

## Skills Covered

- Test a Movie
- Test Download Performance
- Publish a Flash Application
- Publish Settings
- Preview a Published Application
- Export Flash Content

**Software Skills** Use the Test Movie command in Flash to see how an animation will look to a user viewing it in a Web browser. Test download performance to identify problems with speed and flow. When everything is working properly, you're ready to publish the movie.

**Design Skills** You never really know how an animation is going to look to your site visitors until you try it yourself. Previewing isn't enough—you need to test the way the movie runs and check download times to make sure they are optimal.

**Application Skills** In this exercise, you publish the animated logo for the Tierra Verde site. You will select Flash and HTML settings, and then preview the animation in your browser.

### TERMS

**Animated GIF** A .gif-formatted file in which two or more images display in sequence, creating the appearance of animation.

**Export** To save a file or object created in one program in a format that can be used by a different program.

**Projector** A published Flash document in which a version of Flash Player is stored. The projector plays as a stand-alone video even if the user's computer does not have Flash Player installed.

**Publish** To create a Web-compatible version of a Flash document file, which can then be stored on a Web server and accessed by users on the Web.

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## NOTES

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### Test a Movie

- Before you **publish** your Flash application, it's important to test how it will look to a user on the Internet.
- Not every feature in a Flash document can be viewed on the Flash Stage. For example, you cannot play a movie clip instance.
- To view the application as it will look on the Internet, you must use the Test Movie command to export the application to a Flash Player file and display it in a Flash Player window.
- The Flash Player file has the same name as the Flash file, but the three-character file name extension changes from .fla to .swf. For example, a Flash file named Dance.fla would become Dance.swf.
- The .swf Flash Player file is stored in the same folder as the .fla Flash file.
- In the Flash Player window, the entire animation plays from the first frame to the last frame.
- By default, the application loops continuously in the Flash Player window. You can use the Control menu options to rewind, play, stop, and forward an animation in the Flash Player window.

### Test Download Performance

- To play smoothly over the Internet, each frame in a Flash application must download before the animation reaches that frame.
- If an application reaches a frame that has not yet been downloaded the movie pauses until the download is complete.
- The speed of the download depends on the data transfer rate and the amount of data stored in each frame.
- Use the Flash Bandwidth Profiler to test your animation to locate frames where pauses might occur.
- The Bandwidth Profiler displays a graphic representation of the amount of data that is sent from each frame in the movie.

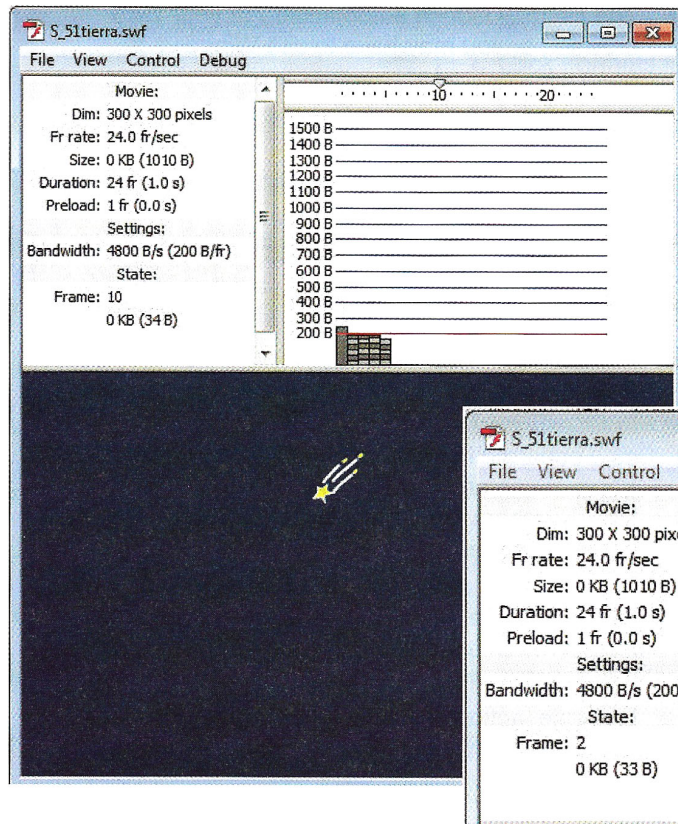
- The left pane of the profiler has three sections:
  - Movie, which includes information about the dimensions, frame rate, frame size, duration, and preloaded frames by number of seconds.
  - Settings, which has bandwidth information.
  - State, which includes information on the number of frames and loading.
- The right pane of the Profiler shows the Timeline header and a graph.
- The red horizontal line in the graph marks the point at which a frame streams in real time with the selected modem speed.
- You can view a Streaming Graph or a Frame by Frame Graph (see Figure 6-28):
  - In the Streaming Graph, frames are represented by alternating light and dark gray blocks, stacked in columns. The height of each block indicates its relative byte size.
  - In the Frame by Frame Graph, each column represents one frame; any frame extending above the red line might cause a pause in the animation.
- Change the Bandwidth Download settings to see how the animation will play at different modem speeds. For example, you may test the animation as it would play using a 56K modem, a DSL line, or a T1 line.
- If a frame is large enough to impact performance, you can try to optimize it to make it smaller so that it will load faster.
- Typical optimization methods include substituting device fonts for embedded fonts, inserting instances instead of graphics, using vector graphics instead of bitmaps, and deleting unnecessary content.

### Publish a Flash Application

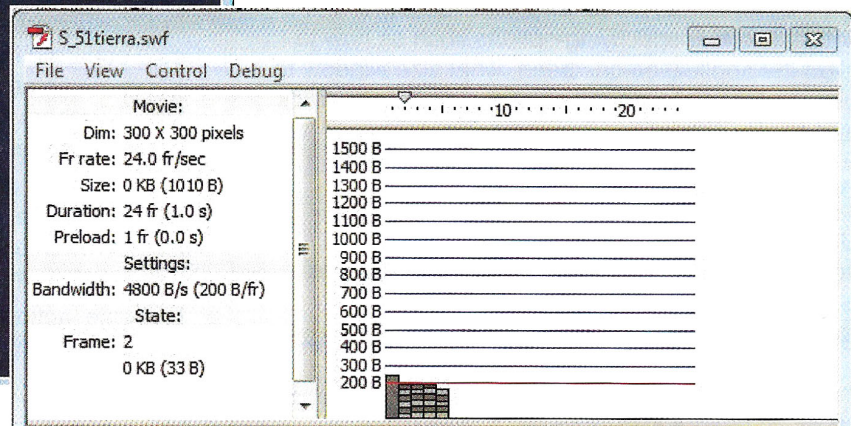
- Publish a complete Flash .fla file in Flash Player format so you—and others—can play it on the Web in the Flash Player program.
- When you publish an application, you select options in the Publish Settings dialog box and Flash generates the files required to display the animation correctly.
- By default, when you publish a file, Flash generates an .swf (Flash Player) version of the original .fla file and an HTML document that provides the instructions for inserting the Flash application in a Web browser window.



**Figure 6-28.**  
Bandwidth Profiler in Streaming Graph view



**Bandwidth Profiler in**  
Frame by Frame Graph view

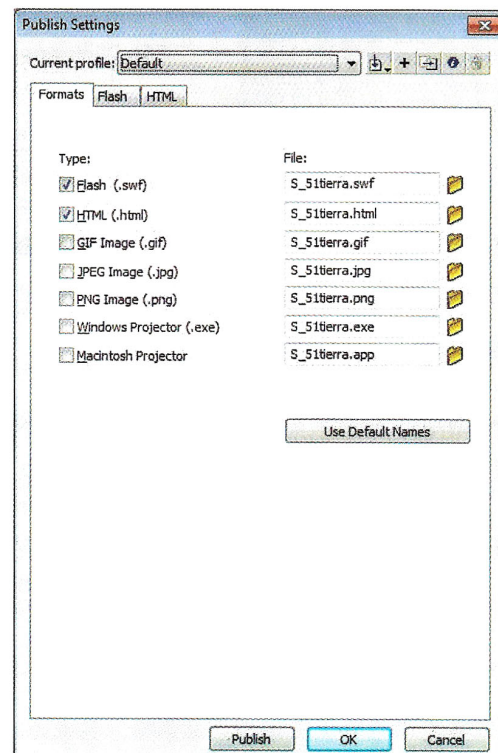


- Alternatively, you can publish the .fla file as a Flash stand-alone **projector** or in alternative file formats that display if there is no Flash Player installed on the user's computer. Available formats include .gif, .jpg, .png, and QuickTime.
- If you edit or modify a Flash file that you have published, you must publish it again in order to update the Flash Player file.

## Publish Settings

- Select publish settings in the Publish Settings dialog box (see Figure 6-29).
- Options that you select in the Publish Settings dialog box override options that are set in the application file. For example, if you select red as the background color in the Publish Settings dialog box, then red will display, even if you selected gray in the Document Properties dialog box.
- On the Formats tab in the Publish Settings dialog box you select the type of files you want to generate. By default, Flash (.swf) and HTML (.html) are selected.

**Figure 6-29. Publish Settings dialog box**



- By default, published file names are the same as the original .fla file name, with the appropriate file name extension added, and published files are stored in the same location as the original .fla file.
- You can change the default file name and select a different storage location, if desired.
- In the Publish Settings dialog box, Flash displays a tab for each selected file format so you can select options such as dimensions, color settings, and image control settings.
- On the Flash tab, set image, sound compression, debugging, and file protection options; and select to generate a text file listing the amount of data in each frame of the final Flash Player file, if desired.
- On the HTML tab, select an HTML template, and set parameters specifying options such as how to align the application onscreen, what size window to use, and the background color, as well as playback and quality options.

### Preview a Published Application

- Use the Publish Preview command to see how your published movie will look in a Web browser.
- Flash creates a file that you can open in your default Web browser.

- You can also test all interactive options, such as buttons.
- The file may launch automatically in your Web browser, or you may have to use Windows to open it.

### Export Flash Content

- **Export** the content of an entire Flash document so you can use it in another program.
- With the Export Movie command, you can save a complete Flash document file in a different movie file format, or as a sequence of still image files.
- You name the exported file and select the file format in the Export Movie dialog box.
- In an exported sequence, each frame is saved as a separate file. That means that if there are 50 frames in an animation, there will be 50 exported files. Numbers are added to the file names to indicate the sequential order.
- Some Flash features may not be supported by the export file type. For example, a movie clip may not display when exported in **animated GIF** format, but may display when exported in QuickTime format.
- Likewise, actions such as those assigned to buttons may not work in all exported file formats.

## PROCEDURES

### Test a Movie (Ctrl + Enter)

1. Open the document in Flash.
  - ✓ *If the document contains multiple scenes, be sure the Play All Scenes command is selected on the Control menu.*
2. Click **Control** ..... (Alt) + (C)
3. Click **Test Movie** ..... (T), (>), (T)
4. Click **Test**.

### Control a Movie in Flash Player

1. Open the document in Flash.
  2. Click **Control** ..... (Alt) + (C)
  3. Click **Test Movie** ..... (T), (>), (T)
- OR**
- Click **Test Scene** ..... (S)

4. Click **Control** ..... (Alt) + (C) in Flash Player window.
  5. Click one of the following:
    - **Stop** ..... (Enter)
    - **Rewind** ..... (shift) + (R)
    - **Loop**.
    - **Step Forward One Frame**.
    - **Step Backward One Frame**.
- ✓ *If the Controller toolbar is displayed in the Flash window, you can use it to control the movie in the Flash Player window.*

### Display the Bandwidth Profiler

1. Open the document in Flash.
2. Click **Control** ..... (Alt) + (C)
3. Click **Test Movie** ..... (T), (>), (T)
4. Click **View** ..... (Alt) + (V)


5. Click **Bandwidth Profiler** ..... (Ctrl) + (B)
6. Click **View** ..... (Alt) + (V)
7. Click one of the following:
  - **Streaming Graph**.
  - **Frame by Frame Graph**.

### Change Bandwidth Download Settings




1. Open the document in Flash.
2. Click **Control**.
3. Click **Test Movie**.
4. Click **View**.
5. Click **Download Settings** ..... (Ctrl) + (Enter)
6. Click desired download speed.


















## Close the Flash Player Window (Ctrl + W)

- Click **Window Close** button ..... 
- OR**
- 1. Click **File**.
- 2. Click **Close**.



## Display Publish Settings Dialog Box (Ctrl + Shift + F12)


1. Open the document in Flash.
2. Click **File** .....  + 
3. Click **Publish Settings** ..... 

## Set File Type Options

1. Display Publish Settings dialog box.
2. Click the **Formats** tab, if necessary.
3. Click to select or deselect file types:
  - **Flash (.swf)** .....  + 
  - **HTML (.html)** .....  + 
  - **GIF Image (.gif)** .....  + 
  - **JPEG Image (.jpg)** .....  + 
  - **PNG Image (.png)** .....  + 
  - **Windows Projector (.exe)** .....  + 
  - **Macintosh Projector** .....  + 
4. Replace the default file name(s) with new file name(s), if desired.
  - ✓ *You must include the correct file name extension.*
5. Click the **Select Publish Destination** icon to change storage location, if desired, then locate and select desired location and click **Save**.
  - ✓ *The default location is the same as the storage location for the original .fla file.*
6. Click **OK** to save the settings and close the dialog box ..... 

## Select Flash (.swf) Publish Settings

1. Display Publish Settings dialog box.
2. Click **Formats** tab, if necessary.
3. Click to select **Flash (.swf)**, if necessary .....  + 
4. Replace default file name(s) with new file name(s), if desired.
  - ✓ *You must include the correct file name extension.*
5. Change storage location, if desired.
  - ✓ *The default location is the same as the storage location for the original .fla file.*
6. Click the **Flash** tab.
7. Click the **Player** drop-down arrow and click the Flash Player version you want to use.
  - ✓ *The most recent version is Flash Player 10.*
8. Click **ActionScript version** drop-down arrow and click ActionScript version to use.
9. Select or deselect options to control debugging as desired:
  - **Generate size report** to create a text file listing amount of data in each frame of the published Flash Player file.
  - **Protect from import** to prevent unauthorized users from converting the .swf file back to a .fla file.
    - ✓ *You may enter a password to protect the file.*
  - **Omit trace actions** to prevent the Output panel or tab from displaying comments.

- **Permit debugging** to allow remote debugging.
  - **Compress movie** to reduce file size.
10. Adjust the **JPEG quality** slider to control bitmap compression.
    - ✓ *The lower the quality, the smaller the published file.*
  11. Click **Audio Stream Set** button to set compression, bit rate, and quality options for streaming audio.
    - ✓ *Click OK to return to Publish Settings dialog box.*
  12. Click **Audio Event Set** button to set compression bit rate and quality options for event sounds.
    - ✓ *Click OK to return to Publish Settings dialog box.*
  13. Select **Override sound settings** check box to override .fla file sound settings.
  14. Select **Export device sounds** check box to export sounds suitable for devices.
  15. Click **Local playback security** drop-down arrow and then click one of the following:
    - **Access local files only** to let the published files interact with files on the local system, but not on the network.
    - **Access network only** to let the published files interact with files on the network, but not on the local system.
  16. Click **OK** to save the settings and close the dialog box ..... 

## Select HTML (.html) Publish Settings

1. Display the Publish Settings dialog box.
2. Click the **Formats** tab, if necessary.
3. Click to select **HTML (.html)**, if necessary.....**[Alt]+[H]**
4. Replace default file name(s) with new file name(s), if desired.
5. Change storage location, if desired.
6. Click the **HTML** tab.
7. Click the **Template** drop-down arrow and then click desired template.  
*✓ Flash Only is the default.*
8. Select the **Detect Flash Version** check box to have published file automatically send user to an alternative HTML page if the installed Flash Player version does not match the version selected on the Flash tab of the Publish Settings dialog box.
9. Click the **Dimensions** drop-down arrow and then click one of the following:
  - **Match Movie**  
to use the current document size.
  - **Pixels**  
to specify width and height in pixels.
  - **Percent**  
to specify size as a percentage of browser window.

## 10. Select desired playback options:

- **Paused at start**  
to pause animation until user action such as a click.
- **Loop**  
to repeat animation continuously.
- **Display menu**  
to display shortcut menu when user right-clicks browser screen.
- **Device font**  
to substitute device fonts for embedded fonts not available on user's system.

## 11. Click **Quality** drop-down arrow, and then click desired Quality option:

- **Low**  
to set a low quality and a high processing speed.
- **Auto Low**  
to automatically increase quality if possible without slowing processing speed.
- **Auto High**  
to automatically sacrifice image quality to improve processing speed.
- **Medium**  
to set an intermediate quality and processing speed.
- **High**  
to set a high quality even if it means slowing processing speed.
- **Best**  
to display the highest possible quality without regard to processing speed.





## 12. Click **Window Mode** drop-down arrow and then click desired transparency option:

- **Window**  
to play animation in its own window on Web page.
- **Opaque Windowless**  
to display animation over HTML background, without letting the background show through.
- **Transparent Windowless**  
to display animation over HTML background, letting the background show through transparent areas of the animation.



## 13. Click **HTML alignment** drop-down arrow and then click desired option for aligning Flash Player window within browser window:

- **Default**  
to center animation in browser window.
- **Left**  
to left-align animation in browser window.
- **Right**  
to right-align animation in browser window.
- **Top**  
to align animation at top edge of browser window.
- **Bottom**  
to align animation at bottom edge of browser window.





14. Click **Scale** drop-down arrow and then click desired scale options:
- **Default (Show all)**  
to fit animation within specified dimensions without distortion.
  - **No border**  
to fit animation within specified dimensions without distortion, cropping if necessary.
  - **Exact fit**  
to fit within specified dimension with distortion.
  - **No scale**  
to prevent the animation from scaling even if the Flash Player window is resized.
15. Click **Flash alignment Horizontal** drop-down arrow and then click desired option for aligning animation horizontally in Flash Player window:
- **Left**
  - **Center**
  - **Right**
16. Click **Flash alignment Vertical** drop-down arrow and then click desired option for aligning animation vertically in Flash Player window:
- **Top**
  - **Center**
  - **Bottom**
17. Select **Show warning messages** check box to display error messages if HTML settings conflict.
18. Click **OK** to save the settings and close the dialog box ..... 
5. Click file format to preview:
- **Default (HTML)** ..... 
  - **Flash** ..... 
  - **HTML** ..... 
- ✓ *Other formats may be available, depending on the options selected in the Publish Settings dialog box.*
6. Change to your Web browser to view the application.
7. Click Web browser's **Close** button to close window when finished.

### Preview a Flash Application in a Web Browser

1. Open your browser.
2. Open the document in Flash.
3. Click **File** ..... 
4. Click **Publish Preview** ..... 

### Publish an Application Using Current Publish Settings (Shift + F12)

1. Open the document in Flash.
2. Click **File** ..... 
3. Click **Publish** ..... 

## EXERCISE DIRECTIONS


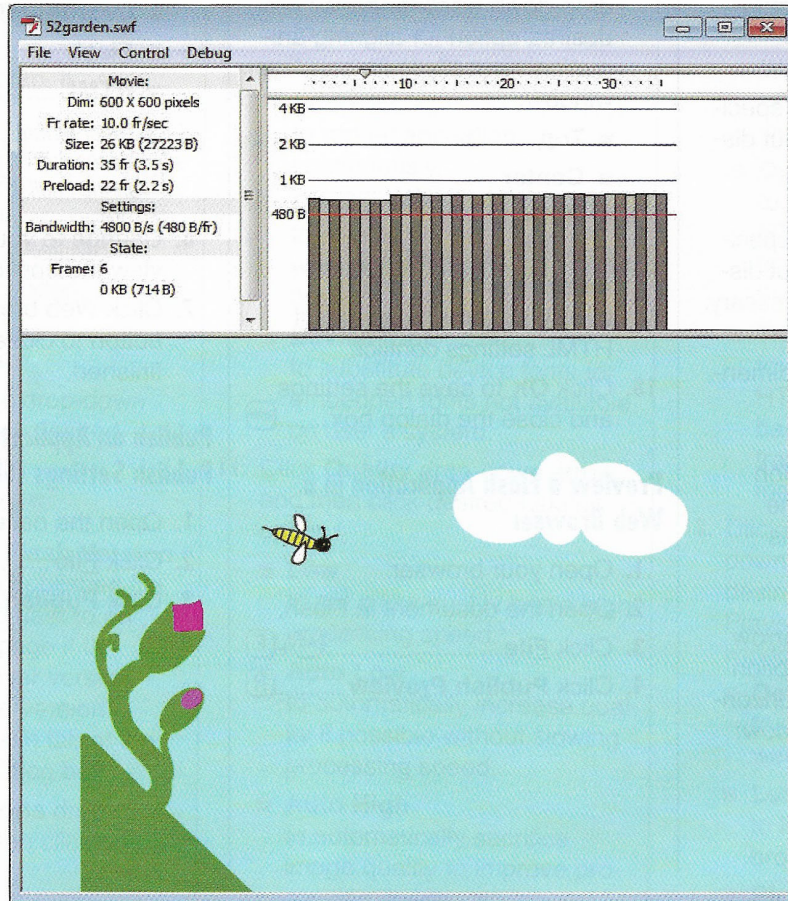
1. Start Flash and open  [S\\_52garden fla.](#)
2. Choose Test Movie from the Control menu and click Test to play the animation in the Flash Player window.
3. Remain in the Flash Player window. Disable the Loop command on the Control menu to stop the animation from playing over and over.
4. Rewind and play the animation.
5. Close the Bandwidth Profiler.
6. Change the Download Settings to DSL to see how a faster download speed affects performance.
7. Rewind and play the animation again.
8. Change the Download Settings back to 56K.
9. Redisplay the Bandwidth Profiler. Change the display to Frame by Frame Graph. It should look similar to Illustration A, shown on the next page.
10. Close the Flash Player window and save your file as [Lastname,firstinitial\\_52 garden](#)
11. Display the Publish Settings dialog box and review the settings in each tab.
12. Click Publish to publish the movie.
13. Close the file, saving all changes, and exit Flash.



Illustration A



## ON YOUR OWN

1. Start Flash and the animation you created in Exercise 51's On Your Own exercise.  
*✓ If you don't have the previous animation, you can use [SO\\_52myfile](#).*
2. Test the movie and view it in the Flash Player.
3. Display the Bandwidth Profiler and test different views.
4. Change the download settings to view it at different speeds.
5. Close the Flash Player window.
6. Slow the video by reducing the Frame rate.
7. Save the file as **SO\_52myfile\_xx**.
8. Choose the File > Publish Settings command and select the options appropriate to your use.
9. Close the file, saving all changes, and exit Flash.

### NOTE

In the next exercise, you return to Dreamweaver to add your Flash movie to a Web page.