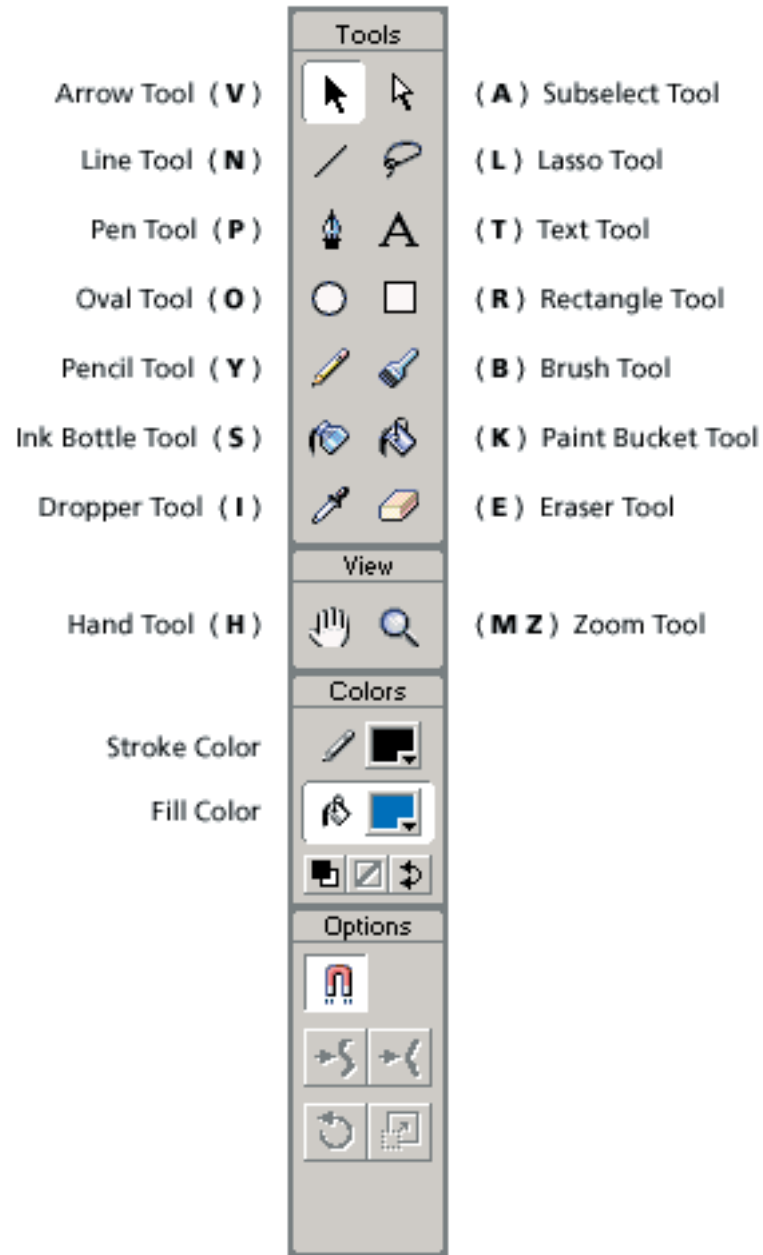


Flash 5

Library/Publishing Pack



Libraries

Every .fla has a library available, whether you use it or not.

Flash places all symbols in the Library along with imported bitmaps, sound files, and referenced video files. This means that deleting symbols and objects from the Stage does not delete them from the Library. If your .fla file is bulky, it could be because it has unused items remaining in it that you assumed were deleted.

Open the Library by selecting Window > Library or Ctrl + L. If you need more info about library objects, drag the edges of the library to reveal additional information. Don't forget the Options widget in the top right of the panel that you can click to get a list of Library commands; the same goes for other panels as well.

The library is important to 1) organize symbols and objects, 2) reduce symbol redundancy to creating more efficient swfs, and 3) reuse symbols and library objects in other .fla files.

Organizing your library

As your library grows, you can add folders within the library to help sort items. You can add new folders through the Options widget or by clicking the expanding folder icon at the bottom of the panel. Using intuitive naming conventions for symbols to begin with also helps.

Opening another .fla's Library

Select File > Open As Library and then select the .fla file with the Library you want to access. A new Library panel with its associated file name as the title will open. You can drag items from this Library to either the Stage or your current Library; doing either will create a copy in the current Library.

Importing

Select File > Import to open the dialogue window for external files to be brought into your Library. You can double-click imported objects in the Library to adjust properties such as compression and re-import a picture in its place. There are global compression settings, but you can also edit compression settings individually in the Library as well.

Text & Font Usage

Types of text and the abilities of each:

<i>Static Text</i>	unable to be updated through ActionScript	no direct user input
<i>Dynamic Text</i>	able to be updated through ActionScript	no direct user input
<i>Input Text</i>	able to be updated through Action Script	direct user input

Local font references are used to display fonts. If you use a specialized font that isn't available on other computer, that font will display in the computer's default font. You can import and embed fonts in Flash, but your publish movie will result in a larger file. Because of this, embedding fonts will not be discussed. Instead, text using special fonts can be "broken apart" into vector shapes, thus eliminating the need for embedding the font.

To break apart text, select Modify > Break Apart or press Ctrl + B

After text is broken apart, you cannot convert it back to editable text; you may want to make a copy of it and place it off of the stage first. The text is converted to vector shapes. By converting the shapes into a symbol, you can easily move the text around or perform animation effects on the text.

Sound

Be careful what you import; sound files have a huge impact on file size.

Sounds are added to Keyframes. It may prove beneficial to separate sounds onto their own layers (each named for the sound) to keep track of what sounds are present.

To add sound, once a Keyframe is selected, open the Sound panel. From the Sound drop-down, you will be able to select a sound from the Library to use on the Keyframe. You can also drag and drop sounds from the Library.

Effects

The Effect drop-down and Custom button control basic effects such as volume, fading, and panning. You can use effects to help simulate motion or illusions in your animation.

Synchronization

The Sync drop-down options impact how the sound plays, performs, and synchronizes:

Event – once the sound starts playing, it will continue playing in its entirety, even if the movie has stopped. If the same event (i.e. button click) triggers the same sound, it will create a new instance of the sound (overlapping sounds are possible).

Start – Same as the Event sync option, except that if the same event triggers the same sound, it will stop the sound and then restart it (overlapping sounds are not possible).

Stop – Simply stops the selected sound from playing. You can use a Stop sync Keyframe before a Start sync Keyframe so only one instance of the sound plays.

Stream – Streaming sounds synchronize with the timeline. The sound will stop playing when it reaches the end of its frame span. When a streaming sound is playing, the Flash player must attempt to keep up with the sound playback. If the Flash player starts lagging behind, it will skip (or “drop” in video production terms) frames to keep up the pace. When synchronizing long sounds with animation, Stream may be the best option because it synchronizes with the timeline.

Looping controls how many times the sound will play again. Be sensible.

Testing the Movie

While editing your .fla in the development environment, every time you select Control > Test Movie or press Ctrl + ENTER to test your current work as a Flash movie, you are actually publishing it. It will publish in the same directory the .fla file is saved. The test movie that was published will display inside the Flash program and provide feedback and tools for the movie.

We will discuss bandwidth as the amount of data or information that can be passed through a connection in a specific period of time. Because Flash movies stream their content, they can begin to play before the movie is completely downloaded. The Bandwidth Profiler (where the Timeline is located in the development environment) displays how much information is being streamed over the timeline. If you are experiencing bottlenecks in data streaming, this is a valuable tool in determining where it is happening. To show the Bandwidth Profiler while testing a movie, select View > Bandwidth Profiler.

The Bandwidth Profiler shows Movie, Bandwidth Setting, and State properties. Movie properties are straightforward, showing dimensions, frame rate, size, and duration. Bandwidth Setting shows what speed the profiler is set to profile. Select Debug from main menu and you will see other bandwidth speeds, such as 56 Kbs to profile. You can also set up user defined speeds. State properties show information of the section of data being loaded. Content that must be loaded before the frame that contains the content can be played is what is displayed in the graph. You can click on different content sections of the graph, if they exist, to get information about data being loaded by Flash. Any spikes from the graph above the red tick mark located at your target bandwidth speed will mean that the movie will need to pause and load the additional data before playing. Creating preloaders in the Flash development environment helps avoid the Flash movie playing content before it is loaded.

To simulate the Flash movie download process at the selected bandwidth speed, select View > Show Streaming. You can stop the streaming process if run into bottlenecks by pressing the ESC key.

A note from Macromedia about streaming sounds:

A streaming sound plays as soon as enough data for the first few frames downloads; it is synchronized to the Timeline. An event sound does not play until it downloads completely, and it continues to play until explicitly stopped.

Publishing

Publish Settings are located under File > Publish Settings.

For each format selected on the Formats tab in the Publish Settings window, there will be an associated tab to control that specific format's settings. When click the Publish button, your Flash movie will be published in all the formats that are checked. Checked formats will also publish when testing the movie. If you uncheck Use default names at the bottom of the window, you can enter in different names for each file or a name other than the Flash movie's file name if desired. Published files will be located in the same directory as the .fla file.

Flash format settings include:

Load Order: (negligible) which order the layers should load. Really only affects the first frame that is displayed.

Options: Generating a size report is handy if you have a bottlenecking file and are debugging it

JPEG Quality: global setting for JPEG compression

Audio Stream and Event: Provide global compression settings for sound types

The Override sound settings checkbox will override individual sound settings and use those set here in the Publish Settings' Flash tab.

Version: drop-down helps target publishing for Flash Player versions. Newer features require newer versions of the Flash player.

Exporting

Exporting Flash movies in formats other than those available for publishing is possible. To do so, select File > Export Movie, choose your target format from the Save as type drop-down, enter a proper filename, and click Save.

To save a single frame of the movie as an image, select File > Export Image.

When exporting your Flash movie, it may not retain all of the features, such as interactivity, that would be available in the standard .swf format.