

Toon Boom Studio Importer: Tour and Tutorial



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Publication Date

January 17, 2002

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Toon Boom Studio Importer: Tour and Tutorial

Toon Boom Studio™ revolutionizes 2D animation production for the Web. With advanced drawing, painting, and lip syncing tools, as well as ground-breaking 3D Sceneplanning, **Toon Boom Studio™** combines the best of traditional animation with innovative tools that will unleash your creative potential!

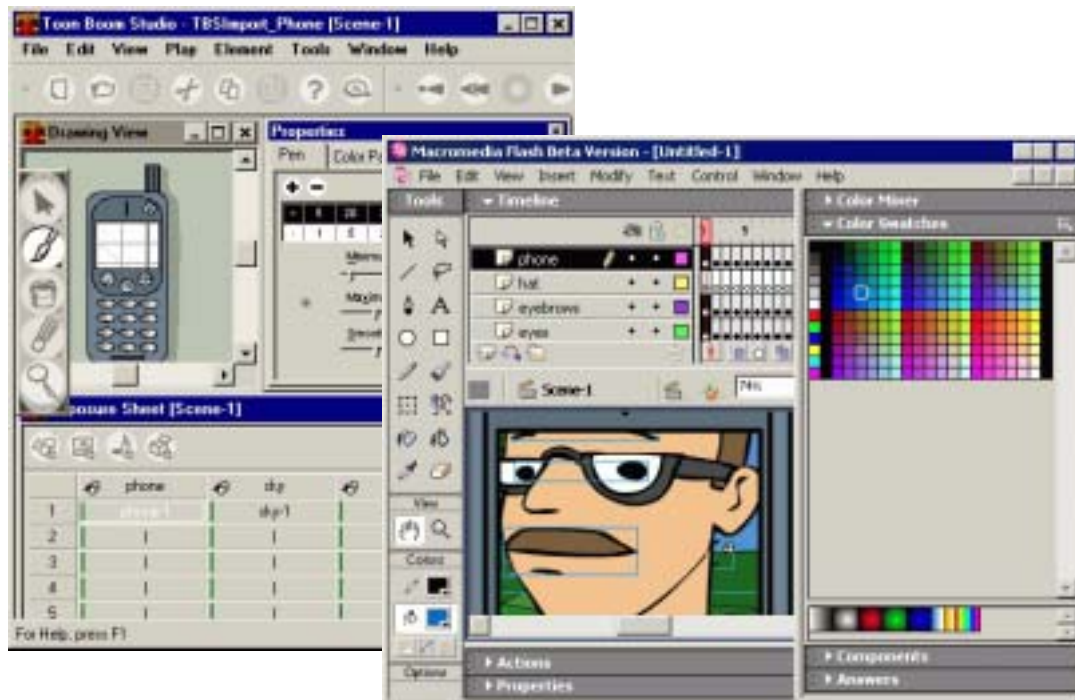
Put **Toon Boom Studio™** in your animation toolbox and create fresh, animated, vector content for the Web, while respecting the need for modest-sized files. Together with **Macromedia® Flash MX**, you'll be equipped with a complete production platform for the creation of interactive entertainment for the Web.

This document will guide you through the process of using the **Toon Boom Studio™ Importer** to import **Toon Boom Studio™** animation content into **Macromedia® Flash MX**, where you can add the interactivity that will WOW your audience of Web viewers.

Improved Workflow with the Toon Boom Studio Importer

The **Toon Boom Studio™ Importer** for Macromedia® Flash MX is a plug-in that will let you load **Toon Boom Studio™** projects directly into Macromedia® Flash MX.

This **Importer** uses unique technology to improve the communication between **Toon Boom Studio™** and Macromedia® Flash MX, resulting in a streamlined workflow for adding interactivity to animations created in **Toon Boom Studio™**.



The **Importer** gives you full-control of the import process.

- Select the scenes, elements (layers) and frames, you want to import.
- Decide how you want to import sound. You can choose to have **Toon Boom Studio™** fit sounds to your animation to ensure synchronization with the animation in the Macromedia® Flash MX movie, or you can choose not to import sounds at all.
- Preserve the layers in your animation, or collapse your layers into one to keep the effect of elements changing relative front-back position (multiplaning).
- Add the entire **Toon Boom Studio™** movie to the current scene, or create new scenes for each **Toon Boom Studio™** scene.

In addition to providing you expert control, the **Importer** also logically organizes your content in Macromedia® Flash MX.

- Element names are preserved as they are transformed into Macromedia® Flash MX layers.
- All of your animation content - sounds, bitmaps and drawings - is organized automatically in your symbol library so that you can make the most of your content.
- Sounds are placed in their own layer.

Tour and Tutorial

We've put together a **Toon Boom Studio™** project and Macromedia® Flash MX movie project to:

- Show you how to use the **Toon Boom Studio™ Importer**.
- Demonstrate all of the great creative opportunities now possible because of the new, close relationship between these two web animation power houses!

You'll need two files to follow the tour and tutorial.

- TBSImport_Phone.tbp: this is the project you will use to tour the features of **Toon Boom Studio™**. You will also import this file into Macromedia® Flash MX to learn how to use the **Importer**.
- TBSImport_Phone.fla: this is a Macromedia® Flash MX project that we constructed by importing **Toon Boom Studio™** content and programming **ActionScript** behaviors. You can take a look at this file to see what you can do in Macromedia® Flash MX with content imported from **Toon Boom Studio™**.

These two files are in the TBSImporter_Samples folder, which is compressed in the TBSImporter_Samples.zip file. To uncompress this file, you'll need **WinZip®**, which is available at: <http://www.winzip.com/>

These are also two Macromedia® Flash MX movies in the TBSImporter_Samples folder, saved in Macromedia® Flash version 5 and Macromedia® Flash MX format.

That's it! You're ready to go! Turn the page...

Take the Toon Boom Studio Tour

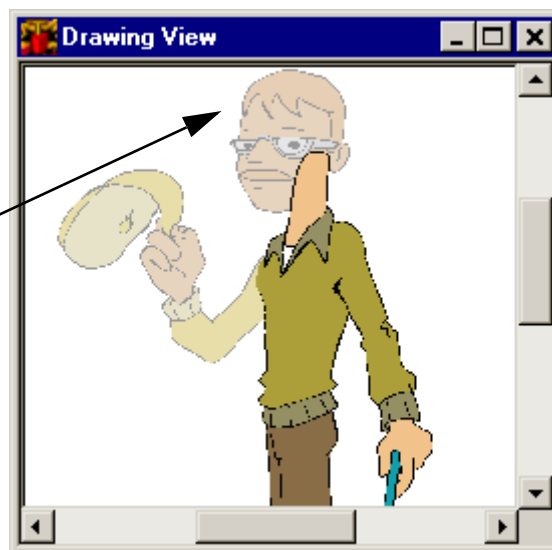
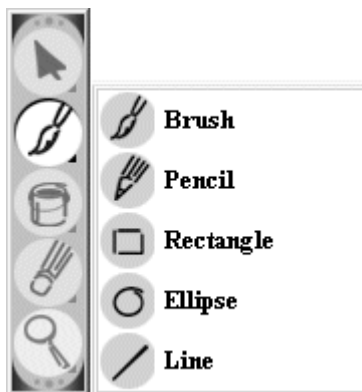
Our first step in this world wide animation tour is **Toon Boom Studio™** where we will take a look at the animation project we have built for you.

This animation project contains a whole bunch of goodies, specially designed with the animation tools in **Toon Boom Studio™**. Let's open her up and take a look inside.

1. Open the TBSImport_Phone.tbp animation set.
 - Select **File > Open**.
 - Browse your file system for the location of the animation project we provided you in the TBSImporter_Samples folder. All of the windows open in **Drawing** mode, your work space for developing and organizing the content of your animations.

The **Drawing View** window is your workspace for creating vector content. It provides a number of digital animation features, including **onion skin**, and **Auto** and **Static Light Table**, which allow you to see through layers as you draw.

The face, arm and hat of this character look paler than his body because they are on other layers. The **Auto Light Table** allows you to see all of the images in the same frame.



The **Tools Palette** stores all of the most important tools you will need to create and edit your vector content. You can also conveniently activate these tools with configurable keyboard shortcuts.

2. Open the **Scene Manager** window. Select **Window > Scene Manager** if it is not already open. Use the **Scene Manager** to organize your movie into scenes.

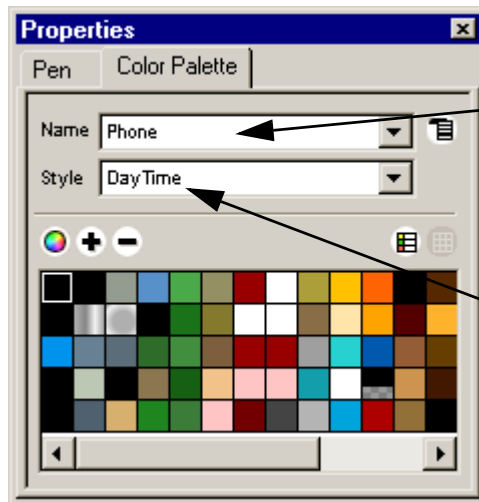
This sample movie includes four scenes, which you can view from either **Drawing** or **Sceneplanning** mode.



Double-click a scene name to open it and explore its contents.

*You can hide a scene from your movie by de-selecting its **Show/Hide** button.*

3. Open the Doggie scene and click the **Color Palette** tab in the **Properties** window.
 - Select **NightTime** from the **Style** drop-menu. Notice how the color of the doggie changes, becoming darker for a nighttime scene. You can create different palette effects in palette styles and apply the effects automatically to drawings that use the colors in the palette.
 - Select the **DayTime** palette style from the **Style** drop-menu to return the doggie to his daytime colors.



*The **Color Palette** tab organizes all of the colors for your production.*

*You can create different **palettes** for each element, which can help you organize a complex scene with lots of different animated characters.*



*You can create different **palette styles** for each palette.*

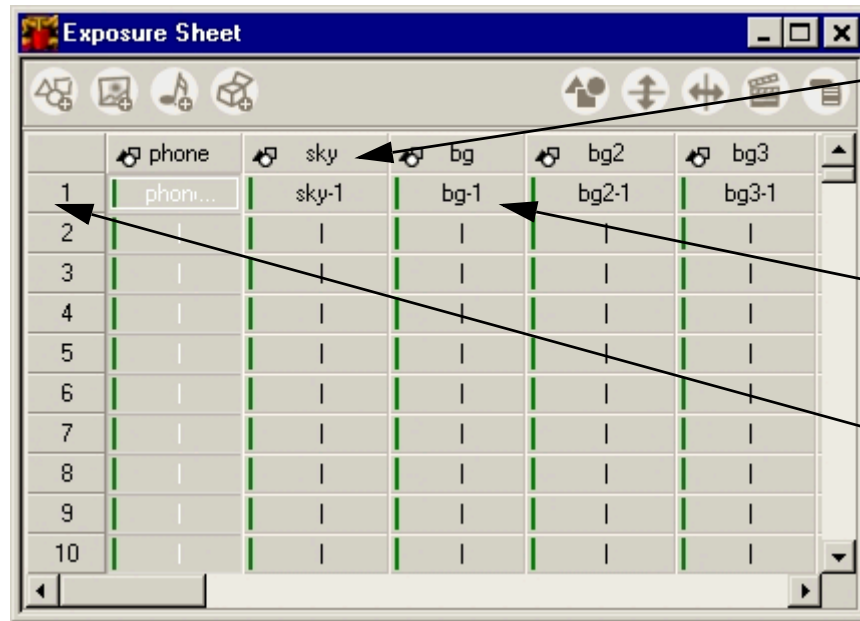
*When you change **palette styles**, the colors in the drawings that use the color swatches in that palette change to reflect the properties of the active style.*



4. Open the Guy scene again, and open and study the **Exposure Sheet** window.

The **Exposure Sheet** window organizes all of the media in your animation. It is your asset library for the bitmaps, sounds, vector images, and movies, you import into **Toon Boom Studio™**.


Toon Boom Studio™ provides a number of ways for you to get content into your movie, including the ability to import and vectorize bitmap images that you scan. This particular feature enables you to use drawings you created with traditional pen and paper techniques in your **Toon Boom Studio™** animated movies.

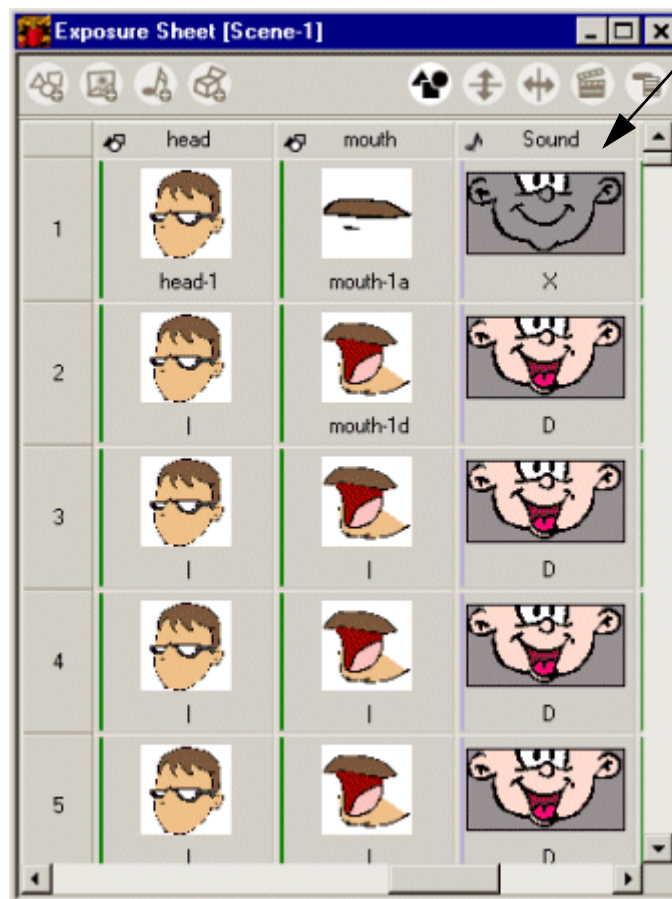


In the **Exposure Sheet**, columns store the content of a unique animation element, such as the body of a character or background bitmap images.

Each new drawing or image in an animation element is stored in a new cell.

Rows span entire elements, representing the visual content of your movie at a specific frame.

5. In the **Exposure Sheet** window, scroll to the Sound element and click the **Toggle Thumbnails**  button so that you see thumbnails of your content in the **Exposure Sheet**.



See the lip chart? This was automatically generated by **Toon Boom Studio™**.

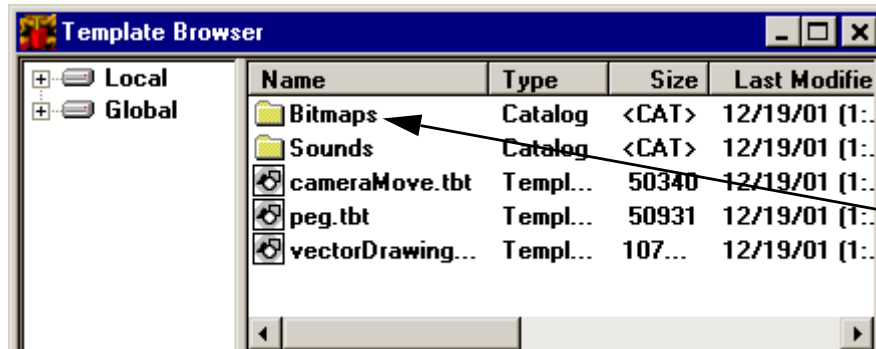
- **Toon Boom Studio™** analyzes voice tracks and generates lip charts automatically for you!
- You can use the lip chart as a reference while you draw the lips of your characters as they speak. Automatic lip sync analysis saves you tons of time when working out the lip sync for your characters.

6. Open the **Template Browser** window. Select **Window > Template Browser** if it is not already open.

The **Template Browser** stores reusable content.


- Content you can share within the current animation is stored in the Local folder.
- Content you can share with any animation project is stored in the Global folder.

You can copy or link templates into your animation. When you link templates, you keep the file size of your Macromedia® Flash MX movie small because only one file is copied into the final SWF.



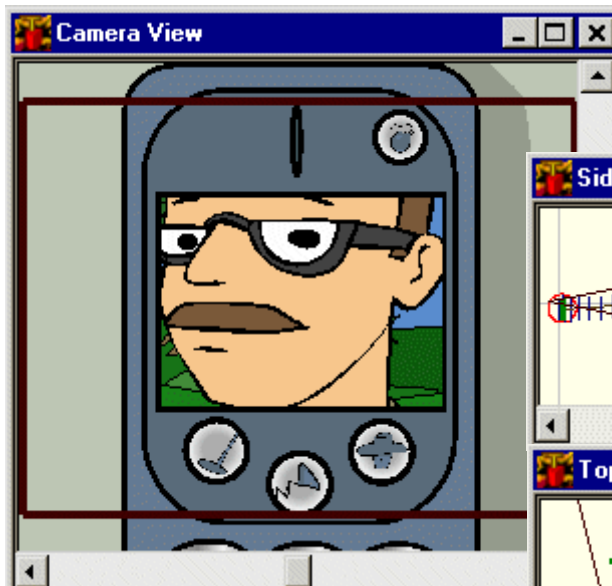
You can build templates from vector drawings or from just about any media you import.

You can also add catalogs to track and organize reusable templates.

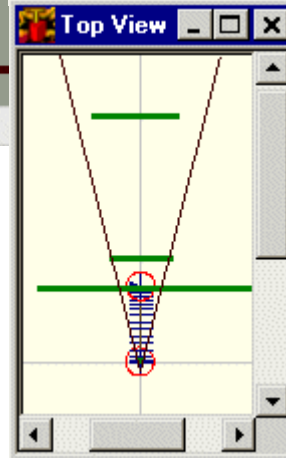
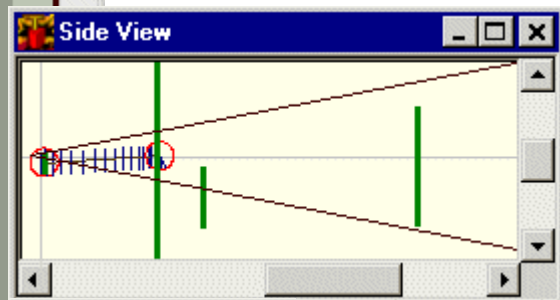
7. Switch to **Sceneplanning**  mode. Look at the **Camera View**, **Top View** and **Side View** windows. Notice the camera framing and the motion path that the camera follows through 3D space.

Sceneplanning mode is an important innovation in 2D animation. It gives animators the ability to lay out 2-dimensional objects in a 3D space (x, y AND z!). In the 3D space you can also use pegs to move, rotate, and scale elements, as well as create various camera effects!

Think of **Sceneplanning** mode as a 3D stage where the elements are actors that you move on the stage, changing the perspective that your audience has of your scene. **Toon Boom Studio™** automatically calculates (interpolates) changes for you, which speeds your production time enormously!



The **Camera View** window shows you how your scene looks from the eye of the camera. The frame in this window represents the view of the camera.



In the **Side View** and **Top View** windows, elements are identified as lines and the camera is indicated by the cone shape lines.

- The **Side View** window shows you how your scene elements look from the side.
- The **Top View** window shows your scene elements as they appear from the top looking down.

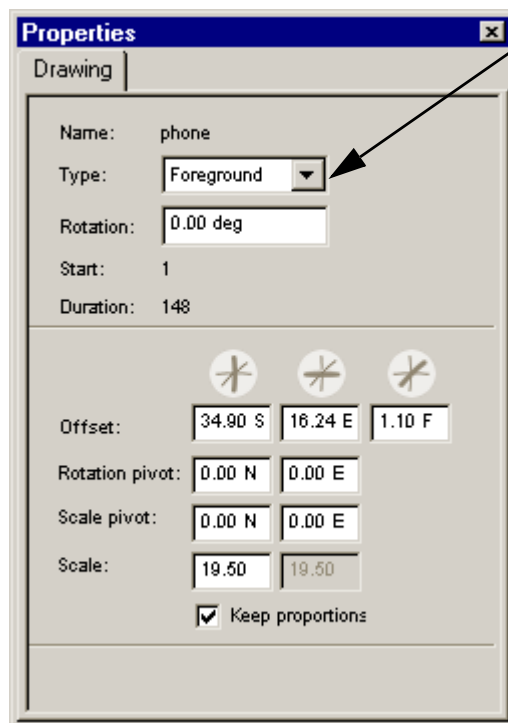
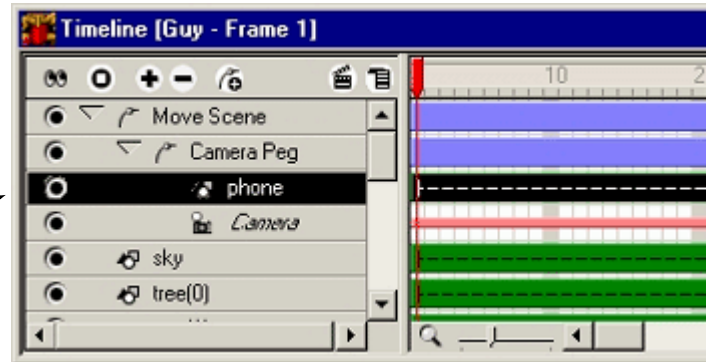
We have zoomed and panned these windows to create what you see here in these pictures.

- To zoom-out, press [Z], the default keyboard shortcut.
- To pan, press the [Spacebar] and use the hand to change your view of the window.

8. In the **Timeline** window, select the Phone element. You'll notice that the information in the **Properties** window changes.

*In **Sceneplanning** mode, the **Timeline** window helps with the organization of your animation, allowing you to track the timing of your elements as well as group elements together.*

In this scene, the phone and camera are attached to a peg, which moves them through the scene.



*The **Properties** window displays information about the element you select.*

*We set the phone element as a **Foreground** element type so that no matter what changes occur to the layering order of elements in **Sceneplanning** mode, the phone will always appear on top.*

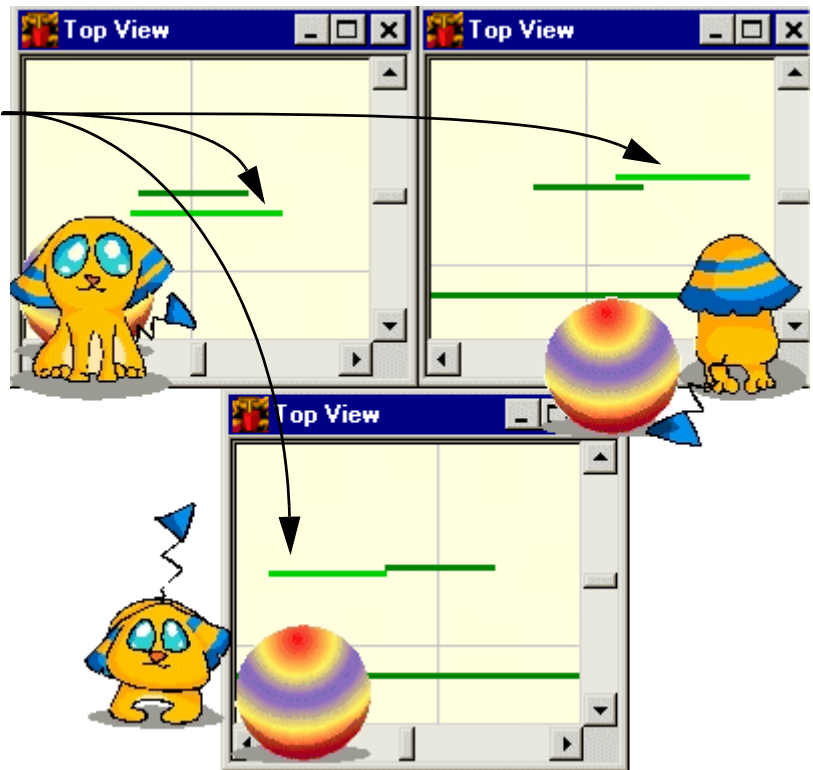
9. Switch to the Doggie scene and press **Play** on the **Interactive Playback** toolbar. Watch the dog as he runs around the ball, moving in front of and behind the ball. **Interactive Playback** allows you to perform quick checks of the action in your scene as you work on it. **Interactive Playback** is not a real-time check, which you will see in the next step.

We created a motion path with the Dog Peg element that moves the dog around the ball. Not only will **Toon Boom Studio**™ reorder the objects as they change relative position, but it will also automatically calculate and resize (interpolate) the dog based on his relative position to the camera in **Sceneplanning** mode.

Pegs and the 3D stage in **Sceneplanning** mode really save a lot of time when it comes to mapping your character movements.

See how the element line of the dog moves around the element line of the ball.

Look at that doggie go!



10. Preview the animation in real-time. Check-out the multiplane camera move and the multiplane motion of the dog!
 - Select **Play > Play Movie**. After your movie is rendered, it appears in the **Playback** window. The **Play Movie** and **Play Scene** commands play back your animation in real-time so that you can check the timing of your animation as it will play in its final form.



- 11.** Now you are ready to export your animation. You can export in Macromedia® Flash MX format to keep the file size of your animation small for output to the web. Or, you can output in QuickTime® format to control the aspect ratio and resolution of your animation.

You'll export your animation in Macromedia® Flash MX format in these steps.

- Select **File > Export > Macromedia Flash Movie**. The **Save As** dialog box opens.
- Select a name and location for your Macromedia® Flash MX movie and click **Save**. The **Export as a Macromedia Flash movie** dialog box opens.
- Select **Full Movie**, **Launch player after export**, leave the **JPEG quality** setting as it is, and click **OK**. A progress dialog box opens during the rendering process. When the render is complete, a window opens and your movie is played.

After the camera trucks out on the golfing guy, there are three more scenes that follow. In Macromedia® Flash MX you can add interactive controls to the buttons on the cell phone so that when users click the buttons, they will see the other scenes in the movie.

That's it for the **Toon Boom Studio™** tour. Turn the page to follow the **Toon Boom Studio™ Importer** tutorial.

Toon Boom Studio Importer Tutorial

Now that you've seen all of the neat stuff we've done with the animator-friendly tools in **Toon Boom Studio™**, you are ready to import the animation project into Macromedia® Flash MX to add interactivity.

You will import the whole movie into Macromedia® Flash MX, but you are going to do it in two steps.

- First you are going to import the first three scenes of the movie using the **Preserve Layers** option. This option converts **Toon Boom Studio™** elements into separate layers. This maintains the organization of your project, but loses changes to the composition order of objects when they change relative front-back position.
- Then, you are going to import the last scene using the **Preserve Composition Order** options. This option merges all of the layers of a scene to one, but maintains changes to the relative position of objects that move from front to back.

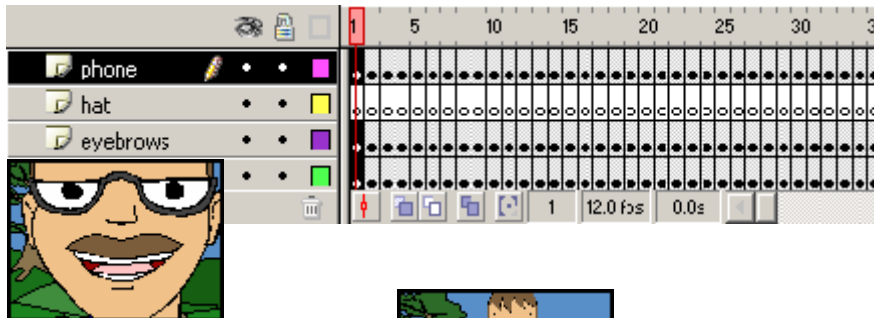
We'll explain the power of both of these options, and the reason you would choose one over the other, in the following two sections.

Importing Using the Preserve Layers Option

The **Preserve Layers** option converts **Toon Boom Studio™** elements into layers in the Macromedia® Flash MX Timeline, preserving the name and layering order of your animation. However, this option does not preserve composition order of objects that cross in front of each other as they change relative positions in depth.

So why would you choose this option?

- If your scene contains only camera effects, such as zooms, pans and trucks, you can use this option and still preserve your camera effects.
Characters in the camera frame will appear to grow, shrink, or fly by, and your elements will be logically ordered in the Timeline.



In the first scene, the camera zooms out on the golfing guy.



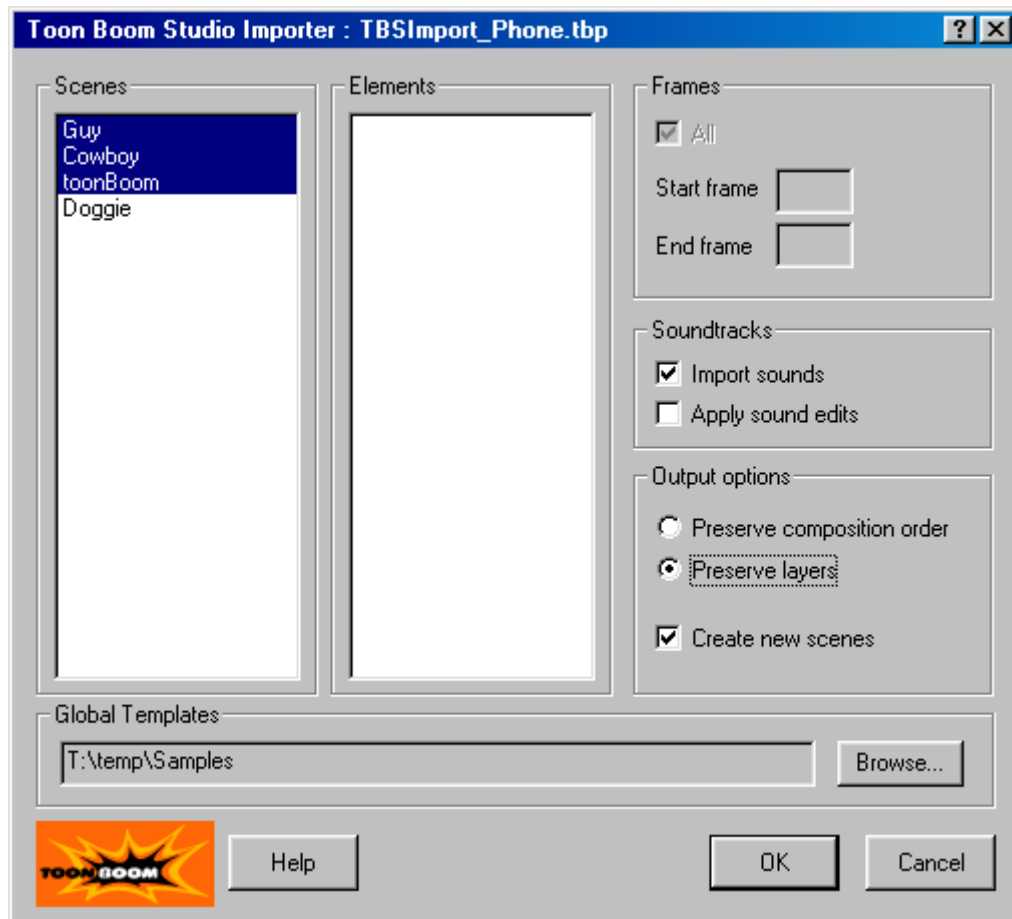
This camera effect is preserved when you import using the Preserve Layers option because no objects change their relative front/back position.



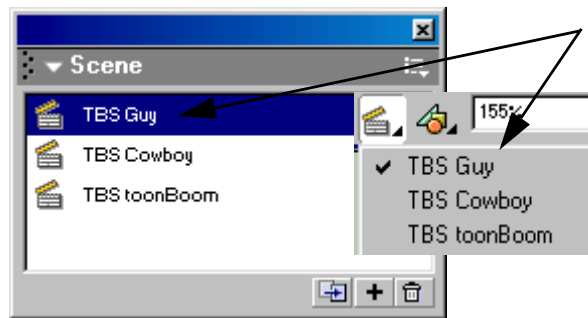
In the tutorial movie, there are four scenes, three of which have camera moves only. In this section, you will import these scenes using the **Preserve Layers** option to see what happens.

To import a **Toon Boom Studio™** project using the **Preserve Layers** option, follow these steps:

1. Start Macromedia® Flash MX. A new project is created automatically.
2. Select **File > Import**. The **Import** dialog box appears.
3. From the **Files of Type** drop-list, select **Toon Boom Studio**. **Toon Boom Studio™** animation sets have the extension **.TBP**.
4. Select the **TBSImport_Phone.tbp** animation set from the **TBSImport_Samples** folder and click **Open**. The **Toon Boom Studio Importer** dialog box opens.



5. Select the first three scenes (Guy, Cowboy and toonBoom). **Toon Boom Studio™** imports all elements and frames when you select multiple scenes.
6. Select **Import sounds**. When you select the **Apply sound edits** option, the **Toon Boom Studio™ Importer** modifies the sound files to include the effects (like fade envelopes and start/stop time) you create in **Toon Boom Studio™**. In this case, we did not modify the sounds, so you don't have to select this option.
7. Select **Preserve layers**. We have a camera move in the sample scene, no scene elements change relative position order, so **Preserve composition order** is the best option.
8. Select **Create new scenes** in the **Output Options** panel. This option adds the scenes you import after the current scene. If you do not select this option, the **Importer** will add all of the content you import into the current scene.
9. Click **OK** when you are done. A progress dialog box opens as the **Toon Boom Studio™** importer begins working to transform your animation set content.
10. When the import is done, open the imported scenes.



The **Toon Boom Studio™** importer adds your animation set after the current scene. To see the **Toon Boom Studio™** content you have imported, you must open the appropriate scene.



The **Importer** adds the three scenes after the first scene in the movie. You must delete this scene, otherwise you will have a blank scene in your move.

11. Take a look at the **Timeline** and **Library** to see how your movie was imported.



Notice the **Symbol Library**. All of the unique content in your **Toon Boom Studio™** animation has been stored in the **Symbol Library**. You can easily access these library items now, and reuse them to keep the file size of your movie small.

Notice how all of your elements have been transformed into Macromedia® Flash MX layers, keeping their name in the process. The camera move has been recreated in Macromedia® Flash MX by changing the relative size of objects on their layers.

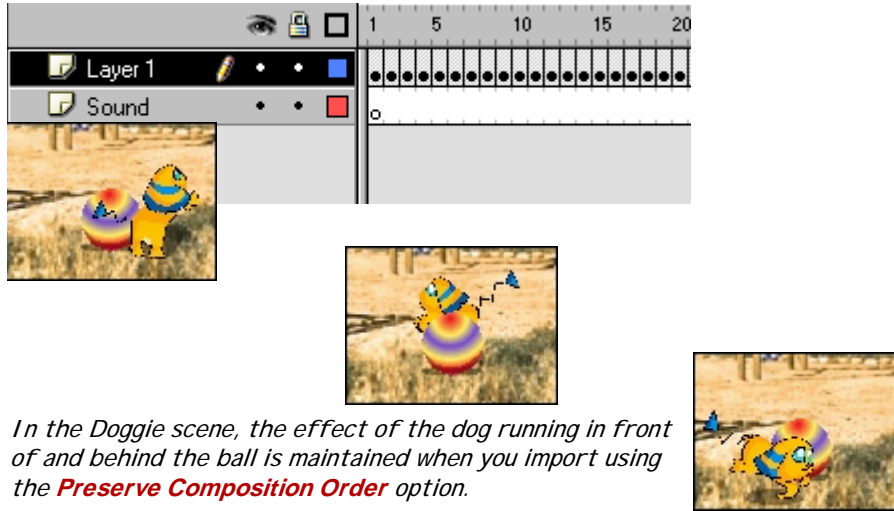
That's it for this part of the tutorial. The next step is to import the last scene into your movie. See "Importing Using the Preserve Composition Order Option" on page 22.

Importing Using the Preserve Composition Order Option

The **Preserve Composition Order** option merges all of your animation elements into one layer, maintaining changes to objects that change relative front-back position.

Because the **Importer** merges element into one layer with this option, it is a little more difficult to organize and track elements. So why would you choose this option?

- If you have finished building all of your animation elements and your scene contains multiplane effects, then use this option. If all you are doing in Macromedia® Flash MX is adding buttons and scripting effects, you can easily create new layers for those in the movie.



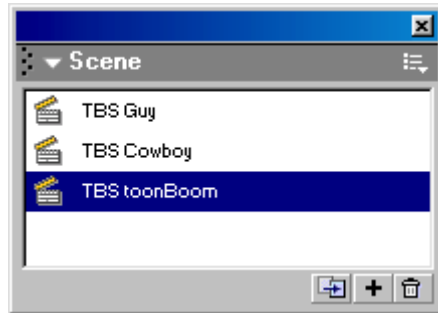
*In the Doggie scene, the effect of the dog running in front of and behind the ball is maintained when you import using the **Preserve Composition Order** option.*

In the Doggie scene, the dog runs around the ball, changing relative front-back position with the ball each time he circles it.

In this section, you will import these scenes using the **Preserve Composition Order** option and see how your multiplane effect is preserved.

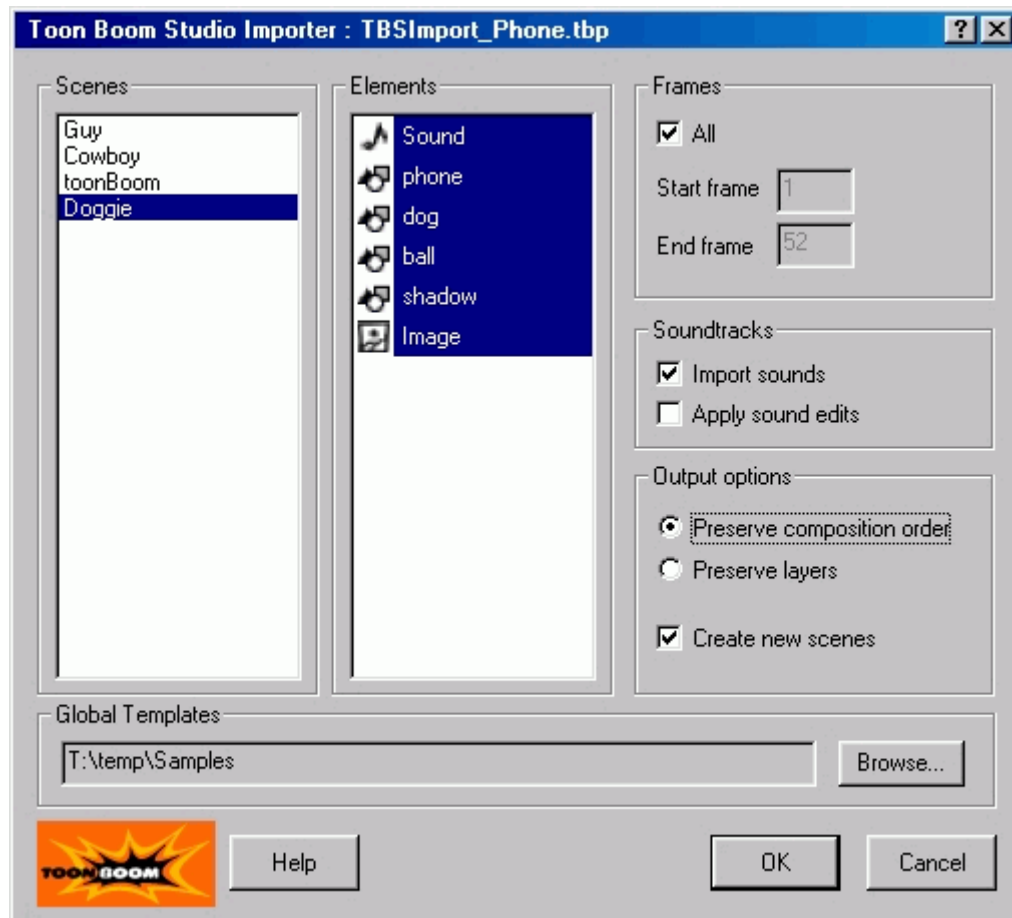
To import a **Toon Boom Studio™** project using the **Preserve Composition Order** option, follow these steps:

1. Make the TBS toonBoom scene active. The **Importer** will add the new scene after the active scene.

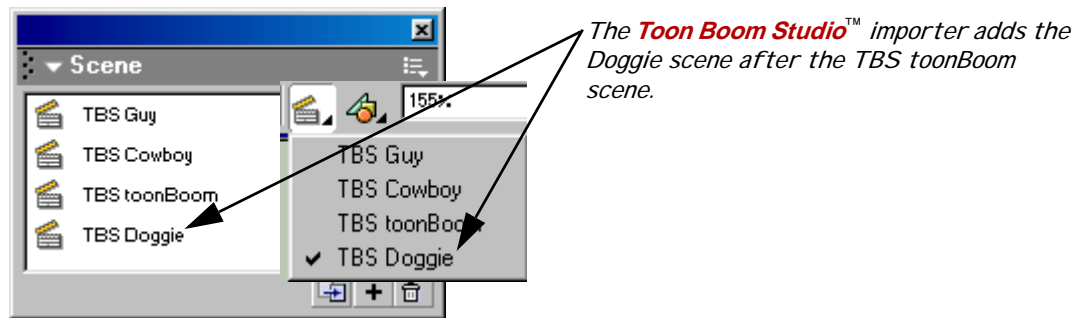


2. Select **File > Import**. The **Import** dialog box appears.
3. From the **Files of Type** drop-list, select **Toon Boom Studio**. **Toon Boom Studio™** animation sets have the extension **.TBP**.

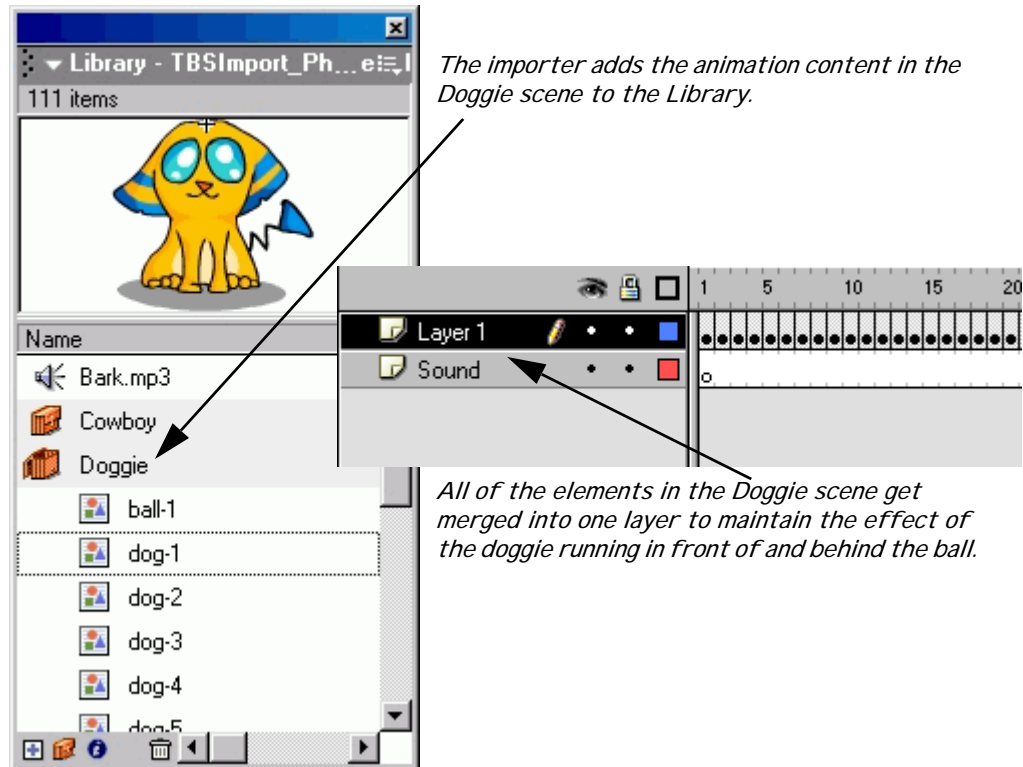
4. Select the TBSImport_Phone.tbp animation set from the TBSImport_Samples folder and click **Open**. The **Toon Boom Studio Importer** dialog box opens.



5. Select the last scene (Doggie), and all elements and frames.
6. Select **Import sounds**. The doggie barks, but we didn't modify the barking sound in **Toon Boom Studio™**, so you don't have to select the **Apply sound edits** option.
7. Select **Preserve Composition Order**. We want to preserve the effect of the dog running around the ball.
8. Select **Create new scenes** in the **Output Options** panel.
9. Click **OK** when you are done. A progress dialog box opens as the **Toon Boom Studio™** importer begins working to transform your animation set content.
10. When the import process is finished, open the Doggie scene.



11. Take a look at the **Timeline** and **Library** to see what happened to the scene.



12. Press [Enter] and playback the Doggie scene to see how he runs around that ball!

With your content now in Macromedia® Flash MX, you can add scripting to create an interactive, animation environment for your viewers.

Check-out “Adding Interactivity in Macromedia® Flash™ MX” on page 27 to see how you can use scripting to add interactivity to your Macromedia® Flash MX movie.

Adding Interactivity in Macromedia® Flash™ MX

So now that you've seen how the **Toon Boom Studio™ Importer** for Macromedia® Flash MX can improve the workflow, we are going to show you a Macromedia® Flash MX project. In this project, we took content we developed in **Toon Boom Studio™** and added interactivity.

1. In Macromedia® Flash MX, open TBSImport_Phone.fla from the TBSImport_Samples folder.
2. Open the **Scene** window.
3. Navigate through the different scenes in the movie.
 - You'll notice that there is a Stop action on the last frame of every scene. This is the script we used:


```
stop();
```
 - You'll also notice that there are actions linked to the cell phone buttons that will take users to the other scenes in the movie when they are clicked. This is the script we used:


```
on (release) {
  gotoAndPlay ( "[sceneName]", [frameNumber] );
}
```
4. Export the movie. Watch! Interact! Enjoy! Witness how we were able to construct an interesting animation using the unique features of both **Toon Boom Studio™** and Macromedia® Flash MX.

Here are some other ideas for what you can do with content developed in **Toon Boom Studio™**:

- Add interactive buttons that launch camera moves that zoom in and out on characters.
- Add interactive buttons that launch a character into a long-winded speech, which you can lip sync with ease in **Toon Boom Studio™**.
- Create multiplane scenes in **Toon Boom Studio™** that are accessible only through programmed interaction.

You can even create your own “choose your own adventure” story that moves players through a world of multiplane effects, like riding in planes, trains and bicycles!

The possibilities are endless now that the technology is in place for improved communication between **Toon Boom Studio™** and Macromedia® Flash MX. **Toon Boom Studio™** and Macromedia® Flash MX - the perfect couple!

Additional Information and Resources

Getting the Importer and Importer Updates

The **Toon Boom Studio™ Importer** is provided with Macromedia® Flash MX. We will also make updates of the **Importer** available on our website.

Be sure to visit <http://www.toonboomstudio.com/flashmx> for product updates, as well as product information.

Getting Toon Boom Studio

You must have **Toon Boom Studio™** installed on your computer to take the **Toon Boom Studio™** tour and of course, to create your own **Toon Boom Studio™** toons.

An evaluation of **Toon Boom Studio™** is distributed with Macromedia® Flash MX. You can also get the latest evaluation version for free from the **Toon Boom Studio™** website.

Getting your free evaluation copy of **Toon Boom Studio™** is as easy as pie. Just follow these steps:

1. You must first become a member of the **Toon Boom Studio™** website.
Go to <http://www.toonboomstudio.com/members/> and sign-up.

Remember the email address and password you use to become a member. You will be asked for both when you log-in to the website.

2. After you are a member, go to the **Store** (<http://www.toonboomstudio.com/store>) and follow the links to download the evaluation copy.

That's it! You are ready to install and run the **Toon Boom Studio™** tour!

Toon Boom Studio Documentation

Need more detailed information about **Toon Boom Studio™**, how it works and its features?

Toon Boom Studio™ comes equipped with *Online Help*, which can help you answer questions quickly. Just press [F1] and the fully-indexed and searchable *Online Help* will open in your default web browser.

For more detailed explanations of procedures and concepts, and illustrated examples, you may also refer to the *User Guide*, which is also available as a PDF, downloadable from our website:

<http://www.toonboomstudio.com>. Those of you who purchase the box version get a printed version of the manual, one that you can read on the subway or train to work, or while resting at home on the weekends.

There are also tutorials available from our website at:

<http://www.toonboomstudio.com/tutorials/>

