Creating a Website Walk-On

A walk-on video is becoming a significant way to grab the attention of visitors to your website. The typical approach is to add a Flash video overlay of a spokesperson that walks on to your webpage, says a few things about the site in 30 to 60 seconds and then disappears. The video has a transparent background, so your website shows through behind the spokesperson. You may have seen some websites that advertise this approach. You can use Google or Bing to search for "Transparent walk-on video". Most of these sites suggest you pay big money to allow them to create this effect for you. These services can run into the thousands of dollars. Or if you wish to create your own video, the cost can also be in the thousands if you purchase Adobe CS4, Flash 8, or Adobe After Effects and the green screen stage to help you build the Flash video.

There are cheaper ways. You can find websites that suggest a fee for their secrets and services that range from $70 and up. Most require you to setup your own green screen stage and buy your own software and hardware to support their secret information.

Well here is a way that may cost you a few bucks but without the secrets. Do so at your own risk. It works for me and assuming you know how to build, edit, and upload web pages to your website, it may work for you.

To make a video with a transparent background, you need to film the actor in front of a green screen. Normally this is called a Chroma-key green screen. Then using video editing software, select the green background and make it transparent. Then save the video as a transparent SWF FLASH video with an alpha channel. Adobe Flash Player 8 and above support transparency. Edit your webpage to overlay the video at an absolute position, typically on the right side of the page. And then set it to run on page load.

This sounds like a piece of cake, doesn't it? However you may not find a video camera and inexpensive software that can do all this, or find inexpensive green screen hardware to use for your stage.

Here is a list of the materials I used:

Video camera: None, used a Canon still camera A640 that supports 640w x 480h pixels video with audio of up to about 5 minutes with a Gig plug-in memory card. Make sure the auto white balance is turned off. Cost: $0. Already had this. It creates AVI files. Note that 480 pixels high on a webpage are about 5 inches high at 96 pixels per inch. All you may need is 320x240 video for your application. A little 2 inch man walking on is quite effective. A good web-cam with a mic may do the trick, if you have one.

Tri-pod: I had one, but bought another at Wal-Mart for about $25 that would hold the camera at eye height.

Green Screen: I bought three yards of Kelly Green muslin at a local fabric store: $6. This was a good start, but I needed a bigger background, so I got a 9'x15' Chroma green screen sheet from Amazon.com for About $37 and tacked it to a basement wall with enough left over to cover about 6 feet of floor in front of the green sheet.

Lighting: There is no such thing as too much lighting. You need to light the green screen as uniformly as possible, but not from in front of the actor, otherwise his shadow will show on the green background. You need to light the actor from behind as well as from the sides to burn out the green reflections on the actor from the green screen. Place the lights in front of the actor at about 45 degrees so shadows do not fall on the green screen. You can buy professional photo lighting with diffusers, but it will cost some bucks. I used 9 inch clip-on lights with spiral daylight fluorescent bulbs covered with a translucent sheet of plastic or thin paper– you can do this because the lights do not put out much heat. I also had an old 4 foot two-tube florescent garage lighting fixture, an old table lamp, and an industrial job light that was not being used. Total Lighting Cost: $50.

Software: From the raw AVI video, you need to create an edited version that fixes all the things you could not do in your make-shift studio, such as cropping, evening-out the green screen colors, and editing the audio. It would have been nice if there was an inexpensive editor that would save the result as a Flash SWF with an alpha channel where the green background is tagged as the transparent color.
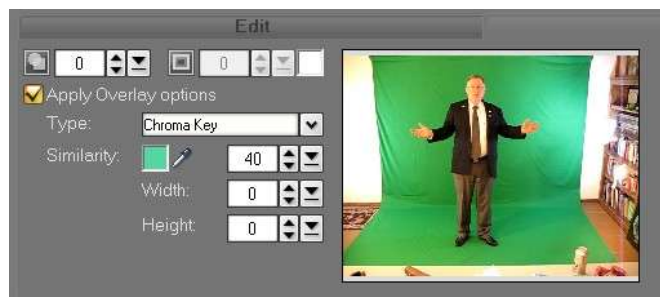
I could not find one inexpensive video editing application that did all the things that Adobe's software could do. However, Corel's VideoStudio X2 allows editing a raw AVI and output of a new edited 24bit AVI or other format that can be used as input to SWISH Video 3.

Using Swish Video 3, a 32bit Flash SWF with an alpha channel can be produced. There are a few things you have to do to make this all work, but no secrets. More details on the steps I used are listed in the appendix. Cost of Software: Corel VideoStudio X2 $67+ Swish Video 3 $50 = $117.

Total Cost: about $230 including the editing software. If you have found another way to do this, kindly let us all know. It doesn't need to be a secret.

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Appendix: Processing the Raw AVI Video

I used a Canon still camera A640 that supports 640w x 480h pixels video with audio to make a video of a guy walking in front of a green screen. Output was a 640x480 avi video. I call this the raw video.

This video was imported into Corel's VideoStudio Pro X2 as the transparent layer called the "Overlay Track". An additional layer, a green image, was added as the "Video Track" that matched the predominant color of the green screen in the Overlay Track (r=0, g=140, b =0 in my case).

The Overlay track was edited; extraneous scene areas cropped, and cleaned up using the provided Overlay Track filters. Then using the Overlay Track Mask & Chroma key option, the green screen portion of the Overlay Track was made transparent, just leaving the guy wandering around in empty space.
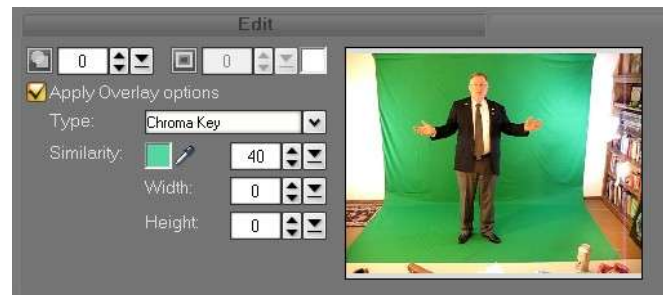

Since the Video Track was just a green image, the result was a uniform green background with the guy in it. The audio was tweaked to make the voice a little lower and then the result was output (called Share in VideoStudio) as a 640x480pixel uncompressed 24bit avi with PCM 48k audio. The result is a big file, but it is only used for the next step, and then it can be deleted.

This big avi is loaded into Swish Video 3.
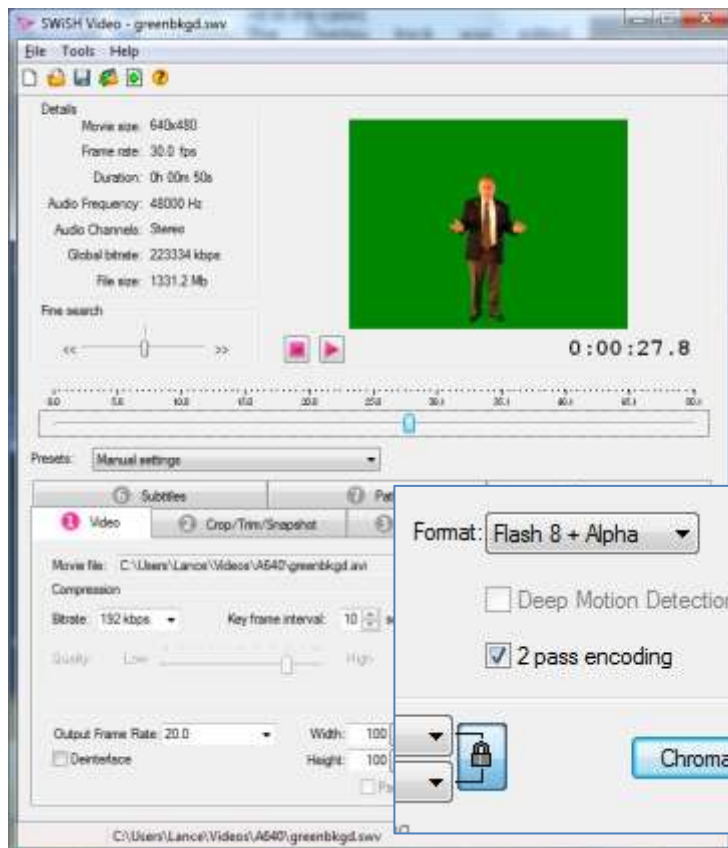
The Format option is set to Flash 8 + Alpha and the Chroma Key button is selected to select the transparent background color.
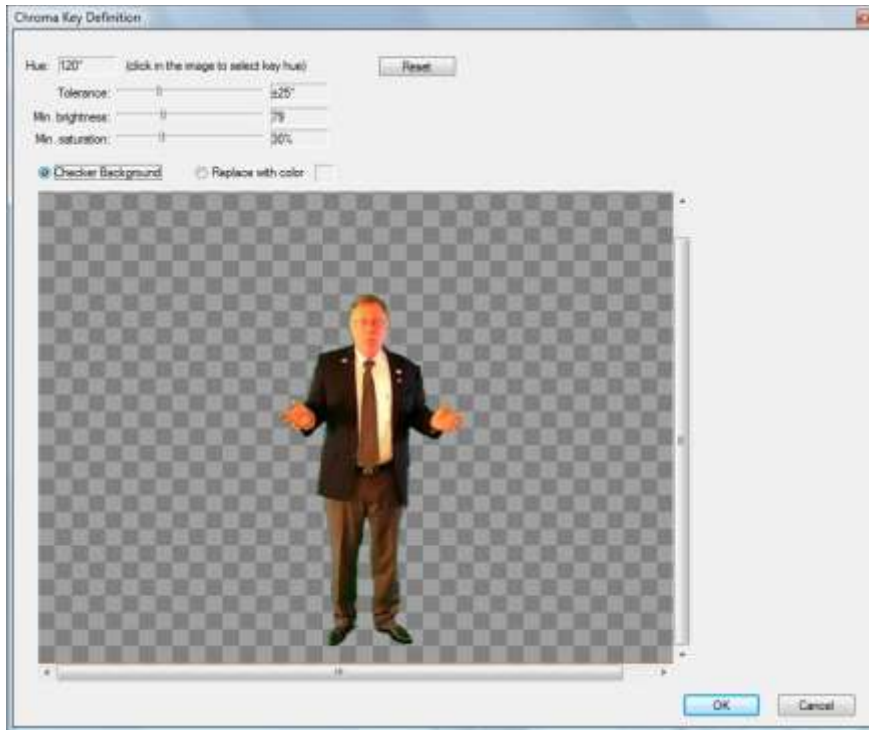
This sets the background color to transparent and now the file can be output as a Flash 8 with a transparent Alpha channel in SWF format.

After saving the SWF file, it can be called from within your webpage using code similar to this:

```
<div style = "position:relative;">
<div id="flashcontent" style="position:absolute;
width:640px;
height:480px;
z-index:1;
top: 100px;
left: 180px;
visibility:visible;">
<object id="myflash" name="myflash" classid="clsid:d27cdb6e-ae6d-11cf-96b8-444553540000"
codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=9,0,0,0" width="640" height="480"
id="mymovie" align="middle" >
<param name="allowScriptAccess" value="sameDomain" />
<param name="allowFullScreen" value="false" />
<param name="movie" value="images/greenbkgd4.swf" />
<param name="loop" value="false" />
<param name="quality" value="high" />
<param name="bgcolor" value="#000000" />
<param name="wmode" value="transparent"/>
<embed src="images/greenbkgd4.swf" loop="false" quality="high" bgcolor="#000000" width="640"
height="480" name="myflash" id="myflash" align="middle" allowScriptAccess="sameDomain"  wmode="transparent"
allowFullScreen="false" type="application/x-shockwave-flash"
pluginspage="http://www.macromedia.com/go/getflashplayer" ></embed>
</object>
</div></div>
```

Note that the wmode is set to transparent. This code was tested in IE 7 and Firefox.