

Properties

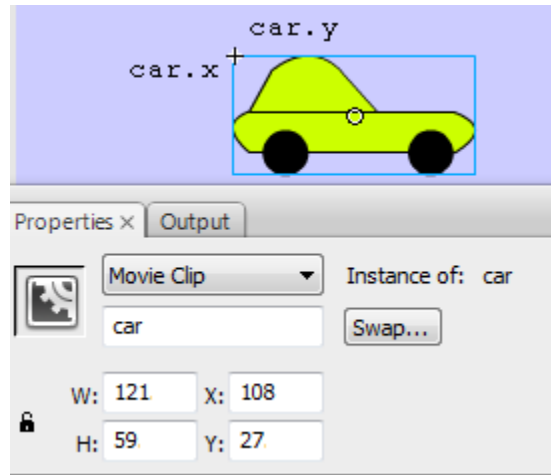
ActionScript3 is an object oriented programming language. A movie clip is one kind of object. An object can have properties. Most of those properties can be changed at either design time or when the movie is playing (run time.) To change the properties at design time we can use the properties window. To change it a runtime we can use ActionScript3.

Changing the car when the movie starts

Start a new ActionScript3 File. Draw a picture of a car and make it a Movie Clip. Name the instance **car**.

A Movie Clip has properties x and y that tell where it is on the stage. In the illustration x is 108. That means that the car is 108 pixels from the left edge of the stage. Y is the distance from the top edge.

Drag your car around on the stage and notice that the properties x and y change as you position the car. You can also type in new values for the width (w) and height (h) of the car.



1. Open the Actions window (Window->Actions from the menu or F9.)
2. In the action window type the statement **car.x=0;**

Flash is case sensitive. That means that if the instructions show a capital letter or a lower case letter, it must be typed exactly that way. The name of the Movie Clip is car. The name of the movie clip is followed by a dot and the property. (*Some people refer to this as “dotted properties.”*) In speaking we will say “Car dot x equals zero.” Every statement in ActionScript must end with a semicolon.

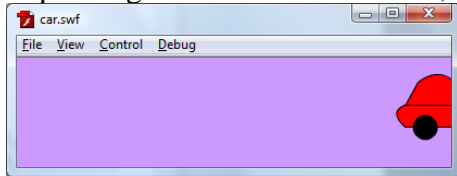
3. Run your movie (Ctrl+Enter on the PC; ⌘+Return on the Mac). Even though the car was in the middle of the stage in the design window, the x property was set to 0 when the movie started.
4. Try these other commands or all of them at once: (Do not type the notes.)

car.y=0;	<i>Puts the car on the left edge.</i>
car.width=200;	<i>Makes the car longer or wider.</i>
car.height=25;	<i>Makes the car taller or shorter</i>
car.alpha=0.5;	<i>Makes the car transparent. Alpha can be between 0 and 1.</i>
car.rotation=45;	<i>Values from 0 to 180 represent clockwise rotation; values from 0 to -180 represent counterclockwise rotation.</i>

Try different values so that you know what they do and become familiar with ActionScript3.

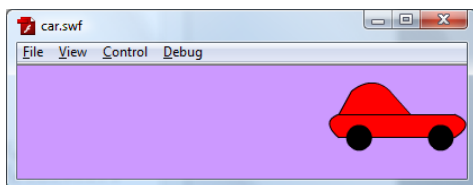
The stage is also an object and has properties. Try this command: (*Notice the capital W!*)
car.x=stage.stageWidth-50;

Depending on the width of the car, the movie will look something like this:



If we change that statement so that instead of 50 we use the width of the car, the car will just touch the edge of the stage:

car.x=stage.stageWidth-car.width;



If you want the car to be just off the stage on the left, you could use the statement below:

car.x=-car.width;

You won't see the car at all this way, so you could add 10 to that to see just the front of the car:

car.x=-car.width+10;

If you use the properties of the car and the stage to position the car, the code will work even if you modify the size of the stage, or the size of the car.

Experiment: Try writing code to position the car along the *bottom edge* of the stage.

Save this movie, in the next lesson, we will learn to move the car using ActionScript instead of Motion tweening.