# Flash for Everyone: Authoring for Accessibility

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*"Flash accessibility" was once a contradiction in terms, but no more. With the Flash Accessibility Kit, you get example code and guidelines for making your Flash content accessible. Learn how to make your Flash projects more inclusive. Flash accessibility issues • Alternative navigation techniques, text descriptions, and more • Future accessibility directions*

Annotated presentation: **www.phillipkerman.com/mmww/**

## __Accessibility Kit:

While it is both wise and admirable that Macromedia has addressed accessibility head-on with its "Accessibility Kit", the sad truth is it's merely a small step for mankind. There's almost *nothing* to it. In fact the guidelines and recommendations (found at: **www.macromedia.com/software/productinfo/accessibility/features** ) provide much more value than the kit itself (and are worth reading). Regardless, the kit is simply an HTML publish template that places all text from the Flash movie in an alt tag and uses the same script found in the banner ad template (which displays a GIF image for those without the Flash player). In fact, you'll probably have more success simply creating your alt tag by hand because then you can write a minimum text description of the movie. (By the way, the text from an alt tag is visible to browsers with image viewing disabled.)

Consider that those who don't experience your Flash movie will instead hear or read the text found in the alt tag. In the case of an alt tag for an image, the description should be salient and concise. It is certainly a challenge to describe a complete Flash movie using just a few words—but realize that this is all that some people will "see". You clearly don't want to just dump all the text from your movie as the Accessibility template does. This can easily break the 1,024 character limit and provide the user with nothing but frustration. Just try to summarize your movie the best you can write your own alt text. (Incidentally, you can still use the Accessibility template but just replace the automatically generated alt tag with a more targeted description.)

## _How Flash is not accessible:

In a way it's easy to point out Flash's faults related to Accessibility, however the balance of this presentation will show things you *can* do to make accessible Flash sites. However, in its current state Flash has specific limits. Namely, the onscreen text in a Flash movie is not accessible to any screen readers or other devices. The Microsoft Active Accessibility will likely be supported in future Flash versions so that it can "talk" to assistive devices through a standard protocol—but it doesn't now. It's quite likely that people have come up with solutions (perhaps via JavaScript and Flash's FSCommand), but generally it is simply not supported.

## __Current Flash features which are accessible:

There are plenty of steps you can take to make accessible Flash websites. Some techniques simply use built-in features while others require a fair bit of handwork. Here are some of the details:

> Automatic tabbing. By default, all buttons in your Flash movie are accessible when the user presses TAB. This means users with limited mobility or who otherwise have difficulty using a mouse will be able to select any button by tabbing to it and pressing enter. Upon pressing tab a yellow outline will sequentially appear in the area of each button. This is an existing feature built-in.
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> Keyboard control. Any Flash button can have a "keyPress" option so the user can effectively press the button by simply pressing a designated key (thus, eliminating the need for the mouse). In addition, Flash 5's new Key Object gives you ultimate control over keyboard equivalents. For example, you can limit tabbing to only a select number of fields in a form rather making the user tab through *all* the buttons and fields to reach the one they need. While this is feature is well documented and quite powerful, it requires a fair bit of work.
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> Magnification/Scalability. Users can use the right-click menu to "Zoom in" on the entire Flash movie. (Naturally, Flash scales and re-renders beautiful anti-aliased graphics.) Additionally, through scripting you can let users zoom in on any sub-element of your movie. Again, this simply takes a bit of ActionScripting and planning.

Synchronized Audio/Closed Captioning: Sounds set to "stream" are automatically locked to the timeline where they're used. Therefore you can easily display the text equivalent of any narration or music. The new Sound Object can also be used for fine control of audio (and synchronization). Unfortunately, the Sound Object lacks a means to "get the current position" of a sound clip—therefore, you have to use getTimer() for fine control. Certainly synchronizing text to audio can be time-consuming but you can build an offline production tool (in Flash or Director) to automate some of the process.

Navigation: This is less of an accessibility issue and more of a usability issue... but it's profound. A common gripe against Flash is that when you click the browser's back button you're taken all the way out of Flash to the previous site visited. This issue is not necessary. If you simply plan ahead, it's simple to enable users to both use the browser's back button to navigate to other subsections of your Flash site and bookmark any subsection. It takes a little bit of programming and a good deal of planning—but it's definitely possible. This will be demonstrated in the session and source files available at the site **www.phillipkerman.com/mmww**.

## __Design issues unrelated to Flash:

It's not as though when you forgo Flash that your sites will magically become accessible—it still requires work. For example, the color choices you make can render text un-readable by those with color-blindness. I'm not prepared to discuss *all* issues related to this topic. However, researching the topic generally can help you when working in Flash.

## __It just means a little more work:

People who are either insensitive or uncreative might say "well, if a user is visually impaired he won't be able to *see* my movie... and if he's hearing impaired then he won't be able to *hear* it." Sometimes fully-abled people have the hardest time imagining things like how a quadriplegic might drive a car (many can). The point is that making an accessible website is just another design challenge. Granted it can take more work, but consider the legal incentives if you won't consider the ethical ones.