

## Check Boxes and Radio Buttons Simplified

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- [DOWNLOAD THE .FLA](#)
- **SKILL LEVEL: ADVANCED (use of Actionscripting)**
- Must know how to use Actions
- Must know how to create symbols and edit them

This tutorial will show you how to use Check Boxes and Radio Buttons in Flash forms. Check Boxes and Radio Buttons are nothing more than variables that are set to ON or OFF based on some simple movie clip. This tutorial will illustrate just how simple they can be. For those code wizards out there a more sophisticated version of Check Boxes and Radio Buttons will also be provided that can act as a generic form element.

### Simple Check Box

Option 1
  Option 2

Each of these check boxes are a separate movie clip with separate names. They most simulate an HTML form when the check box value is set to the name of the box. i.e. "Option1"

The two states are:  
   Option1 = off  
   Option1 = on

### Generic Ckeck Box

Option 3 (cBox\_1)
  Option 4 (cBox\_2)

  
**SUBMIT**

These check boxes are generic and can be used over and over again. Their names are automatically assigned when the movie starts. The order will be the same as the order in which they were added to the scene. It is up to the Flash designer to remember that "Option 3" is cBox1.

The two states are:  
   cBox\_1 = off  
   cBox\_1 = on

Reminder

Note:  
 Radio Buttons and Check Boxes are the same with one exception, each radio buttons must tell all the others when they are pressed.

- This tutorials may help. It can be found at:  
[Flash 4 Forms & Text Boxes](#) or [Text Fields & Send Mail Form](#)
- Download the [source](#) files and have them unzipped for review during this tutorial.

### Step-by-step

#### Overview:

Check Boxes and Radio Buttons are an essential part of many forms. HTML provides convenient way to deal with

these; however, in Flash they are a little more illusive than plain text fields. Furthermore it is nearly impossible to use them in Flash without understanding as little about variables.

With that in mind here is how we will approach this subject:

1. A little "variable" background to help understand what will be sent back to your server.
  2. A simple, single element, Check Box
  3. A simple, single element, Radio Button
  4. A generic, multiple element, Check Box
- 

### ***Before we begin***

The number of variables determines whether to use GET or POST to pass the variables back to your server. The GET method appends the variables to the end of the URL, and is used when a small number of variables are involved. The POST method sends the variables in a separate header, and is capable of sending much longer strings. The example used in this tutorial uses the POST method. Whatever method you choose you will need a CGI on your server that receives the form data and does something with it. A generic CGI is provided with this tutorial that can be used for testing your forms.

#### **1. A little "variable" background**

- a. Variables are set in Flash with the "ACTIONS" tab of the frame properties or the "ACTIONS" tab of the instance properties.

For example: **Set Variable: Checkbox1 = "on"**

- b. Variables are associated with Scenes and movie clips separately. Sending variables from a movie clip does not send the variables from the scene that contained it.
- c. All variables are sent not just the ones that you have in your form. If you have used other variables they will be sent to your server as well. The CGI must sort out which ones to use and which to ignore.

#### **2. A simple, single element, Check Box**

- a. Building the Check Box movie clip.
  - i. The Check Box will be a movie clip with two keyframes, one for the unchecked state and the other for the checked state.
  - ii. Click on **Insert: New Symbol [or Ctrl F8]** to open the Symbol Properties window.
  - iii. Give the symbol a name of "Checkbox1" and make sure that the "Movie Clip" option is selected.
  - iv. In layer 1 and keyframe 1 build your unchecked box.
  - v. In layer 1 add a second keyframe in frame 2 **[F6]** and make this your checked box.
  - vi. Double click on each keyframe and assign a STOP action.
- b. Adding a button to the Check Box.
  - i. Lock layer 1.
  - ii. Click on **Insert: Layer [or click on the "+"]** to insert layer 2.
  - iii. Place a filled area over your unchecked box.

- iv. Select this filled area and press **F8** to save this as a button. Give it a name of "BoxButton" and make sure the "Button" option is selected.
- v. Click in frame 2 of layer 2 and press **F6** to insert another keyframe.
- vi. Double click on the BoxButton to open the Instance Properties window and then click on the "Edit Symbol" icon (it looks like a pencil).
- vii. Click in the "Hit" frame and press **F6** to insert a key frame.
- viii. Now click in the "Up" frame and delete the box and any lines that may be there.

This will give your Checkbox1 movie clip a "Hot Spot" without actually seeing the button.

- ix. Now go back and edit the Checkbox1 movie clip. You can get there several ways. If you get lost, open your library and double click on the Checkbox1.
- c. Setting the button actions.
- i. Since there are two keyframe in layer 2, that have an instance of our button in them, they will act as two separate buttons and consequently have two separate actions assigned.
  - ii. Click in frame 1 of layer 2 to select the frame.
  - iii. Double click on the shaded area, that is your button hot spot, to open the Instance Properties window.
  - iv. Click on the "Actions" tab. We want two things to happen when this button is clicked.
    1. Advance this clip to the next frame (checked) and,
    2. Set the Checkbox1 variable to "on".
  - v. The actions look like this:

On (Release)  
Go to Next Frame  
Set Variable: "...:Checkbox1" = "on" End On

- vi. Now we do the same for keyframe 2. Click in keyframe 2 of layer 2.
- vii. Double click on the shaded area, that is your button hot spot, to open the Instance Properties window.
- viii. Click on the "Actions" tab. We want two things to happen when this button is clicked.
  1. Send this clip to the previous frame (unchecked) and,
  2. Set the Checkbox1 variable to "off".
- ix. The actions look like this:

On (Release)  
Go to Previous Frame  
Set Variable: "...:Checkbox1" = "off" End On

At this point you have everything you need for simple check boxes. To add more check boxes just change the number at the end or use some other variable name for your check box. Remember you can "Duplicate" movie clips and then edit them to change the number.





### 3. A simple, single element, Radio Button

Radio Button and Check Boxes are nearly identical. The only real difference is that radio buttons are usually associated with a set of choices in which one one can be selected, consequently all the radio buttons in a group must know what the others are doing. In other words, when one is "Checked" it must "Uncheck" all the others.

We will use our Checkbox from above to build out radio buttons. The only real change will be that when we set our variable to "on" or "off" we must also set all the other radio button variables to "off" or "on".

Let's start with just three radio buttons to make things simple.

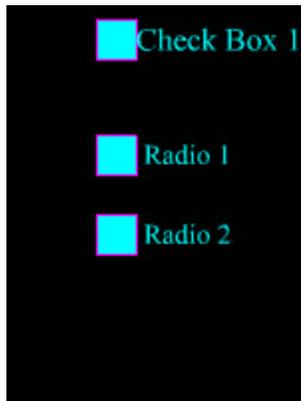
- a. Duplicate "Checkbox1" three times giving them the names: radio1, radio2, and radio3.
- b. From the library window double click on each radio button movie clip and change the variable from "Checkbox1" to "Radio1" etc.
- c. While editing each radio button click in keyframe 2 of layer 2 and and then select **Insert: Clear Keyframe [ Shft F6 ]** to remove the second button and cause the first button to span both frames. This is necessary because radio buttons don't actually have an "OFF" option, it occurs when any other radio button is clicked.
- d. Now when Radio1 is set to "on" it must set Radio2 and Radio3 to "off", and likewise for Radio2 and Radio3.
- e. In this case each instance of the radio button will need to be named so that the radio buttons can position the movie clips with a "Tell Target" operation.
- f. After you place each radio button on stage right click on it and give it the same name as the movie clip itself i.e. Radio1, 2 3.
- g. Here is the code that set Radio1 to Checked:

```

On (Release)
Go to Next Frame
Set Variable: "...:Radio1" = "on"
Comment: **** For Radio Button 2 ****
Begin Tell Target ("/Radio2")
Go to and Stop (1)
End Tell Target
Set Variable: "...:Radio2" = "off"
Comment: **** For Radio Button 3 ****
Begin Tell Target ("/Radio3")
Go to and Stop (1)
End Tell Target
Set Variable: "...:Radio3" = "off"
End On

```

- h. Repeat this logic for all the other radio buttons and you should be on your way.



REMEMBER - the Flash form is probably the easy part of sending form data to a server. The server must have a CGI ready to accept this form data and then do something with it. CGI's come in many flavors: C, PERL, JAVA, ASP, etc. The CGI that is used with this tutorial is written in C. It simply returns the form fields and their values and send them to the browser and to an email address specified in the URL.

#### 4. A generic, multiple element, Check Box

A generic, multiple element, Check Box requires more sophisticated coding. Another example of this can be found at [Macromedia](#). The Macromedia site is very comprehensive and based on the Widgets Sample in Flash 4. I strongly suggest you visit this site and print the pages that cover this topic. The Macromedia site covers Radio Buttons very well and has a good line-by-line explanation of the code. We will concentrate on Check Boxes here and leave the Radio Buttons to them.

There are only two difference between the simple Check Box above and the generic, multiple element Check Box.

- i. This initialization script in keyframe 1, layer 1 on the Check Box movie clip:

```
If (initialized = 0)
Set Variable: "initialized" = 1
Set Variable: "numBox" = ../:numBox
Set Variable: "...:numBox" = numBox + 1
Set Variable: "numBox" = numBox + 1
Set Variable: "box" = "...:cBox_" & numBox
Set Variable: box = "off"
End If
Stop
```

- ii. The button actions for checked and unchecked:

```
Checked:
On (Release)
Set Variable: "box" = "...:cBox_" & numBox
Set Variable: box = "on"
Go to Next Frame
End On
```

```
Un-Checked:
On (Release)
Set Variable: "box" = "...:cBox_" & numBox
```

```
Set Variable: box = "off"  
Go to Previous Frame  
End On
```

Once you build one of these check boxes you can simply drag and drop them into a scene and they will automatically build variables for cBox\_1, cBox\_2, ..... All you have to do in your CGI is to remember what property or option each check box was associated with.

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## Need More Help?

[\[Download Source\]](#)

Don't forget to get the source files and look them over.

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## Troubleshooting

It's safe to say that there are a number of potential pitfalls in building a Flash 4 movie of this type. Although this is a rather simple illustration of Flash 4 programming it is filled with movie clip references and variables. My suggestion in making a movie of this type is to have paper and pencil handy and define variables and movie clips before hand. Make notes as you work. Be consistent in your naming convention.

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