digital pictures you want to include in your new symbol category (see ***Add a New Symbol***).

Activate Symbol Sets

Use the *Symbol Manager* to select the symbol libraries available for your symbol searches.

1. Open the *Symbol Manager*. (See ***Open the Symbol Manager***.)
2. Select **Active Libraries** (under *System Tasks*). The *Symbol Libraries Settings* dialog will open.

SYMBOL LIBRARIES SETTINGS DIALOG



3. Select the libraries you want to use in symbol searches (or clear the libraries you don't want to use).
4. Select the **OK** button to close the *Symbol Libraries Settings* dialog.

Edit a Symbol

Use the *Symbol Editor* to assign or change the part of speech designation, label(s), tags(s), and category(ies) of any symbol that you have imported into your My Symbols library.

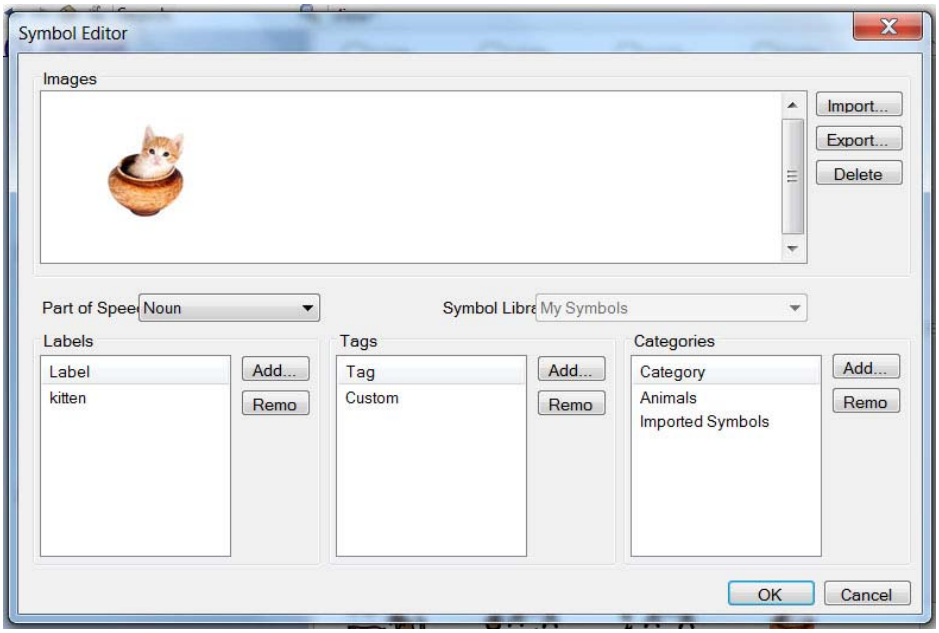
NOTE
You cannot change the part of speech, edit the image, delete tags, categories, or labels from symbols in any symbol libraries other than your My Symbols library. You can add labels, tags, and categories to symbols in any symbol libraries.

NOTE
You can only edit the symbols that you have imported into your My Symbols library. You may not edit symbols in the other symbol libraries.

Open the Symbol Editor

1. Open the *Symbol Manager* (and the Tasks panel). (See ***Open the Symbol Manager***.)
2. Navigate through the folders, and select the symbol that you want to edit.
3. Select **Edit** (under *Symbol Tasks)*. The *Symbol Editor* will open.

SYMBOL EDITOR (WITH IMPORTED SYMBOL SELECTED)



NOTE
Symbols can have multiple labels, tags, and categories, but only one part of speech can be assigned to each symbol.

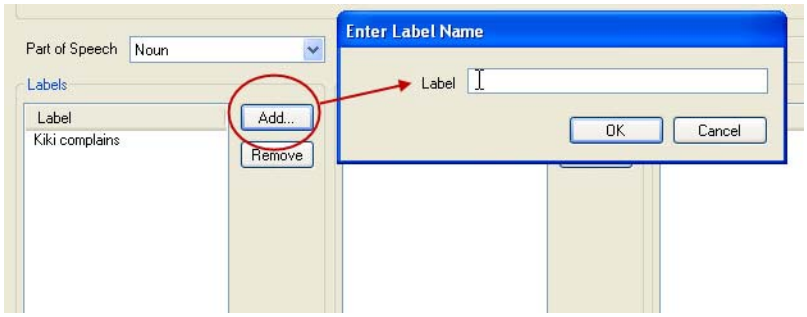
Change the Part of Speech for the Symbol

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. Use the *Part of Speech* drop-down list to select (or change) the part of speech that the symbol represents.

Add a New Label to the Symbol

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. Select **Add** in the *Label* group box. The *Enter Label Name* dialog will open.

ENTER LABEL NAME DIALOG BOX

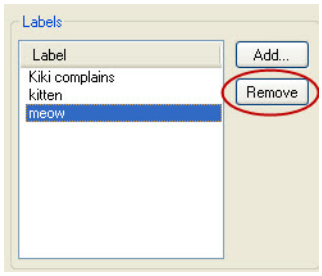


3. Enter a new label name in the *Label* text field. Then select **OK**.
4. Repeat steps 2 and 3 to add multiple labels to the symbol.

Remove a Label from the Symbol

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. Select the label that you want to remove in the *Label* group box.

REMOVE LABEL



NOTE
Hold down the Ctrl key on your keyboard to select multiple labels.

3. Select **Remove**.

Edit the Symbol Tags Using the Symbol Editor

Symbol "tags" group symbols with similar characteristics, making it easier to search for a specific symbol. By adding tags to a symbol you import, you make the symbol available for a wider variety of search options.

NOTE
If you don't need to edit the symbol's part of speech, label, or categories - you can quickly edit only the symbol's tags using the *Edit Tags* dialog. (See *Edit the Symbol Tags Using the Edit Tags Dialog*.)

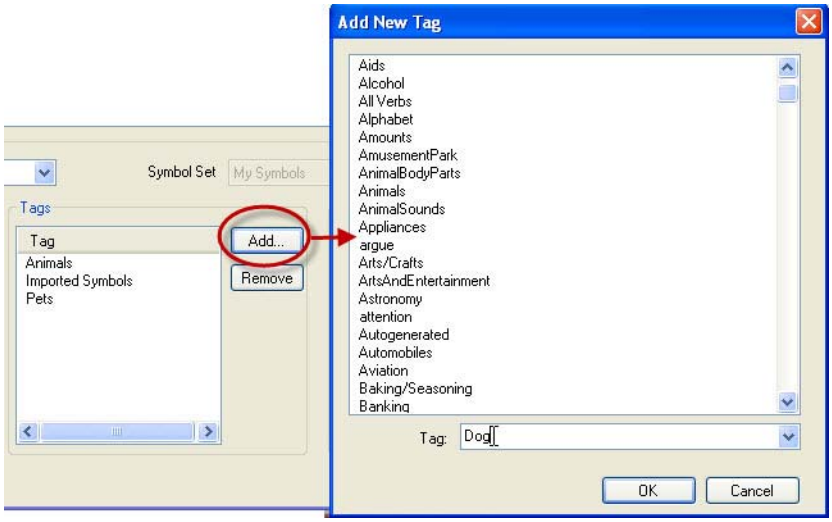
SHORTCUT

You can apply tags to multiple symbols at the same time. Ctrl +click to select multiple symbols, then select Edit Shared Tags under *Symbol Tasks*).

Add a New Tag

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. Select **Add** in the *Tag* group box. The *Add New Tag* dialog will open.

TAG GROUP BOX WITH ADD NEW TAG MENU OPEN



3. Select a tag from the *Add New Tag* dialog, or enter a new tag in the *Tag* text box.
4. Select **OK** to close the *Add a New Tag* dialog.
5. Repeat steps 2 - 4 to add multiple tags to the symbol.

Remove a Tag

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. Select the tag in the *Tag* group box that you want to remove from the symbol.

NOTE

Hold down the Ctrl key on your keyboard to select multiple tags.

3. Select **Remove**.

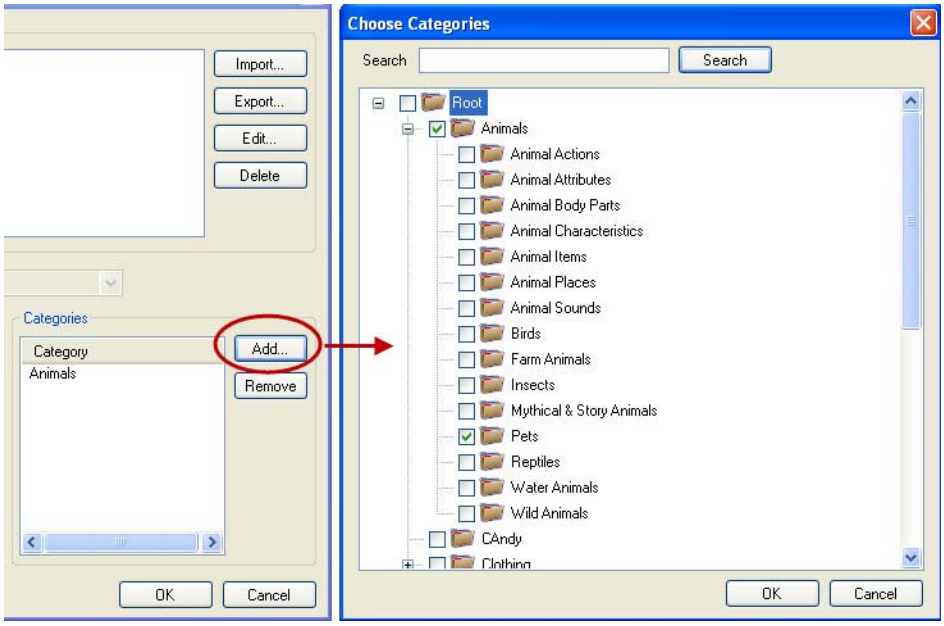
Edit the Symbol Categories

Add a New Category

1. Open the Symbol Editor. See ***Open the Symbol Editor***.

2. Select **Add** in the *Categories* group box. The *Choose Categories* dialog will open, and folders for all the available symbol categories in your active symbol libraries will be displayed. (If necessary, scroll to look through all the available categories.)

CHOOSE CATEGORIES DIALOG



- Select the expansion box [+] to the left of a category to expand the folder to view its subcategory folders.
- You can also use the *Search* text box to find a specific category.

3. Select the check box(es) to the left of the categories you want to add.
4. Select **OK** to close the *Choose Categories* dialog.

Remove a Category

1. Open the Symbol Editor. See ***Open the Symbol Editor***.
2. In the viewport of the *Categories* group box, select the category that you want to remove from the symbol.

> **NOTE**
> Hold down the Ctrl key on your keyboard to select multiple categories.

3. Select the **Remove** button.
4. When you are done editing the symbol, select **OK** to close the *Symbol Editor*.

Edit the Symbol Tags Using the Edit Tags Dialog

"Tags" enable you to group symbols with similar characteristics, so that it's much easier to

search for a specific symbol.

You can quickly add, edit, or remove an imported symbol's tags using the *Edit Tags* dialog.

> **NOTE**
> If you also need to edit the symbol's part of speech, label(s), or category(ies), you should use the *Symbol Editor*. (See ***Edit the Symbol Tags Using the Symbol Editor***.)

Open the Edit Tags Dialog

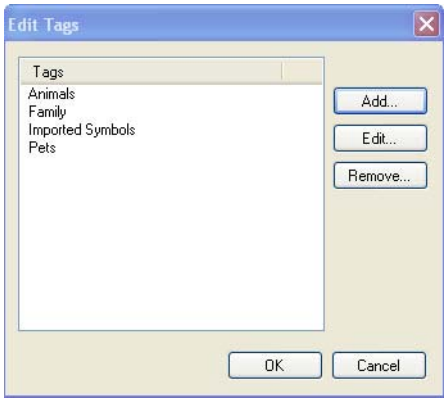
1. Open the *Symbol Manager* (and the Tasks panel). (See ***Open the Symbol Manager***.)
2. Navigate through the folders, and select the symbol whose tags you want to edit.

> **NOTE**
> You can only edit tags for symbols that you have imported into your My Symbols library.

3. Select **Edit Tags** (under *Symbol Tasks*). The *Edit Tags* dialog will open.

> **NOTE**
> If you have selected multiple symbols, select **Edit Shared Tags** to open the *Edit Shared Tags* dialog.

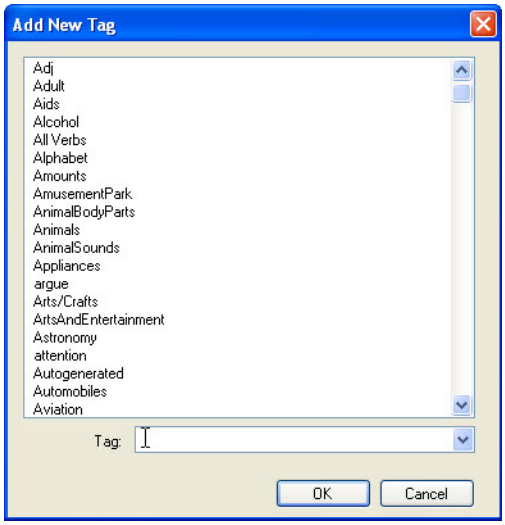
EDIT TAGS DIALOG



Add a New Tag

1. Open the *Edit Tags* Dialog. (See ***Open the Edit Tags Dialog***.)
2. Select **Add** from the *Edit Tags* dialog. The *Add New Tag* dialog will open.

ADD NEW TAG DIALOG



3. Select a tag from the viewport, or enter a new tag in the *Tag* text box.
4. Select the **OK** button to close the *Add New Tag* dialog.
5. Repeat steps 2 - 4 to add multiple tags to the symbol.

Edit a Tag

1. Open the *Edit Tags* Dialog. (See ***Open the Edit Tags Dialog***.)
2. Select the tag that you want to edit from the *Edit Tags* dialog.
3. Select **Edit**. The *Add New Tag* dialog will open. The tag you have selected will be displayed in the *Tag* text box.
4. Enter a new tag in the *Tag* text box, or select a tag from the list. The tag displayed in the *Tag* text box will be replaced with the new tag.
5. Repeat steps 2 - 4 to edit additional tags.

Remove a Tag

1. Open the *Edit Tags* Dialog. (See ***Open the Edit Tags Dialog***.)
2. Select the tag that you want to remove from the *Edit Tags* dialog.

> **NOTE**
> Hold down the Ctrl key on your keyboard to select multiple tags.

3. Select **Remove** from the *Edit Tags* dialog. A confirmation dialog will open. Select **Yes**. The tag will be removed from the symbol.

When you have finished editing tags, select the **OK** button to close the *Edit Tags* dialog.

When you have finished working with symbols, select Close [ ] to close the *Symbol Manager*.

10 Working with Gadgets

A gadget is a pre-programmed object or collection of objects that enable you to quickly construct and enhance your own interactive activities. Using gadgets, you can make your activities more interactive without having to program each object from scratch.

Gadgets also provide you with greater flexibility than templates. With templates, the page has already been designed for you, which is helpful if you want to use a particular design. However, if you want the freedom to move objects around and create your own design, gadgets give you that flexibility. Because gadgets are pre-programmed, you can add them and move them anywhere on a page.

While gadgets have already been programmed for you, some gadgets require you to set a parameter so that the action can be performed properly. For example, if you add the Open Page Button gadget, you will need to set the pageName parameter in order to define the page that should be opened when the user selects the button.

This chapter covers the following topics:

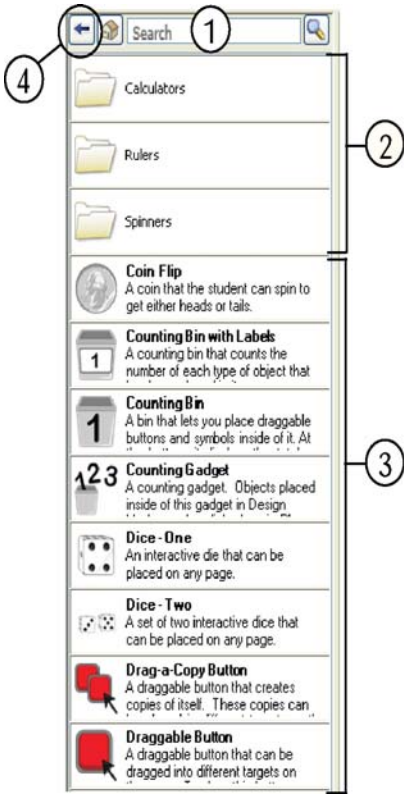
- ***Add a Gadget to your Page***
- ***Use the Gadgets***
- ***Manage your Gadgets***

ADD A GADGET TO YOUR PAGE

Open the Gadgets Panel

1. In the Navigation Pane, select the **Gadgets** button to display the *Gadgets* panel.
2. Double-click a category. The gadgets available in that category will be displayed.

GADGETS PANEL (WITH MATHEMATICS CATEGORY EXPANDED)



1	**Search Box**	To search for a gadget, enter your search criteria, and then select the Search icon [🔍].
2	**Categories**	Double-click a category folder to open it and browse the gadgets and sub categories inside.
3	**Gadgets**	To place a gadget on the page, select the gadget and drag it onto the page.
4	**Back Button**	Moves you up one level in the *Gadgets* folder.

Place a Gadget on the Page

1. Select a gadget and drag it onto the page.

> **NOTE**
> You can also select the gadget and then click anywhere on the page.

2. If necessary, resize or move the gadget.

   - To resize the gadget, select it and then move the pointer over any edge or corner until the double arrow appears. Click and drag the edge or corner until the gadget is the size and shape you want.

> **NOTE**
> Be careful when resizing gadgets. Some gadgets will not work properly when resized.

   - To move the gadget, select it and then drag it to any position in the workspace.

3. To save your changes, select **File Menu > Save Page**.

USE THE GADGETS

The gadgets in Boardmaker Studio are organized into categories. Each category contains a number of gadgets for you to use. This section describes each gadget and provides instructions on how to edit and program them to create activities.

> **NOTE**
> All gadgets are comprised of common objects, and you can edit their properties the same way you would for any object.

Basics

The basic gadgets contain the most commonly used actions in Boardmaker Studio. You can use these gadgets to create the actions for any type of activity.

Close Popup Button

This gadget will close a popup if one is open. This button is also available in the *Navigation* category.

Next Page Button

This gadget opens the next page in the activity. This button is also available in the *Navigation* category.

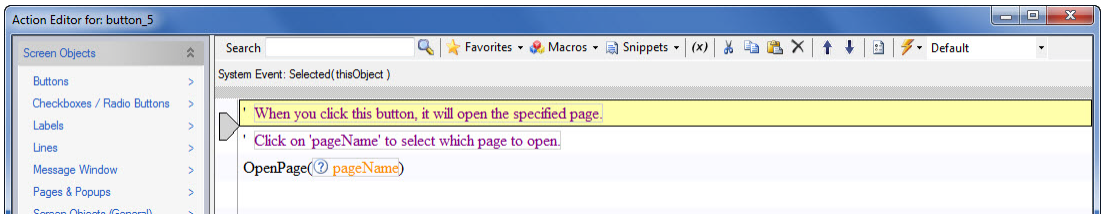
Open Page Button

This gadget opens a page in the current project. This button is also available in the *Navigation* category.

After placing the button, you must program it to choose the page that you want the button to open.

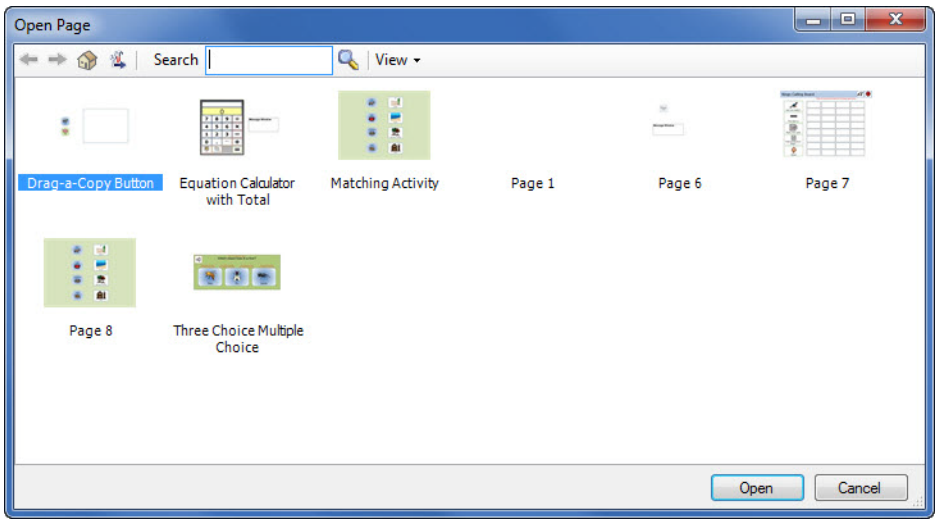
1. On the page, double-click the *Open Page Button* gadget. The *Action Editor* will open.

ACTION EDITOR



2. Select the **pageName** parameter. The *Open Page* window will appear displaying all of the available pages in your project.

Open Page Window



3. Select the page that you want to be opened when the user selects the button.
4. Select the **Open** button.
5. In the *Action Editor*, select **Save**. The page is assigned to the *Open Page* button.

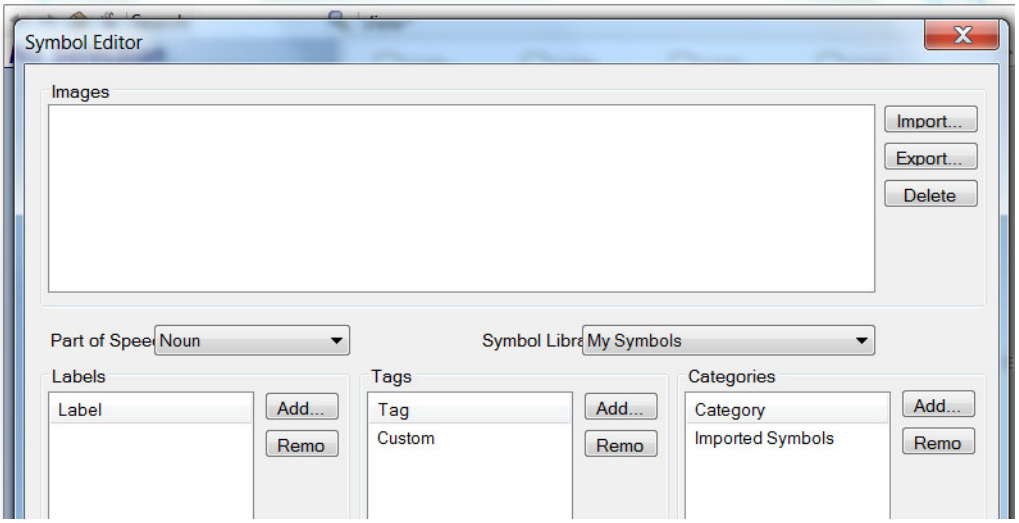
Open Popup Button

This gadget opens a page in a new popup. You can specify the page to be opened, and the alignment and behavior of the popup.

> **Note**
> This gadget is also available in the *Navigation* category.

1. On the page, double-click the **Open Popup** button. The *Action Editor* will open.

Action Editor



2. Select the **pageName** parameter. the *Open Page* window will appear, displaying all of the available pages in your project.
3. Select the page that you want to be opened in the popup. Then select **Open**.

> **NOTE**
> The popup will automatically be set to the same size as the page that you choose. If you want to make the popup smaller, then try changing the page size for the page that will open in the popup.

4. (Optional) Change any of the following parameters:
    - (**openExclusively -** This parameter controls whether or not the user will be able to control the page underneath the popup while the popup is active. By default, this parameter is set to TRUE, which means that the user will not be able to control the page underneath the popup. To enable control of the underlying page, select this parameter and select **FALSE**.
    - **xOffset -** This parameter controls how far offset the popup will be from the default location set by the *hJust* parameter. To move the popup further to the right, select this parameter and enter a value.
    - **yOffset -** This parameter controls how far offset the popup will be from the default location set by the *vJust* parameter. To move the popup further down, select this parameter and enter a value.
    - **hJust -** This parameter controls the horizontal alignment of the popup. To change the alignment, select this parameter and select an option.
    - **vJust -** This parameter controls the vertical alignment of the popup. To change the alignment, select this parameter and select an option.
5. In the *Action Editor*, select **Save**. The parameters are set for the popup.

Play Sound Button

This gadget plays a sound file.

After placing the button, you must program it to choose the sound file that you want to be played. You can choose any of the following audio formats: *.mp3*, *.m4a*, *.wma*, *.wav*.

1. On the page, double-click the *Play Sound Button* gadget. The *Action Editor* will open.
2. Select the **soundID** parameter. A browser will appear.
3. Navigate to the audio file that you want to be played when the user selects the button.
4. Select the **Open** button.
5. In the *Action Editor*, select the **Save** button. The sound file is assigned to the *Open Page* button.

Popup Video Button

This gadget opens a popup and plays a video file.

After placing the button, you must program it to choose the video file (*.wmv*) that you want to be played.

> **NOTE**
> Video files must be Windows Media Files (*.wmv)* to be valid. If your want to use a different type of video file, then you must first convert it to a Windows Media File. To find a video file conversion tool, see *www.mediaconverter.org*.

1. On the page, double-click the *Popup Video Button* gadget. The *Action Editor* will open.
2. Select the **videoID** parameter. A browser will appear.
3. Navigate to the video file that you want to be played when the user selects the button.
4. Select the **Open** button.
5. In the *Action Editor*, select the **Save** button. The video file is assigned to the *Popup Video* button.

Previous Page Button

This gadget opens the previous page in the activity.

> **NOTE**
> This button is also available in the *Navigation* category.

Print Page

This gadget prints the entire page on your default printer.

Read Symbolated Text

This gadget reads the symbolated text on the button using the text-to-speech highlight settings you have set up in the *Setup and Options* dialog.

> **NOTE**
> See *Highlighting Settings* on page 65.

Speak Label Button

This gadget reads the text on the button, using the text-to-speech highlight settings you have set up in the *Setup and Options* dialog.

> **REFERENCE**
> See Highlighting Settings.

Recording Gadget

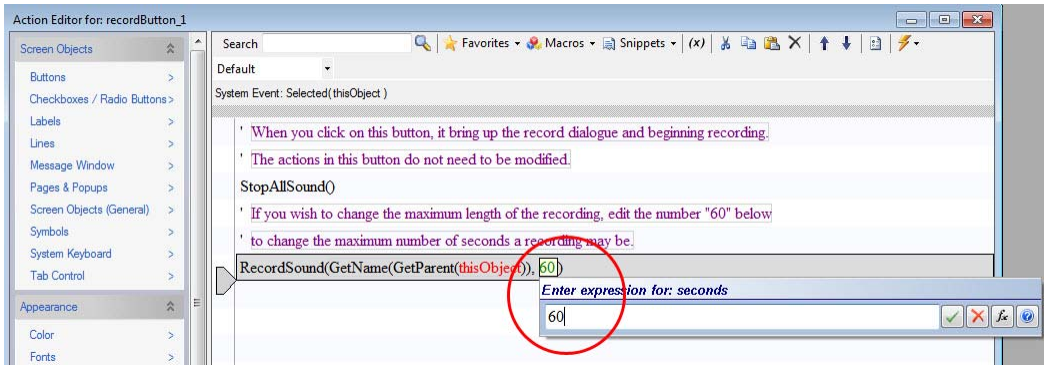
This gadget enables a student to make a recording and play it back. It contains two buttons, a Record button (circle) and a Play button (triangle). When the Record button is selected, a recording dialog appears. When the Play button is selected, the recording is played back. You can have more than one recording gadget on a page.

This gadget is also available in the *Fun Interactions* and *Question and Answers* categories.

After placing the gadget, you can change the maximum time length of the recording. (Sixty seconds is the default value.)

1. Double-click the Record gadget. The *Action Editor* will open.
2. Select the *Seconds* parameter (60). The *Expression Editor* will open.
3. In the *Expression Editor* text box, enter the number of seconds you want the maximum length of the recording to be.

ACTION EDITOR



4. Select the OK button [ ] in the *Expression Editor.*
5. In the *Action Editor,* select the ***Save*** button. The recording will stop at the maximum number of seconds you have entered.

Recordings - Clear All Button

This gadget will clear the recordings on all of the *Recording Gadgets* on the page.

> **NOTE**
> This gadget is also available in the *Fun Interactions* and *Question and Answers* categories.

Speak Label Button

This gadget speaks the label on the button.

> **NOTE**
> You can use the *Properties* panel to edit the label. For instructions, see Add/Edit the Button Content.

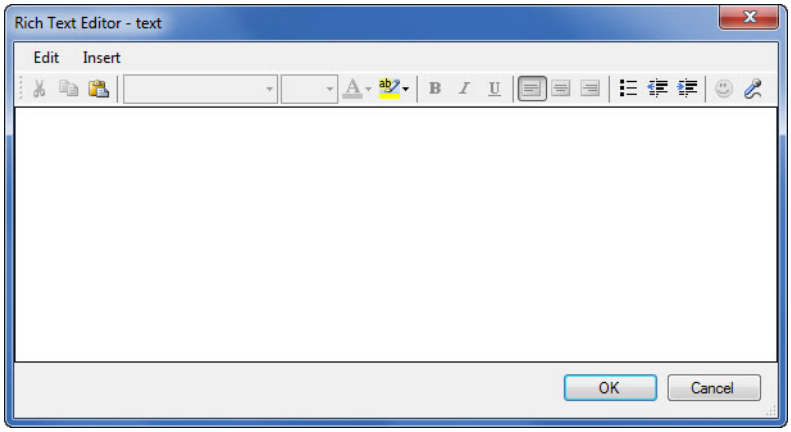
Speak Text Button

This gadget speaks the text that you enter.

After placing the button, you must program it to specify the text that you want to be spoken.

1. On the page, double-click the **Speak Text** gadget. The *Action Editor* will open.
2. Select the **text** parameter. The *Rich Text Editor* will appear.

RICH TEXT EDITOR



3. Enter the text that you want to be spoken when the user selects the button.

> **REFERENCE**
> For more information about using the *Rich Text Editor*, see *Using the Rich Text Editor*.

4. Select the **OK** button.
5. In the *Action Editor*, select the **Save** button. The text is assigned to the *Speak Text* button.

Type Label Button

This gadget sends the button label to the active message window. If there is more than one message window on the page, then the active message window will be the one in which the cursor is currently displayed. To make a message window active, select it.

> **REFERENCE**
> If there are no message windows on the page, then you must place one. For instructions on how to add message windows, see Working with Message Windows.

> **REFERENCE**
> For instructions on editing the button label, see Add/Edit the Button Content.

Type Text Button

This gadget sends the text you enter to the active message window. If there are no message windows on the page, then you must place one. After placing the button, you must also program it to specify the text that you want to be sent to the message window.

> **REFERENCE**
> For instructions on how to add message windows, see *Working with Message Windows*.

1. On the page, double-click the *Type Text* gadget. The *Action Editor* will open.
2. Select the **text** parameter. The *Rich Text Editor* will appear.
3. Enter the text that you want to be spoken when the user selects the button.

> **REFERENCE**
> For more information about using the *Rich Text Editor*, see *Using the Rich Text Editor*.

4. Select the **OK** button.
5. In the *Action Editor*, select the **Save** button. The text is assigned to the *Type Text* button.

Draggable Buttons

Draggable Buttons are gadgets you can use to create grouping, matching, and sorting activities.

Matching

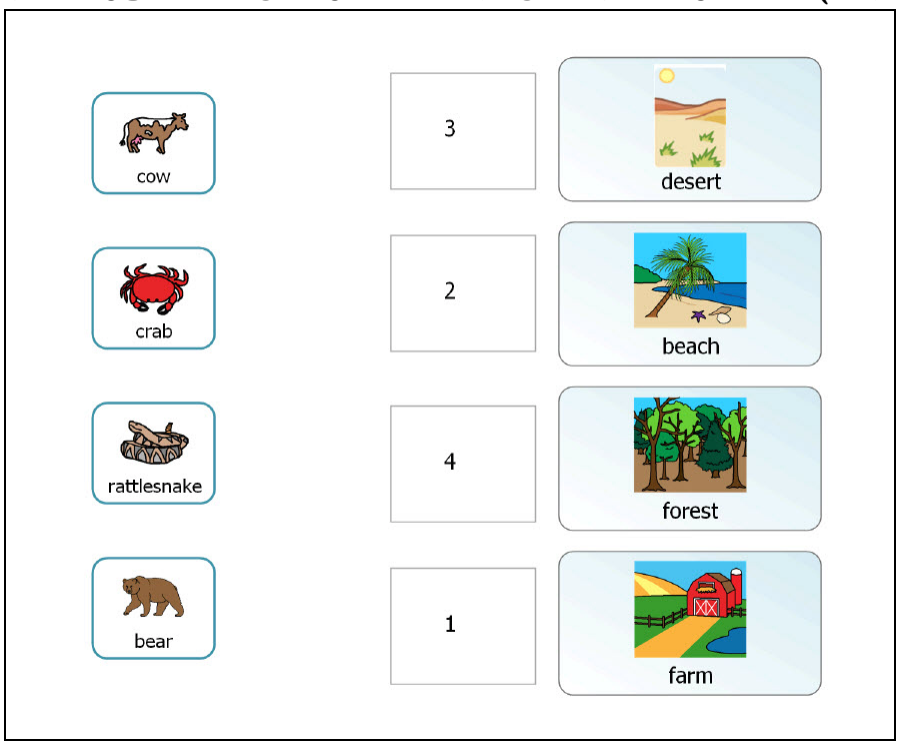
Matching gadgets enable you to create matching activities for your users. They consist of two different types of objects - buttons and targets. Each button is a movable standard button, and it can only be placed in its corresponding target. Each target is a group button that functions as a blank "square" and has been customized to only accept its corresponding button.

Typically, a target is placed next to another symbol or button to provide a "box" into which the buttons can be placed.

If a button is dragged onto its corresponding target, then a positive auditory response will be played. If a button is dragged onto an incorrect target, then a negative auditory response will be played, and the button will snap back to its original location.

In the following example, the labels for each matching button and target have been customized to create an activity in which the user can match an animal with the place where it would be found. The animal buttons are matching buttons, and the numbered squares are their targets. The user can drag each animal to its corresponding target next to a symbol.

Matching Buttons and Targets - Customized for Matching Activity (example)



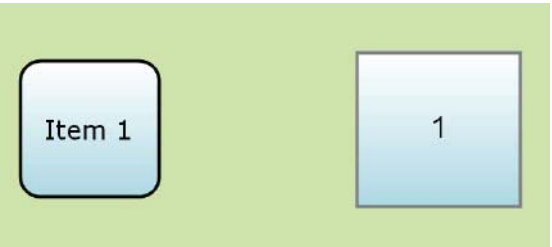
When creating matching activities, you can:

- Add single matching pairs in which the user can drag a single button into a single target.
- Add multiple buttons for the same target if you want the user to be able to drag multiple buttons into a single target.
- Add multiple targets for the same button if you want the user to be able to drag the button into different targets.

To create a matching activity:

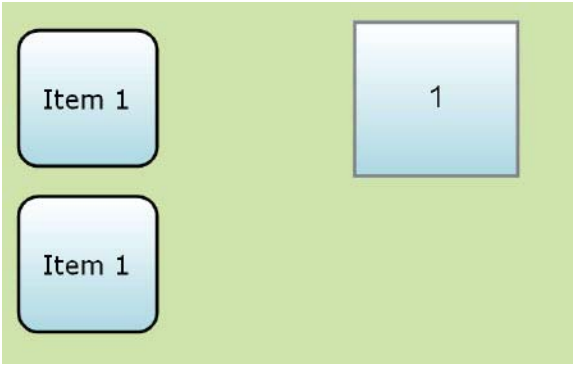
1. In **Draggable Buttons > Matching**, click and drag a matching button onto the page. This button will be the movable button that the user will drag into a target.
2. Add the symbol or button that will be a match for the matching button you just placed. For example, in the figure above, after placing the cow matching button, you would then place the farm button. (For more information about adding buttons, see ***Draw a Standard Button***.)
3. Click and drag the corresponding target onto the page next to the button you added as a match for the matching button. For example, if you already dragged *Matching Button #1* onto the page, then you would drag *Matching Target #1* onto the page.
4. Do one of the following:
    - To add another matching pair, click and drag another matching button and corresponding target to the page.

MATCHING BUTTON AND TARGET (EXAMPLE)



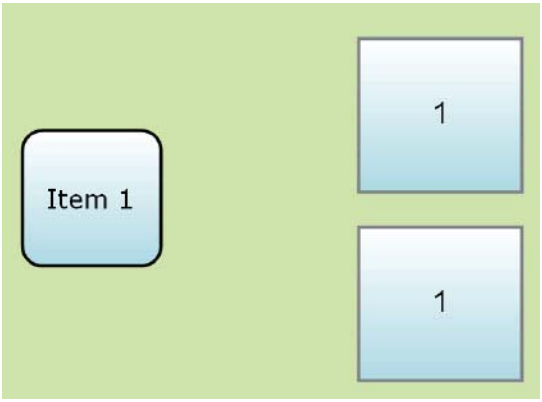
- To add another button that can be dragged into the target you placed, click and drag the corresponding matching button onto the page. In this case, the user will be able to drag either or both matching buttons into the target.

TWO MATCHING BUTTONS AND TARGET (EXAMPLE)



- To add another matching target into which the matching button can be dragged, click and drag the corresponding matching target onto the page. In this case, the user will be able to drag the matching button into either target. He or she will also be able to drag the matching button from one target into the other target.

MATCHING BUTTON AND TWO TARGETS (EXAMPLE)



5. If you'd like to add a symbol and label to the matching buttons, then use the *Properties* and *Symbols* panels. (For more information, see ***Edit Button Content***.)

NOTE
When editing button properties, keep in mind that the target button must be the same size or larger than the corresponding matching button. If the matching button does not fit in its corresponding target button, then the user will not be able to place it even if it is the correct match.

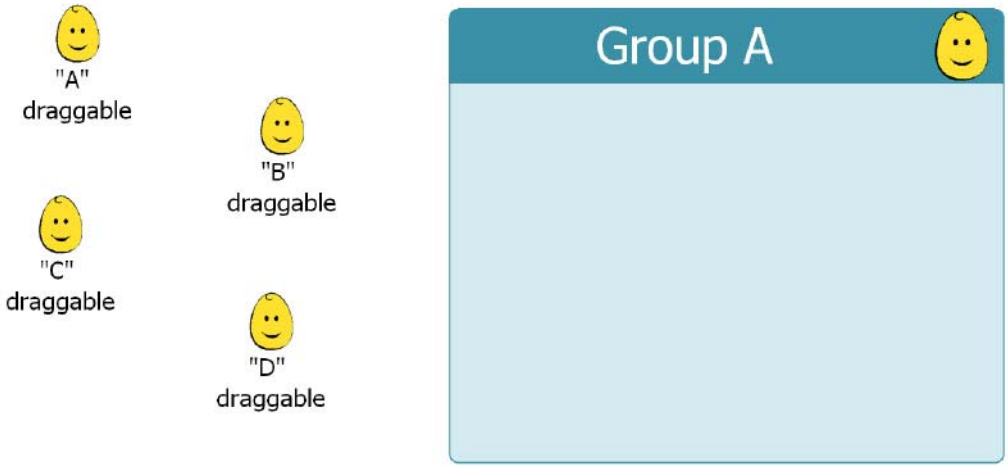
NOTE
While you can add multiple matching buttons for a single target, you might want to consider using the Sorting gadgets instead. (For more information, see *Sorting*.)

Sorting

Sorting gadgets enable you to create unique sorting activities for your users. They consist of two different types of objects - sorting objects and sorting bins. Each sorting bin can contain one or more sorting objects.

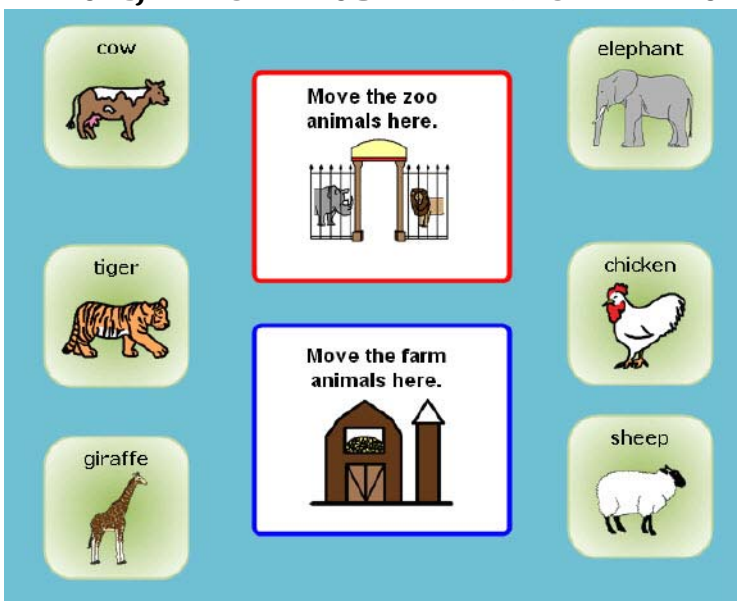
When a sorting object is dragged into its corresponding sorting bin, a positive auditory response will be played. If a sorting object is dragged into an incorrect sorting bin - if a group B object is dragged into a group A sorting bin, for example - then the button will snap back to its original location, and a negative auditory response will be played.

Sorting Objects and Sorting Bin (example)



You can customize each gadget to create your own sorting activities. In the illustration below, the labels and SmartSyms on Group A and Group B sorting bins and sorting objects have been customized to create a "Sort the Animals" activity.

Sorting Objects and Sorting Bins - Customized for Sorting Activity (example)



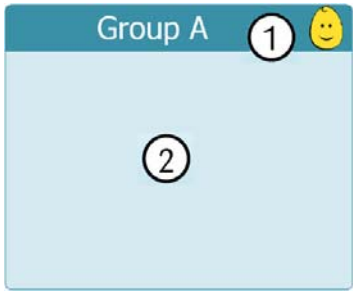
Add Sorting Bins and Objects

1. In **Draggable Buttons > Sorting**, click and drag a sorting bin onto the page. This bin is the group button into which the user can drag objects.
2. Click and drag one or more corresponding sorting objects onto the page. For example, if you already dragged *Sorting Bin - Group A* onto the page, then you would drag *Sorting Object - Group A* onto the page.
3. For each additional group of sorting bins and objects that you want to add, repeat steps 1-2.

Edit Properties for a Sorting Bin

A sorting bin is a customized group button that contains a standard button. The group button enables you to control the layout of the objects that the user drags into the sorting bin, while the standard button enables you to add a title and label for the sorting bin.

SORTING BIN



1 **Standard Button**

2 **Group Button**

REFERENCE
For more information about editing the properties for a group button, see *Edit Group or Target Button Properties*. For more information about editing the properties for a standard button, see *Edit Button Properties*.

Edit Properties for a Sorting Object

A sorting object is a standard button that has been customized to enable users to drag it into a corresponding sorting bin. You can edit the properties for a sorting object in the same way that you edit the properties for a standard button. In most cases, you will want to add content to the sorting object, such as a label and symbol.

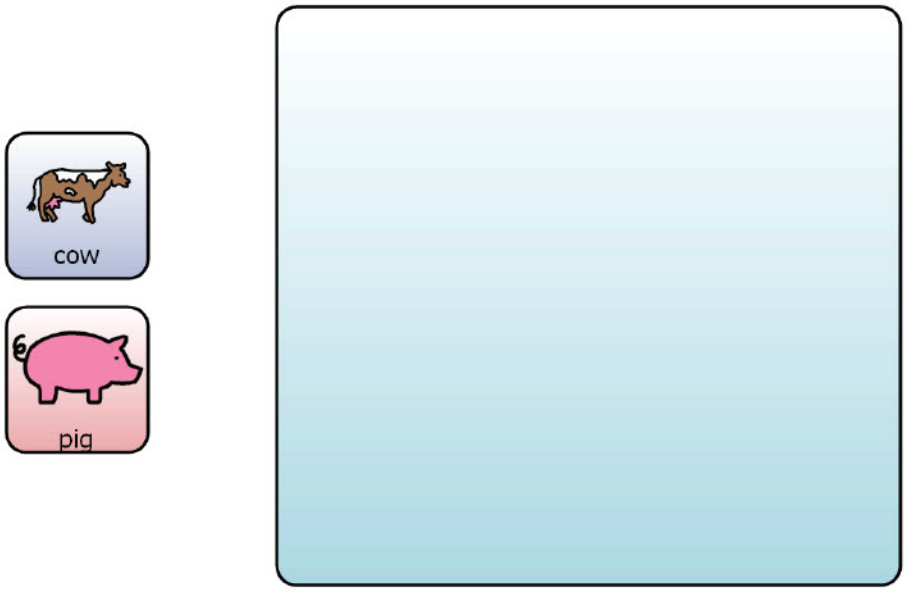
REFERENCE
For more information about editing the properties for a standard button, see *Edit Button Properties*.

Drag-a-Copy Button

A Drag-a-Copy button is a standard button that can be dragged into any target button on the page. When the user drags the button, a copy of the button will be dragged, and the original copy will remain in its original location. The user can continue dragging copies of the button to the target button.

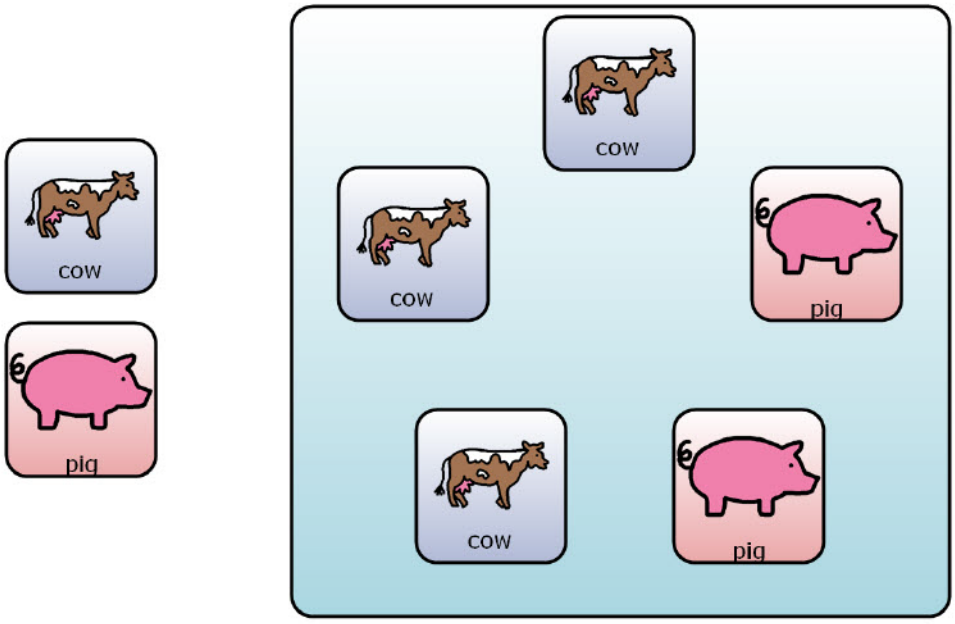
In the following example, two Drag-a-Copy buttons have been placed on the page next to a target button.

DRAG-A-COPY BUTTONS AND TARGET BUTTON (EXAMPLE)



In Preview and Play modes, the user can drag copies of the Cow and Pig Drag-a-Copy buttons into the target button. In this example, the user has dragged three cows and two pigs to the target from the original cow and pig Drag-a-Copy buttons.

Drag-a-Copy Buttons Dragged to the Target Button (example)



1. Set the Drag and Drop properties on the page.
   a. Select the page. Then select the **Properties** button to open the *Properties* panel.
   b. In the *IsTarget* check box, do one of the following:
      - To enable users to place the drag-a-copy buttons anywhere on the page, select *IsTarget*.
      - To make the buttons to snap back to their original locations if not placed in the target bin, then leave *IsTarget* unchecked.
2. Select the **Gadgets** button to open the *Gadgets* panel. Then select **Draggable Buttons**.
3. Click and drag one or more *Drag-a-Copy Button* gadgets onto the page.
4. Add a target button to the page. This button is the object into which the user can drag copies of the Drag-a-Copy button. You can do any of the following:
   - Draw a new target button. (For more information, see ***Draw a Group or Target Button***.)
   - Add a *Group Box (Centered)* gadget. This gadget automatically centers the draggable buttons that are placed in it. (For more information about this gadget, see ***Group Box (Centered)***.)
   - Add a *Group Box (FreeLayout)*. This gadget enables draggable buttons to be placed anywhere within the group box. (For more information, see ***Group Box (FreeLayout)***.)
   - Add a *Target Box* (Holds 1 Button). This gadget enables the user to place a single draggable button. (For more information, see ***Target Box (Holds 1 Button)***.)

5. If necessary, edit the properties for the *Drag-a-Copy Button* and *Target Button*. (For more information, see ***Edit Button Properties*** or ***Edit Group or Target Button Properties***.)

Draggable Button

This gadget is a standard button that can be dragged into any target button on the page. While the Drag-a-Copy button enables the user to drag multiple copies of the button, the Draggable Button enables the user to drag the button itself.

You can set the Drag and Drop properties for the page to define how users will be able to drag the button.

1. Select the page. Then select the **Properties** button to open the *Properties* panel.
2. In the *IsTarget* check box, do one of the following:
   - To enable users to drag the draggable buttons anywhere on the page, select *IsTarget*.
   - To make the draggable buttons snap back to their original locations if not placed in their target, then leave *IsTarget* unchecked.

REFERENCE
The procedure for adding draggable buttons is the same as the procedure for adding Drag-a-Copy buttons. (For more information, see *Drag-a-Copy Button*.)

Group Box (Centered)

This gadget is a target button into which draggable buttons can be placed. The draggable button will be centered in the group box automatically, and the button label will be spoken.

When adding a Group Box (Centered) to the page, the *IsTarget* property is selected by default so that draggable buttons can be placed in it.

REFERENCE
For more information about editing the properties for a Group Box (Centered), see *Edit Group or Target Button Properties*.

Group Box (FreeLayout)

This gadget is a target button into which draggable buttons can be placed. The draggable button can be placed anywhere in the group box, and the button label will be spoken.

When adding a Group Box (FreeLayout) to the page, the *IsTarget* property is selected by default so that draggable buttons can be placed in it.

REFERENCE
For more information about editing the properties for a Group Box (FreeLayout), see *Edit Group or Target Button Properties*.

Reset Page Button

This gadget resets the page to its original configuration. For example, if you create a sorting activity, then the Reset Page button would return the objects to their starting locations and allow the user to restart the activity. This button is also available in the *Navigation* category.

Target Box (Holds 1 Button)

This gadget is a target button into which a single draggable button can be placed. If the user drags a second draggable button into the target box, then it will switch locations with the first button. When the draggable button is placed, the button label will be spoken.

When adding a Target Box (Holds 1 Button) to the page, the *IsTarget* property is selected by default so that draggable buttons can be placed in it.

> **NOTE**
> For more information about editing the properties for a Target Box (Holds 1 Button), see ***Edit Group or Target Button Properties***.

Fun Interactions

Fun Interactions are interactive objects that you can use to create activities with animations and multimedia effects. You can use these gadgets to make your activities more interactive.

Animations

Animation gadgets enable you to add animated buttons to your pages. When selected, the button will move up, down, left, or right depending on the type of gadget.

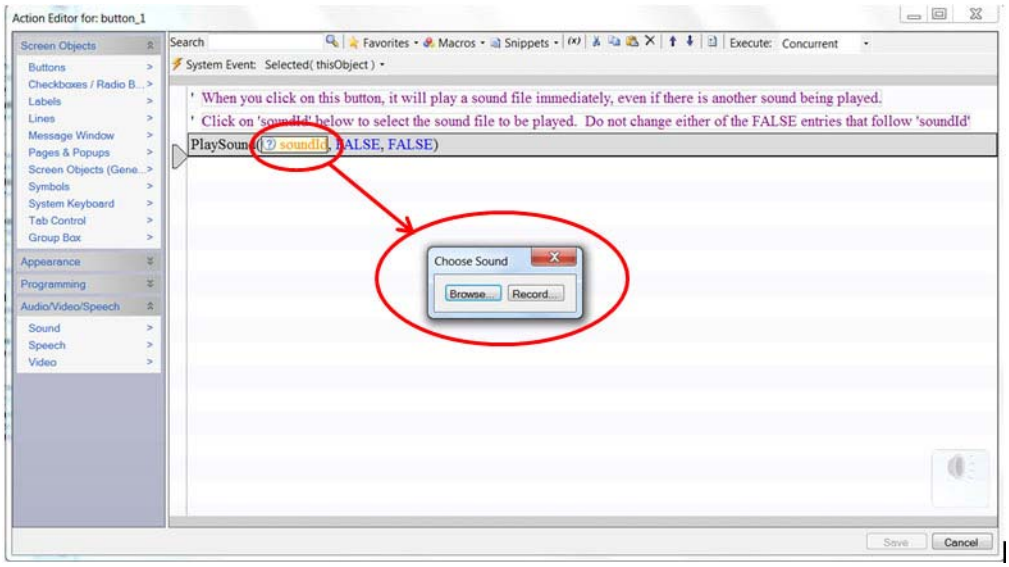
Each animation gadget has been programmed to move in a particular direction at a particular speed when selected. Once it has moved off of the screen, it will disappear until either the next time the page is loaded or the page is reset (for example, the user selects the Reset Page button gadget). You can also select a sound to be played when the button is selected.

REFERENCE
You can edit the symbol on an animation gadget the same way as you would with a standard button. (See *Edit Button Content*.)

To add a sound to an animation gadget:

1. On the page, double-click an animation gadget. The *Action Editor* will open.
2. Select the **soundID** parameter. The *Choose Sound* dialog will open.

ACTION EDITOR WITH SOUNDID PARAMETER SELECTED



3. To browse for an audio file on your computer, select **Browse**.
4. Navigate to the audio file that you want to be played when the user selects the button.
5. Select **Open**.
6. In the *Action Editor*, select **Save**. The sound file is assigned to the animation gadget.

Balloon-Pop Button

This gadget is a standard button hidden underneath a balloon. In Play mode, a balloon will cover the button. When the user selects the balloon, it pops, revealing the button. Customize the symbol, label, and actions on hte standard button.

Change Picture Button

This gadget changes the symbol on another button or its own symbol. When you add the Change Picture Button, you can choose on which button you want the symbol to be changed, and the symbol that you want to be displayed on that button.

> **NOTE**
> Before adding the Change Picture Button, make sure that you've already placed the button or buttons for which you want to change the symbol.

1. On the page, double-click the *Change Picture* button. The *Action Editor* will open.
2. Select the **object** parameter, and then select the object for which you want to change the symbol.
3. Select the **value** parameter. The *Open Symbol* window will appear.
4. Navigate to the symbol that you want to be placed on the object you selected.
5. Select **OK**.
6. In the *Action Editor*, select the **Save** button. The object and value are assigned to the Change Picture button.

Fading Screen

This gadget is a button that fades away. You can use it to cover an object - or part of an object - on the page. When the user selects it, it will fade into the background and reveal the object underneath it.

Hide and Show Button

This gadget hides its label and symbol until the user selects it. When it's selected, the label and symbol are displayed.

Hotspot - Play Sound

This gadget is an invisible hotspot that you can place over a section of symbol to enable the user to select it. When the user selects it, a sound is played.

To add a sound:

1. On the page, double-click the *Hot Spot - Play Sound* gadget. The *Action Editor* will open.
2. Select the **soundID** parameter. The *Choose Sound* dialog will open.
3. To browse for an audio file on your computer, select **Browse**.
4. Navigate to the audio file that you want to be played when the user selects the hotspot.
5. Select **Open**.
6. In the *Action Editor*, select **Save**. The audio file is now assigned to the hotspot.

Hotspot - Talking

This gadget is an invisible hotspot that you can place over a section of a symbol to enable the user to select it. When the user selects it, the text you specified is spoken.

1. On the page, double-click the *Hot Spot - Talking* gadget. The *Action Editor* will open.
2. Select the **text** parameter. The *Rich Text Editor* will open.
3. Enter the text that you want to be spoken when the user selects the hot spot. (For more information about the *Rich Text Editor*, see ***Using the Rich Text Editor***.)
4. Select **OK** to close the *Rich Text Editor*.
5. In the *Action Editor*, select **Save**. The text is now assigned to the hotspot.

Play Instant Sound Button

This gadget enables you to create music activities by playing more than one sound at a time. When the student selects the button, it plays the selected sound immediately, without waiting for any currently playing sound to finish (unlike the *Play Sound* gadget).

1. On the page, double-click the **Instant Sound** button. The *Action Editor* will open.
2. Sect the **soundID** parameter. The *Choose Sound* dialog will open.
3. To browse for an audio file on your computer, select **Browse**.
4. Navigate to the audio file that you want to be played when the student selects the *Play Instant Sound* gadget.
5. Select **Open**.
6. In the *Action Editor*, select **Save**. The sound file is now assigned to the *Play Instant Sound* button.

> **NOTE**
> You can also select Record on the *Choose Sound* dialog and make your own recording.

Popup Video Button

See ***Popup Video Button***.

Recording Gadget

See ***Recording Gadget***.

Recordings - Clear All Button

See ***Recordings - Clear All Button***.

MATHEMATICS

These gadgets enable you to add calculators, rulers, spinners, and counters to your activities.

Calculators

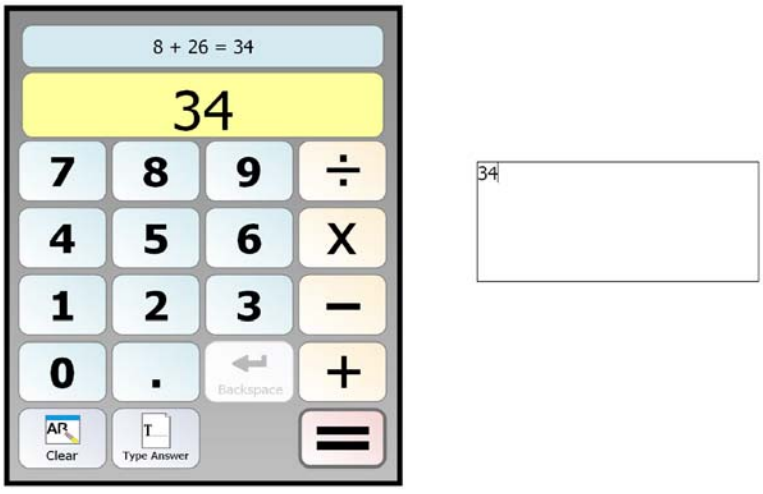
Calculator gadgets enable you to add digital calculators to your activities. Users can use them to perform arithmetic exercises, and display the results in a message window.

Equation Calculator with Total

This gadget is a basic arithmetic calculator that you can place on a page. It displays the equation at the top as the user enters it, and the total underneath. If you add a message window to the page, then the user can select the Type Answer button to display the total in the message window.

In the following example, the user has entered a simple arithmetic equation and selected the *Type Answer* button to display the answer in a message window.

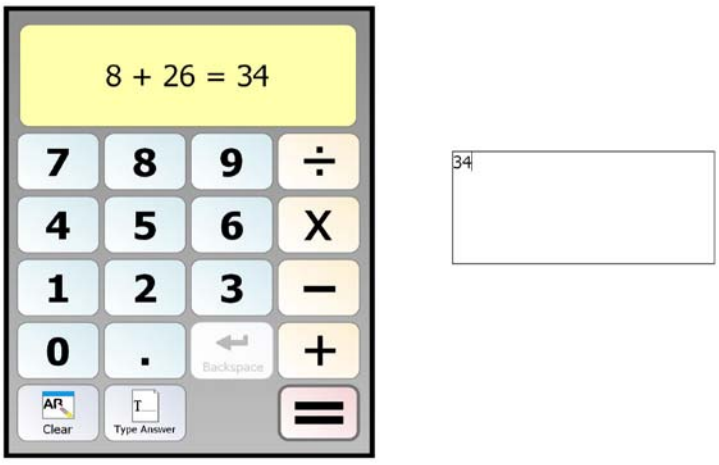
Equation Calculator with Total in Play Mode (example)



Equation Calculator

This gadget is a basic arithmetic calculator that you can place on a page. It displays the equation at the top as the user enters it. If you add a message window to the page, then the user can select the *Type Answer* button to display the total in the message window.

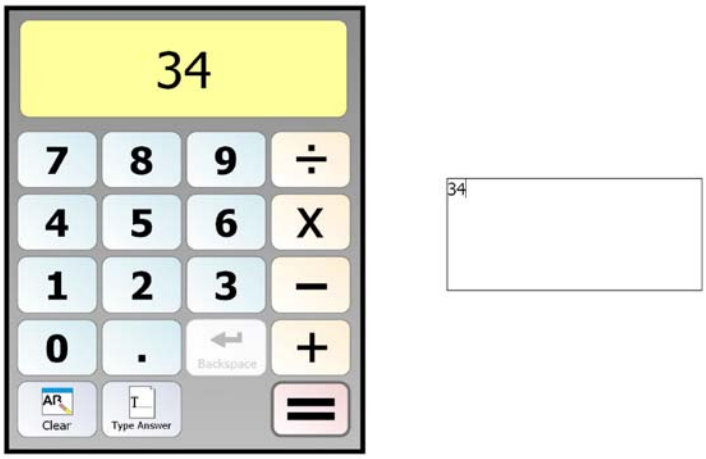
Equation Calculator in Play Mode (example)



Simple Calculator

This gadget is a basic arithmetic calculator that you can place on a page. It displays the total at the top. If you add a message window to the page, then the user can select the *Type Answer* button to display the total in the message window.

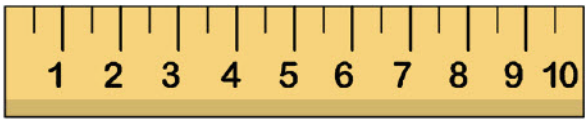
Simple Calculator in Play Mode (example)



Rulers

Ruler gadgets enable your users to measure objects on the screen. Both horizontal and vertical rulers are available, in both centimeters and inches.

Ruler - 10 cm - Horizontal Gadget (example)



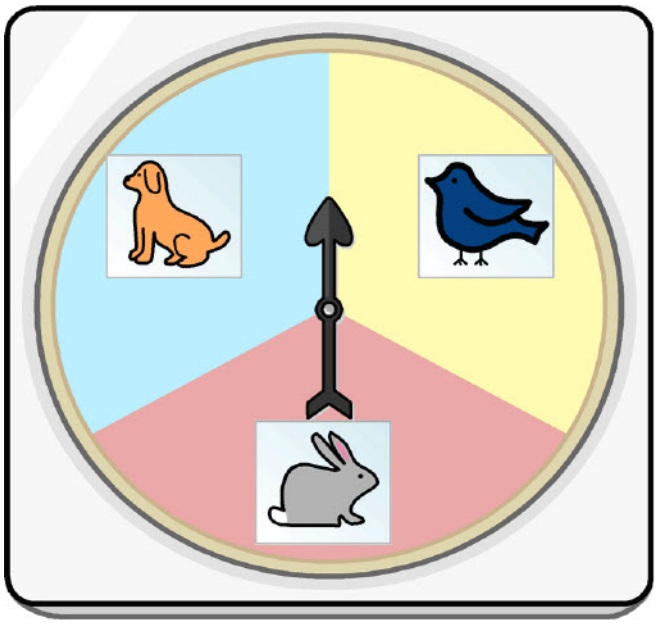
To enable the user to move the ruler in Preview and Play modes:

1. Select the page. Then select the **Properties** button to open the *Properties* panel.
2. Verify that the **IsTarget** check box is checked. If it's not checked, then select it to check it.

Spinners

Spinner gadgets are interactive spinners with a number of choices. When the users selects the gadget, the spinner will spin and land on one of the choices, which will be highlighted and spoken. You can add spinner gadgets with two, three, four, six, or eight choices.

Spinner - 3 Choices Gadget (example with Symbols Added)



Each of the choices on a spinner gadget is a button. For each choice, you should add a symbol, label, or both. (For more information, see ***Edit Button Content***.)

Coin Flip

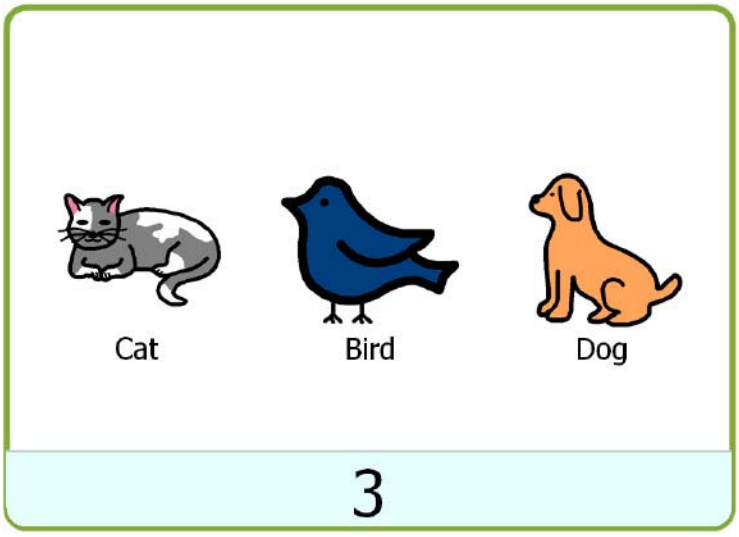
This gadget is a coin that the user can spin. When the user selects it, it will spin and land on either "heads" or "tails."

Counting Bin

This gadget is a group button that counts the number of draggable objects the user drags into it. As the user drags objects into it, the total number of objects will be displayed and spoken.

In this example, the user has dragged three "animal" buttons into the counting bin, and the label displays the number total number of objects.

COUNTING BIN WITH THREE BUTTONS (EXAMPLE)



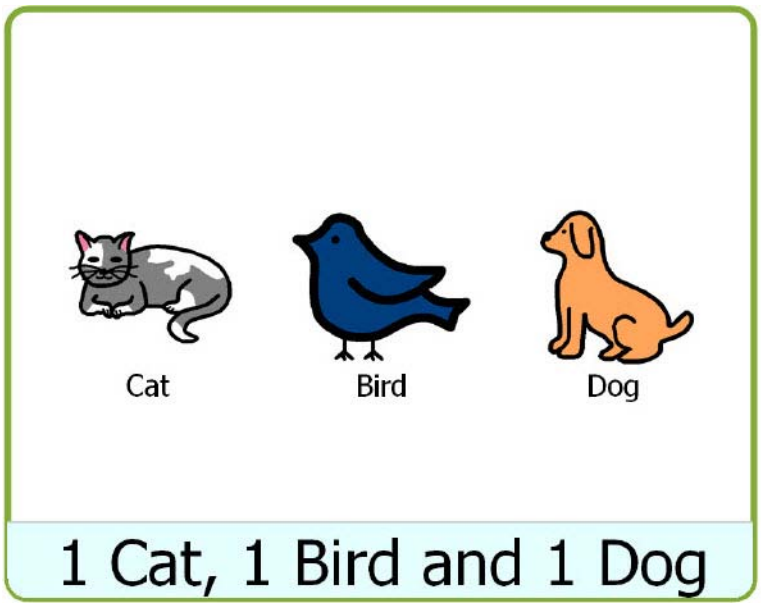
NOTE
Users can also drag the objects out of a counting bin. In this case, the label will update to reflect the new number of objects in the counting bin. For example, in the above example, if the user dragged the Bird button out of the counting bin, then the label would say, "2."

Counting Bin with Labels

This gadget is a group button that counts the number and types of each object the user drags into it. As the user drags objects into it, the number of each type of object will be displayed and spoken.

In this example, the user has dragged three "animal" buttons into the counting bin, and the label displays the number and type of each one.

COUNTING BIN WITH THREE BUTTONS (EXAMPLE)



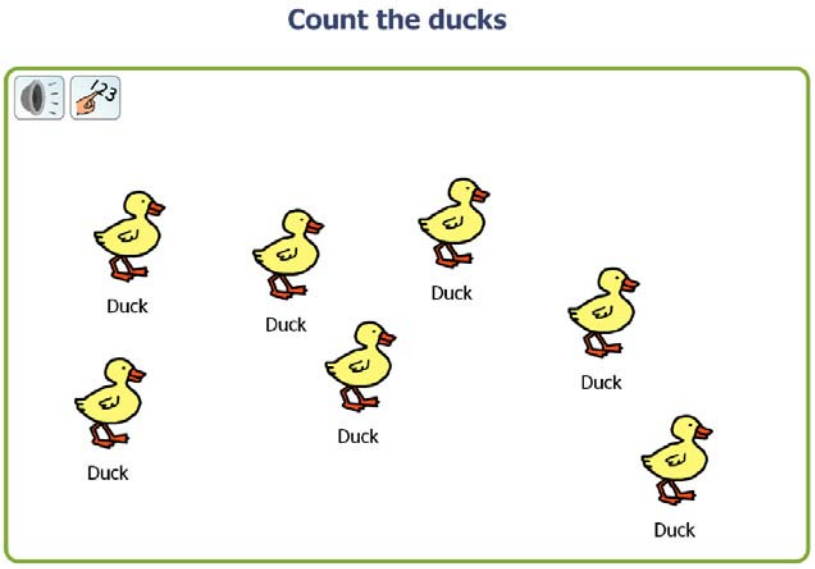
NOTE
Users can also drag the objects out of a counting bin. In this case, the label will update to reflect the new number and types of objects in the counting bin. For example, in the above example, if the user dragged the Bird button out of the counting bin, then the label would say, "1 Dog and 1 Cat."

The type of each object dragged into the counting bin is determined by the object's label. Make sure that you add a label to each object, even if you leave the label hidden. (See ***Edit Button Content***.)

Counting Gadget

This gadget is a group button that counts objects as the user selects them. When the user selects an object, the number will be displayed on the object and will be spoken.

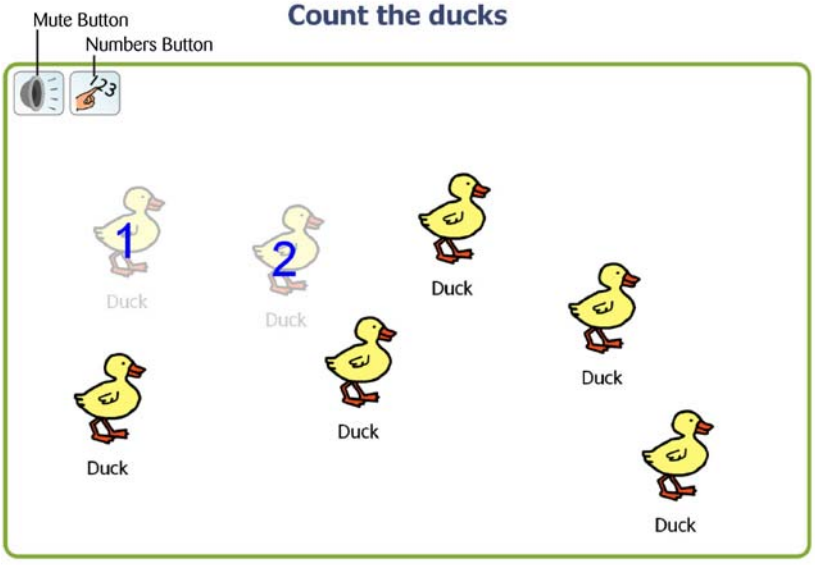
Counting Gadget with Four Buttons (example)



Note
The user can select the mute button to mute the counting. The button next to it either shows or hides the numbers as the objects are selected.

As the user selects each object in the counting gadget, the number will be displayed on the object, and will be spoken. In this example, the user has selected the first two buttons.

Counting Gadget with Two Objects Selected (example)



To add a counting gadget:

1. Drag the *Counting Gadget* onto the page.
2. Place each object that you want to be counted in the counting gadget. You can add buttons (see ***Working with Buttons***) and symbols (see ***The Symbols Panel***).

> **NOTE**
> The objects that are inside the counting gadget are the only ones that can be counted in Preview and Play modes. If the user drags a movable object into the counting bin, it won't be counted.

3. If desired, adjust the size and appearance of the counting gadget. (See ***Edit Group or Target Button Properties***.)
4. If desired, adjust the properties of each object that you placed in the counting gadget. (See ***Edit Button Properties*** or ***Edit SmartSym Properties***.)

Dice - One

This gadget is a single die that the user can roll. When the user selects it, the die will be rolled.

Dice - Two

This gadget is a pair of dice that the user can roll. When the user selects it, the dice will be rolled.

Drag-a-Copy Button

See ***Drag-a-Copy Button***.

Draggable Button

See ***Draggable Button***.

Navigation

Use these gadgets to help your users navigate - to other pages in the activity, to other programs, and even to files and web sites.

Back Page Button

This gadget will return to the last page that was open in the activity.

Close Popup Button

See ***Close Popup Button***.

First Page Button

This gadget goes to the first page in the current activity.

Home Button

This gadget goes to the first page in the current project.

Next Page Button

See ***Next Page Button***.

Open File Button

This gadget opens a specific file on your computer (as well as the Windows application required to open it).

> **NOTE**
> You can't open Boardmaker Studio projects using this gadget.

1. On the page, double-click the **Open File** button. The *Action Editor* will open.
2. Select the **fileName** parameter.
3. Navigate to the file that you want to be opened.
4. Select **Open**.
5. In the *Action Editor*, select **Save**. The file is assigned to the Open File Button.

Open Page Button

See ***Open Page Button***.

Open Popup Button

See ***Open Popup Button***.

Open Program Button

This gadget launches a program.

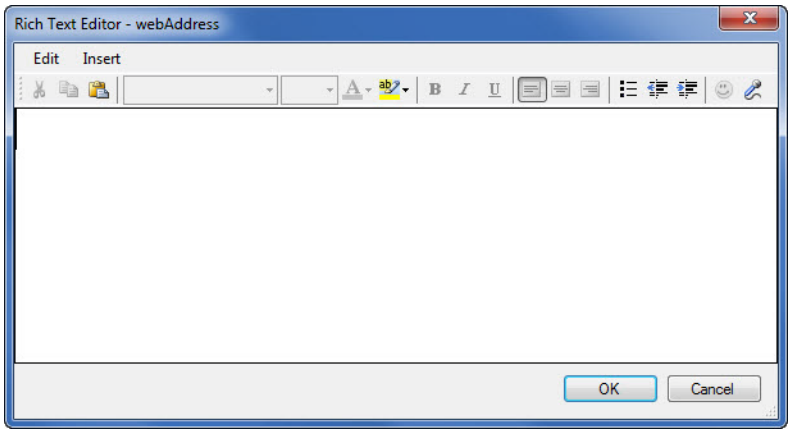
1. On the page, double-click the **Open Program** button. The *Action Editor* will open.
2. Select the **applicationName** parameter. A browser appears.
3. Navigate to the program(*.*exe* file) that you want to be opened and select **Open**.
4. Select **Open**.
5. In the *Action Editor*, select **Save**. The program is assigned to the *Open Program* button.

Open Website Button

This gadget opens a web site in the default web browser.

1. On the page, double-click the **Open Website** button. The *Action Editor* will open.
2. Select the **webAddress** parameter. The *Rich Text Editor* will appear.

RICH TEXT EDITOR



3. Enter the full web site address in quotes that you want to be opened (for example, **"www.boardmakershare.com"**).
4. Select **OK**.
5. In the *Action Editor*, select **Save**. The web site is assigned to the *Open Website* button.

Previous Page Button

See ***Previous Page Button***.

Reset Page Button

See ***Reset Page Button***.

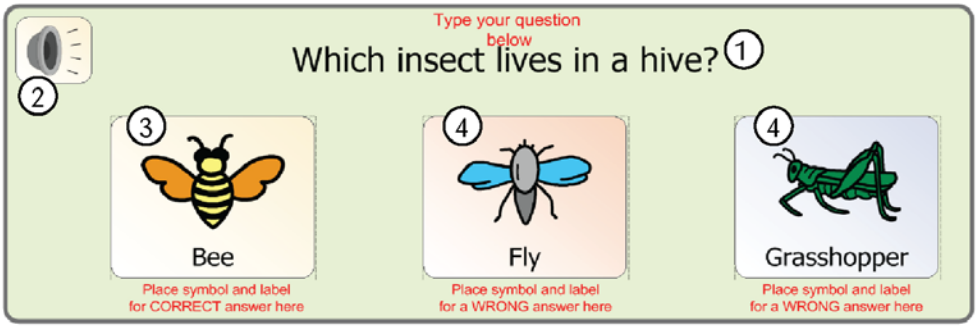
Question and Answer

Question and Answer gadgets enable you to add multiple choice questions to your activities. You can add two-, three-, or four-choice questions.

The *Recording Gadget* allows your students to make a recording and play it back. They can use the gadget to record responses to questions.

A multiple choice question is a group of objects. The following figure shows the multiple choice question as it appears when you drag it onto the page.

THREE-CHOICE MULTIPLE CHOICE GADGET (EXAMPLE)



1 **Question label**

2 **Speak question button**

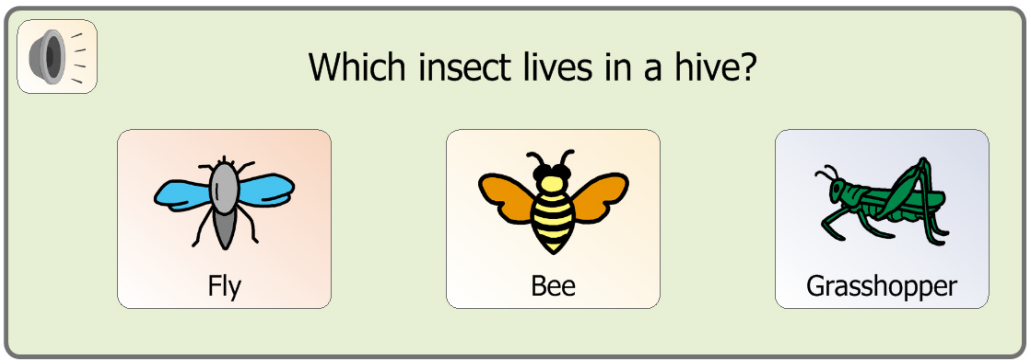
3 **Right answer button**

4 **Wrong answer button**

NOTE
The red instructional text is for your information only. It will not be displayed in Preview and Play modes.

In Preview and Play modes, the choices are placed in random order, and the user can select an answer.

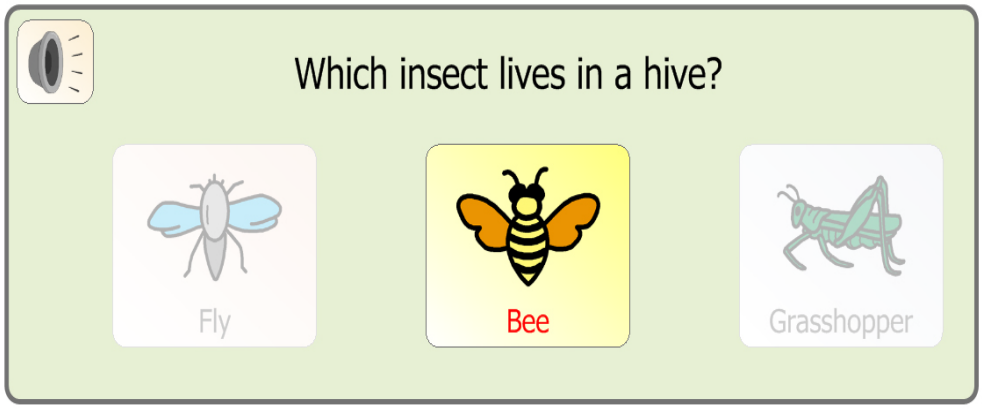
Three-Choice Multiple Choice Gadget in Play Mode (example)



If the user chooses the wrong answer, then a red X will appear, and he or she can make another choice. After the second incorrect answer, correct answer will be shown, and auditory feedback will be provided.

In the illustration below, the user has chosen the correct answer. When the correct answer is selected, it will be highlighted, and a positive, thumbs-up symbol will be displayed. The incorrect choices will be grayed out.

Choosing the Correct Answer for a Multiple Choice Question (example)



To program a multiple-choice gadget:

1. Select the **Question** text label and edit the content to enter the question. (For more information, see ***Add and Format the Label Text***.)
2. Select the right answer button and edit the properties. At a minimum, you should set the label and symbol. (For more information, see ***Edit Button Properties***.)
3. For each wrong answer button, edit the properties to set the label and symbol.

> **Note**
> In Preview and Play modes, the choices are automatically placed in random order. You don't need to change the order.

Recording Gadget

See ***Recording Gadget***.

Recordings - Clear All Button

See***Recordings - Clear All Button***.

Time Gadgets

You use time gadgets to display the current time or to add a visual timer to any activity, which can help your users stay focused while working on a task.

Digital Clock

This gadget is a digital clock that automatically displays the current time. If the user selects the clock, then the current time will be spoken.

Digital Clock Gadget (In Play Mode)

Digital Stopwatch

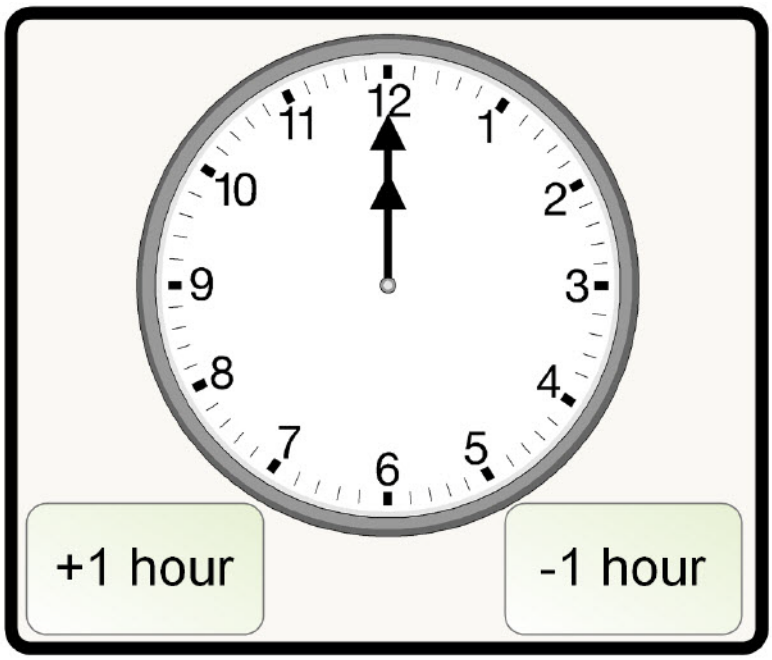
This gadget is a stopwatch timer that you can use to keep track of how long the user has worked on a particular task. The timer starts at 0 and counts up, and you can start and stop it.

Digital Stopwatch Gadget (In Play Mode)

Set the Clock Gadget

These gadgets are analog clocks. The user can set the time forward or backward in either 30-minute or 1-hour increments.

Set the Clock Gadget (In Play Mode)



Timer Bar

These gadgets are timers that show a vertical bar that counts down from a specified amount of time to zero, which is helpful if you want to help the user stay focused on a particular task. When the time is up, a stop sign is displayed, and the phrase, "Time's Up!" is spoken. Timer bar gadgets are available ranging from 30 seconds to 10 minutes.

Timer Bar Gadget (In Play Mode)

Today's Date

This gadget displays the current date (day, month, and calendar date). If the user selects the

date, then it will be spoken.

TODAY'S DATE GADGET (IN PLAY MODE)

Writing

Use these gadgets to design writing activities for your users.

> **NOTE**
> The writing gadgets are designed to work with message windows. Some of these gadgets contain message windows, but for others, you may need to add a message window for the gadget to function properly.

Keyboards

This subcategory provides two keyboard gadgets that you can place on the page - an ABC keyboard and a QWERTY keyboard. On the ABC keyboard, the keys are laid out in alphabetical order. On the QWERTY keyboard, the keys are laid out in the standard QWERTY order, like on a standard computer keyboard.

The keyboard gadgets enable users to enter text by selecting the buttons on the keyboard. The text is displayed in the active message window.

> **NOTE**
> After adding a keyboard, make sure to add a message window to the page so that the text can be displayed.

Toolbars

These gadgets enable you to add toolbars that users can use to perform actions in a message window. Each toolbar contains a set of buttons that users can use to help write, edit, and review the text that they enter in a message window.

> **NOTE**
> You can add multiple toolbars depending on your need. For example, you can add the Editing toolbar and the File toolbar to provide editing and file maintenance actions for your users. However, you might want to consider using one of the writing windows gadgets, which include toolbars customized for beginning, intermediate, or advanced editing tasks. (For more information, see *Writing Windows*.)

Advanced Editing Toolbar

This toolbar provides the following buttons:

- **Copy** - Copies the selected text to the clipboard.

- **Cut** - Cuts the selected text and places it on the clipboard.
- **Paste** - Pastes the contents of the clipboard into the message window.

ADVANCED EDITING TOOLBAR

Editing Toolbar

This toolbar provides the following buttons:

- **Check spelling** - Opens the spell checker and checks the spelling of the words entered in the message window. When the spell checker finds a misspelled word, it provides several suggestions to the user, who can choose to replace the word with one of the suggestions, ignore the misspelling, or enter a new word to replace the misspelled one.

> **REFERENCE**
> For more information, see *Check Spelling Button*.

- **Backspace** - Performs a backspace in the message window at the current cursor location.
- **Delete word** - Deletes the word to the left of the cursor.
- **Clear** - Deletes all of the content in the message window.

EDITING TOOLBAR

File Toolbar

This toolbar provides the following buttons:

- **New** - Creates a new text file and opens it in the message window.
- **Open** - Enables the user to choose a text file to load in the message window. When the user makes a selection, the contents of the text file will be loaded in the message window.
- **Save** - Saves the contents of the message window in a text file. If the user hasn't opened a text file, then a dialog will open enabling the user to create a new text file in which to save the text.
- **Print -** Prints the contents of the message window on your default printer.

FILE TOOLBAR

Formatting Toolbar

This toolbar provides the following buttons:

- **Smaller font** - Decreases the size of the currently selected text.
- **Bigger font** - Increases the size of the currently selected text.
- **Bold** - Applies bold formatting to the currently selected text. If the text is already bold, then the bold formatting will be removed.
- **Italics** - Applies italics to the currently selected text. If the text is already italicized, then the italics formatting will be removed.
- **Underline** - Underlines the currently selected text. If the text is already underlined, then the underlining will be removed.

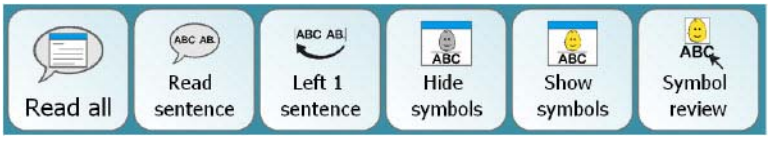
FORMATTING TOOLBAR

Review Toolbar

This toolbar provides the following buttons:

- **Read all** - Reads the text in the message window using the Text to Speech Highlighting settings.
- **Read sentence -** Reads one sentence of the text in the message window.
- **Left 1 sentence -** Moves the cursor one sentence to the left.
- **Hide symbols -** Hides the symbols in the message window. When the user selects this button, the message window will display text only.
- **Show symbols** - Symbolates the text. When the user selects this button, symbols will be displayed above each word in the message window. You can change the degree of symbolation by modifying the Symbolate properties for the message window. (For more information, see ***Define the Symbolate Properties of the Message Window***.)
- **Symbol review** - Turns the symbol review mode on or off. When it's turned on, the user can select any word in the message window to see its symbol.

REVIEW TOOLBAR



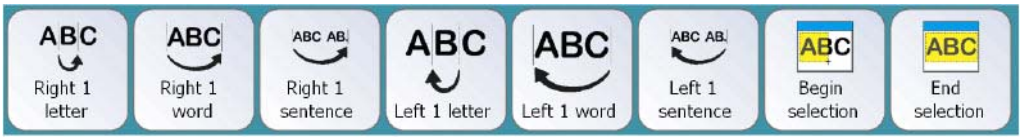
Switch Scanner Toolbar

This toolbar provides buttons for positioning the cursor and selecting text in the message window. You can use it for users who are unable to use the mouse to click and drag in a message window.

This toolbar provides the following buttons:

- **Right 1 letter** - Moves the cursor to the right by one character.
- **Right 1 word** - Moves the cursor to the right by one word.
- **Right 1 sentence** - Moves the cursor to the right by one sentence.
- **Left 1 letter** - Moves the cursor to the left by one character.
- **Left 1 word** - Moves the cursor to the left by one word.
- **Left 1 sentence** - Moves the cursor to the left by one sentence.
- **Begin selection** - Enables you to select text using the cursor. When the user selects this button and moves the cursor to the right, the text will be selected.
- **End selection** - Ends the text selection.

SWITCH SCANNER TOOLBAR



Word Prediction

These gadgets enable you to add a single word prediction button, or a word prediction bar, which consists of a group of five word prediction buttons organized either horizontally or vertically. By using a word prediction bar, you can provide your users with five word predictions instead of just one.

Word prediction is an excellent way to help your users with the writing process. As the user enters text in the message window, the word prediction button(s) predict the next word based on the previous letters or words the user has entered. (For more information about how word prediction works, and instructions on editing the properties for a word prediction button, see ***Word Prediction***.)

Writing Grids

These gadgets are grids of buttons that will send their labels to the active message window. When the user selects one of the buttons, the label is displayed in the message window.

NOTE
After adding a writing grid, you should edit the label and symbol for each button in the grid. (See *Edit Button Content*.)

Writing Windows

These gadgets are message windows with pre-configured toolbars. You can use them to create basic to advanced writing activities.

Advanced Writing Window

This gadget is a writing window for advanced users. It includes a message window for typing text and a toolbar with buttons for file management, reviewing, editing, and formatting.

You can change the font and symbolate properties in the writing window. (See ***Edit Message Window Properties***.)

> **NOTE**
> This writing window toolbar includes buttons from the File, Editing, Advanced Editing, Formatting, and Review toolbars. (For more information about each button, see *Toolbars*.)

Beginning Writing Window

This gadget is a writing window for beginning users. It includes a message window for typing text, and a toolbar with buttons for reviewing.

You can change the font and symbolate properties in the writing window. (See ***Edit Message Window Properties***.)

> **NOTE**
> This writing window toolbar includes buttons from the Review toolbar. (For more information about each button, see *Review Toolbar*.)

Intermediate Writing Window

This gadget is a writing window for intermediate users. It includes a message window for typing text, and a toolbar with buttons for file management and reviewing.

You can change the font and symbolate properties in the writing window. (See ***Edit Message Window Properties***.)

> **NOTE**
> This writing window toolbar includes buttons from the File and Review toolbars. (For more information about each button, see *Toolbars*.)

Message Window - Symbolated

This gadget is a symbolated message window without any toolbars. The user can select it to read the text aloud.

> **REFERENCE**
> For more information about symbolated text in message windows, see *Define the Symbolate Properties of the Message Window*.

Message Window - Text Only

This gadget is a message window without any toolbars. The user can select it to read the text aloud.

Switch-Scanner Writing Window

This gadget is a writing window that includes a toolbar with buttons for positioning the cursor and selecting text. You can use it for users who are unable to use the mouse to click and drag.

You can change the font and symbolate properties in the writing window. (See ***Edit Message Window Properties***.)

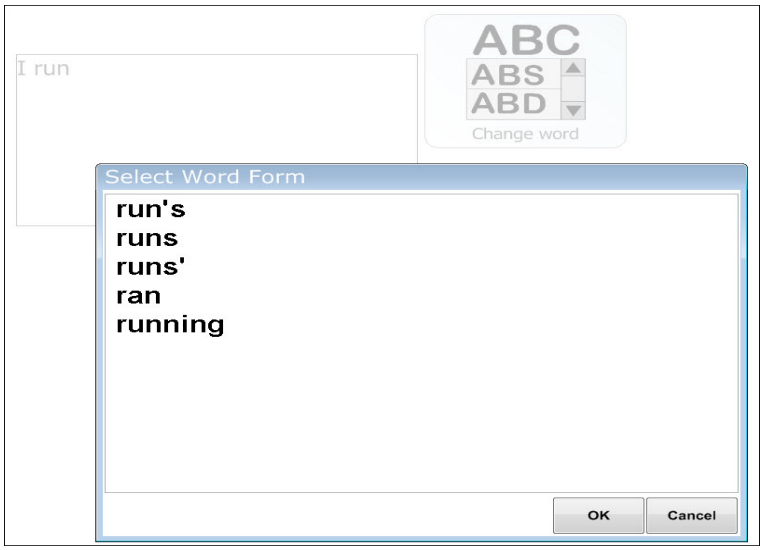
> **NOTE**
> This writing window toolbar includes buttons from the Review, File, Editing, Formatting, and Switch-Scanner toolbars. (For more information about each button, see *Toolbars*.)

Change Word Button

This gadget helps the user to change a word to a different verb tense, or to make it either singular or plural. When the user selects the button, a window will appear displaying alternate word forms for the word to the left of the cursor in the message window.

In this example, the user has entered the word, "run" and selected the *Change Word* button. The *Select Word Form* dialog now appears and suggests several alternate word forms for the word.

SELECT WORD FORM DIALOG (EXAMPLE)



Check Spelling Button

This gadget opens the spell checker and checks the spelling of the words entered in the message window. When the spell checker finds a misspelled word, it provides several suggestions to the user, who can choose to replace the word with one of the suggestions, ignore the misspelling, or enter a new word to replace the misspelled one.

In this example, the user has misspelled the word, "fast." The spelling checker shows the misspelling to the user in the context of the sentence and suggests several possible words to replace it.

SPELL CHECK (EXAMPLE)

Clear Message Window Button

This gadget deletes all of the content in the message window.

Insert Symbol Button

This gadget inserts the button's symbol, without any associated text, into the message window. (For more information about adding a symbol to a button, see ***Edit Button Content***.)

Print Message Window Button

This gadget prints the contents of the message window on your default printer.

Read All Button

This gadget reads the text in the message window using the Text to Speech Highlighting settings.

Type Label Button

This gadget sends the text of its label to the message window. If the message window is symbolated, then the button's symbol will also be inserted. (See ***Type Label Button***.)

Type Text Button

This gadget sends the text you specify to the message window.

1. On the page, double-click the *Type Text Button* gadget. The *Action Editor* will open.
2. Select the **text** parameter. The *Rich Text Editor* will appear.
3. Enter the text that you want to assign to the Type Text button. (For more information about using the *Rich Text Editor*, see ***Using the Rich Text Editor***.)

> **NOTE**
> While you use the *Rich Text Editor* to enter the text, not all of the features in the *Rich Text Editor* will be available.

4. Select the **OK** button.

5. In the *Action Editor*, select the **Save** button. The text is assigned to the Type Text button.

Undo Button

This gadget undoes the last action that the user performed in the message window. You can use it to help the user quickly undo an action that he or she performed accidentally. For example, if the user accidentally selects the *Clear Message Window* button and loses all of the text in the message window, the *Undo* button would restore the text.

MANAGE YOUR GADGETS

While Boardmaker Studio contains many default gadgets for you to use, you can also create your own, edit the properties for gadgets, and delete them. You can also share your gadgets with other Boardmaker Studio users and use gadgets that other users have developed.

> **NOTE**
> When creating and importing new gadgets in Boardmaker Studio, the gadgets are automatically saved in the Gadgets folder on your computer that was created when you installed Boardmaker Studio. If you uninstall Boardmaker Studio, then you will lose any gadgets that you created. So you don't lose your gadgets, it is recommended that you save or back up your gadgets in another location.

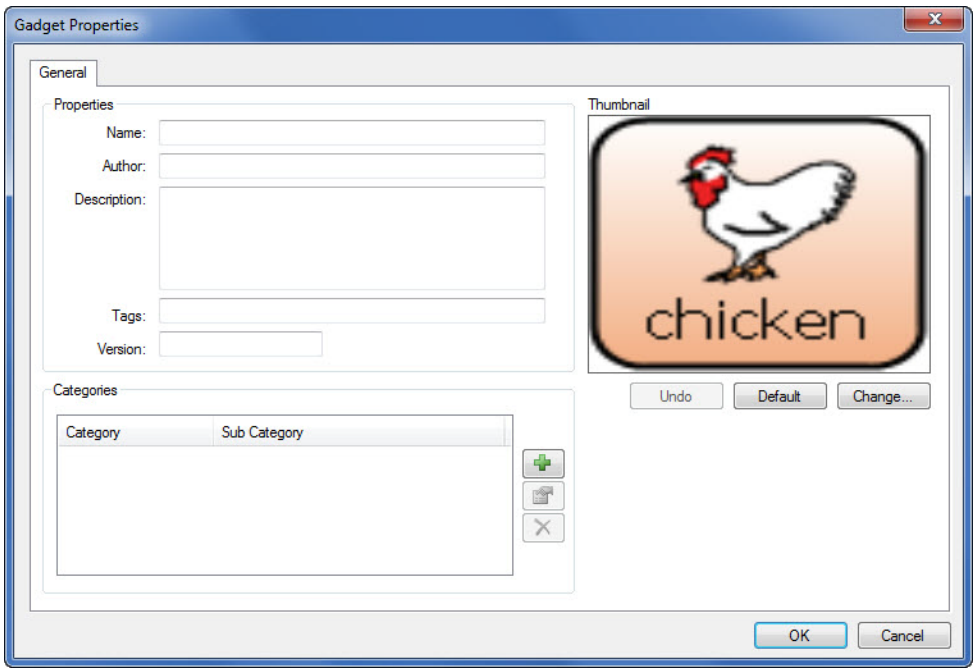
Create a New Gadget

As you design pages in Boardmaker Studio, you can save the objects you design as new gadgets. That way, you can quickly access these designs in the future. For example, if you add a new button to the page and define its content and style, then you can save the button as a new gadget so that the next time you need to add the same button to the page, you won't have to draw the button from scratch and set the content and style.

> **NOTE**
> You can modify any default gadget, or any existing gadget, but you must save it as a new gadget.

1. Right-click an object and select **Add to Gadgets**. The *Gadget Properties* dialog will appear.

GADGET PROPERTIES DIALOG



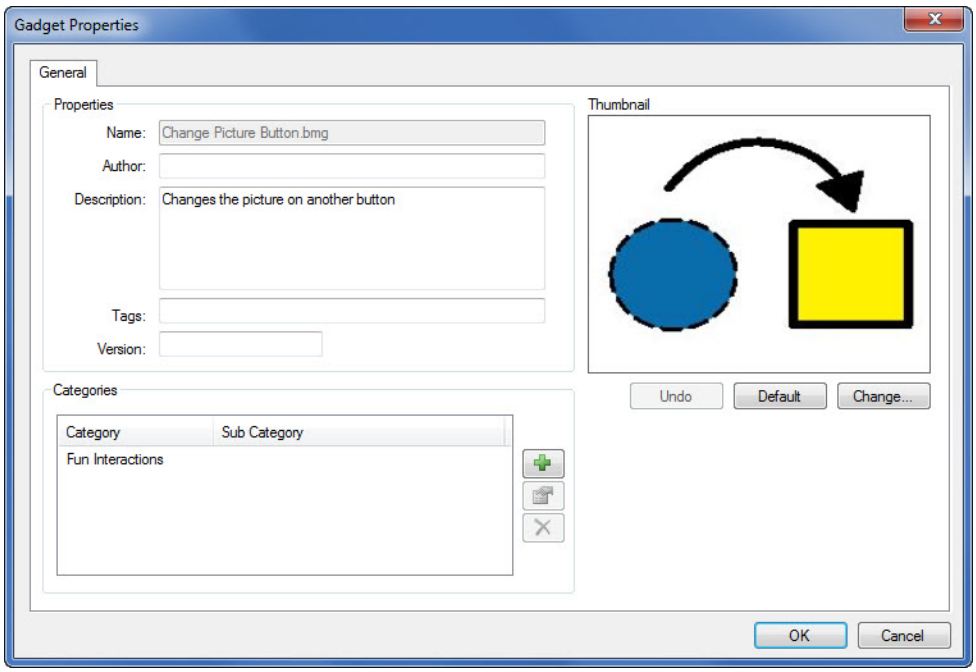
2. Set the properties for the gadget, and then select **OK**. (For more information, see ***Edit Properties for a Gadget***.)

Edit Properties for a Gadget

You can edit the properties of a gadget to set its name, change its thumbnail, and assign it to a category.

In the *Gadgets* panel, right-click a gadget, and then select **Edit**. The *Gadget Properties* dialog will appear.

GADGET PROPERTIES DIALOG



Set the Properties

To set the properties for the gadget, in the *Properties* section, complete any of the following fields:

- **Name -** If you are creating a new gadget, then enter a name for the gadget. This name is the name that will be displayed for the gadget in the *Gadgets* panel.

> **NOTE**
> You can only define a name for the gadget when you are creating a new gadget. If you are editing the properties for an existing gadget, then you can't change the name.

- **Author -** If necessary, enter your name. This field is optional, but if you plan on sharing the gadget with other users or using other users' gadgets, then you might want to add your name so that you can quickly identify the gadget in the future.
- **Description -** Enter a description for the gadget. If you plan on sharing the gadget with other users, then make sure to include a description of what the gadget does, and any instructions required to make the gadget work properly.
- **Tags -** Enter one or more search tags to help you or other Boardmaker Studio users find the gadget in a search. If you enter more than one tag, then enter a comma (,) to separate them. For example, if the gadget is a picture of a banana, then you could enter the following tags: fruit, yellow.

  Search tags make it easier for you and other Boardmaker Studio users to find gadgets. When searching for gadgets in Boardmaker Studio or on *Boardmakershare.com*, the search will return all gadgets that have tags that closely match the search criteria.

When choosing tags for the gadget, try to include tags that describe the scenario, or type of activity, in which a user would want to use the gadget. You can also include synonyms for the gadget's name.

NOTE
When entering a tag, you can use letters, numbers, and underscores (_).

Change the Thumbnail Image

The thumbnail image is the image that is displayed for the gadget in the *Gadgets* panel. By default, the thumbnail is a small picture of the object, but you can change it to be any image.

1. In the *Thumbnail* pane of the *Gadget Properties* dialog, select the **Change** button. A browser will appear.
2. Navigate to the image you want to use for the thumbnail, and then select **Open**.

NOTE
If you want to change the thumbnail back to the default image, then select the **Default** button.

Assign a Gadget to a Category

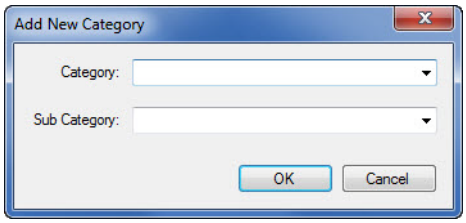
You can define where the gadget will be located in the *Gadgets* panel. If no category is assigned, then the gadget will appear in the root listing in the *Gadgets* panel.

The *Gadgets* panel is organized by category. Each category is displayed as a folder, and some of the categories are further broken down into sub-categories.

Assign a Gadget to a New Category

1. Select the Add icon [ ]. The *Add New Category* dialog will appear.

ADD NEW CATEGORY DIALOG



2. In the *Category* text field, either:
   - To assign the gadget to a new category, enter the name of the category,
   - Or, to assign the gadget to an existing category, select the arrow to the right of the Category text field and select a category from the drop-down list.
3. If you want to assign the gadget to a sub-category, then either:
   - To assign the gadget to a new sub category, enter the name of the sub-category,

- Or, to assign the gadget to an existing sub-category, select the arrow to the right of the Category text field and select a sub-category from the drop-down list

> **NOTE**
> The list of sub-categories includes all existing sub-categories, not just the sub-categories that currently exist for the category you selected. If you assign the gadget to a sub-category that doesn't exist for the category you selected, then the sub-category will be created within that category.

4. Select the **OK** button. The gadget is assigned to the category and, if applicable, the sub-category.
5. If you want to assign the gadget to another category, then repeat steps 1-4. If you assign a gadget to more than one category, then the gadget will be displayed in each category to which it's assigned.

Assign a Gadget to a Different Category

If a gadget is already assigned to a category, and you want to switch it to a different category, then you can edit the category assignment.

1. In the *Categories* pane, select the category that you want to change.
2. Select the Edit icon [ ]. The *Edit Category* dialog will appear.
3. Choose a new category and, if necessary, sub-category. (For more information about choosing categories, see ***Assign a Gadget to a New Category***.)

Share Gadgets

You can share gadgets in Boardmaker Studio by importing and exporting the gadget files. You can import gadgets that other users have created, and export gadgets that you have created.

Add Other Boardmaker Studio Users' Gadgets

You can add gadgets that other Boardmaker Studio users have created.

1. On your computer, copy the gadgets file that you want to import. The gadget must have a*.bmg* file name extension.
2. Navigate to **My Documents > Boardmaker Studio > Gadgets**.
3. Paste the gadget file into the *Gadgets* folder.
4. Open Boardmaker Studio. If you already have Boardmaker Studio open, then close it and re-open it. The gadget will be displayed in the *Gadgets* panel. If it has a category assigned to it, then it will be listed in that category.

Export a Gadget

If you want to send a gadget to another user, or post a gadget on *BoardmakerShare.com*, then

you can export it.

1. On your computer, navigate to **My Documents > Boardmaker Studio > Gadgets**. By default, this folder contains all of the gadgets you have created.
2. Copy the gadget file that you want to export, and send it to the location to which you want to export the gadget.

11 Working with Actions

An "action" is a behavior that causes an object on a page to perform a function, such as sending text to the message window, speaking a button's label, opening a page when a hot spot is selected, displaying the time on a button, etc.

Boardmaker Studio offers over 500 actions, and you can use these actions to easily program an object to create your own customized content. Use the *Action Editor* to quickly add an action script to an object on a page - select a Favorite action or Snippet (a commonly used grouping of actions) from the *Action Editor* toolbar, or search for an action by simply typing in a keyword in the Search text box. Create a new macro or event, share variables within all the pages of a project or activity, and easily reorder the sequence of actions in your action script.

If you like, you can save the object you have programmed as a Gadget to use over and over again in all your projects.

This chapter covers the following topics:

- ***The Action Editor***
- ***Programming an Object***

THE ACTION EDITOR

Use the *Action Editor* to assign actions to an object or to a page - or to edit actions already assigned. You can add actions from a number of categories (choose from over 550 actions from four major categories), search for a specific action, add a favorite action or snippet. You can add or edit macros or shared variables, manage events, select from various options for your action scripts, and, if you wish, determine whether the action script you program can run concurrently with an action script programmed on another object.

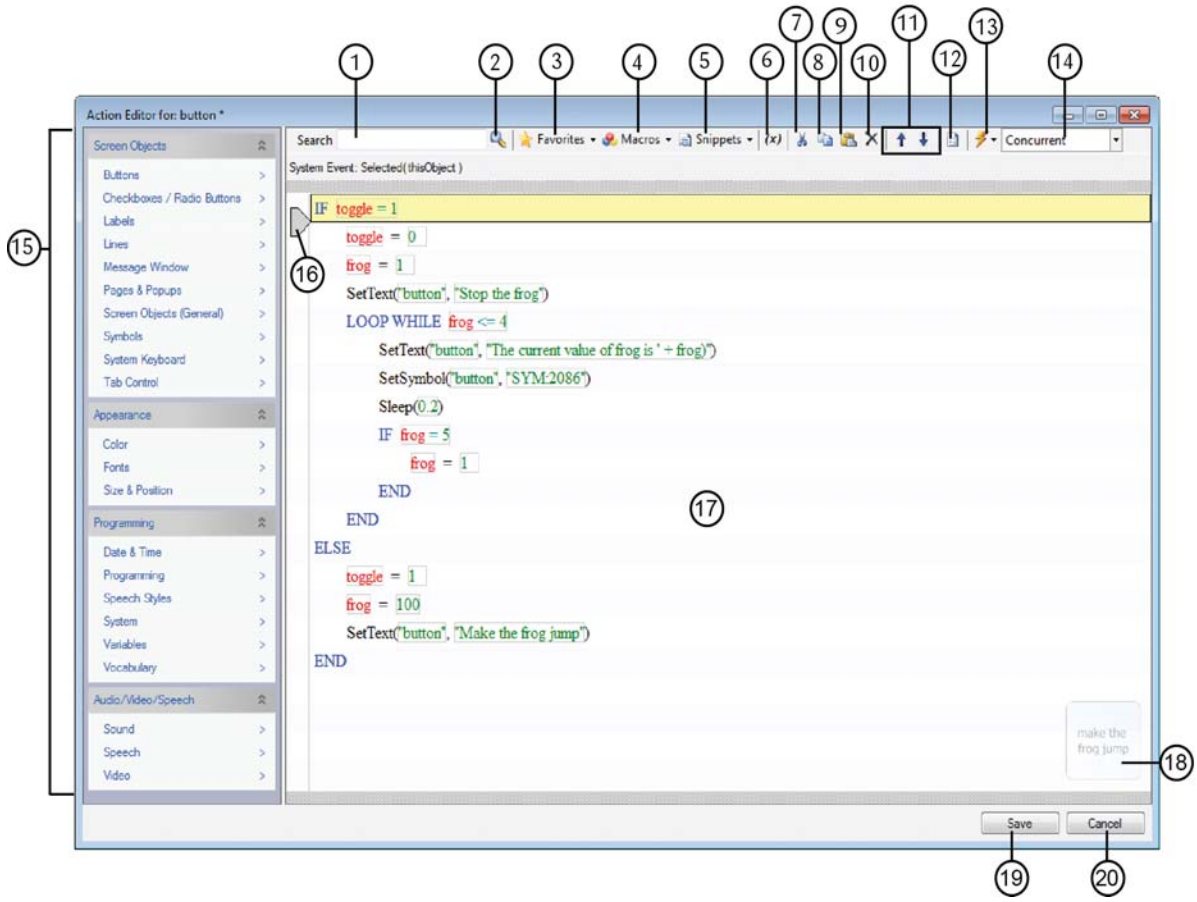
You can access the *Action Editor* by:

- Selecting **Edit Actions** from the Properties panel (under *Programming*) of any programmable object (or from the *Page* Properties panel) or
- By double-clicking directly on the object (or on the page background).

Overview of the Action Editor

Detailed instructions for using the *Action Editor* are included in this chapter. Following is a simple overview of the *Action Editor* to help familiarize you with its functions and controls:

Action Editor



1 ***Search* text box -** Enter your search criteria in the text box. As you begin typing, actions that match the text will be dynamically displayed. (See ***Searching for Actions***.)

2 **Search button -** Enter a keyword in the *Search* text box and then select the Search button.) (See ***Searching for Actions***.)

3 **Favorites drop-down list -** Add an action from the *Favorites* list to the object you are programming. (See ***Favorites***.)

4 **Macros drop-down list -** Add a macro to the object you are programming. (See ***Working with Macros***.)

5 **Snippets drop-down list -** Add a commonly used action to the object you are programming. (See ***Snippets***.)

6 **Edit shared variables button -** Add or edit a shared variable. (See ***Working with Shared Variables***.)

7 **Cut -** Cut the selected (highlighted) action(s).

8 **Copy -** Copy the selected (highlighted) action(s).

9 **Paste -** Paste the cut/copied action(s).

10 **Delete -** Remove the selected (highlighted) action(s).

11 **Move selected lines up / Move selected lines down arrows -** Move the selected action up or down in the sequence of actions.

12 **Options button -** Open the *Action Script Options* dialog. (See ***Action Script Options***.)

13 **Events button -** Open the *Events* drop-down list. (See ***Working with Events***.)

14 **Execution type drop-down list -** Designate whether the actions programmed on two or more objects can be performed at the same time ("concurrent"), or designate the action script as "exclusive" (only one exclusive action script can execute at a time.) (Or you can retain the default settings).

15 **Category list -** Displays a list of action categories, arranged by category group. Select a category in the list to display all the actions in that category. Select an action from the list to add it to the list of assigned actions. (See ***Action Categories***.) (To view [open] the list of action categories in a category group, select the arrow at the top right of the category group title bar.)

16 **Insertion pointer -** Indicates the location in the list of actions where the next action will be added. This pointer can be dragged up or down to any position in the action list.

17 **Assigned actions list -** Displays all of the actions assigned to the object you are programming. Actions are performed in the sequence in which they appear.

18 **Object thumbnail -** Displays a thumbnail picture of the object being edited.

19 **Save button -** Save all changes you have made and close the *Action Editor*.

20 **Cancel button -** Close the *Action Editor* without saving any changes.

NOTE

The *Macro Editor* is virtually identical to the *Action Editor* and is used in the same way - to add actions to the macro (or to edit actions on a macro). The only difference between the two is that the *Macro Editor* does not include an Events button. (You cannot add an event to a macro.) (See *Working with Macros*.)

Action Categories

Boardmaker Studio offers a large number of pre-programmed actions (over 550!) that you can assign to objects on a page - or to the page itself.

REFERENCE
See the appendix *Action and Function List* for a complete list of all the actions available in Boardmaker Studio.

These actions are grouped into four categories:

- Screen Objects
- Appearance
- Programming
- Audio/Video/Speech

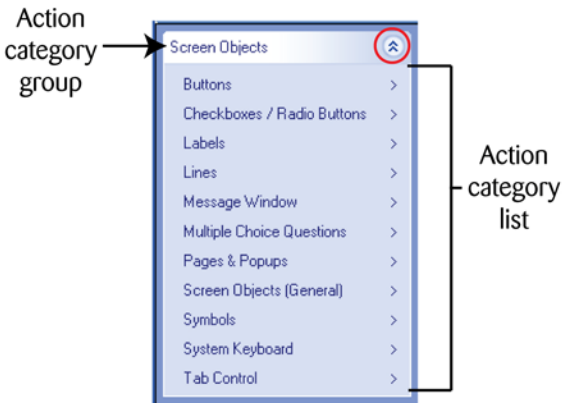
Within each category, actions are arranged by function.

You can access the action category list from both the *Action Editor* and *Macro Editor*s.

REFERENCE
See *The Action Editor* and *The Macro Editor*.

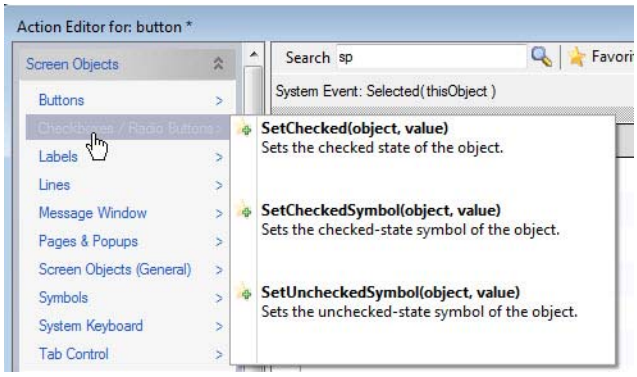
To open the list of actions in a category group, select the arrow [ ] at the top right of the category group title bar.

CATEGORY GROUP WITH CATEGORY LIST OPEN



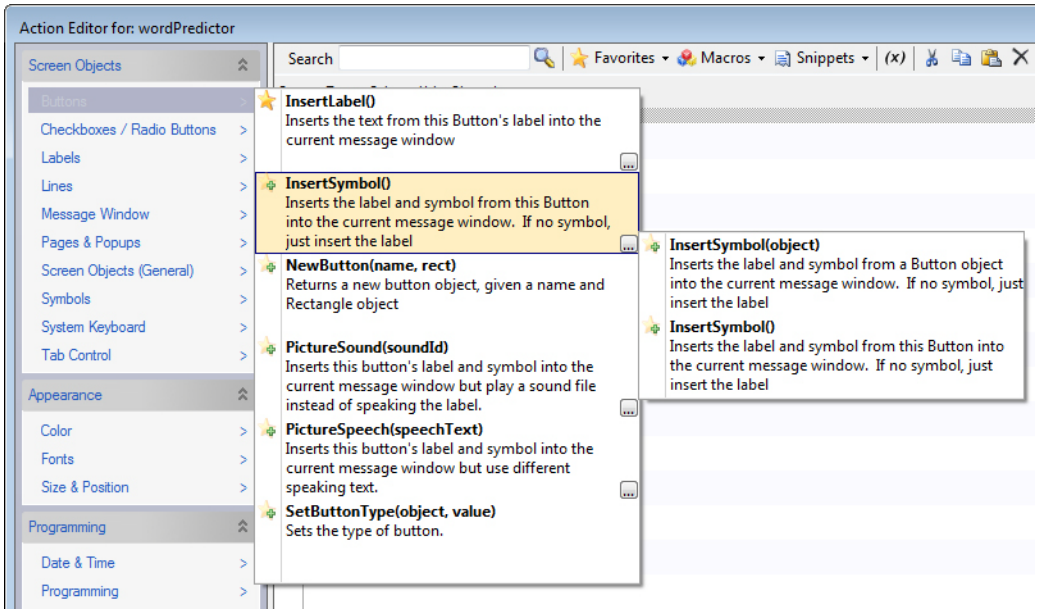
When you select a category from the category list, a list will open, listing all of the actions in that category - with a brief description of each action. Simply select an action to assign it to the object or page you are programming.

Checkboxes / Radio Buttons Action List (from Screen Objects category)



Some of the actions in the category list have variations - indicated by an ellipsis icon [...] after the action name. Select this icon to open a list of variations of the action. (See the illustration below.)

Category List (shown in Action Editor)



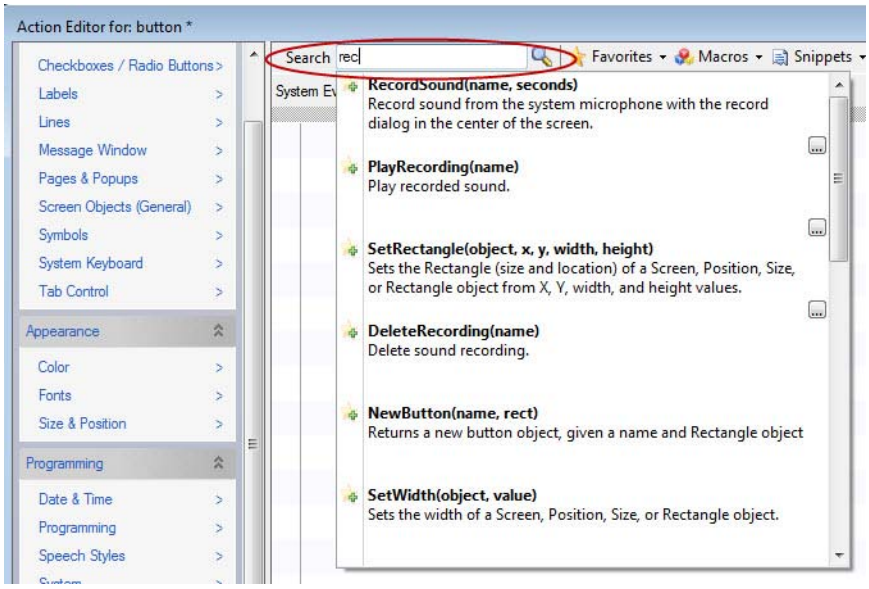
Reference
See *Programming an Object* for step-by-step instructions for programming actions.

Searching for Actions

If you don't know the name of the action you want to use, you can simply enter a keyword into the Search text box on the *Action Editor*. As you type, actions that match the text will be dynamically displayed.

If, for example, you want to program a button to record a student's response to a question, and you don't know the name of the exact action to use, you can enter a keyword such as "record." As you begin typing in the keyword, a drop-down list will show actions related to the letters you have entered. (See the illustration below.)

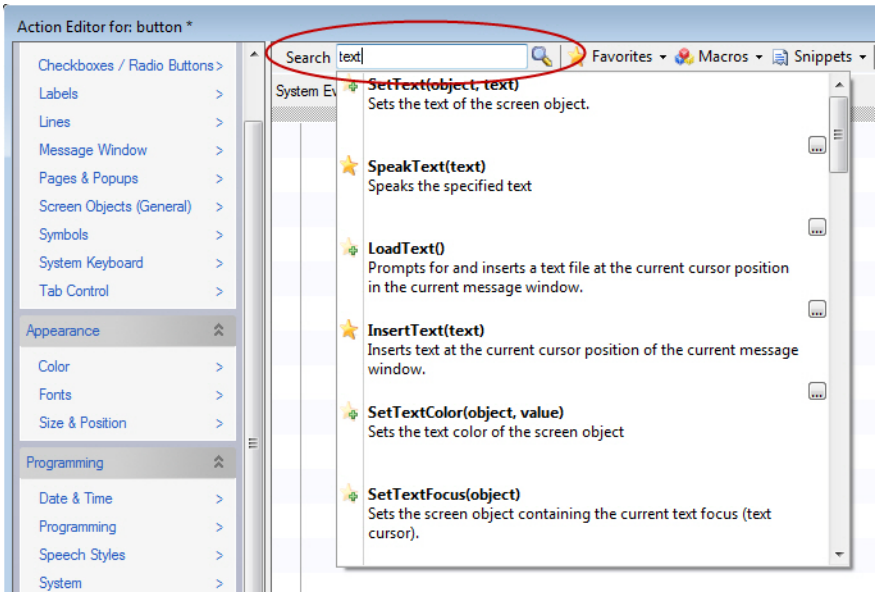
ACTION SEARCH (DYNAMIC DISPLAY AS TEXT IS ENTERED)



The drop-down list will change dynamically as you type. When you see the action you want to use, simply select it and it will be assigned to the object you are programming.

You can also type a keyword or two into the *Search* text box, and select the Search button to open a list of actions that match your search criteria. (See the illustration below.)

ACTION SEARCH (USING SEARCH BUTTON)



REFERENCE
See *Programming an Object* for step-by-step instructions for programming actions.

Favorites

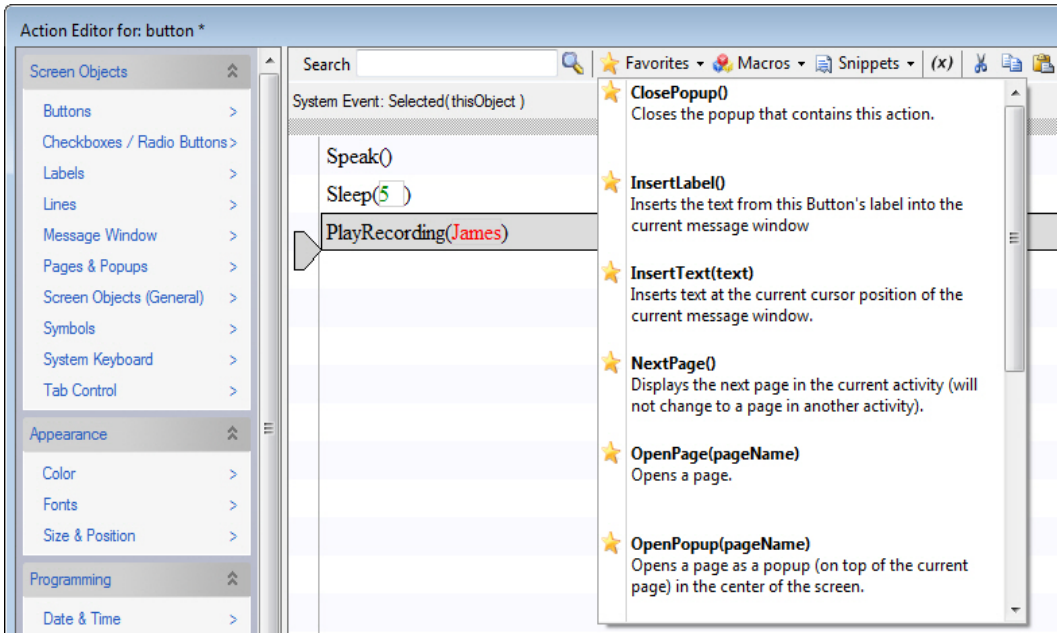
The *Favorites* list contains frequently used actions. Use this list to quickly insert a favorite action when you programming an object or a macro.

You can easily customize the *Favorites* list by adding your own favorite actions and removing actions that you seldom use.

The *Favorites* list can be accessed through both the *Action Editor* and *Macro Editor*s. (See ***The Action Editor*** and ***The Macro Editor***.)

REFERENCE
See *Programming an Object* for step-by-step instructions for adding actions to an object.

FAVORITES DROP-DOWN LIST (SHOWN IN ACTION EDITOR)



Favorite Actions

By default, the *Favorites* list contains the following actions:

ClosePopup()	Close the popup on which this action is programmed.
InsertLabel()	Send the object's label text to the message window.
InsertText(text)	Send text to the message window. (You must specify the text.)
NextPage()	Opens the next page in the current activity.
OpenPage(pagename)	Open a specified page. (You must select the page.)
OpenPopup(pageName)	Open a specified popup. (You must select the popup.)
PlaySound(soundId	Plays a sound file. (You must select the sound to be played.)
PopupVideo(videoId)	Opens the video in full screen. (You must select the video.) Automatically closes the popup when the video is finished playing.
PreviousPage()	Opens the previous page in the current activity.
SpeakLabel()	Speak the object's label text. (Text is not sent to the message window.)
SpeakText()	Speak a text message. (You must specify the text message. It may be different from the object's label, and it is not sent to the message window.)

Add an Action to the Favorites List

You can customize the *Favorites* list by adding the actions that you use most often.

1. Open the *Action Editor* (see ***The Action Editor***).

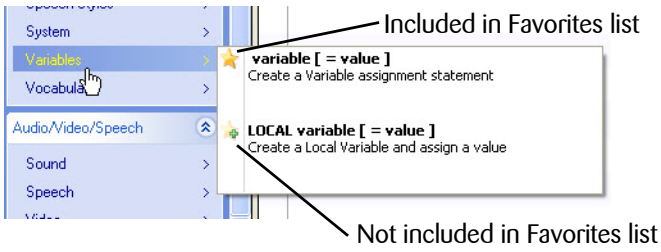
> **SHORTCUT**
> Double-click on any object on the page or on the page itself to quickly open the *Action Editor*.

2. Search for the action that you want to add to your *Favorites* list:
   - Enter a key word or phrase in the Search text box. As you type, actions that match the text will be dynamically displayed.
   - Or you can search for an action from the category list.
3. Highlight the action by moving your cursor over it.

> **CAUTION**
> Highlight the action, do not select it. (Selecting the action will add it to the list of actions already programmed on the object.)

Actions that are already included in the *Favorites* list have a star icon [ ]. Actions that are not included display an add icon [ ].

CATEGORY LIST (VARIABLES) SHOWING FAVORITES LIST ICONS



4. To add the action to the *Favorites* list, select the add icon [ ]. The icon will disappear and be replaced by the star icon [ ]. The action will immediately be added to the *Favorites* list.
5. Repeat steps 2 - 4 to add more actions to the *Favorites* list.
6. When you have finished adding actions to the *Favorites* list, select Close [ ] to close the *Action Editor*.

> **NOTE**
> You can also add an action to the *Favorites* list through the *Macro Editor*. (See *The Macro Editor*.)

Remove an Action from the Favorites List

The *Favorites* list is pre-programmed with a list of frequently used actions. If you find that you never use one or more of these actions, you can easily remove the action from the *Favorites* list.

1. Open the *Action Editor* (see ***The Action Editor***).

> **SHORTCUT**
> Double-click on any object on the page or on the page itself to quickly open the *Action Editor*.

2. Select the **Favorites** drop-down list in the toolbar.
3. Scroll through the list to find the action that you want to remove, and highlight the action by moving your cursor over it.

> **CAUTION**
> Highlight the action, do not select it. (Selecting the action will add it to the list of actions already programmed on the object.)

4. Select the star icon [ ] to the left of the action name. The icon will disappear and be replaced by the add icon [ ]. The action will immediately be removed from the *Favorites* list.
5. Repeat steps 3 and 4 to remove additional actions from the *Favorites* list.

> **NOTE**
> You can also remove an action from the *Favorites* list through the *Macro Editor*. (See *The Macro Editor*.)

6. When you have finished, select Close [ ] to close the *Action Editor*.

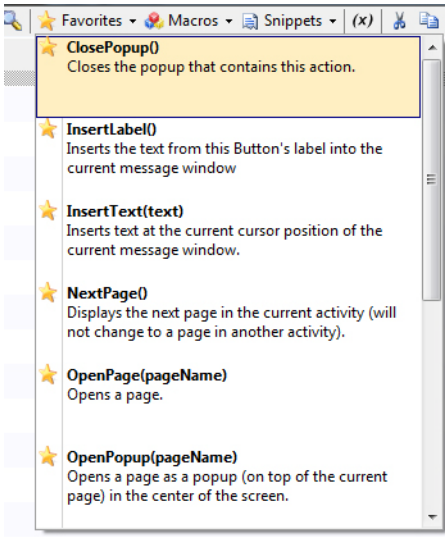
Program an Object with a Favorite Action

You can quickly and easily add a favorite action to any object you are programming.

> **REFERENCE**
> See *Programming an Object*.

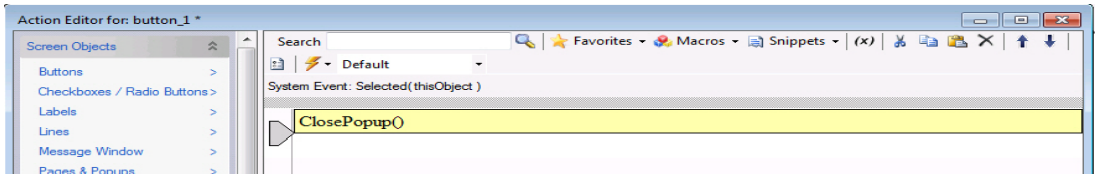
1. If the *Action Editor* is not open, double-click the object (or page) to which you want to add the favorite action.
2. *(Optional)* If you are adding a favorite to an object that already has actions programmed on it, move the insertion pointer to the location in the list of actions where you want to place the favorite.
3. Select the **Favorites** drop-down list.
4. Select the favorite you want to add from the list. (See the illustration below.)

FAVORITES DROP-DOWN LIST



The favorite action will appear at the position you have indicated.

FAVORITE IN ACTION EDITOR



5. *(Optional)* If the favorite you have added contains a variable or expression, define its values.

6. Select **Save** on the *Action Editor*. The *Action Editor* will close, and the favorite will be added to the actions programmed on the object.

Entering Expressions and Variables

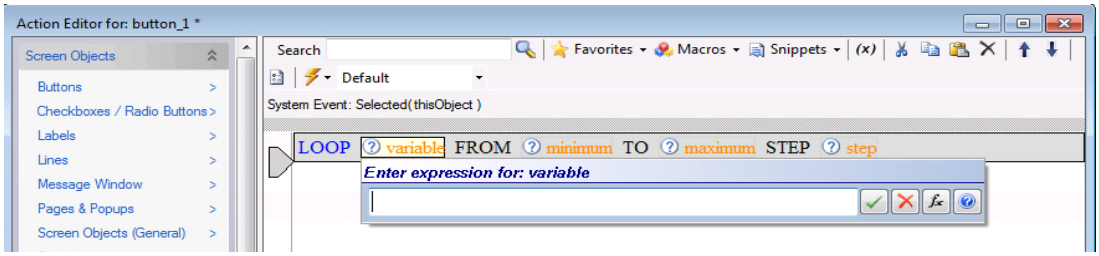
An expression is an instruction to execute something that will return a value. It's a combination of values, variables, functions, and operators that computes and then produces (or "returns") another value.

For example, *2+3* is an expression. *2* and *3* are values, and the expression returns another value of *5*.

The Expression Editor at a Glance

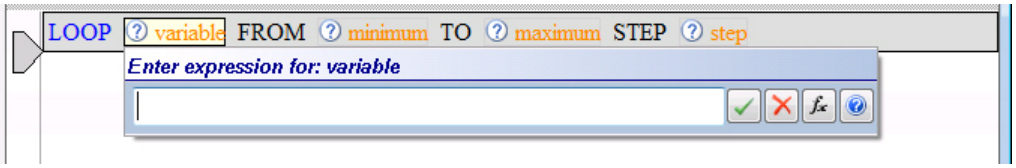
Many actions contain expressions. If you add an action that contains an expression, then the Expression Editor will open to enable you to define each component of the expression.

Expression Editor (example)



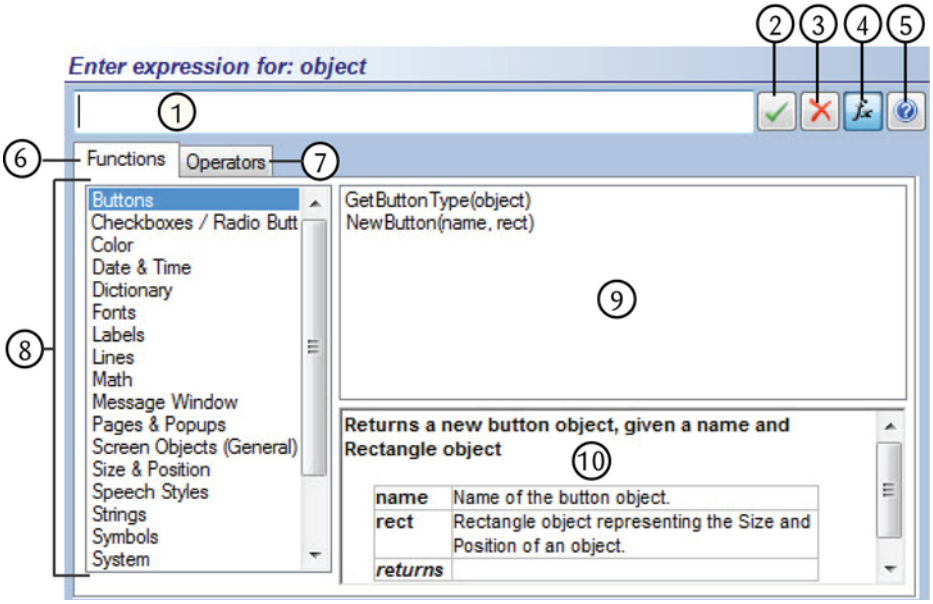
When the Expression Editor opens, empty placeholders will be displayed for each component that you need to define in the expression. In this example, *variable*, *minimum*, *maximum*, and *step* are all placeholders for the expression. By defining these components, you can build the expression.

Expression Editor Showing Placeholders (example)



The Expression Editor is available in the *Action Editor* and *Macro Editors*.

Expression Editor (with Functions Tab Open)



1 **Text field -** Displays the name or value of the expression for the action you are currently programming. Enter a name for the expression in this field or double-click on a function or operator in the Functions or Operators tabs to add the name to the field.

2 **OK button -** Accepts the expression you have entered into the text field and closes the *Expression Editor*.

3 **Cancel button -** Closes the *Expression Editor* (without accepting any text entries you have entered in the text field).

4 **Show / Hide Functions button -** Toggles between displaying and hiding the Functions and Operators tabs.

5 **Help button -** Opens Expression Help.

6 **Functions tab -** Displays the functions you can enter for the expression.

7 **Operators tab -** Displays the operators you can enter for the expression.

8 **Categories list -** Displays a list of action categories. This list is limited to the categories that contain actions to which you can assign functions.

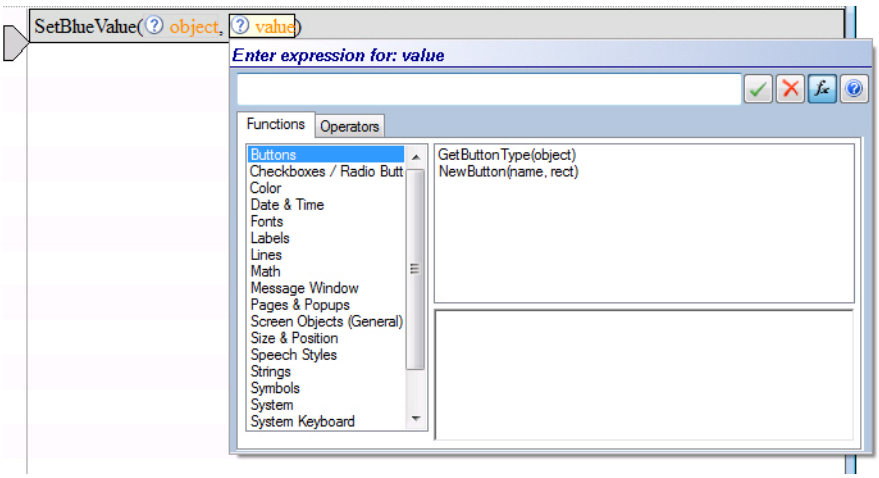
9 **Functions list -** Displays a list of the functions available for the selected action category.

10 **Function definition -** Defines the selected function and its required parameters, if any.

Enter an Expression

1. In the *Action Editor* or *Macro Editor*, add an action. (See ***Adding Actions to an Object***.) The expression will be inserted with empty placeholders, and the Expression Editor will open.

EXPRESSION EDITOR



NOTE
If the Expression Editor doesn't open, then make sure that the *Edit Parameters on Insert* option is selected. (See *Action Script Options*.)

2. For the first placeholder, enter a value for the expression in the text field. Depending on the properties of the expression you are entering, you can enter this value in the following ways:

   - Enter the value manually as text.

NOTE
If you enter the value of the expression as text, enclose words or phrases in quotation marks (for example, "Today is"). Enter numbers without quotation marks (for example, 73 or 98.6). Enter variables without quotation marks (for example, length or x).

   - Choose a function. On the *Functions* tab, select an action category and then double-click a function. (See ***Functions***.)
   - Choose an operator. On the *Operators* tab, double-click an operator. (See ***Operators***.)

3. Select the OK (check mark) button in the *Expression Editor* toolbar. The value will be added to the placeholder.
4. Repeat steps 2 and 3 for each placeholder in the expression.

Functions and Operators

The *Functions* and *Operators* tabs in the Expression Editor provide a shortcut for building expressions. When entering an expression, rather than entering functions and operators manually, you can choose one from a list.

Functions

A function is a command that returns a specific value.

Some functions require a parameter in order to return a value or an object. The necessary parameter will be enclosed in parentheses after the function name, and you must define the parameter when programming the function. For example, in the *GetBrightness(Object*) function, *Object* is the parameter from which the brightness value will be returned.

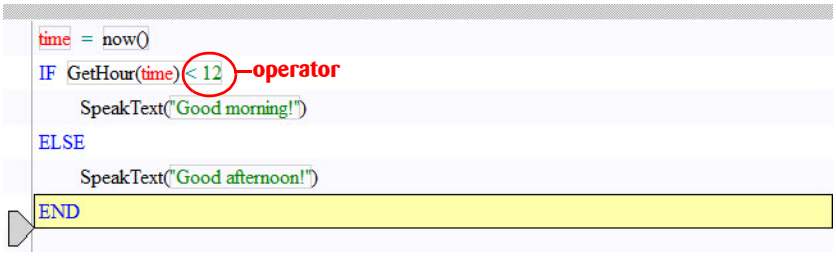
Functions that do not require parameters to return a value have empty parentheses after the function name. For example, *NewColor()*.

Operators

An operator is a symbol that represents a mathematical or logical action in the expression (for example, addition, greater than, or not equal to).

- An expression can have one or more operators. In the following example, the *time* variable is set to the current time. If the current time is less than 12 (noon), then the phrase "Good morning" will be spoken. Otherwise, the phrase "Good afternoon" will be spoken.

EXPRESSIONS WITH OPERATORS



Practice Exercise: Use a Variable Action to Program a Button

This exercise will show you how to use the Expression Editor to program a button to display the current time.

- Open the *Action Editor.*
- Create a variable to hold the current time.
- Set the text of the selected button to display the current time.
- Play the project to try out your program.

> **NOTE**
> Before you begin this exercise, you should create a new page with at least one blank button on the page. Save the new page with a name like "Practice" or "Test" so that you can find it easily. (See *Creating Pages*.)

Step One: Open the Action Editor

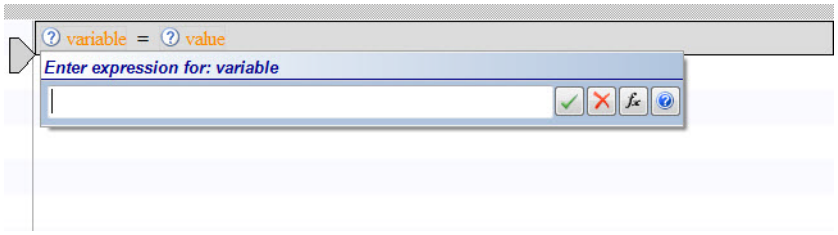
1. Open the new page you have created for this exercise.
2. Double-click a button on the page. The *Action Editor* will open.

> **NOTE**
> Before you begin adding actions to the button for this exercise, make sure that the *Edit Parameters on Insert* and *Simple Select Mode* options are selected. (See *Action Script Options*.)

Step Two: Create a Variable to Hold the Current Time

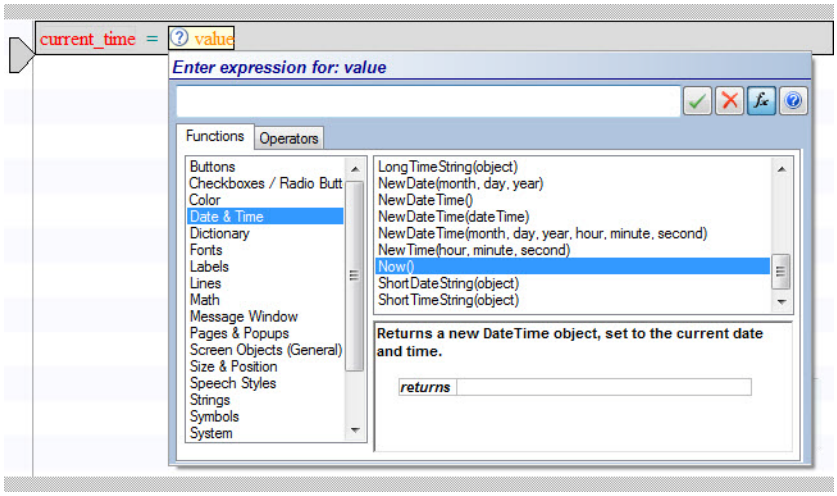
1. In the Category list, in the *Programming* section, select **Variables > variable [=value]**. A blank variable assignment will appear in line 1, and the Expression Editor will open.

BLANK VARIABLE ASSIGNMENT IN THE EXPRESSION EDITOR



2. Enter **current_time** in the text field, and then select the OK button.
3. Select the **value** placeholder to enter a value for *current_time* to store. The Expression Editor will open.
4. Select the Show/Hide Functions button. The *Functions* tab will open.
5. Select the **Date & Time** category, and then double-click the **Now()** function.

SELECTING THE NOW FUNCTION



6. Select the OK button. *Now()* is assigned to the *current_time* variable.

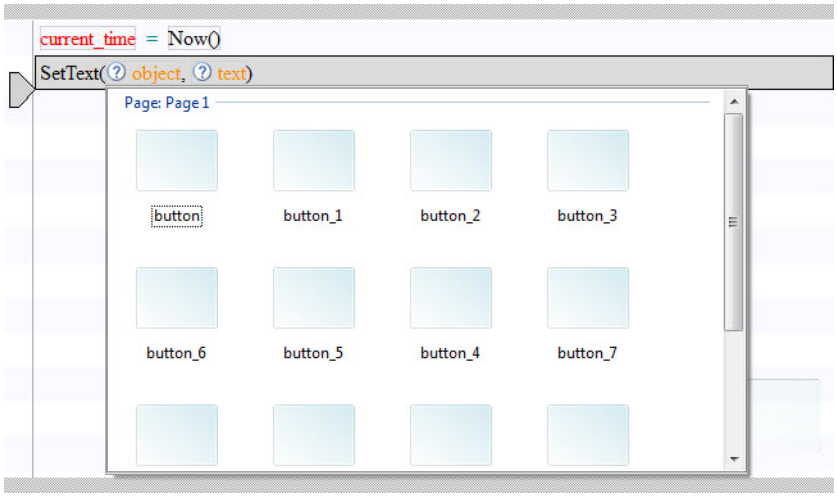
Step Three: Set the Button to Display the Current Time

After creating a variable to hold the current time, you next need to set the button to display that value.

1. Make sure that the Insertion Pointer is under line 1.

2. In the *Search* text field, enter **SetText**, and then select the *SetText(object,text)* function. The function will be added to the *Action Editor*, and a browser will open displaying each of the buttons on your page.

THE SETTEXT FUNCTION

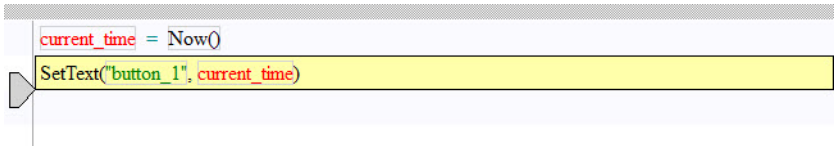


NOTE

The *SetText* function sets the text for the selected screen object (in this case, a button). The function has two parameters: *object* (the object for which you are setting the text), and *text* (the text that you want to be displayed on the object).

3. To set the *object* parameter, select the button on which you want the time to be displayed.
4. Select the *text* parameter. The Expression Editor will open.
5. Enter *current_time* in the text field, and then select the OK button. The *SetText* function is completed. In this case, the function will display, on *button_01*, the value stored in the *current_time* variable.

The Completed SetText Function

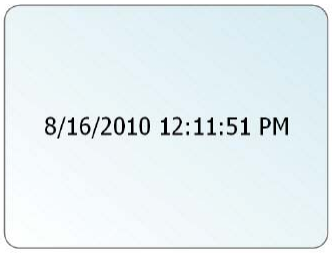


6. In the *Action Editor*, select **Save**. The program is saved, and you can now try it out.

Step Four: Try Out Your Program

1. In the Boardmaker Studio Designer, select the Mode button and choose **Preview Page**.
2. Select the button that you programmed. The button should display the current date and time.

Button Displaying Current Date and Time



Snippets

The *Snippets* drop-down list provides a shortcut for quickly inserting a "snippet" - a group of commonly used actions - into the actions you are programming. The *Snippets* list, by default, includes a selection of popular actions from the *Programming* category.

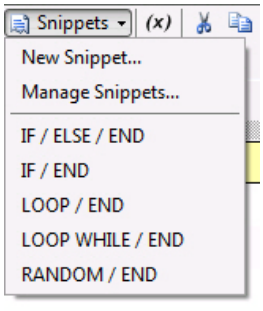
REFERENCE
See *Entering Expressions and Variables* for information on programming these types of actions.

The *Snippets* list can be accessed through both the *Action Editor* and *Macro Editor*s. (See ***The Action Editor*** and ***The Macro Editor***.)

REFERENCE
See *Programming an Object* for step-by-step instructions for adding actions to an object.

You can customize the *Snippets* list by adding, editing, or deleting snippets.

SNIPPETS DROP-DOWN LIST



Adding a New Snippet to the Snippets List

You can add actions that you frequently use to the *Snippets* list. If, for example, if you often use the *PlaySound(soundid)* action to play a recording of applause, you can make that action a snippet. Then, instead of having to search for the sound ID (the applause sound file) each time you want to use the action, you can program the action only one time: *PlaySound("SOUND:APPLAUSE"*). Then you can add the programmed action to the *Snippets* list so you can quickly and easily add the action to any object by simply selecting it from the list.

You can make a new snippet using a group of actions that you have already programmed, or you can create a new snippet and program it using the *Snippet Editor*.

Add a Snippet Using Pre-Programmed Actions

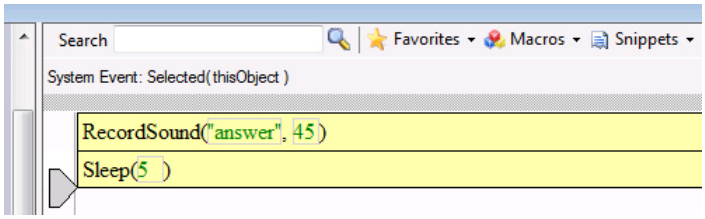
If you have programmed an object with an action (or group of actions) that you want to be able to use over and over again, you can make that action (or group of actions) into a snippet.

1. Double-click on the object with the group of actions that you want to make into a new snippet. The *Action Editor* will open, and the actions assigned to the object will be listed.

2. Highlight the action(s) that you want to make into a new snippet.

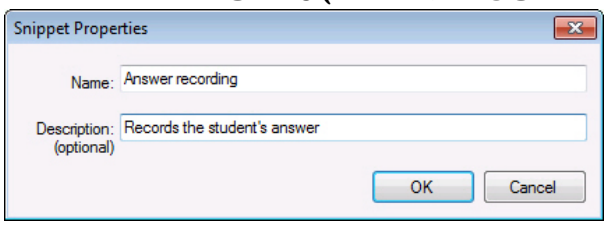
> **NOTE**
> To highlight more than one action, hold down the **Ctrl** key as you select each action.

ACTION EDITOR WITH ACTIONS HIGHLIGHTED



3. Select **Snippets > New Snippet**. The *Snippet Properties* dialog will open.

SNIPPET PROPERTIES DIALOG (WITH NAME AND DESCRIPTION FIELDS COMPLETED)

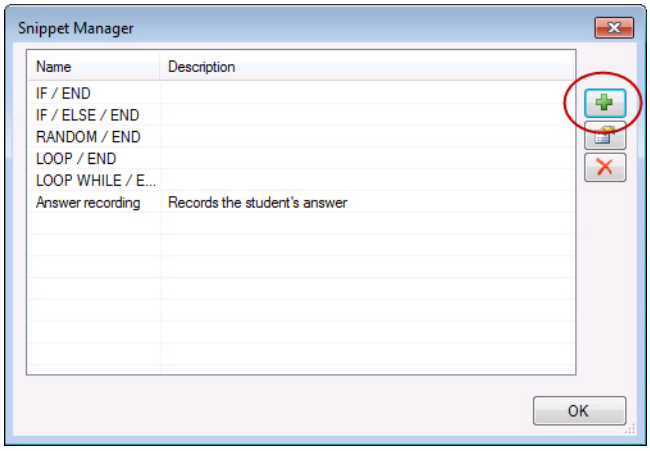


4. In the *Name* text box, enter a name for the new snippet.
5. *(Optional)* In the *Description* text box, enter a short description of the new snippet.
6. Select **OK**. The *Snippet Properties* dialog will close and the snippet will be added to the *Snippets* list.
7. Select Close [ ] to close the *Action Editor*.

Add a Snippet Using the Snippet Manager

1. Double-click on any object on the page or on the page background. The *Action Editor* will open.
2. Select **Snippets > Manage Snippets**. The *Snippet Manager* will open.

SNIPPET MANAGER (WITH ADD BUTTON CIRCLED)



3. Select Add [ ]. The *Snippet Properties* dialog will open.
4. In the *Name* text box, enter a name for the new snippet.
5. *(Optional)* In the *Description* text box, enter a short description of the new snippet.
6. Select **OK**. The *Snippet Editor* will open.

NOTE
The *Snippet Editor* contains most of the same tools and drop-down lists as does the *Action Editor*. See *The Action Editor* for information on using these tools and lists. (The *Snippet Editor* does not contain an Events button or an Execution type drop-down list.)

7. Select actions for the snippet. You can:
   - Select actions from the Category list.
   - Use the *Favorites, Macros, or Snippets* drop-down lists to add actions to the snippet you are creating.)
   - Use the Search text box and Search button to search for a specific action.
8. When you have finished creating the snippet, select **Save**. The *Snippet Manager* will reopen.
9. To add additional snippets, repeat steps 3 -8.
10. If you are done adding snippets, Select **OK** to close the *Snippet Manager*. Select Close [ ] to close the *Action Editor*.

Managing Snippets

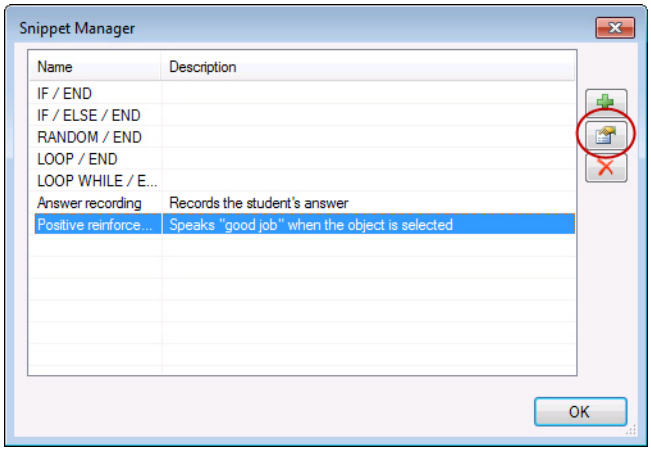
You can add, edit, and delete snippets using the *Snippet Manager*.

> **REFERENCE**
> See *Add a Snippet Using the Snippet Manager*.

Edit a Snippet

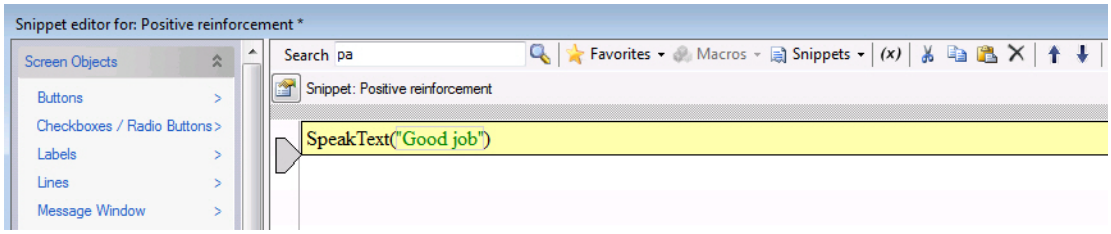
1. Double-click on an object on the page or on the page background. The *Action Editor* will open.
2. Select **Snippets > Manage Snippets**. The *Snippet Manager* will open.
3. Select the snippet you want to edit.

SNIPPET MANAGER (WITH OPTIONS BUTTON CIRCLED)



4. Select Options [ ]. The *Snippet Editor* will open.

SNIPPET EDITOR



5. Use the tools and drop-down lists in the *Snippet Editor* to add, reorder, or delete actions from the snippet.

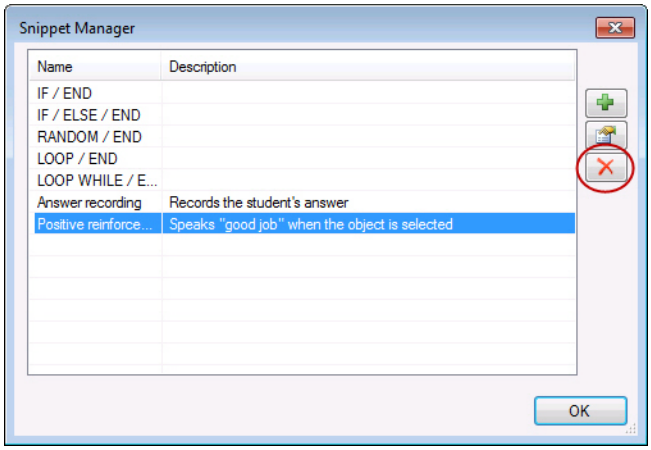
> **NOTE**
> The *Snippet Editor* contains most of the same tools and drop-down lists as does the *Action Editor*. See *The Action Editor* for information on using these tools and lists. (The *Snippet Editor* does not contain an Events button or an Execution type drop-down list.)

6. Select **Save** to save your changes. The *Snippet Editor* will close, and the *Snippet Manager* will reopen.
7. To edit additional snippets, repeat steps 3 - 6.
8. If you are done editing snippets, select **OK** to close the *Snippet Manager*. Select Close [ ] to close the *Action Editor*.

Delete a Snippet Using the Snippet Manager

1. Double-click on an object on the page or on the page background. The *Action Editor* will open.
2. Select **Snippets > Manage Snippets**. The *Snippet Manager* will open.

Snippet Manager (with Delete button circled)



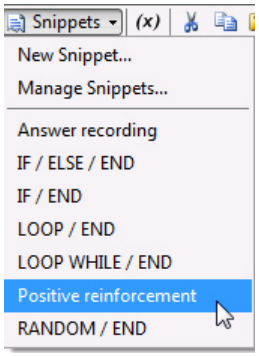
3. Select the snippet you want to delete.
4. Select Delete [ ] on the *Snippet Manager*. A confirmation dialog box will open. Select **Yes**.
5. If you are done deleting (or managing snippets), select **OK** to close the *Snippet Manager*. Select Close [ ] to close the *Action Editor*.

Program an Object with a Snippet

You program an object with a snippet in the same way you program any action on an object. (See ***Programming an Object***.)

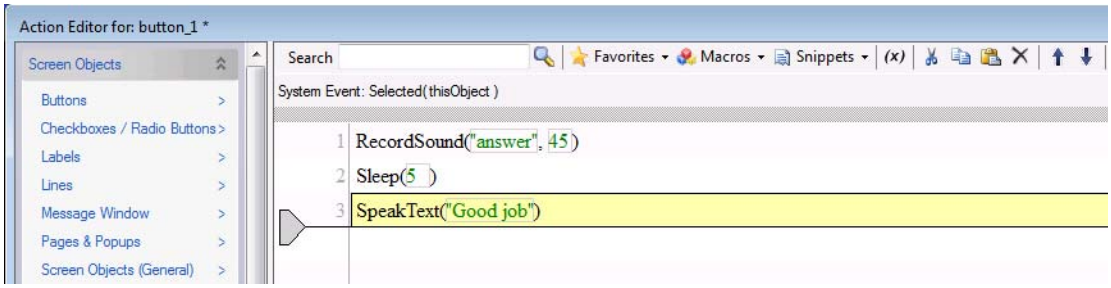
1. Double-click on the object (or page) on which you want to program the snippet. The *Action Editor* will open.
2. Select the **Snippets** drop-down list.
3. Select the snippet you want to add. (See the illustration below.)

SNIPPETS DROP-DOWN LIST



The snippet you have added will appear in the *Action Editor*.

SNIPPET IN ACTION EDITOR



4. Select **Save** on the *Action Editor*. The *Action Editor* will close, and the snippet will be added to the actions programmed on the object.

Working with Shared Variables

Variables that can be accessed and used across components in a project are called shared variables. You can create shared variables that can be shared across projects, activities, and pages.

Shared variables are helpful when you need to define a value that must be passed to different objects in your project. If any of the objects in your project change the value stored in the shared variable, then the new value will be saved and available to the other objects in its scope. (For more information about shared variable scope, see ***Scope***.)

For example, suppose you were designing a multi-page activity, and you wanted to display the page number on a button for each page. You could manually enter the page number in the label for each page number button, but then you'd have to edit each button every time you added, deleted, or moved pages in the activity.

Instead, you could use a shared variable. This variable would store the current page number and pass it to each page in the activity. As the user moves from page to page, the page number value could be incremented or decremented and then displayed in the page number button label.

You can also use shared variables to define project-wide settings that you and other users can set using the *Project Setup* dialog.

REFERENCE
For more information about variables, see *Entering Expressions and Variables*.

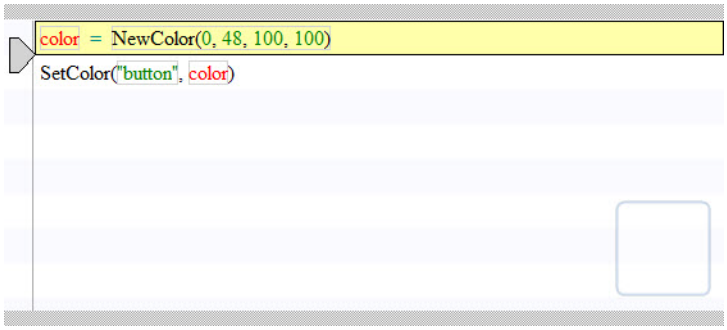
Shared Variables Basics

A shared variable works just like a local variable - except that you can use it across multiple objects, pages, or activities, or even across an entire project.

Local vs. Shared Variables

When you program an object and create a variable, that variable is local, meaning that it's only available to the object you're programming. In the following example, a button has been programmed to change its color to a custom shade of blue when the user clicks it. The *color* variable defines the color, and *SetColor* assigns the color to the button.

BUTTON PROGRAMMED TO CHANGE ITS COLOR (EXAMPLE)



Because *color* was defined for the button object, it's a local variable and is only available to expressions that you program for the button object. If you wanted to assign *color* to a different object (such as another button), you would use a shared variable.

Scope

For shared variables, the scope refers to the levels to which a shared variable can be passed and modified. In Boardmaker Studio, the scope is determined by the level at which you create a shared variable.

You can create shared variables at the following levels:

- **Project -** The variable will be available to every component in the project, including all activities, pages, and objects.
- **Activity -** The variable will be available to each page and object in the activity, but not to any other activities or pages and objects outside of the activity.
- **Page -** The variable will be available to the page itself and every object on the page, but not available to any other pages or objects.

The Edit Shared Variables Dialog at a Glance

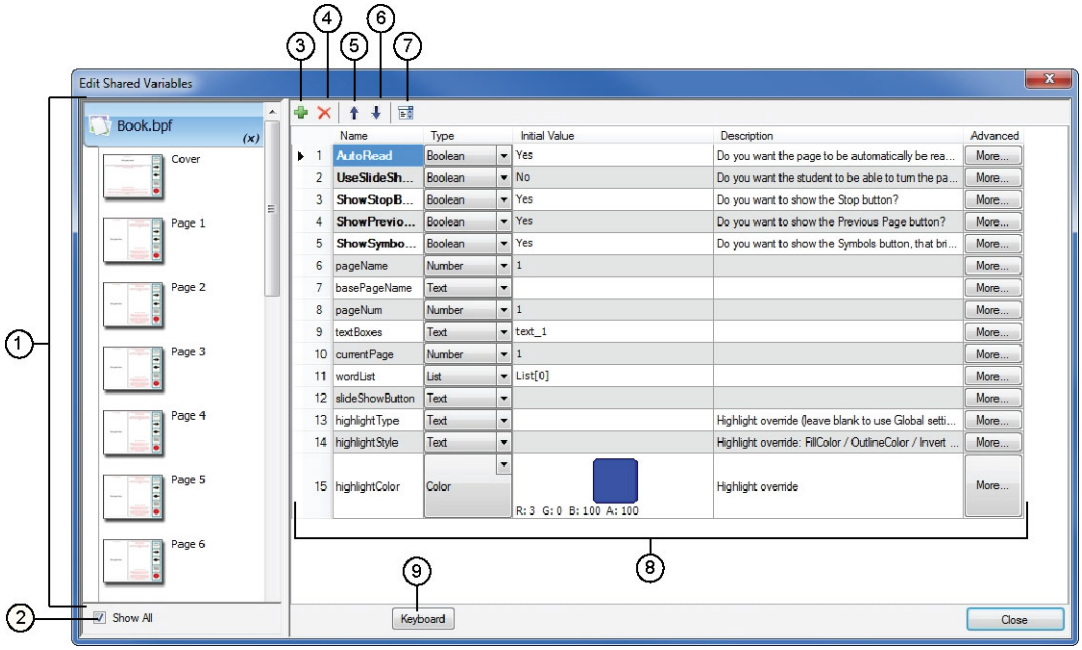
The *Edit Shared Variables* dialog displays all of the shared variables available for the current project, activity, or page. Use this dialog to create, edit, delete, and reorder shared variables.

You open the *Edit Shared Variables* dialog from the *Project* panel.

1. Mouse over:
   - The project title (to create or edit a shared variable for every component in the project).
   - An activity folder (to create or edit a shared variable for each page in the activity).
   - A page (to create or edit a shared variable for each object on the page).
2. Select Edit Shared Variables [x]. The *Edit Shared Variables* dialog will open.

SHORTCUT
To open the *Edit Shared Variables* dialog, you can also right-click a project, activity, or page in the *Project* panel and select Edit Shared Variables.

EDIT SHARED VARIABLES DIALOG



1 **Project Pane -** This pane displays all activities and pages in the project. The *(x)* indicates that the component has shared variables.

2 **Show All check box -** If you select this check box, then all activities and pages in the project will be displayed. If you clear it, then only the component for which you're creating shared variables will be displayed.

3 **Add Row icon -** Adds a new shared variable.

4 **Delete Row icon -** Deletes the selected shared variable.

5 **Move Row Up icon -** Moves a shared variable up a row in the table.

6 **Move Row Down icon -** Moves a shared variable down a row in the table.

7 **Drop List Manager icon -** Opens the Drop List Manager dialog, which you can use to add drop lists, or add, edit, and delete the options for an existing drop list. (See ***Working with Drop Lists*** **on page 456.**)

8 **Shared Variable table -** A table containing shared variables. Each row is a shared variable, and each column is a field for the shared variable.

9 **Keyboard button -** Opens the On-Screen Keyboard. This keyboard lets you enter text when you are not physically at your computer (for example, if you are using an interactive whiteboard).

Create a Shared Variable

You can create a new shared variable at the project, activity, or page level. The level at which you create the shared variable will determine where it will be stored and where it can be used. (For more information about shared variable scope, see ***Scope***.)

1. Open the *Edit Shared Variables* dialog. (See ***The Edit Shared Variables Dialog at a Glance***.)

2. Select the Add Row icon [ ]. A new row will be added to the table.

3. Complete each of the following fields:

   - **Name -** Enter a name for the variable. The name can include letters, numbers, and underscores (_), but it can't include any spaces. For example, if you were creating a shared variable to store the page number, you could name the variable *pageNum*, *pagenum*, or *page_num*. However, *page num* would be invalid.

   - **Type -** Select the drop-down list and choose the data type for the variable. (For more information about the different data types you can choose, see ***Types of Shared Variables***.)

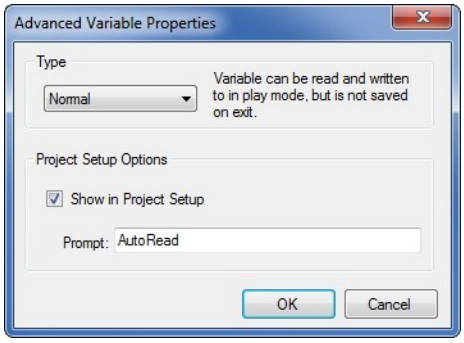
   - **Initial Value -** If you want the variable to contain an initial value, then select this field and enter the value. (For more information about how to enter an initial value for each type of shared variable, see ***Types of Shared Variables***.)

   - **Description -** Enter a description for the variable. It's recommended that you define what the variable controls and any valid values that can be entered.

     Use the *Description* field to keep track of what a shared variable is used for, and to help other users understand how to use the shared variables that are included in the *Project Setup*.

4. In the *Advanced* column, select **More** to define advanced properties for the shared variable. The *Advanced Variable Properties* dialog will open.

ADVANCED VARIABLE PROPERTIES DIALOG (FOR TEXT VARIABLES)



NOTE
The properties available on the *Advanced Variable Properties* dialog depend on the type of shared variable that you selected in the *Type* field.

5. Complete any of the following:

   - The **Type** drop-down list - Choose one of the following options:

     - **Normal -** The shared variable can store values while the project is in Play mode, but the values won't be saved when the project is stopped. The next time the project is opened, the shared variable will have the value that you chose in the Initial Value field.

     - **Save To Project -** The shared variable can store values while the project is in Play mode, and these values will be saved to the shared variable when the project is stopped. The next time the project is opened, the shared variable will have the last value to be written to it when the project was stopped.

   - The **Numbers** section (Number data type only) - If you want to limit the values that the user can set for the shared variable in the *Project Setup* dialog, then select the *Limit Values* text box, and then in the adjacent text boxes, enter a minimum and maximum value.

     If you want the user to choose the number from a drop-down list in the *Project Setup* dialog, then select the *Show as list* check box.

   - The **Show in Project Setup** check box - If you want the shared variable to be available in the *Project Setup* dialog, then select this option.

NOTE
If you select the *Show in Project Setup* check box, users will be able to reorder the rows for List and Table shared variables.

   - The **Prompt** text box - Enter the prompt that you want to be displayed for this shared variable in the *Project Setup* check box.

   - The **Allow Add/Remove** check box (List and Table data types only) - If you select this check box, then the user will be able to add and remove rows in the list from the *Project Setup* dialog.

6. For each additional shared variable that you want to add, repeat steps 2-5.

7. Select **Save and Close**. The shared variable is created, and you can now use it in an expression. (See ***Use a Shared Variable in an Expression***.)

Types of Shared Variables

When creating and editing shared variables, you can use any of the following data types:

- Audio
- Boolean
- Color
- Date Time
- Drop List
- Font
- List
- Number
- Position
- Rectangle
- Size
- Symbol
- Table
- Text
- Video

Audio

This data type enables you to assign a specific audio file to a variable. Valid audio files include any of the following audio file formats: *.mp3*, *.m4a*, *.wma*, *.wav*.

To assign an initial audio file to a variable:

1. Select the *Initial Value* field. A browser will open.
2. Select the audio file on your computer that you want to assign to the variable.
3. Select **Open**. The file you selected is listed in the *Initial Value* field.

Boolean

Boolean data types are logical data types that have one of two values: Yes (true) or No (false). This data type is useful for when you want to include an optional feature in your project. In this scenario, the shared variable will contain a value of either Yes or No, and it can pass that value to an action that either displays or does not display the feature.

NOTE
When using a boolean data type to define project settings, make sure to select the *Setup* check box so that the value of the shared variable can be set using the *Project Setup* dialog.

For example, suppose that in your project, you created a macro that inserts a button on each page to display the page number, but that you want to enable users to choose whether to include the button in the project. In this case, you could create a shared variable with a boolean data type (in this example, *ShowPageNum*). The macro that you programmed to control the page number button would then use *ShowPageNum* to determine whether or not to add the button.

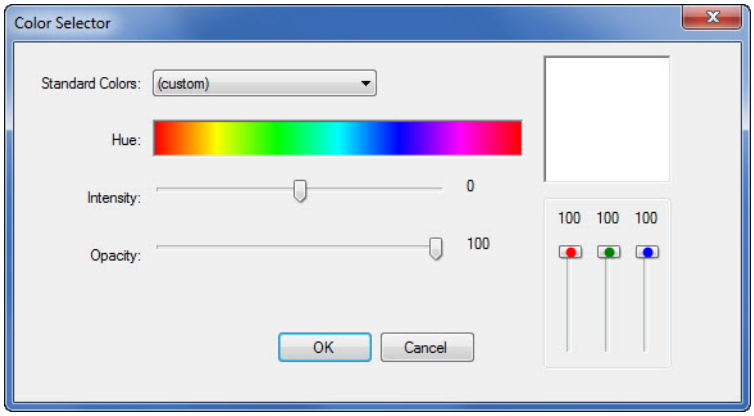
Color

This data type enables you to assign a specific color to a variable.

To assign an initial color value to a variable:

1. Select the *Initial Value* field. The *Color Selector* dialog will open.

COLOR SELECTOR DIALOG



2. To choose a standard color, select the **Standard Colors** drop-down list and choose a color.

NOTE
You can also choose a color using the *Hue* field. Click and drag the mouse to the left or right until the appropriate color is displayed.

3. If necessary, to customize the color, click and drag any of the following sliders:
   - **Intensity -** Click and drag the slider to the right to make the color less intense, or to the left to make the color more intense.
   - **Opacity -** Click and drag the slider to the left to make the color less opaque.
   - **Red** [ ] **-** Click and drag the slider up to increase the red, or down to decrease it.
   - **Green** [ ] **-** Click and drag the slider up to increase the green, or down to decrease it.

- **Blue** [ ] **-** Click and drag the slider up to increase the blue, or down to decrease it.

> **NOTE**
> As you adjust the color, keep in mind that if you adjust the intensity, the red, green, and blue sliders will adjust automatically to reflect the changes.

4. Select **OK**.

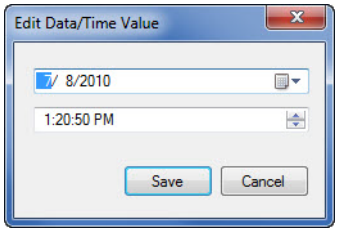
Date Time

This data type enables you to assign a specific date and time to a variable. For example, you could assign 7/5/2010 11:30:12 AM.

To assign an initial date and time to a variable:

1. Select the *Initial Value* field. The *Edit Date/Time Value* dialog will open.

EDIT DATE/TIME VALUE DIALOG



2. Select the date and time, and then select **Save**.

Drop List

This data type enables you to specify a list of options from which the teacher setting up the activity can choose. If you want to set a variable to store a particular value, then you can use a drop list shared variable to let the teacher choose which value to use.

For example, suppose you have a shared variable called *highlightType* to let the teacher choose what will be highlighted in a message window (nothing, word, word and symbol, or sentence). You could create a drop list containing each of these options.

To assign a drop list to a shared variable:

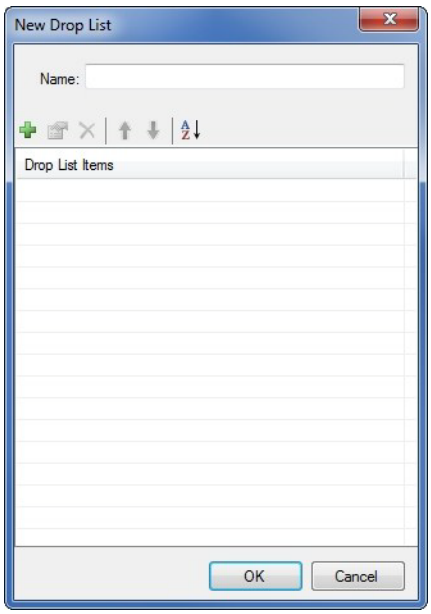
1. Select the *Type* field and select *Drop List*. A drop-down list will open.

2. Select *New* to create a new drop list.

> **NOTE**
> If you want to assign an existing drop list to the shared variable, then select it from the drop-down list.

The *New Drop List* dialog will open.

NEW DROP LIST DIALOG



3. Enter a name for the drop list in the *Name* field.
4. For each item that you want to add to the drop list, do the following:
   a. Select the Add Row icon [+]. A new row will be added to the drop list.
   b. In the new row, enter the name of the item, and then press **Enter**.
5. Select **OK**. The drop list is created and added to the shared variable.

REFERENCE
Use the Drop List Manager to edit a drop list. (See *Working with Drop Lists* on page 456.)

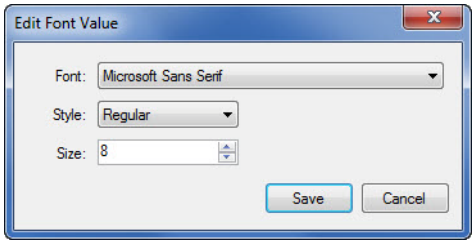
Font

This data type enables you to assign a font, style, and size to a variable.

To assign an initial font to a variable:

1. Select the *Initial Value* field. The *Edit Font Value* dialog will open.

EDIT FONT DIALOG



2. Select the font, style, and size, and then select **Save**.

List

List data types enable you to work with a collection of values instead of a single value. For example, if you're designing an activity that plays videos, you could use a list variable to store each of the videos that you want to be played rather than creating a separate shared variable for each video.

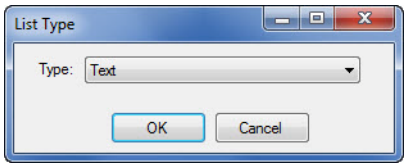
A list is a container that holds a set of variables. You can create lists to contain a set of any of the supported data types, such as videos, numbers, or fonts.

The individual items in a list are called elements. You can think of lists as folders for shared variables: you can add variables to the list, which is like putting a file in a folder. You can work with the list as a whole (like picking up a folder and taking it to a new location) or, you can access individual elements within the list (like opening the folder and choosing a particular file).

To assign a list to a variable:

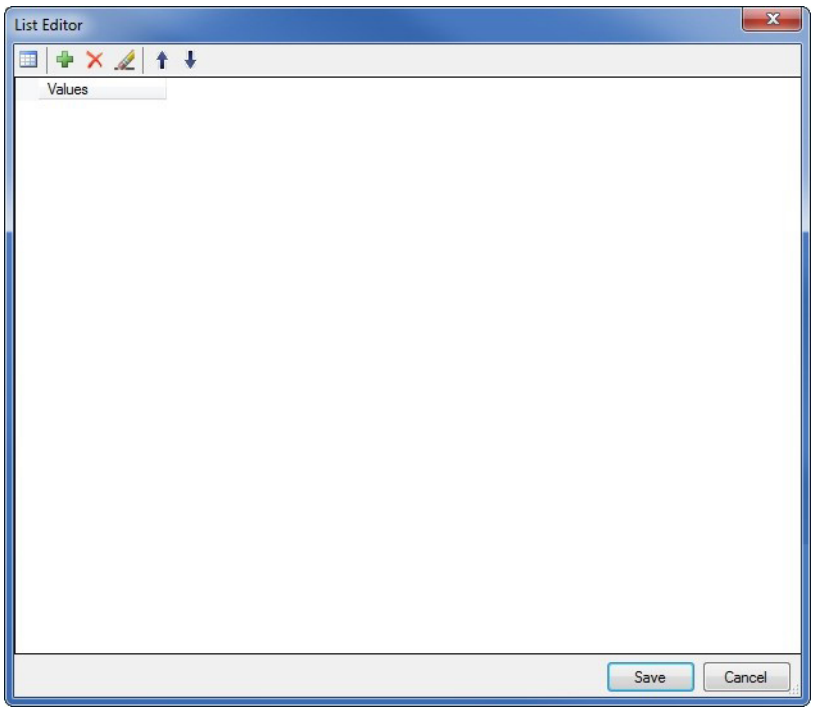
1. Select the *Initial Value* field. The *List Type* dialog will open.

LIST TYPE DIALOG



2. Select the *Type* drop-down list and select the data type for each element in the list.
3. If you selected the Drop List data type, then select the *Drop List* drop-down list and select the drop list that you want to use for the list.
4. If you selected the Number data type, then do the following:
    a. If you want to limit the values that can be set for the list of numbers, then select the *Limit Values* text box, and then in the adjacent text boxes, enter a minimum and maximum value.
    b. If you want to choose the number from a drop-down list, then select the *Show as list* check box.
5. Select **OK**. The *List Editor* dialog will open.

LIST EDITOR DIALOG



NOTE
To quickly change the list type, on the toolbar, select the Setup List icon [ ].

6. For each element that you want to add to the list, do the following:

   a. Select the Add Row icon [ ].

   b. If you want to add an initial value to the element, then select the *Values* field for the row you added, and then enter the value.

NOTE
You can add an initial value for every element in the list, some of the elements, or none of the elements.

7. To edit the values in the list, do one of the following:

   - To clear the value from a row, but not delete the row, select the value, and then select the Clear Row Values icon [ ].
   - To delete a row, select the value, and then select the Delete Row icon [ ].
   - To move a value in the list, select the row, and then select the Move Row Up [ ] or Move Row Down [ ] icon.

8. Select **Save**. The list is created.

Number

This data type enables you to assign a number to a variable.

To assign an initial number to a variable:

1. Select the *Initial Value* field. The *Enter Value* dialog will open.
2. Enter a number, and then select **OK**.

Position

This data type enables you to assign a specific two-dimensional position on the screen, based on X and Y coordinates, to a variable.

> **NOTE**
> The values of the X and Y coordinates are expressed in pixels. The number of pixels depends on the size of the page, but standard, onscreen activities are set to 1024W x 768H.

To assign an initial position on the screen to a variable:

1. Select the *Initial Value* field. The *Edit Position Value* dialog will open.
2. In the *X* field, enter the x-coordinate (horizontal) for the position. The value 0 is the left-most horizontal position on the screen. The larger the number, the further right the position will be.

> **NOTE**
> For a standard onscreen activity, the right-most position on the page is 1024.

3. In the *Y* field, enter the y-coordinate (vertical) for the position. The value 0 is the upper-most vertical position on the screen. The larger the number, the further down the position will be.

> **NOTE**
> For a standard onscreen activity, the bottom-most position on the page is 768.

4. Select **Save**.

Rectangle

This data type enables you to assign a position and size of a rectangle to a variable. These values are expressed in pixels.

To assign an initial rectangle to a variable:

1. Select the *Initial Value* field. The *Enter Rectangle Value* dialog will open.
2. Complete the following text fields:
   - **X -** Enter the x-coordinate (horizontal) for the position. The value 0 is the left-most horizontal position on the screen. The larger the number, the further right the position will be.

- **Y -** Enter the y-coordinate (vertical) for the position. The value 0 is the upper-most vertical position on the screen. The larger the number, the further down the position will be.
- **Width -** Enter the width of the rectangle. The larger the number, the wider the rectangle will be.
- **Height -** Enter the height of the rectangle. The larger the number, the taller the rectangle will be.

3. Select **Save**.

Size

This data type enables you to assign a specific width and height, in pixels, to a variable. This data type is helpful if you need to set an object, such as a button, to be a specific size.

To assign an initial size to a variable:

1. Select the *Initial Value* field. The *Edit Position Value* dialog will open.
2. In the *Width* field, enter the width of the size. The larger the number, the wider the size will be.
3. In the *Height* field, enter the height of the size. The larger the number, the taller the size will be.
4. Select **Save**.

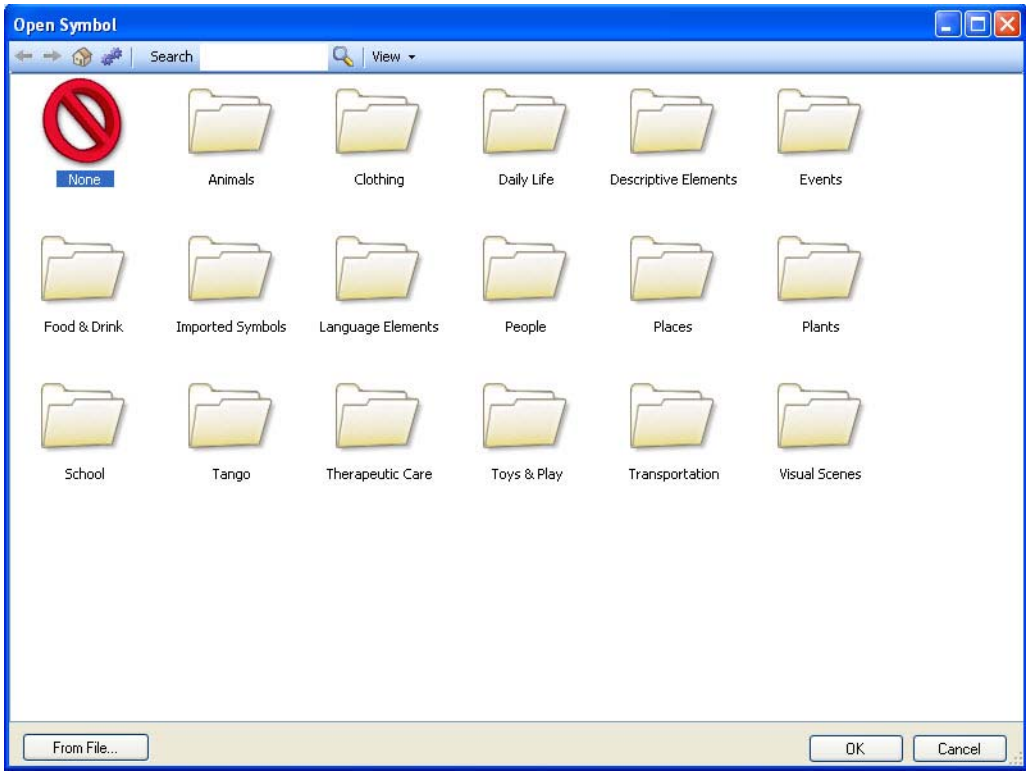
Symbol

This data type enables you to assign a symbol to a variable.

To assign an initial symbol to a variable:

1. Select the *Initial Value* field. The *Open Symbol* window will open.

OPEN SYMBOL WINDOW



2. Do one of the following:

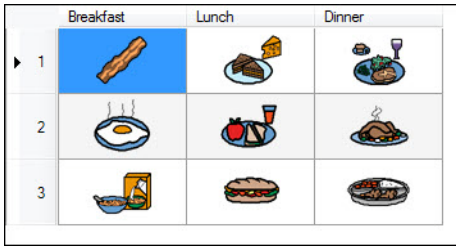
   - To choose a symbol from the symbols included in Boardmaker Studio, double-click through the folders until you find the symbol you want to assign to the variable, and then select **OK**.
   - To choose an external image file, select **From File**, select an image file, and then select **Open**.

> **NOTE**
> Choosing an external image file enables you to choose images from a location external to the symbol set in Boardmaker Studio, such as photos and pictures on your computer or USB drive.

Table

Table data types enable you to work with a collection of lists. For example, suppose that you have a list that contains a collection of food symbols. If you wanted to store a separate list of food symbols for each meal of the day, you could create a table with one element for each meal. In this example, the food symbols would be the rows in the table, and the meals would be the columns.

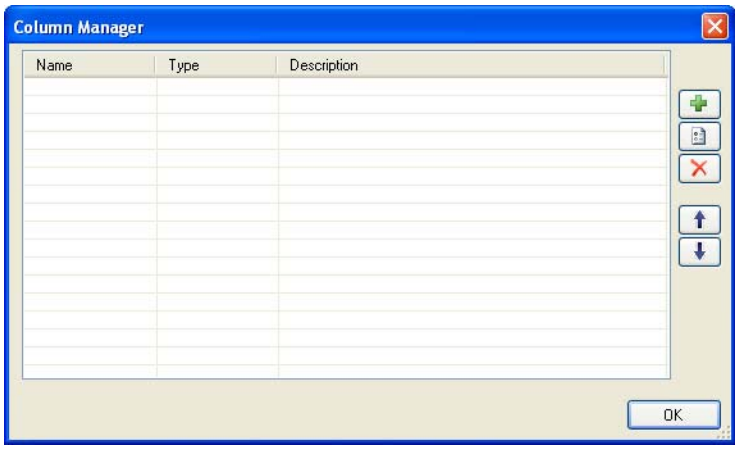
TABLE WITH ROWS AND COLUMNS (EXAMPLE)



To assign a table to a variable:

1. Select the *Initial Value* field. The *Column Manager* will open.

COLUMN MANAGER



2. For each column you want to add to the table, do the following:

   a. Select the Add Column icon [ ]. The *Column Properties* dialog will open.

   b. In the *Name* text box, enter a name for the column.

   c. If necessary, in the *Description* text box, enter a description for the column to help you and other users see what the column is used for.

   d. Select the *Type* drop-down list and choose the data type for the elements that can be assigned to the column.

   e. If you selected the Drop List data type, then select the *Drop List* drop-down list and select the drop list that you want to use for the column.

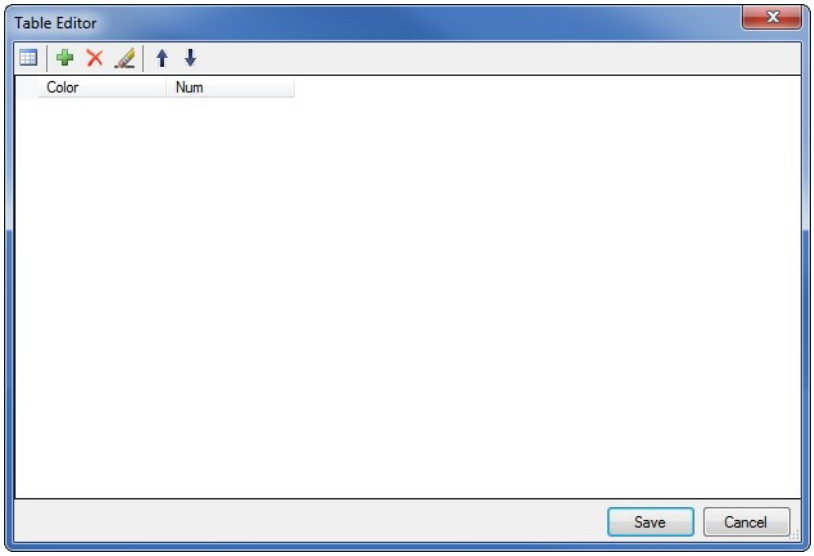
   f. If you selected the Number data type, then do the following:

- If you want to limit the values that can be set for the column, then select the *Limit Values* text box, and then in the adjacent text boxes, enter a minimum and maximum value.
- If you want to choose the number from a drop-down list, then select the *Show as list* check box.

g. Select **OK**.

3. After adding the columns to the table, in the *Column Properties* dialog, select **OK**. The *Table Editor* will appear.

TABLE EDITOR



4. For each row that you want to add to the table, do the following:

   a. Select the Add Row icon [ ].

   b. If you want to add an initial value to any of the columns, then in any of the available columns, enter the value.

> **NOTE**
> You can add an initial value for every element in the table, some of the elements, or none of the elements.

5. To edit the values in the table, do one of the following:

   - To clear the values from a row, but not delete the row, select the row number, and then select the Clear Row Values icon [ ].
   - To delete a row, select the row number, and then select the Delete Row icon [ ].
   - To move a row in the table, select the row number, and then select the Move Row Up [ ] or Move Row Down [ ] icon.

6. Select **Save**. The table is created.

Text

This data type enables you to assign a text string to a variable. You can use this data type to assign a character, word, phrase, or sentence.

> **NOTE**
> You can enter a number as a shared variable with a text data type. In this case, the number will be stored as text, which means that you won't be able to perform mathematical functions with it.

To assign an initial text string to a variable:

1. Select the *Initial Value* field. The *Enter Text* dialog will open.
2. Enter the text, and then select **OK**.

Video

This data type enables you to assign a specific video file (*.avi* or *.wmv)* to a variable.

> **NOTE**
> Video files should be Windows Media Files (*.wmv)*. If your want to use a different type of video file, then you can convert it to a Windows Media File using a free, online video conversion web site such as *www.mediaconverter.org*.

To assign an initial video file to a variable:

1. Select the *Initial Value* field. A browser will open.
2. Select the video file on your computer that you want to assign to the variable.
3. Select **Open**. The file you selected is listed in the *Initial Value* field.

Edit a Shared Variable

You can edit, reorder, and delete shared variables.

Edit a Shared Variable

1. Open the *Edit Shared Variables* dialog. (See ***The Edit Shared Variables Dialog at a Glance***.)
2. Select the name of the shared variable that you want to edit.
3. Edit any of the properties for the shared variable. (For more information about each property, see ***Create a Shared Variable***.)
4. Select **Save and Close**. The shared variable is saved.

Reorder Shared Variables

Reordering shared variables enables you to change the order of the shared variables in the list.

1. Open the *Edit Shared Variables* dialog. (See ***The Edit Shared Variables Dialog at a Glance***.)
2. Select the name of the shared variable that you want to move up or down in the list.
3. Select Move Row Up [ ] to move the shared variable up, or select Move Row Down [ ] to move it down.
4. Select **Save and Close**.

Delete a Shared Variable

1. Open the *Edit Shared Variables* dialog. (See ***The Edit Shared Variables Dialog at a Glance***.)
2. Select Delete Row [ ]. The shared variable is deleted.

Working with Drop Lists

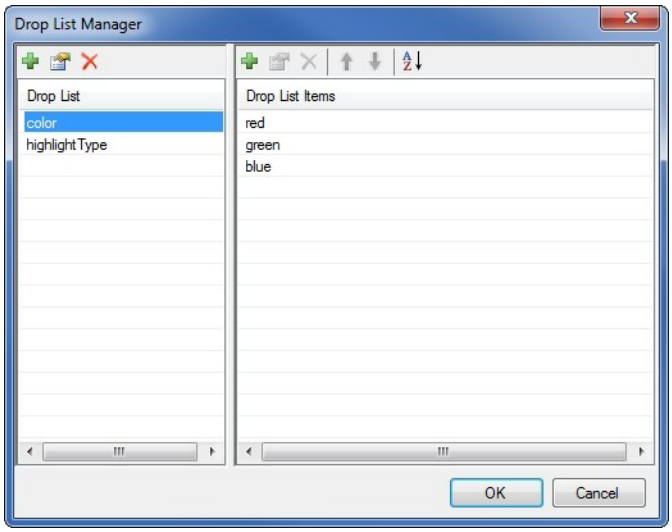
You can use the *Drop List Manager* to create, edit, and delete drop lists. You can also edit the items within each drop list.

REFERENCE
For more information about drop lists, see *Drop List*.

Access the Drop List Manager

On the toolbar, select the Drop List Manager icon [ ]. The *Drop List Manager* will open.

DROP LIST MANAGER



Create a New Drop List

1. In the *Drop List* pane, select the Add Row icon [ ]. A new, blank row will open.

SHORTCUT
You can also double-click a blank row.

2. Enter a name for the drop list, and then press **Enter**. The drop list is created.
3. For each item that you want to add to the drop list, do the following:
   a. In the *Drop List Items* pane, select the Add Row icon.
   b. Enter a name for the item, and then press **Enter**.

REFERENCE
For more information about how to change the order of the items in the drop list, see *Edit the Items in a Drop List*.

Edit a Drop List

1. In the *Drop List* pane, select a drop list.
2. Do one of the following:
   - To enter a new name for the drop list, select the Edit Row icon [ ], and then press **Enter**.
   - To delete the drop list, select the Delete Row icon [ ].

Edit the Items in a Drop List

1. In the *Drop List* pane, select a drop list.
2. In the *Drop List Items* pane, do one of the following:
   - To edit an item, select the item, then select the Edit Row icon [ ], and then enter a new name for the item.
   - To delete an item, select the item, and then select the Delete Row icon [ ].
   - To sort the items in alphabetical order, select the Sort Rows icon [ ].
   - To move an item in the drop list, select the item, and then select the Move Row Up [ ] or Move Row Down [ ] icon.

Use a Shared Variable in an Expression

After creating a shared variable, you can use it in an expression in the *Action Editor*. You use shared variables in the same way as local variables.

For example, suppose you have a boolean shared variable called *ShowPageNum*, which is used to control whether a button is displayed to show the page number on each page in the activity. On each page, you could use an *If/Else/End* expression to display the page number button if *ShowPageNum* is set to Yes, or to hide the button if *ShowPageNum* is set to No.

To use a shared variable in an expression:

1. In the *Action Editor*, select **Variables > variable [= value]**. The variable = value expression is entered in the *Action Editor*.

VARIABLE EXPRESSION

2. For the variable, enter the name of the shared variable.

> **NOTE**
> Shared variables are case-sensitive, so make sure that you enter the shared variable's name in the correct case.

3. Enter the rest of the expression. (For more information about entering variable expressions, see ***Entering Expressions and Variables***.)

Action Script Options

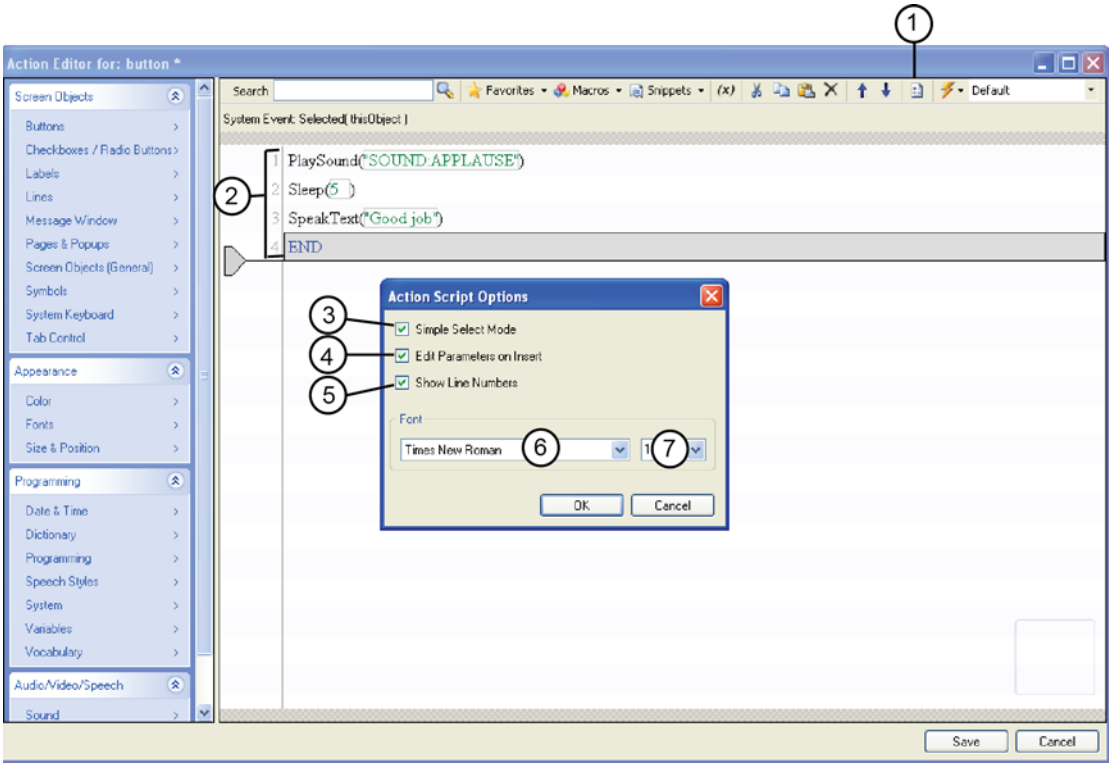
The *Action Script Options* dialog provides tools to help you customize the actions you program into an object or a page. If an action requires additional information (the name of a page to open, text to be spoken etc.), the options control the way in which the software prompts you for this information.

You can also select whether or not to view line numbers and to choose the font face and font size in which the action script will appear in the assigned actions list in the *Action Editor.*

Following is an overview of the *Action Script Options* dialog. See ***Programming an Object*** for step-by-step instructions for adding actions to an object.

The *Action Script Options* dialog is accessible from both the *Action Editor* and *Macro Editor*s.

Action Script Options Dialog (Open in Action Editor)



1 **Options button -** Opens the *Action Script Options* dialog.

2 **Line numbers -** Displays a number for each line (action) listed in the *Action Editor*. Actions are performed in the order in which they are listed. This feature can be enabled or disabled by selecting or clearing the *Show Line Numbers* check box (5).

3 **Simple Select Mode check box -** Automatically open the appropriate browser or the *Rich Text Editor* to allow you to select the information necessary to complete an action. (For example, if the *Simple Select Mode* check box is selected, when you add the *PlaySound(soundId)* action, a browser will

automatically open to allow you to select a sound file. If the check box is not selected, you must manually enter the expression for *soundId*).

NOTE
Clear this check box if you want to define an expression that is not available on the *Expression Editor*. (See *Entering Expressions and Variables*.)

4 **Edit Parameters on Insert check box -** Automatically open the *Expression Editor* to prompt you to define the parameters necessary to complete an action when the action is first assigned to an object.

5 **Show Line Numbers check box -** Select this check box to display line numbers for each action listed.

6 **Font drop-down list -** Select a font family for the action script.

7 **Font size drop-down list -** Select a font size for the action script.

Working with Events

An event is an action, or a series of actions, that are "sent " (or "broadcast") to an object or a group of objects on a page (or to the page itself). An event always involves at least two objects - the object or objects that contain the actual event programming, and the object that "triggers" the actions - or group of actions - to run.

There are two types of events - system events and user-defined events. System events are preprogrammed, default events that are preassigned to the object (or page). System events cannot be edited or deleted and are indicated on the *System Event* dialog by a "locked icon" [ ]. You cannot create a system event.

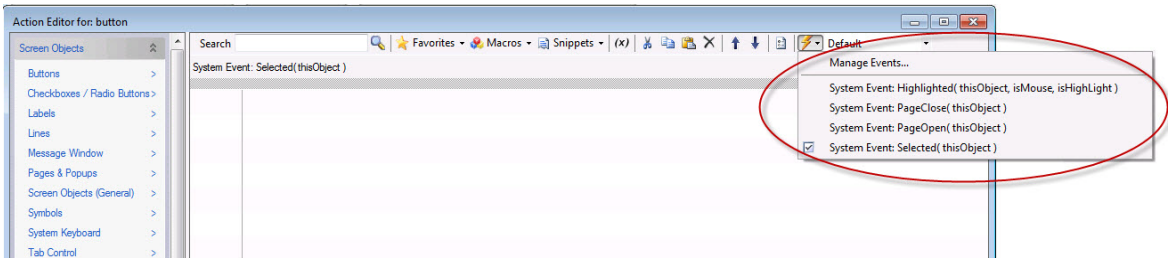
You can create your own user-defined events. This section includes procedures for using the *Event Manager* to create a new event on one object, assign actions to it, and then program a second object to activate the event. Also included is information on editing events.

Event Manager

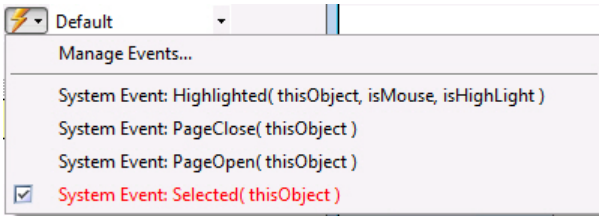
Use the *Event Manager* to create, edit, or delete a user-defined event, or to edit or delete a user-defined event. The *Event Manager* is accessed from the Events drop-down list [ ] on the *Action Editor* toolbar. (See ***The Action Editor***.)

Double-click on the object, or the page, on which you want to program the event. The *Action Editor* will open. Select the Events button [ ] to open the Events drop-down list.

EVENTS DROP-DOWN LIST (IN ACTION EDITOR)



EVENTS DROP-DOWN LIST



The Events drop-down list displays the system event(s) and any existing user-defined events for the selected object.

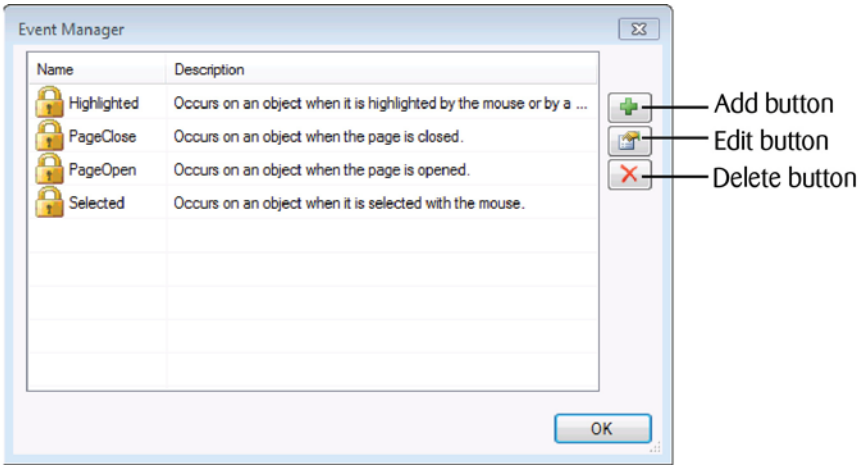
- System events are the default events assigned to the object or page. They are not controlled by the user and cannot be created, edited, or deleted. System events are labeled as such and are indicated by a "locked" icon [ ].

- User-defined events are created and managed by the user. If a user event exists for the selected object or page, it will be displayed in the Events drop-down list.

NOTE
Events that include action script are displayed in red. (See the illustration above.)

Select **Manage Events** from the Events drop-down list. The *Event Manager* will open.

EVENT MANAGER



***Name* -** Lists all system events and user events assigned to the selected object or page. The "locked" icon indicates a system event.

***Description* -** Text description for the event.

Add button - Create a new event for the selected object or page.

Edit button - Edit the selected user-defined event.

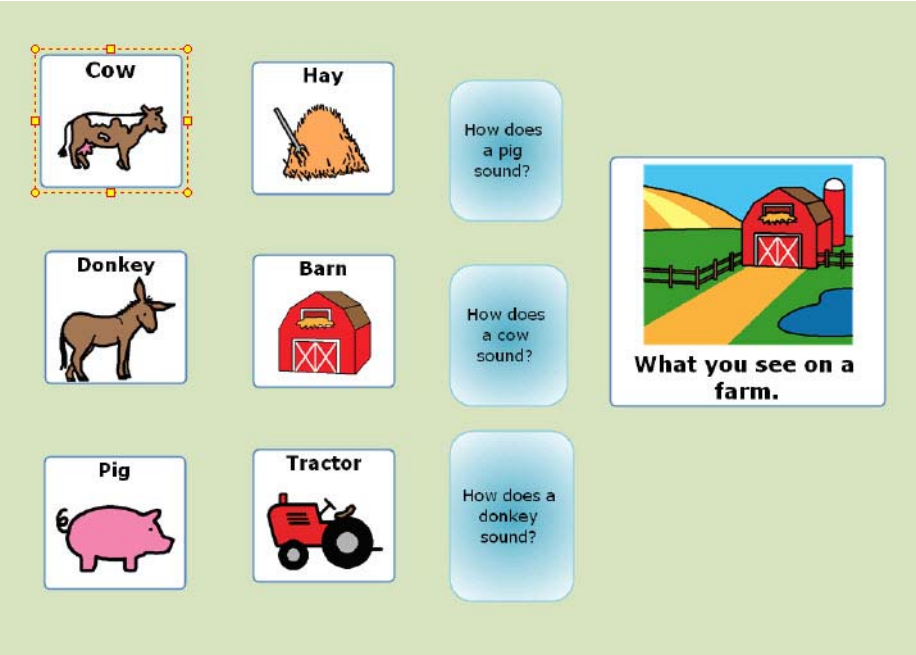
Delete button - Delete the selected user-defined event.

Create a New Event

Use the *Event Manager* to create a new event for a selected object or page. Then use the *Action Editor* to program the actions for the event. (See ***The Action Editor***.)

An event can contain one or more actions, and a single object can be programmed with more than one event. In addition, different objects on the same page can each be programmed with events that have the same name. These events are separate, and specific, to the objects on which they are programmed. In the "Farm Page" example (see the illustration below):

FARM PAGE



- Each of the animal buttons (Cow, Donkey, and Pig) is programmed with uniquely named events (ColorSoundCow, ColorSoundDonkey, ColorSoundPig) to light up each of the three buttons with a specific color and play a different animal sound.
- Each of the remaining buttons (Hay, Barn, and Tractor) is programmed with a same-name event ("FarmTour") to light up all three buttons at one time with a specific color and to speak the words "We see these things on a farm."

NOTE
You may want to create a blank page and replicate the example, "Farm Page" shown above so that you can practice programming an event and creating the "trigger" for the event.)

The example page ("Farm Page") shown above will be used throughout this procedure to illustrate how to create an event (Color/Sound/Cow) on a button

NOTE
Before you begin creating events, make sure that the *Simple Select Mode* and *Edit Parameters on Insert* check boxes in the *Action Script Options* dialog are selected. See ***Action Script Options***.

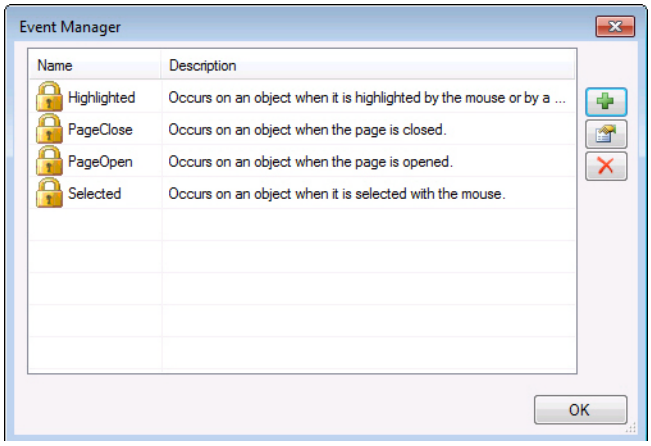
Create the Event

1. Select the object for which you want to create the event. The *Properties* panel will open. In the Farm Page example above, the *Cow* button is the selected object.
2. In the Properties panel, select **Edit Actions**. The *Action Editor* will open.

> **SHORTCUT**
> Double-click on the object (the Cow button) to open the *Action Editor*.

3. In the toolbar, select the Events button [ ]. The Events drop-down list will open.
4. Select **Manage Events** from the list. The *Event Manager* will open. System events, indicated by the locked icon [ ], and any existing user events for the selected object will be displayed in the *Name* column.

EVENT MANAGER

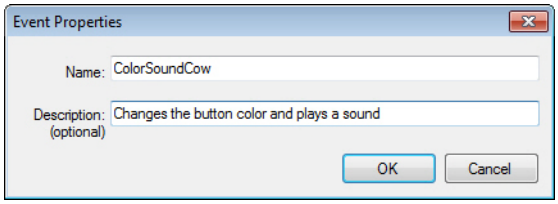


5. Select the Add [ ] button. The *Event Properties* dialog will open.
6. In the *Name* text box, enter a name for the new event. In this example, the event name is "ColorSoundCow."

> **NOTE**
> The name you enter cannot have any spaces. Use an underscore between words.

7. *(Optional)* In the *Description* text box, enter a brief description of the new event.

EVENT PROPERTIES DIALOG



8. Select **OK**. The new event will be shown in the *Name* column of the *Event Manager*.

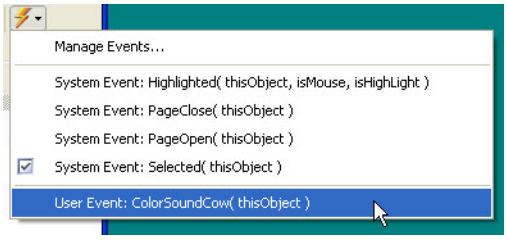
9. Select **OK**. The *Event Manager* will close and the *Action Editor* will be displayed.

Now you will program the actions for the new event you just created.

Program the Event

1. In the toolbar, select the Events button [⚡] The Events drop-down list will open.

EVENTS DROP-DOWN LIST – SELECT THE NEW EVENT



2. Select the new user event you created ("ColorSoundCow"). The list will close, and the *Action Editor* will open.

   You can now begin programming actions for the new event. In steps 3 and 4 below, two actions will be programmed for the event, "ColorSoundCow". These actions will make the *Cow* button turn red and play a "moo" sound when the event is triggered.

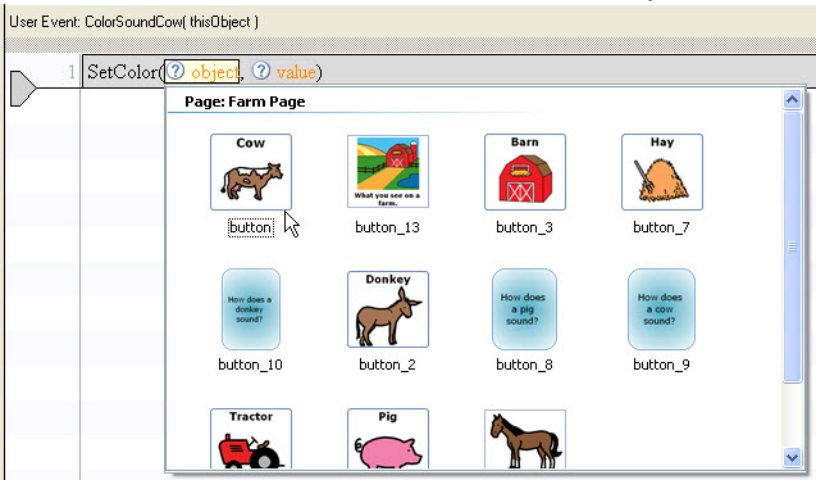
> **NOTE**
> For step-by-step instructions on programming actions, see *Programming an Object*.

3. Use the *Action Editor* to program the first action for your event. In the example event, the first action will cause the *Cow* button to turn red.

   a. Select ***Screen Objects (General) > SetColor(object,value)*** from the *Screen Objects* action category. The action will appear on the first line in the *Action Editor*.

   b. Select the ***object*** field in the *SetColor(object,value)* action. A browser will open showing all objects on the page.

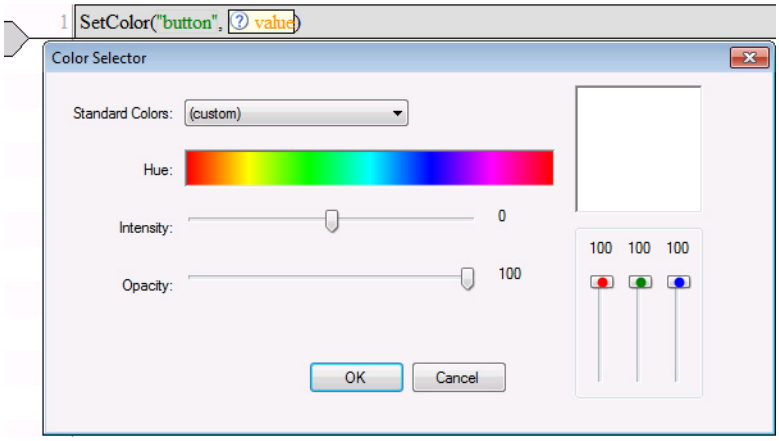
PROGRAM AN ACTION FOR THE NEW EVENT (SET COLOR - OBJECT)



c. Select the "Cow" button. The object name ("button") will be displayed in the *object* field.

d. Select the ***value*** field to choose the color to which the button will change when the event is triggered. The *Color Selector* dialog will open.

PROGRAM AN ACTION FOR THE NEW EVENT (SET COLOR - VALUE)



e. Select the color (red in the example event) from the *Standard Colors* drop-down list. The color name will be displayed in the *value* field.

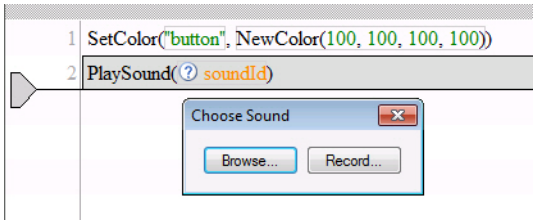
SHORTCUT
You can also type the color name (red) into the *Standard Colors* text field to quickly select the color.

4. Program the second action for your event. In the example event, the second action will cause the button to play a "moo" sound.

a. Select ***Speech > PlaySound(soundId)*** from the *Audio/Video/Speech* action category group. The action will appear as the second line in the *Action Editor*, and the *Choose Sound* dialog will open.

SHORTCUT
You can also select the *PlaySound(soundId)* action from the *Favorites* list.

PROGRAM AN ACTION FOR THE NEW EVENT (SOUND ID).



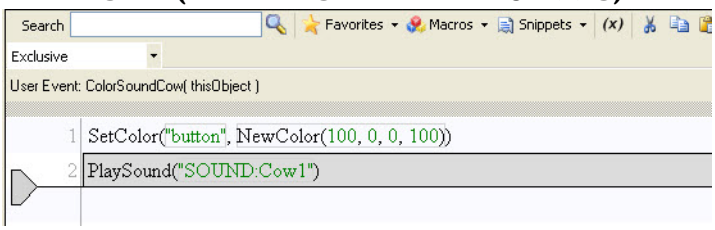
b. Select **Browse**. A file browser will open.

c. Select the sound you want played when the event is triggered. You may have to scroll through folders to find the appropriate sound (animal sounds are normally located in the *Boardmaker Studio* > *Media* > *Animals* folder*).* In the example action, the "*Cow1.wav*" sound is selected.

d. Select **Open** on the file browser. The sound file you selected will be displayed in the *soundId* field.

5. Lines 1 and 2 in the *Action Editor* for the user event: "ColorSoundCow(thisObject)" should match the illustration below.

ACTION EDITOR (COLORSOUNDCOW EVENT PROGRAMMED)



6. Select **Save**. The *Action Editor* will close.

After you create a new event, you must program another object on the page to "trigger" the event to run. (See ***Create the Trigger for the Event***.)

Create the Trigger for the Event

In order for an event to occur, it must be "triggered" by selecting another object. You must program this other object to execute the actions contained in the event. When the trigger object is selected, the event will run.

In the Farm Page example we have been using in this procedure, the *Cow* button is assigned an event named "ColorSoundCow," which will change the button color to red and play a "moo" sound. The *How Does A Cow Sound* button will be programmed with the *SendEvent* action to "trigger" the ColorSoundCow event. When the *How Does A Cow Sound* button is selected, it will send the "ColorSoundCow" event to the *Cow* button - the *Cow* button's color will change, and a "moo" sound will play.

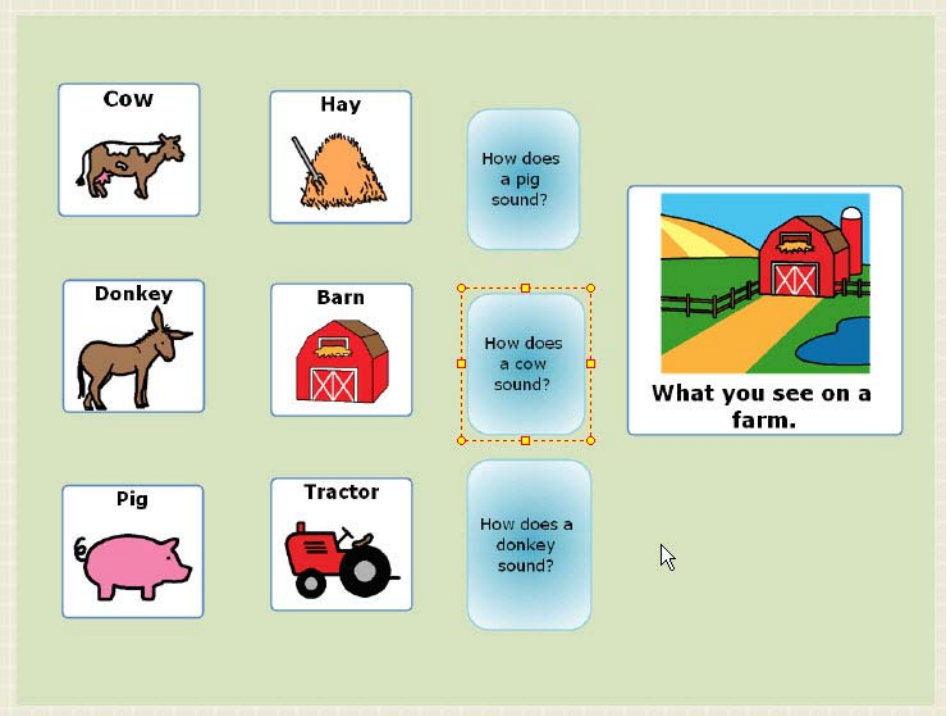
When creating the trigger for an event, you have the option to "send" the trigger message to a specific object, or to "broadcast" the trigger message to all objects on a page that contain an event of a specific name.

The following procedure will use the "Farm Page" example to show you how to create a trigger to send the ColorSoundCow event to the *Cow* button.

NOTE
Before you begin, make sure that the *Simple Select Mode* and *Edit Parameters on Insert* check boxes in the *Action Script Options* dialog are selected. See ***Action Script Options***.

1. Select the object on the page (or the page itself) that you want to use to send (or broadcast) the event. In the example that follows, the *How does a cow sound?* button is selected. The *Properties* panel will open.

PAGE WITH SELECTED "TRIGGER" OBJECT



2. Select **Edit Actions**. The *Action Editor* will open.

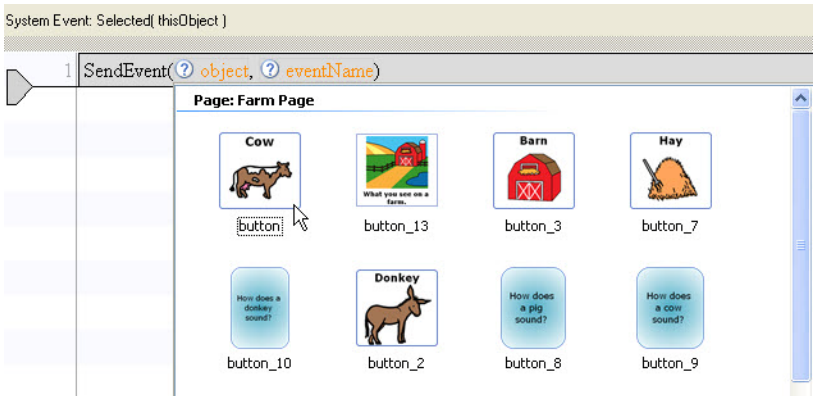
SHORTCUT
Double-click on the "How does a cow sound" button to open the *Action Editor*.

3. Select ***Screen Objects (General) > SendEvent(object,eventName)*** from the *Screen Objects* action category. The action will appear on the first line in the *Action Editor*.

NOTE
If you wanted to broadcast the event to all objects on the page that contain a specific event, you would select *BroadcastEvent(eventName)* from the *Screen Objects* action category. Then you would enter the name of the event you wanted to broadcast into the *eventName* field on the *Expression Editor*.

4. Select the **object** field in the *SendEvent(object,eventName)* action. A browser will open showing all objects on the page.

SendEvent Action (Select Object))

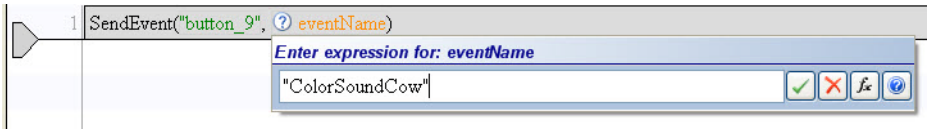


5. Select the object that contains the event - in this case, the *Cow* button. The object name will replace the object field in the *SendEvent(object,eventName)* action.

6. Select the **eventName** field in the *SendEvent(object,eventName)* action. The *Expression Editor* will open.

7. Enter the name of the event you want to trigger, "ColorSoundCow," (use quotation marks) and then select OK [ ]. The *Expression Editor* will close, and the event name ("ColorSoundCow") will replace the *eventName* field in the *SendEvent(object,eventName)* action.

SendEvent Action (Select Event Name)



Note

You must enclose the event name in quotation marks and enter it exactly as you entered it when the event was created. The event name is case sensitive. If these requirements are not met, the event will not be sent when the trigger is selected.

8. Select **Save** to close the *Action Editor*.

The *How does a cow sound?* button has now been programmed to trigger the "ColorSoundCow" event. When you put the software into Preview or Play modes, and the *How does a cow sound?* button is selected, the *Cow* button should turn red and a "moo" sound should be played.

Edit an Event

Use the Events drop-down list to edit a user-defined event. You can change the name of the event and add, delete, or change the order of its actions.

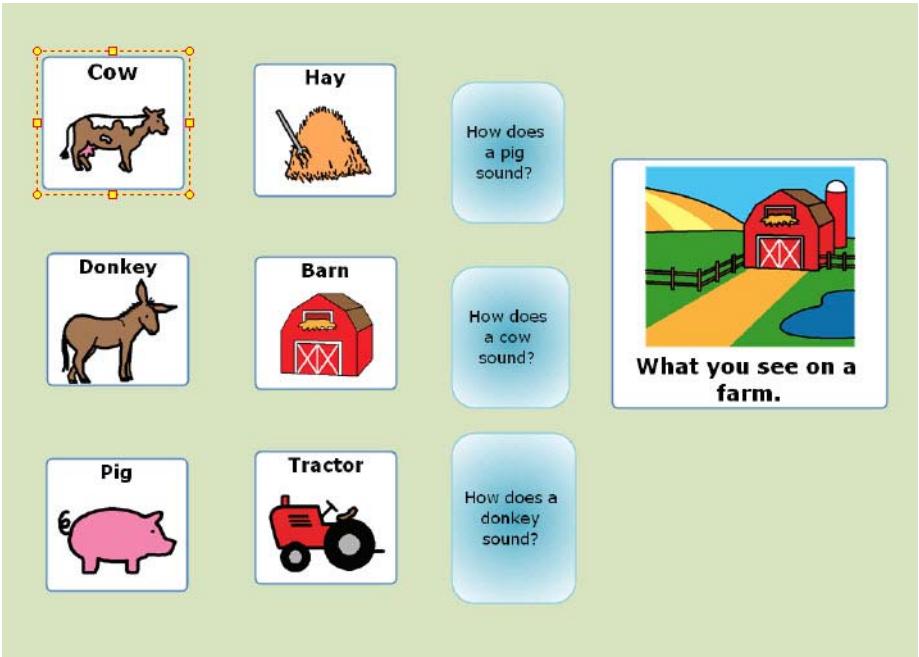
NOTE
You cannot edit a system event. Only user events can be edited.

The following example page ("Farm Page") will be used throughout this procedure to illustrate how to edit an event.

Open the Events Drop-Down List

1. Select the button to which the event you want to edit is assigned. The Properties panel will open. In the example below, the *Cow* button is the selected object.

"FARM" PAGE WITH SELECTED OBJECT



2. In the *Properties* panel, select **Edit Actions**. The *Action Editor* will open.

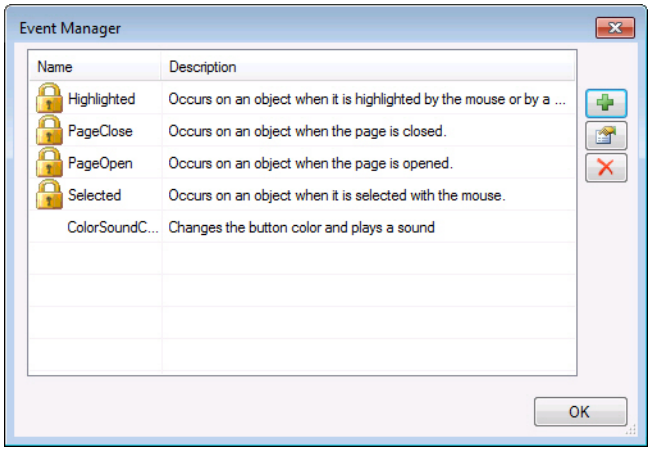
SHORTCUT
Double-click the object (*Cow* button) to open the *Action Editor*.

3. In the toolbar, select the Events button [⚡]. The Events drop-down list will open. All of the events - both system events and user-defined events - will be listed.

Rename an Event

1. Open the Events drop-down list. (See ***Open the Events Drop-Down List***.)
2. Select **Manage Events**. The *Event Manager* will open.

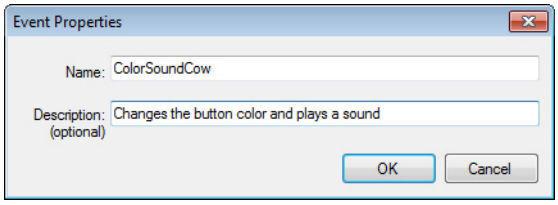
Event Manager



3. In the *Event Manager*, select the event whose name you want to change.
4. Select the Edit [ ] button. The *Event Properties* dialog will open.

> **Note**
> You cannot rename a system event. Only user-defined events can be renamed.

Event Properties Dialog



5. Enter a new name for the event in the *Name* text box.

> **Note**
> You can also change the event description.

6. Select **OK**. The *Event Properties* dialog will close and the edited event name will appear in the *Event Manager*.
7. Select **OK** to close the *Event Manager*.
8. Select Close [ ] to close the *Action Editor*.

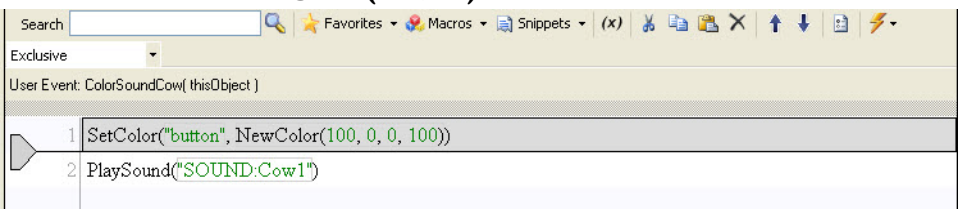
Edit an Event

1. Open the Events drop-down list. (See ***Open the Events Drop-Down List***.)
2. Select the event you want to edit. The *Action Editor* will open and show the actions that are programmed for the selected event.

> **NOTE**
> You cannot edit a system event. Only user-defined events can be edited.

3. Use the *Action Editor* to add, edit, or delete an action, or to change the order in which actions are performed. (See ***The Action Editor***.)

EVENT SHOWN IN ACTION EDITOR (EXAMPLE)



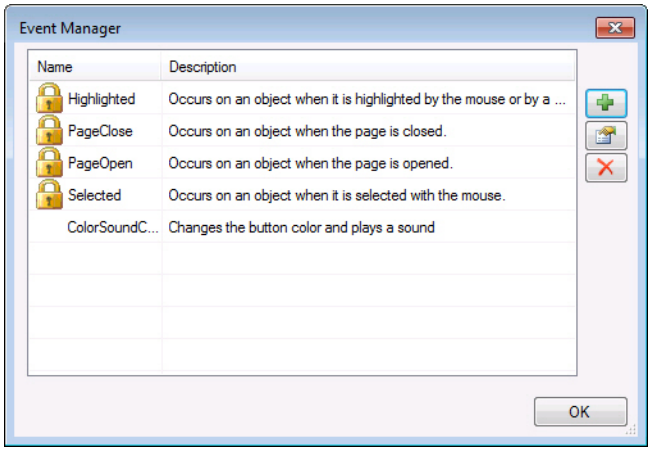
> **REFERENCE**
> See *Programming an Object* for information on assigning actions to an object and *Entering Expressions and Variables* for information on programming actions containing expressions and variables.

4. Select **Save** to save your changes and close the *Action Editor*.

Delete an Event

1. Open the Events drop-down list. (See ***Open the Events Drop-Down List***.)
2. Select **Manage Events**. The *Event Manager* will open.

EVENT MANAGER



3. Select the event you want to delete.

NOTE
You cannot delete a system event. Only user-defined events can be deleted.

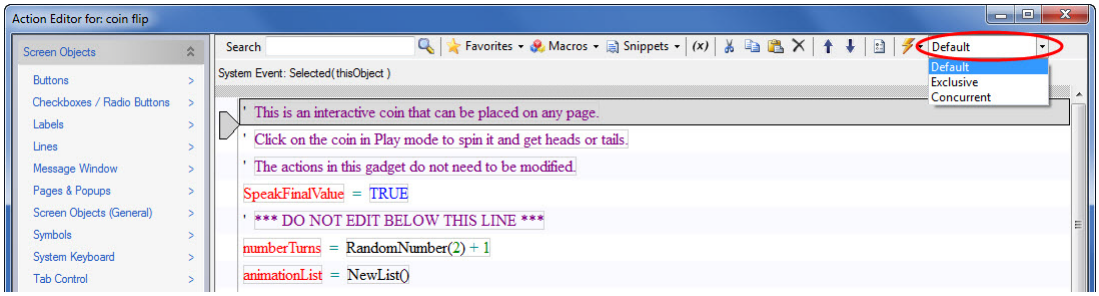
4. Select Delete [ ]. A confirmation dialog will open.
5. Select **Yes** in the confirmation dialog. The selected event will be deleted.
6. Select **OK** to close the *Event Manager*.
7. Select Close [ ] to close the *Action Editor*.

Action Script Execution Types

When programming an object, the Execution Type drop-down list enables you to set the way in which the script will be executed in Play mode. By setting the execution type, you can control the number of scripts that can be executed on a page at the same time.

> **NOTE**
> You can't set the execution type for a macro. Macros automatically use the execution type of the script that called them.

THE EXECUTION TYPE DROP-DOWN LIST



Execution Types

When setting the execution type for an action script, you will have three choices:

- Default
- Exclusive
- Concurrent

Default

The Default option is automatically selected for each action script that you create.

- When creating action scripts for selecting, scanning, and page opening and closing events, the default execution type is *Exclusive.*
- When creating action scripts for dragging, target, and highlight events, the default execution type is *Concurrent*.

Exclusive

The *Exclusive* execution type means that only one exclusive action script can execute at a time. Exclusive action scripts will still execute if other concurrent scripts are executing, but not if another exclusive action script is executing.

For example, suppose that in a sorting activity, you have two buttons: one for a dog and one for a cat. Each button uses the *SpeakLabel(object,wait)* action to speak the label when the user selects it. In this scenario, the script for each button would be set to the Exclusive execution type so that the user doesn't select the second button to start speaking before the first one has finished speaking.

Dog and Cat Buttons

Concurrent

The *Concurrent* execution type means that multiple, concurrent action scripts can execute at the same time.

When programming an action for an object, if you choose the *Concurrent* execution type, then the user will be able to perform that action repeatedly.

For example, if you set the Coin Flip gadget to *Concurrent*, then the user will be able to spin the coin every time he or she selects the button, even if it is still spinning. If the Coin Flip gadget were set to be *Exclusive*, then the user would not be able to select the button until it has stopped spinning.

Set the Execution Type for an Action Script

To set the execution type for an action script, on the *Action Editor* toolbar, select the Execution Type drop-down list and choose an option.

Working with Macros

A macro is a series of actions combined to form one single action. Macros can save you time - particularly if you will repeatedly be using the same series of actions to program objects throughout your project.

For example, if you are creating a number of new pages for a project, and you want all the pages to be formatted exactly alike - with the same style, color, border, background, height and width - you could individually format each page in the project, or, you could set up an macro that includes all of the formatting actions to do it for you!

Or - as another example - you could set up a macro to open a "reinforcer" popup upon completion of an activity, and then set up another macro to close the popup and open a new activity. Macros are real time savers - whenever you find yourself programming the same actions on various objects, consider creating a macro.

Boardmaker Studio includes a number of pre-programmed macros - you can use these macros "as is," edit them, or you can create your own custom macros.

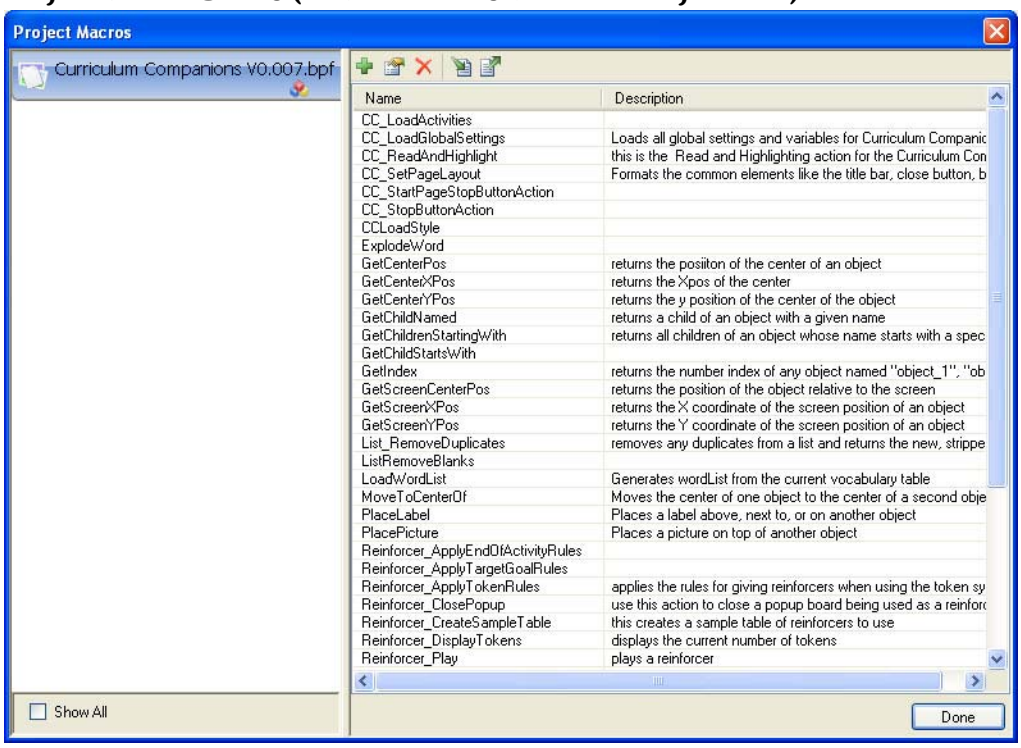
This section includes an overview of the dialogs that are used to create and edit macros; step-by-step procedures for creating and editing macros; and an exercise that will walk you through creating a simple macro.

The Macro Dialogs at a Glance

Macros are project specific, and are saved in the folder for the project, activity, or page for which they were created. Selecting Edit Macros [ ] from the Project Panel on the project, activity, or page level will open the *Project Macros* dialog, which lists all of the macros available for that project, activity, or page.

Following is a brief overview of the *Project Macros* dialog. (See ***The Project Macros Dialog*** for step-by-step instructions for using this dialog to add a new macro, edit or delete an existing macro, and to import and export macros.)

PROJECT MACROS DIALOG (EXAMPLE SHOWING MACROS AT PROJECT LEVEL)



Use the *Project Macros* dialog to add a new macro, edit or delete an existing macro, and to import and export macros. Then use the *Macro Properties* dialog to name your new macro and define its parameters. Next, select the actions for your new macro using the *Macro Editor* – exactly as you do when programming objects or pages.

The Project Macros Dialog

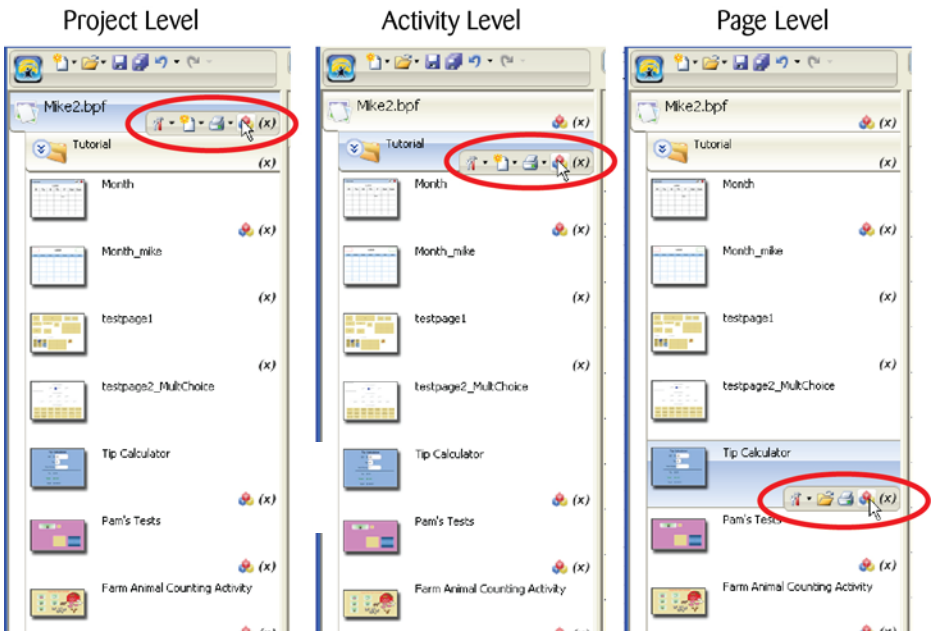
The *Project Macros* dialog displays all of the macros available for the current project, activity, or page. Use this dialog to add, edit, delete, reorder, or import or export macros.

The *Project Macros* dialog is opened from the *Project* panel:

1. Mouse over:
    - The project title (to create or edit a macro stored in the project folder).
    - The activity folder (to create or edit a macro stored in an activity folder).
    - The icon representing an individual page (to create or edit a macro stored in a page folder).

    The floating toolbar will appear. (See the illustration below.)

FLOATING TOOLBAR AT PROJECT, ACTIVITY, AND PAGE LEVELS



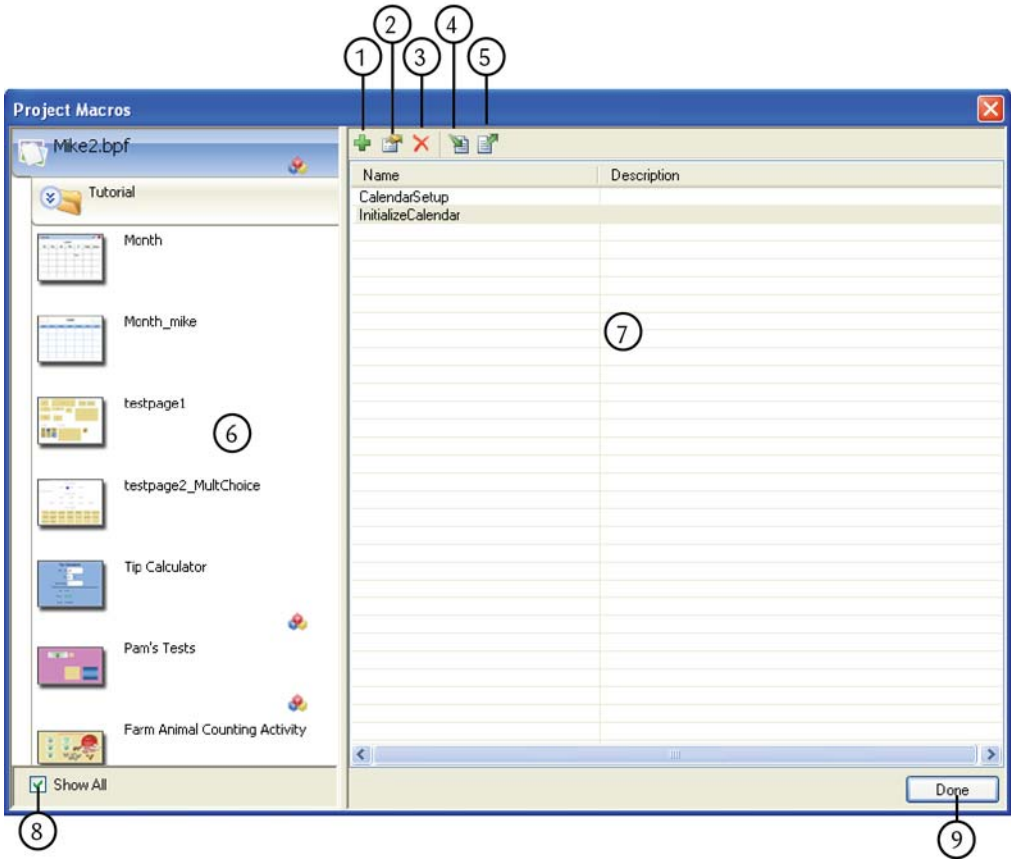
2. Select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open.

EDIT MACROS ICON ON FLOATING TOOLBAR

SHORTCUT

If Edit Macros [ ] is displayed in the Project Panel at the project, activity, or page level, you can simply select this icon to open the *Project Macros* dialog. Or - you can right-click on a project, activity, or page in the Project panel and select **Edit Macros** from the right-click menu.

PROJECT MACROS DIALOG



1 **Add Macro -** Create a new macro at the project, activity, or page level. (See ***Create a New Macro***.)

2 **Edit Macro -** Edit the name, description, parameter, and/or actions of the selected parameter. (See ***Edit a Macro***.)

3 **Delete Macro -** Remove the selected macro. (See ***Delete a Macro***.)

4 **Import Macro -** Import a macro from your Projects folder. (The macro will be imported into the currently selected project, activity, or page.) (See ***Export and Import Macros***.)

5 **Export Macro -** Export the selected macro to another project, folder, or file sharing device. (See ***Export and Import Macros*.)**

6 **Project Panel -** Displays the Project Panel (when the *Show All* check box [8] is selected.) Select the project title, an activity folder, or the icon for an individual page, and all macros for the selected project, activity, or page will be listed [7].

7 **Macro list -** Lists all macros (name and description) for the currently selected project, activity, or page.

8 ***Show All* check box -** Displays the Project Panel [6].

9 ***Done* button -** Saves your changes and closes the *Project Macros* dialog.

The Macro Properties Dialog

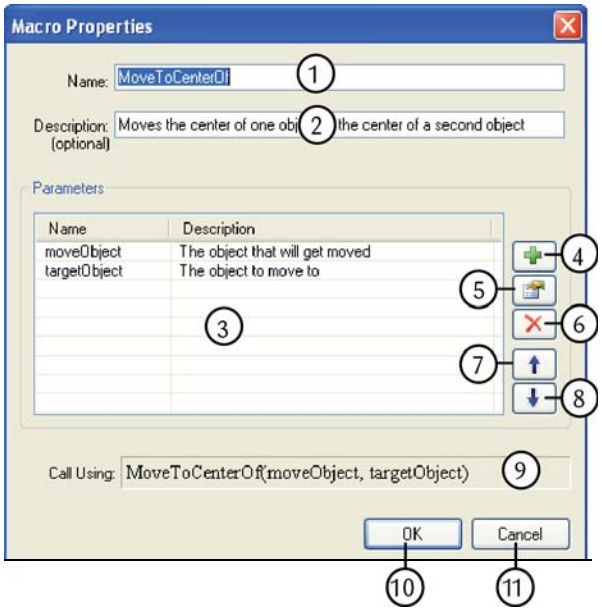
Macros are defined (or edited) using the *Macro Properties* dialog. Use this dialog to enter a unique name, description, and to add parameters to a new macro (or to edit an existing macro.)

NOTE
A "parameter" is a value that is "called" (sent) to the macro and is used as a variable within it.

To open the *Macro Properties* dialog, select Add Macro [ ] from the toolbar of the *Project Macros* dialog. (See ***The Project Macros Dialog***.)

NOTE
The *Macro Properties* dialog will also open when you select New Macro from the drop-down *Macros* list on the *Action Editor* or *Macro Editor* (to add a new macro), or when you select Edit Macro [ ] on the first line (the macro name bar) of the *Macro Editor* (to edit an existing macro).

MACRO PROPERTIES DIALOG



The *Macro Properties* dialog contains the following fields and controls:

1 ***Name* text box -** The "name" (value) of the macro whose parameters you are defining. (The name should be very brief, but descriptive of what the macro does. The name cannot include spaces.)

2 ***Description* text box -** (Optional field) A more detailed description of the macro than that in the *Name* text box (1).

3 **Parameters list -** Lists the name (value) and the (optional) description of each parameter assigned to the macro. Parameters are listed in the sequence in which they are called.

4 **Add -** Open the *Macro Parameter Properties* dialog so you can add a parameter to the macro.

5 **Edit Macro -** Open the *Macro Parameter Properties* dialog so you can edit the properties of the selected parameter.

6 **Delete -** Delete the selected parameter from the macro.

7 **Up -** Move the selected parameter up in the call sequence.

8 **Down -** Move the selected parameter down in the call sequence.

9 ***Call Using* field -** Action script used to call the macro to be executed. (The name of the macro plus the macro parameters in the order in which they will be called.)

10 ***OK* -** Save all changes and close the dialog.

11 ***Cancel* -** Close the dialog without saving any changes.

The Macro Editor

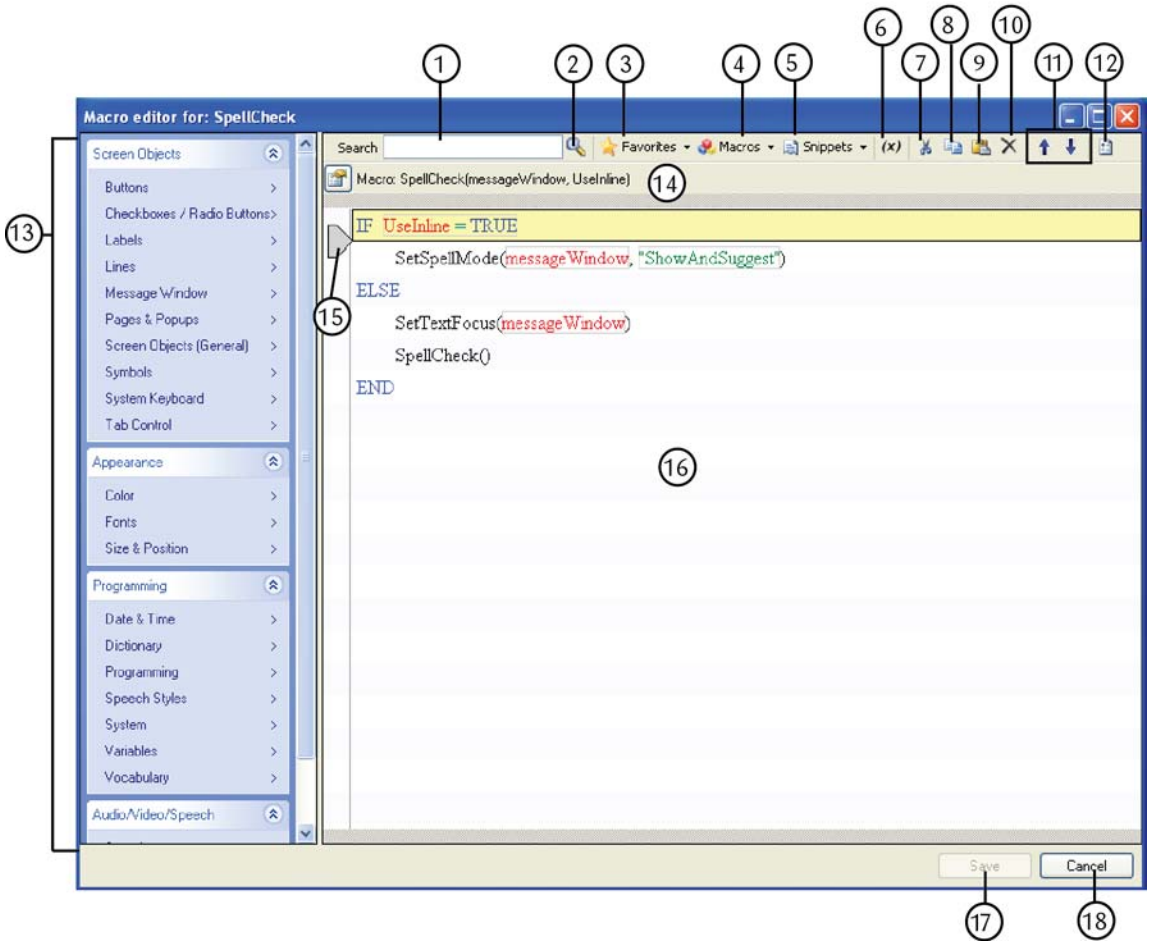
Use the *Macro Editor* to assign actions to a new macro or to edit an existing macro. (See ***Create a New Macro*** or ***Edit a Macro***.)

The *Macro Editor* will open:

- When you select **OK** on the *Macro Properties* dialog (to create a new macro). (See ***The Macro Properties Dialog***.)
- When you select Edit Macro [] from the *Project Macros* dialog (or double-click on a macro in the *Project Macros* dialog). (See ***The Project Macros Dialog***.)

Following is an overview of the *Macro Editor*. See ***Programming an Object*** for step-by-step instructions for using the *Macro Editor*.

MACRO EDITOR



1 **Search text box -** Enter your search criteria in the text box. As you begin typing, a list of actions that match the text you type will be dynamically displayed. (See ***Searching for Actions***.)

2 **Search button -** Enter a keyword and then select this button. A list of actions that match your search criteria will be displayed. (See ***Searching for Actions***.)

3 **Favorites drop-down list -** Add an action from the *Favorites* list to the macro. (See ***Favorites***.)

4 **Macros drop-down list -** Insert another macro into the macro you are programming.

5 **Snippets drop-down list -** Add a commonly used action to the macro. (See ***Snippets***.)

6 **Edit shared variables -** Add a shared variable to the macro or edit a shared variable contained in the macro. (See ***Working with Shared Variables***.)

7 **Cut -** Cut the selected action from the macro.

8 **Copy -** Copy the selected action**.**

9 **Paste -** Paste the selected action.

10 **Delete -** Remove the selected action.

11 **Move selected lines up / Move selected lines down arrows -** Move the selected action up or down in the sequence of actions.

12 **Options button -** Open the *Action Script Options* dialog. (See ***Action Script Options***.)

13 **Category list -** Displays a list of action categories, arranged by category group. Select a category in the list to open a list of all the actions in that category. Select an action from the list to add it to the actions to be performed by the macro. (See ***Action Categories***.)

NOTE
To view (open) the list of action categories in a category group, select the arrow [ ] at the top right of the category group title bar.

14 **Macro name bar -** Displays the name of the macro and the Edit Macro icon. Selecting this icon will open the *Macro Properties* dialog so you can edit the name, description, and parameters of the macro.

15 **Insertion pointer -** Indicates the location in the list of actions where the next action will be added. This pointer can be dragged up or down to any position in the action list.

16 **Assigned actions list -** Displays all of the actions assigned to the macro you are programming. Actions are performed in the sequence in which they appear.

17 **Save button -** Saves your changes and closes the *Macro Editor*.

18 **Cancel button -** Ignores your changes and closes the *Macro Editor*.

NOTE
The *Macro Editor* is identical to the *Action Editor* with one exception - the *Macro Editor* does not include an Events drop-down list. (You cannot add a system event to a macro.)

Create a New Macro

You can create a new macro at the project, activity, or page level. The level at which you create the macro will determine where the new macro is stored and where it can be used:

- If you create a macro at the project level, the macro will be stored in the project *Macros* folder and will be available to program any object or page throughout the project.
- At the activity level, the macro is stored in the activity *Macros f*older and is available to any object or page in the activity.
- At the page level, the macro is stored in the page *Macros* folder and can only be used on the specific page on which it was created.

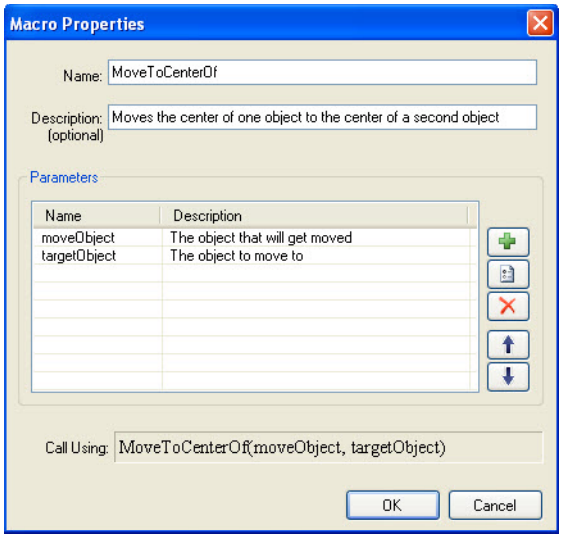
You create a new macro using the *Macro Properties* dialog. Then you use the *Macro Editor* to select the actions it will perform.

REFERENCE
An exercise is included at the end of this section that will let you practice creating a new macro. See *Exercise: Create a New Macro and Program a Button With It*.

1. Open the *Project Macros* dialog. (See ***The Project Macros Dialog***.)
2. Select Add Macro [ ]. The *Macro Properties* dialog will open.

NOTE
You can also create a new macro at the page level through the *Action Editor* or *Macro Editor*s. Select New Macro from the Macros drop-down list. The *Macro Properties* dialog will open. Continue with step 3 below.

MACRO PROPERTIES DIALOG



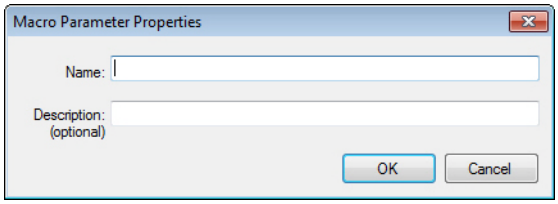
3. In the *Name* text box, enter a name for the new macro. There cannot be any spaces between words in the *Name* text box - use an underscore (_) if you want to separate words in the macro's name.

4. *(Optional)* Enter a brief description of the new macro in the *Description* text box.
5. Add parameters to the new macro:

> **NOTE**
> It is possible to create a macro that does not include parameters. If you do not want to add parameters to your macro - select OK and continue with step 7 below.

   a. Select Add [ ]. The *Macro Parameter Properties* dialog will open.

MACRO PARAMETER PROPERTIES DIALOG



   b. Enter a "name" (value) for the new parameter in the *Name* text box.
   c. *(Optional)* Enter a short description in the *Description* text box to explain the parameter's function.
   d. To add additional parameters to the macro, repeat steps a - c above.
   e. Select **OK**. The *Macro Parameter Properties dialog* will close, and the new parameter will appear in the *Macro Properties* dialog.

> **NOTE**
> The *Call Using* field of the *Macro Properties dialog* will reflect the addition of the parameters.

6. When you have finished adding parameters to the macro, select **OK** to close the *Macro Properties* dialog. The *Macro Editor* will open.
7. Use the *Macro Editor* to assign actions to (or "program") the new macro. (See ***The Macro Editor*** and ***Programming an Object***.)
8. Select **Save** to close the *Macro Editor*. Select **Done** to close the *Project Macros* dialog.

Edit a Macro

You can edit the properties (name, description and parameters) and add, reorder, or delete the actions of a pre-existing macro through the *Macro Editor*.

1. Open the *Project Macros* dialog. (See ***The Project Macros Dialog***.)
2. Select the macro that you want to edit.
3. Select Edit Macro [] from the toolbar. The *Macro Editor* will open.

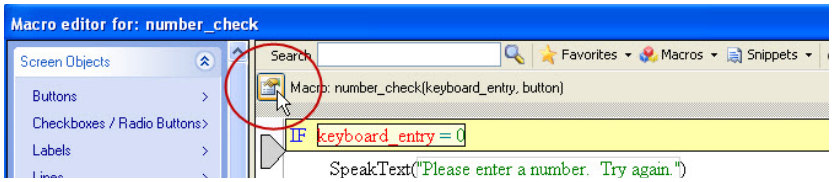
Edit Macro Actions

1. Open the *Project Macros* dialog. (See ***The Project Macros Dialog***.)
2. Double-click on the macro whose actions you want to edit. The *Macro Editor* will open.
3. Use the *Macro Editor* to add, delete, or reorder the macro's actions. (See ***The Macro Editor*** and ***Programming an Object***.)

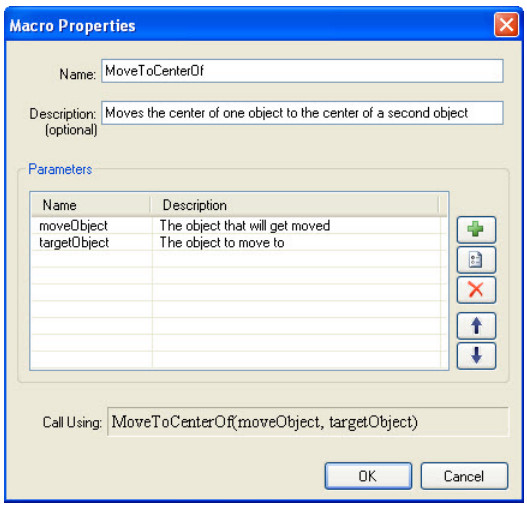
Add or Edit Macro Parameters

1. Open the *Macro Properties* dialog:
   a. Open the *Project Macros* dialog. (See ***The Project Macros Dialog***.)
   b. Double-click on the macro that you want to edit. The *Macro Editor* will open.
   c. Select Edit Macro [] in the Macro name bar on the top line of the *Macro Editor*. (See the illustration below.) The *Macro Properties* dialog will open.

Edit Macro Name Bar



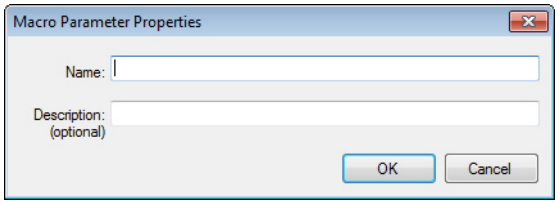
Macro Properties Dialog



Add a Parameter to a Macro

1. Select Add [ ]. The *Macro Parameter Properties* dialog will open.

MACRO PARAMETER PROPERTIES DIALOG



2. Enter a name (value) for the new parameter in the *Name* text box.
3. *(Optional)* Enter a short description in the *Description* text box.
4. Select **OK**.
5. Repeat steps 1 - 4 to add additional parameters to the macro.
6. When you have finished adding parameters, select **OK** to close the *Macro Properties* dialog.
7. Select **Save** to close the *Macro Editor*.

Edit a Parameter

1. In the *Macro Properties* dialog, select the parameter that you want to edit.
2. Select Edit Macro [ ]. The *Macro Parameter Properties* dialog will open.
3. To rename the parameter, enter a new name for the parameter in the *Name* text box.
4. To change the parameter description, highlight the current text in the *Description* text box, and enter a new description of the parameter.
5. Select **OK** to close the *Macro Properties* dialog.
6. Repeat steps 2 - 5 to edit additional parameters.
7. Select **Save** to close the *Macro Editor*.

Delete a Parameter

1. In the *Macro Properties* dialog, select the parameter you want to delete.
2. Select Delete [ ]. The parameter will be removed.
3. Repeat steps 1 and 2 to delete additional parameters.
4. Select **OK** to close the *Macro Properties* dialog.
5. Select **Save** to close the *Macro Editor*.

Reorder the Sequence in Which the Parameters are Called

Parameters are called in the sequence in which they are listed in the *Macro Properties* dialog. You can reorder this sequence.

1. In the *Macro Properties* dialog, select the parameter that you want to move.
2. Move the parameter:
   - Select Up [ ] to move the parameter up one line in the sequence.
   - Select Down [ ] to move the parameter down one line in the sequence.
3. Repeat step 2 until the sequence is reordered to your liking.
4. When you have finished reordering the parameters, select **OK** to close the *Macro Properties* dialog.
5. Select **Save** to close the *Macro Editor*.

Export and Import Macros

You can export a macro from any of your projects, save it, and then import it to use in any other project.

> **NOTE**
> If you are exporting the macro to a file sharing device (USB flash drive or external hard drive), connect it to a USB port on your computer.

Export a Macro

1. In the *Project* panel, mouse over the project title, activity folder, or page icon in which the macro is located until the floating toolbar appears.
2. Select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open.

> **SHORTCUT**
> You can also right-click on a project, activity, or page in the *Project* panel and select Edit Macros from the right-click menu to open the *Project Macros* dialog.

3. Select the macro you want to export.
4. Select Export Macro [ ] from the toolbar. The *Save As* dialog should open to the default folder (*My Documents > Boardmaker Studio >Projects.)*

> **NOTE**
> If the *Save As* dialog does not open to your *Projects* folder, navigate to My Documents > Boardmaker Studio > Projects.

NOTE
If you want to export the macro to a location other than your *Projects* folder, navigate to the folder on your computer or to the file sharing device to which you want to export the macro.

5. In the *File name* text box, enter a name for the macro you are exporting.
6. Select **Done** to close the *Project Macros* dialog.

NOTE
You can only export one macro at a time. Repeat the steps in the above procedure to export additional macros.

Import a Macro

NOTE
If you are importing the macro from a file sharing device (USB flash drive or external hard drive), connect it to a USB port on your computer.

1. In the *Project* panel, mouse over the project title, activity folder, or page icon into which you want to import the macro until the floating toolbar appears.
2. Select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open.

SHORTCUT
You can also right-click in the on a project, activity, or page in the Project panel and select Edit Macros from the right-click menu to open the *Project Macros* dialog.

3. Select Import Macro [ ] from the toolbar. The *Open* dialog should open to the default folder (*My Documents > Boardmaker Studio > Projects.)*

NOTE
If you want to import a macro from a location other than your *Projects* folder, navigate to the folder on your computer or to the file sharing device where the macro is located.

4. Select the macro you want to import. To select more than one macro, **Ctrl + Click** on each macro you want to import.
5. Select **Open**. The macro will be added to the *Project Macros* dialog and will be available for you to use in the project, activity, or page into which it was imported.
6. Select **Done** to close the *Project Macros* dialog.

Delete a Macro

You can delete a macro at the project, activity, or page level.

> **NOTE**
> Deleting a macro will remove the macro only from the project, activity, or page folder you have selected. For example, if you delete a macro from a page, that macro will still be available if it is used on other pages in the project. However, if you remove a macro at the project level, that macro will no longer be available for any activity or page in the project.

1. In the *Project* panel, mouse over the project title, activity folder, or page icon from which you want to delete the macro unit until the floating toolbar appears.

> **NOTE**
> Select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open.

> **SHORTCUT**
> You can also right-click in the on a project, activity, or page in the Project panel and select Edit Macros from the right-click menu to open the *Project Macros* dialog.

2. Select the macro you want to delete.
3. Select Delete Macro [ ] from the toolbar. A confirmation dialog will open. Select **Yes** to delete the macro.
4. Select **Done** to close the *Project Macros* dialog.

Exercise: Create a New Macro and Program a Button With It

The following exercise will walk you through the procedure for creating a simple macro. The macro you create will be used to program a button for a counting activity. The macro will check the user's keyboard input to ensure that a number has been entered and then display the result on the button.

It is suggested that you create a new page on which to practice programming exercises. You can name the page whatever you like, but remember what you have named it and the project in which you created it so that you can find it easily.

Define the Macro Properties

1. Open your programming exercise page (or create a new page).
2. In the *Project* panel, mouse over the icon representing the exercise page that you just opened. The floating toolbar will appear.
3. Select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open.

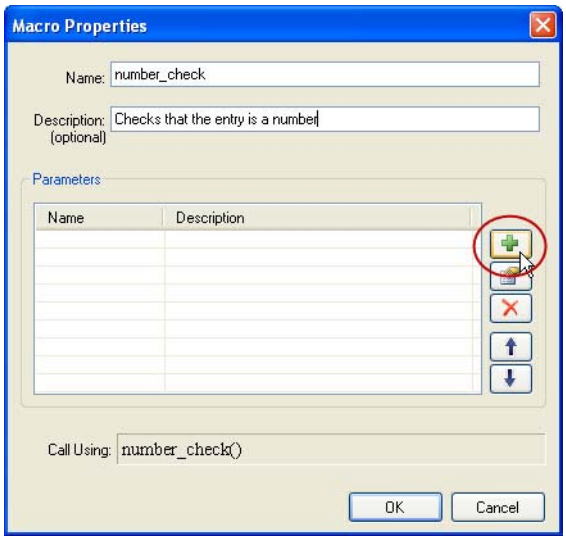
> **SHORTCUT**
> Right-click on the page in the Project panel and select Edit Macros from the right-click menu to open the *Project Macros* window.

4. Select Add Macro [ ] from the *Project Macros* dialog. The *Macro Properties dialog* will open.

5. In the *Name* text box, enter **number_check**.

6. In the *Description* text box, enter, **Checks that the entry is a number.** (Entering a description will help you remember what the macro does.)

Macro Properties Dialog with Macro Name and Description



Now you will add a parameter to the new macro.

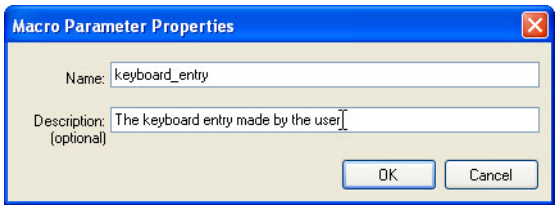
7. Select Add [ ] on the *Macro Properties* dialog. (See the illustration above.) The *Macro Parameter Properties* dialog will open.

8. In the *Name* text box, enter **keyboard_entry**. "Keyboard entry" is the value - the variable - that represents the text that the user will enter and that will be called when the macro is activated.

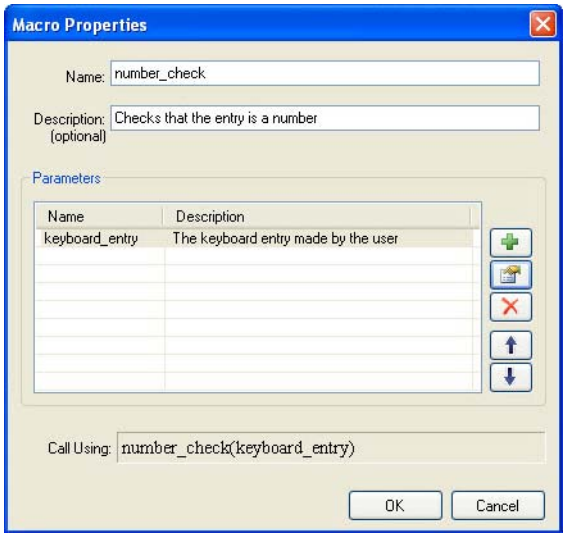
9. In the *Description* text box, enter **The keyboard entry made by the user**. (Entering a description for the parameter - like entering a description for the macro - will help you remember what the parameter does.)

10. Select **OK.** The *Macro Parameter Properties* dialog will close.

Macro Parameter Properties Dialog with Parameter Name and Description



MACRO PROPERTIES DIALOG WITH MACRO PROPERTIES DEFINED



NOTE
Notice how the *Call Using* field of the *Macro Properties* dialog has changed to reflect the addition of the parameter.

11. Select **OK** to close the *Macro Properties* dialog and save your new macro.

Next you will add actions to program the new macro.

Program the Macro

1. Make sure that the *Macro Editor* is open.

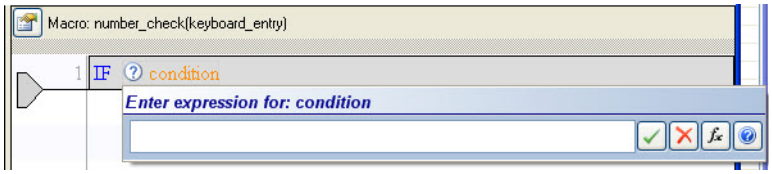
NOTE
If the *Macro Editor* is not open, mouse over the page icon in the *Project* panel and then select Edit Macros [ ] from the floating toolbar. The *Project Macros* dialog will open. Select Edit Macro [ ].The *Macro Editor* will open.

2. Select ***Programming > IF condition*** from the *Programming* action category list in the left panel of the *Macro Editor*. This action will appear as the first line in the *Macro Editor*, and the *Expression Editor* will open.

NOTE
To view (open) the list of action categories in a category group, select the arrow [ ] at the top right of the category group title bar.

NOTE
If the *Expression Editor* does not open, select the *condition* field in the *IF condition* action.

EXPRESSION EDITOR



3. In the *Expression Editor* text box, type, **keyboard_entry=0**.

> **NOTE**
> "0" indicates "not a number" to the Boardmaker Studio software. If the keyboard entry is anything other than a number - if it is a letter, space, or other character - the software will not accept the entry and will perform the next action - in the *IF* block.

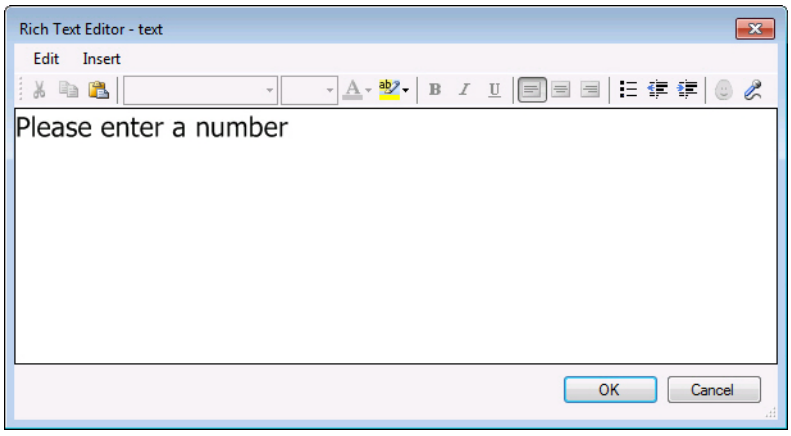
4. Select OK [ ].

5. Select ***Speech > SpeakText(text)*** from the *Audio/Video/Speech* action category**.** The action will appear as the second line in the *Macro Editor,* and the *Rich Text Editor* will open.

> **SHORTCUT**
> You can also select the *SpeakText(text)* action from the *Favorites* drop-down list.

6. Enter **Please enter a number** in the *Rich Text Editor*.

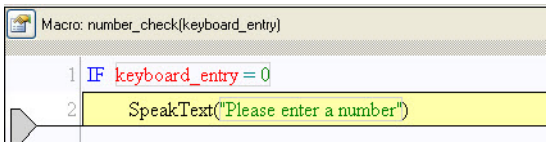
TEXT IN RICH TEXT EDITOR



7. Select **OK** to close the *Rich Text Editor*.

The first two actions you have programmed into your macro (the *IF* condition) will tell the software to check the value of the parameter, *keyboard_entry* (to check whether it is a number). Then, **if** the keyboard entry is **not** a number, to audibly cue the user to enter a number. Lines 1 and 2 in the *Macro Editor* should match the illustration below.

Macro Editor - If Condition Programmed



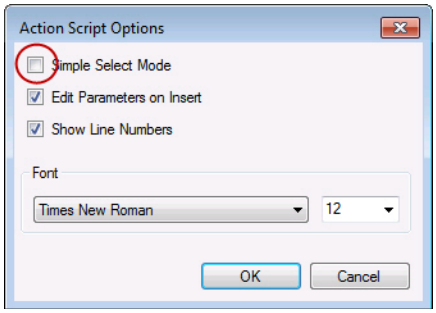
Now you will add an *Else* block to your macro. This *Else* block will tell the software that if the keyboard entry - the user's answer - **is** a number, the answer should be displayed on the selected object.

8. Select ***Programming > Else*** from the *Programming* action category. The action will appear on the third line of the *Macro Editor*.

9. Select Options [ ] from the *Macro Editor* toolbar. The *Action Script Options* dialog will open.

10. Clear the *Simple Select Mode* check box.

Action Script Options Dialog (Simple Select Mode Check Box Cleared)



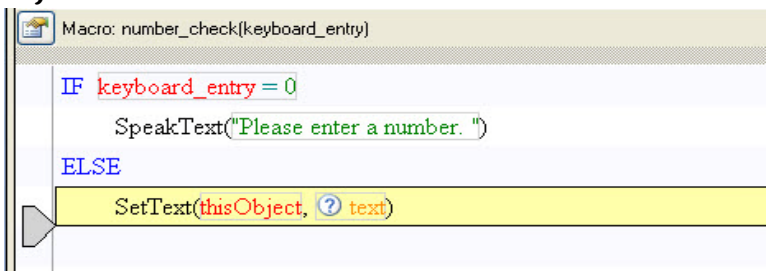
11. Select **OK** to close the *Action Script Options* dialog.

12. Select ***Screen Objects(General)* > SetText(object,text)** from the *Screen Objects* action category.

13. Select the *object* field in the *Expression Editor*.

14. Enter **thisObject** (capitalize the first letter in "object"). (See the illustration below.)

Object Expression in Expression Editor



Note
Clearing Simple Select mode will allow you to designate the object on which you program the macro ("thisObject") as the object on which the answer will be displayed.

15. Select OK [ ].

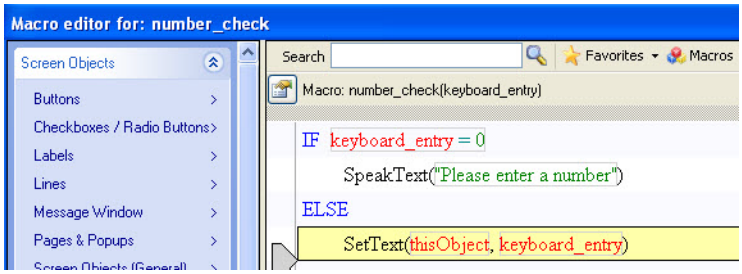
16. Select the *text* field in the *SetText* action. The *Expression Editor* will open so you can select the value of the parameter - the text that is to be displayed as the "answer."

17. Enter **keyboard_entry**. (This is the value that will be displayed as the answer.)

18. Select OK [ ] to close the *Expression Editor*.

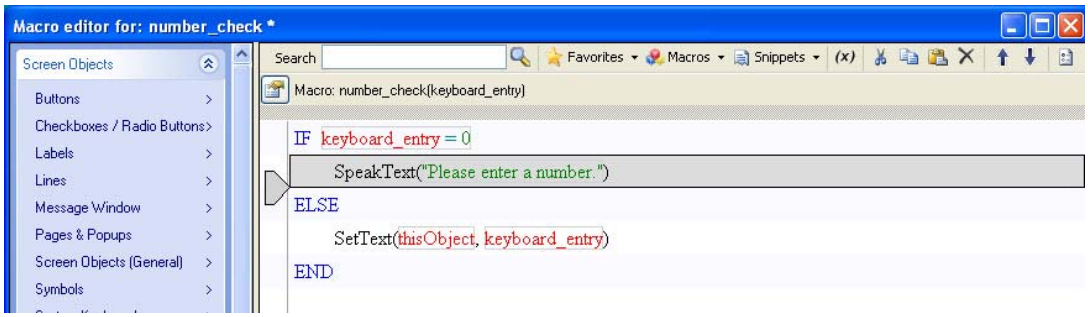
Lines 1 through 4 in the *Macro Editor* should now match the illustration below.

Macro Editor - If Condition and Else Block Programmed



19. Select ***Programming > END*** from the *Programming* action category. The action will appear as the fifth line in the *Macro Editor* and will stop the execution of the macro.

Macro Editor (programming for number_check macro complete)



Note
Select Options [ ] from the *Macro Editor* toolbar, and select the *Simple Select Mode* check box - this will make programming easier as you continue this exercise.

20. Select **Save** to close the *Macro Editor*.

21. Select **Done** to close the *Project Macros* dialog.

You have programmed the macro to tell the software to check whether the parameter - keyboard entry - is a number. Then, **if** the keyboard entry is **not** a number, to audibly cue the user to enter a number. If the keyboard entry **is** a valid number ("else"), this number - the answer - will be displayed on a button. When a valid number has been entered and displayed, the macro will stop running (it will "end").

Next, you will draw a button that you will program with the macro you just created.

Draw a Button

1. Open your programming exercise page (the page on which you programmed the number_check macro) if it is not already open.
2. Draw a rectangular button on any empty area on the page. (See ***Designing a Page***.)
3. Select the Label text box in the *Button* Properties panel, and enter, **How many pigs do you see?**

LABEL TEXT BOX IN BUTTON PROPERTIES PANEL

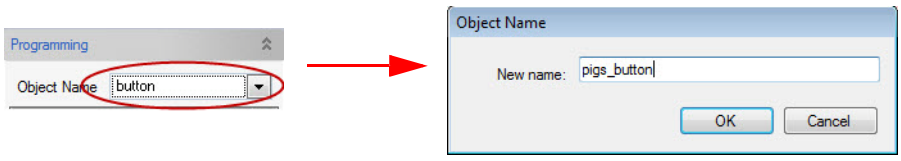
NOTE

If you like, you can use the *Button* Properties panel to format the label text, add a symbol to the button, and change the button style.

BUTTON TO BE PROGRAMMED WITH NUMBER_CHECK MACRO

4. Select the *Object Name* text box in the *Button* Properties panel. The *Object Name* dialog will open.

OBJECT NAME TEXT BOX AND OBJECT NAME DIALOG



5. Enter **pigs_button** in the *New name* text box. (This will identify the button when you are programming it.)
6. Select **OK** to close the *Object Name* dialog.
7. When you have finished creating the button, be sure to save your work. Select Save [ ] from the toolbar, or select **Save** from the File Menu.

Next you will program the button you have just drawn.

Program the Button with the New Macro

You will now program your "pigs" button, so that when it is selected, a dialog will open, asking the user, "How many pigs do you see?" If the user enters a letter or a character that is not a number, the cue, "Please enter a number" will be spoken aloud. When the user enters a number, it will be displayed on the button.

1. Open your programming exercise page if it is not already open.
2. Select the "pigs" button. The *Button* Properties panel will open.
3. Select the **Edit Actions** button in the *Programming* group. The *Action Editor* will open.

SHORTCUT
Double-click on the button to quickly open the *Action Editor*.

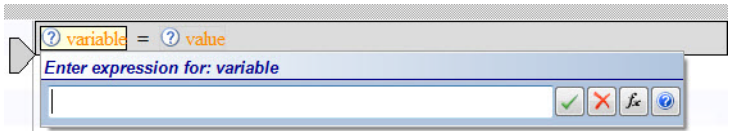
NOTE
Be sure that Simple Select Mode is selected. Select Options [ ] from the *Action Editor* toolbar, and select the *Simple Select Mode* check box. Then select OK to close the *Action Script Options* dialog.

The first and second actions you will be programming on the button are variables. The third action is the *number_check* macro you have just programmed.

4. Select ***Variables > variable[=value]*** from the *Programming* action category in the left panel. The action will appear as line 1 in the *Action Editor*, and the *Expression Editor* will open.

NOTE
(If the *Expression Editor* does not open, select the ***variable*** placeholder (the placeholder on the left side of the expression) to open it.

ACTION EDITOR WITH VARIABLE AND VALUE PLACEHOLDERS



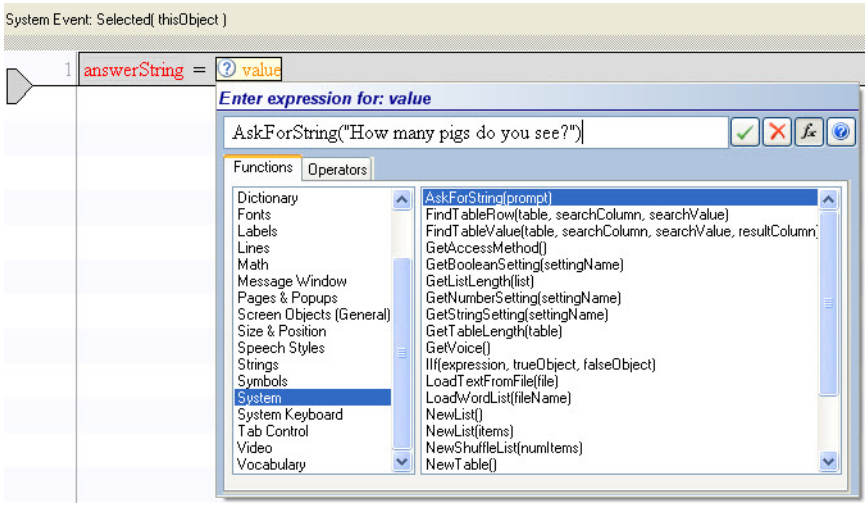
REFERENCE
For more information on programming variables, see *Entering Expressions and Variables*.

5. Enter answerString (no spaces - capitalize the first letter in "String") in the text field of the *Expression Editor*. Then select OK [ ].
6. Define the value of the variable:
   a. Select Show/Hide Functions [ ]. (Select the **Functions** tab if the *Functions* tab pane if it is not already open.)
   b. Select ***System*** from the *Functions* list.

c. Double-click on ***AskForString(prompt)***. (See the illustration below.)

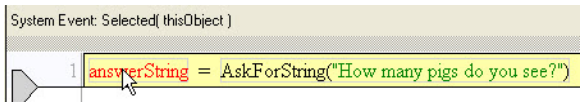
d. Highlight the text "prompt" and enter **"How many pigs do you see?"** (use quotation marks). (See the illustration below.

EXPRESSION EDITOR - ENTER EXPRESSION FOR VALUE (LINE 1)



7. Select OK [✓]. The *Expression Editor* will close, and line 1 in the *Action Editor* should match the illustration below.

ACTION EDITOR - LINE 1



The first action you have programmed onto your button will tell the software to display a dialog prompt that displays the question, "How many pigs do you see?" - "answerString" is a variable, a place holder, where the "answer," the string entered by the user, will be stored.

REFERENCE
In computer programming, a "string" is a sequence of binary numbers that represent data values. When the user enters a number in the dialog, the software will store that number as a string in the variable place holder "answerString." The action that you will program next will convert the string to a numerical character, such as "3" or "6."

8. Select ***Variables > variable[=value]*** from the *Programming* action category. The action will appear as line 2 in the *Action Editor*, and the *Expression Editor* will open.

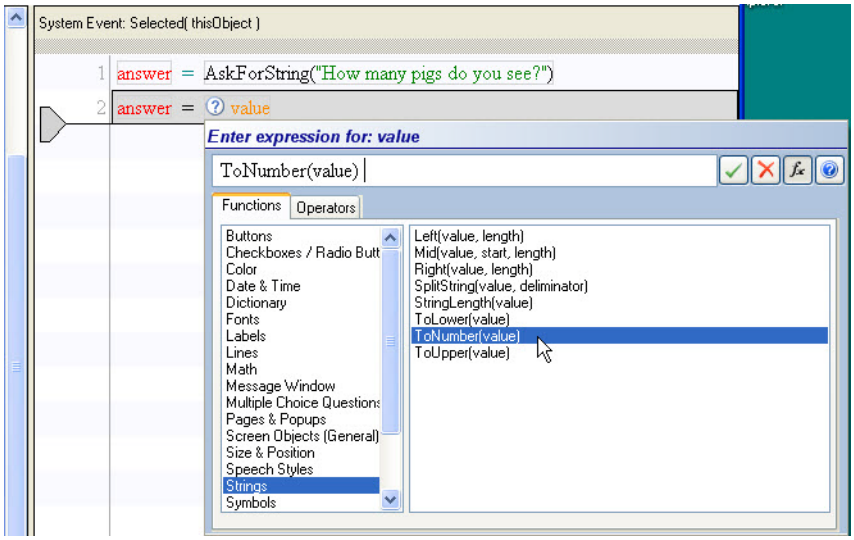
9. Define the variable: Enter **answer** in the text field of the *Expression Editor*. Then select OK [✓].

10. Define the value of the variable:

    a. Select ***Strings*** from the *Functions* list.

    b. Double-click on ***ToNumber(value)***. (See the illustration below.)

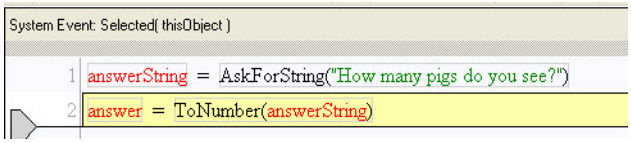
Expression Editor - Enter Expression for Value (Line 2)



c. Highlight the text "value" and enter **answerString** (no spaces - capitalize the first letter in "string").

11. Select OK [✓]. The *Expression Editor* will close, and line 2 in the *Action Editor* should match the illustration below.

Action Editor - Lines 1 and 2

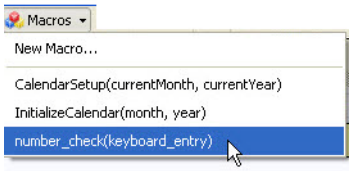


The second action you have programmed will convert the user's answer (the "answerString") to a numerical character.

Next you will add your macro.

12. Select the macro you have just programmed (***number_check (keyboard_entry***) from the *Macros* drop-down list in the toolbar. (See the illustration below.)

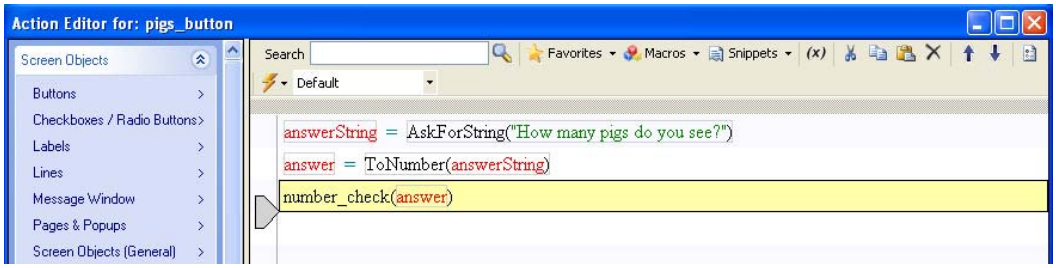
Macros Drop-Down List



The macro will appear as line 3 in the *Action Editor*, and the *Expression Editor* will open.

13. Enter the expression for *keyboard_entry.* Enter **answer** in the text field of the *Expression Editor*. Then select OK [✓].

COMPLETED PROGRAMMING FOR PIGS_BUTTON)



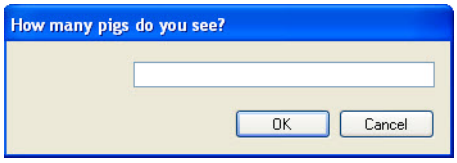
14. Select **Save** to close the *Action Editor*.

You have now successfully programmed a button with two variable actions and the new macro.

Try Out the New Macro

1. Open your programming exercise page if it is not already open.
2. In the Boardmaker Studio Designer, select the Mode button and choose **Preview Page**.
3. Select the "pigs_button" you have programmed. A dialog should appear.

DIALOG



4. Enter the letter **w** in the text box and select **OK.** Your computer should speak, "Please enter a number."
5. Select the pigs_button again.
6. Enter the number **7** in the text box and select **OK.**
7. The number 7 should appear on the button and replace the button's label ("How many pigs?")

You have now successfully created a new macro and programmed a button to use it.

PROGRAMMING AN OBJECT

It is easy to program an object using Boardmaker Studio. Programming an object simply involves assigning actions to the object using the *Action Editor* (or *Macro Editor*).

Programming can be as basic as adding one action to a button - an action to speak the text of the label on the button when the button is selected, for example - or you can assign a number of actions to an object so that it performs a series of actions when it is selected.

You can save the actions you program to use again and again by adding them to the *Snippets* or *Macro* drop-down lists.

Programmable objects include buttons (standard, symbolate, word predictor, or group), freeform buttons; hot spots; SmartSyms; labels (not assigned to objects); lines; video boxes; message windows and text boxes; check boxes and radio buttons; group buttons and tab controls, and the page itself.

You can easily assign actions to an object using the action category list or the shortcut drop-down lists (*Favorites*, *Snippets,* or *Macros)* in the *Action Editor*. After you have selected the actions you want the object to perform, you can edit the actions using the tools in the *Action Editor* - you can add actions, change the order in which the actions are performed, copy and paste actions to use them over again, or delete the actions entirely.

Following are general procedures for adding actions to an object and editing the actions already programmed on an object. At the end of this procedure, we have included several exercises that will let you practice programming an object.

NOTE

It is suggested that before you begin programming an object, you familiarize yourself with the *Action Editor* (see ***The Action Editor***) and with action categories (see ***Action Categories***.)

REFERENCE

See ***Working with Macros*** for instructions specific to programming macros.

Adding Actions to an Object

1. Select the object (or select the page itself) to which you want to add actions. The Properties panel for the selected object will open.
2. Select the **Edit Actions** button in the Properties panel. The *Action Editor* will open. Any actions currently assigned to the object will be listed.

SHORTCUT
Double-click the object to open the *Action Editor*.

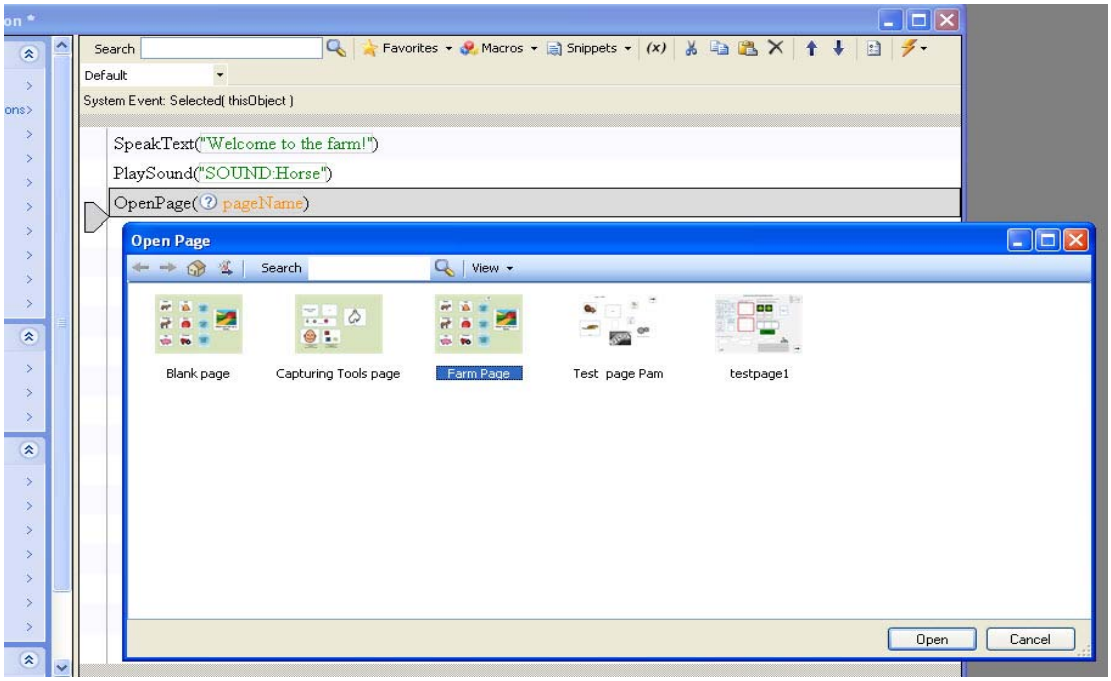
NOTE
Actions are performed in the order in which they are listed.

3. Select the action you want to add. You can add an action:
   - Using the *Search* text box and Search button in the *Action Editor* toolbar to search for a specific action. (See ***Searching for Actions***.)
   - From the action category group. (See ***Action Categories***.)
   - From the *Favorites*, *Snippets,* or *Macros* drop-down lists in the *Action Editor* title bar: (See ***Favorites***, ***Snippets***, and ***Working with Macros***.)

   If no further information is needed to perform the action, it will be added to the action list in the *Action Editor*.

   If further information is needed, (for example, the name of the page to open, or the text to be spoken, or sound to be played) a browser or the *Rich Text Editor* will open and you must select the appropriate file, enter the appropriate text, etc., to complete the action. (See the illustration below.) The action will then be added to the action list in the *Action Editor*.

OPEN PAGE BROWSER (EXAMPLE)

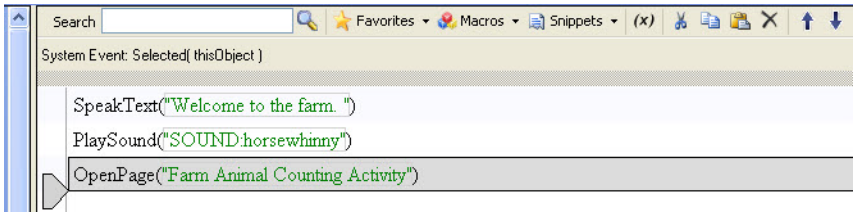


4. Repeat step 3 above to add more actions to the object.

REFERENCE
See *Entering Expressions and Variables* for information on programming actions containing expressions and variables.

The insertion pointer (see illustration below) will indicate the location in the list of actions where the next action will be added. The insertion pointer will normally move down one action each time an action is added to the list so that each action added will follow the prior action in sequential order.

INSERTION POINTER



In the illustration above, the insertion pointer indicates that the next action will be added after the highlighted action (the *OpenPage* action).

NOTE
You can select the Insertion pointer and drag it up or down to change the location at which the next action will be added.

5. When you have finished adding actions to the object, select **Save** to close the *Action Editor*.

Editing Actions Assigned to an Object

You can use the *Action Editor* to assign additional actions to an object, to edit a specific action assigned to an object, or to delete an action. You can also change the order in which the assigned actions are performed.

1. Select the object on the page you want to edit (or select the page itself). The Properties panel for the object will open.
2. Select **Edit Actions** in the Properties panel. The *Action Editor* will open. The actions currently assigned to the object will be listed.

SHORTCUT
Double-click the object to open the *Action Editor*.

NOTE
Actions are performed in the order in which they are listed.

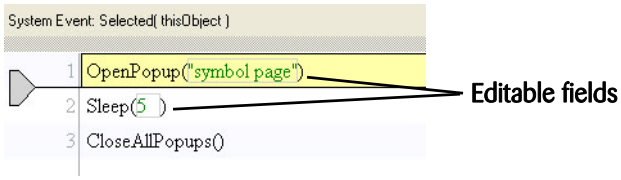
Add an Action to an Object

1. Select the insertion pointer and drag it to the position in the list of actions where you want to insert the action.
2. Select the action you want to add from the Category list or from the *Favorites*, *Snippets,* or *Macros* drop-down lists - or use the *Search* text box and Search button to search for a specific action. (See ***Adding Actions to an Object***.) The action will be added to the list of actions at the position indicated by the insertion pointer.
3. When you finish editing actions, select **Save** to close the *Action Editor*.

Edit an Action

You can edit some actions that you have assigned to an object. The only actions that are "editable" are those that require user input, such as the designation of a file to be opened, a condition or variable to be defined, text to be spoken, etc. (See the illustration below.)

EDITABLE ACTIONS



1. Select the action that you want to edit.
2. Select the editable field and make your changes.
3. Select **Save** to close the *Action Editor*.

Change the Order of Actions

You can change the order in which the actions are performed.

1. Select the action that you want to reorder.
2. Move the action:
   - To move the action up one line in the sequence, select the up arrow [ ] in the *Action Editor* toolbar.
   - To move the action down one line in the sequence, select the down [ ] arrow in the *Action Editor* toolbar.
3. Select **Save** to close the *Action Editor*.

Delete an Action

1. Select the action that you want to delete.
2. Select Delete [ ] on the *Action Editor* toolbar. The action will be removed from the list of actions.
3. Select **Save** to close the *Action Editor*.

Practice Exercises – Programming an Object

Following are several simple exercises that will let you practice programming an object.

If you have created a page in your project on which to practice programming exercises, open this page. If you have not created a practice page, it is suggested that you create a new blank page in your project (or create a new project) for practice exercises. (Name the page whatever you like, but remember what you have named it and the project in which you created it so that you can find it easily.)

> **REFERENCE**
> See *Creating Original Content* and *Creating Content Using Templates* for information on creating new pages and projects.

Exercise 1: Program a Button to Open a Page

This is a very basic practice exercise in which you will add one action to open a new page.

1. Open your practice page.

> **NOTE**
> For this exercise, your project will need to have at least one page other than your practice page. If your practice page is the only page in your activity, create a new page. See *Creating Pages*.

2. Select the arrow to the right of the Button tool in the toolbar. Then select **Standard Button** from the drop-down list.
3. Draw a standard button in the workspace. The *Button* Properties panel will open.

> **NOTE**
> Add a label ("Open Page") to help you identify the button you are programming when you put the software into Preview mode. (See *Edit Button Properties* for help adding a label.)

4. Select **Edit Actions** on the *Button Properties* panel. The *Action Editor* will open.
5. Select **Pages and Popups > OpenPage(pageName)** from the *Screen Objects* action category group. A browser will open.

> **SHORTCUT**
> You can also select the OpenPage(pageName) action from the *Favorites* drop-down list.

6. Select any page in your project from the browser. Then select **Open**. The browser will close, and the action will be listed in the *Action Editor*.
7. Select **Save** to close the *Action Editor*.
8. Try out your programmed button:
    a. In the Boardmaker Studio Designer, select the Mode button and choose **Preview Page.**

b. Select the new "**Open Page**" button that you programmed.

c. When you select the button, the page you have selected should open.

d. Select Stop [ ] to return to Design mode.

Exercise 2: Add Additional Actions to the Button

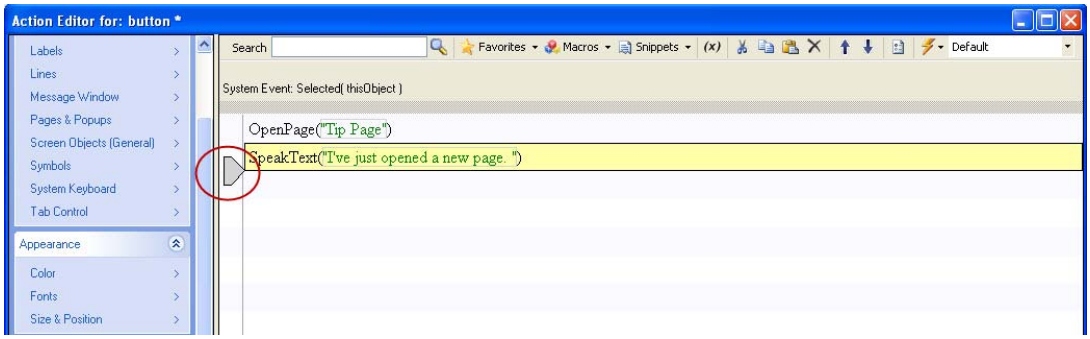
In this exercise, you will add two new actions to the "Open Page" button you programmed in Exercise 1.

1. If it is not already open, open the practice page on which you programmed the "Open Page" button.
2. Double-click on the **Open Page** button. The *Action Editor* will open. The *OpenPage()* action (the only action currently assigned to the button) will be listed.
3. Select **Speech > SpeakText()** from the *Audio/Video/Speech* action category group. The *Rich Text Editor* will open.

SHORTCUT
You can also select SpeakText() from the *Favorites* drop-down list.

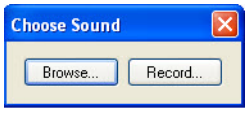
4. Enter "I've just opened a new page" (no quotes) in the *Rich Text Editor*. Select **OK** to close the *Rich Text Editor*.
5. Make sure the Insertion Pointer is beneath the *Speak Text* action in the *Action Editor* (beneath line 2 – see the illustration below).

ACTION EDITOR SHOWING INSERTION POINTER



6. Select **Sound > PlaySound(soundId)** from the *Audio/Video/Speech* action category group. The *Choose Sound* dialog will open.

CHOOSE SOUND DIALOG



SHORTCUT
You can also select PlaySound(soundId) from the *Favorites* drop-down list.

7. Select **Browse**. A browser will open.
8. Navigate to the folder where your sound files are saved.
9. Select a sound file you want to play when the page opens. Select **Open**. The browser will close, and the action will be listed in the *Action Editor.*
10. Select **Save** to save your changes and close the *Action Editor*.
11. Try out your programmed button:

    a. In the Boardmaker Studio Designer, select the Mode button and choose **Preview Page**.

    b. Select the new "**Open Page**" button that you programmed.

    When you select the button, the selected page should open; the phrase, "I've just opened a new page" should be spoken; and the sound file you have chosen should play.

NOTE

If you want to practice changing the sequence of actions, try opening your practice page and double-click your Open Page button. Then try using the up arrow [ ] and down [ ] arrows to change the order in which the *SpeakText()* and *Play Sound()* actions are performed.

Exercise 3: Program a Fortune Telling Button

This simple practice exercise uses actions from the *Favorites* and *Snippets* drop-down lists to program a "fortune telling" button.

1. Open the practice page you created for these exercises.
2. Select the arrow to the right of the Button tool in the toolbar. Then select **Standard Button** from the drop-down list.
3. Draw a standard button in the workspace. The *Button Properties* panel will open

> **NOTE**
> Add a label ("Tell me my fortune") to the button. You can also add a symbol or change the button's appearance. (See ***Edit Button Properties*** for help adding a label, symbol, and changing the button's appearance.)

4. Select **Edit Actions** on the *Button* Properties panel. The *Action Editor* will open.

> **SHORTCUT**
> Double-click the button to open the *Action Editor*.

5. Select **Favorites > SpeakText(text).** The action will be listed, and the and the *Rich Text Editor* will open.

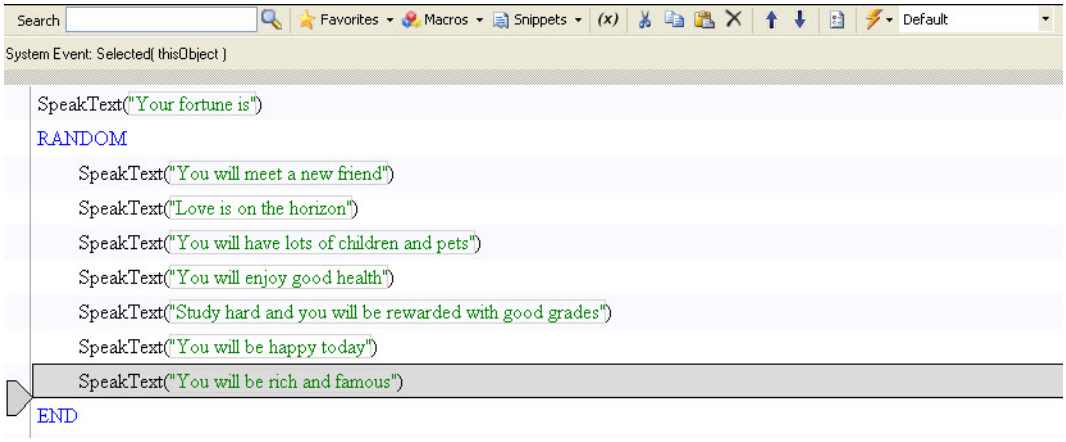
> **NOTE**
> This action is also available in the *Speech* action category in the *Audio/Video/Speech* category group.

6. Enter "Your fortune is" (no quotation marks) in the *Rich Text Editor*.
7. Select **Snippets > Random/End.**
8. Select the insertion pointer and move it up one line to beneath the *Random* action (beneath Line 2).
9. Select **Favorites > SpeakText(text).** The action will appear on line 3 (in the Random block), and the *Rich Text Editor* will open.
10. Enter a "fortune" in the *Rich Text Editor*. (For example, **You will meet a new friend**.)
11. Continue selecting **Favorites > SpeakText(text)** and entering "fortunes". (Enter at least five fortunes so that you can see how the random action feature works when you put the software into Preview mode.)

> **NOTE**
> You can also copy and paste the *SpeakText(text)* action. Highlight the line containing the action and then select Copy []and then Paste [ ] from the toolbar. The new action will appear where indicated by the insertion pointer. Then select the text field and change the text of the fortune in the *Rich Text Editor*.

When you have finished adding "fortunes," your "Fortune Telling" program should look similar to the illustration below.

ACTION EDITOR WITH EXERCISE 2 PROGRAM



12. Select **Save** to save your new program and close the *Action Editor*.

13. Try Out Your Fortune Telling Program

    a. In the Boardmaker Studio Designer, select the Mode button and choose **Preview Page**.

    b. Select the **Tell me my fortune** button that you have programmed.

    The button should speak the words, "Your fortune is..." and then speak any one of the fortunes you have entered. The fortunes will not be spoken in the same order you have entered them – they will be spoken at random.

    Try selecting the button several times - each time the button is selected, the software should randomly speak a different fortune.

    c. Select Stop [ ] to return to Design mode.

12 Printing

Boardmaker Studio makes it easy for you to print out just one page, selected pages, or an entire activity or project. The software also gives you the option of printing all the pages in an activity or project in their native orientation - so the project will print out correctly if some of its pages are portrait and others landscape.

This chapter covers the following topics:

- ***Printing a Page From Your Project***
- ***Printing an Activity or Project***

Printing a Page From Your Project

Use the *Print Setup* dialog to select print options for printing a single page from your project.

> **Reference**
> If you want to print more than one page from an activity or project, see *Printing an Activity or Project*.

Open the Print Setup Dialog

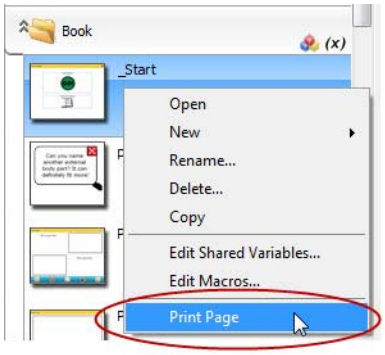
You can access the *Print Setup* dialog through the floating toolbar on the *Project* panel, through the right-click menu on the *Project* panel, or through the File Menu:

- **From the Project panel -** In the *Project* panel, mouse over the page you want to print. The Floating Toolbar will appear. Select the printer icon.

Printer Icon in Floating Toolbar

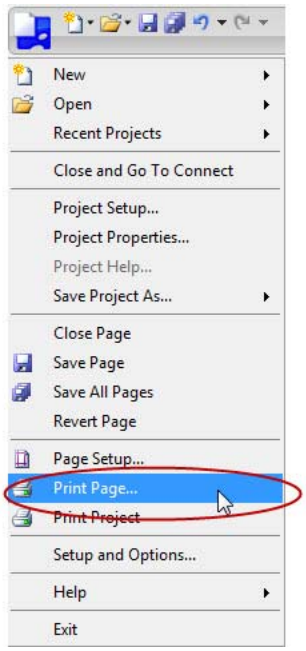
- **From the right-click menu -** In the *Project* panel, right-click on the page you want to print. From the right-click menu, select Print Page.

Page Right-Click Menu

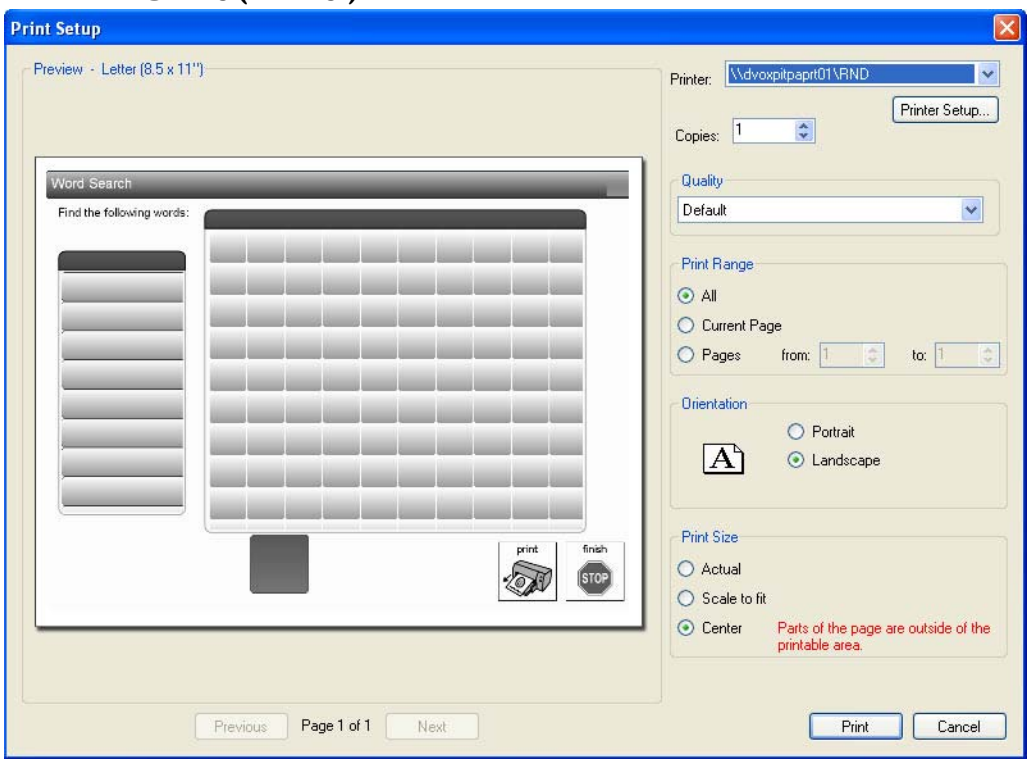


- **From the File Menu -** In the *Project* panel, select the page you want to print. Then select **Print Page** from the File Menu.

File Menu



Print Setup Dialog (for page)



Set Print Options

Set Up Your Printer and Select the Number of Copies

1. *(Optional)* Your default printer should appear in the *Printer* drop-down list. If it does not appear, or if you want to change printers, select a printer from the list.
2. *(Optional)* If you want to change your printer settings, select **Printer Setup**. Your default Windows print dialog will open. Make your changes in this dialog, and then select **OK**.
3. Use the *Copies* drop-down list to select the number of copies you want to print.

Select the Print Quality

Use the *Quality* drop-down list to select the resolution of the printed page. The print quality settings in the list will vary, depending on your printer.

> **NOTE**
> The higher the resolution, the longer the page will take to print.

Set the Print Range

To print a single page in a project, the default print range setting is *All.* Normally only the single page you have selected will be printed on a single sheet of paper. (See ***Set the Print Size***.)

Set the Page Orientation

Select **Portrait** or **Landscape** under *Orientation.*

Set the Print Size

If part(s) of a page will be cut off when the page prints, a message will appear in red indicating that parts of the page are outside the printable area.

WARNING MESSAGE - PAGE SIZE EXCEEDS PRINTABLE AREA

- Select **Actual** if you want the page to print at its actual physical size. If parts of the page are outside the print area, the page will print on two or more sheets of paper. (Note that the *Page* indicator at the bottom of the screen will indicate the number of pages required to print the page at its actual size. [You can set the print range.])
- Select **Center** if you want to center the page on a single sheet of paper when it is printed. (Only one page will print.) (This is the default print setting.)

- Select **Scale to fit** to adjust the size of the page to fit on a single sheet of paper.

Print the Page

When you have finished selecting your print options, select **Print** to print the page.

> **NOTE**
> You can also select Current Page (under *Print Range*) in the *Print Setup* dialog for activities or projects to print a single page from an activity or project.

Printing an Activity or Project

You can easily print an entire activity or project - or a selected range of pages from an activity or project. Boardmaker Studio will even automatically adjust its print settings so that pages will print out correctly even if they have mixed portrait and landscape orientations.

Reference
If you want to print a single page from an activity or project, see *Printing a Page From Your Project*.

Open the Print Setup Dialog

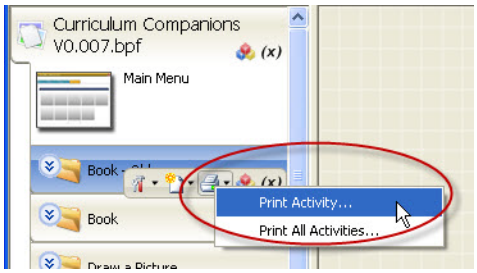
Open the *Print Setup* dialog to select print options for printing an entire activity (or a selected range of pages from an activity).

To Print an Activity

From the Project Panel:

1. Mouse over the folder icon representing the activity you want to print. The Floating Toolbar will appear.
2. Select the printer icon on the Floating Toolbar. Then select **Print Activity** from the drop-down list.

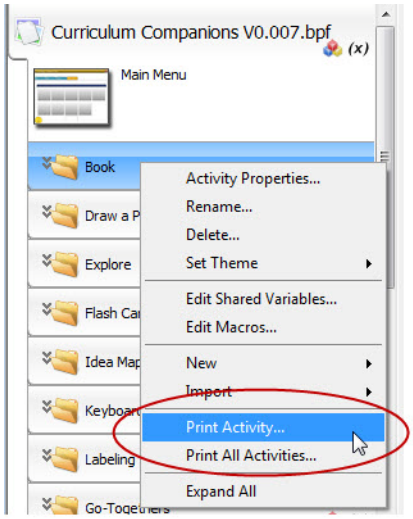
Printer Icon in Floating Toolbar (Print Activity)



From the Right-Click Menu

1. In the *Project* panel, right-click on the activity you want to print.
2. From the right-click menu, select **Print Activity**.

Activity Right-Click Menu



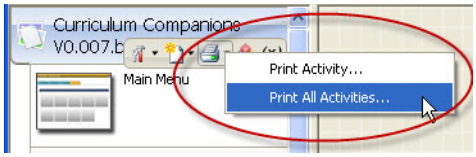
To Print a Project

Open the *Print Setup* dialog to select print options for printing all the pages in a project - including all of the activities in the project - or a selected range of pages:

From the Project Panel:

1. Mouse over the folder icon representing the project you want to print. The Floating Toolbar will appear.
2. Select the printer icon on the Floating Toolbar. Then select **Print All Activities** from the drop-down list.

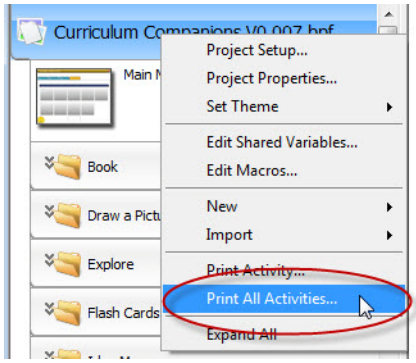
Printer Icon in Floating Toolbar (Print All Activities)



From the Right-Click Menu

1. In the *Project* panel, right-click on the folder icon representing the project you want to print.
2. From the right-click menu, select **Print All Activities.**

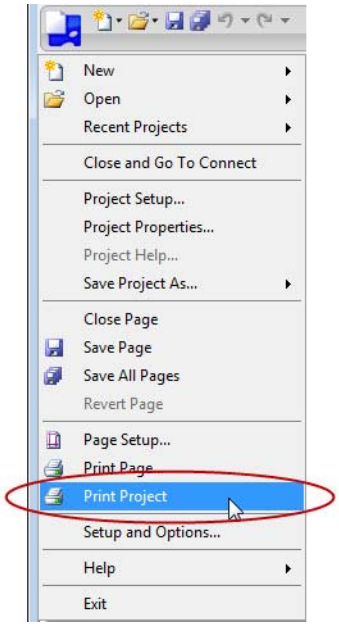
ACTIVITY RIGHT-CLICK MENU



From the File Menu

1. In the *Project* panel, select the folder icon representing the project you want to print.
2. Select **Print Project.**

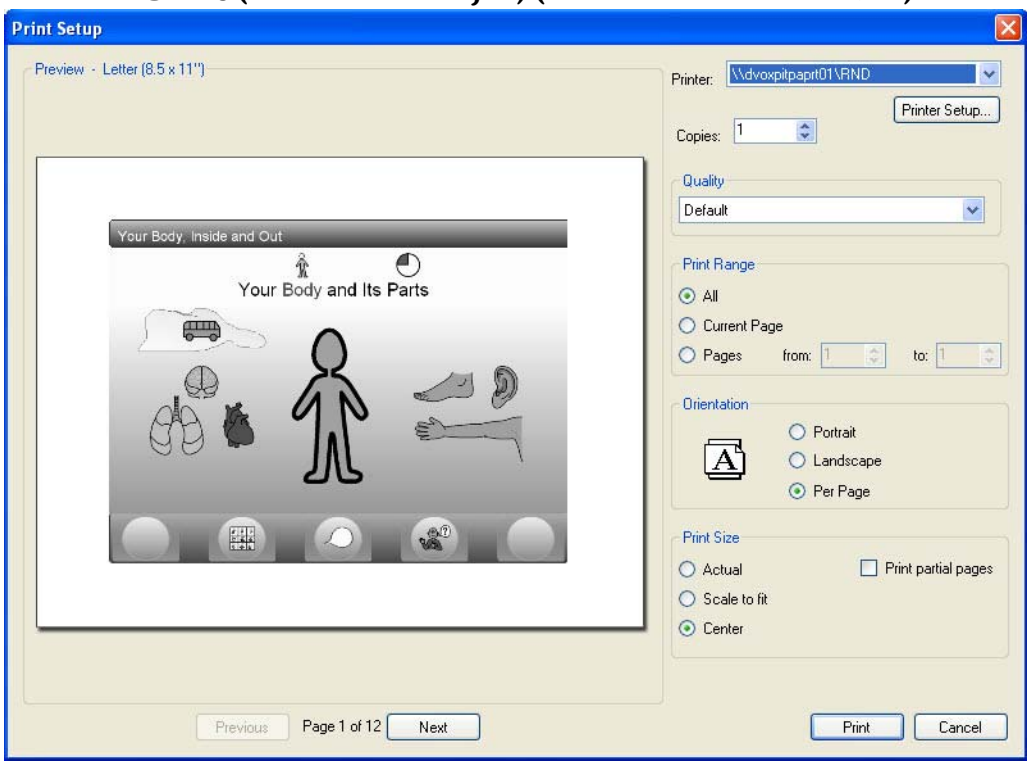
FILE MENU



Set Print Options

Use the *Print Setup* dialog to select print options.

PRINT SETUP DIALOG (FOR ACTIVITY OR PROJECT) (ACTIVITY SHOWN IN THIS EXAMPLE)



Set Up Your Printer and Select the Number of Copies

1. *(Optional)* Your default printer should appear in the *Printer* drop-down list. If it does not appear, or if you want to change printers, select a printer from the list.
2. *(Optional)* If you want to change your printer settings, select **Printer Setup**. Your default Windows print dialog will open. Make your changes in this dialog, and then select **OK**.
3. Use the *Copies* drop-down list to select the number of copies you want to print.

Select the Print Quality

Use the *Quality* drop-down list to select the resolution of the printed pages. The print quality settings in the list will vary, depending on your printer.

NOTE
The higher the resolution, the longer the pages will take to print.

Set the Print Range

Select an option (under *Print Range)* that represents the pages you want to print:

- **All -** All pages in the selected activity or project will be printed.
- **Current Page -** Only the page that is currently visible in the *Print Setup* dialog will be printed.

> **NOTE**
> Use the Previous and Next buttons at the bottom of the *Print Setup* dialog to move from page to page through the activity or project.

- **Pages -** Use the **from** and **to** drop-down lists to select the range of pages to print.

Set the Page Orientation

Select an option (under *Orientation*) to set the orientation for all of the pages in the activity or project that will print:

- Portrait
- Landscape
- **Per Page -** This setting will allow each page to be printed at its native orientation - use this setting if your activity or project has pages with both portrait and landscape orientations.

Set the Print Size

Select an option (Under *Print Size*) to select a size at which the pages in the activity or project will print:

- **Actual -** The pages will print at the size selected when the page was set up - at their actual physical size.

> **NOTE**
> When you select Actual as the print size setting, portions of pages may be cut off when the activity or project is printed. You can choose to print all pages in the activity or project - including those portions of pages that would have been cut off. (See *Print Partial Pages*.)

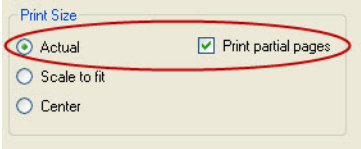
- **Scale to Fit -** Adjusts the size of each page to fit on a single sheet of paper.
- **Center -** This is the default print size setting. Each page in the project or activity will be centered on a single sheet of paper when it is printed. (Partial pages cannot be included and will not print.)

Print Partial Pages

If a portion of any page or pages in the activity or project is outside the printable area, that portion of the page will normally not be included when the activity or project is printed out - the print out will not automatically include (or "span") these partial pages. If you set your print size to *Actual*, you have the option of including partial pages when you print the activity or project.

1. Under *Print Size*, select **Actual**.
2. Select the **Print partial pages** check box.

Print Partial Pages Check Box (Actual Print Size Setting)



Print the Project or Activity

When you have finished selecting your print options, select **Print** to print the activity or project.

A Getting Additional Help

If you need additional assistance using Boardmaker Studio Player, you can refer to the documentation resources or contact Technical Support.

This appendix covers the following topics:

- ***Documentation Resources***
- ***Technical Support***

Documentation Resources

This section covers the following topics:

- ***User Guide***
- ***Boardmaker Studio Handbook***
- ***Online Tutorials and Videos***

User Guide

The ***Boardmaker Studio User Guide*** is a PDF file providing comprehensive information about how to use Boardmaker Studio. It can be accessed either from the Connect screen or from the File Menu:

- To access it from the Connect screen, select the **Help** link at the top of the screen. Then select **Boardmaker Studio User Guide**.
- To access it from the Boardmaker Studio designer workspace, select **File Menu > Help > Boardmaker Studio User Guide**.

You can also download the User Guide from the Mayer-Johnson Product Documentation page: *http://www.mayer-johnson.com/support/productdocumentation/.*

Boardmaker Studio Handbook

The Boardmaker Studio Handbook that was shipped with your software is a brief introductory reference booklet intended to get you immediately "up and running" by focusing on the key, frequently used features of Boardmaker Studio. You can also download a PDF version of the handbook from the Mayer-Johnson Product Documentation page: *http://www.mayer-johnson.com/support/productdocumentation/.*

Online Tutorials and Videos

The Boardmaker Studio *Help* menu contains a link to the Mayer-Johnson website *Online Tutorials and Videos* page. This link can be accessed either from the Connect screen or from the File Menu:

- To access it from the Connect screen, select the **Help** link at the top of the screen. Then select **Online Tutorials & Videos**.
- To access it from the Boardmaker Studio Designer workspace, select **Help > Online Tutorials & Videos**.

TECHNICAL SUPPORT

United States & Canada

1-800-588-4548

M - F: 8:00 a.m. - 6:00 p.m. (EST)

support@mayerjohnson.com

United Kingdom

+44 (0) 1926 516 250

support@mayerjohnson.com

B Common Words

"Common words" are words that are widely used in normal conversation. When you are defining the symbolate properties of a message window, label, or symbolate button, you have the option of symbolating "common words" or "non-common words."

Following is a list of the words that Boardmaker Studio classifies as "common words."

a	**call**	**funny**	**just**
about	**came**	**gave**	**keep**
after	**can**	**get**	**kind**
again	**carry**	**give**	**know**
all	**clean**	**go**	**laugh**
always	**cold**	**goes**	**let**
am	**come**	**going**	**light**
an	**could**	**good**	**like**
and	**cut**	**got**	**little**
any	**did**	**green**	**live**
are	**do**	**grow**	**long**
around	**does**	**had**	**look**
as	**done**	**has**	**made**
ask	**don't**	**have**	**make**
at	**down**	**he**	**many**
ate	**draw**	**help**	**may**
away	**drink**	**her**	**me**
be	**eat**	**here**	**much**
because	**eight**	**him**	**must**
been	**every**	**his**	**my**

before	fall	hold	myself
best	far	hot	never
better	fast	how	new
big	find	hurt	no
black	first	I	not
blue	five	if	now
both	fly	in	of
bring	for	into	off
brown	found	is	old
but	four	it	on
buy	from	its	once
by	full	jump	one
only	see	then	wash
open	seven	there	we
or	shall	these	well
our	she	they	went
out	show	think	were
over	sing	those	what
own	sit	three	when
pick	six	to	where
play	sleep	today	which
please	small	together	white
pretty	so	too	who
pull	some	try	why
put	soon	two	will
ran	start	under	wish
read	stop	up	with
red	take	upon	work
ride	tell	us	would
right	ten	use	write

round	thank	very	yellow
run	that	walk	yes
said	the	want	you
saw	their	warm	your
say	them	was	

C Action and Function List

This appendix lists and describes all of the actions and functions that are available through the *Action Editor* and *Macro Editor* menus. These actions and functions are organized by category.

This appendix covers the following action and function categories:

- ***Programming***
- ***Xml***
- ***Variables***
- ***Math***
- ***Date & Time***
- ***Tab Control***
- ***System***
- ***Screen Objects (General)***
- ***Message Window***
- ***Pages & Popups***
- ***Vocabulary***
- ***Strings***
- ***Size & Position***
- ***Sound***
- ***System Keyboard***
- ***Database***
- ***Labels***
- ***Color***
- ***Buttons***

- ***Checkboxes / Radio Buttons***
- ***Speech Styles***
- ***Fonts***
- ***Video***
- ***Symbols***
- ***Lines***
- ***Speech***

Programming

Actions

variable [= value]

Creates a variable assignment statement. The shortcut for this action is to just type the '=' key at any time.

Parameters

variable	Variable name.
value	Expression whose value to assign to the named variable.

BREAK

Breaks out of (leaves) the current block, continuing to run actions after the END statement of the current block.

COMMENT comment

Informational message to explain or document the action script. This statement does not execute.

Parameters

comment	Text of the comment.

CONTINUE

Returns to the beginning of the current LOOP or LOOP WHILE block.

ELSE

Begins a block of actions executed if the preceding IF or any ELSEIF conditions are FALSE.

ELSEIF condition

Begins a block of actions executed if 'condition' is TRUE and the preceding IF or any ELSEIF conditions are FALSE.

Parameters

condition	Logical condition to test. If TRUE, the actions in the following block will be executed.

END

Ends a block of actions that starts with an IF, LOOP, LOOP WHILE, or RANDOM statement.

IF condition

Begins a block of actions executed if 'condition' is TRUE.

Parameters

condition	Logical condition to test. If TRUE, the actions in the following block will be executed.

LOCAL variable [= value]

Creates a local variable and assigns a value. This will guarantee that the variable is local to the action script, ignoring any shared variables by the same name.

Parameters

variable	Variable name.
value	Expression whose value to assign to the named variable.

LOOP variable FROM minimum TO maximum [STEP step]

Begins a block of actions executed a specified number of times.

Parameters

variable	Variable that will contain a number between (inclusive) 'minimum' and 'maximum' that will be incremented by 'step' each time the loop is executed.
minimum	Starting number for 'variable'.
maximum	Maximum number that 'variable' can reach. If 'variable' is greater than this number after 'step' is added, the loop stops.
step	Number added to the loop variable on the second and all subsequent times through the loop. This addition occurs before the check against 'maximum' is made. If not specified, the value is 1

LOOP WHILE condition

Begins a block of actions executed in a loop as long as 'condition' remains TRUE...

Parameters

condition	Conidtional expression to evaluate before executing the LOOP. If FALSE, the looping will stop

OPTION

Begins a block of actions to execute within a RANDOM block.

> **NOTE**
> Any actions appearing in a RANDOM block prior to the first OPTION block are treated as single-action options.

RANDOM

Begins a block of actions (or OPTION group of actions), in which one action (or OPTION group) will be randomly selected and executed.

RETURN [value]

Exits (stops executing) the current action script or macro, optionally returning a value. Upon returning to the calling script, this value could then be assigned to a variable, used in an expression, or used as a parameter to another action or macro.

Parameters

value	Expression defining the value to return.

Xml

XmlAddChild(object, nodeName)

Creates a new named child XmlNode.

Parameters

object	The Xml node object
nodeName	The name of the child node.

XmlAddChild(object, nodeName, attrList)

Creates a new named child XmlNode with attributes.

Parameters

object	The Xml node object
nodeName	The name of the child node.
attrList	A list of atributes, where the list contains [name1, value1, name2, value2, ...].

XmlAddChild(object, nodeName, attrList, nodeValue)

Creates a new named child XmlNode with attributes and value.

Parameters

object	The Xml node object
nodeName	The name of the child node
attrList	A list of atributes, where the list contains [name1, value1, name2, value2, ...]
nodeValue	The value of the node

XmlAddChildNode(object, childNode)

Adds a child node to an Xml node.

Parameters

object	The Xml node object
childNode	The Xml node to add

XmlDelete(object, deleteMethod)

Delete a node, a node's children, a nodes attributes, or both.

Parameters

object	The Xml node object
dleteMethod	What to delete. One of the following… 'DeleteNode' delete this node. 'DeleteChildren' delete all children of this node. 'DeleteAttributes' delete all attributes of this node. 'DeleteChildrenAndAttributes' delete all children and attributes of this node

XmlDeleteAttribute(object, attributeName)

Delete a named attribute of an Xml node.

Parameters

object	The Xml node object
attributeName	The name of the attribute.

XmlDeleteChild(object, nodeName)

Delete a child note from an Xml node.

Parameters

object	The Xml node object
attributeName	The name of the child node

XmlInsert(object, nodeToInsert, InsertMethod)

Insert a child or sibling node relative to an Xml node.

Parameters

object	The Xml node object
nodeToInsert	The node to insert into the Xml node.
insertMethod	How to insert the node. One of: 'InsertBefore' insert as sibling prior to this node. 'InsertAfter' insert as sibling after this node. 'AppendChild' insert as last child of this node. 'PrependChild' insert as first child of this node. 'ReplaceNode' replace this node with the specified node.

XmlSetAttribute(object, attributeName, attributeValue)

Set a named attribute of an Xml node. If the attribute already exists, its value will be changed, otherwise, a new attribute will be added. If the value parameter is null, the attribute will be removed.

Parameters

object	The Xml node object
attributeName	The name of the attribute.
attributValue	The value of the attribute

XmlSetAttribute(object,attrList)

Set the attributes of an Xml node. The attributes are passed as a list which contains [name1, value1, name2, value2, …].

Parameters

object	The Xml node object
attrList	A list of atributes, where the list contains [name1, value1, name2, value2, ...].

XmlSetValue(object,newValue)

Set the value of an Xml node.

Parameters

object	The Xml node object
newValue	The value to set.

XmlSetValue(object,newValue, xPathQuery)

Sets a value based in the provided XPath query. Note that the value may be the node's (or child node's) value or attribute value.

Parameters

object	The Xml node object
newValue	The value to set.
xPathQuery	The XPath query to execute

XmlSetValue(object,newValue, xPathQueryTemplate, queryParams)

Sets a value based in the provided XPath query and a list of query parameters. Note that the value may be the node's (or child node's) value or attribute value.

Parameters

object	The Xml node object
newValue	The value to set.
xQueryTemplate	
queryParams	The list of parameters to pass the XPath query

XmlSortNodeList(nodeList, noResultBehavior, xPathQuery)

Sort a list of nodes by running XmlGetValue on each node and sorting the resultant value. The list that is passed in is modified as per the noResultBehavior. The count of nodes remaining in the list is returned

Parameters

object	The list of Xml nodes to sort
newResultBehavior	If the XPath query fails (returns a null result) those nodes can be deleted (Delete) or added to the beginning (PlaceAtBeginning) or end of the List (PlaceAtEnd).
xPathQuery	The XPath query to execute on each node in the list.

XmlSortNodeList(nodeList, noResultBehavior, xPathQueryTemplate, queryParams)

Sort a list of nodes by running XmlGetValue on each node and sorting the resultant value. The list that is passed in is modified as per the noResultBehavior. The count of nodes remaining in the list is returned.

Parameters

object	The list of Xml nodes to sort
noResultBehavior	If the XPath query fails (returns a null result) those nodes can be deleted (Delete) or added to the beginning (PlaceAtBeginning) or end of the List (PlaceAtEnd).
xPathQueryTemplate	
queryParams	Comma separated ordered list of values that satisfy the $var1, $var2, etc. parameters of the XPath query template

Functions

NewXmlNode(nodeName)

Creates a new named Xml node.

Parameters

nodeName	The name of the new node.t

NewXmlNode(nodeName, attrList)

Creates a new named Xml node with attributes.

Parameters

nodeName	The name of the new node.t
attrList	A list of atributes, where the list contains [name1, value1, name2, value2, ...].

NewXmlNode(nodeName, attrList, nodeValue)

Creates a new named Xml node with attributes and a value.

Parameters

nodeName	The name of the new node.t
attrList	A list of atributes, where the list contains [name1, value1, name2, value2, ...].
nodeValue	The value of the new node

XmlNodeFromString(XmlString)

Creates a new Xml Node (and possibly attributes and child nodes) from a string representing the xml i.e. "<name attr='value'><child>text</child></name>"

Parameters

SmlString	The string representing the Xmlt

XmlEscapeText(textToEscape)

Convert a string to include the correct escape code needed for Xml values and attributes. Note that all Xml actions already handle this conversion correctly. This action is useful for building Xml strings to pass to XmlNodeFromString().

Parameters

textToEscape	The text to convert. For example, the text '5 < 10' will get converted to '5 < 10'

XmlGetAttribute(object)

Get the value of a named attribute from an Xml node.

Parameters

object	The XmlNode object

XmlGetAttributes(object, attributeName)

Get the attributes of an Xml node. The attributes are returned in a table, where the first column ('name') is the name of each attribute, and the second column ('value') is the value of each attribute.

Parameters

object	The XmlNode object
attributeName	The name of the attribute

XmlGetChildren(object)

Get the list of child nodes for an Xml node.

Parameters

object	The XmlNode object

XmlGetNode(object, xPathQuery)

Gets a child node of an Xml node, given the provided XPath query. Note that attributes will not be returned.

Parameters

object	The XmlNode object
xPathQuery	The XPath query to execute

XmlGetNode(object, xPathQueryTemplate, queryParams)

Gets a child node of an Xml node, given the provided XPath query, and a list of query parameters. Note that attributes will not be returned.

Parameters

object	The XmlNode object
xPathQueryTemplate	
queryParams	The list of parameters to pass the XPath query

XmlGetNodes(object, xPathQuery)

Gets a list of child nodes of an Xml node, given the provided XPath query. Note that attributes will not be returned.

Parameters

object	The XmlNode object
xPathQuery	The XPath query to execute

XmlGetNodes(object, xPathQueryTemplate, queryParams)

Gets a list of child nodes of an Xml node, given the provided XPath query, and a list of query parameters. Note that attributes will not be returned.

Parameters

object	The XmlNode object
xPathQueryTemplate	
queryParams	The list of parameters to pass the XPath query

XmlGetName(object)

Get the name of an Xml node.

Parameters

object	The XmlNode object

XmlGetParent(object)

Get the parent node of an Xml node.

Parameters

object	The XmlNode object

XmlGetValue(object)

Get the value of an Xml node.

Parameters

object	The XmlNode object

XmlGetValue(object, XPathQuery)

Get a value from an Xml node, given the provided XPath query. The returned value could be, based on the query, the node's (or child node's) value, an attribute value, or the result of something like 'count()'

Parameters

object	The XmlNode object
xPathQuery	The XPath query to execute

XmlGetValue(object, XPathQueryTemplate, queryParams)

Get a value from an Xml node, given the provided XPath query, and a list of query parameters. The returned value could be, based on the query, the node's (or child node's) value, an attribute value, or the result of something like 'count()

Parameters

object	The XmlNode object
xPathQueryTemplate	A XPath query string using parameter replacement. $var1, $var2, etc. will be replaced, in order, with the comma separated values that follow
queryParams	The list of parameters to pass the the XPath query.

Variables

Actions

variable [= value]

Creates a variable assignment statement. The shortcut for this action is to just type the '=' key at any time.

Parameters

variable	Variable name.
value	Expression whose value to assign to the named variable.

LOCAL variable [= value]

Creates a local variable and assigns a value. This will guarentee that the variable is local to the action script, ignoring any shared variables by the same name.

Parameters

variable	Variable name.
value	Expression whose value to assign to the named variable.

Math

Functions

Abs(value)

Returns the absolute value of the specified number, which removes the negative sign if the number is negative.

Parameters

value	Number to convert.

Acos(value)

Returns the angle, in degrees (0 - 360), given the cosine (-1 to 1).

Parameters

value	Number representing a cosine (-1 to 1).

Asin(value)

Returns the angle, in degrees (0 - 360), given the sine (-1 to 1).

Parameters

value	Number representing a sine (-1 to 1).

Atan(value)

Returns the angle, in degrees (0 - 360), given the tangent.

Parameters

value	Number representing a tangent.

Ceiling(value)

Returns the smallest integer (whole number) greater than or equal to the specified number.

Parameters

value	Decimal number to convert.

Cos(value)

Returns the cosine (-1 to 1) of the specified angle (in degrees).

Parameters

value	Angle, measured in degrees (0 - 360).

Cosh(value)

Returns the hyperbolic cosine of the specified degree-based angle.

Parameters

value	Angle, measured in degrees (0 - 360).

E()

Returns the natural logarithmic base, specified by the constant, e (2.718...).

Exp(value)

Returns e (2.718...) raised to the specified power.

Parameters

value	Number represnting the exponent.

Floor(value)

Returns the largest integer (whole number) less than or equal to the specified number.

Parameters

value	Decimal number to convert.

Ln(value)

Returns the natural (base e(2.718...)) logarithm of a specified number.

Parameters

value	Number for which you want to find its natural logarithm.

Log10(value)

Returns the base 10 logarithm of the specified number

Parameters

value	Number for which you want to find its logarithm.

Max(value1, value2)

Returns the larger of two specified numbers.

Parameters

value1	First of two numbers to compare.
value2	Second of two numbers to compare.

Min(value1, value2)

Returns the smaller of two specified numbers.

Parameters

value1	First of two numbers to compare.
value2	Second of two numbers to compare.

PI()

Returns the ratio of the circumference of a circle to its diameter, specified by the constant pi (3.14...).

Power(value, power)

Returns 'value' raised to 'power'.

Parameters

value	Number to be raised to a power.
power	Number that specifies a power (exponent).

Round(value)

Returns 'value' rounded to the nearest integer (whole number).

Parameters

value	Number to round.

Round(value, places)

Returns 'value' rounded to the specified number of fractional digits (precision).

Parameters

value	Number to round.
places	Number of fractional digits (precision) to round to.

Sign(value)

Returns the number -1 if 'value' is negative, 0 if 'value' is zero, and 1 if 'value' is positive.

Parameters

value	Number to evaluate.

Sin(value)

Returns the sine (-1 to 1) of the specified degree-based angle.

Parameters

value	Angle, measured in degrees (0 - 360).

Sinh(value)

Returns the hyperbolic sine of the specified degree-based angle.

Parameters

value	Angle, measured in degrees (0 - 360).

Tan(value)

Returns the tangent of the specified degree-based angle.

Parameters

value	An angle, measured in degrees (0 - 360)

Tanh(value)

Returns the hyperbolic tangent of the specified degree-based angle.

Parameters

value	Angle, measured in degrees (0 - 360).

Date & Time

Actions

AddDays(object, value)

Adds a number of days to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of days to add.

AddHours(object, value)

Adds a number of hours to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of hours to add.

AddMinutes(object, value)

Adds a number of minutes to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of minutes to add.

AddMonths(object, value)

Adds a number of months to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of months to add.

AddSeconds(object, value)

Adds a number of seconds to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of seconds to add.

AddYears(object, value)

Adds a number of years to a DateTime object.

Parameters

object	Base DateTime object.
value	Number of years to add.

SetDateTime(object, value)

Sets a DateTime object (target) with the value of another DateTime object (source).

Parameters

object	Target DateTime object.
value	Source DateTime object.

SetDay(object, value)

Sets the day of month value (1 - 31) of a DateTime object.

Parameters

object	DateTime object to modify.
value	Day of the month (1-31).

SetHour(object, value)

Sets the hour value (0 - 23) of a DateTime object.

Parameters

object	DateTime object to modify.
value	Hour in military time (0-23).

SetMinute(object, value)

Sets the minute value (0 - 59) of a DateTime object

Parameters

object	DateTime object to modify.
value	Number representing the minute (0-59)

SetMonth(object, value)

Sets the month value (1 - 12) of a DateTime object.

Parameters

object	DateTime object to modify.
value	Number corresponding to the month (1-12).

SetSecond(object, value)

Sets the second value (0 - 59) of a DateTime object.

Parameters

object	DateTime object to modify.
value	Number of seconds (0-59).

SetYear(object, value)

Sets the year value (1 - 9999) of a DateTime object

Parameters

object	DateTime object to modify.
value	Four-digit year (1-9999).

Functions

CurrentDate()

Returns the current date, as a string, in short format, formatted for your culture. For example, for English (United States): "12/31/2009""

CurrentDay()

Returns the day of the week of the current date, as a string, formatted for your culture. For example, for English (United States): "Monday".

CurrentMonth()

Returns the name of the month of the current date, as a string, formatted for your culture. For example, for English (United States): "December".

CurrentTime12()

Returns the current time in 12-hour format, as a string, with the AM/PM designation. For example, if the time is 1:00 PM this will return "1:00 PM".

CurrentTime24()

Returns the current time in 24-hour format, as a string. For example, if the time is 1:00 PM this will return "13:00".

CurrentYear()

Returns the current year, as a string.

DateTimeString(object, format)

Returns a string representation of a DateTime object using the supplied custom formatting string.

Parameters

object	The DateTime object
format	String that specifies how to format the Date/Time. Use one or more of the following character sequences: Year: y, yy, yyyy; Month Number: M, MM; Month Name: MMM, MMMM; Day Number: d, dd; Day Name: ddd, dddd; Hour(12): h, hh; Hour(24): H, HH; Minute: m, mm; Second: s, ss; AM/PM: t, tt.

GetDateTime(object)

Returns the DateTime object.

Parameters

object	The DateTime object.

GetDay(object)

Returns the day of the month as a Number (1 - 31) of a DateTime object.

Parameters

object	The DateTime object

GetDayOfWeek(object)

Returns the day of the week as a Number (1=Sunday - 7=Saturday) of a DateTime object

Parameters

object	The DateTime object.

GetDayOfYear(object)

Returns the day of the year as a Number (1 - 366) of a DateTime object.

Parameters

object	The DateTime object.

GetHour(object)

Returns the hour of the day in military time (0-23) of a DateTime object.

Parameters

object	The DateTime object.

GetMinute(object)

Returns the minute (0-59) of a DateTime object.

Parameters

object The DateTime object.

GetMonth(object)

Returns the number of the month (1-12) of a DateTime object.

Parameters

object The DateTime object.

GetSecond(object)

Returns the second (0-59) of a DateTime object.

Parameters

object The DateTime object.

GetYear(object)

Returns the year value (1-9999) of a DateTime object.

Parameters

object The DateTime object.

LongDateString(object)

Returns the current date string, in long format, formatted for your culture, of a DateTime object. For example, for English (United States): "Monday July 20, 2009"., 2009"""

Parameters

object The DateTime object.

LongTimeString(object)

Returns the current time, including seconds, in 12-hour format, with the AM/PM designation, of a DateTime object. For example, if the time is 1:00 PM this will return "1:00:00 PM".

Parameters

object The DateTime object.

NewDate(month, day, year)

Returns a new DateTime object from month, day, and year numbers. The time portion of the DateTime object is set to the current time.

Parameters

month	The number of the month (1-12).
day	The day of the month (1-31).
year	The four-digit year (1-9999).

NewDateTime()

Returns a new DateTime object, set to the current date and time. (same as Now())

NewDateTime(month, day, year, hour, minute, second)

Returns a new DateTime object from month, day, year, hour, minute, and second numbers.

Parameters

month	The number of the month (1-12).
day	The day of the month (1-31).
year	The four-digit year (1-9999).
hour	The hour in military time (0-23).
minute	The minute (0-59).
second	The second (0-59).

NewDateTime(dateTime)

Returns a new DateTime object, copied from another DateTime object.

Parameters

dateTime	The DateTime object.

NewTime(hour, minute, second)

Returns a new DateTime object from hour, minute, and second numbers. The date portion of the DateTime object is set to the current date.

Parameters

hour	The hour in military time (0-23).
minute	The minute (0-59).
second	The second (0-59).

Now()

Returns a new DateTime object, set to the current date and time. (Same as NewDateTime())

ShortDateString(object)

Returns the current date string in short format, formatted for your culture, of a DateTime object. For example, for English (United States): "12/31/2009".

Parameters

object	The DateTime object.

ShortTimeString(object)

Returns the current time in 12-hour format, with the AM/PM designation, of a DateTime object. For example, if the time is 1:00 PM this will return "1:00 PM".

Parameters

object	The DateTime object.

Tab Control

Actions

AddTab(object, label)

Adds a new tab to a TabControl object.

Parameters

object	TabControl object.
label	String containing the label text.

InsertTab(object, tabIndex, label)

Inserts a new tab in the TabControl.

Parameters

object	TabControl object in which to add the tab pane.
tabIndex	Index of the tab in the TabControl.
label	String containing the label text.

RemoveTab(object, tabIndex)

Removes a tab from the TabControl.

Parameters

object	TabControl object from which to remove the tab pane.
tabIndex	Index of the tab in the TabControl.

SetCurrentTab(object, value)

Sets the currently visible tab of the TabControl object.

Parameters

object	The TabControl object.
value	Index of the tab in the TabControl to display.

SetTabHeight(object, value)

Sets the height for all tabs of a TabControl object.

Parameters

object	The TabControl object.
value	Integer indicating the height of the tabs of the TabControl, in pixels.

SetTabLabel(object, tabIndex, label)

Sets the text of the label on a tab of this TabControl object.

Parameters

object	The TabControl object.
tabIndex	Index of the tab in the TabControl.
label	String containing the label text.

SetTabSymbol(object, tabIndex, symbolId)

Sets the symbol on a tab of this TabControl object

Parameters

object	The TabControl object.
tabIndex	Index of the tab in the TabControl.
symbolId	ID of the symbol to display on the tab pane.

SetTabWidth(object, value)

Sets the width for all tabs of a TabControl object.

Parameters

object	The TabControl object.
value	Integer representing the width of the tabs of the TabControl, in pixels.

Functions

GetTab(object)

Returns the height for all tabs of a TabControl object.

Parameters

object	The TabControl object.

GetTab(object, tabindex)

Gets a numbered tab object from a tab control.

Parameters

object	The TabControl object.
tabindex	Numbered tab

GetTabHeight(object)

Returns the height for all tabs of a TabControl object.

Parameters

object	The TabControl object.

GetTabLabel(object, tabIndex)

Returns the label text for a tab of this TabControl object.

Parameters

object	The TabControl object.
tabIndex	Index of the tab in the TabControl.

GetTabSymbol(object, tabIndex)

Returns the symbol for a tab of this TabControl object.

Parameters

object	The TabControl object.
tabIndex	Index of the tab in the TabControl.

GetTabWidth(object)

Returns the width for all tabs of a TabControl object.

Parameters

object	The TabControl object.

NewTabControl(name, rect)

Creates a new TabControl object.

Parameters

name	String indicating the name for the new TabControl.
rect	Rectangle object specifing the size and position of the new TabControl object.

System

Actions

AddTableColumn(table, name)

Add a new named column to a table.

Parameters

table	The Table object.
name	The name of the new column to add.

CancelDragDrop()

Cancels the current drag-drop operation, and returns the dragged object back to its original position.

DbPrint(value)

Prints a String to the script debug window.

Parameters

value	String to print to the debug window.

DeleteListItem(list, item)

Deletes an item from a list.

Parameters

list	List object.
item	List item index to remove.

DeleteTableRow(table, row)

Deletes a row from a table.

Parameters

table	Table object.
row	Table row index remove.

ExitApplication()

Exits the application and takes you back to where you came from.

ExitApplication(confirm, alwaysExit)

Exits the application. If confirm is TRUE, brings up a confirmation dialog. If alwaysExit is TRUE then the Application is exited also.

Parameters

confirm	Optional argument. If TRUE brings up a confirmation dialog.
alwaysExit	Optional argument. If TRUE then always quits the Application, either Boardmaker Studio, or Boardmaker Studio Player.

ExitRunMode()

Exits run mode.

ExitRunMode(confirm)

Exits run mode. If confirm is TRUE, brings up a confirmation dialog.

Parameters

confirm	Optional argument. If TRUE brings up a confirmation dialog.

InsertListItem(list, afterItem, value)

Inserts an item in a list at specified position.

Parameters

list	List object to modify.
afterItem	List item index after which to insert the new item.
value	Object to insert.

InsertTableRow(table, rowAfter)

Insert a new row into a table.

Parameters

table	Table object to modify.
rowAfter	Row index after which to insert the new row.

InsertTableRow(table, rowAfter, list)

Insert a new row into a table and set the column values.

Parameters

table	Table object to modify.
rowAfter	Row index after which to insert the new row.
list	List object of column values for the new row.

InsertTableRow(table, rowAfter, columnValues)

Adds a row to a table with values in the row's cells.

Parameters

table	Table object to modify.
rowAfter	Row index after which to insert the new row.
columnValues	Comma-separated list of objects for each column in the row.

LaunchApplication(applicationName, arguments)

Launches an external apllication with command-line arguments.

Parameters

applicationName	Pathname for the application to launch.
arguments	Optionals arguments for the application.

LaunchApplication(applicationName)

Launches an external apllication.

Parameters

applicationName	Pathname for the application to launch.

LaunchFile(fileName, arguments)

Launches a file with it's associated external application.

Parameters

fileName	Pathname of the file to open.
arguments	Optional arguments for the file.

LaunchFile(fileName)

Launches a file with it's associated external application.

Parameters

fileName	Pathname of the file to open.

LaunchWebSite(webAddress)

Launches web site in an external web browser.

Parameters

webAddress	URL for the website.

PerfEvent(eventXML)

Creates a performance event from a string representing the event XML.

Parameters

eventXML	.String representing the event

PerfEvent(eventName, paramList)

Creates a performance event from the named XML node and attributes.

Parameters

eventName	.Xml node name
paramList	.List of attributes

PrintProject()

Prints all of the pages in the current project.

RefreshAllVariables()

Refreshes the state of embedded variables in labels to update their contents.

ResetPrediction()

Resets word or phrase prediction buttons.

SaveWordList(filename, words)

Saves a list of words to a file.

Parameters

filename	Pathname of the file.
words	List of words to save.

SetAccessMethod(value)

Sets the current (active) access method.

Parameters

value	Access method.

SetBooleanSetting(settingName, value)

Sets a user system setting Boolean (TRUE or FALSE) value. System settings survive normal application restarts.

Parameters

settingName	Name of the setting.
value	New value of the setting. One of: "True", "False".

SetNumberSetting(settingName, value)

Sets a user system setting Number value. System settings survive normal application restarts.

Parameters

settingName	Name of the setting.
value	New value of the setting.

SetStringSetting(settingName, value)

Sets a user system setting String value. System settings survive normal application restarts.

Parameters

settingName	Name of the setting.
value	New value of the setting.

SetVariable(varName, value)

Set the value of any shared variable in a project.

Parameters

varName	The path (or relative path) name of the variable, for instance, "\Activity 4\Page 2\x"
value	The value to assign the variable.

SetVoice(value)

Sets the voice to use for speech.

Parameters

value	Name of the voice to use.

ShowMessage(messageText, buttonText)

Shows a popup message box with a single button.

Parameters

messageText	Text to display in the message box.
buttonText	Text to display on the message box button.

ShuffleListItems(list)

Randomly reorders the items in a list.

Parameters

list	List object to shuffle.

ShuffleTableRows(table)

Randomly reorders the rows of a table.

Parameters

table	Table object to shuffle.

Sleep(seconds)

Pauses the script for a number of seconds

Parameters

seconds	The number of seconds to pause

SwapListItems(list, item1, item2)

Switches the positions (indexes) of two items in a list.

Parameters

list	List object to modify.
item1	First list index to move.
item2	Second list index to move.

SwapTableRows(table, row1, row2)

Switches the positions (indexes) of two rows in a table.

Parameters

table	Table object to modify.
row1	First row index to move.
row2	Second row index to move.

WriteTextToFile(file, text, append)

Writes text to the specified file.

Parameters

file	File to store the text.
text	Text to save.
append	TRUE to append the text to the end of the file; FALSE to overwrite the contents of the file.

Functions

AskForString(prompt)

Asks the user to enter a string and returns it.

Parameters

prompt	Prompt to display to the user.

Evaluate(expression)

Evaluate an expression and return the value.

Parameters

expression	The expression, as a string. For instance, "x +10", or "sin(90) + y + 15"

FindTableRow(table, searchColumn, searchValue)

Retruns the table row index that contains the specified search criteria.

Parameters

table	Table object to search.
searchColumn	Table column (name or index) to search.
searchValue	Value in the searchColumn to search for.

FindTableValue(table, searchColumn, searchValue, resultColumn)

Returns a table cell value for the specified search criteria.

Parameters

table	Table object to search.
searchColumn	Table column (name or index) to search.
searchValue	Value in the searchColumn to search for.
resultColumn	Table column (name or index) who's value will be returned.

GetAccessMethod()

Gets the current (active) access method

GetBooleanSetting(settingName)

Returns the TRUE or FALSE value of the specified user system setting. If the setting does not exist or is not a Boolean setting, this returns FALSE. To set, use the SetBooleanSetting action

Parameters

settingName	Name of the setting.

GetListLength(list)

Returns the length (number of objects) of a List object.

> **NOTE**
> Any 'holes' in the list (null or empty items) are also counted.

Parameters

list	List object to count.

GetNumberSetting(settingName)

Returns the Number value of the specified user system setting. If the setting does not exist or is not a Number setting, this returns -1. To set, use the SetNumberSetting action.

Parameters

settingName	Name of the setting.

GetNumberTableColumns(table)

Gets the number of named columns in a table.

Parameters

table	The table object.

GetNumberTableEntries(table, stopAtFirstEmpty)

Gets the number of rows in a table that have any value in their columns, optionally stopping at the first blank row.

Parameters

table	The table object.
stopAtFirstEmpty	If true, stop counting at the first empty row, otherwise, count all non-empty rows.

GetNumberTableEntries(table)

Gets the number of rows in a table that have any value in their columns, up to the first blank row.

Parameters

table	The table object.

GetStringSetting(settingName)

Returns the String value of the specified user system setting. If the setting does not exist or is not a String setting, this returns Nothing. To set, use the SetStringSetting action.

Parameters

settingName	Name of the setting.

GetTableColumns(table)

Returns a list of the named columns in a table.

Parameters

table	The table object.

GetTableLength(table)

Returns the number of rows in a table.

> **NOTE**
> Blank rows are also counted (see GetTableEntries).

Parameters

table	The table object.

GetVariable(varName)

Get the value of any shared variable in a project.

Parameters

varName	The path (or relative path) name of the variable, for instance, "\Activity 4\Page 2\x"

GetVoice()

Gets the name of the voice used for speech.

IIf(expression, trueObject, falseObject)

Inline IF statement. Returns one of two objects based on the TRUE or FALSE value of an expression.

Parameters

expression	Logical expression to evaluate.
trueObject	Object to return if the expression is FALSE.
falseObject	Object to return if the expression is TRUE.

IsTableRowEmpty(table, row)

Returns TRUE if there are no column values stored in the row of a table.

Parameters

table	The table object.
row	The row index to check.

LoadTextFromFile(file)

Returns a string containing text from the specified file.

Parameters

file	File containing the text to load.

LoadWordList(fileName)

Returns a list objext containing words loaded from a file. The file contains one word per line.

Parameters

fileName	File containing the word list.

NewList(items)

Returns a new List object using a comma separated list of one or more items to prepopulate the list.

Parameters

items	Comma-separated list of one or more items to prepopulate thelist.

NewList()

Returns a new List object

NewShuffleList(numItems)

Returns a new List object containing consecutive numbers starting at 1 through 'numItems', but in random order

Parameters

numItems	Number of numbers to use in the list.

NewTable()

Returns a new Table object (spreadsheet with rows and columns).

NewTable(colNames)

Returns a new Table object (spreadsheet with rows and columns), specifying column names using a comma separated list of one or more items.

Parameters

colNames	Comma-separated list of one or more column names to create, such as: "Name","Address","Phone Number"

RandomNumber(min, max)

Returns a random Number, specifying the upper and lower bounds (inclusive).

Parameters

min	Smallest number in the range (inclusive).
max	Largest number in the range (inclusive).

RandomNumber(max)

Returns a random Number, from 1 to 'max' (inclusive).

Parameters

max	Largest number in the range (inclusive).

SystemTic()

Returns the number of seconds (and partial seconds) elapsed since the system started.

ToString(object)

Returns the String representation of the specified object.

Parameters

object	Object to return as a string value.

Screen Objects (General)

Actions

AddEvent(object, eventName, script)

Adds a custom event to a screen object.

Parameters

object	Screen object
eventName	Name of the event to be added
script	Code for the event to be added

BringToFront(object)

Brings a screen object to the front of the Z-order.

Parameters

object	Screen object to move.

BroadcastEvent(eventName)

Broadcasts a named user event to all screen objects.

Parameters

eventName	Name of the event.

CopyStyle(object, fromObject)

Copies the style from one screen object to another screen object.

Parameters

object	Screen object to copy the style to.
fromObject	Screen object to copy the style from.

DeleteScreenObject(object)

Deletes a screen object (only applies to objects placed using script).

Parameters

object	Screen object to delete.

DesymbolateAll(object)

Removes all symbols from symbolated text in the screen object.

Parameters

object	Screen object to convert.

Disable(object)

Disables a screen object.

Parameters

object	Screen object to disable.

Enable(object)

Enables a screen object.

Parameters

object	Screen object to enable.

Hide(object)

Hides the screen object (makes it invisible).

Parameters

object	Screen object to hide.

Print()

Prints the current page

Print(object, printType, landscape)

Prints the screen object

Parameters

object	Screen object to print.
printType	How to position the content on the page. One of: "Actual", "Center", or "Scale".
landscape	TRUE to print in landscape mode; FALSE to print in portrait mode.

Print(object)

Prints the screen object

Parameters

object	Screen object to print.

Print(printType, landscape)

Prints the current page

Parameters

printType	How to position the content on the page. One of: "Actual", "Center", or "Scale".
landscape	TRUE to print in landscape mode; FALSE to print in portrait mode.

ReadAndHighlight(object, type, highlightStyle1, highlightColor1, highlightStyle2, highlightColor2, wait)

Reads the content of a screen object, highlighting the content as it reads.

Parameters

object	Screen object who's content will be read.
type	Type of highlight to perform. One of: "HighlightWord", "HighlightWordAndSymbol", "HighlightSentence", or "HighlightSentenceAndWord".
highlightStyle1	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor1	Color to use for highlighting.
highlightStyle2	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor2	Color to use for highlighting.
wait	If TRUE, don't continue executing the next action until the highlighting is finished. If FALSE, the next action executes immediately.

ReadAndHighlight(object, type, highlightStyle, highlightColor)

Reads the content of a screen object, highlighting the content as it reads.

Parameters

object	Screen object who's content will be read.
type	Type of highlight to perform. One of: "HighlightWord", "HighlightWordAndSymbol", "HighlightSentence", or "HighlightSentenceAndWord".
highlightStyle	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor	Color to use for highlighting.

ReadAndHighlight(object, type, highlightStyle, highlightColor, wait)

Reads the content of a screen object, highlighting the content as it reads.

Parameters

object	Screen object who's content will be read.
type	Type of highlight to perform. One of: "HighlightWord", "HighlightWordAndSymbol", "HighlightSentence", or "HighlightSentenceAndWord".
highlightStyle	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor	Color to use for highlighting.
wait	If TRUE, don't continue executing the next action until the highlighting is finished. If FALSE, the next action executes immediately.

ReadAndHighlight(object, wait)

Reads the content of a screen object, highlighting the content as it reads, using the current highlight and color settings.

Parameters

object	Screen object who's content will be read.
wait	If TRUE, don't continue executing the next action until the highlighting is finished. If FALSE, the next action executes immediately.

ReadAndHighlight(object)

Reads the content of a screen object, highlighting the content as it reads, using the current highlight and color settings.

Parameters

object	Screen object who's content will be read.

ReadAndHighlight(object, type, wait)

Parameters

object	
type	Type of highlight to perform. One of: "HighlightWord", "HighlightWordAndSymbol", "HighlightSentence", or "HighlightSentenceAndWord".
wait	If TRUE, don't continue executing the next action until the highlighting is finished. If FALSE, the next action executes immediately.

ReadAndHighlight(object, type, highlightStyle1, highlightColor1, highlightStyle2, highlightColor2)

Reads the content of a screen object, highlighting the content as it reads.

Parameters

object	Screen object who's content will be read.
type	Type of highlight to perform. One of: "HighlightWord", "HighlightWordAndSymbol", "HighlightSentence", or "HighlightSentenceAndWord".
highlightStyle1	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor1	Color to use for highlighting.
highlightStyle2	Style for highlighting content. One of "FillColor", "OutlineColor", "Invert", or "TextColor".
highlightColor2	Color to use for highlighting.

Redraw()

Force the screen to redraw itself right now.

SavePageOf(object)

Saves the Page that hosts the specified screen object. Use with caution! This will save the page in the project in its current state, including any changes made by any open page actions.

Parameters

object	Screen object on the page to save.

SendEvent(object, eventName)

Sends a named user event to the screen object.

Parameters

object	Screen object to receive the event.
eventName	Name of the event to send.

SendToBack(object)

Sends a screen object to the back of the Z-order.

Parameters

object	Screen object to move.

SetActions(object, eventType, script)

Sets the system event script of the screen object, given the event type and String of the actions.

Parameters

object	Screen object.
eventType	One of: "Selected", "Scanned", "PageOpen", "PageClose", "Design".
script	Text of the action script.

SetAudioCue(object, value)

Sets the audio cue of the screen object.

Parameters

object	Screen object.
value	Text of the Audio Cue.

SetBorderColor(object, value)

Sets the border color of the screen object.

Parameters

object	Screen object.
value	Color for the border color.

SetBorderWidth(object, value)

Sets the border width of the screen object.

Parameters

object	Screen object.
value	Border widith, in pixels.

SetClipContentType(object, value)

Sets a screen object's clip content property.

Parameters

object	Screen object.
value	How to fit the content. One of: "Fit", "Fill", or "None".

SetColor(object, value)

Sets the color value of a screen object.

Parameters

object	Screen object.
value	Color to use.

SetDisabled(object, value)

Sets the Disabled value of a screen object.

Parameters

object	Screen object.
value	TRUE to disable the screen object; FALSE to enable it.

SetDragType(object, value)

Sets the drag type of a screen object.

Parameters

object	Screen object.
value	Action for the drag operation. One of: "None", "Copy", "Move".

SetFont(object, value)

Sets the font value of a screen object.

Parameters

object	Screen object.
value	Font to use.

SetFontBold(object, value)

Sets the bold value of a screen object's font.

Parameters

object	Screen object.
value	TRUE to use bold text; FALSE, otherwise.

SetFontFace(object, value)

Sets the font face of a screen object.

Parameters

object	Screen object.
value	Name of the font to use.

SetFontItalic(object, value)

Sets the italic value of a screen object's font.

Parameters

object	Screen object.
value	TRUE to use italic; FALSE, otherwise.

SetFontSize(object, value)

Sets the font size of a screen object.

Parameters

object	Screen object.
value	Integer representing the point size for the current font.

SetFontStrikethrough(object, value)

Sets the strikethrough value of a screen object's font.

Parameters

object	Screen object.
value	TRUE to use strikethrough; FALSE, otherwise.

SetFontUnderline(object, value)

Sets the underline value of a screen object's font.

Parameters

object	Screen object.
value	TRUE to underline text; FALSE, otherwise.

SetGradient(object, value)

Sets the gradient type of the specified screen object.

Parameters

object	Screen object.
value	The gradient type. One of: "None", "Right", "Left", "Down", "Up", "DownRight", "DownLeft", "UpRight", "UpLeft", "CircleIn", "CircleOut", "HorizontalIn", "HorizontalOut", "VerticalIn", "VerticalOut", or "Glass".

SetGradientColor(object, value)

Sets the gradient color of the specified screen object.

Parameters

object	Screen object.
value	The gradient color.

SetGridColumns(object, value)

Sets the number of grid columns in the specified screen object (must have the grid layout type).

Parameters

object	Screen object.
value	Number of grid columns.

SetGridInsertType(object, value)

Sets the grid insertion type of the specified screen object (object must have the grid layout type).

Parameters

object	Screen object.
value	The grid insertion type.

SetGridLocation(object, x, y)

Sets the grid location of a child within its parent (parent object must have the grid layout type)

Parameters

object	Screen object.
x	The X location (column) of the object.
y	The Y location (row) of the object.

SetGridLocation(object, value)

Sets the grid location of a child within its parent (parent object must have the grid layout type)

Parameters

object	Screen object.
value	A position object representing the location to set.

SetGridMargin(object, value)

Sets the margin, in pixels, between adjacent cells of a grid (object must have the grid layout type).

Parameters

object	Screen object.
value	The grid margin, in pixels.

SetGridRows(object, value)

Sets the number of grid rows in the specified screen object (must have the grid layout type).

Parameters

object	Screen object.
value	Number of grid rows.

SetGridSize(object, value)

Sets the number of grid rows and columns in the specified screen object (must have the grid layout type).

Parameters

object	Screen object.
value	Size object representing the number or rows (height) and columns (width) of the grid.

SetHidden(object, value)

Sets the hidden (visible) state of the screen object.

Parameters

object	Screen object.
value	TRUE to hide the object, FALSE to make the object visible.

SetHorizontalJustification(object, value)

Sets the horizontal justification property of a screen object.

Parameters

object	A screen object.
value	Sets the horizontal justification property of a screen object.

SetIsTarget(object, value)

Sets the the screen object to be a drag and drop target.

Parameters

object	Screen object.
value	TRUE to make the screen object a target; FALSE, otherwise.

SetLayoutType(object, value)

Sets the layout type of the screen object.

Parameters

object	Screen object.
value	Layout type. One of: "FreeForm", "Fill", "AutoCenter", "AutoGrid", "AutoCircular", or "Grid".

SetLineLeading(object, value)

Set the line leading value of a screen object.

Parameters

object	Screen object.
value	Size of leading.

SetLocked(object, value)

Sets the locked property of a screen object.

Parameters

object	Screen object.
value	TRUE to lock the screen object; FALSE, otherwise.

SetMaintainAspect(object, value)

Sets the maintain aspect value of an object when resizing.

Parameters

object	Screen object.
value	TRUE to maintain the aspect ratio; FALSE, otherwise.

SetMargin(object, value)

Sets the margin of a screen object (distance in pixels between the border of the object and its bounding rectangle.)

Parameters

object	Screen object.
value	Margin in pixels

SetName(object, value)

Sets the name of the screen object.

Parameters

object	Screen object.
value	Name for the screen object.

SetObjectProp(object, propertyName, value)

Sets a named custom property for an screen object. Screen objects can store any number of custom properties, accessible by a textual name.

Parameters

object	Screen object.
propertyName	Name of the property to set.
value	Value for the property.

SetParent(object, value)

Sets the parent of the screen object, which removes it from its current parent

Parameters

object	Screen object.
value	The screen object that will be the new parent

SetPosition(object, xOffset, yOffset, hJust, vJust)

Sets the position of a screen object by justifying it and then offsetting it by the x and y values.

Parameters

object	Screen object.
xOffset	X-coordinate for the object placement.
yOffset	Y-coordinate for the object placement.
hJust	Horizontal justification of the object, relative to xOffset. One of: "Left", "Right", "Center", "None""
vJust	Vertical justification of the object, relative to yOffset. One of: "Top", "Bottom", "Center", "None""

SetSelectable(object, value)

Sets the Selectable property of a screen object.

Parameters

object	Screen object.
value	TRUE if you can select the object, FALSE if not.

SetShape(object, value)

Sets the shape of the object. One of: "Rectangle", "RoundedRect1", "RoundedRect2", "RoundedRect3", "RoundedRect4", "RectangleChiseledEdge", "Folder", "Circle", "Capsule", "Triangle", "Hexagon", "Octagon", "Explosion", "SpeechBubble", "Cloud", "LeftArrow", "RightArrow", "UpArrow", "DownArrow", or "Checkmark".

Parameters

object	Screen object.
value	Shape for the object.

SetSymbol(object, value)

Sets the Symbol of a screen object

Parameters

object	Screen object.
value	Name of the symbol to use.

SetSymbolateHeight(object, value)

Sets the height of symbols in embedded symbolated text.

Parameters

object	Screen object.
value	Height, in pixels, of the object.

SetSymbolateLoc(object, value)

Sets the symbol location for embedded symbolated text.

Parameters

object	Screen object.
value	Location for the text. One of: "OnTop", "OnBottom".

SetSymbolateWhat(object, value)

Sets the type of words to symbolate in embedded symbolated text.

Parameters

object	Screen object.
value	The type of words to symbolate. One of: "All", "Nouns", "Verbs", "Adjectives", "ContentWords", "WordsOnList", "WordsNotOnList", "NonCommonWords".

SetSymbolateWords(object, value)

Set the list of words to symbolate in embedded symbolated text.

Parameters

object	Screen object.
value	List of words to sybmolate.

SetSymbolLayout(object, value)

Sets the symbol layout type for the screen object.

Parameters

object	Screen object.
value	The symbol layout type, of the object.

SetTargetScanning(object, value)

Sets the target scanning type of the screen object

Parameters

object	Screen object.
value	Scanning type. One of: "Scan", "ScanAndPosition", or "Disable".

SetText(object, text)

Sets the text of the screen object.

Parameters

object	Screen object.
text	Text to use in the object.

SetText(object, text, isUserText, symbolateType)

Sets the text of the screen object.

Parameters

object	Screen object.
text	Text to use in the object.
isUserText	Is this text that a user has typed in? If so certain character token replacements will occur.
symbolateType	Type of symbolation that should occur.

SetTextBackgroundColor(object, value)

Sets the text background color of the screen object

Parameters

object	Screen object.
value	Background color for the text.

SetTextColor(object, value)

Sets the text color of the screen object

Parameters

object	Screen object.
value	Color for the text.

SetTextFocus(object)

Sets the screen object containing the current text focus (text cursor).

Parameters

object	Screen object to receive focus.

SetUserEventActions(object, eventName, script)

Sets a named user event script of the screen object, given the name of the event and String of the actions

Parameters

object	Screen object.
eventName	Name of the event.
script	Text of the action script.

SetVerticalJustification(object, value)

Sets the vertical justification property of a screen object

Parameters

object	Screen object.
value	Sets the vertical justification property of a screen object

Show(object)

Show (unhide) the screen object

Parameters

object	Screen object.

SpeakLabel(object, wait)

Speaks the label of the given object

Parameters

object	The object who's label will be spoken.
wait	If TRUE, don't continue executing the next action until the spoken text is finished. If FALSE, the next action executes immediately.

SpeakLabel()

Speaks the label of the current object (shortcut for SpeakLabel(thisObject))

SpeakLabel(object)

Speaks the label of the given object.

Parameters

object	The object who's label will be spoken.

SymbolateAll(object)

Adds symbols to all text in the object where possible.

Parameters

object	Screen object.

Functions

DoesTheTextFit(object)

Returns TRUE if the text associated with the object fits in the object; FALSE, otherwise.

Parameters

object	Screen object.

DoesTheTextFit(object,inSoManyLines)

Returns TRUE if the text associated with the screen object can be displayed within the area of the object.

Parameters

object	Screen object.
inSoManyLines	Number of lines of text

DoesTheTextFit(object, inSoManyLines)

Returns TRUE if the text associated with the object fits within the given number of lines; FALSE, otherwise.

Parameters

object	Screen object.
inSoManyLines	Number of lines in which to fit the text.

GetActions(object, eventType)

Returns a String consisting of the actions for the specified system event of the specified screen object.

Parameters

object	Screen object.
eventType	One of: "Selected", "Scanned", "PageOpen", "PageClose", "Design".

GetAudioCue(object)

Returns the audio cue of the screen object.

Parameters

object	Screen object.

GetBorderColor(object)

Returns the border Color object of the specified object.

Parameters

object	Screen object.

GetBorderWidth(object)

Gets the border width of the object.

Parameters

object	Screen object.

GetChildAt(object, x, y)

Returns the child object at the specified location in a screen object.

Parameters

object	Screen object who's child is to be retrieved.
x	X-coordinate of the child (relative to the 'object') if 'object' has a freeform layout; the column number if 'object' has a grid layout; the child index for all other layout types.
y	Y-coordinate of the child (relative to the 'object') if 'object' has a freeform layout; the row number if 'object' has a grid layout; not applicable for all other layout types.

GetChildOf(object, name)

Returns a child object with the specified name in a screen object.

Parameters

object	Screen object who's child is to be retrieved.
name	Name of the child object.

GetChildOf(object, name, type)

Returns a child object of a specific type in a screen object.

Parameters

object	Screen object who's child is to be retrieved.
name	Name of the child object.
type	Type of object to retrieve (see IsA function).

GetChildren(object)

Returns a List object containing screen objects that are children of the specified screen object.

Parameters

object	Screen object who's children are to be retrieved.

GetClipContentType(object)

Get a screen object's clip content property.

Parameters

object	Screen object.

GetColor(object)

Returns the Color object from the specified screen object.

Parameters

object	Screen object.

GetDisabled(object)

Gets the Disabled value of a screen object.

Parameters

object	Screen object.

GetDragType(object)

Gets the drag type of a screen object.

Parameters

object	Screen object.

GetFont(object)

Returns the Font object from the specified screen object

Parameters

object Screen object.

GetFontBold(object)

Gets the bold value of a screen object's font

Parameters

object Screen object.

GetFontFace(object)

Gets the font face of a screen object.

Parameters

object Screen object.

GetFontItalic(object)

Gets the italic value of a screen object's font.

Parameters

object Screen object.

GetFontSize(object)

Gets the font size of a screen object.

Parameters

object Screen object.

GetFontStrikethrough(object)

Gets the strikethrough value of a screen object's font.

Parameters

object Screen object.

GetFontUnderline(object)

Gets the underline value of a screen object's font.

Parameters

object Screen object.

GetGradient(object)

Returns the gradient type of the specified screen object.

Parameters

object Screen object.

GetGradientColor(object)

Returns the gradient color of the specified screen object.

Parameters

object Screen object.

GetGridColumns(object)

Returns the number of grid columns in the specified screen object (must have the grid layout type).

Parameters

object Screen object.

GetGridInsertType(object)

Returns the grid insertion type of the specified screen object (object must have the grid layout type).

Parameters

object Screen object.

GetGridLocation(object)

Returns a position object representing the grid location of an object within its parent (parent object must have the grid layout type).

Parameters

object Screen object.

GetGridMargin(object)

Returns the margin, in pixels, between adjacent cell of a grid (object must have the grid layout type).

Parameters

object Screen object.

GetGridRows(object)

Returns the number of grid rows in the specified screen object (must have the grid layout type).

Parameters

object Screen object.

GetGridSize(object)

Returns a size object representing the number or rows and columns in the grid (object must have the grid layout type).

Parameters

object Screen object.

GetHidden(object)

Returns TRUE if the screen object is hidden (i.e. not visible)

Parameters

object Screen object.

GetHorizontalJustification(object)

Returns the horizontal justification property of a screen object

Parameters

object Screen object.

GetMargin(object)

Gets the margin of a screen object (distance in pixels between the border of the object and its bounding rectangle.)

Parameters

object Screen object.

GetIsTarget(object)

Gets a value indicating if the screen object is a target for other drag and drop objects

Parameters

object Screen object.

GetLayoutType(object)

Gets the layout type of the screen object

Parameters

object	Screen object.

GetLineLeading(object)

Get the line leading value from a screen object.

Parameters

object	Screen object.

GetLocked(object)

Gets the locked property of a screen object.

Parameters

object	Screen object.

GetMaintainAspect(object)

Gets the maintain aspect value of a screen object.

Parameters

object	Screen object.

GetName(object)

Returns the name of the screen object.

Parameters

object	Screen object.

GetObjectProp(object, propertyName)

Gets a named custom property for an screen object. Screen objects can sore any number of custom properties, accessible by a textual name.

Parameters

object	Screen object.
propertyName	The name of the property to retrieve.

GetPageOf(object)

Returns the Page object that contains the screen object.

Parameters

object Screen object.

GetPagePosition(object)

Gets the position of a page object in page coordinates.

Parameters

object Screen object.

GetPageRectangle(object)

Gets the rectangle of a page object in page coordinates.

Parameters

object Screen object.

GetParent(object)

Returns the screen object that is the parent of the specified screen object.

Parameters

object Screen object.

GetScreenObject(name)

Returns a screen object with the specified name.

Parameters

name Name of the screen object.

GetScreenPosition(object)

Gets the position of a screen object in screen coordinates.

Parameters

object Screen object.

GetScreenRectangle(object)

Gets the rectangle of a screen object in screen coordinates.

Parameters

object Screen object.

GetSelectable(object)

Returns the Selectable property of a screen object.

Parameters

object Screen object.

GetShape(object)

Returns the shape of the specified Button.

Parameters

object Button object.

GetSymbol(object)

Returns the symbol of the specified object.

Parameters

object Screen object.

GetSymbolateHeight(object)

Get the height of symbols in embedded symbolated text

Parameters

object Screen object.

GetSymbolateLoc(object)

Get the symbol location for embedded symbolated text

Parameters

object Screen object.

GetSymbolateWhat(object)

Get the type of words to symbolate in embedded symbolated text.

Parameters

object Screen object.

GetSymbolateWords(object)

Get the list of words to symbolate in embedded symbolated text.

Parameters

object Screen object.

GetSymbolLayout(object)

Returns the symbol layout type for the screen object.

Parameters

object	Screen object.

GetTargetScanning(object)

Gets the target scanning type of the screen object

Parameters

object	Screen object.

GetText(object, type)

Returns the label text of the screen object.

Parameters

object	Screen object.
type	The type of text to retrieve. One of: "TextOnly", "FormattedText", "FormattedDocument", "SpeechText", or "All"

GetText(object)

Returns the label text of the screen object.

Parameters

object	Screen object.

GetTextBackgroundColor(object)

Returns a Color object for the text background color of the screen object.

Parameters

object	Screen object.

GetTextColor(object)

Returns a Color object for the text color of the screen object.

Parameters

object	Screen object.

GetTextFocus()

Get the screen object containing the current text focus (text cursor).

GetUserEventActions(object, eventName)

Returns a String consisting of the actions for the specified named user event of the specified screen object.

Parameters

object	Screen object.
eventName	Name of the user event.

GetVerticalJustification(object)

Returns the vertical justification property of a screen object.

Parameters

object	Screen object.

IsA(object, atomType)

Returns TRUE if the screen object is the specified type; FALSE, otherwise.

Parameters

object	Screen object.
atomType	One of: "Button", "GroupBox", "Label", "Line", "MessageWindow", "Page", "Popup", "PhrasePredictor", "Symbol", "TabControl", "Video", "VocabularyListBox", "WordPredictor""

Message Window

Actions

ApplySpeechStyle(style)

Applies a SpeechStyle object to the current message window selection.

Parameters

style	A SpeechStyle object.

Backspace()

Moves the cursor position back by deleting the previous character in the current message window.

BeginSelection()

Begins selecting text in the current message mindow. Typical usage is to next move the cursor and end the selection mode with an EndSelection action.

ChangeWordForm(partOfSpeech)

Changes the word to the left of the cursor in the current message window to the specified word form

Parameters

partOfSpeech	One of: "VB"=Verb:Infinitive, "VBZ"=Verb:3rd-person, "VBD"=Verb:Past, "VBN"=Verb:Past Participle, "VBG"=Verb:Present Participle, "NN"=Noun:Singular, "NNS"=Noun:Plural, "NNV"=Noun:Possessive, "NNSV"=Noun:Plural Possessive, "JJ"=Adjective:base, "JJR"=Adjective:comparative, "JJS"=Adjective:superlative.

ChangeWordVariant()

Using the word to the left of the cursor in the current message window, pops up a menu of all morphological variants and replaces the word with the selected variant.

ClearMessagewindow(object)

Clears the contents of the specified message window.

Parameters

object	MessageWindow object to clear.

ClearMessagewindow()

Clears the contents of the current message window.

Copy()

Copies the currently selected text from the current message window to the system clipboard.

Cut()

Cuts the currently selected text in the current message window to the system clipboard.

DecreaseFontSize()

Decreases the font size of the currently selected text in the current message window.

Delete(contentType)

Deletes text in the current message window. The amount of text deleted is specified by a parameter.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".

Delete()

Deletes the selected text, or the charater to the right of the current cursor location, in the current message window.

DeSelect()

Removes the selection (not the text) from the current message window.

Desymbolate()

Removes symbols from the currently selected text in the current message window.

EndSelection()

Exits selection mode for the current message window that was entered by the BeginSelection action.

FileNew()

Clear the current message window and start a new file.

GoToPage(pageNumber)

Displays a particular page in a paged document in the current message window.

Parameters

pageNumber	Number of the page to display.

GoToPage(object, pageNumber)

Displays a particular page of a paged document in the specified message window.

Parameters

object	MessageWindow object containing the paged document.
pageNumber	Number of the page to display.

IncreaseFontSize()

Increases the font size of the currently selected text in the current message window.

InsertImage(imageId, width, height)

Inserts an image file into the current message window, resizing it to the specified dimensions.

Parameters

imageId	
width	Width of the image, in pixels.
height	Height of the image, in pixels.

InsertImage(imageId)

Inserts an image file into the current message window.

Parameters

imageId	ID of the image to insert.

InsertImage()

Asks the user to choose an image file and then inserts it into the current message window.

InsertNewLine()

Inserts a new line into the current message window.

InsertPageBreak()

Adds a page break into the current message window at the current cursor position.

InsertPause(pauseLen)

Inserts a pause command into the current message window at the current cursor position.

Parameters

pauseLen	Length of time to pause, in seconds (0-10).

InsertSoundFile()

Prompts for and inserts a sound file at the current cursor position in the current message window.

InsertSpeechEffect(effect)

Inserts a speech effect at the current cursor position in the current message window.

Parameters

effect	One of: "Cough", "Cry", "Eh", "Kiss", "Laugh", "Mmm", "Oh", "Sniff", "Swallow", "Throat", "Whistle", "Yawn".

InsertText(text, isUserText, symbolateType)

Inserts text at the current cursor position of the current message window.

Parameters

text	Text to insert.
isUserText	Is this text that a user has typed in? If so certain character token replacements will occur.
symbolateType	Type of symbolation that should occur.

InsertText(text)

Inserts text at the current cursor position of the current message window.

Parameters

text	Text to insert.

LoadText()

Prompts for and inserts a text file at the current cursor position in the current message window.

LoadText(object)

Prompts for and inserts a text file at the current cursor position in the specified message window.

Parameters

object	MessageWindow object.

LoadTextAndSymbolate()

Prompts for and inserts a text file at the current cursor position in the current message window. The text is then symbolated.

MoveCursor(cursorMove)

Moves the cursor in the current message window.

Parameters

cursorMove	One of: "Left", "Right", "Up", "Down", "Home", "End", "WordForward", "WordBack", "SentenceForward", "SentenceBack", "ParagraphForward", "ParagraphBack", "DocumentBegin", "DocumentEnd", "ParagraphBegin", "ParagraphEnd", "SelectionStart", "SelectionEnd""

PageDown(object)

Displays the next page in a paged document in the specified message window.

Parameters

object	MessageWindow object containing the paged document.

PageDown()

Displays the next page in a paged document in the current message window.

PageUp()

Displays the previous page in a paged document in the current message window.

PageUp(object)

Displays the previous page in a paged document in the specified message window.

Parameters

object	MessageWindow object containing the paged document.

Paste()

Pastes the system clipboard contents into the current message window at the current cursor position.

PrintMessageWindow(object)

Prints the contents of the specified message window.

Parameters

object	MessageWindow object whose contents to print.

PrintMessageWindow()

Print the contents of the current message window.

Redo()

Repeats of the last redoable action in the current message window.

SaveText()

Save the contents of the current message window to the current filename.

SaveTextAs()

Prompt for a file name, and save the contents of the current message window to that file.

SaveToTextFile()

Prompt for a file name, and save only the textual the contents of the current message window to that file.

Search()

Prompts for a search string and performs a search in the current message window starting at the current cursor position, highlighting the first match.

SearchAgain()

Performs a search in the current message window starting at the current cursor position using the last search string, highlighting the next match.

SelectAll()

Selects all of the text in the current message window.

SelectWord()

Selects the word at the current cursor position in the current message window.

SetEditMode(object, value)

Sets the editing mode for the specified message window.

Parameters

object	MessageWindow object.
value	One of: "PlayMode", "DesignMode", or "PlayAndDesignMode".

SetHorzJustification(justification)

Sets the horizontal justification of the current paragraph or currently selected paragraphs in the message window.

Parameters

justification	One of: "Left", "Center", "Right", "None".

SetResponseToSelection(object, value)

Sets the message window selection setting (what occurs when the message window is selected).

Parameters

object	MessageWindow object.
value	One of: "Speak", "MoveCursor", "SpeakWord".

SetSpellMode(object, value)

Sets the spelling mode for the specified message window.

Parameters

object	MessageWindow object.
value	One of: "None", "Show", "Show and Suggest".

SetSymbolMode(object, value)

Sets the symbolate mode of the specified message window.

Parameters

object	MessageWindow object.
value	One of: "No Symbols", "Symbolate""

SetVertJustification(justification)

Sets the vertical justification of the current message window.

Parameters

justification	One of: "Top", "Center", "Bottom", "None".

ShowSymbolWindow(object)

Shows the zoomed symbol window for the word at the current cursor position in the specified message window.

Parameters

object	MessageWindow object.

ShowSymbolWindow()

Shows the zoomed symbol window for the word at the current cursor position in the current message window

Speak()

Speaks the contents of the current message window.

Speak(contentType, advance, wait)

Speaks the specified range of text in the current message window, optionally advancing the cursor.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".
advance	TRUE to advance the cursor after speaking; FALSE, otherwise.
wait	If TRUE, don't continue executing the next action until the spoken text is finished. If FALSE, the next action executes immediately.

Speak(contentType)

Speaks the specified range of text in the current message window.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".

Speak(contentType, advance)

Speaks the specified range of text in the current message window, optionally advancing the cursor.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".
advance	TRUE to advance the cursor after speaking; FALSE, otherwise.

SpellCheck()

Checks the spelling of the current message window text, presenting suggestions for misspelled words.

Symbolate()

Adds symbols, where possible, to the currently selected text in the message window.

ToggleFontStyle(style)

Toggles the specified TextFontStyle on and off for the currently selected text in the current message window.

Parameters

style	One of: "Bold", "Italic", "Underline", "Strikeout".

Undo()

Performs an undo of the last undoable action in the current message window.

Functions

CurrentPageNumber(object)

Returns the current page in a paged document in the specified message window.

Parameters

object	MessageWindow object.

CurrentPageNumber()

Returns the current page in a paged document in the current message window.

GetClipboardText()

Returns the unformatted text from the clipboard.

GetCurrentWord(object)

Returns the word at the current cursor position in the specified message window.

Parameters

object	MessageWindow object.

GetCurrentWord()

Returns the word at the current cursor position in the current message window

GetEditMode(object)

Returns the editing mode for the specified message window.

Parameters

object	MessageWindow object.

GetMessageFileName()

Gets the file associated with the current message window.

GetMessageWindowText()

Gets the unformatted text from the current message window.

GetMessageWindowText(type)

Gets the unformatted text from the specified message window.

Parameters

type	The type of text to retrieve. One of: "TextOnly", "FormattedText", "FormattedDocument", "SpeechText", or "All".

GetNumberOfPages(object)

Gets the number of pages in a paged document in the specified message window.

Parameters

object	MessageWindow object.

GetNumberOfPages()

Gets the number of pages in a paged document in the current message window.

GetResponseToSelection(object)

Returns the window selection setting for the specified message window.

Parameters

object	Message window object.

GetSelectedText(type)

Returns the unformatted selected text from the specified message window.

Parameters

type	The type of text to retrieve. One of: "TextOnly", "FormattedText", "FormattedDocument", "SpeechText", or "All".

GetSelectedText()

Returns the unformatted selected text from the current message window.

GetSpellMode(object)

Returns the spelling mode for the specified message window.

Parameters

object	MessageWindow object.

GetSymbolMode(object)

Get the symbolate mode of the specified message window

Parameters

object	MessageWindow object.

NewMessageWindow(name, rect)

Creates a new message window at the specified position with the specified size.

Parameters

name	String containing the name for the window.
rect	Rectangle object indicating the position and dimensions of the new message window.

Pages & Popups

Actions

BackPage()

Displays the previous page in the page history.

CloseAllPopups()

Closes all open popups.

ClosePopup()

Closes the popup that contains this action.

FirstPage()

Displays the first page of current activity.

ForwardPage()

Displays the next page in the page history.

LastPage()

Displays the last page of the current activity.

NextPage()

Displays the next page in the current activity (will not change to a page in another activity).

OpenActivity(activityName)

Opens an activity. When an activity is opened, the first page of the activity is opened and displayed

Parameters

activityName The name (or path and name) of the activity.

OpenPage(pageName)

Opens a page.

Parameters

pageName The name (or path and name) of the page to open.

OpenPopup(pageName, openExclusively, xOffset, yOffset, hJust, vJust)

Opens a page as a popup (on top of the current page) at the specified coordinates, optionally opening it exclusively.

Parameters

pageName	The name (or path and name) of the page to open
openExclusively	TRUE to block other activity until the popup closes, FALSE, otherwise. Note, if TRUE, the popup should contain a button with a ClosePopup action to close itself.
xOffset	X-coordinate, in pixels, for the popup placement, relative to hJust.
yOffset	Y-coordinate, in pixels, for the popup placement, relative to vJust.
hJust	Horizontal justification of the popup on the screen, relative to the xOffset. One of: "Left", "Right", "Center", "None""
vJust	Vertical justification of the popup on the screen, relative to the yOffset. One of: "Top", "Bottom", "Center", "None""

OpenPopup(pageName, openExclusively, xPos, yPos)

Opens a page as a popup (on top of the current page) at the specified coordinates, optionally opening it exclusively.

Parameters

pageName	The name (or path and name) of the page to open
openExclusively	TRUE to block other activity until the popup closes, FALSE, otherwise. Note, if TRUE, the popup should contain a button with a ClosePopup action to close itself.
xPos	X-coordinate, in pixels, for the popup placement.
yPos	Y-coordinate, in pixels, for the popup placement.

OpenPopup(pageName, openExclusively)

Opens a page as a popup (on top of the current page) in the center of the screen, optionally opening it exclusively.

Parameters

pageName	The name (or path and name) of the page to open
openExclusively	TRUE to block other activity until the popup closes, FALSE, otherwise. Note, if TRUE, the popup should contain a button with a ClosePopup action to close itself.

OpenPopup(pageName, xPos, yPos)

Opens a page as a popup (on top of the current page) at the specified coordinates.

Parameters

pageName	The name (or path and name) of the page to open
xPos	X-coordinate, in pixels, for the popup placement.
yPos	Y-coordinate, in pixels, for the popup placement.

OpenPopup(pageName)

Opens a page as a popup (on top of the current page) in the center of the screen.

Parameters

pageName	The name (or path and name) of the page to open

OpenPopup(pageName, xOffset, yOffset, hJust, vJust)

Opens a page as a popup (on top of the current page) at the specified coordinates.

Parameters

pageName	The name (or path and name) of the page to open
xOffset	X-coordinate, in pixels, for the popup placement, relative to hJust.
yOffset	Y-coordinate, in pixels, for the popup placement, relative to vJust.
hJust	Horizontal justification of the popup on the screen, relative to the xOffset. One of: "Left", "Right", "Center", "None""
vJust	Vertical justification of the popup on the screen, relative to the yOffset. One of: "Top", "Bottom", "Center", "None""

PreviousPage()

Displays the previous page in the current activity.

ResetActivity(activityName)

Reset all the shared variables (except saved variables) for an activity (an any sub-activities) to their initial value.

Parameters

activityName	The name (or path and name) of the activity in the current project reset.

ResetActivity(activityName, resetSubActivities, resetSavedVars)

Reset all the shared variables for an activity (and optionally any sub-activities) to their initial value.

Parameters

activityName	The name (or path and name) of the activity in the current project reset.
resetSubActivities	
resetSavedVars	

ResetPage(pageName, resetSavedVars)

Reset all the shared variables for a page.

Parameters

pageName	The name (or path and name) of the page in the current project reset.
resetSavedVars	

ResetPage()

Reset all the shared variables (except saved variables) for the current page to their initial value.

ResetProject(resetSubActivities, resetSavedVars)

Reset all the shared variables for the current project (and optionally any sub-activities) to their initial value.

Parameters

resetSubActivities	If TRUE, also reset any sub-activities, if FALSE, only reset the top level project variables.
resetSavedVars	

ResetProject()

Reset all the shared variables (except saved variables) for the current project to their initial value.

SaveAll()

Saves all currently open pages. Use with caution! This will save all open pages in the project in its current state, including any changes made by any open page actions.

SavePage()

Saves the current page. Use with caution! This will save the page in the project in its current state, including any changes made by any open page actions.

SetProjectComplete()

Sets a flag denoting the user has completed an activity. (This is needed to conclude performance tracked activities.)

Functions

GetActivityContents(activityName, contentType)

Gets the contents of the named activity folder and returns it in a two-column table format, with the first column listing the name of the object, and the second column listing the type (folder or page).

Parameters

activityName	Name of the activity
contentType	Type of item (page or folder)

GetActivityVariables(activityName, contentType)

Gets the variables of the named activity (page or folder). Returns the variable as a three-column table, with the first column listing the name of the variable, the second column listing its value, and the third column describing the variable.

Parameters

activityName	Name of the activity
contentType	TRUE to return setup variables only

GetBackPages()

Returns a list object containing the names of all the previous pages in the page history.

GetCurrentPage()

Gets the current Page object

GetCurrentPagePath()

Returns the full path (within the current project) of the current page.

GetForwardPages()

Returns a list object containing the names of all the next pages in the page history.

GetTopPage()

Gets the topmost Page object in Z order

HasBackPage()

Returns TRUE if a previous page exists in the page history; FALSE, otherwise.

HasForwardPage()

Returns TRUE if a next page exists in the page history; FALSE, otherwise.

HasNextPage()

Returns TRUE if a next page exists in the current activity; FALSE, otherwise.

HasPreviousPage()

Returns TRUE if a previous page exists in the current activity; FALSE, otherwise.

Vocabulary

Actions

ClearSymbolateOverrides()

Clears temporary symbolate preferences.

SetSymbolateOverrides(overrides)

Temporarily overrides default symbolate preferences.

Parameters

overrides	A table object containing two columns of word/symbol pairs. The first column contains the words to override, and the second column contains the corresponding symbols.

Functions

BestSymbolForWord(word)

Returns a Symbol representing the best match for the given word, or Nothing if there are no matches.

Parameters

word	Word for which you want a symbol.

IsPartOfSpeech(word, pos)

Returns TRUE if the supplied word is the specified part of speech, otherwise FALSE

Parameters

word	The word to use
pos	The part of speech: "Unknown", "Noun", "Verb", "Adjective", "Adverb", "Article", "Auxiliary", "Preposition", "Conjunction", "Number", "Pronoun", "Interjection", "Contraction", "Other", "All""

IsWordInDictionary(word)

Returns whether a word is in the dictionary.

Parameters

word	Word to check.

SymbolateText(text, symbolateType)

Applies symbols to text, returning a table containg rows of word, symbol, and part of speech, for each word in the text.

Parameters

text	Text string to convert.
symbolateType	Defines how the text is symbolated. One of: "All","Nouns", "Verbs", "Adjectives", "ContentWords", "WordsOnList", "WordsNotOnList", or "NonCommonWords".

SymbolateText(text, symbolateType, symbolateWords)

Applies symbols to text, returning a table containg rows of word, symbol, and part of speech, for each word in the text. Only apply symbols to the words specified in the list.

Parameters

text	Text string to convert.
symbolateType	
symbolateWords	

SymbolsForWord(label, exactMatch, library)

Returns a list of symbols from a specific symbol library matching a word or phrase, specifying whether the match must be exact or not.

Parameters

label	Label text to match.
exactMatch	Whether the symbol must match the word exactly.
library	Name of symbol library to use.

SymbolsForWord(label, exactMatch)

Return a list of symbols matching a word or phrase, specifying whether the match must be exact or not.

Parameters

label	Label text to match.
exactMatch	Whether the symbol must match the word exactly.

SymbolsForWord(label)

Return a list of symbols matching a word or phrase.

Parameters

label	Label text to match.

SymbolsFromTag(tag)

Returns a List object containing symbols associated with a tag.

Parameters

tag	Tag for which to find symbols.

SymbolsFromTag(tag, library)

Returns a List object containing symbols that have the specified tag from the specified symbol set

Parameters

tag	Tag for which to find symbols.
library	Name of the symbol library.

TransformWord(word, targetPOS)

Returns a word converted to the specified word form

Parameters

word	Word to transform.
targetPOS	Part of speech desired. One of:"VB"=Verb:Infinitive, "VBZ"=Verb:3rd-person, "VBD"=Verb:Past, "VBN"=Verb:Past Participle, "VBG"=Verb:Present Participle, "NN"=Noun:Singular, "NNS"=Noun:Plural, "NNV"=Noun:Possessive, "NNSV"=Noun:Plural Possessive, "JJ"=Adjective:base, "JJR"=Adjective:comparative, "JJS"=Adjective:superlative.

WordsFromTag(tag)

Returns a List object containing words from the dictionary that have the specified tag.

Parameters

tag	Tag for which to find related words.

Strings

Functions

BoundValue(value, lowerBound, upperBound)

Parameters

value
lowerBound
upperBound

IsNullOrEmpty(value)

Returns TRUE if the string is either NULL (unset) or empty (zero length).

Parameters

value	String object.

Left(value, length)

Returns a new String containing the leftmost number of characters specified from the source String

Parameters

value	The String to use
length	The number of characters to use

Mid(value, start, length)

Returns a new String containing characters from the middle of the source String

Parameters

value	The String to use
start	The position (character count) in the string to start at
length	The number of characters to use

Right(value, length)

Returns a new String containing the rightmost number of characters specified from the source String

Parameters

value	The String to use
length	The number of characters to use

SplitString(value, delimiter)

Returns a new List object containing one or more strings created by splitting the source string into chunks where the delimiter is found

Parameters

value	The String to use
delimiter	The String to use as the delimiter (i.e. the delimiter "," would split the string "abc,def" into a list of two strings, "abc" and "def"

StringLength(value)

Returns the length (number of characters) of the supplied String

Parameters

value	The String to use

ToLower(value)

Returns a new String that is the lower case version of the supplied String

Parameters

value	The String to use

ToNumber(value)

Returns a Number parsed from the supplied string, assuming the supplied string only contains number characters

Parameters

value	The String to use

ToUpper(value)

Returns a new String that is the upper case version of the supplied String

Parameters

value	The String to use

Size & Position

Actions

ChangeSize(object, value)

Changes the size of a Screen, Position, Size, or Rectangle object by adding the specified Size object to the current values

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	A Size object representing the width and height of an object, in pixels.

ChangeSize(object, width, height)

Changes the size of a Screen, Position, Size, or Rectangle object by adding the specified width and height values to the current values.

Parameters

object	A Screen, Position, Size, or Rectangle object.
width	Width of an object, in pixels.
height	Height of an object, in pixels.

MovePosition(object, value)

Moves a Position, Size, Rectangle, or Screen object by adding the specified Position object to the current values.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Position object representing the X and Y coordinates in pixels.

MovePosition(object, x, y)

Moves a Position, Size, Rectangle, or Screen object by adding the specified X and Y pixel coordinates to the current values

Parameters

object	A Screen, Position, Size, or Rectangle object.
x	Number of pixels from the left on the horizontal axis
y	Number of pixels from the top on the vertical axis

SetHeight(object, value)

Sets the height of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Height of an object, in pixels.

SetPosition(object, x, y)

Sets the Position (location) from X and Y values of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
x	Number of pixels from the left on the horizontal axis.
y	Number of pixels from the top on the vertical axis.

SetPosition(object, value)

Sets the Position (location) of a Screen, Position, Size, or Rectangle object, given a Position object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	A Position object representing the X and Y coordinates in pixels

SetRectangle(object, x, y, width, height)

Sets the Rectangle (size and location) of a Screen, Position, Size, or Rectangle object from X, Y, width, and height values.

Parameters

object	A Screen, Position, Size, or Rectangle object.
x	Number of pixels from the left on the horizontal axis.
y	Number of pixels from the top on the vertical axis.
width	Width of an object, in pixels.
height	Height of an object, in pixels.

SetRectangle(object, value)

Sets the Rectangle (size and location) of a Screen, Position, Size, or Rectangle object from a Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Rectangle object representing the size and position of an object.

SetSize(object, width, height)

Sets the size, from width and height, of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
width	Width of an object, in pixels.
height	Height of an object, in pixels.

SetSize(object, value)

Sets the Size, from a Size object, of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	A Size object representing the width and height of an object, in pixels.

SetWidth(object, value)

Sets the width of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Width of an object, in pixels.

SetXpos(object, value)

Sets the X value (horizontal position) of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Number of pixels from the left on the horizontal axis.

SetYpos(object, value)

Sets the Y value (vertical position) of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.
value	Number of pixels from the top on the vertical axis.

Functions

GetHeight(object)

Returns the height, in pixels, of a Screen, Position, Size, or Rectangle object.

Parameters

object	A Screen, Position, Size, or Rectangle object.

GetPosition(object)

Returns the Position object of a Screen, Position, Size, or Rectangle object.

Parameters

object A Screen, Position, Size, or Rectangle object.

GetRectangle(object)

Returns the Rectangle object of a Screen, Position, Size, or Rectangle object

Parameters

object A Screen, Position, Size, or Rectangle object.

GetSize(object)

Returns the Size object of a Screen, Position, Size, or Rectangle object

Parameters

object A Screen, Position, Size, or Rectangle object.

GetWidth(object)

Returns the width, in pixels, of a Screen, Position, Size, or Rectangle object

Parameters

object A Screen, Position, Size, or Rectangle object.

GetXpos(object)

Returns the X value (horizontal position), in pixels, of a Screen, Position, Size, or Rectangle object

Parameters

object A Screen, Position, Size, or Rectangle object.

GetYpos(object)

Returns the Y value (vertical position), in pixels, of a Screen, Position, Size, or Rectangle object

Parameters

object A Screen, Position, Size, or Rectangle object.

NewPosition(textValue)

Parameters

textValue

NewPosition(x, y)

Returns a new Position object from X and Y values

Parameters

x	Number of pixels from the left on the horizontal axis.
y	Number of pixels from the top on the vertical axis.

NewPosition()

Returns a new Position object

NewRectangle()

Returns a new Rectangle object.

NewRectangle(rectangle)

Returns a new Rectangle object copied from an existing Rectangle object.

Parameters

rectangle	Rectangle object from which to copy.

NewRectangle(x, y, width, height)

Returns a new Rectangle object from X, Y, Width, and Height values.

Parameters

x	Number of pixels from the left on the horizontal axis.
y	Number of pixels from the top on the vertical axis.
width	Width of an object, in pixels.
height	Height of an object, in pixels.

NewSize()

Returns a new Size object

NewSize(width, height)

Returns a new Size object from width and height values.

Parameters

width	Width of an object, in pixels.
height	Height of an object, in pixels.

NewSize(textValue)

Returns a new Size object using a string in the form: "WxH" or "W H", i.e. "5x4" or "5 4".

Parameters

textValue	Name of the Size object.

Sound

Actions

DeleteRecording(name)

Delete sound recording.

Parameters

name	The name of the recording to delete (wildcards allowed).

PlayRecording(name, wait, queue)

Plays a recording after all other sounds are finished playing (queued). The next action continues immediately.

Parameters

name	Name of recording.
wait	If TRUE, don't continue executing the next action until playing is finished. If FALSE, the next action executes immediately.
queue	TRUE to queue the sound and play it after the current sound is finished; FALSE, to play the sound immediately.

PlayRecording(name)

Play recorded sound.

Parameters

name	Name of recording.

PlayRecording(name, wait)

Plays a recording after all other sounds are finished playing (queued).

Parameters

name	Name of recording.
wait	If TRUE, don't continue executing the next action until playing is finished. If FALSE, the next action executes immediately.

PlaySound(soundId, wait)

Plays a sound file after all other sounds are finished playing (queued).

Parameters

soundId	Name of the sound file to play.
wait	If TRUE, don't continue executing the next action until playing is finished. If FALSE, the next action executes immediately.

PlaySound(soundId)

Plays a sound file.

Parameters

soundId	Name of the sound file to play.

PlaySound(soundId, wait, queue)

Plays a sound file after all other sounds are finished playing (queued). The next action continues immediately.

Parameters

soundId	Name of the sound file to play.
wait	If TRUE, don't continue executing the next action until playing is finished. If FALSE, the next action executes immediately.
queue	TRUE to queue the sound and play it after the current sound is finished; FALSE, to play the sound immediately.

RecordSound(name, seconds)

Record sound from the system microphone with the record dialog in the center of the screen.

Parameters

name	The name of the recording.
seconds	Maximum number of seconds to record.

RecordSound(name, seconds, xPos, yPos)

Record sound from the system microphone with the record dialog at the specified coordinates.

Parameters

name	The name of the recording.
seconds	Maximum number of seconds to record.
xPos	
yPos	

RecordSound(name, seconds, xOffset, yOffset, hJust, vJust, hideStopButton)

Record sound from the system microphone with the record dialog at the specified coordinates and optionally hiding the "Stop" button.

Parameters

name	The name of the recording.
seconds	Maximum number of seconds to record.
xOffset	X-coordinate on the page for the popup placement, relative to hJust.
yOffset	Y-coordinate on the page for the popup placement, relative to vJust.
hJust	Horizontal justification of the popup on the page. One of: "Left", "Right", "Center", "None""
vJust	Vertical justification of the popup on the page. One of: "Top", "Bottom", "Center", "None""
hideStopButton	Hide the Stop button on the record dialog.

RecordSound(name, seconds, xOffset, yOffset, hJust, vJust)

Record sound from the system microphone with the record dialog at the specified coordinates.

Parameters

name	The name of the recording.
seconds	Maximum number of seconds to record.
xOffset	X-coordinate on the page for the popup placement, relative to hJust.
yOffset	Y-coordinate on the page for the popup placement, relative to vJust.
hJust	Horizontal justification of the popup on the page. One of: "Left", "Right", "Center", "None""
vJust	Vertical justification of the popup on the page. One of: "Top", "Bottom", "Center", "None""

System Keyboard

Actions

DisableKeyModifier(modifier)

Parameters

modifier

EnableKeyModifier(modifier)

Parameters

modifier

InsertKey(kmmStr)

Insert a key into the current Message Window based on the current modifier key state.

Parameters

kmmStr

InsertKeyLabel()

Insert a keyboard key label that will show the current key state of a button.

ToggleKeyModifier(modifier)

Parameters

modifier

Functions

GetKeyModifierDescription()

Database

Functions

ExecuteQuery(connectionObject, queryString)

Execute a database query

Parameters

connectionObject	The Database connection object
queryString	Query string

GetLastDbErrorMessage(connectionObject)

Get last database error message

Parameters

connectionObject	The Database connection object

NewDbConnection(providerTypeString, connectionString)

Database connection scripting object

Parameters

providerTypeString	Database provider type
connectionString	Database connection string

Labels

Actions

NewLabel(name, text)

Creates a new Label object

Parameters

name	The name of the new Label object
text	The text of the new Label object

NewLabel(name, text, rect)

Creates a new Label object

Parameters

name	The name of the new Label object
text	The text of the new Label object
rect	Rectangle object representing the Size and Position of an object

SetAutogrow(object, value)

Sets the auto grow property of a Label object

Parameters

object	A Label object
value	TRUE to enable auto grow, FALSE otherwise

SetSelectionType(object, value)

Sets the SelectionType property of a screen object.

Parameters

object	Screen object.
value	One of: "None", "Rectangle", or "Content".

SetSymbolate(object, value)

Set the symbolate property of a Label object.

Parameters

object	Label object.
value	TRUE to symbolate the label text; FALSE, otherwise.

Functions

GetAutogrow(object)

Returns the auto grow property of a Label object, TRUE or FALSE

Parameters

object A Label object

GetSelectionType(object)

Returns the SelectionType property of a screen object.

Parameters

object Screen object.

GetSymbolate(object)

Gets the symbolate property of a Label object.

Parameters

object Label object.

Color

Actions

SetBlueValue(object, value)

Sets the blue value (0 - 100) of a Color object

Parameters

object	The Color object
value	The blue value (0-100)

SetBrightness(object, value)

Sets the brightness value (0 - 100) of a Color object

Parameters

object	The Color object
value	The brightness value (0-100)

SetGreenValue(object, value)

Sets the green value (0 - 100) of a Color object

Parameters

object	The Color object
value	The green value (0-100)

SetHue(object, value)

Sets the hue value (0 - 360) of a Color object

Parameters

object	The Color object
value	The hue value (0-360)

SetOpacity(object, value)

Sets the opacity value (0 - 100) of a Color object

Parameters

object	The Color object
value	The opacity value (0-100)

SetRedValue(object, value)

Set the red value (0 - 100) of a Color object

Parameters

object	The Color object
value	The red value (0-100)

SetSaturation(object, value)

Sets the saturation value (0-100) of a Color object

Parameters

object	The Color object
value	The saturation value (0 - 100)

Functions

GetBlueValue(object)

Returns the blue value (0 - 100) of a Color object

Parameters

object	The Color object

GetBrightness(object)

Returns the brightness value (0 - 100) of a Color object

Parameters

object	The Color object

GetGreenValue(object)

Returns the green value (0 - 100) of a Color object

Parameters

object	The Color object

GetHue(object)

Returns the hue value (0 - 360) of a Color object

Parameters

object	The Color object

GetOpacity(object)

Returns the opacity value (0 - 100) of a Color object

Parameters

object	The Color object

GetRedValue(object)

Returns the red value (0 - 100) of a Color object

Parameters

object	The Color object

GetSaturation(object)

Returns the saturation value (0 - 100) of a Color object

Parameters

object	The Color object

NewColor(red, green, blue, opacity)

Returns a new Color object given red, green, blue, and opacity values

Parameters

red	The red value (0-255)
green	The green value (0-255)
blue	The blue value (0-255)
opacity	The opacity value (0-255)

NewColor(red, green, blue)

Returns a new Color object given red, green, and blue values

Parameters

red	The red value (0-255)
green	The green value (0-255)
blue	The blue value (0-255)

NewColor()

Returns a new Color object

NewColor(colorName)

Returns a new Color object given the name of a color

Parameters

colorName	The textual name of the color, such as "red", "green", etc.

Buttons

Actions

InsertLabel()

Inserts the text from this Button's label into the current message window

InsertLabel(object)

Inserts the text from a Button object label into the current message window

Parameters

object	Button object

InsertSymbol()

Inserts the label and symbol from this Button into the current message window. If no symbol, just insert the label

InsertSymbol(object)

Inserts the label and symbol from a Button object into the current message window. If no symbol, just insert the label

Parameters

object	Button object

NewButton(name, rect)

Returns a new button object, given a name and Rectangle object

Parameters

name	Name of the button object.
rect	Rectangle object representing the Size and Position of an object.

NewGroupBox(name, rect)

Returns a new group box object, given a name and rectangle object

Parameters

name	Name of the new Group Box object.
rect	Rectangle object representing the Size and Position of an object.

PictureSound(object, soundId)

Inserts a button's label and symbol into the current message window but play a sound file instead of speaking the label.

Parameters

object	Button object.
soundId	Name of the sound file to play.

PictureSound(soundId)

Inserts this button's label and symbol into the current message window but play a sound file instead of speaking the label.

Parameters

soundId	Name of the sound file to play.

PictureSpeech(speechText)

Inserts this button's label and symbol into the current message window but use different speaking text.

Parameters

speechText	Alternate text to speak.

PictureSpeech(object, speechText)

Inserts a button's label and symbol into the current message window but use different speaking text.

Parameters

object	Button object.
speechText	Alternate text to speak.

SetButtonType(object, value)

Sets the type of button.

Parameters

object	Button object.
value	Button type. One of: "Standard", "Symbolate", "WordPredictor", "Group".

Functions

GetButtonType(object)

Gets the type of the specified button.

Parameters

object	Button object.

Checkboxes / Radio Buttons

Actions

SetChecked(object, value)

Sets the checked state of the object.

Parameters

object	Checkbox or radio button object.
value	TRUE to check the object; FALSE to uncheck it.

SetCheckedSymbol(object, value)

Sets the checked-state symbol of the object.

Parameters

object	Checkbox or radio button object.
value	Name of the symbol to use when "checked".

SetUncheckedSymbol(object, value)

Sets the unchecked-state symbol of the object.

Parameters

object	Checkbox or radio button object.
value	Name of the symbol to use when "unchecked".

Functions

GetChecked(object)

Returns TRUE if the object is checked; FALSE, otherwise.

Parameters

object	Checkbox or radio button object.

GetCheckedSymbol(object)

Returns the name of the symbol to use when "checked".

Parameters

object	Checkbox or radio button object.

GetUncheckedSymbol(object)

Returns the name of the symbol to use when "unchecked".

Parameters

object	Checkbox or radio button object.

NewCheckbox(name, rect, text, idCheck, idUncheck)

Creates a new Checkbox object

Parameters

name	Name of the new object.
rect	Rectangle object representing the Size and Position of an object.
text	The text label of the object.
idCheck	The symbolID of the checked state icon. Set to NULL to use the default icon.
idUncheck	The symbolID of the unchecked state icon. Set to NULL to use the default icon.

NewRadioButton(name, rect, text, idCheck, idUncheck)

Creates a new RadioButton object

Parameters

name	Name of the new object.
rect	Rectangle object representing the Size and Position of an object.
text	The text label of the object.
idCheck	The symbolID of the checked state icon. Set to NULL to use the default icon.
idUncheck	The symbolID of the unchecked state icon. Set to NULL to use the default icon.

Speech Styles

Actions

SetDoEmphasis(object, value)

Set to TRUE to emphasize the words in the SpeechStyle object

Parameters

object	The SpeechStyle object
value	TRUE to emphasize the words, otherwise FALSE

SetDoPitch(object, value)

Set to TRUE to adjust the pitch in the SpeechStyle object - use SetPitch to specify the pitch

Parameters

object	The SpeechStyle object
value	TRUE to adjust the pitch, otherwise FALSE

SetDoRate(object, value)

Set to TRUE to adjust the rate in the SpeechStyle object - use SetRate to specify the rate

Parameters

object	The SpeechStyle object
value	TRUE to adjust the rate, otherwise FALSE

SetDoSpell(object, value)

Set to TRUE to spell out the words in the SpeechStyle object

Parameters

object	The SpeechStyle object
value	TRUE to spell out the words, otherwise FALSE

SetDoVoice(object, value)

Set to TRUE to change the voice in the SpeechStyle object - use SetVoice to specify the voice

Parameters

object	The SpeechStyle object
value	TRUE to change the voice, otherwise FALSE

SetDoVolume(object, value)

Set to TRUE to change the volume in the SpeechStyle object - use SetVolume to specify the volume

Parameters

object	The SpeechStyle object
value	TRUE to change the volume, otherwise FALSE

SetPitch(object, value)

Sets the pitch in the SpeechStyle object - SetDoPitch must also be set to TRUE for this to take effect

Parameters

object	The SpeechStyle object
value	Pitch is a number between -10 to 10

SetRate(object, value)

Sets the speaking rate in the SpeechStyle object - SetDoRate must also be set to TRUE for this to take effect

Parameters

object	The SpeechStyle object
value	Rate is a number between -10 to 10

SetSpeechVolume(object, value)

Sets the volume in the SpeechStyle object - SetDoVolume must also be set to TRUE for this to take effect

Parameters

object	The SpeechStyle object
value	Volume is a number between 0 to 100

SetVoice(object, value)

Sets the voice name in the SpeechStyle object - SetDoVoice must also be set to TRUE for this to take effect

Parameters

object	The SpeechStyle object
value	The name of the voice that should be used, as shown in the Speech Settings menu

Functions

GetDoEmphasis(object)

Returns TRUE if the words will be spoken with greater emphasis in the SpeechStyle object

Parameters

object The SpeechStyle object

GetDoPitch(object)

Returns TRUE if the pitch will be altered in the SpeechStyle object - use GetPitch to get the pitch that will be used

Parameters

object The SpeechStyle object

GetDoRate(object)

Returns TRUE if the rate will be altered in the SpeechStyle object - use GetRate to get the rate that will be used

Parameters

object The SpeechStyle object

GetDoSpell(object)

Returns TRUE if the speech engine will spell out the words in the SpeechStyle object

Parameters

object The SpeechStyle object

GetDoVoice(object)

Returns TRUE if a voice change will occur in the SpeechStyle object - use GetVoice to check the voice that will be used

Parameters

object The SpeechStyle object

GetDoVolume(object)

Returns TRUE if a volume change will occur in the SpeechStyle object - use GetVolume to get the volume value

Parameters

object The SpeechStyle object

GetPitch(object)

Returns the pitch (-10 to 10) that will be used in the SpeechStyle object if GetDoPitch returns TRUE

Parameters

object The SpeechStyle object

GetRate(object)

Returns the rate (-10 to 10) that will be used in the SpeechStyle object if GetDoRate returns TRUE

Parameters

object The SpeechStyle object

GetSpeechVolume(object)

Returns the volume (0 to 100) that will be used in the SpeechStyle object if GetDoVolume returns TRUE

Parameters

object The SpeechStyle object

GetVoice(object)

Returns the name of the voice that will be used in the SpeechStyle object if GetDoVoice returns TRUE

Parameters

object The SpeechStyle object

NewSpeechStyle(style)

Creates and returns a new SpeechStyle object by copying another one

Parameters

style The source SpeechStyle object

NewSpeechStyle()

Creates and returns a new SpeechStyle object

Fonts

Actions

SetFontBold(object, value)

Sets the bold value of a Font object

Parameters

object	The Font object
value	TRUE for bold, otherwise FALSE

SetFontFace(object, value)

Sets the typeface (font name) of a Font object

Parameters

object	The Font object
value	The typeface (font name)

SetFontItalic(object, value)

Sets the italic value of a Font object

Parameters

object	The Font object
value	TRUE for italics, otherwise FALSE

SetFontSize(object, value)

Sets the point size of a Font object

Parameters

object	The Font object
value	The size of the font, in points

SetFontStrikethrough(object, value)

Sets the strikethrough value of a Font object

Parameters

object	The Font object
value	TRUE for strikethrough, otherwise FALSE

SetFontUnderline(object, value)

Sets the Underline parameter of a Font object

Parameters

object	The Font object
value	TRUE for underline, otherwise FALSE

Functions

GetFontBold(object)

Returns TRUE if the font will be bold, FALSE otherwise

Parameters

object	The Font object

GetFontFace(object)

Returns the typeface (font name)

Parameters

object	The Font object

GetFontItalic(object)

Returns TRUE if the font will be italicized, FALSE otherwise

Parameters

object	The Font object

GetFontSize(object)

Returns the size of the Font object in points

Parameters

object	The Font object

GetFontStrikethrough(object)

Returns TRUE if the font will be strikethrough, FALSE otherwise

Parameters

object	The Font object

GetFontUnderline(object)

Returns TRUE if the font will be underlined, FALSE otherwise

Parameters

object	The Font object

NewFont(font)

Creates and returns a new Font object by copying another one

Parameters

font	The source Font object

NewFont()

Creates and returns a new Font object

NewFont(face, ptSize, bold, italic)

Creates and returns a new Font object by describing it's properties

Parameters

face	The typeface (font name)
ptSize	The size of the font, in points
bold	TRUE for bold, otherwise FALSE
italic	TRUE for italics, otherwise FALSE

Video

Actions

OpenVideoPlayer(videoId)

Opens the Video Player.

Parameters

videoId	The video ID to be played

PauseVideo(object)

Pauses the current video in the VideoControl object

Parameters

object	The VideoControl object

PlayVideo(object)

Plays the currently loaded video in the VideoControl object

Parameters

object	The VideoControl object

PopupVideo(videoId, xPos, yPos, width, height)

Opens the video at a specific position and waits for the video to finish before executing the next action. The popup will be closed automatically when the video is finished.

Parameters

videoId	The video ID to be played
xPos	The x position of the video popup window
yPos	The y position of the video popup window
width	The width position of the video popup window
height	The height position of the video popup window

PopupVideo(videoId, margin)

Opens the video full screen and waits for the video to finish before executing the next action. The popup will be closed automatically when the video is finished.

Parameters

videoId	The video ID to be played
margin	The magin, in pixels, surrounding the video popup from full screen.

PopupVideo(videoId)

Opens the video full screen and waits for the video to finish before executing the next action. The popup will be closed automatically when the video is finished.

Parameters

videoId	The video ID to be played

RestartVideo(object)

Restarts the current video in the VideoControl object

Parameters

object	The VideoControl object

SetMute(object, value)

Mutes the volume of the VideoControl object.

Parameters

object	The VideoControl object
value	TRUE to mute the output, FALSE to turn mute off

SetRepeatVideo(object, value)

Sets the repeat value of the VideoControl object - if TRUE, the video will repeat when it gets to the end.

Parameters

object	The VideoControl object
value	TRUE to turn repeat on, FALSE to turn it off

SetTouchVideo(object, value)

Sets if video playback in the VideoControl object can be paused and resumed by selecting it

Parameters

object	The VideoControl object
value	TRUE if the video playback in the VideoControl object can be paused and resumed by selecting it, FALSE for a selection to have no effect

SetVideo(object, videoId)

Sets the video to play in the VideoControl object, and starts playing it.

Parameters

object	VideoControl object.
videoId	ID of the video to play.

SetVideo(object, videoId, play)

Sets the video to play in the VideoControl object, and optionally starts playing it.

Parameters

object	VideoControl object.
videoId	ID of the video to play.
play	If TRUE, the new video will start playing.

SetVideoPosition(object, value)

Sets the current play position for the current video in the VideoControl object

Parameters

object	VideoControl object.
value	New position, in seconds.

SetVolume(object, value)

Sets the volume of the VideoControl object (0 - 100).

Parameters

object	VideoControl object.
value	A number representing the volume (0 - 100)

StopVideo(object)

Stops the currently playing video

Parameters

object	VideoControl object.

ToggleMute(object)

Toggles the system volume mute state

Parameters

object	VideoControl object.

ToggleRepeat(object)

Toggles whether to replay the content.

Parameters

object	VideoControl object.

Functions

GetMute(object)

Returns TRUE if the VideoControl object volume is muted, otherwise FALSE

Parameters

object VideoControl object.

GetRepeatVideo(object)

Returns TRUE if the video in the media object will repeat when it gets to the end

Parameters

object VideoControl object.

GetTouchVideo(object)

Returns TRUE if the video playback in the media object can be paused and resumed by selecting it

Parameters

object VideoControl object.

GetVideo(object)

Returns the name of the video file currently set in the media object.

Parameters

object VideoControl object.

GetVideoDuration(object)

Returns the duration (total length), in seconds, for the current video in the media object.

Parameters

object VideoControl object.

GetVideoPosition(object)

Returns the current play position, in seconds, for the current video in the media object.

Parameters

object VideoControl object.

GetVolume(object)

Gets the volume value for the VideoControl object (0 - 100).

Parameters

object	VideoControl object.

NewVideoControl(name, rect)

Creates and returns a new VideoControl object.

Parameters

name	Name of the new VideoControl object.
rect	Rectangle object with the size and location for the new VideoControl object.

TogglePlayPause(object)

Toggles between play and pause in the VideoControl object.

Parameters

object	VideoControl object.

Symbols

Actions

NewSymbol(name, rect, id)

Creates a new Symbol object

Parameters

name	The name of the symbol object
rect	Rectangle object representing the Size and Position of an object.
id	The symbol identifier

SetSelectionType(object, value)

Sets the SelectionType property of a screen object.

Parameters

object	Screen object.
value	One of: "None", "Rectangle", or "Content".

SetSymbol(object, value)

Sets the Symbol of a screen object

Parameters

object	Screen object.
value	Name of the symbol to use.

Functions

GetImageSize(value

Gets the size in width and height of an image attached to a screen object.

Parameters

value	.Screen object

GetSelectionType(object)

Returns the SelectionType property of a screen object.

Parameters

object	Screen object.

GetSymbol(object)

Returns the symbol of the specified object.

Parameters

object	Screen object.

Lines

Actions

MoveLine(object, x1, y1, x2, y2)

Moves a line object to the specified start and end points.

Parameters

object	Line object to move.
x1	X-coordinate for the start of the line.
y1	Y-coordinate for the start of the line.
x2	X-coordinate for the end of the line.
y2	Y-coordinate for the end of the line.

MoveLine(object, start, end)

Move a line object to the specified start and end positions

Parameters

object	Line object to move.
start	Position object representing the coordinates of the start of the line.
end	Position object representing the coordinates of the end of the line.

NewLine(name, start, end)

Craetes a new line object at the specified start and end positions.

Parameters

name	Name of the new line.
start	Position object representing the coordinates of the start of the line.
end	Position object representing the coordinates of the end of the line.

NewLine(name, x1, y1, x2, y2)

Creates a new line object at the specifed start and end points.

Parameters

name	Name of the new line.
x1	X-coordinate for the start of the line.
y1	Y-coordinate for the start of the line.
x2	X-coordinate for the end of the line.
y2	Y-coordinate for the end of the line.

NewLine(name)

Creates and returns a new line object, with no physical representation.

Parameters

name	Name of the new line.

Speech

Actions

Speak()

Speaks the contents of the current message window.

Speak(contentType, advance, wait)

Speaks the specified range of text in the current message window, optionally advancing the cursor.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".
advance	TRUE to advance the cursor after speaking; FALSE, otherwise.
wait	If TRUE, don't continue executing the next action until the spoken text is finished. If FALSE, the next action executes immediately.

Speak(contentType)

Speaks the specified range of text in the current message window.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".

Speak(contentType, advance)

Speaks the specified range of text in the current message window, optionally advancing the cursor.

Parameters

contentType	One of: "All", "Selection", "Word", "Sentence", "Paragraph".
advance	TRUE to advance the cursor after speaking; FALSE, otherwise.

SpeakLabel(object, wait)

Speaks the label of the given object

Parameters

object	The object who's label will be spoken.
wait	If TRUE, don't continue executing the next action until the spoken text is finished. If FALSE, the next action executes immediately.

SpeakLabel()

Speaks the label of the current object (shortcut for SpeakLabel(thisObject))

SpeakLabel(object)

Speaks the label of the given object.

Parameters

object	The object who's label will be spoken.

SpeakText(text)

Speaks the specified text

Parameters

text	Text to speak.

SpeakText(text, wait)

Speaks the specified text.

Parameters

text	Text to speak.
wait	If TRUE, don't continue executing the next action until the spoken text is finished. If FALSE, the next action executes immediately.

StopAllSound()

Stops all sound currently playing.

D Keyboard Shortcuts

This appendix covers the following keyboard shortcuts:

- ***Workspace***
- ***Action Editor***
- ***Action Editor Drop-Down Menus and Submenus in Action Category List***

WORKSPACE

Ctrl + Z	Undo your last action.
Ctrl + Y	Redo (reverses the Undo command).
Ctrl + S	Save the current page.
Ctrl + C **or** **Ctrl + Insert**	Copy the selected object.
Ctrl + X **or** **Delete**	Cut the selected object.
Ctrl + V **or** **Shift + Insert**	Paste the selected object.
Ctrl + N	Clear the message window.
Tab	Select the next object on the page. (Selection sequence moves from top to bottom and, for objects of the same height, from left to right and then moves to select the page itself.) (If no object is selected, the selection sequence will begin on the first object on the page.)
Shift + Tab	Select the previous object on the page. (Selection sequence moves from bottom to top and, for objects of the same height, from right to left and then moves to select the page itself.) (If no object is selected, the selection sequence will begin on the last object on the page.)
Delete	Delete the selected object.
Ctrl + A	Select all objects on the page.
Right arrow key	Nudge the selected object to the right in small increments.
Ctrl + right arrow key	Nudge the selected object to the right in larger increments.
Left arrow key	Nudge the selected object to the left in small increments.
Ctrl + left arrow key	Nudge the selected object to the left in larger increments.
Up arrow key	Nudge the selected object up in small increments.
Ctrl + up arrow key	Nudge the selected object up in larger increments.
Down arrow key	Nudge the selected object down in small increments
Ctrl + down arrow key	Nudge the selected object down in larger increments.

Action Editor

Ctrl + F **or** **Alt +S**	Place the cursor in the search box.
Ctrl + S	Save your changes and close the *Action Editor* menu.
Up arrow key	Move the highlight up one line in the action list.
Down arrow key	Move the highlight down one line in the action list.
PgUp key **or** **Home key**	Move the highlight to the top of the action list.
PgDn key **or** **End key**	Move the highlight to the bottom of the action list.
Ctrl + Home	Select all actions in the action list (when the last action is highlighted).
Ctrl + End	Select all actionsin the action list (when the first action is highlighted).
Ctrl + X **or** **Shift + delete**	Cut the selected action.
Ctrl + C **or** **Ctrl + Insert**	Copy the selected action.
Ctrl + V **or** **Shift + Insert**	Paste the selected action.
Delete	Delete the selected action.
Ctrl + A	Select all actions.
Ctrl + up arrow key	Move the selected action up one line.
Ctrl + up down key	Move the selected action down one line.
Ctrl + click **or** **Shift + click** **or** **Shift + up or down arrow key**	Select multiple actions.
Enter	Edit the selected action (when action has editable fields).

Tab **or** **Shift + Tab**	In the *Expression Editor* menu, move the cursor to the next editable field.
Click on editable field	Open the *Expression Editor* menu.
Ctrl + E	Open the *Events* drop-down menu.
Ctrl + M	Insert a new macro.
Ctrl + T	Opens the *Snippets* drop- down menu to insert a snippet.
Esc	Brings up a dialog to cancel all changes and close the *Action Editor* menu.

Action Editor Drop-Down Menus and Submenus in Action Category List

Up arrow key	Move up one line in the menu.
Down arrow key	Move down one line in the menu.
Right arrow key	Open a submenu in a category list popup menu.
Left arrow key	Close a submenu in a category list popup menu.
***Favorites* menu: right-click**	Select or deselect action name to add to or delete from the Favorites list.
Click plus icon [ ] **next to action in Action Category list.**	Add action to *Favorites* list.
Click star icon [ ] **next to action in *Favorites* menu.**	Remove action from *Favorites* list.

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