



User Guide

# Legal Notices

## Published by Toon Boom Animation Inc.

### **Corporate Headquarters**

7 Laurier Avenue East  
Montreal, Quebec  
Canada H2T 1E4  
Tel: (514) 278-8666  
Fax: (514) 278-2666  
toonboom.com

## Disclaimer

The content of this manual is covered by a specific limited warranty and exclusions and limit of liability under the applicable License Agreement as supplemented by the special terms and conditions for Adobe® Flash® File Format (SWF). Please refer to the License Agreement and to those special terms and conditions for details.

The content of this manual is the property of Toon Boom Animation Inc. and is copyrighted. Any reproduction in whole or in part is strictly prohibited.

For additional copies of this manual, please contact Toon Boom Animation Inc. at the Corporate Headquarters address.

Copyright © 2007 by Toon Boom Animation Inc. All rights reserved.

## Trademarks

Toon Boom Storyboard is a trademark owned by Toon Boom Animation Inc. All other trademarks are the property of their respective owners.

## Credits

Documentation Development: Peter Cawthorne

Content Development and Art: Lindsay Brown, Tania Gray

## Publication Date

March 2007

# Contents

Introducing Toon Boom Storyboard .....	7
What Is Storyboard? .....	7
Why You Should Use Storyboard .....	8
Methods of Reducing Production Cycle Times .....	8
Methods of Reducing Storyboard Cycle Times .....	8
Toon Boom Storyboard Animatic Feature .....	9
Chapter 1: How To Prepare For Storyboarding .....	11
First Steps .....	11
The Script .....	11
The Structure .....	12
The Delivery .....	12
Storyboard Basics .....	12
Script Analysis and Breakdown .....	12
Shot Evaluation .....	13
Shot List Creation .....	14
Chapter 2: How To Use Storyboard .....	15
Launching The Program .....	15
Starting Your Storyboard Project .....	17
Creating A New Storyboard .....	17
Creating a new storyboard from the Welcome screen .....	18
Other ways of creating a new storyboard .....	19
Opening An Existing Storyboard .....	20
Opening a Recently Used Storyboard .....	21
The Storyboard Window .....	22
Drawing in a Panel .....	23
Using the Brush .....	23
Drawing Shapes .....	24
Working with Colours and Pen Styles .....	24
Adding a new pen .....	26
Adding a new texture .....	28
Adding a new colour .....	28
Working with the Colour Picker .....	28
Mixing colours with the Colour Picker .....	30
Mixing colours in a gradient with the Colour Picker .....	30
Cutting and Erasing Drawing Objects .....	31
Working with Selections .....	33
Resizing, rotating and moving selections .....	34
Changing the pivot point for scaling and rotating .....	36
Flattening Drawing Objects .....	38

Transforming Drawing Objects .....	38
Flipping Drawing Objects .....	41
Setting Up Your Drawing Space .....	41
Displaying a grid .....	41
Moving within the drawing space .....	42
Working With Storyboard Panels .....	44
Adding Panels .....	46
Deleting Panels .....	47
Duplicating Panels .....	47
Renaming Shots .....	48
Joining Panels to a Shot .....	50
Joining panels using drag and drop .....	50
Splitting Panels in a Shot .....	51
Inserting Transitions .....	52
Deleting Transitions .....	52
Adding Snapshot Markers to a Panel .....	52
Deleting Snapshot Markers from a Panel .....	54
Importing Images into Storyboard .....	54
Onion Skinning: Displaying Drawings from Next and Previous Panels .....	57
Setting onion skin options .....	58
Working With Layers .....	59
Drawing on Layers .....	60
Adding Layers .....	61
Deleting Layers .....	61
Renaming Layers .....	61
Arranging Layers .....	62
Copying Layers .....	62
Displaying Layers with the Light Table .....	63
Merging Layers .....	64
Locking or Unlocking Layers .....	65
Spreading Layer Motion Across Panels .....	66
Working With the Camera .....	69
Adding a Camera Move .....	69
Creating a Camera Move .....	70
Spreading a Camera Move .....	71
Deleting a Camera Movement .....	74
Previewing a Camera Move .....	74
Working With Text .....	74
Adding Text to a Layer .....	75
Adding Captions .....	75
Working With Captions .....	75
Working With Sound .....	78
Displaying the Timeline View .....	78
Adding a Sound Track .....	78



---

Deleting a Sound Track .....	79
Linking or Unlinking a Sound Track .....	79
Importing a Sound Sequence .....	80
Deleting a Sound Sequence .....	82
Turning Sound On and Off .....	82
Working With Sound Sequences .....	83
Working With Voice Annotations .....	85
Working With the Library .....	86
Getting Rights to Template Folders .....	86
Creating Templates .....	86
Placing storyboard drawings and sounds into template folders .....	87
Importing into files into template folders .....	87
Using Templates in Your Storyboard .....	88
Previewing Templates .....	89
Changing Display Options .....	89
Renaming Templates .....	89
Deleting Templates .....	90
Managing Template Folders .....	90
Adding a Library .....	91
Printing Your Storyboard .....	91
Adding a New PDF Page Layout .....	92
General tab .....	94
Page tab .....	94
Storyboard tab .....	94
Header tab .....	98
Footer tab .....	98
Editing a PDF Page Layout .....	98
Adding Security to Your PDF Document .....	99
Playing Back Your Storyboard .....	100
Viewing an Animatic in Toon Boom Storyboard .....	101
Creating a Flash or QuickTime Animatic .....	101
Exporting Storyboard Assets to Other Applications .....	103
Exporting to Toon Boom Applications .....	104
Exporting to EDL or AAF .....	106
Exporting Image Assets .....	107
Exporting to Bitmap .....	108
Exporting to CSV .....	109
Cleaning up Storyboard Projects .....	110
Customizing Storyboard .....	112
Customizing Toolbars .....	112
Showing/Hiding Toolbar Groups .....	112
Adding and Removing Buttons .....	112
Storyboard Preferences .....	114
General .....	114
Global UI .....	116

---

Drawing View .....	125
Export .....	126
Shortcut .....	128

## Chapter 3: Exploring the User Interface ..... 129

Managing Your Window Workspace .....	130
Storyboard Workspaces .....	131
Drawing Workspace .....	132
Customize your workspace .....	132
Timeline Workspace .....	133
Customize your workspace .....	133
Overview Workspace .....	134
Customize your workspace .....	134
Horizontal Workspace .....	135
Customize your workspace .....	135
Vertical Workspace .....	136
Customize your workspace .....	136
Storyboard Views .....	137
Drawing View .....	137
Panel View .....	138
Timeline View .....	139
Tool Properties .....	140
Panel Tab .....	141
Panel tab Properties .....	142
Caption tab Menu .....	143
Storyboard Tab .....	144
Storyboard tab Properties .....	145
Storyboard tab Caption Menu .....	145
Library Tab .....	146
Library tab Menu .....	146
Pen Tab .....	148
Pen tab Properties .....	148
Pen tab Menu .....	149
Text Tab .....	150
Text tab Properties .....	151
Storyboard Commands .....	152
File Toolbar .....	152
Edit Toolbar .....	153
View Toolbar .....	154
Storyboard Toolbar .....	155
Layer Toolbar .....	156
Tools Toolbar .....	158
Sound Toolbar .....	161
Play Toolbar .....	162
Navigation Toolbar .....	163
Onion Skin Toolbar .....	164

---

Storyboard Menus .....	165
Toon Boom Storyboard Menu .....	165
File Menu .....	166
Edit Menu .....	167
View Menu .....	169
Play Menu .....	171
Storyboard Menu .....	172
Layer Menu .....	175
Sound Menu .....	176
Caption Menu .....	177
Tools Menu .....	178
Help Menu .....	181
 Chapter 4: Keyboard Shortcuts .....	 183
 Index .....	 193



# Introducing Toon Boom Storyboard

## What Is Storyboard?

Toon Boom Storyboard lets you take an idea and transform it into a visual story that will become a complete production, whether animated or live-action. Developed in conjunction with expert storyboard artists, Toon Boom Storyboard speeds up production planning and enables studios to reach new heights with increased production integration. Its advanced features make it the tool of choice when creating an entirely digital storyboard. It truly completes the production pipeline.

Storyboard's easy-to-use and intuitive interface means that you will be performing basic operations almost immediately (create or import a drawing, add or delete panels) and more complex procedures within the shortest time. Reading through this documentation will provide you with the knowledge to get the most out of the product.

Storyboard supports the use of a pen and tablet (such as the Wacom Cintiq) allowing you to work with little or no keyboard use.

Here are a few highlights of the Toon Boom Storyboard solution:

- A flexible layer-based panel display with motion camera capabilities
- A complete set of drawing tools, including the Brush tool, which is pressure-sensitive when using a digital graphic tablet and pen
- Customizable caption fields to insert fully searchable textual content, such as scene descriptions and comments
- An advanced timeline to control timing and automatically generate an animatic with sound tracks and transitions between shots
- Real-time animatic creation with dynamic camera moves
- Extensive export capabilities, including printing, image sequences, and Toon Boom Opus, Toon Boom Harmony, Toon Boom Solo, EDL, AAF, CSV, SWF and QuickTime file formatting.

# Why You Should Use Storyboard

Toon Boom Storyboard provides a logical and simple, yet powerful method of visualizing a series of images that show key scenes and events. Because a storyboard is a visual script it becomes an project outline showing a shot-by-shot breakdown, while not showing every frame of the production.

You provide the story plan, mood, setting and all that you need to let the audience follow the story.

Each storyboard drawing should provide enough detail to show what is happening in a scene. Toon Boom Storyboard allows you to create a drawing in a storyboard panel and annotate it with text or audio commentary.

## Methods of Reducing Production Cycle Times

Using a storyboard you can speed up your production cycle by:

- Planning your production
- Using the storyboard panels and animatics to workout and discuss your ideas
- Producing a visual representation of how your film will look
- Describing the sequence and assembly of the production
- Eliminating unnecessary editing
- Animating only the scenes you will use
- Uncovering problems such as flow
- Constructing a step-by-step guide to making and shooting your film

## Methods of Reducing Storyboard Cycle Times

By using Toon Boom Storyboard you can speed up your storyboarding in many ways, including:

- Viewing an animatic to review any changes you have made at any time.
- Avoiding creation of scenes that will eventually be edited out of the completed cartoon.
- Resolving script or timing issues that may exist with the current storyboard.
- Deciding if the storyboard or soundtrack needs to be edited.
- Accelerating the review and approval process.

# Toon Boom Storyboard Animatic Feature

One of the advantages of using Toon Boom Storyboard is that you can make use of the built-in animatic feature. An animatic consists of the storyboard's pictures synchronized with the soundtrack. The Toon Boom Storyboard animatic features allows you to:

- View an animatic immediately without rendering, with or without camera movement, at any time during your storyboard development without using external software
- Export your storyboard in seconds to a QuickTime or Flash animatic, to preview the flow of the storyboard with synchronized sound, camera movements and transitions between shots

As an animatic or story reel is made after the soundtrack is created, but before full animation begins, it allows you the opportunity to edit the production. Editing the film at the animatic stage prevents unnecessary animation of scenes that would only be edited out of the film, this saves production costs and time.





# Chapter 1

## How To Prepare For Storyboarding

Planning ahead can save you time and effort. While storyboarding will save you considerable time during production, some additional planning of your storyboard project will further streamline your workflow.

Including storyboarding in your project planning will allow you to meet a number of production goals, such as:

- Providing a common visual roadmap to which a team can refer
- Reducing overall production time
- Reducing the likelihood that production resources are not used on scenes that will eventually be deleted

Using the same logic, taking steps to plan how you will storyboard also eases this early part of production.

## First Steps

Before you begin storyboarding, consider the factors that will affect your storyboard project and your final production.

- The Script
- The Structure
- The Delivery

## The Script

Create a completed or well-developed script. The more complete your screenplay is, the easier your ideas will be to storyboard.

Storyboarding is also beneficial for completing a script that is in the last stages of development, as it can often help to resolve remaining storytelling issues. For example, storyboarding can highlight the need for modifications to transitions between shots, or for shots you did not realize were missing but need to be inserted to enhance the flow of action.

*Tip*

*Complete a script or screenplay to the best of your ability before creating a storyboard.*

## The Structure

Consult your script, try to visualize it as a series of shots and decide which ones can be placed into panels in your future storyboard. You still do not need to draw anything at this point; you just want to assess if there is a smooth, logical visual flow to the story, and get an idea of the type of shots that will work in your production.

### *Tip*

*Breaking down your script into smaller components produces a more manageable structure to work with.*

## The Delivery

How will your final production be broadcast? Is it designed for television, HDTV or widescreen film? Will it be watched on an iPod, PDA or mobile phone? All of these factors determine the aspect ratio of the final production. The size and dimensions of your production will determine the level of detail and how your shots are composed.

### *Tip*

*Assume the viewer's role for a moment, and try to determine how your project will be best viewed in its final medium.*

# Storyboard Basics

There are three recommended steps when preparing your storyboard project.

- Script Analysis and Breakdown
- Shot Evaluation
- Shot List Creation

Following these steps will help you to develop a clear vision of how you want your production to look, feel and flow. Anyone viewing your storyboard should be able to follow its story in a clear, logical manner by looking at the visual and textual information.

## Script Analysis and Breakdown

### *Goal*

*Break down your script into a series of shots.*

The action in a panel is usually composed of the action, dialogue, and effects that occur between a camera being turned on until it is turned off. Typically, a shot can be expressed in a single panel, but more elaborate or complex shots may require multiple panels.

Before beginning your storyboard, you should analyze your script to find out if it is possible to produce a storyboard using the current structure. You will already have an idea of some of the shots you will want to use based on the script, structure and delivery requirements.

Taking into consideration these factors early on will make this step even easier and more productive.

Using the information from your analysis, determine the shots that you will require for the production. At this stage, you may not necessarily have information on every detail of the shot, like the camera angle, composition, lighting or type of shot, but if you have some of this information, you can include it. What is more important is the development of the sequence of the shots. Create a unique panel or write notes for each shot that you intend to use in your production.

Dividing your script into smaller parts will make the job of determining shots easier.

## Shot Evaluation

### *Goal*

*Determine the important elements of each shot.*

The elements you need to determine are:

- Camera angles and movements
- The direction of movement of objects within a shot
- The mood you want to create

Now that you have broken down your script into separate shots and have laid out the sequence of shots in separate storyboard panels, you are ready to determine the most effective shot to use in each panel to convey the type of story you are trying to tell.

Your storyboard panel should convey the most important aspects of the shot and you should create each shot to maximize its intended impact. You will need to make a number of decisions, independently or with a partner or team. Some of the issues to determine are:

- Which characters are in the shot and their position
- Which props are in the shot and their position
- Whether or not you need to include certain elements to maintain continuity between other shots
- How objects and characters move during the shot
- Where the camera is positioned and expected changes in camera movement during the shot
- What type of lighting is required for the shot
- What type of special effects may be required for the shot
- How accompanying dialogue or narration will be integrated into the shot

## Shot List Creation

### *Goal*

*Create an itemized list of each shot used in key sequences or your entire story.*

With a clearer idea of the sequence and composition of your shots, you can plan how much you want to storyboard. You can storyboard your entire production. Alternatively, you can storyboard shots that are pivotal to the emotional impact of the story or that may require a more complex setup.

Create a shot list for your production, which, for each shot, details the important elements you worked out during your evaluation of the shots. You should include the shot's type and angle, camera effects, lighting, and accompanying dialogue.

Entries in the shot list can then be used to complete storyboard panels. These provide you with a guideline to create an informative visual narrative for your production.

# Chapter 2

## How To Use Storyboard

This chapter includes everything you need to know to get the most out of Toon Boom Storyboard. If you are new to storyboarding, read the chapter How To Prepare For Storyboarding to learn how to gather the information and get your script ready for storyboarding.


In this chapter, you will learn the following tasks:

- Launching The Program on page 15
- Starting Your Storyboard Project on page 17
- The Storyboard Window on page 22
- Drawing in a Panel on page 23
- Working With Storyboard Panels on page 44
- Working With Layers on page 59
- Working With the Camera on page 69
- Working With Text on page 74
- Working With Sound on page 78
- Working With the Library on page 86
- Printing Your Storyboard on page 91
- Playing Back Your Storyboard on page 100
- Exporting Storyboard Assets to Other Applications on page 103
- Customizing Storyboard on page 112

## Launching The Program

How you create a new storyboard project or open an existing one depends on your operating system.

### To open Storyboard:

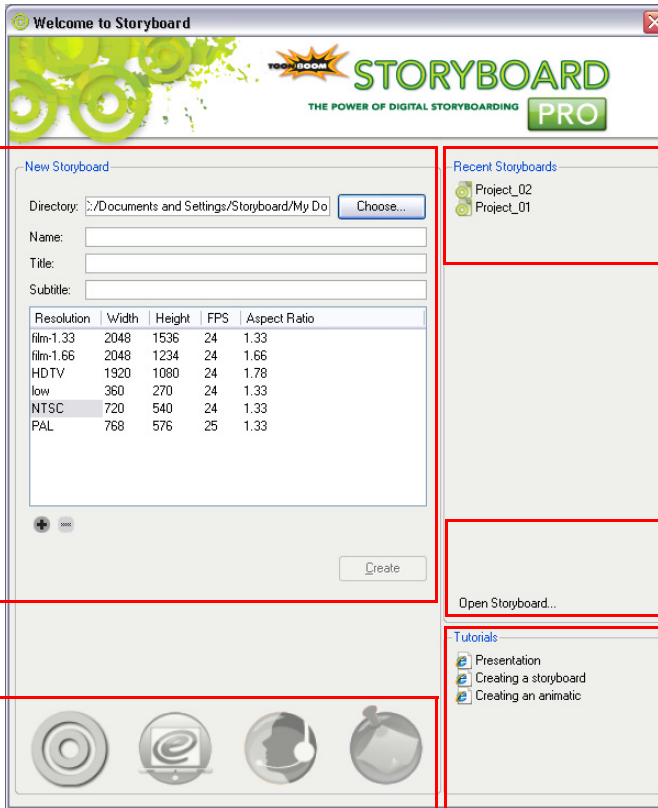
1. Double-click the Toon Boom Storyboard Pro  icon.
2. Toon Boom Storyboard opens. The splash screen briefly appears before closing and displaying the Welcome screen.

### Tip

Other ways to launch Storyboard depend on your operating system:

- ⇒ Windows users can select **Start > Programs > Toon Boom Animation > Toon Boom Storyboard Pro**.
- ⇒ Mac OSX users can select **Applications > Toon Boom Storyboard Pro > Toon Boom Storyboard Pro**.

When you first launch Toon Boom Storyboard, the Welcome Screen appears.



Create a new storyboard here.

Open recent storyboards here.

Select storyboard files here

Link to Storyboard on the Web

Direct access to video tutorials located on our website, will help you understand and improve your storyboarding techniques.

# Starting Your Storyboard Project


Once you have launched Toon Boom Storyboard you can create a new storyboard, open an existing one or easily open one which you have recently worked on.

- Creating A New Storyboard on page 17
- Opening An Existing Storyboard on page 20
- Opening a Recently Used Storyboard on page 21

## Creating A New Storyboard

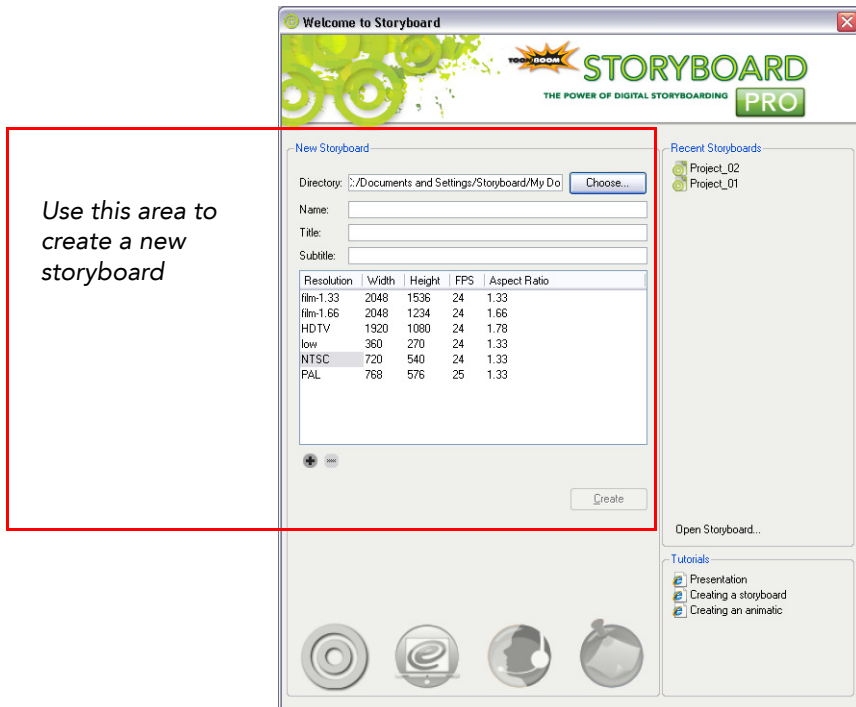
When you create a new project, you will specify the location where you want to store the storyboard elements. You will also be able to specify storyboard project properties, such as the aspect ratio and frames per second (these can be changed later).

**To create a new storyboard:**

1. Do one of the following:
  - ▶ Launch the program to display the Welcome screen.
  - ▶ In the menu bar, click on **File > New Storyboard**.
  - ▶ In the File Toolbar, click the **New**  button.

## Creating a new storyboard from the Welcome screen

When you first open Toon Boom Storyboard you can create a new storyboard directly from the Welcome screen.



To create a new storyboard do the following:

### Note


The **Directory** and **Name** fields are mandatory and you will be unable to create a new storyboard unless these are completed.

1. In the **Directory** field, type in the path or browse to the location where you will store the new storyboard project.
2. In the **Name** field, enter the name of a new file folder where you will store your storyboard project.

If you press the spacebar an underscore is automatically generated to fill the space between the words.

3. In the **Title** field, type in the name you are giving your storyboard.
4. In the **Subtitle** field, type in the secondary name of your storyboard.




5. At this point you can choose to assign the resolution of your storyboard output, You can select a different resolution. To add a new one, click  to open the New Resolution dialog box.
6. Click on the **Create** button when you are done. The new project is created and placed in the directory you selected.

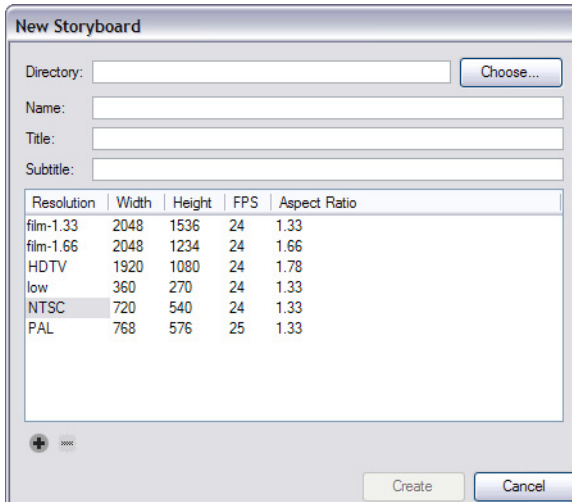
The Toon Boom Storyboard window opens the default workspace. The window opens with an empty panel to get you started.

## Other ways of creating a new storyboard

Apart from using the welcome screen as an access point to create a new storyboard, you can create one after Storyboard is open:

- In the menu bar, click on **File > New Storyboard**.
- In the File Toolbar, click the **New**  button.

In either case the following dialog box opens and the procedure used to create a new storyboard is the same.



The 'New Storyboard' dialog box contains the following fields and table:

Directory:  Choose...

Name:

Title:

Subtitle:

Resolution	Width	Height	FPS	Aspect Ratio
film-1.33	2048	1536	24	1.33
film-1.66	2048	1234	24	1.66
HDTV	1920	1080	24	1.78
low	360	270	24	1.33
NTSC	720	540	24	1.33
PAL	768	576	25	1.33

+ More...


Create Cancel

Use this dialog box to name your storyboard, select where you want to store your files (in the **Directory** field), the name of the storyboard folder (in the **Name** field), the name of your storyboard and its subtitle (in the **Title** and **Subtitle** fields).

**To create a new storyboard do the following:**

### Note

The **Directory** and **Name** fields are mandatory and you will be unable to create a new storyboard unless these are completed.

1. In the **Directory** field, type in the path or browse to the location where you will store the new storyboard project.
2. In the **Name** field, enter the name of a new file folder where you will store your storyboard project.  
  
If you press the spacebar an underscore is automatically generated to fill the space between the words.
3. In the **Title** field, type in the name you are giving your storyboard.
4. In the **Subtitle** field, type in the secondary name of your storyboard.
5. You can select a different resolution. To add a new one, click  to open the New Resolution dialog box.
6. Click on the **Create** button when you are done. The new storyboard project is created and placed in the directory you selected.  
  
The Toon Boom Storyboard window opens the default workspace. The window opens with an empty panel to get you started.

*Tip*

Other ways to open the New Storyboard dialog box:


- ⇒ Windows users can use the [Ctrl]+[N] shortcut.
- ⇒ Mac OSX users can use the [Command]+[N] shortcut.

## Opening An Existing Storyboard

If you want, you can continue working on a previously created storyboard project by opening it.

If you have another project open, you will be prompted to save it, and it will close after you confirm your choice. A saved project is added to the recent projects list so you can easily choose it again (See Opening a Recently Used Storyboard on page 21).

### To open an existing storyboard:

1. Do one of the following:
  - ▶ Launch the program to display the welcome screen. Click the **Open Storyboard** link.
  - ▶ In the menu bar, click on **File > Open Storyboard**.
  - ▶ In the File Toolbar, click the **Open**  button.

The **Open Storyboard** dialog box appears.

2. Browse to the folder where your project is located, select the file or bundle with the SBOARD format and click the **Open** button to open it. The project opens in the Storyboard window.

*Tip*

Other ways to open the Open Storyboard dialog box:

- ⇒ Windows users can use the [Ctrl]+[O] shortcut.
- ⇒ Mac OSX users can use the [Command]+[O] shortcut.

## Opening a Recently Used Storyboard

A recently saved project is added to the Recent Storyboards list so you can easily choose it again.

### To open a recently used storyboard:

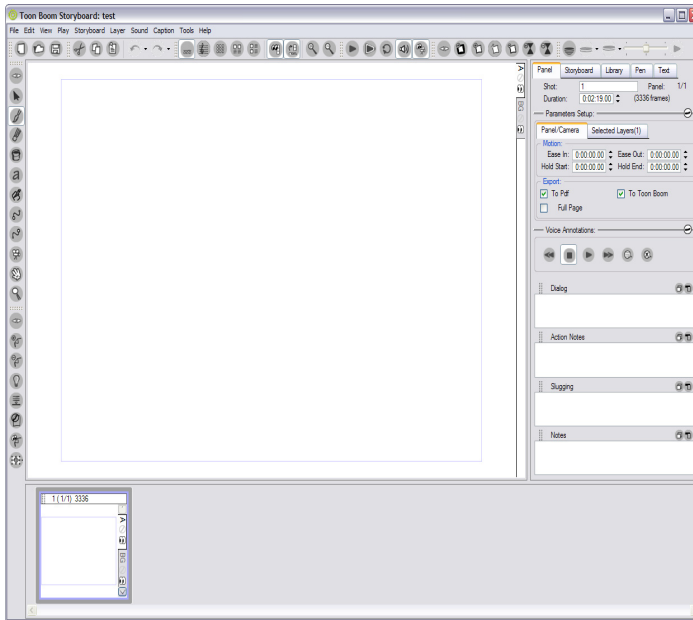
1. Do one of the following:
  - ▶ Launch the program to display the welcome screen. A list of filenames of recent storyboards is listed in the upper right section of the welcome screen.
  - ▶ In the menu bar, click on **File > Recent Storyboards**.
2. Select the filename of the storyboard you want to open from the list of recent storyboards.

# The Storyboard Window

The Toon Boom Storyboard window is composed of the menu bar, toolbars, and one or more embedded windows, called views. You can also display and change properties in the Tool Properties to the right of the topmost view.

When you open a storyboard, there are two views open and the Tool Properties are displayed on the right.

This is the *Drawing Workspace*.



*This is the default workspace.*

*The current panel is displayed in the Drawing View, the largest area, and underneath it, the Panel View.*

*As you add more panels, they will be displayed in sequence in the Panel View.*

This workspace was designed to assist the story artist in creating visual content for each panel. The *Drawing View*, in the top left portion of the Drawing Workspace, provides a large space in which to work with the drawing tools and define camera movements.

Other workspaces are available when working in Toon Boom Storyboard. For further information, see *Managing Your Window Workspace* on page 130.

# Drawing in a Panel

You can use your mouse or a graphic tablet and pen to draw your story. The drawing tools in Toon Boom Storyboard resemble standard drawing tools used in many graphic and animation programs, including Adobe Photoshop, Adobe Illustrator, Toon Boom Studio, Toon Boom Solo and Toon Boom Harmony. If you are already familiar with these tools and working with selections, you can proceed to Working With Storyboard Panels on page 44.

- Using the Brush on page 23
- Drawing Shapes on page 24
- Working with Colours and Pen Styles on page 24
- Cutting and Erasing Drawing Objects on page 31
- Working with Selections on page 33
- Flattening Drawing Objects on page 38
- Transforming Drawing Objects on page 38
- Setting Up Your Drawing Space on page 41

## Using the Brush

When you draw with the Brush tool and a graphic tablet and pen, you can enjoy the effect of drawing as if you are working with paper. A digital paintbrush allows the width of your line to change depending on the amount of pressure you apply.

*Notice how the line in the drawing varies throughout this drawing.*

*The variable-width brush stroke creates a unique look for your drawings.*



Before you draw with the brush, you may want to change its look by modifying its line width, colour and texture. You can do this using the Pen Tab.


For more information, see Working with Colours and Pen Styles on page 24.

### To draw a brush stroke:

1. Select **Tools > Brush**.
2. Draw your line using your graphic tablet, mouse or other input device.

*Tip*

Other ways to activate the Brush:

- ⇒ From the Tools Toolbar, click the **Brush**  button.
- ⇒ Use the [Alt]+[B] shortcut.
- ⇒ Select **Brush** in the panel's pop-up menu.

The Drawing View provides an enlarged area for you to draw, but you can also draw in the Panel View.

## Drawing Shapes

These tools are used to create straight lines and shapes in Toon Boom Storyboard.




Before you draw a shape, you may want to change the look of the shape's line. You can do this using the Pen Tab. For more information, see Working with Colours and Pen Styles on page 24.

**To draw straight lines, ellipses and rectangles:**

1. Select the tool you want to use from the Tools Toolbar. You have the following choices:
  - ▶ **Line** tool: draws straight lines.
  - ▶ **Rectangle** tool: draws rectangular or square shapes.
  - ▶ **Ellipse** tool: draws round shapes.
2. Drag the cursor in the Drawing View window until you have the shape you want.

*Tip*

Other ways to activate these tools:

- ⇒ From the Tools Toolbar, click the **Line** , **Rectangle**  or **Ellipse**  buttons.
- ⇒ Select **Line**, **Rectangle** or **Ellipse** in the panel's pop-up menu.

After activating a tool, you can use keyboard shortcuts to have more control as you draw:

- ⇒ Press [Shift] to draw perfect circles and squares or to draw lines in 15 degree increments.
- ⇒ Press [Alt] to draw shapes from the centre, or connect lines as you draw.

The Drawing View provides an enlarged area for you to draw, but you can also draw in the Panel View.

## Working with Colours and Pen Styles

The Pen Tab in the Tool Properties controls the size and style of the drawing tool you are using. You can use this tab to access properties that apply to Brush, shape, Eraser and Paint tools.

**To change the pen style:**

1. If the Tool Properties are not displayed, select **View > Toggle Tool Properties**.

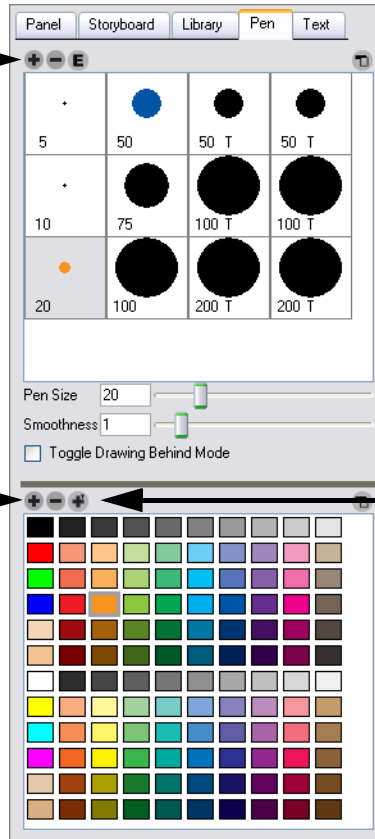
## 2. Click the Pen Tab.

To create a new pen style for the brush, click the **Add Pen** button.

To change the maximum **Pen Size** of the brush, enter a value or use the slider.

To create a new colour for the brush, click the **Add colour** button.

Click on a colour in the palette to change the colour of the brush.



Click a pen style if you want to use it.

To add a textured pen, click the **Add Texture** button.

The current pen style is highlighted. Its colour and maximum width are displayed. The number in the lower left corner is the maximum pen size. The letter T is displayed if the pen is associated with a texture.

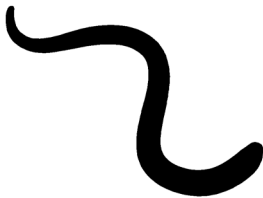
- ▶ If you are using a graphic tablet and pen, the width of the line you draw depends on the pressure you apply and the Minimum and Maximum Size settings in the Pen Style dialog box, which you can open by double-clicking the selected style. You can also create a new pen style. See Adding a new pen on page 26.
- ▶ Select a pen colour from the swatches in the Pen Tab. You can also create a new colour. See Adding a new colour on page 28.
- ▶ Select a texture pen style if you want to draw using a bitmap texture. For more information on textures, see Adding a new pen on page 26.

## Adding a new pen

You can add a new pen style to your pen list. The new pen style is based on the size and smoothness values of the pen that is currently selected in the Pen Tab. In addition to the maximum width and smoothness of your drawing tool, you can also specify minimum brush stroke width and pen texture properties.

Toon Boom Storyboard makes it possible for you to draw brush lines using a texture fill. Texture fills make it possible for you to emulate the effect of using different types of drawing tools, like charcoal or pastels, on different types of drawing paper, like canvas or burlap.

You can use texture pens to retouch drawings that were scanned in grayscale and vectorized to preserve the unique qualities of the hand-drawn line.



*Default Solid Pen*




*Texture Pen, this line is softer than a default pen. It was drawn using a pen style with a texture.*



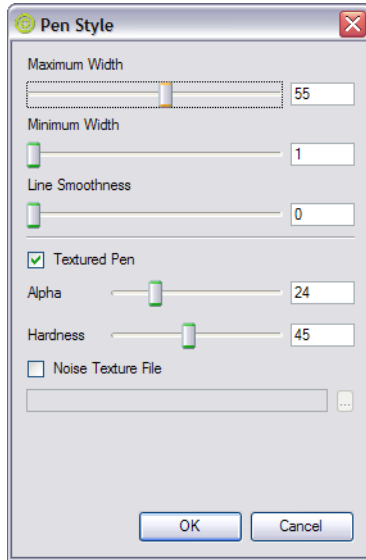
*Noise Fill, you can use textures to create digital drawings that look like they were drawn with different drawing tools on different types of drawing paper.*

### To add a new pen:

1. If the Tool Properties are not displayed, select **View > Toggle Tool Properties**.
2. In the Pen Tab, click the **New Pen**  button.



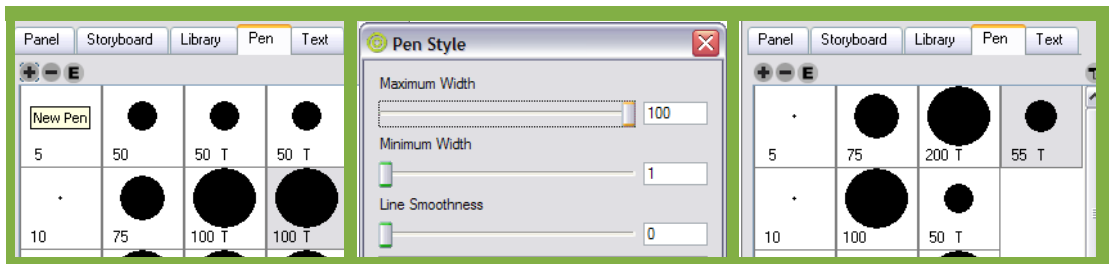
The Pen Style dialog box opens.



3. Define a new pen style:

- ▶ Use the **Maximum Width** and **Minimum Width** sliders to select the thickness of lines you draw with the Brush. The maximum width also applies to the width of the shape tools and the Eraser.
- ▶ Use the **Line Smoothness** slider to select the amount of smoothness.
- ▶ Select the **Textured Pen** option if you want to adjust the characteristics of pen styles that use texture images, when the Brush tool is in use.
  - ⇒ Use the **Alpha Max** slider to set the opacity of the brush stroke.
  - ⇒ Use the **Hardness** tool to determine how the pen pressure is factored into the opacity of the brush stroke.
  - ⇒ Select the **Noise Texture File** option to create unique line textures by selecting a bitmap file (a TGA or PSD), which will add a masking layer of the image to the brush stroke. Use the browse feature to go to the location of the bitmap file.


4. Press OK to save your changes.



## Adding a new texture

You can add a new texture to the palette and attach it to your pen or brush to change the look or get the textured look you require for your storyboard. Your texture file must be in TGA or PSD format.

### To add a new texture:

1. In the pen tab, click on the Add texture  **button**. An open dialog box appears.
2. Browse to the location where you have the texture file stored and click OK, the new texture is added into the palette.

## Adding a new colour

You can add a new colour to the palette. You can then use the Colour Picker to specify the colour's properties.

### To add a new colour:

1. In the Pen Tab, click the **Add Colour**  button. A new colour pot appears at the end of the list.
2. Double-click the colour to open the Colour Picker dialog box.

The Colour Picker is a window that you can position anywhere in your work space. You can choose from a number of Colour Picker options to create your colour palettes.

## Working with the Colour Picker

The Colour Picker is a window where you can define the colour properties of a drawing tool, such as the Brush, Paint or Text tools.

To select a colour, you can enter the HSV (Hue Saturation Value) or RGB (Red, Green, Blue) values, or you can use the colour wheels or the sliders.

Below the current colour square on the Colour Picker are six *Brightness Swatches* that allow you to pick a colour slightly darker or brighter than the current colour. These shades represent slight variations in the brightness of a colour.

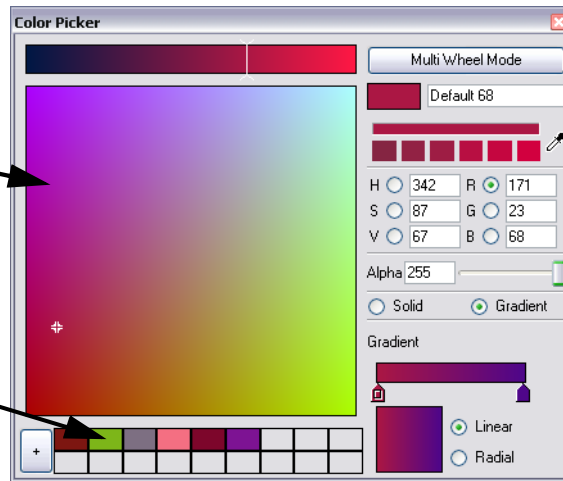
The *Undo List* can be used to return to a previously mixed colour. It stores a maximum of 16 colours and adds colours to the list each time you change a colour.

The Colour Picker has two displays: Single-wheel or Multi-wheel. By default, it is displayed in Single-wheel mode.

### Single Wheel Mode

Colour Wheel

Colour Storage



Current colour

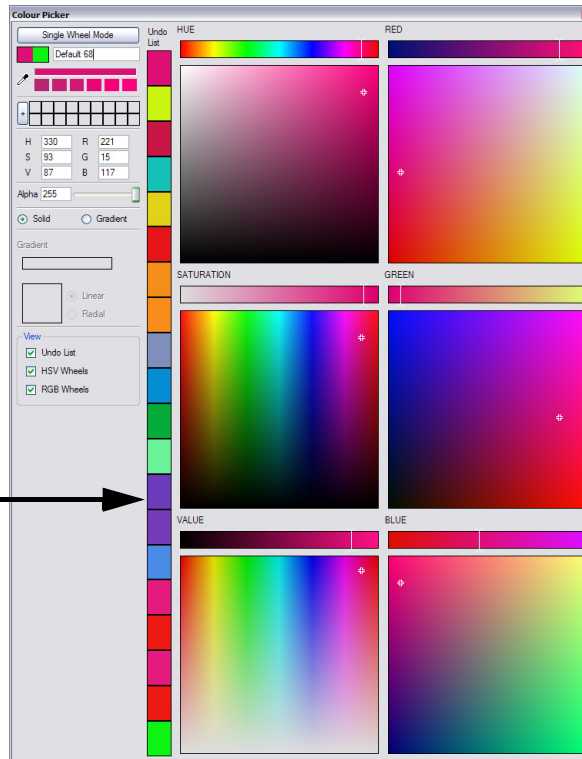
Brightness Swatches and Dropper

HSV and RGB

Alpha colour transparency control

Gradient control

### Multi Wheel Mode



There are six colour wheels in Multi Wheel Mode.

Undo List, lets you revert to a previous colour.

Click the **Multi Wheel Mode** or **Single Wheel Mode** button to switch between the two displays.

## Mixing colours with the Colour Picker

When you are selecting a colour to use in your colour palette, you must define the RGB or HSV, and alpha values for the colour. A preview of the colour appears next to the current colour.

### To use the Colour Picker to mix colours:

1. In the colour palette, double click any swatch to open the Colour Picker.
2. Click the swatch you want to modify.
3. Select a new colour using any of the following methods.
  - ▶ Type the HSV or RGB value.
  - ▶ Click in the colour wheel to select a colour.
  - ▶ In Multi Wheel mode, use the sliders beneath the colour wheels to select the colour.
  - ▶ Use the Dropper to sample colour values from any place on your monitor.

Notice that as you change the colour with the Colour Picker, the current colour changes in both the Colour Picker window and in the swatch.

4. Change the alpha value of the colour (this value determines a colour's transparency) by entering the value directly in the **Alpha** field, or use the slider to select it.

### Tip

You can use the Undo List in the Multi Wheel Colour Picker to revert to a previous colour.

## Mixing colours in a gradient with the Colour Picker

You can define a colour swatch that will paint a zone with more than one colour and add this to your palette. The painted zone displays multiple colours that blend smoothly from one to another. This is called a gradient swatch.

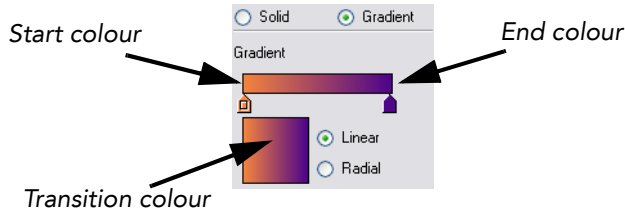
You can define up to eight different transition points within one swatch. You can then adjust where the transitions take place by dragging transition markers to the appropriate place. You can create either a Linear gradient (the colours change in a straight line) or a Radial gradient (the colours change in a concentric pattern).

### To create a gradient:

1. In the colour palette, double click any swatch to open the Colour Picker.
2. Click the swatch you want to modify.
3. Select the **Gradient** option.
4. You can select the type of gradient you want from the Gradient panel:
  - ▶ **Radial**: the colours blend in a circular pattern
  - ▶ **Linear**: the colours blend along a straight line
5. Define the transition colour for each marker by clicking a marker and selecting a colour from the colour wheel. A small square appears on the selected marker.

When you choose a colour for a transition marker, Toon Boom Storyboard adjusts the colours on either side of it based on the colours of the nearest transition markers.

6. Drag the transition markers to where you want the colour to be completely changed.
7. To add more colour transitions, click directly below the gradient bar. A transition marker appears (you can add a maximum of eight markers).



To remove a transition marker, drag it down until it disappears. To create a gradient, you must have at least two transition markers.

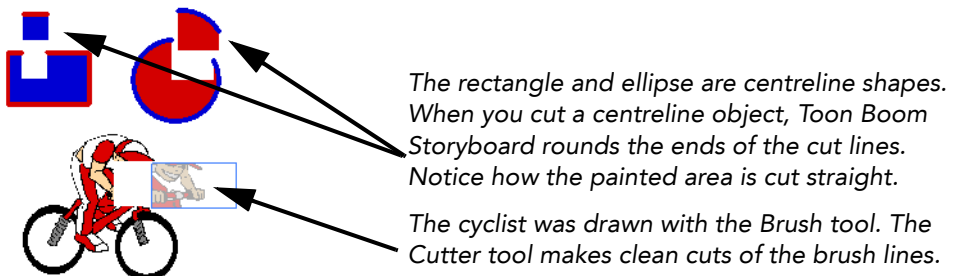
## Cutting and Erasing Drawing Objects

As you use the drawing tools to create the objects and characters in your storyboard, you may need to cut or erase sections of drawing objects to refine your artwork.

For example, if you wanted to reuse a drawing to build another, you may need to cut or erase sections of the original drawing.

The Cutter tools and Eraser tool allow you to remove parts from drawing objects, and each tool has a unique behavior.

- The *Rectangle Cutter* allows you to create rectangular and square cut selections and move them. If you were working with pen and paper, this operation would be like using a sharp knife and ruler.
- The *Freehand Cutter* allows you to draw the shape you want to cut out of a drawing and move it. This is like using a pair of scissors.
- The *Eraser* allows you to erase sections of a drawing in the same way as a traditional eraser. It allows you to remove a section of a drawing object.



**To create cut selections from drawing objects:**



1. Select **Tools > Rectangle Cutter** or **Tools > Freehand Cutter**.

2. Drag the selected Cutter tool across the section of the drawing object you want to cut. The Cutter tool creates a rectangular selection or lasso over the area.

To create the cut, move the cut selection away from the original drawing object using the Cutter tool, or remove the cut entirely using the Cut command in the Edit Menu. If you deselect the cut object or the Cutter tool, the cut will disappear and the object will remain uncut.

*Tip*

Other ways to activate Cutter tools:

- ⇒ From the Tools Toolbar, click the **Rectangle Cutter**  or **Freehand Cutter**  button.
- ⇒ Select **Rectangle Cutter** or **Freehand Cutter** in the panel's pop-up menu.
- ⇒ Use the [Alt]+[T] shortcut to activate the Freehand Cutter.

**To erase a section of a shape or brush line:**


1. Select **Tools > Eraser**.
2. Drag your cursor through the parts of the drawing you want to erase.



*In this example, we drew an eraser line through the circle then recoloured one of the new shapes.*

*Tip*

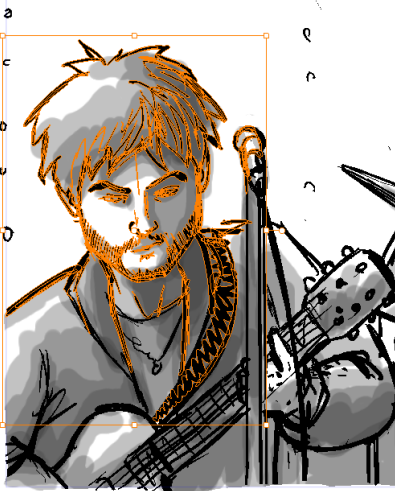
Other ways to activate this tool:

- ⇒ From the Tools Toolbar, click the **Eraser**  button.
- ⇒ Select **Eraser** in the panel's pop-up menu.
- ⇒ Use the [Alt]+[E] shortcut to activate the Eraser tool.

The width of the eraser is determined by the currently selected pen style's maximum width. You can modify the Pen Size in the Pen Tab.

## Working with Selections

You can select and modify any drawing object using the lasso (the default) or the rectangular marquee selection tool. When you select a drawing object, a bounding box appears around it and you can then change its properties (colour, shape, angle) or its position in the drawing space.



*If you press the [Shift] key, you can select more objects and add them to what you have already selected. On Mac use the [Alt] key.*


Once you select an object, you can change its properties interactively in the view or change them in the Pen Tab or Text Tab. You can also copy, cut and paste selections.

### To activate the Select tool:

1. Activate the Select tool. Do one of the following:
  - ▶ To select one or more objects, select **Tools > Select**.
  - ▶ To select all the objects, click the Drawing View and select **Edit > Select All**.
2. Make a selection:
  - ▶ Drag the Select tool over each drawing object.
  - ▶ Draw a closed shape around the drawing objects.

#### Tip

Other ways to activate this tool:

- ⇒ From the Tools Toolbar, click the **Select**  button.
- ⇒ Select in the panel's pop-up menu.
- ⇒ Windows users can use the [Ctrl]+[A] shortcut to select all objects.
- ⇒ Mac OSX users can use the [Command]+[A] shortcut to select all objects.

#### Tip

You can use keyboard shortcuts to have more control over selections:

- ⇒ Press [Shift] to select additional objects.

- ⇒ To copy a selection, Windows users can press [Ctrl] and drag the copied selection away from the original one.
- ⇒ To copy a selection, Mac OSX users can press [Command] and drag the copied selection away from the original one.

#### **To deselect objects:**

- ▶ To deselect an object without deselecting the others, press [Shift] and click the objects you want to remove from the selection.
- ▶ To deselect all objects, select **Edit > Deselect All**.

#### *Tip*

Other ways to deselect objects:

- ⇒ Click the Select tool in an empty area in the panel.
- ⇒ Use the [Esc] shortcut.

When this tool is active, press [Shift] to deselect an object while keeping the other selections active.

#### **To permanently use the rectangular marquee selection tool:**

1. Select **Edit > Preferences**.
2. Click the **Drawing View** tab.
3. Turn off the **Select Tool Is Lasso** check box.
4. Click OK to confirm your changes.

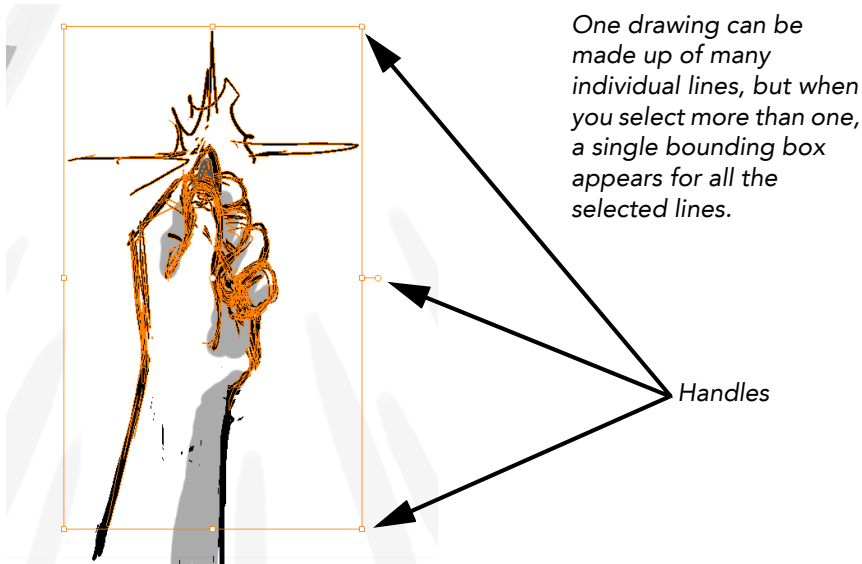
#### *Tip*

The selection tool is a lasso by default. To temporarily use the rectangular marquee selection tool, press the [Alt] key while selecting a drawing object.





## Resizing, rotating and moving selections

If you take a close look at the bounding box that appears around selected objects, you will notice that there are small boxes in each corner, in the centre of each side, and on the right side of the bounding box. These boxes act as handles that you can use to change drawings.





Depending on the handle you select, you can make different types of changes to the selected object. When you pass your pointer over a handle or over the object, the pointer changes to indicate the type of change you can make.

- **Move** : changes the current position of the selected lines/shapes.
- **Deform** : changes the size of the selected lines/shapes.
- **Rotate** : changes the angle of the selected lines/shapes.
- **Resize** : changes the width and height of the selected lines/shapes.

If you drag a handle beyond its opposing handle on the bounding box, you will flip the drawing object either horizontally, vertically or diagonally. For greater precision in flipping drawing objects horizontally or vertically, use the Flip Selection Horizontally and Flip Selection Vertically commands. For more information on using these commands, see Flipping Drawing Objects on page 41.

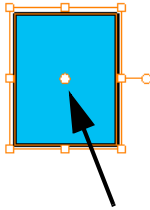
#### Tip

You can use keyboard shortcuts to have more control over the resizing and rotation of drawings:

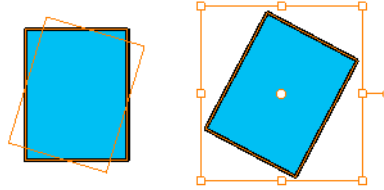
- ⇒ Press [Shift] to resize a drawing without deforming it.
- ⇒ Press [Alt] as you resize to, and maintain the static centre-point, instead of scaling the drawing object from the opposite corner that you drag from.
- ⇒ Press [Shift] to rotate drawings in 15 degree increments.
- ⇒ Press [Alt] as you rotate a selection from the centre, regardless of where the pivot point is positioned.

## Changing the pivot point for scaling and rotating

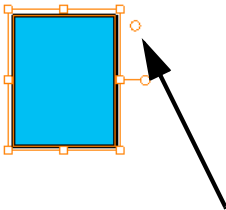
You can change the pivot point, or centre of rotation and scaling effects. This might come in handy if you want to rotate or scale a drawing from a corner, rather than from the centre.



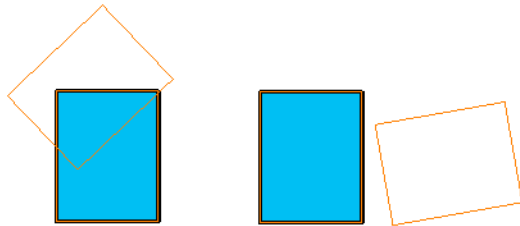
*Here the drawing rotates around the original pivot point in the centre of the bounding box.*



*Here is the result.*



*Here the pivot point is moved to the corner and the drawing rotates around this position.*



*Here are two possible results.*

### **To change the pivot point:**

1. Select the drawing object you want to transform.
2. In the bounding box, drag the pivot point to a new position.

### 3. Scale or rotate the drawing object.

*The pivot point starts off in the centre of the drawing object.*



*But can be moved to any location.*



#### *Tip*

You can use keyboard shortcuts to have more control over the resizing and rotation of drawings:

- ⇒ Press [Alt] as you resize to and maintain the static centre-point, instead of scaling the drawing object from the opposite corner that you drag from.
- ⇒ Press [Alt] as you rotate a selection from the centre, regardless of where the pivot point is positioned.

## Flattening Drawing Objects

The **Flatten** command reduces the number of selected overlapping drawing objects in a layer into one drawing object and removes any hidden lines..

This reduces the amount of memory required for drawing objects.

The centreline strokes in shapes created using the Line, Ellipse and Rectangle tools are converted to brush strokes after flattening.

### To activate this command:


1. Use the Select tool to select the drawing objects you want to flatten.
2. Select **Tools > Flatten**.

The centreline strokes in shapes created using the Line, Ellipse and Rectangle tools will convert to brush strokes after flattening.

Avoid using texture pen styles of different colours for drawing objects that you will flatten to ensure that colours blend properly.

### Tip

Other ways to activate this tool:

- ⇒ From the Tools Toolbar, click the **Flatten**  button.
- ⇒ Select **Flatten** in the panel's pop-up menu.
- ⇒ Use the [Alt]+[Shift]+[F] shortcut.

## Transforming Drawing Objects

By default, a panel in Toon Boom Storyboard is 5 seconds.

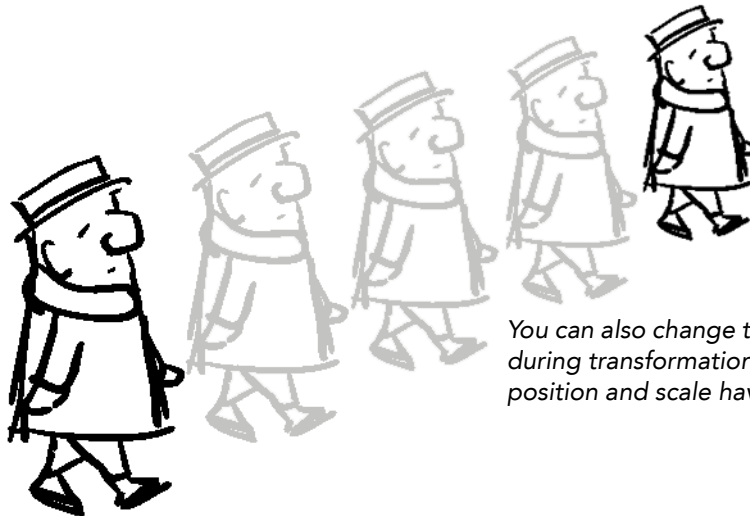
With the Transform tools, you can animate changes in position, rotation and scaling all from one tool. Unlike with the Select tool, your changes do not remain static for the entire panel; you set the image's position, rotation and scale at the first frame and define its position, rotation and scale at the final frame. Toon Boom Storyboard calculates the position of the drawing object at the frames in between the first and last frame in the panel.

You can also set the position of the first frame to be the same as the last frame, and vice versa.

If you want to animate a motion path, you can use the Transform tool in the Drawing View or Panel View. Another example of a transformation is making an object appear to grow in size by transforming the object and re-scaling it to a larger size.



*The butterfly's first position (bottom left) and last position (top right, rotated counterclockwise) in the panel were defined. The difference in position and rotation is changed over time in the panel's frames.*



*You can also change the scale of an object during transformation. This character's position and scale have been changed.*

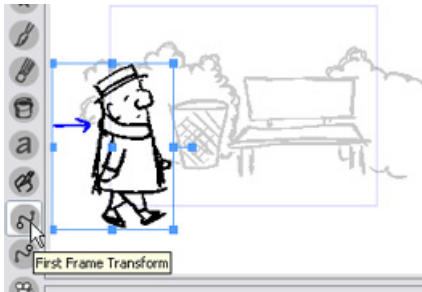
The Transform tools work with all the drawing objects on a selected layer. To learn more about layers, see *Working With Layers* on page 59.

Unlike a traditional paper-based storyboard, you will be able to see your transformations when you play back your animatic in Toon Boom Storyboard and when you view an enhanced animatic in QuickTime or Flash.

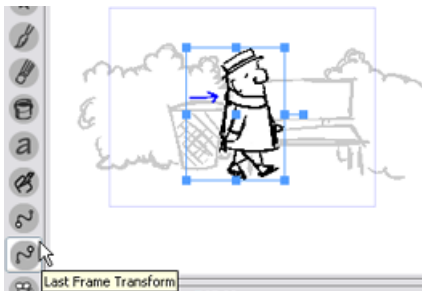
**To animate with the Transform tool:**

1. Select the layer you want to transform.
2. Select **Tools > First Frame Transform**.

A blue bounding box appears around all of the drawing objects in the layer.





3. Scale, rotate and position the objects in the selection as you want them to look in the first frame.
4. Select **Tools > Last Frame Transform**.
5. Scale, rotate and position the objects in the selection as you want them to look in the last frame.



You can reapply a transformation at any time while working on your project. Reset the transformation to its original static position using the **Reset Transform** command in the Layer Menu.

*Tip*

To activate these tools, you can also click the **First Frame Transform**  or the **Last Frame Transform**  button from the Tools Toolbar.

**To copy a frame position:**

- ▶ To copy the position of the last frame from the position of the first frame, select **Layer > Copy Layer End Position From Start Position**.

You can also press the **Copy Layer End Position from Start Position**  button in the Layer Toolbar.

- ▶ To copy the position of the first frame from the position of the last frame, select **Layer > Copy Layer Start Position From End Position**.

You can also press the **Copy Layer Start Position from End Position**  button in the Layer Toolbar.

## Flipping Drawing Objects

You can flip a selected drawing object or all drawing objects in an active layer either vertically (from top to bottom) or horizontally (from left to right).

### To flip a drawing object:

1. Select the drawing object that you want to flip in the current layer. To select multiple objects, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.

If no drawing objects are selected, then all the drawing objects in the layer will be flipped.

2. Do one of the following:

- ▶ To flip the object horizontally, select **Tools > Flip Selection Horizontally**.

You can also use the [Alt]+[H] shortcut.

- ▶ To flip the object vertically, select **Tools > Flip Selection Vertically**.

You can also use the [Alt]+[V] shortcut.

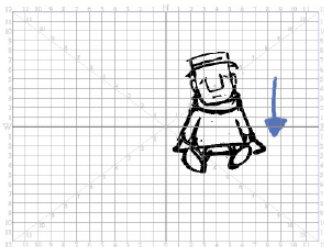
## Setting Up Your Drawing Space

You can customize your drawing space to suit your needs.

- Displaying a grid on page 41
- Moving within the drawing space on page 42

### Displaying a grid

When you are drawing your objects, it may be difficult to draw them on a plain white surface that does not have any reference points. You can choose to display a grid that appears behind your drawings.



*Use the grid to judge the distance and size of objects in your panel.*

### To display the grid in the panel:

1. Select **View > Toggle Grid**.
2. Select the type of grid you want to use from the **View > Grid** menu. You can choose from the following types:
  - **Normal**: the grid is divided into a standard set of squares of equal size.
  - **12 Field**: the grid measures 12 fields in each compass direction from the grid centre.
  - **16 Field**: the grid measures 16 fields in each compass direction from the grid centre.

#### Tip

Other ways to display the grid:

- ⇒ Select **View > Toggle Grid** submenu in the panel's pop-up menu.
- ⇒ Windows users can use the [Ctrl]+[G] shortcut.
- ⇒ Mac OSX users can use the [Command]+[G] shortcut.

When this tool is active, press [Shift] to deselect an object while keeping the other selections active.

## Moving within the drawing space

It is only natural to want to rotate your drawing space while you are working. Getting the best drawing angle, while seeing all of the relevant parts of your drawing enables you to finely craft your drawings.



*Rotate the drawing space to get a better angle for the part of the drawing you are working on.*

### To rotate the drawing space:

- ▶ Select **View > Rotate Clockwise**.
- ▶ Select **View > Rotate Counterclockwise**.
- ▶ To return your drawing space to its original angle, select **View > Reset Rotation**.

#### Tip

Select the **View** submenu in the panel's pop-up menu to access these commands.

Use the following keyboard shortcuts to rotate your drawing space:

- ⇒ To rotate clockwise, press [V].



- ⇒ To rotate counterclockwise, press [C].
- ⇒ To reset rotation, press [Shift]+[A].

### To pan a drawing:

- ▶ Hold the [Spacebar] down (your cursor arrow is replaced by a small open hand) while you click the mouse. Your cursor becomes a closed hand. Drag the cursor in the Drawing View to change the area displayed.

#### *Tip*

Use the following keyboard shortcuts to pan your drawing space:


- ⇒ Press [N] to centre the image at the current mouse position.
- ⇒ To reset the pan, press [Shift]+[N].

### To zoom the Drawing View:

1. Select **Tools > Zoom** to activate the Zoom tool.
2. Click the Drawing View to zoom in.

#### *Tip*

Other ways to activate this tool:

- ⇒ From the Tools Toolbar, click the **Zoom**  button.
- ⇒ Select **Zoom** in the panel's pop-up menu in the Drawing View.
- ⇒ Use the [Alt]+[Z] shortcut.

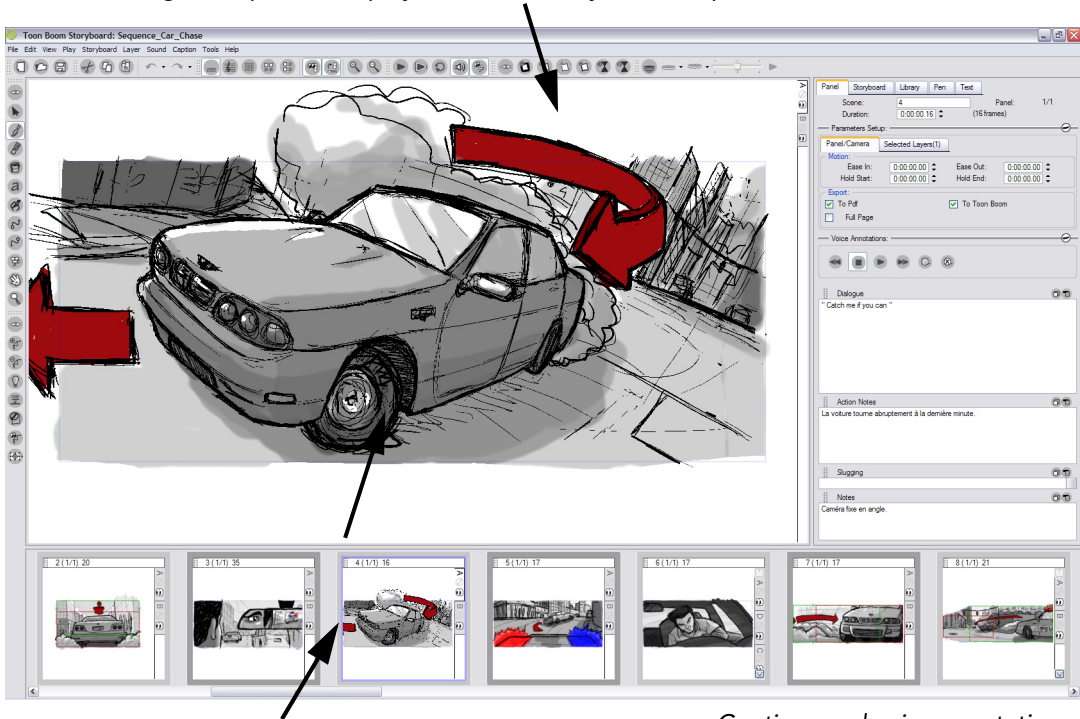
Use the following keyboard shortcuts to zoom in your drawing space:

- ⇒ Hold the [Spacebar] down, use the middle-mouse button and drag the Drawing View up to zoom out or drag down to zoom in.
- ⇒ Press [1] to zoom out.
- ⇒ Press [2] to zoom in.
- ⇒ Press [N] to centre the image at the current mouse position.

# Working With Storyboard Panels

Panels are displayed in timeline views (the Panel View and Timeline View) and in the Drawing View.

*If the Drawing workspace is displayed, the currently selected panel can be seen in it.*



*When a panel is selected, it is highlighted with a bounding box.*

*Captions and voice annotations provide useful supporting text and audio information.*

A *panel* is an essential building block of a storyboard and is rich in information.

- Its **visual content** describes a part of a shot that you want to film.
- A panel can include **camera** information, including information about the setup and camera movements.
- A panel can have **captions** associated with them, which can be used to add textual information. Text can include, but is not limited to, dialogue, continuity, prop and equipment notes, staff required for the shot and sound track timing.
- A panel exists in a sequence of other panels that create the story that you want to develop for production. A single panel can be used to describe a **shot**, although more complex shots may require additional panels.

### In Toon Boom Storyboard:

- A single drawing can be created in a panel, or visual content can be stored on multiple drawing **layers**. These can be modified, rearranged and swapped between panels.
- **Visual guides** define where you want to place the camera at the beginning of a panel and at the end. This information is automatically converted into a dynamic camera move in the animatic output from your Toon Boom Storyboard project.
- Four **caption fields** are included automatically for each panel, but an unlimited number of caption types can be added to storyboard panels allowing you to organize text in a manner that is relevant to your project. Text can be imported from text files directly into a panel's text field. In addition to textual notes, you can also record **audio notes** using the voice annotation feature.
- **Panel order** can be rearranged by inserting, deleting and dragging and dropping selected panels to their new position in the storyboard. Panels can be linked together to form new shots, and panels that form shots can be disconnected from each other.


You can use a number of Toon Boom Storyboard's features to work with panels.

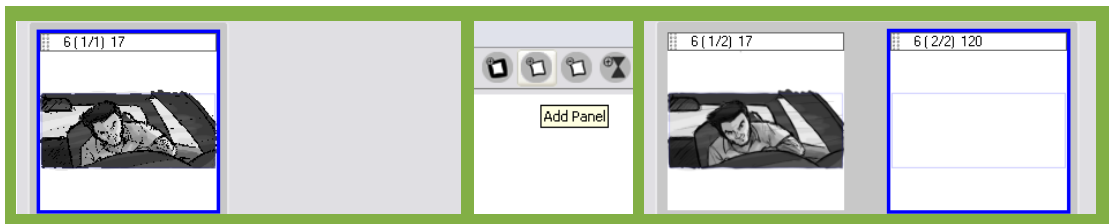
- Adding Panels on page 46
- Deleting Panels on page 47
- Duplicating Panels on page 47
- Renaming Shots on page 48
- Joining Panels to a Shot on page 50
- Splitting Panels in a Shot on page 51
- Inserting Transitions on page 52
- Deleting Transitions on page 52
- Adding Snapshot Markers to a Panel on page 52
- Deleting Snapshot Markers from a Panel on page 54
- Importing Images into Storyboard on page 54
- Onion Skinning: Displaying Drawings from Next and Previous Panels on page 57

## Adding Panels

When you start a storyboard, you have one blank panel to get you started. You can add subsequent panels to the storyboard at any location in the timeline.


### To add a panel to a shot:

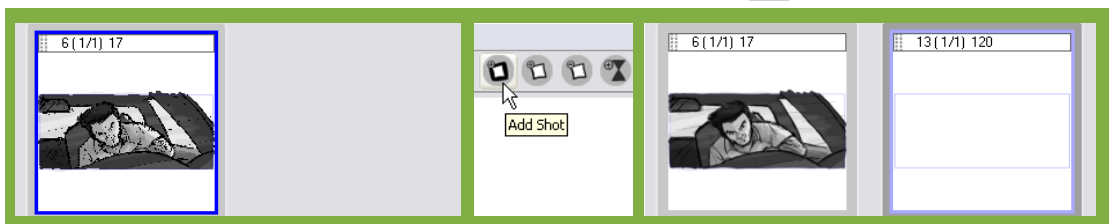
1. In the Panel View or Timeline View, select the panel that will appear before the panel you want to add to the storyboard.
2. Do one of the following:
  - ▶ Select **Storyboard > Add Panel**.
  - ▶ From the Storyboard Toolbar, click the **Add Panel**  button.
  - ▶ Use the [P] shortcut.



A new panel is created within the current shot, positioned immediately after the panel you selected. If the panel is added after an unconnected panel, the two panels will be joined together to form a shot. All panels in the same shot are grouped by a dark gray bounding box.

### To add a new panel and create a new shot:

1. In the Panel View or Timeline View, select the shot that will appear before the panel you want to add to the storyboard.
2. Do one of the following:
  - ▶ Select **Storyboard > Add Shot**.
  - ▶ From the Storyboard Toolbar, click the **Add Shot**  button.




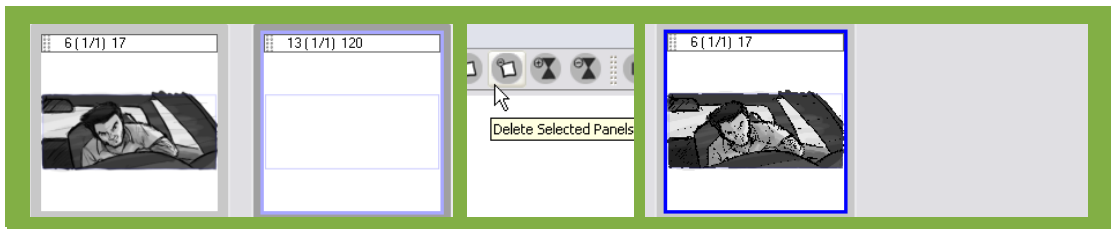
A new panel is created immediately after the current shot. If the panel is added after an unconnected panel, the two panels will remain disconnected (that is, two shots with one panel each).

## Deleting Panels

You can delete one or more panels from your project.

### To delete panels from your storyboard:

1. In the Panel View or Timeline View, select the panel that you want to cut from the storyboard. To select multiple panels, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.
2. Do one of the following:
  - ▶ Select **Edit > Delete Selected Panels**.
  - ▶ In the Storyboard Toolbar, press  **Delete Selected Panels**.
  - ▶ Press the [Delete] key.




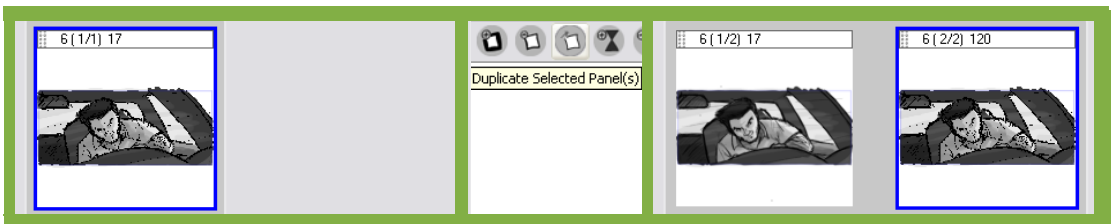
To select multiple panels, hold down [Ctrl] (Windows) or [Command] (Mac OSX) as you click.

## Duplicating Panels

You can duplicate one or more panels in the Timeline View.

### To duplicate a panel:

1. In the Panel View or Timeline View, select the panel or set of panels you want to duplicate. To select multiple panels, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.
2. Do one of the following:
  - ▶ Select **Storyboard > Duplicate Selected Panels**.
  - ▶ From the Storyboard Toolbar, click the **Duplicate Selected Panels**  button.



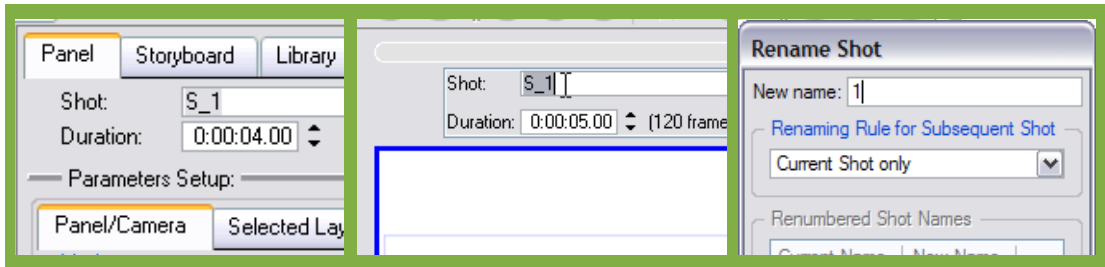
A new panel is created within the current shot, immediately after the selected panel.

## Renaming Shots

You can rename your shot or change the numbering sequence of one more shots.

### To rename a shot:

1. Select a panel in the shot you want to rename.
2. Do one of the following:
  - ▶ In the Panel Tab, click the **Shot** field and type in the new shot name (or number).
  - ▶ In the Horizontal Workspace or Vertical Workspace, select the **Shot** field, located above the panel.
  - ▶ Select **Storyboard > Rename Shot** to open the Rename Shot dialog box and enter the shot name in the **New Name** field and press OK.



3. Select the **Do not show this dialog automatically** option, if you want to use the current settings the next time you rename a shot.

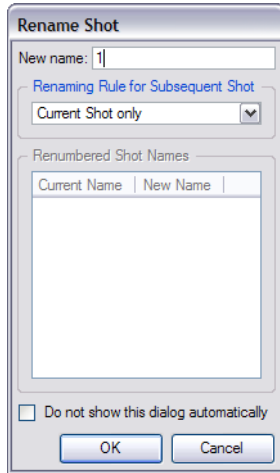
The Rename Shot dialog box can be used to rename a shot, but its features allow you to update the numbering of multiple shots. There are two ways to renumber shots:

- Update all shot numbers to increment by one number (for example, rename shots 1, 2, B, 9A, 3 to begin at 3 and renumber subsequent shots 4, 5, 6, 7)
- Update all shot number prefixes to increment by one number (for example, rename shots 5, 6, 6A, 7, 7A to begin at 3 and rename subsequent panels, 4, 5A, 6, 7A)

### To renumber shots:

1. Select the panel in the shot at which you want to begin renumbering.
2. Select **Storyboard > Rename Shot**.

The Rename Shot dialog box opens.



3. Do one of the following:

- ▶ To renumber shots beginning at the selected shot, enter the number at which you want to begin numbering in the **New Name** field and select **Renumber Shot**.
- ▶ To renumber the shots' numerical prefixes beginning at the selected shot, enter the new shot name (it must begin with a number) and select **Renumber Prefix Only**.

The Renumbered Shot Names list will display columns with the current and updated shot names.

4. Press OK to save the new names.


*Tip*

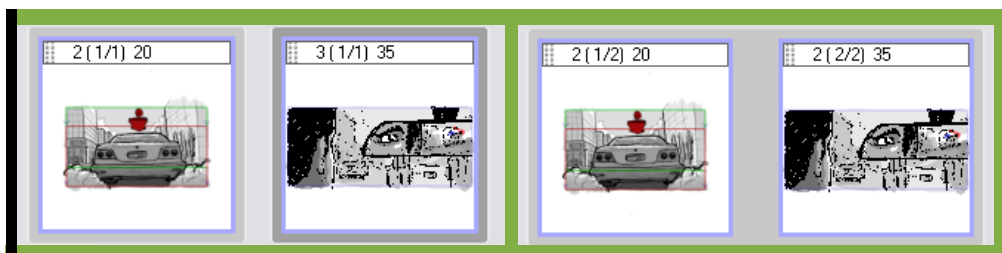
When using the Renumber Prefix Only option, the selected shot name and subsequent shot names must begin with a numerical prefix.

## Joining Panels to a Shot

You can add a panel to an existing adjacent shot. The new shot will adopt the name of the shot that was nearest to the start of the timeline.

### To join a panel to a shot:

1. Select two or more panels to join in the same shot.
2. Do one of the following:
  - ▶ Select **Storyboard > Join Selected Panels to Shot**.
  - ▶ In the Storyboard Toolbar, press the **Join Panels to Shot**  button.
  - ▶ In the Panel View, click on the first panel you want to join and drag that panel to the one which you are going to attach it to.



To select multiple panels, hold down [Ctrl] (Windows) or [Command] (Mac OSX) as you click.

The panels will be part of the same shot. The first shot name of the selection will override the other shot names.

## Joining panels using drag and drop

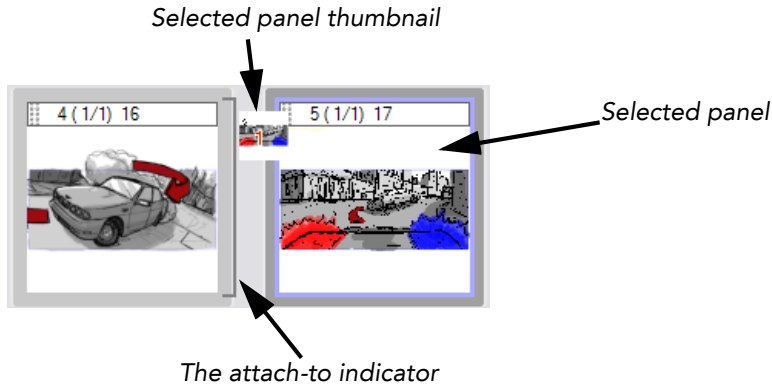
You may find it quicker to work in the Panel View and use the handy drag and drop feature to join your panels.

### To join a panel to a shot:

1. In the Panel View, click on the first panel you want to join to your shot to select it. A bounding box will appear around the panel image which you have just selected.
2. Keeping the panel selected, drag it along in the Panel View until it is beside the panel you want to attach it to.
  - ▶ It does not matter in which direction you drag the panel as you move along the Panel View.
  - ▶ You can drag the panel to any position and attach it to any panel or shot in the Panel View.
  - ▶ As you drag you will notice a small thumbnail of the selected image moves along with the cursor showing you exactly what the selected panel looks like.



- When you drag alongside another panel or shot you will see a line appear, this *attach-to* line indicates that the image is in the correct position to attach to the panel or shot.




- Once you have correctly positioned the panel thumbnail beside the panel you want to link to, drop the selection and it will automatically attach to the panel.

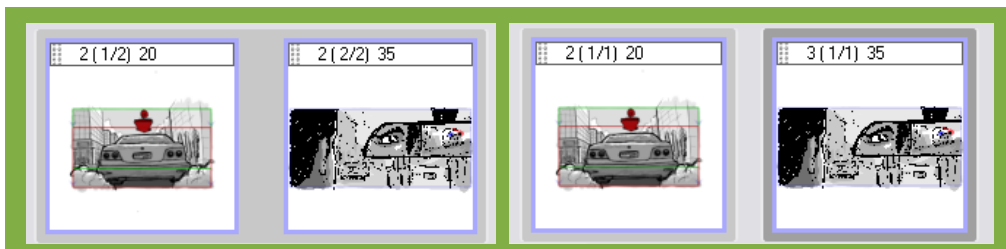
You can select multiple panels and simultaneously drag them to attach them to another panel. To select multiple panels, hold down [Ctrl] (Windows) or [Command] (Mac OSX) as you click.

## Splitting Panels in a Shot

You can remove a panel from the shot it is in. Selected panels will each become separate shots with one panel each.

### To split a panel from a shot:

- Select one or more panels in the same shot.
- Do one of the following:
  - Select **Storyboard > Split Current Shot**.
  - In the Storyboard Toolbar, press **Split Current Shot**  button.




To select multiple panels, hold down [Ctrl] (Windows) or [Command] (Mac OSX) as you click.



Each selected panel becomes part of a new shot in which it is the only panel. New shot names will be numbered based on the next available shot number in the storyboard project.

## Inserting Transitions

By default, transitions between shots are defined as cuts—the action in the panel at the end of a shot finishes and immediately displays the next shot. The transitions will also be translated visually when the storyboard is exported to a QuickTime movie.

### To insert a transition:


1. Select the panel before the shot transition you want to add.
2. Do one of the following:
  - ▶ Select **Storyboard > Insert Transition**.
  - ▶ In the Storyboard Toolbar, press **Insert Transition**  button.

A transition is inserted between shots. By default, the transition is a wipe . A transition can be changed to a dissolve , by selecting the transition, and either double-clicking it or changing its type in the Panel tab. You can also use the Panel tab to change the duration of the transition.

## Deleting Transitions

You can delete a wipe or dissolve transition at any time and restore it to a cut.

### To delete a transition:

1. Select the transition you want to delete by clicking it.
2. Do one of the following:
  - ▶ Select **Storyboard > Remove Transition**.
  - ▶ In the Storyboard Toolbar, press **Remove Transition**  button.

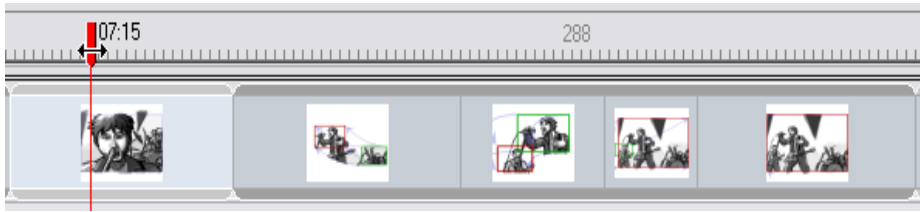
## Adding Snapshot Markers to a Panel

If you want to specify which frames in a panel will be visible in a PDF file, you must add snapshot markers to the panel. By default, only the first frame in the panel is visible in a PDF file.

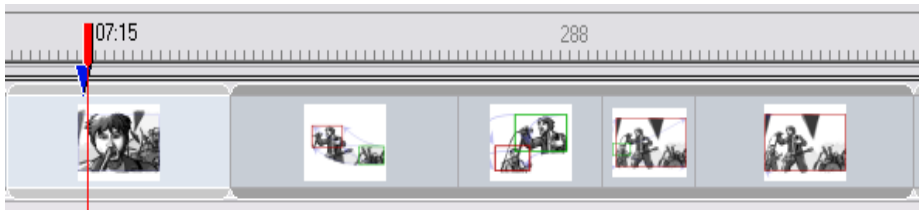
### To add a snapshot marker to a panel:

1. In the Timeline View, select the panel to which you want to add a snapshot marker.

2. Drag the Current Frame slider to the position where you want to add a snapshot marker.

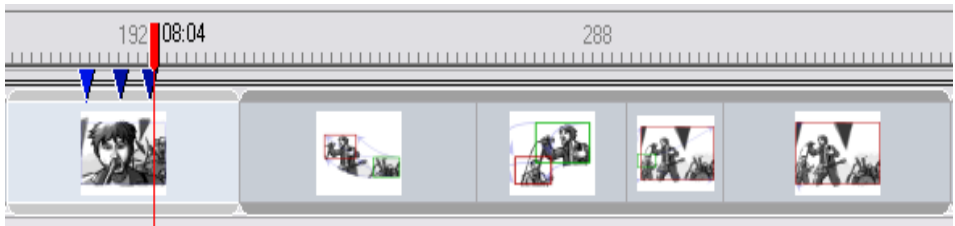


3. Do one of the following:
  - ▶ Select **Storyboard > Add Snapshot**.
  - ▶ Right-click the layer's tab and select **Add Snapshot**.



4. Repeat steps 2 and 3 for each snapshot marker you want to add to the panel.

Notice that the brightness of the icon changes for any subsequent snapshot markers in the panel.



When you create the PDF file, it will display a separate view of each of the panel's frames. For example, the panel below shows three of the panel's frames.

Shot	Panel	Duration
5	1/1	02:00

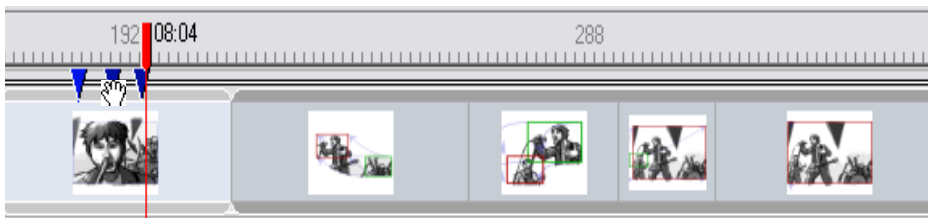
## Deleting Snapshot Markers from a Panel

You can remove snapshot markers from the currently selected panel.

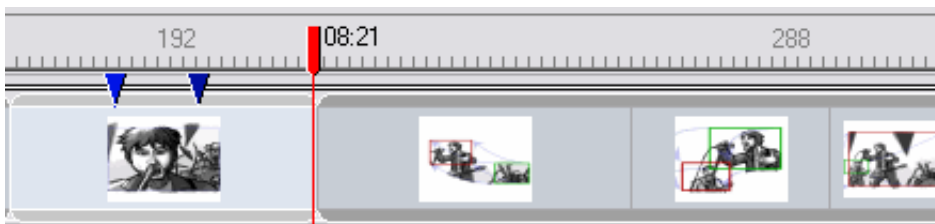
**To delete a snapshot marker:**

1. Select the snapshot marker you want to delete.

In this case, a hand cursor appears over the snapshot marker.



2. Drag the hand cursor outside of the panel in the Timeline View to remove the snapshot marker.



## Importing Images into Storyboard

As you build your scene, you may want to use bitmap images for backgrounds and overlays. You may also want to import an image as a reference for a vector drawing you want to create. With Toon Boom Storyboard, you can import a variety of bitmap formats (TVG, OPT, PAL, SCAN, SGI, TGA, YUV, OMF, PSD, PNG, JPG, JPE or JPEG) which you can combine with your vector-animated content to create rich and unique graphic styles.

You can import a single image (or multiple images located in the same folder) into a new layer.

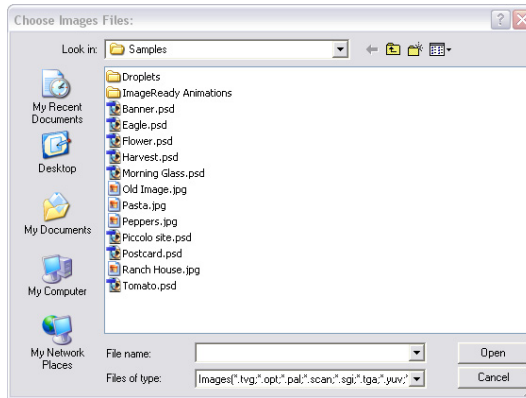
### NOTE

Toon Boom Storyboard does not support import of 8-bit CMYK or 16-bit RGB or CMYK format PSD files. You can currently import only 8-bit RGBA format PSD files.

**To import images into the current panel:**

1. Select the panel where you want to import the image.
2. Select **Layer > Import Images as Layers**.

The Choose Images Files dialog box opens.



3. Select the image(s) you want to import and press Open to confirm your selection.

#### *Tip*

To select multiple images, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.

A layer will be created behind the existing layers, containing the selected image. If you selected more than one image, each image will be imported in alphanumerical order on its own layer.

If you selected a PSD image with multiple layers, a message asks “This image contains multiple layers. Do you want to import each layer separately?”

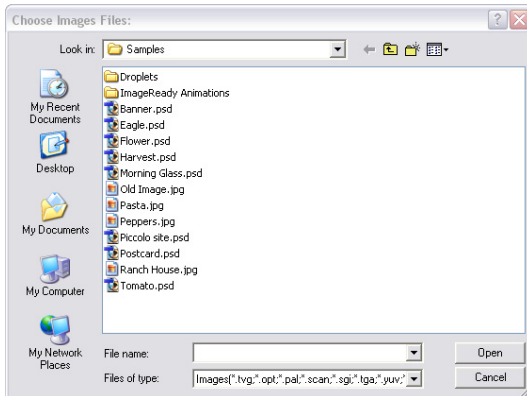
- ▶ If you click **Yes**, each layer is imported on its own layer in the panel.
- ▶ If you click **No**, a layer will be created behind the existing layers, containing the selected PSD image.

You can import a single image (or multiple images located in the same folder) into a new shot.

#### **To create shots as you import images into your current storyboard:**

1. Select the shot before the one you will insert when you import the image.
2. Select **Storyboard > Import Images As Shots**.

The Choose Images Files dialog box opens.



3. Select the image(s) you want to import and press Open to confirm your selection.

#### *Tip*

To select multiple images, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.

A new shot will be created and inserted after the shot you selected, containing the selected image. If you selected more than one image, each image will be imported in alphanumerical order in its own shot.

If you selected a PSD image with multiple layers, a message asks “This image contains multiple layers. Do you want to import each layer separately?”

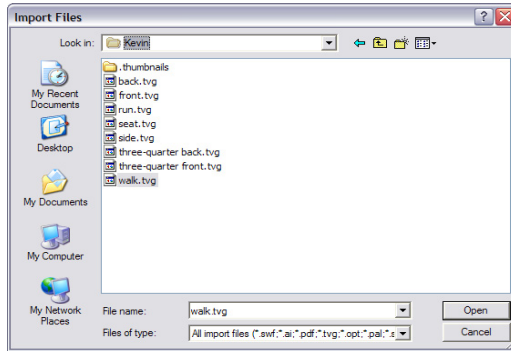
- ▶ If you click **Yes**, each layer is imported on its own layer in the panel.
- ▶ If you click **No**, a layer will be created behind the existing layers, containing the selected PSD image.

You can import images into your storyboard’s template library for future use.

#### **To import images into your template library:**

1. In the Tool Properties, click the Library Tab.
2. Select the folder for the library where you want to import the image.
3. Certain template library folders that can be shared with others are locked by default, and you must get access to them when they are not in use by someone else. To unlock a folder, get the rights to edit the library:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **Right To Modify Library** so that a check mark appears next to the command name.
5. Select the folder where you want to store the file.
6. From the pop-up menu, select **Import Files**.

The Import Files dialog box opens.



7. Select the image(s) you want to import and press Open to confirm your selection.

The image file names or thumbnails appear in the folder's list of assets. If you want to use it in your storyboard at any time, drag the image into the panel where you want to use it. For more information on using the template library, see *Working With the Library* on page 86.

#### Tip

To select multiple images, hold down the [Ctrl] key (Windows) or the [Command] key (Mac OSX) as you click.

## Onion Skinning: Displaying Drawings from Next and Previous Panels






With onion skinning in Toon Boom Storyboard, you can display the drawings from previous panels in the current panel so you can see where to place the drawings for the next panel. You can also display drawings from next panels in the current panel so you can see where to place the drawings for the previous panel. You can use these drawings as a reference to determine the size, angle or position of the drawing in the current panel.

You can display the drawings of up to three previous panels or next panels in the onion skin.






Use the **Onion Skin**  button in the Onion Skin toolbar to turn the onion skin feature on and off.

In the Drawing View, Toon Boom Storyboard displays the drawings of the previous and next panels in the onion skin in a different colour so that you can distinguish them. You can also use the onion skin in the Timeline View to display drawings in the previous and next frames in the current frame. Toon Boom Storyboard also makes use of a flipbook feature allowing you to rapidly move between drawings.

**To set the previous onion skin depth:**

- ▶ Select one of the following options from the **Show Previous**  button in the Onion Skin toolbar:
  - ▶ **No Previous Panels**  : displays only the drawings in the currently selected panel.
  - ▶ **Previous Panel**  : displays the drawings of the previous panel before the drawings in the current panel.
  - ▶ **Previous Two Panels**  : displays the drawings of the previous two panels before the drawings in the current panel.
  - ▶ **Previous Three Panels**  : displays the drawings in the previous three panel before the drawings in the current panel.

**To set the next onion skin depth:**

- ▶ Select one of the following options from the **Show Next**  button in the Onion Skin toolbar:
  - ▶ **No Next Panels**  : displays only the drawings in the currently selected panel.
  - ▶ **Next Panel**  : displays the drawings of the next panel after the drawings in the current panel.
  - ▶ **Next Two Panels**  : displays the drawings of the next two panels after the drawings in the current panel.
  - ▶ **Next Three Panels**  : displays the drawings in the next three panels after the drawings in the current panel.

## Setting onion skin options

By default, onion skin drawings:

- are displayed as filled shapes
- display drawings from the previous panels in shades of red
- display drawings from the next panels in shades of green

You can change how drawing objects are coloured and shaded in the onion skin to suit your working style.

## Onion skin shading and colour preferences

**To set onion skin shading and colour preferences:**

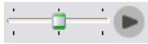
1. Select **Edit > Preferences** (Windows) or **Toon Boom Storyboard > Preferences** (Mac OS X) to open the Preferences dialog box.
2. Click the **Drawing View** tab.



3. In the Onion Skin panel, select your colour shading option:
  - ▶ If you want drawings from previous and next panels to appear in their original colour and faded, turn off the **Enable Shade** check box.
  - ▶ If you want drawings from previous and next panels to appear as different colours, turn on the **Enable Shade** check box.
4. To change the colour values applied to drawings, do one of the following:
  - ▶ To choose a colour for drawings from the previous panels, click the **Onion Skin Colour Before** square and select a new colour from the Colour Picker.
  - ▶ To choose a colour for drawings from the next panels, click the **Onion Skin Colour After** square and select a new colour from the Colour Picker.
5. Click **OK** when you are done.

## Onion Skin Flipbook feature

Toon Boom Storyboard makes use of a flipbook feature allowing you to rapidly move between onion-skinned drawings.

- ▶ In the Onion Skin toolbar, click and drag the flipbook slider  to flip between the drawings you have already selected with the onion skin tool. This is an extremely useful and time saving feature. To automatically play the onion-skinned drawings as a flipbook, click on the play button in the flipbook slider.

## Working With Layers

When you import an image or draw in a panel, you are actually adding artwork to one of its *layers*. By default, each panel has two layers, a background (BG) and a foreground layer (A).

As you add layers, they are automatically assigned subsequent letters in alphabetical order, but they can be renamed manually. They are also placed behind the other layers in the panel.

Working on multiple layers increases the reusability of your drawing as you move from shot- to-shot or scene-to-scene. Each layer or part of a layer can be dragged from the selected shot into any other shot reducing drawing time.

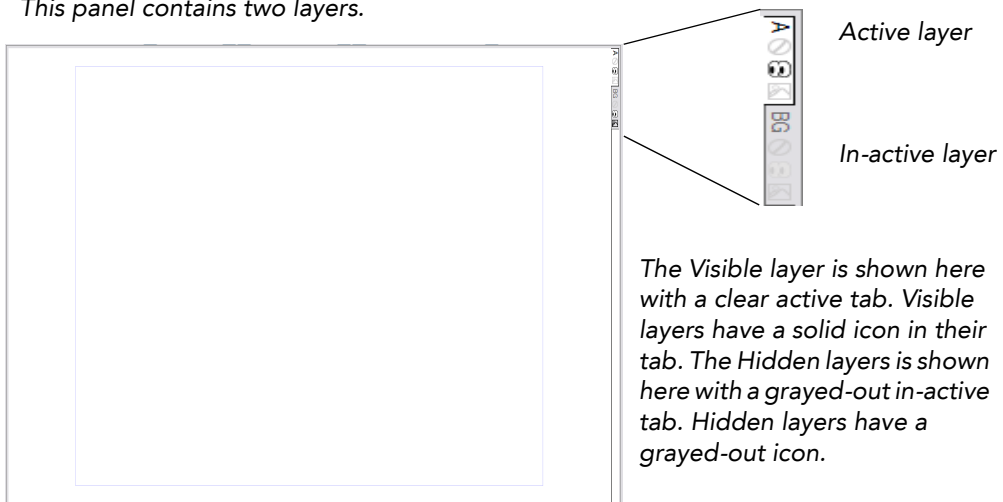
The following tasks describe how to work with layers:

- Drawing on Layers on page 60
- Adding Layers on page 61
- Deleting Layers on page 61
- Renaming Layers on page 61
- Arranging Layers on page 62
- Copying Layers on page 62
- Displaying Layers with the Light Table on page 63
- Merging Layers on page 64
- Locking or Unlocking Layers on page 65
- Spreading Layer Motion Across Panels on page 66

## Drawing on Layers

When you open a project, the Drawing Workspace is displayed by default in the Storyboard window. In the Drawing View, layer tabs are always displayed, allowing you to navigate between layers. If the Panel View is large enough, layer tabs are displayed for each panel.

*This panel contains two layers.*



### To draw on a layer:

1. Select the layer you want to use: click on the tab with the name of the layer you want to use.
2. When the layer is turned on and active, the eye icon is black. If the layer is disabled, you will not be able to draw and any content in the layer is hidden. In this case you will need to turn it on, click the grayed-out eye icon in the selected layer's tab.

3. Select a drawing tool, such as the Brush.

As you draw, the panel will be updated in the Drawing View and the Panel View.


*Tip*

By default, drawing tools add objects on top of all other objects in a layer. To draw behind an object without adding new layers, select **Toggle Drawing Behind Mode** under the Pen tab in the Tool Properties.

## Adding Layers

You can add an unlimited amount of layers to a panel.


**To add a drawing layer to a panel:**

1. Select the panel to which you want to add the layer.
2. Do one of the following:
  - ▶ Select **Layer > Add Drawing Layer**.
  - ▶ Right-click the layer's tab and select **Add Layer**.
  - ▶ In the Layer Toolbar, click the **Add Layer**  button.

## Deleting Layers

You can delete the currently selected layer using the Delete Layer command.

**To delete a layer from a panel:**

1. Select the panel from which you want to delete the layer.
2. Do one of the following:
  - ▶ Select **Layer > Delete Layer**.
  - ▶ Right-click the layer's tab and select **Delete Current Layer**.
  - ▶ In the Layer Toolbar, click the **Delete Layer**  button.

## Renaming Layers

Relevant naming can help you to work faster and better keep track of layers.

**To rename a layer:**

1. Select the panel with the layer you want to rename.
2. Do one of the following:
  - ▶ Select **Layer > Rename Current Layer**.
  - ▶ Right-click the layer's tab and select **Rename Layer**.

## Arranging Layers

Layers can be repositioned. They can be brought closer to the front or the back in the layering order.

If you want to have a character move to the front of a shot, you can click on the character's layer tab and drag it lower.

**To change the display order of a layer:**

1. Click the tab of the layer you want to move.
2. Drag the tab up or down. A black bar will indicate the tab's (and the layer's) new position.

## Copying Layers

You can reuse drawings from other panels throughout your storyboard. You can also modify drawing objects and transformations after they've been copied to a new layer, rather than redrawing objects that are similar.

**To copy a layer to another panel:**

1. Click the tab of the layer you want to copy.
2. Drag the tab to another panel:
  - ▶ Drop it in the panel's drawing area to make it the topmost layer.
  - ▶ Drop it in the tabs at a specific tab position to place it in a specific layer order.

When you copy a layer it retains its original layer name in the new panel. If a layer with the same name already exists, then the copied layer will use the original name and add a numerical suffix.

For example, if layer **A** is copied to a panel, where a layer **A** already exists, the copied layer will be named **A\_1**. If it is copied into the panel a second time, the new layer will be named **A\_2**.

## Displaying Layers with the Light Table

As you create your drawings, you may want to focus on drawings on a specific layer, but still see drawings from other layers in your panel so you can figure out how all the drawings look in relation to each other. For example, if one character is grabbing something from another, you will need to see all of the drawings together to get a sense of how to position the characters' hands.

You can do this by using the light table feature. The light table displays a semi-transparent version of all layers in a panel, except for the layer that is currently selected.



*Auto Light Table turned on*



*Auto Light Table turned off*

### To activate the Light Table:


- ▶ Do one of the following:
  - ▶ Select **View > Auto Light Table** to turn on the light table.
  - ▶ In the Layer Toolbar, click the **Auto Light Table**  button.

You can select the tab of the layer with the drawings you want to view. To turn off the light table, select the command again.

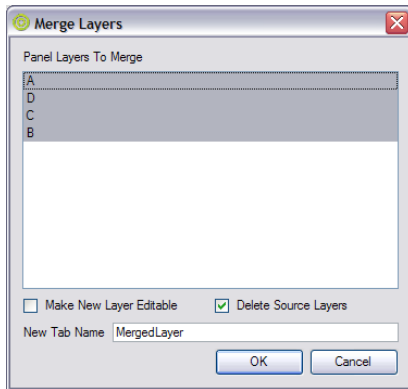
## Merging Layers

You can merge one or more layers together into one layer.

### To merge a layer into another layer:

1. Select the panel with the layers you want to merge.
2. Do one of the following:
  - ▶ Select **Layer > Merge Layers**.
  - ▶ In the Layer Toolbar, click the **Merge Layers**  button.
  - ▶ Right-click a layer tab and select **Merge Layers**.

The Merge Layers dialog box opens.



3. Select the layers you want to merge from the Panel Layers To Merge list.
4. Do one of the following:
  - ▶ To make the merged layer editable, select **Make New Layer Editable**, if it is not already editable. Any previously defined motion in the source layers will be lost. If you choose not to make the layer editable, transform motion will be kept. You can draw on top of merged layers but cannot modify them. After you have merged layers it is possible to modify them using **Convert Templates To Drawing**. To do this right click on the drawing and select **Convert Templates To Drawing** from the popup menu.
  - ▶ To delete the original layers, select **Delete Source Layers**.
5. In the **New Tab Name** field, enter the name of the new tab.



By default, the name of the tab is **MergedLayer**. Any newly merged layers will use this tab name and add a numerical suffix, i.e., **MergedLayer\_1**, **MergedLayer\_2**, and so on.

6. Click OK to confirm your changes.

## Locking or Unlocking Layers


You can lock the currently selected layer to protect any objects on it from being changed. Once locked, you can unlock the layer to make changes to any objects on it.

### To lock or unlock a layer:

- ▶ Select the layer you want to lock and click the **unlock** icon  in the tab with the name of the layer you want to lock. Layers that are locked will display a **lock**  icon to show that they're locked.

*Tip:*

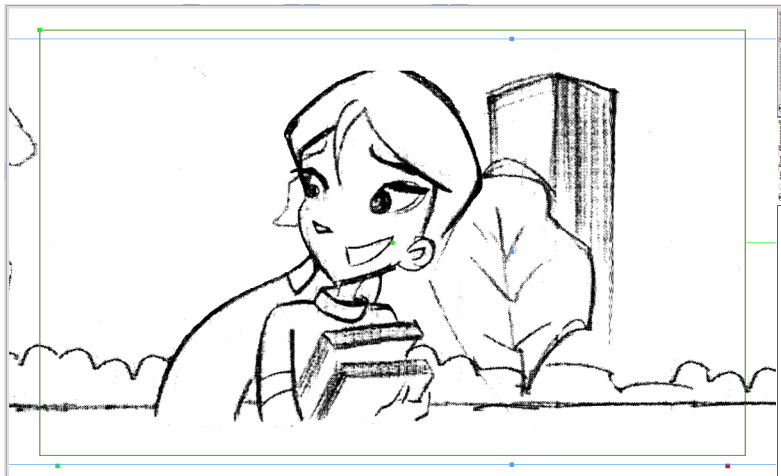
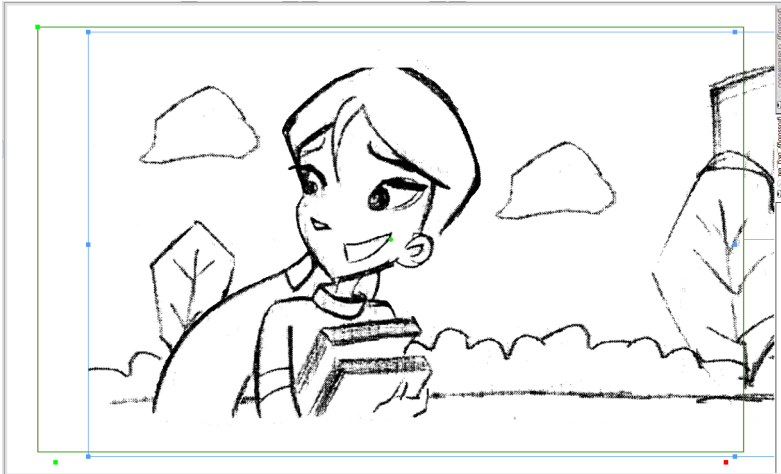
Other ways to lock or unlock a layer:

- ⇒ Select **Layer > Lock/Unlock Layer**.
- ⇒ In the Layer Toolbar, click the **Lock/Unlock Layer**  button.
- ⇒ Use the [Alt]+[L] shortcut.

## Spreading Layer Motion Across Panels

You can spread the current layer motion across all panels in the same shot or a specified number of adjacent panels after the current panel in the same shot.

The background layer in this example has the following motion:

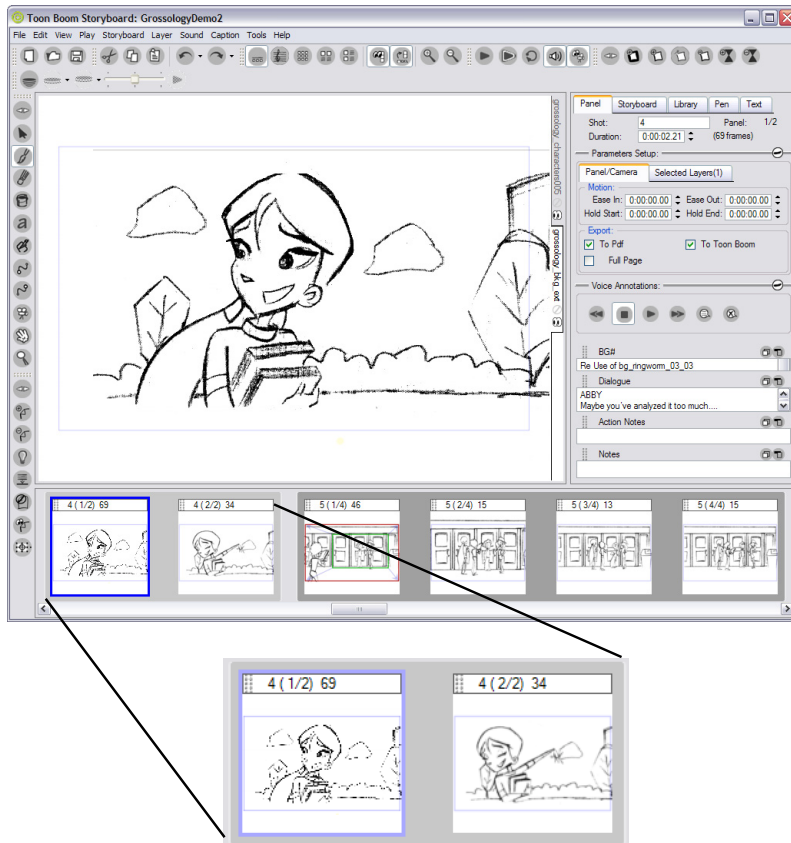


*This shows the motion in the background layer*



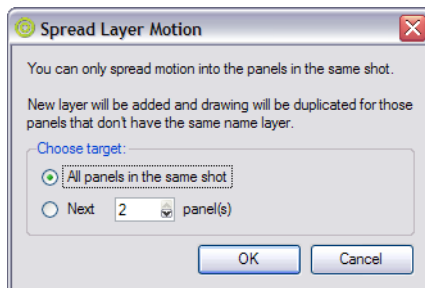
## To spread layer motion over panels:

1. Select the layer with the motion you want to spread.



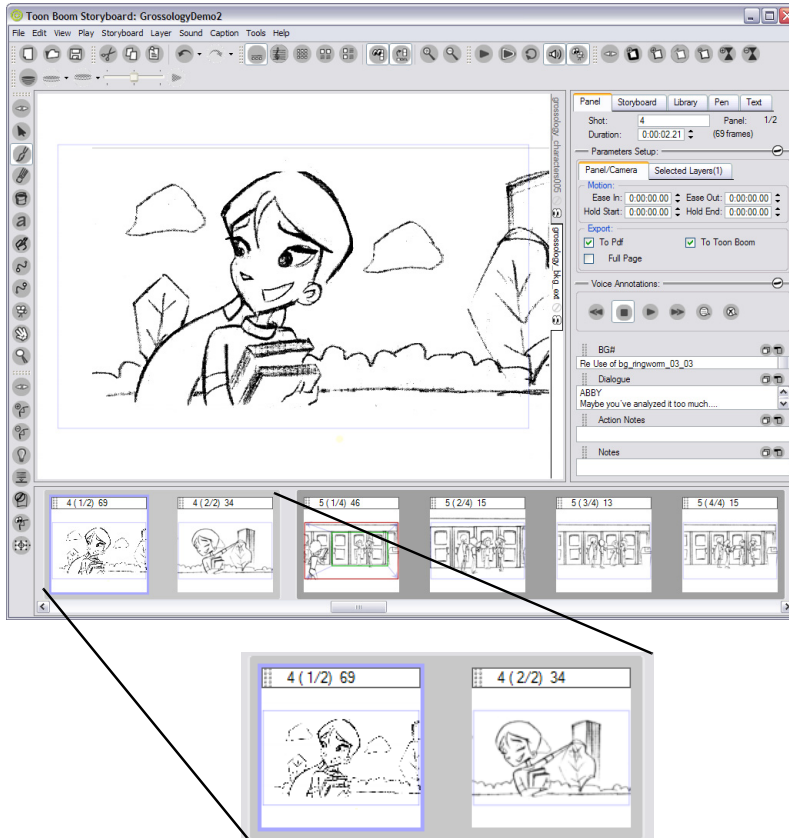
2. Do one of the following:
  - ▶ Select **Layer > Spread Layer Motion**.
  - ▶ Press the **Spread Layer Motion**  button in the Layer Toolbar.

The Spread Layer Motion dialog box opens.



3. Do one of the following:

- ▶ To spread layer motion over all panels in the same shot, select **All panels in the same shot**.
- ▶ To spread layer motion a specified number of adjacent panels after the current panel in the same shot, select **Next panel(s)** and enter or select the number of adjacent panels.



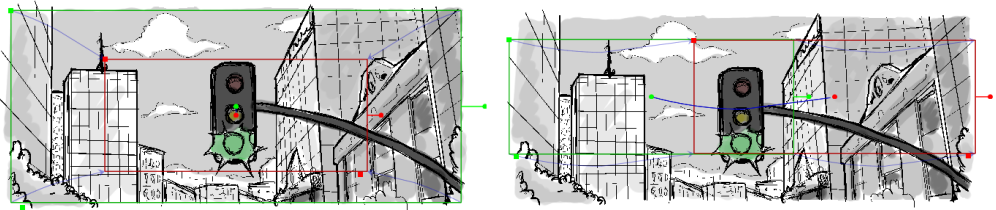
A new layer will be added and the drawing will be duplicated for those panels that do not have the same name in the defined range.

# Working With the Camera

The script or shot list may describe a camera move to be included in a panel. In Toon Boom Storyboard, you can easily add a visual guide representing a camera movement using the Camera Transform tool.

When you view an animatic with the Camera Preview option turned on, or create a Flash or QuickTime animatic based on the storyboard, it will include actual camera movements translated from the information described in the project.

Once a camera guide has been added to a panel, you can change the start and end positions of the camera to define its movement.




The following tasks describe how to work with the camera:

- Adding a Camera Move on page 69
- Creating a Camera Move on page 70
- Spreading a Camera Move on page 71
- Deleting a Camera Movement on page 74
- Previewing a Camera Move on page 74

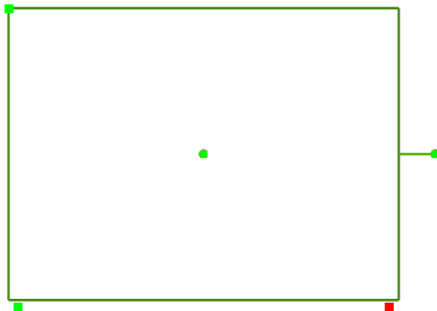
## Adding a Camera Move

By default each panel has a static camera frame view. To add camera motion (pan, zoom or tilt) you first need to add a camera guide.

**To add a camera guide to a panel:**

1. Select the panel to which you want to add the camera guide.
2. Do one of the following:
  - ▶ Select **Tools > Camera Transform**.
  - ▶ Press the **Camera Transform**  button in the Tools Toolbar.

The camera guide is added and displayed at its default position.



*The green rectangle represents where the camera is located at the beginning of the shot and the red rectangle represents where it is located when it ends.*

*By default, the camera remains in the same position for the duration of the panel.*


You can define a camera movement for a panel or spread a camera movement across panels in the same shot for complex crane or hand-held movements. See [Creating a Camera Move](#) on page 70 and [Spreading a Camera Move](#) on page 71.

## Creating a Camera Move

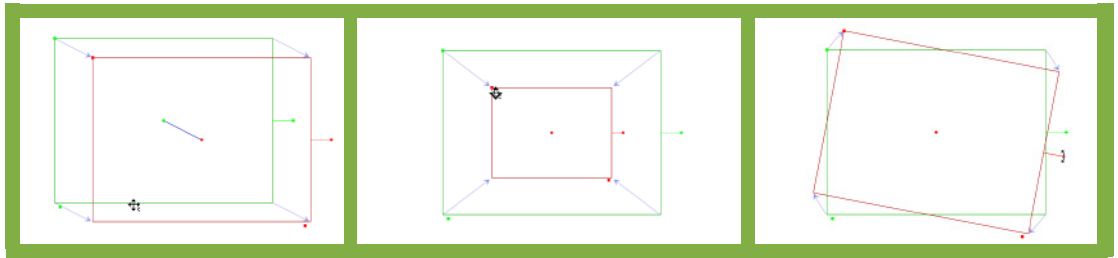
Once a camera guide has been added to a panel, you can change the start and end positions of the camera. The start position of the camera is represented by a green rectangle, and the end position is represented by a red rectangle.

The default position of the camera makes the default viewing area visible and remains static for the entire panel.

### To define a camera move:

1. Select the panel with the camera you want to modify.
2. Add a camera guide or select the existing camera guide:
  - ▶ Select **Tools > Camera Transform**.
  - ▶ Press the **Camera Transform**  button the Tools Toolbar.

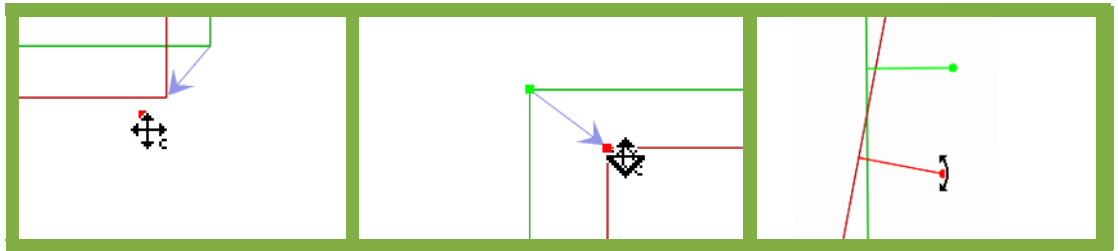
3. Use the handles to move, tighten, widen and rotate the camera until you set it in the desired position.



Move

Tighten and widen

Rotate




Use the circle inside the rectangle to move the centre of the camera. The arrows indicate the direction of the camera's movement.

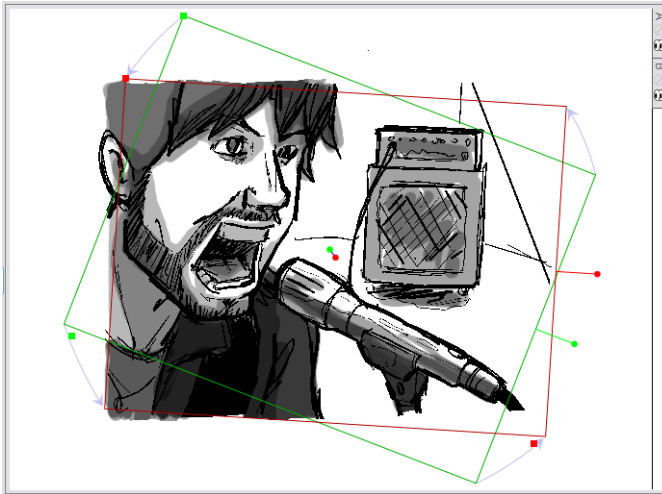
## Spreading a Camera Move


Once a camera guide has been added to a panel, you can spread its movement across all panels in the same shot or a specified number of contiguous panels after the current panel in the same shot. The start position of the camera is defined in the first panel and the end position of the camera is defined in the last panel.

**To spread a camera move:**

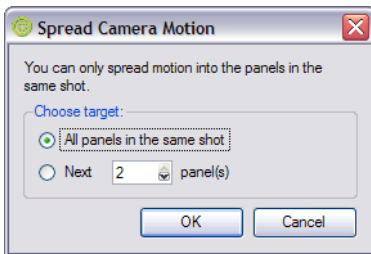
1. Select the panel with the camera you want to modify.
2. Add a camera guide or select the existing camera guide:
  - ▶ Select **Tools > Camera Transform**.
  - ▶ Press the **Camera Transform**  button in the Tools Toolbar.

3. Use the handles to move, tighten, widen and rotate the camera until you set it in the desired position.



4. Do one of the following:
  - ▶ Select **Storyboard > Spread Camera Motion**.
  - ▶ Press the **Spread Camera Motion**  button in the Storyboard Toolbar.

The Spread Camera Motion dialog box opens.



5. Do one of the following:

- ▶ To spread camera motion over all panels in the same shot, select **All panels in the same shot**.
- ▶ To spread camera motion a specified number of contiguous panels after the current panel in the same shot, select **Next panel(s)** and enter or select the number of contiguous panels.



You can reuse camera positions from adjacent panels throughout your storyboard. You can change the start position of the current panel by copying the camera's end position in the current panel or the previous panel. You can also change the end position of the current panel by copying the camera's start position in the current panel or the next panel.

**To copy a camera position:**

1. Click the panel where you want to add the camera guide.
2. Copy a camera position from the current panel, previous panel or subsequent panel.

**Copying from the current panel**

- ▶ To copy the end position in the current panel and then use this copied position as the new start position, select **Storyboard > Copy Camera Start Position From End Position In This Panel**.

You can also press the **Copy Camera Start Position from End**  button in the Storyboard Toolbar.

**Copying from the previous panel**

- ▶ To copy the end position in the previous panel and then use this copied position as the new start position, select **Storyboard > Copy Camera Start Position From End Position in Previous Panel**.

You can also press the **Copy Camera Start Position from Previous Panel**  button in the Storyboard Toolbar.

- ▶ To copy the start position in the previous panel and then use this copied position as the new end position, select **Storyboard > Copy Camera End Position From Start Position In This Panel**.

You can also press the **Copy Camera End Position from Start**  button in the Storyboard Toolbar.

### Copying from the next panel


- ▶ To copy the start position in the next panel and then use this copied position as the new end position, select **Storyboard > Copy Camera End Position from Start Position In Next Panel**.

You can also press the **Copy Camera End Position from Next Panel**  button in the Storyboard Toolbar.

## Deleting a Camera Movement

You can remove the camera guide and reset the camera to its default position at any time by selecting the panel with the camera move and selecting **Storyboard > Reset Camera**.

## Previewing a Camera Move

You can view real-time playback of all panels or a selected panel with camera movement in Toon Boom Storyboard, by selecting the **Camera Preview**  button in the Play Toolbar before you play back your animatic. For more information on animatics, see Viewing an Animatic in Toon Boom Storyboard on page 101.

# Working With Text

While storyboards contain a large amount of visual content, most, if not all storyboards contain text—often a significant amount—to complement drawings and provide supporting information.

Text can appear in your storyboard panel, using the Text drawing tool. Text is most often found outside the visual portion of the panel in **captions**, which can be associated with the entire storyboard or a specific panel.

For each panel, four text fields for captions are provided by default, but more can be added and the type of caption category is up to the story artist. Depending on the workspace, captions for panels are displayed in the Panel View underneath or to the right of each panel, or in the Tool Properties Panel Tab.


Captions that apply to the entire storyboard can be entered using the Tool Properties Storyboard Tab. The Script text field is provided by default, but you can customize this tab to add as many text fields as needed for your captions.

The following tasks describe how to work with text:


- Adding Text to a Layer on page 75
- Adding Captions on page 75
- Working With Captions on page 75



## Adding Text to a Layer

With the **Text**  tool, you can create drawing objects based on the text you type, the font you select and text attributes you apply. Text objects are a part of a drawing, so you can manipulate them in the same way (for example, painting, scaling, and transforming).

**To add text to a layer:**

1. Click on the tab with the name of the layer you want to use.
2. Do one of the following:
  - ▶ Select **Tools >Text**.
  - ▶ From the Tools Toolbar, click the **Text**  button.
  - ▶ Windows users can use the [Ctrl]+[Shift]+[T] shortcut.
  - ▶ Mac OSX users can use the [Command]+[Shift]+[T] shortcut.
3. Click the panel at the position where the text will begin.
4. Type in the characters you want to appear in the panel.

You can use the Text Tab to change the text properties, including the font and colour. Either select existing text and apply the properties, or set them before you enter text.

## Adding Captions


**To type notes into the field:**

1. If the Tool Properties are hidden, select **View > Toggle Tool Properties**.
2. Do one of the following:
  - ▶ Click the Panel Tab to enter notes in the selected frame.
  - ▶ Click the Storyboard Tab to enter notes for the project.
3. Click in the field where you want to enter notes and begin typing.

## Working With Captions


You can add a new type of caption field for the project (in the Storyboard Tab) or to the panels in your project (in the Panel Tab).

**To add a Panel tab caption:**

1. Do one of the following:
  - ▶ Select **Caption > Add Caption to Panels**.
  - ▶ Click the menu  button of any caption field in the Panel Tab, and select **Add Caption**.
2. Enter the name of the new caption field in the dialog box that opens.


A new caption field is added at the bottom of the tab.

### To add a Storyboard tab caption:

1. Do one of the following:
  - ▶ Select **Caption > Add Caption to Storyboard**.
  - ▶ Click the menu  button of any caption field in the Storyboard Tab, and select **Add Caption**.
2. Enter the name of the new caption field in the dialog box that opens.


A new caption field is added at the bottom of the tab.

### To delete a caption field:

1. Do one of the following:
  - ▶ Select **Caption > Delete Caption**, and select the name of the text field you want to remove.
  - ▶ Click the menu  button of the caption field you want to delete, and select **Delete Caption**.

A confirmation dialog box opens, to verify that you want to delete the field.
2. If you want to confirm, click **Yes**.

### To change the display of a caption field:


- ▶ Click the **Caption Display**  button above the caption field you want to change.

If all captions were displayed, then the selected caption field will be hidden.

If the caption was hidden, then the caption will be displayed and all other captions will be hidden.

If only the caption is displayed, then all captions will be displayed.

### To rename a caption title:

- ▶ Select **Caption > Rename Caption**, and select the name of the caption field you want to rename.
- ▶ Click the menu  button of the caption field you want to rename, and select **Rename Caption**.

### To search for caption text:

1. Select **Caption > Find Text in Captions**.

The Search in Panel Captions dialog box opens.



2. Enter the text to find.
3. Turn on the **Case Sensitive** check box to match the capitalization that you entered.
4. Specify the direction of the search:
  - ▶ To find the next occurrence of the text string in a caption field, click the **Find Next** button.
  - ▶ To find the previous occurrence of the text string in a caption field, click the **Find Previous** button.

## Working With Sound

When you decide that you want to add sound to your storyboard, you must first prepare the sound outside Toon Boom Storyboard. To work with sounds in Toon Boom Storyboard, add one or more sound tracks, into which you import the sound sequences. You can then organize the sounds by organizing sound tracks, mixing sound levels and editing the part of the sound sequence you will use.

You can preview your panels with sound at any time, by playing back an animatic of the current panel or the entire storyboard using the controls in the Play Toolbar.

To import sounds and view sound tracks, display the Timeline View in the Drawing Workspace.

The following tasks describe how to work with sound:

- Displaying the Timeline View on page 78
- Adding a Sound Track on page 78
- Deleting a Sound Track on page 79
- Linking or Unlinking a Sound Track on page 79
- Importing a Sound Sequence on page 80
- Deleting a Sound Sequence on page 82
- Turning Sound On and Off on page 82
- Working With Sound Sequences on page 83
- Working With Voice Annotations on page 85

## Displaying the Timeline View

The Timeline View is only visible in the Timeline Workspace.

**To display the Timeline View:**

- ▶ Select **View > Timeline Workspace**.
- ▶ Click the **Timeline Workspace**  button in the View Toolbar.


## Adding a Sound Track

You can create a sound track in which you can import one or more sounds. You can add an unlimited number of tracks to your sound track to help you organize your work. For instance, you can have a track for all dialogue or a separate track for each character's dialogue. You can create a track for ambient sound, music or significant sound effects.

You must work in the Timeline Workspace's Timeline View.

**To add a sound track:**

1. Make sure the Timeline View is visible.


2. Do one of the following:
  - ▶ Select **Sound > New Sound Track**.
  - ▶ Right-click (Windows) or [Ctrl]-click (Mac OSX) the sound track and select **New Sound Track**.
  - ▶ In the Sound Toolbar, press **New Sound Track** .
3. After you have added a new sound track you are ready to import a sound. See Importing a Sound Sequence on page 80.

## Deleting a Sound Track

You can delete a sound track at any time. When you delete a sound track, all of the sounds included in this sound track are also deleted.

You must work in the Timeline Workspace's Timeline View.

### To delete a sound track:

1. Select the sound track you want to delete.
2. Do one of the following:
  - ▶ Select **Sound > Delete Current Sound Track**.
  - ▶ Right-click (Windows) or [Ctrl]-click (Mac OSX) the sound track and select **Delete Sound Track**.
  - ▶ In the Sound Toolbar, press **Delete Sound Track** .

The selected sound track is deleted from the timeline.



## Linking or Unlinking a Sound Track

You can link a sound track to the current panel to keep sound sequences in sync during editing. Once linked, you can unlink the sound track at any time from the panel.

You must work in the Timeline Workspace's Timeline View.



### To link a sound track to the current panel:

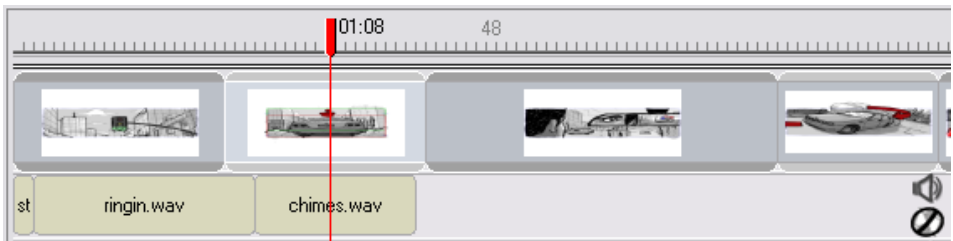
1. Select the sound track you want to link to the current panel.

2. In the selected sound track, click the **Unlink**  button to link that track's sound sequences to the current panel. Sound tracks linked to a panel will display the **Link**  button to show its link is on.



#### To unlink a sound track from the current panel:

- ▶ In the selected sound track, click the **Link**  button to unlink that track's sound sequences from the current panel. Sound tracks that are not linked to a panel will display the **Unlink**  button to show its link is off.



## Importing a Sound Sequence

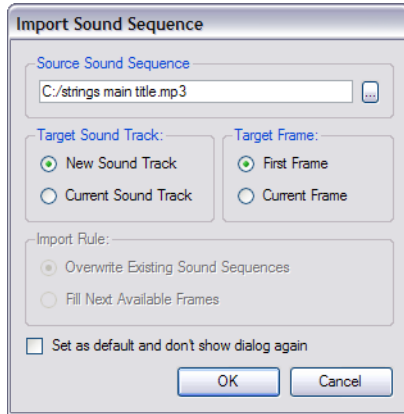
You can import a sound sequence (WAV, AIF, AIFF, or MP3) into a sound track at the first frame or at the current frame. If the sound sequence doesn't already exist in your project, Toon Boom Storyboard Pro copies the file from its present location to the **audio** folder in your storyboard project folder.

You must work in the Timeline Workspace's Timeline View.

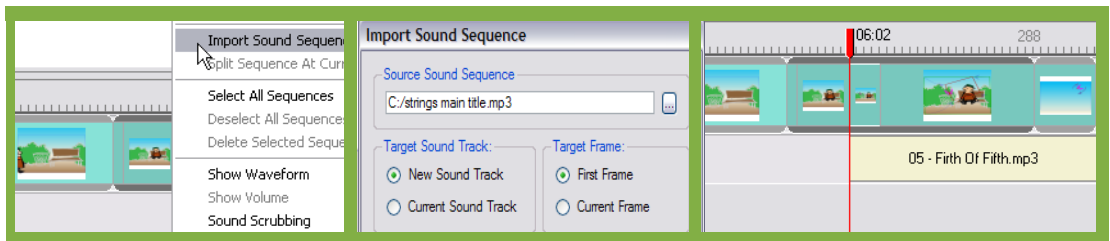
#### To import a sound sequence:

1. Select the sound track where you want to import the sound.
2. Do one of the following:
  - ▶ Select **Sound > Import Sound Sequence**.
  - ▶ Right-click (Windows) or [Ctrl]-click (Mac OSX) the sound track and select **Import Sound Sequence**.

The Import Sound Sequence dialog box opens.



3. Select the sound sequence you want to import by typing in the file path or using the Browse button to search for the file you want to use.
4. Use the Target Sound Track options to specify whether you want to create a sound track and import the sequence into it, or import the sequence into the selected sound track.
5. Use the Target Frame options to select at which frame the sound will begin.
6. If you selected **Current Sound Track** option, specify the Import Rule:
  - ▶ **Overwrite Existing Sound Sequences:** by default, when you import a sound, it will replace sounds that exist in the target frames.
  - ▶ **Fill Next Available Frames:** import the sound sequence into the first available empty frames after any existing sound selection.
7. Select the **Set as default and don't show dialogue again** option, if you want to use the current settings the next time you import sound and open a browse box to select a sound automatically.



To display the Import Sound Sequence dialog box automatically:

1. Select **Edit > Preferences**.
2. Click the **General** tab.
3. Turn off the **Use Default Sound Import Settings and Don't Show dialogue** check box.


4. Click OK to confirm your changes.

## Deleting a Sound Sequence

You can delete a specific sound sequence in a sound track.

You must work in the Timeline Workspace's Timeline View.

**To delete a sound sequence:**


1. Select the sound sequence you want to delete.
2. Do one of the following:
  - ▶ Right-click (Windows) or [Ctrl]-click (Mac OSX) the sound sequence and select **Delete Selected Sequences**.
  - ▶ In the Sound Toolbar, press **Delete Sound Sequence** .

The selected sound sequence is deleted from the sound track.



## Turning Sound On and Off

After you have added sounds to your shot, you can preview the shot as an animatic with all the sounds in sync. This helps you make any adjustments necessary to keep your sound synchronized with the action in your project.

**To turn on and off the sound for all sound tracks:**

- ▶ In the Play Toolbar, click the **Sound**  button. When it is highlighted, the sound is on.

**To turn on the sound of selected sound tracks:**

- ▶ In the selected sound track, click the Sound Off  button to turn that track's sound back on. Layers with sound will display the Sound On  button to show its sound is on.



## Working With Sound Sequences

The sound features in Toon Boom Storyboard make it possible for you to edit sounds that you imported. If you want to play only a section of a sound sequence, you can select the exact part you want to use. You can adjust volume levels of sound sequences to fade in, fade out, or mute sounds, without affecting the original sound sequence.

You must work in the Timeline Workspace.

### To customize the sound track features:

- ▶ To show the waveform of the sound sequences, select **Sound > Show Waveform**.
  - ▶ Once waveform is displayed, you can also select **Sound > Show Volume** to display the playback sound level for each sound sequence.
- ▶ Select **Sound > Sound Scrubbing** to listen to the sound as you drag the red Current Frame slider forward and backward.

You can edit sounds that were created outside of Toon Boom Storyboard, then imported into the project.

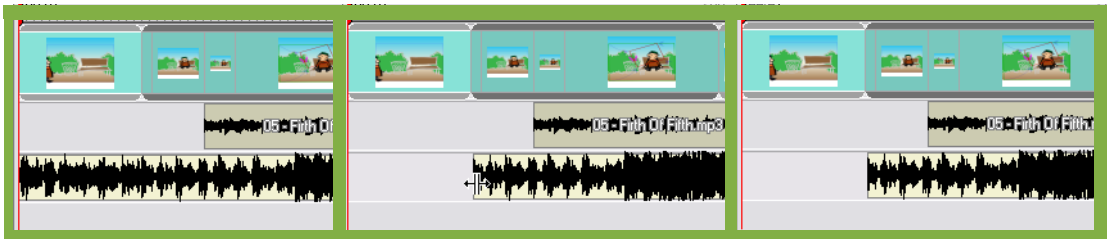
### To edit a sound sequence:

1. Verify that the volume is on for the view and the sound track you want to work with.

You may find it easier to edit the sound by customizing the display to show the sound's waveform.

You can listen to the sound by dragging the Current Frame slider across the sequence to scrub the sound.

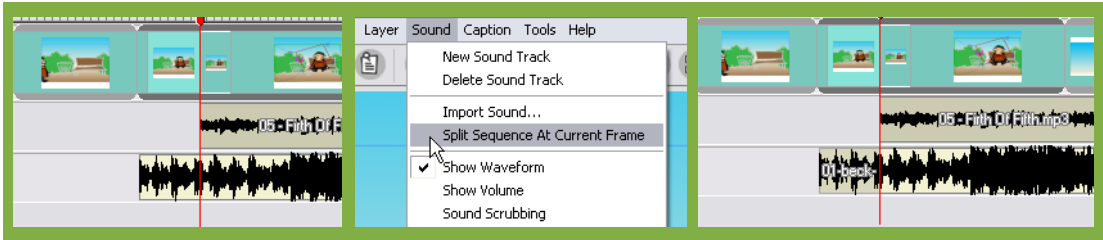
2. Do one of the following.
  - ▶ Drag the cursor that appears at the start frame to the position where you want to set the new start of the clip. This will cut the beginning of the original file from playback.
  - ▶ Drag the cursor that appears at the end frame to the position where you want to the clip to begin. This will cut the end of the original file from playback.



You can play back the sound to hear the edited version of the sequence. The original sound sequence is not modified. You can drag the boundaries of the edited sequence closer to or all the way back to their original positions to use more of the sound sequence.

### To split a sound sequence in two:

1. Move the red Current Frame slider to the frame where you want to begin the second sound sequence that results from the split.
2. Select **Sound > Split Sequence at Current Frame**.



You can change the volume throughout a sound sequence by specifying new volume levels and adjusting the rate at which sound fades in and out. The original sound sequence is not affected, but you will hear the sound with the edited levels, when previewing a storyboard or playing its output as an animatic.

### To display and adjust the volume levels of a sound sequence:

1. Select **Sound > Show Waveform**.
2. Select **Sound > Show Volume**.



A blue line, indicating the sound level, is displayed for each sound sequence. White squares mark the points at which the sound changes to a new level.

3. Click the line to add a new marker, or drag an existing marker to adjust the volume at a specific frame.

The slope of the line indicates how quickly the sound changes from one level to another. If the slope is steep, the change is abrupt. If the slope is less inclined, the volume changes at a more gradual rate.

## Working With Voice Annotations



A panel with one or more voice annotations displays a symbol in the selected panel.


### To record a voice annotation:

1. Select the panel you want to link the voice annotation to.
2. In the Panel Tab, click the **Record Voice Annotation**  button.

The Record a Voice Annotation dialog box opens.



3. Press the **Start Recording**  button to begin recording.
4. When you finish recording your comment press **Stop Recording or Playing** .

To play back your comment immediately, press **Play Recorded Sound** . You can re-record and replay until you are satisfied with your note.


5. Press OK to save the recording or Cancel to delete it.

### To select a voice annotation:

1. Display the Panel Tab.
2. Press the **Next Voice Annotation**  and **Previous Voice Annotation**  buttons.

The Voice Annotations section displays the order of the current voice annotation in the sequence and the total number of voice annotations associated with the panel.


### To play a voice annotation:

1. In the Panel Tab, select the voice annotation you want to play.
2. Press the **Play Voice Annotation**  button.

### To stop a voice annotation:

- ▶ In the Panel Tab, press the **Stop Voice Annotation**  button.

### To delete a voice annotation:

1. Select the panel you want to delete the voice annotation from.
2. In the Panel Tab, click the **Delete Voice Annotation**  button.

## Working With the Library

You can organize templates of reusable animation assets. Regardless of your working style, templates can help you reduce your workload and pre-production time. The opportunities for reuse presented by this feature can impact how you plan, design and execute your productions.

Use the library to display your local animation assets, that is, all layers and sound sequences in your current storyboard. You can also open libraries of animation assets stored elsewhere on your computer or network, which enables you to share data between multiple projects or users.

The following tasks describe how to work with the template library:

- Getting Rights to Template Folders on page 86
- Creating Templates on page 86
- Using Templates in Your Storyboard on page 88
- Previewing Templates on page 89
- Changing Display Options on page 89
- Renaming Templates on page 89
- Deleting Templates on page 90
- Managing Template Folders on page 90
- Adding a Library on page 91

## Getting Rights to Template Folders

Before you can use a template, you have to get rights to modify it. The folder appears as a locked folder icon by default. An icon with a lock can be changed, added to or deleted.

**To unlock a library:**

1. In the Tool Properties, click the Library Tab.
2. Select the folder library folder that you want to unlock.
3. Template library folders are locked by default. Get the rights to edit the library:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **Right To Modify Library** so that a check mark appears next to the command name.
5. Select the folder where you want to store the file.

## Creating Templates

You can create templates from layers and sound sequences that you use in your storyboard.

If you are working with a team, it is important to come up with a convention that you all use to name and identify templates. This will facilitate the reuse of the work the templates contain.

## Placing storyboard drawings and sounds into template folders

You can take drawing objects on a layer in a panel and store it as a template. You can also take a sound sequence and store it.

### To create templates:

1. In the Tool Properties, click the Library Tab.
2. Get rights to the folder.
3. Select an asset to copy to the library:
  - ▶ In the Panel View or Drawing View, select a layer tab to store the layer's drawing objects.
  - ▶ In the Panel View, select the scene header to create a template of the drawing objects on all layers.
  - ▶ In the Timeline View, select a sound sequence to create a template of it.
4. Drag the selection to the Library tab and drop it in the folder where you want to store it.

The new template appears in the folder you selected.

## Importing into files into template folders

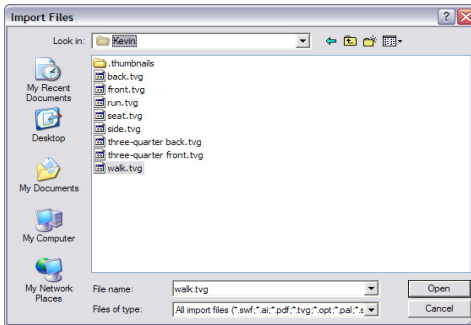
You can import drawings, sounds and SWF files into the template folders of a library.

=

### To import templates:

1. In the Tool Properties, click the Library Tab.
2. Get the rights to the folder.
3. Select the folder where you want to place the template:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **Import Files**.

The Import Files dialog box opens.



5. Select the files you want to import into the template folder.

The new template(s) appears in the folder you selected.

## Using Templates in Your Storyboard

You can use assets stored in your template library by dragging them into the appropriate component of your storyboard.

**To use templates in your storyboard:**

### Losing motion

It is important for you to realise that all motion or animation you have in this template will be permanently lost when you use **Convert Template to Drawing**.

1. In the Tool Properties, click the Library Tab.
2. Get rights to the folder.
3. Select a template to use in your storyboard:
4. Drag the asset to the location where you want to use it.

- ▶ Select a drawing and drag it to the panel to add it as a layer. If the template was a drawing that was originally composed of multiple layers, select **Convert Template to Drawing** to edit the new layer.

If the template was a PSD image that was originally composed of multiple layers, a message asks "This image contains multiple layers. Do you want to import each layer separately?"

- ▶ If you click **Yes**, each layer is imported on its own layer in the panel.
- ▶ If you click **No**, a layer will be created behind the existing layers, containing the selected PSD image.
- ▶ Select a sound sequence and drag it into a sound track in the Timeline View.
- ▶ Select a SWF file and drag it to a panel to add the first frame as a layer. Select **Convert Template to Drawing** to edit the new layer.

## Previewing Templates

You can preview an image or layer transformation in the Preview panel of the Library tab.

### To preview templates in the Template Library:

1. Open the Preview panel by dragging the left side of the Library tab's top frame.
2. Select the template that you want to preview:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
3. From the pop-up menu, select **Preview Template**.

The template appears in the Preview panel.

#### *Tip*

You can also double-click a template to send it to the Preview panel.

## Changing Display Options

There are a number of options you can use to control how template files are displayed in the Library tab.

### To change template display options:

1. Select the template that you want to preview:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
2. Do one of the following:
  - ▶ From the pop-up menu, select **View > Thumbnails** to display the visual contents of a template file. (Select **Generate Thumbnails** from the pop-up menu at any time to refresh thumbnails images).
  - ▶ From the pop-up menu, select **View > Details** to display details about the template file.
  - ▶ From the pop-up menu, select **View > List** to display the list of template filenames.

## Renaming Templates

Rename a template if the current name is unclear or does not represent the contents of the template.

If you are working with a team, it is important to come up with a convention that you will all use to name and identify templates. This will facilitate the reuse of the work the templates contain.

Renaming templates does not affect the contents or your ability to update assets that used the template under the original name.

### To rename a template:

1. In the Tool Properties, click the Library Tab.
2. Get rights to the library folder you want to use.
3. Select library folder or template folder that you want to rename:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **Rename Folder**.
5. Type the new folder name and click outside the highlighted typing area or press the [Enter] key.

## Deleting Templates

When you no longer require a template, you can simply delete it from the library. Deleting a template does not affect scenes that used the template.

### To delete a template:

1. In the Tool Properties, click the Library Tab.
2. Get rights to the library folder you want to use.
3. Select library folder or template folder that you want to delete:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **Delete Folder**.

## Managing Template Folders

As your projects evolve and grow, you may need to sort and group related templates. You can create folders for your templates to help you keep them organized.

### To create folders and organize templates:

1. In the Tool Properties, click the Library Tab.
2. Get rights to the library folder you want to use.
3. Select library folder or template folder that you want to delete:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
4. From the pop-up menu, select **New Folder**.

The folder appears in the template library. You can change the name immediately, and copy and paste files from one folder to another.



## Adding a Library

You can load new libraries into the Library tab to display and use the template folders they contain. This allows you to store your templates in one central location that you can share between storyboard projects as well as with other users.

### To load a new library folders in the Library:

1. In the Tool Properties, click the Library Tab.
2. Open the pop-up menu:
  - ▶ Windows users must right-click the library folder.
  - ▶ Mac OSX users must [Ctrl]-click the library folder.
3. Select **Open Library**.
4. Use the dialog box that opens to locate the folder that you want to load in the Library Tab list.

The library folder you selected appears at the bottom of the library list.

To remove a library from the list, use the **Close Library** feature.

## Printing Your Storyboard

You can output your digital storyboard to a PDF, a printable file format that is equally easy to distribute digitally to others. By default, each page will print three panels per page (with captions) in a Horizontal Workspace or Vertical Workspace.

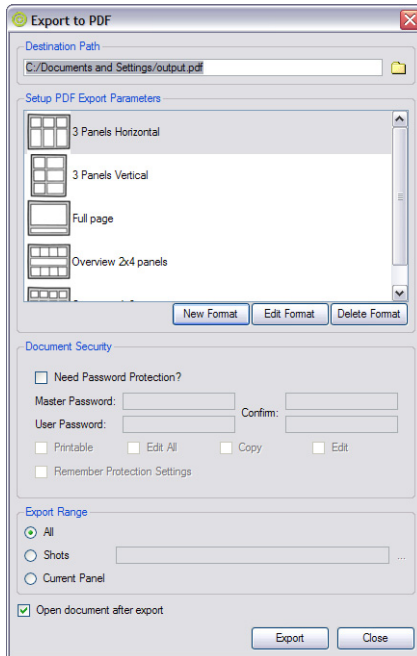
You can also secure your digital storyboard by giving your PDF file a password and restricting certain features such as printing and editing. When files have restricted features, any tools and menu items related to those features are dimmed. For more information, refer to Adding Security to Your PDF Document on page 99.


Furthermore, you can customize the workspace of your PDF output and add new workspaces. For more information, refer to Adding a New PDF Page Layout on page 92.

### To create a PDF:

1. If you want to print a selected panel, click it to select it. To select additional panels:
  - ▶ Windows users can hold down the [Ctrl] key.
  - ▶ Mac OSX users can hold down the [Command] key.
2. Select **File > Export to PDF**.

The Export to PDF dialog box opens.



3. In the **Destination Path** field, specify the location and name of the file that will contain the PDF. Either type in the path directly or click the Browse  button to display a window to select a file.
4. In the Setup PDF Export Parameters panel, select the page orientation for the PDF file.
5. In the Export Range panel, select whether to generate a file including the entire storyboard, specific shots, or the currently selected panel(s).
6. To view the file when it is ready, select **Open document after export**.
7. Click **Export** to confirm your settings and begin the export.

## Adding a New PDF Page Layout

You can define and manage the page layout properties of your PDF document.

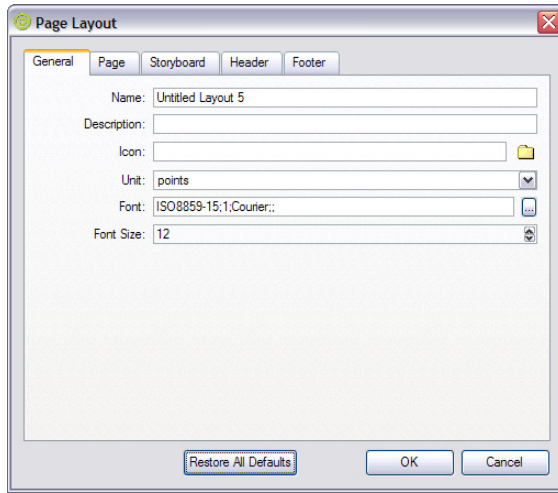
**To add a new page layout:**

1. Select **File > Export to PDF**.

The Export to PDF dialog box opens.

2. Click the **New Format** button.

The Page Layout dialog box opens. You can configure a number of properties in each tab to customize the look of the PDF version of your storyboard.



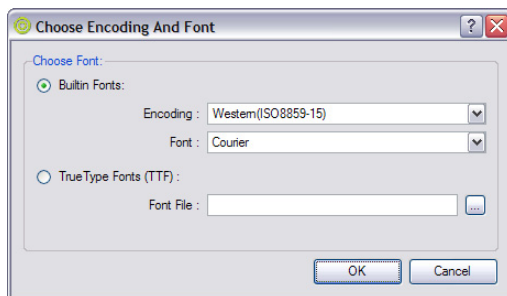
There are five tabbed areas in the Page Layout dialog box, they are:

- **General**  
Sets up the name, description and font parameters.
- **Page**  
Sets up the page formatting and orientation.
- **Storyboard**  
Sets up the cover, panels and caption parameters for the pdf.
- **Header**  
Sets up the page header parameters.
- **Footer**  
Sets up the page footer parameters.

## General tab

- **Name, Description and Icon** are related to the PDF Layout templates, in the Setup PDF Export Parameters list in the Export to PDF dialog box.
- **Unit:** Select the unit of measurement (points, mm, cm or inches) of values used in the Page Layout dialog box.
- **Font:** Select any font installed on your system to use for all text in the PDF document.

To export Unicode characters to your PDF document, select the language encoding and the embedded PDF font that will be used to display the text in the PDF document.



- **Font Size:** Select the point size that applies to all text in the PDF document.

## Page tab

- **Page Format:** Select the type of page you want to print on (Letter, Legal or A4).
- **Orientation:** Select if you want the PDF page to be printed in Portrait or Landscape.
- **Rotation:** Select the degree of clockwise rotation of the storyboard on the printed page.
- **Top Margin** field: Enter distance from the top page edge to set the margin.
- **Bottom Margin** field: Enter distance from the bottom page edge to set the margin.
- **Left Margin** field: Enter distance from the left page edge to set the margin.
- **Right Margin** field: Enter distance from the right page edge to set the margin.
- **Background Image:** Select an image to use as a watermark on all pages, except the cover.

## Storyboard tab

This tab has three tabbed areas where you set up the cover, panels and caption parameters for the pdf.

## Cover tab

- **Show Cover:** Insert a cover as the first page of the PDF.
- **Background Image:** Select an image (PNG, BMP or JPG file format) to use as a watermark on the cover.
- **Show Title:** Display the Project Title defined in the Storyboard properties.
- **Show Description:** Display the Project Subtitle defined in the Storyboard properties.
- **Show Duration:** Display the duration (as a time code or frame) of the selected storyboard panels.

### Tip

To specify the duration type, select or clear the **Exported Document (PDF and etc.)** check box in the Preferences dialog box. See Global UI on page 116.

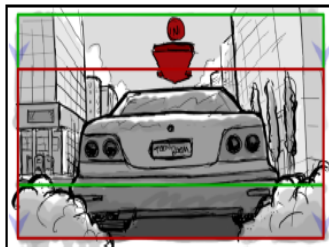
- **Show Date:** Display the date of export.

## Panels tab

- **Number of Rows:** Defines the number of panel rows displayed per page
- **Number of Columns:** Defines the number of panel columns displayed per page.
- **Show Panel Image:** Check this to display each panel's visual content.



- **Image Zoom Level (%):** Check this to display the image in the panel at a percentage of the original size.
- **Frame Panel Image:** Check this to display a rectangle around the panel's visual content on each page.



- **Show Panel Header:** Check this to display each panel's Shot Name, Panel Number, and Duration as a header.

Shot	Panel	Duration
5	1/1	02:00

- **Display Duration:** Check this to display the duration of each panel.
- **Frame Panel Header:** Check this to display a rectangle around the panel header on each page.

Shot	Panel	Duration
5	1/1	02:00

- **Expand Panels:** Check this to display camera motion (such as pan, tilt, or zoom) in the image across several panels.

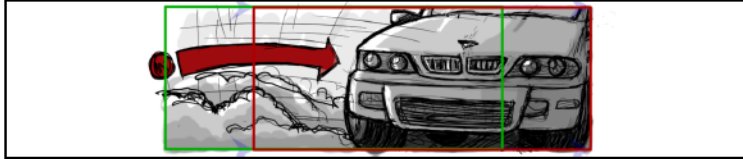
Shot	Panel	Duration
7	1/1	00:17



- **Display "No Panel" on board:**
- Check this to replace the panel's image with an X and the text "No Panel" above it. This is used when there is not enough space to display a panel on the same

page. The panel with the image is normally displayed on the next page or the nearest one with enough space to show the image on.

Shot	Panel	Duration
7	1/1	00:17



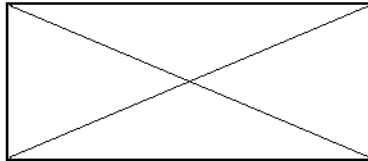
Action Notes:

The car skids IN but the driver knows how to take control of his racing car.

Notes:

Camera executes a panoramic movement and follows the car's movements.

NO PANEL



- **Show Transition:** Check this to display transition information (Transition Type (Dissolve ☒ or Wipe ▤) and Duration).

## Captions tab

- **Captions List:** Check this to select which captions to include in the PDF storyboard.
- **Show Empty Captions:** Check this to display an empty space where you can write in your own captions, if needed.
- **Trim Captions:** Check this to remove empty lines after captions.
- **Frame Captions:** Display a black rectangle around captions on each page.
- **Specific Font For Caption Names:** Check this to enable the **Caption Title Font** and **Caption Title Font Size** options.
- **Caption Title Font:** Browse to the font you want to use for the Caption Title.
- **Caption Title Font Size:** Sets the size of the font you are using for the Caption Title.

## Header tab

- **Display Header:** Check this to display a header on each page (except the cover). The header includes the Project Title, Project Subtitle, and Project Episode defined in the Storyboard properties.
- **Header Height:** Enter the size of the header displayed on each page (except cover).
- **Header Logo:** Browse to a logo image (BMP, JPG, or PNG) to display to the left of the header. Scale the logo to match header's height.
- **Show Title:** Check this to display the Project Title defined in the Storyboard properties.
- **Show Description:** Check this to display the Project Subtitle defined in the Storyboard properties.
- **Show Page Number:** Check this to display a page number in the header on each page (except the cover).
- **Frame Page Number:** Check this to display a rectangle around the page number in the header on each page.
- **Font:** Browse to the font you want to use for the text in the header.
- **Font Size:** Sets the size of the font you are using for the text in the header.

## Footer tab

- **Display Footer:** Check this to display a footer on each page (except cover). The footer includes the Project Copyright defined in the Storyboard properties.
- **Footer Height:** Enter the size of the footer displayed on each page (except cover).
- **Font:** Browse to the font you want to use for the text in the footer.
- **Font Size:** Sets the size of the font you are using for the text in the footer.

## Editing a PDF Page Layout

Once you have set up the page layout you can edit the format so you can export a PDF with a different look, for example, if you want to change the font or page margins.

The descriptions of the Edit **page layout** dialog are the same as the **Page layout** dialog, see Adding a New PDF Page Layout on page 92.

You can define and manage the page layout properties of your PDF document.

**To edit an existing page layout:**

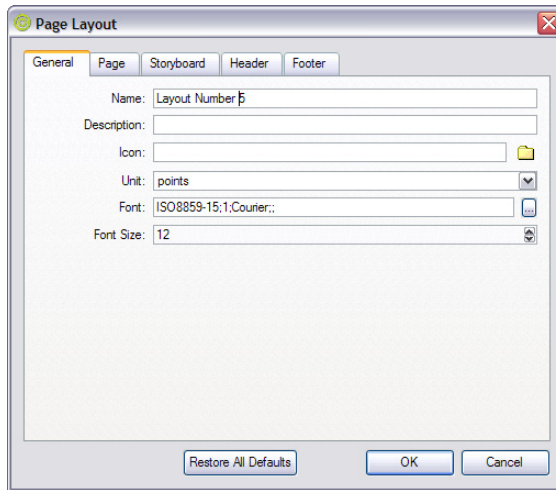
1. Select **File > Export to PDF**.

The Export to PDF dialog box opens.

2. Click the **Edit Format** button.



The Page Layout dialog box opens. You can configure a number of properties in each tab to customize the look of the PDF version of your storyboard.



There are five tabbed areas in the Page Layout dialog box, they are:

- **General**  
Edit the name, description and font parameters.
- **Page**  
Edit the page formatting and orientation.
- **Storyboard**  
Edit the cover, panels and caption parameters for the pdf.
- **Header**  
Edit the page header parameters.
- **Footer**  
Edit the page footer parameters.

## Adding Security to Your PDF Document

A PDF file can have a user password and a master password. To change a security setting in a file, you need to open it with the Master password.

Opening the PDF file using a Master password:

- temporarily disables the security restrictions

Opening the PDF file using a User password:

- retains and applies any previously set security restrictions to the file.

**To add security to a PDF file:**

1. Select **File > Export to PDF**.

The Export to PDF dialog box opens.

2. In the Document Security panel, select **Need Password Protection?**
3. Specify any password protection you want:
  - ▶ In the **Master Password** field, enter the password users must enter before they can open the file. Re-enter the password to confirm it.
  - ▶ In the **User Password** field, enter the password users must enter before they can set or change any security options. Re-enter the password to confirm it.

#### **NOTE**

Your password must be at least 6 characters long.

4. Select the options to define the level of user actions allowed:
  - ▶ Printable to allow users to print the file.
  - ▶ Edit All to allow users to make changes to the file.
  - ▶ Copy to allow users to copy the contents of the file.
  - ▶ Edit to allow users to change text annotations in the file.
5. Select **Remember Protection Settings** so that Toon Boom Storyboard remembers the protection settings you set.
6. Click **Export** to confirm your settings and begin the export.

When you later open the file, a dialog box will appear prompting you to enter the password of the file.

## Playing Back Your Storyboard

By synchronizing the storyboard panels and the soundtrack, you can create an animatic (also known as a Leica reel or test reel), on which your final animation will be based. An animatic is essentially a draft version of your animation. Use it to get a sense of the shot composition and timing of your animation. Editing the pace and sequence of shots at the animatic stage will prevent changes during the production stage, which at that point are more costly and time-consuming.

Toon Boom Storyboard animatics include the following features:

- You can play your animatic at any time in the Drawing View
- You can generate your animatic as a Flash or QuickTime movie: camera information is converted into actual camera movements
- All drawing transformations can be viewed in your animatic






The following tasks describe how to work with animatics:

- Viewing an Animatic in Toon Boom Storyboard on page 101
- Creating a Flash or QuickTime Animatic on page 101

## Viewing an Animatic in Toon Boom Storyboard

You can preview your project as an animatic in Toon Boom Storyboard at any time during its development process. You will be able to preview visual content, including transformations, synchronized with sounds.

### To preview your project in Toon Boom Storyboard:

1. Turn on the **Sound**  button (it is on when it appears pressed in).
2. If you want to see how the shots will look with dynamic camera movement, turn on the **Camera Preview**  (it is on when it appears pressed in).
3. Select the panel where you want the playback to begin.
4. Display the Drawing Workspace.
5. In the Play Toolbar, click **Play Selected Panels**  or **Play All Panels** .
6. To play your project in a continuous loop. Click on the **Loop**  button.

## Creating a Flash or QuickTime Animatic

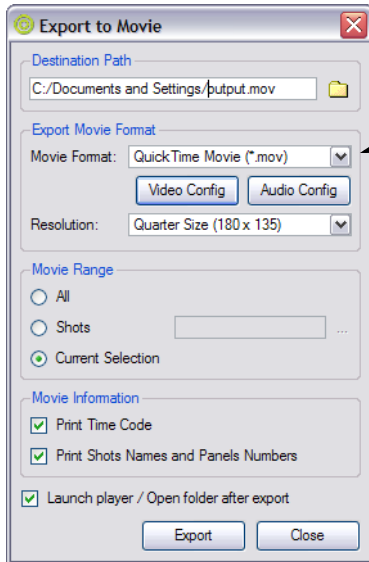
When you create an animatic in Toon Boom Storyboard, you can store it in one of the following file formats:

- SWF: Flash Movie
- MOV: QuickTime Movie
- TGA or JPG: Image Sequence


### To create an image sequence or enhanced animatic:

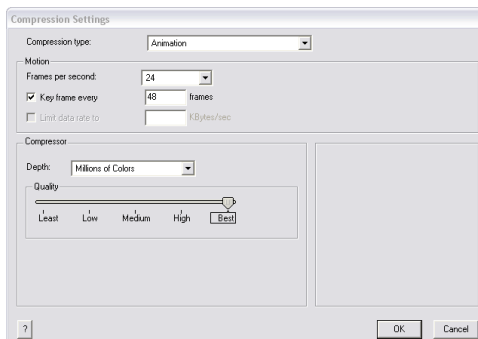
1. If you want to create an animatic of a single panel, click the panel in the Panel View or Timeline View to select it. If more than one panel is selected, only the first panel in the sequence will be used.
2. Do one of the following:
  - ▶ Select **File > Export to Movie**.
  - ▶ Windows users can use the [Ctrl]+[E] shortcut.
  - ▶ Mac OSX users can use the [Command]+[E] shortcut.

The Export to Movie dialog box opens.

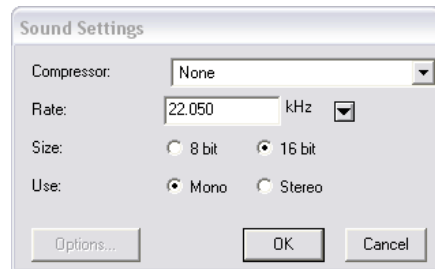


You can select the animatic format here.

3. Specify the location and name of the file that will contain the animatic. Either type in the path directly or click the Browse  button to display a window to select a file.
4. In the Movie Format list, select whether you want your animatic to be a **Flash Movie**, a **QuickTime Movie**, or an **Image Sequence** (TGA or JPG).
5. Your export options depend on the format you select.
  - **QuickTime Movie:** Click the **Video Config** and **Audio Config** buttons to open the Compression Settings and Sound Settings dialog boxes, respectively.

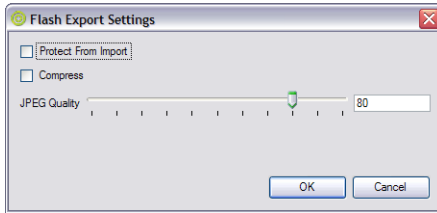



Compression Settings dialog box



Sound Settings dialog box

- **Flash:** Click the **Options** button to open the Flash Export Settings dialog box.



- **Image Sequence:** Enter the name of the TGA or JPG image file in the **Prefix** field.
6. Select the **Resolution** of your final output.
  7. In the Movie Range panel, select whether to export the entire storyboard, specific shots, or the last panel you selected as an animatic. Either enter a space between shot names or click the Browse  button to display a window to select shots.

#### NOTE

Toon Boom Storyboard supports only a continuous selection of shots. If the selection is non-continuous, for example 1, 3 and 5, then shots 1, 2, 3, 4 and 5 will be exported.

8. In the Movie Information panel, select one of the following:
  - **Print Time Code:** Overlay a time code along the bottom of the animatic.
  - **Print Shots and Panels Names:** Overlay the shot name and panel name along the bottom of the animatic.
9. To view the animatic when it is ready, select **Launch player / Open folder after export**.
10. Click **Export** to confirm your settings and begin the export.

## Exporting Storyboard Assets to Other Applications

In addition to creating Flash and QuickTime animatics and storyboards in PDF format, you can also export storyboard assets to Toon Boom Solo, Toon Boom Harmony and applications that support EDL, AAF, PSD, JPG or TGA files.

Furthermore, you can export an image asset in the currently selected panel to a file in TGA or JPEG format.

You can also export the data in a storyboard project in comma separated value (.CSV) file format.

The following tasks describe how to export storyboard assets:

- Exporting to Toon Boom Applications on page 104
- Exporting to EDL or AAF on page 106
- Exporting Image Assets on page 107
- Exporting to Bitmap on page 108
- Exporting to CSV on page 109

## Exporting to Toon Boom Applications

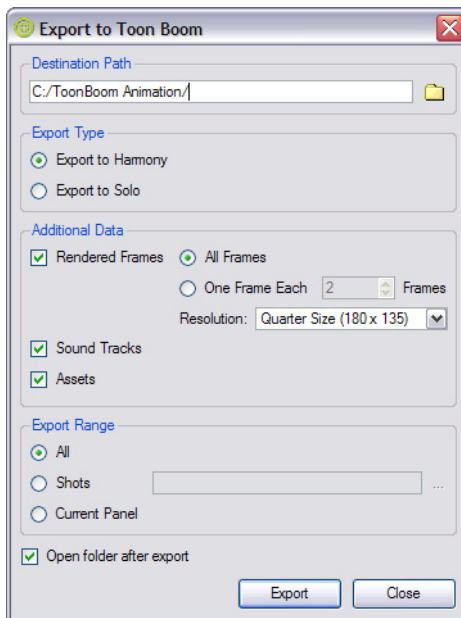
You can export the storyboard project you developed using Toon Boom Storyboard to the powerful animation software of Toon Boom Solo and Toon Boom Harmony and use the storyboard you have designed.


Your exported data shots from your storyboard project prepared as separate Toon Boom Solo and Toon Boom Harmony scenes. If you are using Toon Boom Harmony, you will be able to import a job into Control Centre with this data.


**To export a storyboard to Toon Boom Solo or Toon Boom Harmony:**

1. Select **File > Export to > Toon Boom**.

The Export to Toon Boom dialog box opens.



2. Specify the location and name of the folder that will contain the storyboard's assets in Solo or Harmony. Either type in the path directly or click the Browse  button to display a window to select a file.

3. In the Export Type panel, select the application you want to export to.
4. Select if you want to have **All Frames** rendered or render one Toon Boom Storyboard frame for a selected number of Toon Boom Harmony/Toon Boom Solo frames.
5. Select the **Resolution** quality.
6. Select the other elements you want to export.
7. In the Export Range panel, select whether to export the entire storyboard, specific shots, or the last panel you selected. Either enter a space between shot names or click the Browse  button to display a window to select shots.
8. To view the location and contents of the exported folder when they are ready, select **Open Folder After Export**.
9. Click **Export** to confirm your settings and begin the export.

## Exporting to EDL or AAF

You can export a storyboard project to files in EDL or AAF format.

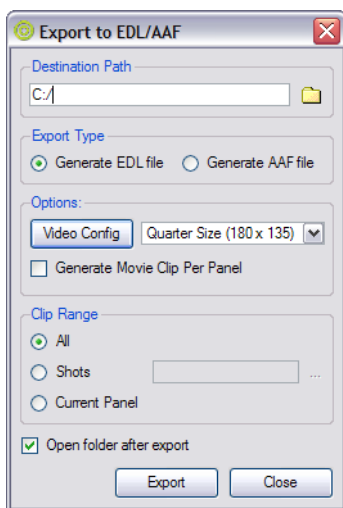
Using these file formats you can export your storyboard timeline to third party editing software such as; Apple Final Cut Pro, Adobe Premiere and Avid where you can perform video/film post production and management.


Your exported data includes an EDL or AAF file of the storyboard (or the portion you selected for export) and separate animatic for each selected shot for your reference.

### To export a storyboard to EDL or AAF format:

1. Select **File > Export to > EDL/AAF**.


The Export to EDL/AAF dialog box opens.



2. Specify the location and name of the folder that will contain the storyboard's assets. Either type in the path directly or click the Browse  button to display a window to select its new path.
3. In the Export Type panel, select whether you want to create an EDL file or an AAF file.
4. In the Options panel, select if you want to create a QuickTime movie for each shot you are exporting. You can also select compression settings using the **Video Config** button, and select the resolution quality (quarter size (180 x 76), half size (360 x 153), or full size (720 x 306)).

The resulting QuickTime Movie files are named **storyboardname-shotname-panelnumber.mov**. For example, a storyboard named **MyStoryboard** containing a shot named **CarChase** with three panels will create three QuickTime Movie files named: **MyStoryboard-CarChase-1.mov**, **MyStoryboard-CarChase-2.mov**, and **MyStoryboard-CarChase-3.mov**.



5. In the Clip Range panel, select whether to export the entire storyboard, specific shots, or the last panel you selected. Either enter a space between shot names or click the Browse  button to display a window to select shots.
6. To view the location and contents of the exported folder when they are ready, select **Open folder after export**.
7. Click **Export** to confirm your settings and begin the export.

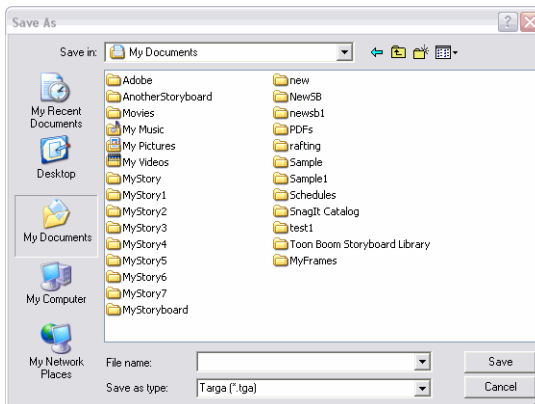
## Exporting Image Assets

You can export the current visible frame to a TGA, JPEG or PSD image.

**To export the current frame to TGA, JPEG or PSD image:**

1. Select **File > Export Current Image**.

The Save As dialog box opens.



2. Type the name of the image including a TGA, JPG or PSD extension.
3. Click **Save** to confirm your settings and begin the export.

Your exported data includes a TGA, JPEG or PSD file of the frame.

## Exporting to Bitmap

You can export a storyboard project to bitmap files in PSD with independent layers, TGA or JPG format.

Your exported data includes a separate bitmap file for each panel in the storyboard.

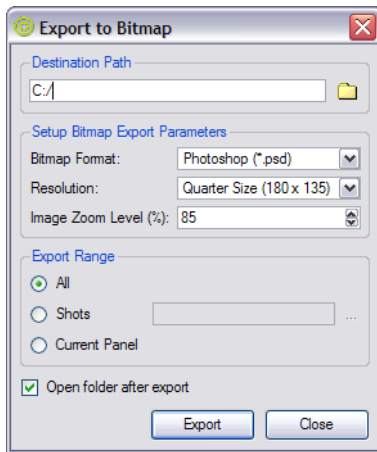
### NOTE



In the case of a PSD file, transform and transition animations are not exported. However, camera moves are rendered into an independent layer.

### To export a storyboard to a bitmap file:

1. Select **File > Export to > Bitmap**.

The Export to Bitmap dialog box opens.



2. Specify the location and name of the folder that will contain the storyboard's assets. Either type in the path directly or click the Browse  button to display a window to select its new path.
3. In the **Bitmap Format** drop-down menu, select whether you want your bitmap file to be in **Photoshop**, **Jpeg**, or **Targa** format.
4. Select the **Resolution** quality. This will be a quarter size, half size, or full size of the current storyboard resolution.
5. Select the magnification of the image. Enter a value between 0 and 400 or accept the default of 85%.
6. Select the resolution quality.
7. In the Export Range panel, select whether to export the entire storyboard, specific shots, or the last panel you selected. Either enter a space between shot names or click the Browse  button to display a window to select shots.

The resulting bitmap files are named **storyboardname-shotname-panelnumber.psd/jpg/tga**. For example, a storyboard named **MyStoryboard** containing a shot named **CarChase** with three panels will create three bitmap files named:

- ▶ **MyStoryboard-CarChase-1.psd/jpg/tga,**
  - ▶ **MyStoryboard-CarChase-2.psd/jpg/tga,**
  - ▶ **MyStoryboard-CarChase-3.psd/jpg/tga.**
8. To view the location and contents of the exported folder when they are ready, select **Open folder after export**.
  9. Click **Export** to confirm your settings and begin the export.

## Exporting to CSV

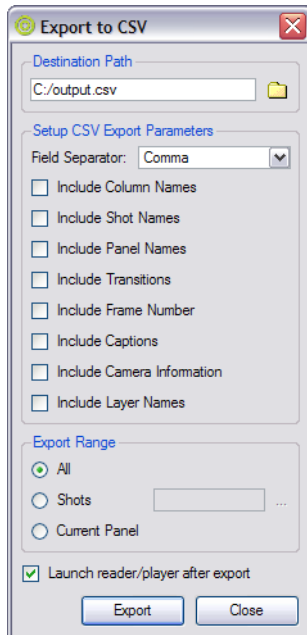
You can export the data in a storyboard project in comma separated value (.CSV) file format.



You can view this data in any application that supports comma separated value files, such as Microsoft Excel. If you do not have Microsoft Excel installed, you can save the .CSV file to your computer, and then open the file in another application.

**To export a storyboard to a CSV file:**

1. Select **File > Export to > CSV**.

The Export to CSV dialog box opens.



2. Specify the location and name of the folder that will contain the storyboard project's data. Either type in the path directly or click the Browse  button to display a window to select a file.
3. In the Setup CSV Export Parameters panel, in the Field Separator drop-down menu, select the fields separator (Comma, Semicolon, Tab or Vertical bar).
4. Select the data you want to export.
5. In the Export Range panel, select whether to export the entire storyboard, specific shots, or the last panel you selected. Either enter a space between shot names or click the Browse  button to display a window to select shots.
6. To view the CSV file directly in Microsoft Excel or another application that recognizes the CSV format, select **Launch reader/player after export**.
7. Click **Export** to confirm your settings and begin the export.

## Cleaning up Storyboard Projects

As you create your storyboard you will add information which at some point will be no longer relevant to the current project. Some of this information will be deleted and some of it will be put aside and not associated with any panels used in your storyboard. All of these unused items take up space and inflate the size of your final project files. Toon Boom Storyboard offers you the opportunity to significantly reduce the size of your project by removing the following:

- `_deleted_scene-XXXX` not linked to any panels
- `_deleted_scene-XXXX` directories not linked to any panels
- backup files - all files which extension ends with ~
- audio directory files which are not referenced by any sound sequence
- removed layers these are `_deleted_DrawXX` in `/scene-XXXX/elements/`
- remove folders `panel -XXXX` in `<project>library/Scene_Templates/`
- all deleted directories, for example, those in the library

The Remove Unused Files command, cleans the history and browses the project directory for unused files and directories and removes them, then saves your project using the existing project name.

**THIS PROCEDURE CANNOT BE UNDONE** Once you optimize your project files you cannot retrieve any files which were removed during the optimization process. It is highly recommended that you copy all of your project files to another location before starting the optimization process. This will help you in several ways:

- Reuse of the current project's unused assets in other projects.
- Reintroduction of some previously unused assets into the current project.
- Retrieval of project should a system power failure or other unforeseen event occur during the optimization process.

**To optimize your project:**

1. Select **File> Remove Unused Files**. The Remove Unused Files dialog box opens.

**Note:** Once started this process cannot be undone. Files removed from the project during this process can never be retrieved.

2. There are two options in this dialog box.

- **OK**

This starts the optimization process and cleans up your project. This process will take several minutes to complete depending on the size of your project and the number of files which have to be removed.

- **Cancel**

This returns you to the current workspace and does not start the optimization process.

3. Once the process is complete a notification dialogue appears telling you that the process was successful.
4. Click on the **OK** button in the notification dialog box, you are returned to the current storyboard workspace.

# Customizing Storyboard

Toon Boom Storyboard provides customizable toolbars and shortcuts. By using the Preferences dialog box, you can customize your storyboard project settings to suit your needs. For example, you can specify where you want to see time code or frame number values (in the thumbnail panels in the Drawing and Overview workspaces or in the timeline in the Sound Track view). You can also indicate whether you want to see animation-oriented or live action terminology in the graphical user interface.

By default, storyboard preferences are saved from one release to the next. If you want to delete your preferences, select the **Delete Toon Boom Storyboard preferences** check box during the installation process.

## NOTE

Keep in mind that deleting the preferences permanently removes not only customized workspaces and settings but also all of the keyboard shortcuts you may have set to make your work easier.

## Customizing Toolbars

Toon Boom Storyboard allows you to customize the location and content of toolbars. Toolbars are organized by functional group within Toon Boom Storyboard (Layer, Workspace, Drawing, and so on).

### Tip

Toolbars are docking windows — you can drag them anywhere within the Storyboard window.

## Showing/Hiding Toolbar Groups

Toolbar groups are displayed by default.

### To show/hide toolbars:


1. Select **View > Toolbars**.
2. Deselect the check box of the group you want to hide from the **View > Toolbars** menu.

The toolbar group is dropped from the Storyboard window.

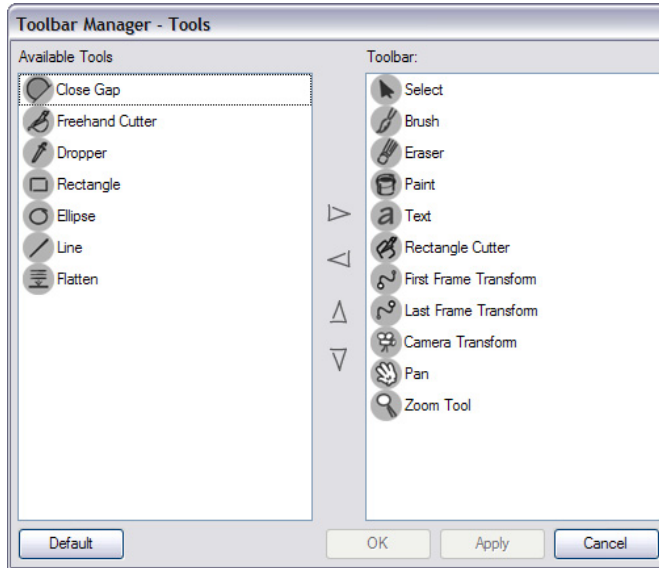
3. To re-display a hidden toolbar group, reselect the check box.

## Adding and Removing Buttons

### To add a button to a toolbar:

1. Click the Toolbar Manager  button of the group of buttons you want to rearrange (such as the Sound group shown below).

The Toolbar Manager dialog box opens displaying the buttons in that group.



2. Select the tool button in the Available Tools group box and click on the arrow icon to transfer it to the Toolbar group box.
3. Repeat this until you have added all of the tools you require.
4. Click **OK** to complete the procedure and close the Toolbar Manager.

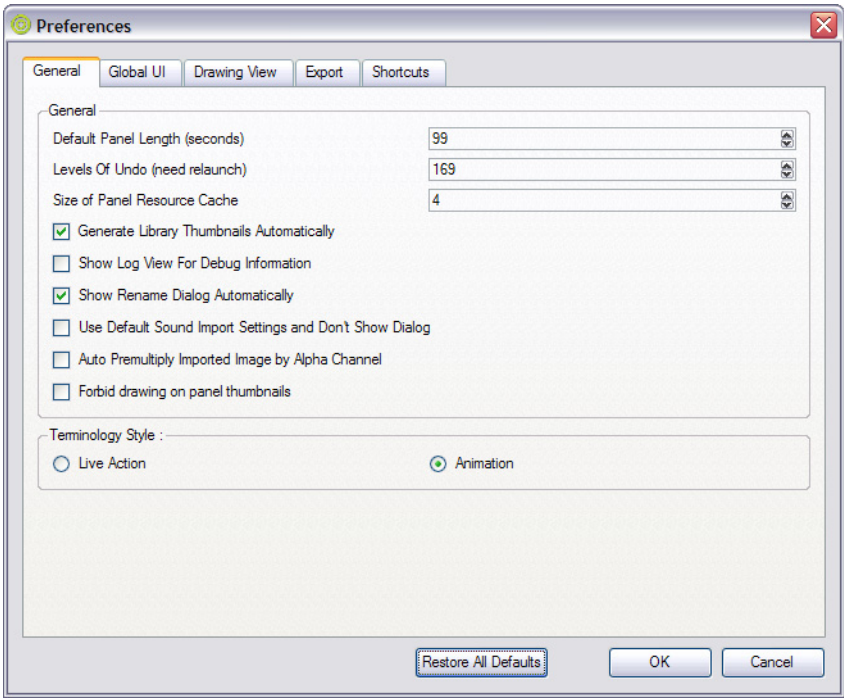
**To remove a button from the toolbar:**

5. Select the tool button in the Toolbar group box and click on the arrow icon to transfer it to the Available Tools group box.
6. Repeat this until you have removed all of the tools which you do not require.
7. Click **OK** to complete the procedure and close the Toolbar Manager.

# Storyboard Preferences

To open the preferences dialog box do the following:

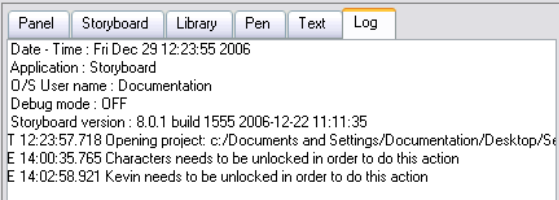
- 1. Select **Edit > Preferences**, the Preferences dialog box opens showing the following tabbed windows:
  - General Tab
  - Global UI Tab
  - Drawing View Tab
  - Export Tab
  - Shortcuts Tab



## General

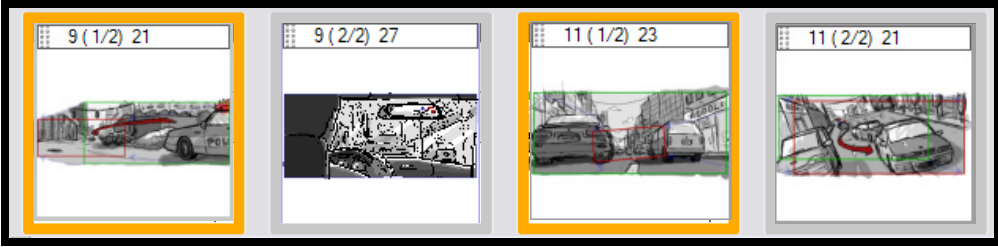
To do this...	Choose...
Defaults are indicated with an asterisk (*)	
Specify the length (in seconds) of a new panel. Enter a value between 0 and 99 or accept the default of 5.	<b>Default Panel Length</b> 5 seconds *



To do this...	Choose...
Specify the number of levels of undo. Enter a value between 0 and 99 or accept the default of 50.	<b>Levels Of Undo</b> 50 *
When turned on, generate thumbnails automatically in the Template library when a new template is created.	<b>Generate Library Thumbnails Automatically</b> <input checked="" type="checkbox"/> *
When turned on, display basic debug information in the Tool Properties under the Log tab.	<b>Show Log View For Debug Information</b> <input type="checkbox"/> *
 <p>The screenshot shows the 'Log' tab in the Storyboard application. It displays a list of log entries with timestamps and messages. The messages include 'Opening project: c:/Documents and Settings/Documentation/Desktop/Se', 'Characters needs to be unlocked in order to do this action', and 'Kevin needs to be unlocked in order to do this action'.</p>	<b>Show Rename dialog Automatically</b> <input checked="" type="checkbox"/> *
When turned on, use the current sound settings when you import sound and open a browse box to select a sound automatically.	<b>Use Default Sound Import Settings and Don't Show dialog</b> <input type="checkbox"/> *
When turned off, display the Import Sound dialog box automatically.	
When turned on, premultiply the channels with the alpha value of the layer, resulting in an opaque layer. This is helpful when creating layers used by other effects, or in certain compositing situations. Use this option if you're importing a semi-transparent image. Turn off this option if you're importing a PSD image.	<b>Auto Premultiply Imported Image by Alpha Channel</b> <input type="checkbox"/> *

To do this...	Choose...
When turned on, prevents accidental drawing over the thumbnail images in the panel in drawing workspace or overview workspace. Use this option to improve overall system performance.	<b>Forbid drawing on Panel thumbnails!</b> <input type="checkbox"/> *
Select the terminology style to be used to display terms in the GUI. <ul style="list-style-type: none"><li>• Live Action - Live action terms will be displayed (i.e., shot instead of scene).</li><li>• Animation - Animation terms will be displayed (i.e., scene instead of shot).</li></ul>	<b>Terminology Style:</b> <input type="radio"/> Live Action <input checked="" type="radio"/> * Animation

Global UI

To do this...	Choose...
Defaults are indicated with an asterisk (*)	
Change the colour of the bounding box used for the first group of shots. The RGB value of the default colour is 160,160, 160.  Click the shot group colour box to open the Colour Picker dialog box where you can choose a new colour for the bounding box. For example, if you choose orange for the first shot group box colour, then all first shots will look as follows:	<b>Shot group box colour One</b> <input type="color"/> * (RGB value=160,160, 160)
	


## To do this...

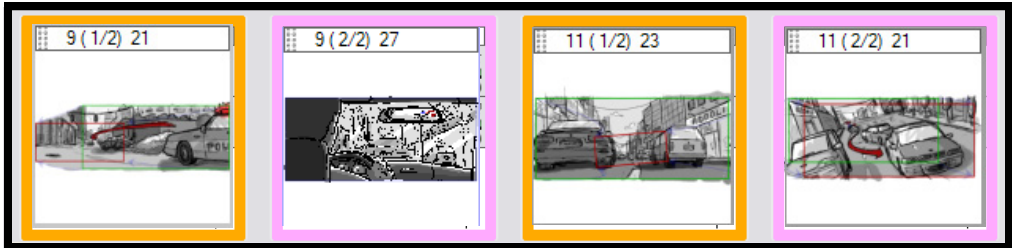
Change the colour of the bounding box used for the second group of shots. The RGB value of the default colour is 200, 200, 200.

Click the shot group colour box to open the Colour Picker dialog box where you can choose a new colour for the bounding box. For example, if you choose pink for the second shot group box colour, then all second shots will look as follows:

## Choose...

**Shot group box colour Two**

 \* (RGB value=200, 200, 200)

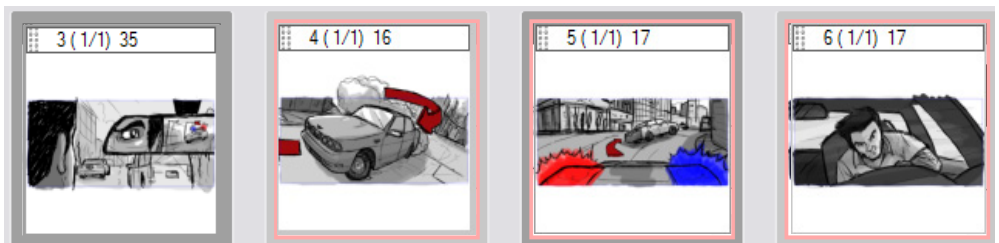



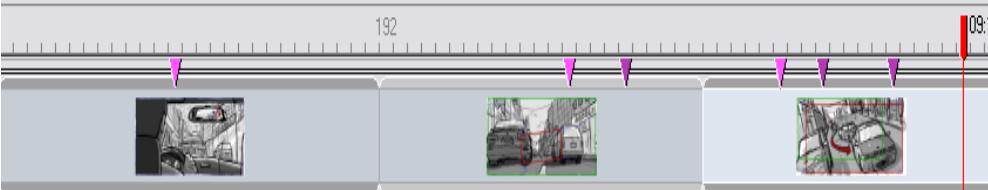

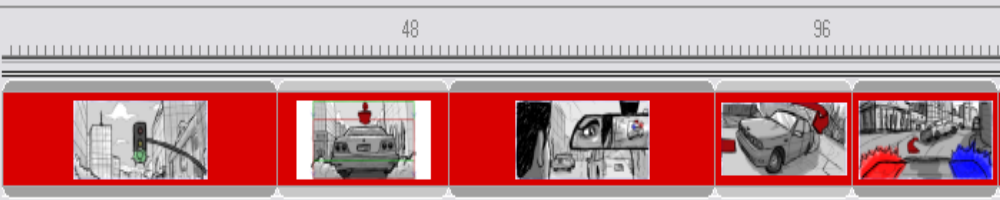

Change the colour of the bounding box used for panels. The RGB value of the default colour is 0, 0, 255.

Click the panel bounding box colour box to open the Colour Picker dialog box where you can choose a new colour for the panel bounding box. For example, if you choose red for the panel bounding box colour, then the bounding box that appears around all selected panels will look as follows:

**Selected panel bounding box colour**

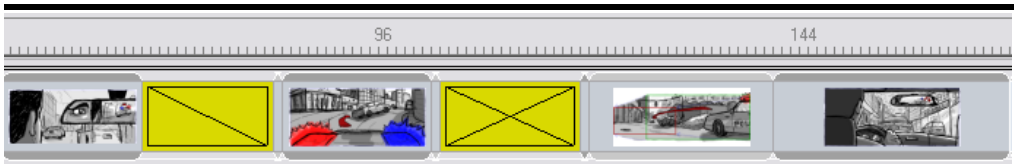
 \* (RGB value=0, 0, 255)



To do this...	Choose...
<p>Change the colour of the snapshot marker used for panels in the Timeline View. The RGB value of the default colour is 0, 20, 230.</p> <p>Click the snapshot marker colour box to open the Colour Picker dialog box where you can choose a new colour for the snapshot marker. For example, if you choose pink for the snapshot marker colour, then all the snapshot markers will look as follows:</p>	<p><b>Snapshot marker colour in Timeline View</b></p> <p> * (RGB value=0, 20, 230)</p>
	
<p>Change the colour of panels in the Timeline View. The RGB value of the default colour is 200, 200, 200.</p> <p>Click the panel colour box to open the Colour Picker dialog box where you can choose a new colour for panels. For example, if you choose red for the panel colour, then all the panels in the Timeline View will look as follows:</p>	<p><b>Panel colour in Timeline View</b></p> <p> * (RGB value=200, 200, 200)</p>
	
<p>Change the colour of transitions in the Timeline View. The RGB value of the default colour is 207, 237, 214.</p> <p>Click the transition colour box to open the Colour Picker dialog box where you can choose a new colour for transitions. For example, if you choose yellow for the transition colour, then all transitions in the Timeline View will look as follows:</p>	<p><b>Transition colour in Timeline View</b></p> <p> * (RGB value=207, 237, 214)</p>

To do this...


Choose...

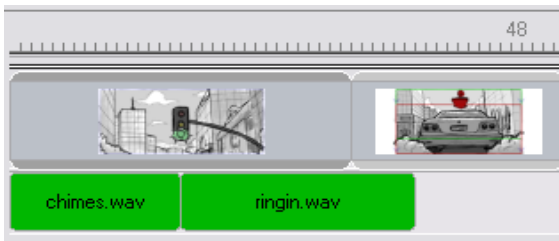


Change the colour of sound sequences in the Timeline View. The RGB value of the default colour is 237, 236, 205.

Click the sound sequence colour box to open the colour Picker dialog box where you can choose a new colour for sound sequences. For example, if you choose green for the sound sequence colour, then all sound sequences in the Timeline View will look as follows:

### Sound sequence colour in Timeline View

 \* (RGB value=237, 236, 205)

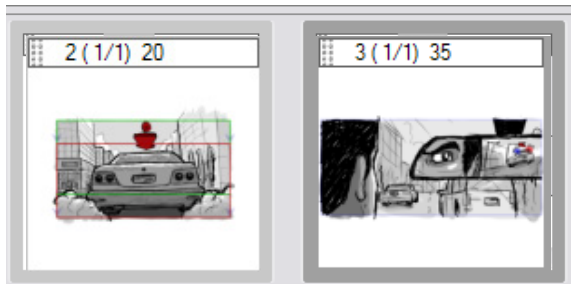


To do this...

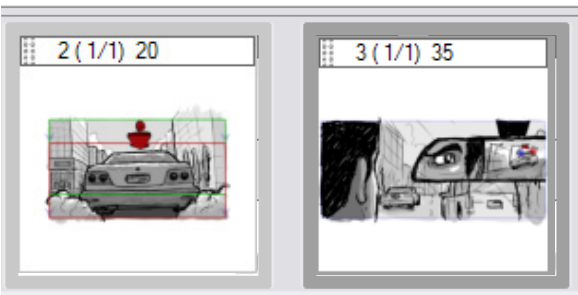
When turned on, display the duration as a time code in thumbnail panels in the Drawing and Overview workspaces.

Choose...

Thumbnail Panels in Drawing and Overview Workspaces



When turned off, display the duration as frames in thumbnail panels in the Drawing and Overview workspaces.

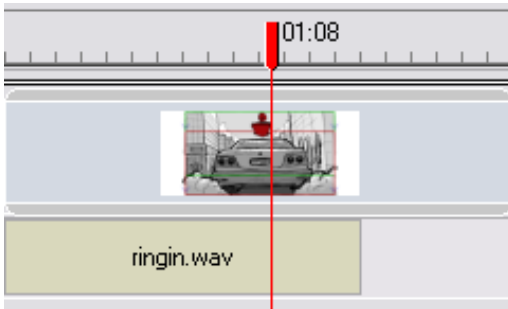


To do this...

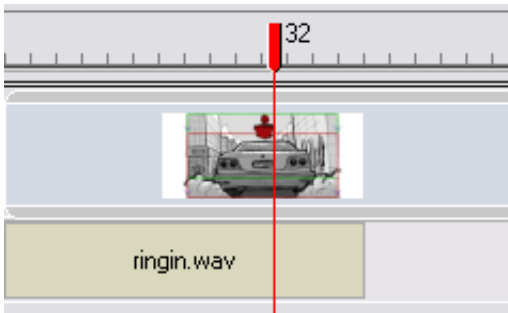
Choose...

When turned on, display the duration as a time code when dragging the red Current Frame slider across a sound sequence in the Timeline View.

**Slider in Sound Track View**



When turned off, display the duration as a frame when dragging the red Current Frame slider across a sound sequence in the Timeline View.



When turned on, display the duration as a time code in the timeline in Sound Track View.

**Timeline in Sound Track View**



To do this...

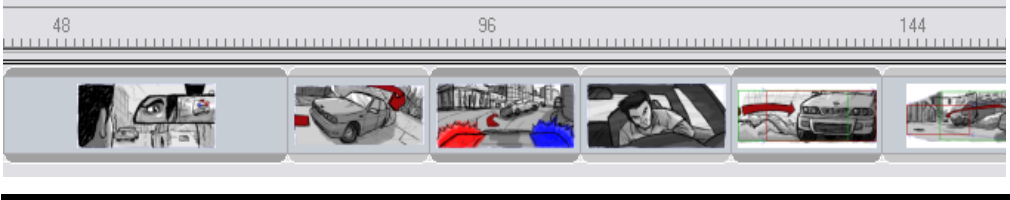
Choose...


When turned off, display the duration as a frame in the timeline in Sound Track View.

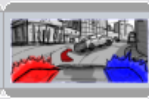
48


96


144
















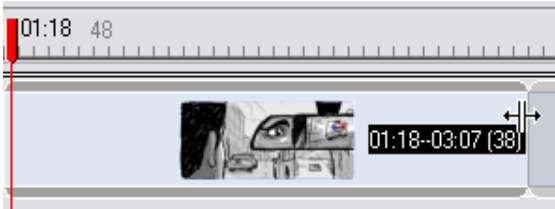
---

To do this...

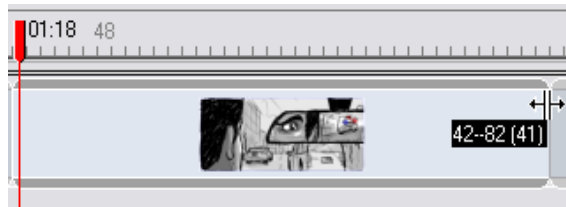
Choose...

When turned on, display the duration as a time code when adjusting the length of a panel in the Timeline View.

### Changing Duration Overlapping Timing Info in Timeline View



When turned off, display the duration as a frame when adjusting the length of a panel in the Timeline View.



To do this...

When turned on, print the duration as a time code of the selected storyboard panels in the PDF document.

Shot	Panel	Duration
1	1 / 1	03 : 21



When turned off, print the duration as a frame of the selected storyboard panels in the PDF document.

Shot	Panel	Duration
1	1 / 1	93












Choose...

Exported Document (PDF and etc.)





## Drawing View

To do this...	Choose...
Defaults are indicated with an asterisk (*)	
Specify a texture quality value between very low and very high for the brush stroke, or accept the default value of low.	<b>Stroke Texture Quality</b> Low *
When turned on, the selection tool is a lasso and a rectangular marquee when [Alt] is pressed.  When turned off, the selection tool is a rectangular marquee and a lasso when [Alt] is pressed.	<b>Select Tool Is Lasso</b>  *
Specify the initial default setting for automatically closing gaps in line art as you paint. Select from the following tolerance levels: <ul style="list-style-type: none"> <li>• 0 - disabled</li> <li>• 1 - small gap</li> <li>• 2 - medium gap</li> <li>• 3 - large gap</li> </ul>	<b>Auto Gap Closing</b> 0 (disabled) *
When turned on, displays drawings from previous and next panels in a different colour.  When turned off, displays drawings from previous and next panels in their original colour and faded.	<b>Enable Shade</b>  *
Choose a colour for drawings from the previous panels. Click the <b>Onion Skin Colour Before</b> square and select a new colour from the colour Picker. The RGB value of the default colour is 255, 0, 0.	<b>Onion Skin Colour Before</b>  * (RGB value=255, 0, 0)
Choose a colour for drawings from the next panels. Click the <b>Onion Skin Colour After</b> square and select a new colour from the colour Picker. The RGB value of the default colour is 0, 255, 0.	<b>Onion Skin Colour After</b>  * (RGB value=0, 255, 0)
Enable the display of onion skin layers from panels outside of the current shot or scene.	<b>Enable Across Shot (Scene) Boundary</b>  *
Enables the camera motion on the onion skin layers.	<b>Apply Camera Motion</b> 

To do this...	Choose...
Defaults are indicated with an asterisk (*)	
When turned on, improve the appearance of bitmaps.	<b>Smooth Textures</b>  *
When turned on, disable writing to the OpenGL back buffer. Use this option if you're experiencing problems displaying gradients and cutters with your OpenGL video card.	<b>Alternate Gradient and Cutter</b>  *
When turned on, allows you to show brush strokes on top of the layers and not behind.	<b>Show Brush Strokes in Place while Drawing</b> 

Export

To do this...	Choose...
Defaults are indicated with an asterisk (*)	
When Exporting to a Movie: When turned on, optimizes the file size and the rendering time of	<b>Optimize Still Image Sequences</b>  *
When Exporting to a Movie: Specify the font used when you overlay a time code into the animatic. Select fonts available on you system from the adjacent droplist.	<b>Time Code Font</b>
When Exporting to a Movie: Specify the colour of the time code used when you overlay a time code into the animatic. Clicking on the colour swatch, displays the colour picker so you can select a colour.	<b>Time Code Colour</b>
When Exporting to a Movie: Specify the physical height of the time code overlay in the animatic. Clicking on the adjacent droplist allows you to choose in one percent increments up to a maximum height of 50% of the movie.	<b>Time Code Height%</b>

To do this...	Choose...
Defaults are indicated with an asterisk (*)	
<p>When Exporting to a Movie:</p> <p>Specify the position of the time code used when you overlay a time code in the animatic. Clicking on the adjacent droplist allows you to choose from</p> <ul style="list-style-type: none"> <li>• Top Left</li> <li>• Top Centre</li> <li>• Top Right</li> <li>• Bottom Left</li> <li>• Bottom Centre</li> <li>• Bottom Right</li> </ul>	<p><b>Time Code Position</b></p>
<p>Specify the colour of the background against which the time code is shown. This may make it easier to view the timecode. Clicking on the colour swatch, displays the colour picker so you can select a colour</p>	<p><b>Time Code Background Colour</b></p>
<p>When Exporting to Toon Boom:</p>	<p><b>Maintain Local Library When Import External Image/Template</b></p>
<p>When turned on, the export of QuickTime files for EDL/AAF is faster because only panels with animated frames are rendered at the frame rate of the storyboard project.</p> <p>In Toon Boom Storyboard, there are two types of panels: those with motion (transformations or camera moves) and those without motion. In the case of panels without motion, when this option is turned on, Toon Boom Storyboard for example, renders only one frame per second instead of 24 frames per second. This option does not affect panels with motion.</p> <p><b>NOTE:</b> When this option is turned on, certain video editing tools such as Final Cut Pro will not recognize the exported QuickTime files.</p>	<p><b>Optimize Still Image Sequences</b></p> <p> *</p>

## Shortcut

For detailed information on Toon Boom Storyboard's keyboard shortcuts, see Keyboard Shortcuts on page 183.

# Chapter 3

## Exploring the User Interface

Toon Boom Storyboard is designed with a number of features that offer flexibility in creating a storyboard project. This chapter offers a look at interface components and features that you can use to design your project:

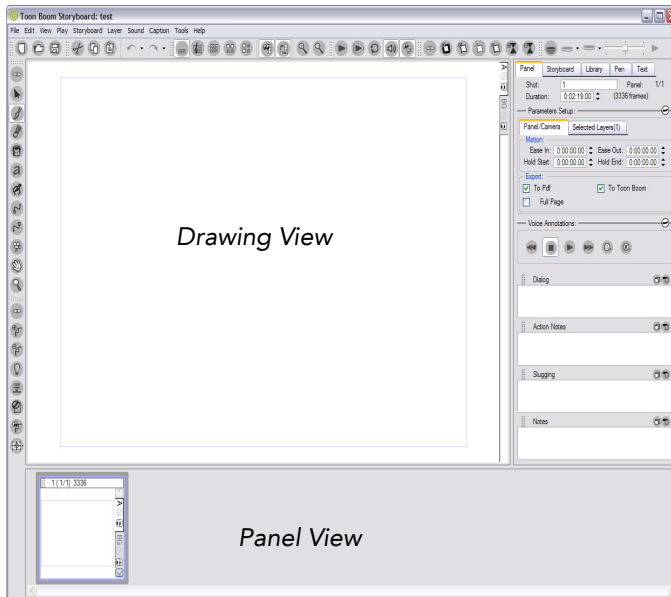
- Managing Your Window Workspace on page 130
- Storyboard Workspaces on page 131
- Storyboard Views on page 137
- Tool Properties on page 140
- Storyboard Commands on page 152
- Storyboard Menus on page 165

# Managing Your Window Workspace

The Toon Boom Storyboard window is composed of the menu bar, toolbars, and one or more smaller windows, called views. You can also display storyboard properties on the right side of the workspace.

When you open a storyboard project for the first time, the standard workspace is displayed. It contains the Drawing View, the Panel View and the Tool Properties.

## *The Drawing Workspace*



*Tool Properties*

The upper view is called the *Drawing View*, which displays the currently selected panel. The lower view is called the *Panel View*, which lays out all the panels in the project in chronological order. The Panel View can be replaced by another type of timeline display, called the *Timeline View*, which includes sound track information.

The current panel's properties are displayed in the *Tool Properties*, found to the right of the Drawing view. Other types of properties are displayed in other Tool Properties tabs. Its display can be switched on and off while you work.

When this workspace is active, the captions for the current frame are displayed in the Tool Properties *Panel Tab*.



Window workspace components:

- *Drawing View*, displays the currently selected panel
- *Panel View*, lays out all the panels in the project in chronological order
- *Tool Properties*, displays the current panels properties in several tabs.
  - ⇒ The *Panel Tab* displays the captions for the current frame.
  - ⇒ The Storyboard tab is where you can enter information about the storyboard project.
  - ⇒ The Library tab provides access to all drawings and sounds in your current project, allowing re-use of these resources.
  - ⇒ The Pen tab to select types of pens to draw lines with different qualities. The lines can be thin or thick, and be smooth or rough. Use the colour palette to assign and edit pen colours and textures
  - ⇒ Text tab to select a new font and other text characteristics to the text. Use the colour palette to assign and edit font colours and textures.

You can work with the window workspace you find most effective for your current tasks.

## Storyboard Workspaces

This section describes the possible workspaces available in Toon Boom Storyboard, it provides an example of each workspace and a procedure for customizing each workspace.

Views and *Tool Properties* can be displayed in one or more window workspaces:

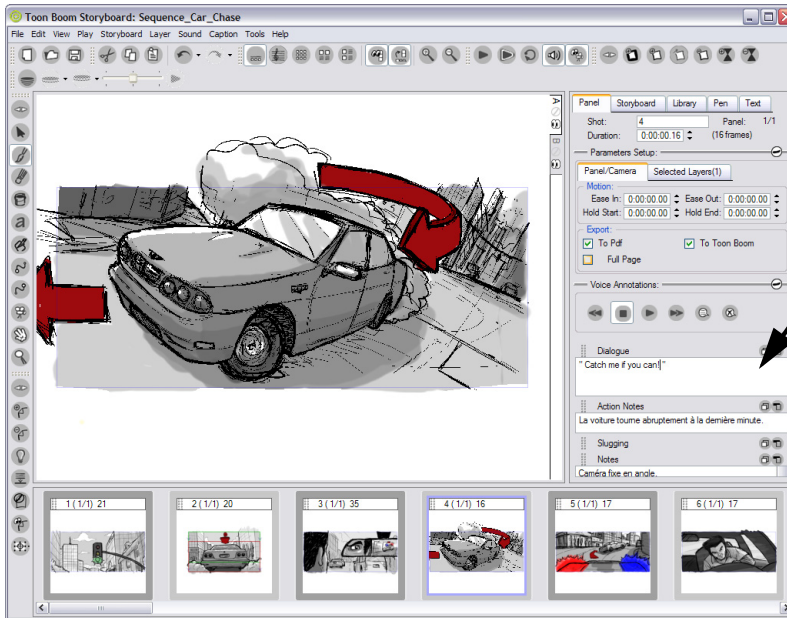
- Drawing Workspace on page 132
- Timeline Workspace on page 133
- Overview Workspace on page 134
- Horizontal Workspace on page 135
- Vertical Workspace on page 136

## Drawing Workspace

This is the standard workspace displayed when Toon Boom Storyboard opens. It contains the Drawing View, the Panel View and the Tool Properties.

To display this workspace:

- ▶ Select **View > Drawing Workspace**.
- ▶ In the View Toolbar, press  **Drawing Workspace**.




*In this view, the captions for the current panel are displayed in the Tool Properties.*

*The Tool Properties can be turned off.*

*The Panel View can be replaced by the Timeline View.*

## Customize your workspace

To replace the Panel View with the Timeline View:

- ▶ In the View Toolbar, press  **Timeline Workspace**.

To hide the Tool Properties and Panel tab:

- ▶ Select **View > Toggle Tool Properties**.
- ▶ In the View Toolbar, press  **Toggle Tool Properties**.

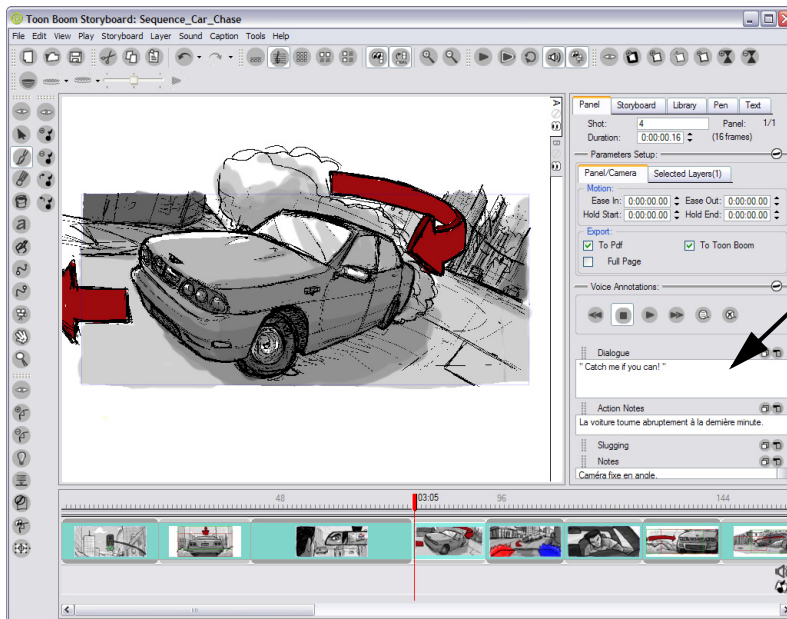
## Timeline Workspace

This workspace is similar to the Drawing Workspace. It contains the Drawing View, the Panel View and the Tool Properties.

You can also access the Timeline View from this workspace.

**To display this workspace:**

- ▶ Select **View > Timeline Workspace**.
- ▶ In the View Toolbar, press  **Timeline Workspace**.




*In this view, the captions for the current panel are displayed in the Tool Properties.*

*The Tool Properties can be turned off.*

*The Timeline View can be replaced by the Panel View.*

## Customize your workspace

**To replace the Timeline View with the Panel View:**

- ▶ In the View Toolbar, press  **Drawing Workspace**.

**To hide the Tool Properties and Panel tab:**

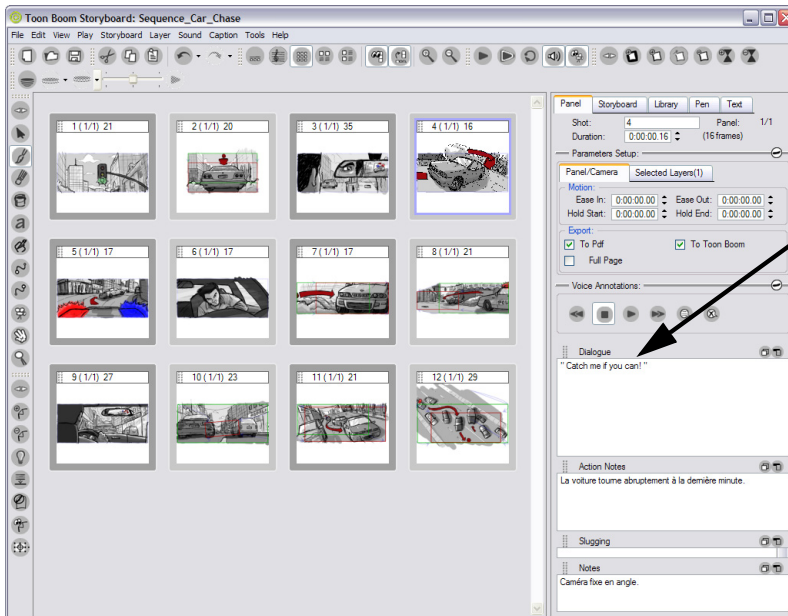
- ▶ Select **View > Toggle Tool Properties**.
- ▶ In the View Toolbar, press  **Toggle Tool Properties**.

## Overview Workspace

This workspace contains the Panel View and the Tool Properties.

To display this workspace:

- ▶ Select **View > Overview Workspace**.
- ▶ In the View Toolbar, press  **Overview Workspace**.



*In this view, the captions for the current panel are displayed in the Tool Properties.*

*The Panel tab is displayed with the other tabs. You can change the display to separate it from the other tabs.*

*The Tool Properties can be turned off.*

## Customize your workspace

To display the Panel tab as a Tool Properties tab:

- ▶ Select **View > Combine Panel Tab**.
- ▶ In the View Toolbar, press  **Combine Panel Tab**.


To hide the Tool Properties and Panel tab:

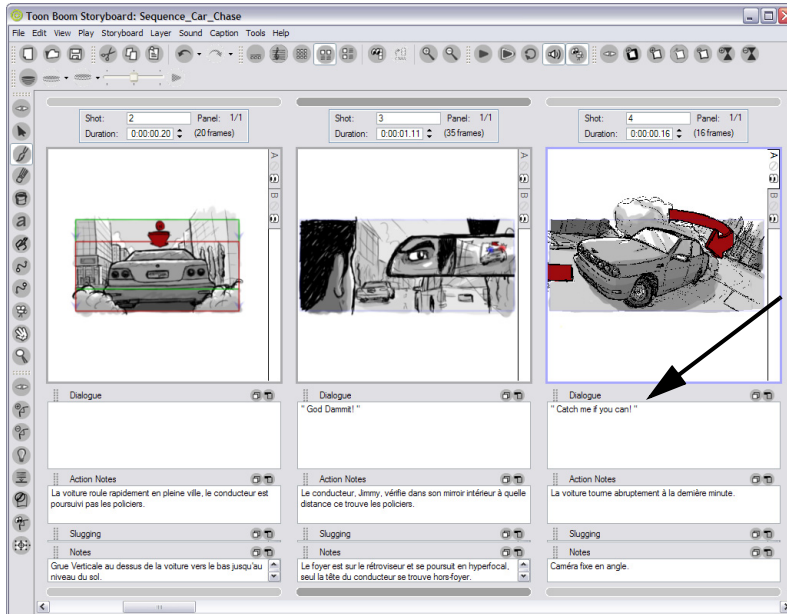
- ▶ Select **View > Toggle Tool Properties**.
- ▶ In the View Toolbar, press  **Toggle Tool Properties**.

## Horizontal Workspace

This workspace displays the Panel View horizontally.

To display this workspace:

- ▶ Select **View > Horizontal Workspace**.
- ▶ In the View Toolbar, press  **Horizontal Workspace**.



*In this view, the captions for the panel are displayed below each panel.*

*The Tool Properties can be turned on and will appear on the right side of the window.*

## Customize your workspace

To display the Tool Properties:

- ▶ Select **View > Toggle Tool Properties**.
- ▶ In the Sound Toolbar, press  **Toggle Tool Properties**.

To display the Panel tab with other Tool Properties:

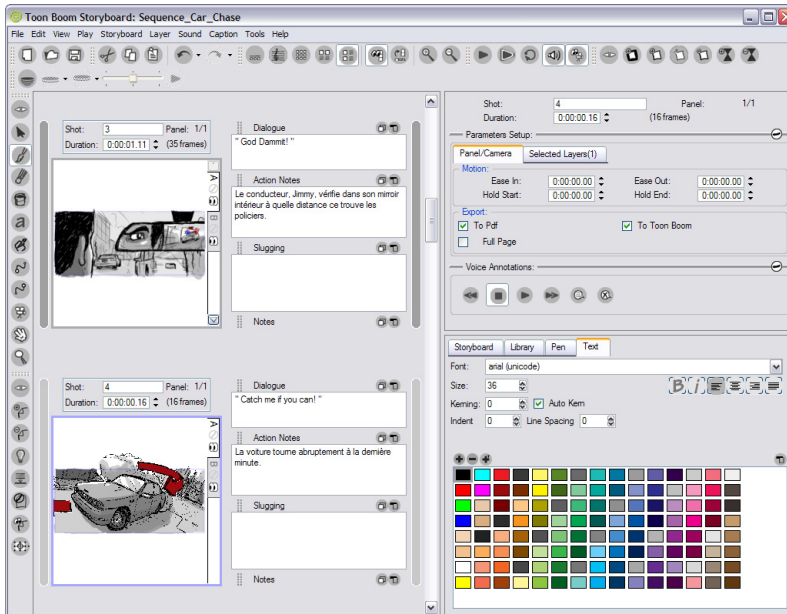
- ▶ Select **View > Combine Panel Tab**.
- ▶ In the View Toolbar, press  **Combine Panel Tab**.

## Vertical Workspace

This workspace displays the Panel View vertically and the Tool Properties.

To display this workspace:

- ▶ Select **View > Vertical Workspace**.
- ▶ In the View Toolbar, press  **Vertical Workspace**.



*In this view, the captions for the panel are displayed beside each panel.*

*The Panel tab is displayed with the other tabs. You can change the display to separate it from the other tabs, as shown in the figure on the left.*

*The Tool Properties can be turned off.*

## Customize your workspace

To display the Panel tab as a Tool Properties tab:

- ▶ Select **View > Combine Panel Tab**.
- ▶ In the View Toolbar, press  **Combine Panel Tab**.

To hide the Tool Properties and Panel tab:

- ▶ Select **View > Toggle Tool Properties**.
- ▶ In the View Toolbar, press  **Toggle Tool Properties**.

# Storyboard Views

Customizing your window workspace allows you to access multiple views. Once you understand the use and capabilities of each view, you will be able to display views, panels and toolbars in a manner that best suits the way you work. There are a number of view windows that can appear in Toon Boom Storyboard after you open a project.

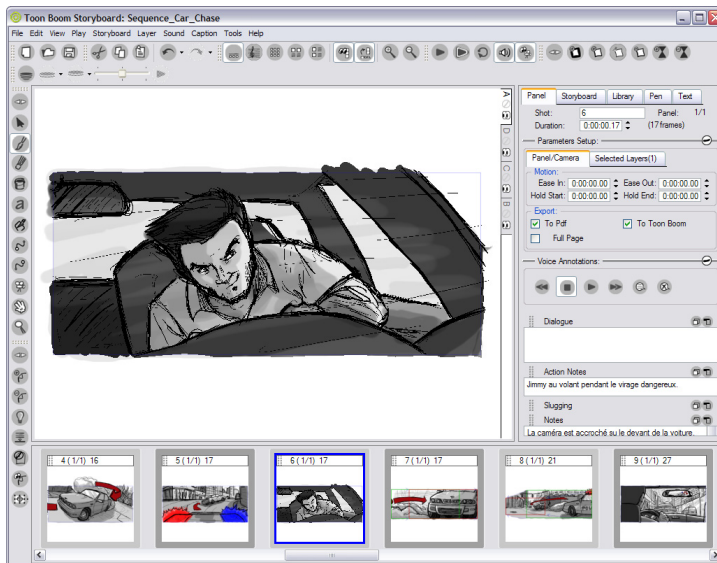
They are:

- Drawing View on page 137
- Panel View on page 138
- Timeline View on page 139

## Drawing View

In the Drawing View, you can create new drawings and modify existing ones in a selected panel. You can also use this view to select, move, rotate or scale drawings. This view allows you to plan camera moves using the camera tools and see parts of the panel that might appear outside the default camera frame during certain parts of the shot.

Many of these features can be accessed by working in a panel in the Panel View, but the Drawing View allows you to display the panel in an enlarged area with more detail and offers finer control over drawing tools and camera positioning. You can also zoom in to a part of your drawing to view and create more detailed content. When you preview the storyboard using the playback controls, the preview is displayed in the Drawing View.

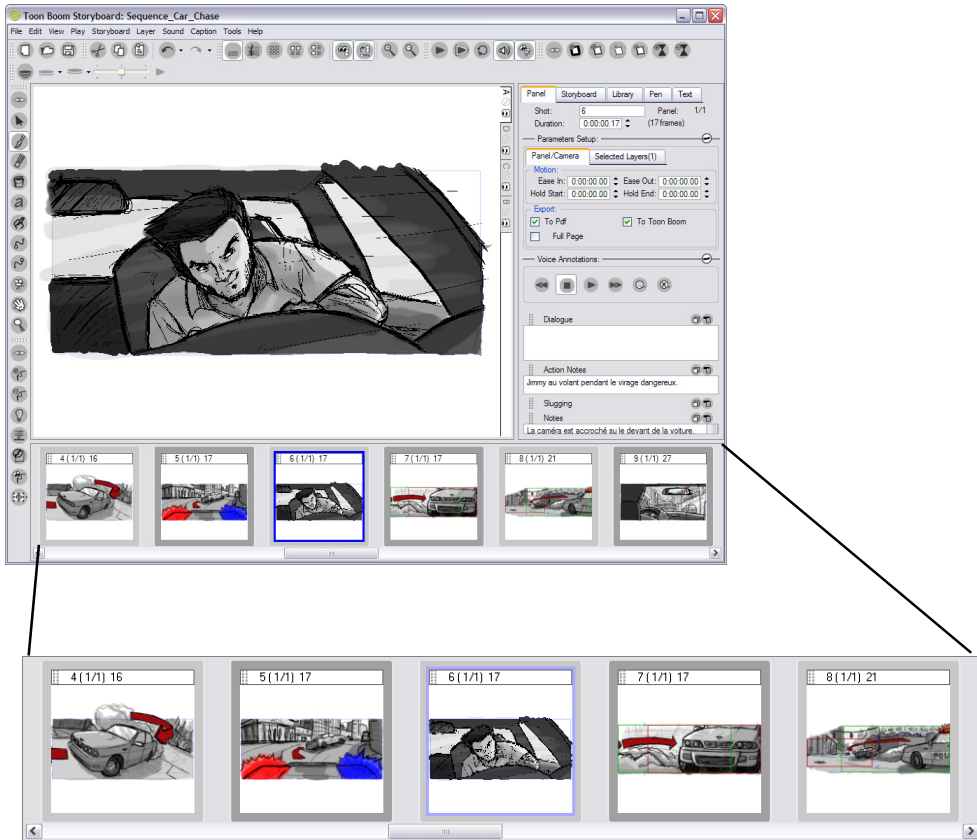


This view is included in the Drawing Workspace.

## Panel View

Use the Panel View to visualize panels as a chronological sequence. Like the Timeline View, this is a type of timeline. In both views, you can also add transitions between shots, easily navigate the timeline, and control the playback of a selected panel or the entire project from this view.

Use the Panel View to select, add, rename and delete panels.

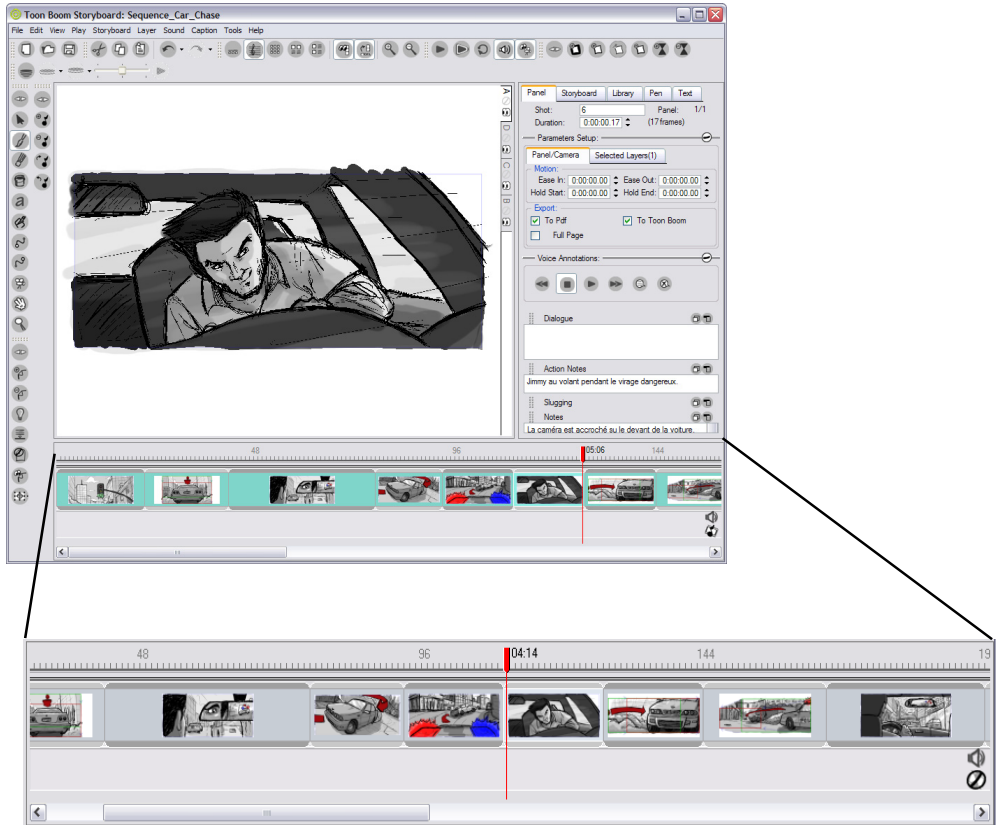


This view is included in the Drawing Workspace, Overview Workspace, Horizontal Workspace and Vertical Workspace.



## Timeline View

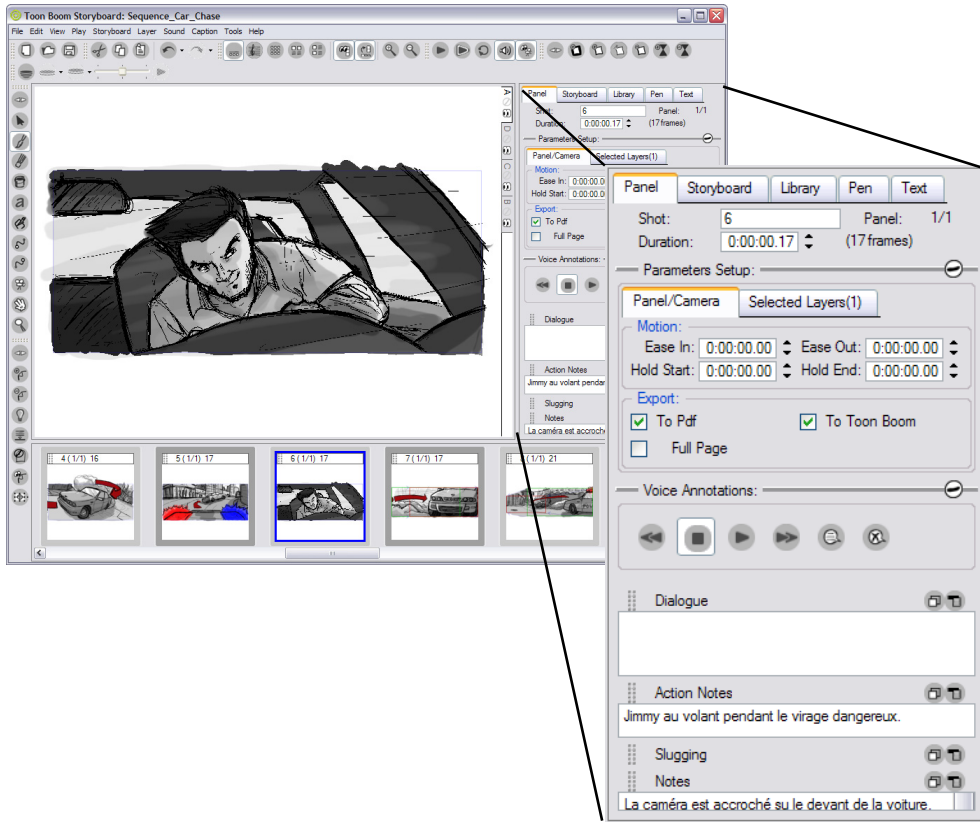
The Timeline View can be used to visualize the timing of your scene's visuals and sounds. You can add sound track layers to this timeline, as well as edit audio files imported into the sound tracks. You can also add transitions and control the playback of a selected panel or the entire storyboard from this view.



This view is included in the Timeline Workspace.


## Tool Properties

The Tool Properties allow you to manage storyboard properties. This includes properties and information for panels, drawing tools, and the image and audio file library.



The following tabs appear at the top of the Tool Properties:

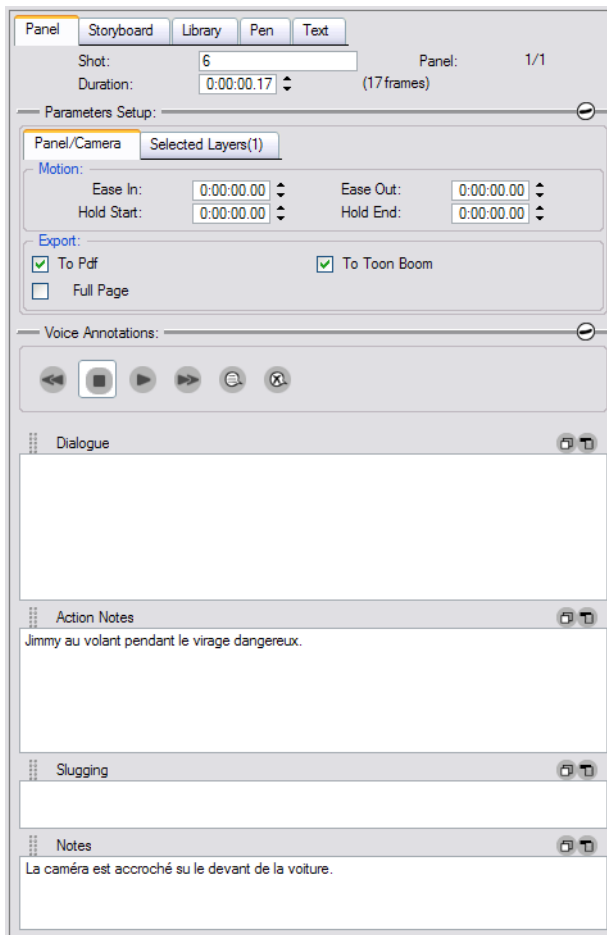
- Panel Tab on page 141
- Storyboard Tab on page 144
- Library Tab on page 146
- Pen Tab on page 148
- Text Tab on page 150

You can turn the Tool Properties display on or off in the Storyboard window, by selecting **View > Toggle Tool Properties** or clicking the **Toggle Tool Properties**  button.

## Panel Tab

The Panel tab contains information about the currently selected panel, including its name, length and the scene to which it belongs. The Panel tab is also used to keep track of text and audio notes relating to the panel and the shot it describes.

In the Drawing Workspace, the Panel tab is the location where you can enter textual information about the current panel. By default, you can use one of the fields that is displayed in the tab, but you can use the commands in the Caption menus to customize your text field display.



There are four default caption fields in the Panel tab.









**Dialogue:** Enter the lines of dialogue from your script that occur during this shot described in the current panel.

**Action Notes:** Describe the actions that occur during the shot described in the panel.

**Slugging:** Indicate start and stop times of dialogue and relevant actions.

**Notes:** Add anything relevant about the current panel or the shot it represents. For example, the crew working on the shot, required props, ambient sounds, continuity notes or required equipment to complete the shot.

## Panel tab Properties

Property		Application
Shot		Use this text field to display/rename the current panel's shot.
Duration		Use this text field to determine the length of the shot.
Ease In		Enter the duration of the ease in after the first frame in which the gradual change in camera or layer movement begins. For example, if you want to slowly accelerate to the normal camera or layer speed from frame 1-10, enter a value of 10.
Ease Out		Enter the number of frames before the last frame in which the change in camera or layer movement is gradual.
Hold Start		Enter the beginning of the camera or layer motion in the panel.
Hold End		Enter the end of the camera or layer motion in the panel.
To Pdf		Select this check box to print the current panel's shot.
Full Page		Select this check box to print the current panel's shot full page.
To Harmony		Select this check box to export the current panel's shot to Toon Boom Harmony.
Previous Voice Annotation		Play the previous voice annotation.
Stop Voice Annotation		Stop playback of the voice annotation.
Play Voice Annotation		Play the voice annotation.
Next Voice Annotation		Play the next voice annotation.
Record Voice Annotation		Open a window to start and stop the recording of a voice annotation, and play it back.
Delete Voice Annotation		Delete the current voice annotation.
Caption Display		Alternately hide the caption; show the caption and hide all other captions; and display all captions.
Caption Menu		Display and select from a menu of text field commands.

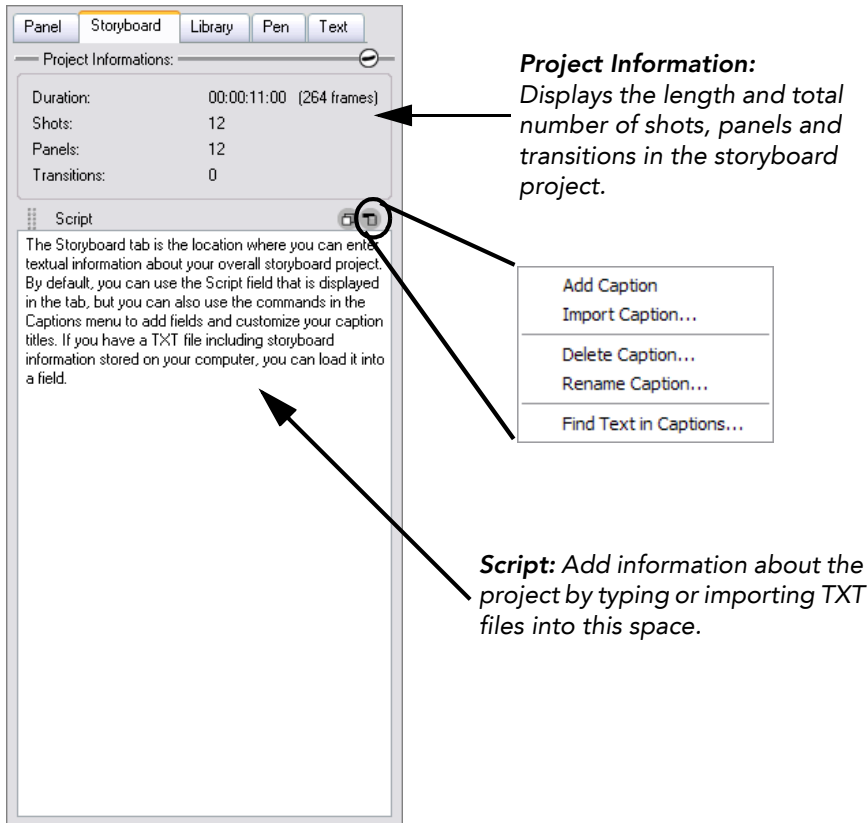
## Caption tab Menu

Command	Action	Other Access Methods
Add Caption	Add a caption field to the panel.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Add Caption to Panels</b></li> </ul>
Import Caption	Load a text file into the selected caption.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Import Caption</b></li> </ul>
Delete Caption	Delete the selected caption field.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Delete Caption</b></li> </ul>
Rename Caption	Change the selected caption title.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Rename Caption</b></li> </ul>
Find Text in Captions	Opens a dialog box used to search for text in the storyboard and panel caption fields.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[Shift]+[F]</li> <li>• Mac OS X [Command]+[Shift]+[F]</li> <li>• <b>Caption &gt; Find Text in Captions</b></li> </ul>



## Storyboard Tab

The Storyboard tab displays information about the storyboard project such as duration and total number of shots, panels and transitions.

The Storyboard tab is also the location where you can enter textual information about your overall storyboard project. By default, you can use the Script field that is displayed in the tab, but you can also use the commands in the Captions menu to add fields and customize your caption titles. If you have a TXT file including storyboard information stored on your computer, you can load it into a field.



# Storyboard tab Properties

Property	Application	
Duration and Frames	Displays the length of the storyboard project in seconds and frames.	
Shots	Displays the total number of shots in the storyboard project.	
Transitions	Displays the total number of transitions in the storyboard project.	
Panels	Displays the total number of panels in the storyboard project.	
Caption Display		Alternately hides the caption, shows the caption and hides all other captions, and displays all captions.
Caption Menu		Display and select from a menu of caption commands.

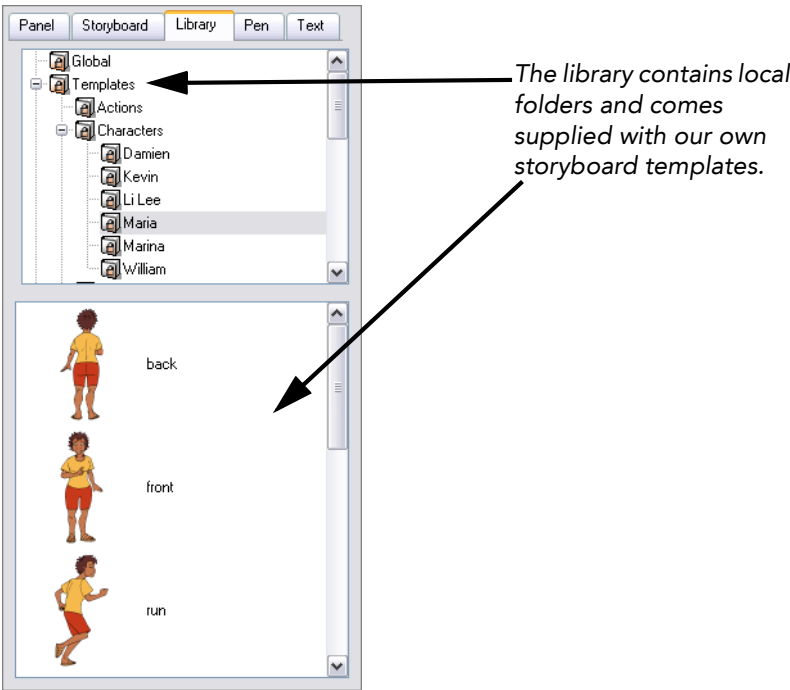
# Storyboard tab Caption Menu

Command	Action	Other Access Methods
Add Caption	Add a caption field at the project level.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Add Caption to Storyboard</b></li> </ul>
Import Caption	Load a text file in to the selected caption.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Import Caption</b></li> </ul>
Delete Caption	Delete the selected caption field.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Delete Caption</b></li> </ul>
Rename Caption	Change the selected caption title.	<ul style="list-style-type: none"> <li>• <b>Caption &gt; Rename Caption</b></li> </ul>
Find Text in Captions	Opens a dialog box used to search for text in the storyboard and panel caption fields.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[Shift]+[F]</li> <li>• Mac OS X [Command]+[Shift]+[F]</li> <li>• <b>Caption &gt; Find Text in Captions</b></li> </ul>

## Library Tab

When you need to re-use any piece of content in your current storyboard project, you can use the assets in the library.

Use the Library tab to access all drawings and sounds in your project. You can copy any asset from one place in your storyboard to another. You can also import drawings and sounds into your library for re-use in your project.



*The library contains local folders and comes supplied with our own storyboard templates.*

You can use the library to share work with other artists or between projects. Using the library can reduce the amount of work you need to do, as well as keep the size of your storyboard project small.

## Library tab Menu

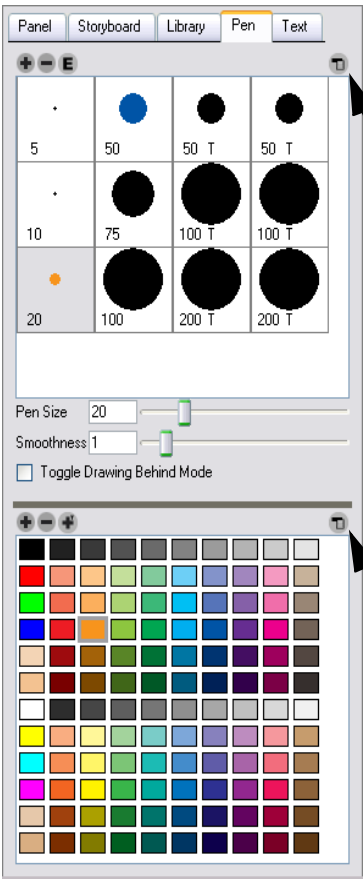
Command	Action	Other Access Methods
Right to Modify Library	Get rights to add or makes changes to the selected folder.	
New Folder	Add a subfolder to the selected folder.	



Command	Action	Other Access Methods
Delete Folder	Remove the selected folder from the template library.	• <b>[Delete]</b>
Rename Folder	Deletes the selected folder name in the text field and replaces it with the new name entered.	
Refresh	Reload all folders to update content information.	
Open Library	Add a library folder to the template library.	
Close Library	Remove library folders from the template library.	
Delete Thumbnails	Delete thumbnail icons from the template library.	
Generate Thumbnails	Generate thumbnail icons of drawing objects stored in the template library.	
Import Files	Import files into the Library	

## Pen Tab

As you design your storyboard panels, you can use the Pen tab to select different types of pens to draw lines with different qualities. The lines can be thin or thick, and be smooth or rough. Use the colour palette to assign and edit pen colours and textures.



The Pen tab includes a selection of pens, identified by maximum width and colour. You can add, modify and delete pen styles.



The Pen tab menu is accessed here.


Adjust the pen size and smoothness using the sliders here. Turn on the drawing behind mode.

The colour palette allows you to add, modify and delete colour (and texture) swatches.





The Pen tab Colour Palette menu is accessed here.

## Pen tab Properties

Property	Application
New Pen	 Open the Pen Style dialog box to add a new pen to the list.
Delete Pen	 Delete the selected pen from the list.

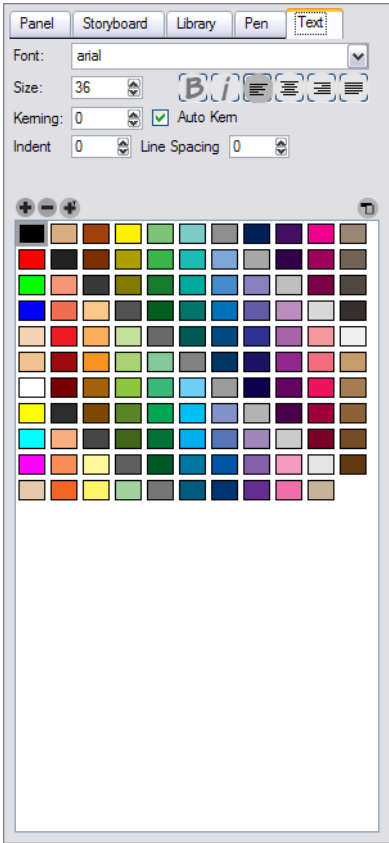
Property	Application
Edit Selected Pen	 Open the Pen Style dialog box to make changes to the selected pen.
Pen Size	Change the width of the pen. For a brush stroke, this value changes the maximum width of the brush.
Smoothness	Select the amount of smoothness that drawing tools will apply to a line.
Toggle Drawing Behind Mode	Select this option to draw behind an object.

### Pen tab Menu

Command	Action	Other Access Methods
Edit Selected Pen	Open the Pen Style dialog box to make changes to the selected pen.	•  (Pen Tab)
New Pen	Open the Pen Style dialog box to add a new pen to the list.	•  (Pen Tab)
New Texture Pen	Open a dialog box to browse for a texture and add a new pen to the list. A [T] appears beside the pen in the list.  You can also add a texture pen from the Pen Style dialog box and select the Textured Pen check box to add a new pen with texture to the list.	•  (Pen Tab)
Delete Pen	Delete the selected pen. Also applies to a Textured Pen.	•  (Pen Tab)

# Text Tab




Text can be inserted directly into a storyboard panel when the Text tool is active. Use the Text tab to select a new font and other text characteristics. You can apply new text properties to a selection of text that has already been typed or select properties that will apply to text you are about to type. Use the colour palette to assign and edit font colours and textures.



*The Text tab allows you to define the look of the text in your drawing.*

*The lower section includes the colour palette. You can add, modify and delete colour (and texture) swatches.*

## Text tab Properties

Property	Application	
Font	Use this drop-down menu to select the name of the font you want to apply. The list will display all of the fonts on your system, however only vector fonts can be used to create a text object.	
Size	Use this drop-down menu to select the point size of the font you want to use.	
Bold		Displays selected text in boldface. If a boldface version of the font is not installed on your system, this button is disabled.
Italic		Displays selected text in italics. If an italicized version of the font is not installed on your system, this button is disabled.
Alignment		Left, centre, right or full justify text with these buttons.
Kerning	Use this field to adjust the spacing between characters. Negative numbers decrease spacing between characters and positive numbers increase it.	
Auto Kern	Select this option to adjust the spacing between characters automatically, based on the font's predefined standard.	
Indent	Use this field to increase or decrease the indentation on the first line of text.	
Line Spacing	Use this field to increase or decrease the spacing between each line of text.	

# Storyboard Commands




Toon Boom Storyboard includes buttons that execute useful commands, which are grouped on a number of toolbars.

- File Toolbar on page 152
- Edit Toolbar on page 153
- View Toolbar on page 154
- Storyboard Toolbar on page 155
- Layer Toolbar on page 156
- Tools Toolbar on page 158
- Sound Toolbar on page 161
- Play Toolbar on page 162
- Navigation Toolbar on page 163

Toolbars are integrated into the Toon Boom Storyboard window. They can be detached by placing the cursor over the left side of the toolbar, and either dragging the toolbar or double-clicking it.

## File Toolbar






Use this toolbar to work with storyboard project files in Toon Boom Storyboard. These commands can also be accessed from the File Menu.

Command	Action	Other Access Methods
New	 Opens a dialog box where you can enter a new storyboard name and directory location.	<ul style="list-style-type: none"><li>• <b>File &gt; New Storyboard</b></li><li>• Windows [Ctrl]+[N]</li><li>• Mac OS X [Command]+[N]</li></ul>
Open	 Opens a dialog box where you can select the storyboard you want to open. If you select this command when a storyboard is open, you can still open another one; the current storyboard will close before the new one opens.	<ul style="list-style-type: none"><li>• <b>File &gt; Open Storyboard</b></li><li>• Windows [Ctrl]+[O]</li><li>• Mac OS X [Command]+[O]</li></ul>
Save	 Saves all changes that you have made to the current storyboard.	<ul style="list-style-type: none"><li>• <b>File &gt; Save Storyboard</b></li><li>• Windows [Ctrl]+[S]</li><li>• Mac OS X [Command]+[S]</li></ul>

## Edit Toolbar












Use this toolbar to undo and redo Toon Boom Storyboard operations. These commands can also be accessed from the Edit Menu.

Command	Action	Other Access Methods
Copy	 Copies selected objects and their properties.	<ul style="list-style-type: none"><li>• <b>Edit &gt; Copy</b></li><li>• Windows [Ctrl]+[C]</li><li>• Mac OS X [Command]+[C]</li></ul>
Cut	 Removes selected objects. You can perform a paste to place the object or its properties to another object.	<ul style="list-style-type: none"><li>• <b>Edit &gt; Cut</b></li><li>• Windows [Ctrl]+[X]</li><li>• Mac OS X [Command]+[X]</li></ul>
Paste	 Places the object you cut or copied into the location you have selected.	<ul style="list-style-type: none"><li>• <b>Edit &gt; Paste</b></li><li>• Windows [Ctrl]+[V]</li><li>• Mac OS X [Command]+[V]</li></ul>
Redo	 Reapplies the last operation when you have undone an operation that you decide you want to keep.  Click the arrow next to the button to see a list of actions that you can redo from the Redo list.	<ul style="list-style-type: none"><li>• <b>Edit &gt; Redo</b></li><li>• Windows [Ctrl]+[Shift]+[Z]</li><li>• Mac OS X [Command]+[Shift]+[Z]</li></ul>
Undo	 Removes the last change you made to your storyboard. Revert changes you have made, in the order you made them.  Click the arrow next to the button to see a list of actions that you can undo from the Undo list.	<ul style="list-style-type: none"><li>• <b>Edit &gt; Undo</b></li><li>• Windows [Ctrl]+[Z]</li><li>• Mac OS X [Command]+[Z]</li></ul>

# View Toolbar



Use this toolbar to display and manage window workspaces. These commands can also be accessed from the View Menu.










Command	Action	Other Access Methods
Combine Panel Tab	 Includes the Panel Tab in the Tool Properties. Select it again to display the Panel tab separately from the other Tool Properties tabs.	<ul style="list-style-type: none"><li>• <b>View &gt; Combine Panel Tab</b></li></ul>
Drawing Workspace	 Activates a workspace displaying both the Drawing View and the Panel View.	<ul style="list-style-type: none"><li>• <b>View &gt; Drawing Workspace</b></li><li>• [3]</li></ul>
Horizontal Workspace	 Activates a workspace displaying the frames in a row, with each panel's caption properties below it.	<ul style="list-style-type: none"><li>• <b>View &gt; Horizontal Workspace</b></li><li>• [6]</li></ul>
Overview Workspace	 Activates a workspace displaying the panels in the Panel View as thumbnails.	<ul style="list-style-type: none"><li>• <b>View &gt; Overview Workspace</b></li><li>• [5]</li></ul>
Timeline Workspace	 Activates a workspace displaying both the Drawing View and the Timeline View.	<ul style="list-style-type: none"><li>• <b>View &gt; Timeline Workspace</b></li><li>• [4]</li></ul>
Toggle Tool Properties	 Turns on and off the display of the Panel tab and Properties panels.	<ul style="list-style-type: none"><li>• <b>View &gt; Toggle Tool Properties</b></li></ul>
Vertical Workspace	 Activates a workspace displaying the panels in a column, with each panel's caption properties beside it.	<ul style="list-style-type: none"><li>• <b>View &gt; Vertical Workspace</b></li><li>• [7]</li></ul>
Zoom In	 Increases your drawing space.	<ul style="list-style-type: none"><li>• <b>View &gt; Zoom In</b></li><li>• [2]</li></ul>
Zoom Out	 Reduces your drawing space.	<ul style="list-style-type: none"><li>• <b>View &gt; Zoom Out</b></li><li>• [1]</li></ul>









## Storyboard Toolbar






Use this toolbar to manage storyboard Panels. Many of these commands can also be accessed from the Storyboard Menu.












Command	Action	Other Access Methods
Add Panel	 Adds a new panel to the shot positioned after the current panel.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Add Panel</b></li> <li>• panel track pop-up menu: <b>Add Panel</b></li> <li>• [P]</li> </ul>
Add Shot	 Adds a new unconnected panel after the current shot.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Add Shot</b></li> <li>• panel track pop-up menu: <b>Add Shot</b></li> </ul>
Copy Camera End Position From Start	 Uses the same camera position as the first frame in the current panel for the last frame in the current panel.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Copy Camera End Position From Start Position In This Panel</b></li> </ul>
Copy Camera End Position From Next Panel	 Uses the same camera position as the first frame in the next panel for the last frame in the current panel.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Copy Camera End Position From Start Position In Next Panel</b></li> </ul>
Copy Camera Start Position from Previous Panel	 Uses the same camera position as the last frame in the previous panel for the first frame in the current panel.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Copy Camera Start Position From End Position In Previous Panel</b></li> </ul>
Copy Camera Start Position from End	 Uses the same camera position as the last frame in the current panel for the first frame in the current panel.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Copy Camera Start Position From End Position In This Panel</b></li> </ul>
Delete Selected Panels	 Deletes one or more selected storyboard panels.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Delete Selected Panels</b></li> <li>• panel track pop-up menu: <b>Delete Selected Panels</b></li> <li>• [Del]</li> </ul>
Duplicate Selected Panel(s)	 Duplicates one or more selected storyboard panels.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Duplicate Selected Panels</b></li> </ul>
Insert Transition	 Inserts a shot transition after a selected panel, or between two of the selected panels.	<ul style="list-style-type: none"> <li>• <b>Storyboard &gt; Insert Transition</b></li> <li>• panel track pop-up menu: <b>Insert Transition</b></li> </ul>





Command	Action	Other Access Methods
Join Panels to Shot	 Combines selected panels that are in consecutive order into a single shot.	<ul style="list-style-type: none"><li>• <b>Storyboard &gt; Join Selected Panels to Shot</b></li><li>• panel track pop-up menu: <b>Join Selected Panels</b></li></ul>
Remove Transition	 Deletes a selected transition.	<ul style="list-style-type: none"><li>• <b>Storyboard &gt; Remove Transition</b></li><li>• panel track pop-up menu: <b>Remove Transition</b></li></ul>
Reset Camera	 Removes all position, scaling and rotation changes made to the camera.	<ul style="list-style-type: none"><li>• <b>Storyboard &gt; Reset Camera</b></li></ul>
Split Current Shot	 Disconnects selected panels from any shots to which they are joined.	<ul style="list-style-type: none"><li>• <b>Storyboard &gt; Split Current Shot</b></li><li>• panel track pop-up menu: <b>Separate Selected Panels From Shot</b></li></ul>
Spread Camera Motion	 Spreads the movement of a camera guide across all panels in the same shot or a specified number of contiguous panels after the current panel in the same shot.	<ul style="list-style-type: none"><li>• <b>Storyboard &gt; Spread Camera Motion</b></li></ul>
Toolbar Manager	 Customizes which tools appear on the selected toolbar.	

## Layer Toolbar

Use this toolbar to manage layers in the Drawing View. Many of these commands can also be accessed from the Layer Menu.





Command	Action	Other Access Methods
Add Layer	 Adds a drawing layer to the panel.	<ul style="list-style-type: none"><li>• <b>Layer &gt; Add Layer</b></li></ul>
Bring Current Layer to Front	 Moves the selected layer on top of all other layers in the panel.	<ul style="list-style-type: none"><li>• <b>Layer &gt; Bring Layer to Front</b></li></ul>
Bring Current Layer Backward	 Moves the selected layer underneath the layer behind it.	<ul style="list-style-type: none"><li>• <b>Layer &gt; Bring Layer Backward</b></li></ul>










Command	Action	Other Access Methods
Bring Current Layer Forward	 Moves the selected layer on top of the layer in front of it.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Bring Layer Forward</b></li> </ul>
Bring Current Layer to Back	 Moves the selected layer underneath all other layers in the panel.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Bring Layer to Back</b></li> </ul>
Copy Layer End Position From Start	 Uses the position of the last frame from the current layer and pastes it over the position of the first frame.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Copy Layer End Position From Start Position</b></li> </ul>
Copy Layer Start Position From End	 Uses the position of the first frame from the current layer and pastes it over the last frame.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Copy Layer Start Position From End Position</b></li> </ul>
Delete Current Layer	 Removes the selected layer from the panel.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Delete Current Layer</b></li> <li>• layer tab pop-up menu: <b>Delete Layer</b></li> </ul>
Import Image as Layer	 Opens a dialog box to navigate to the image you want to import into the current panel.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Import Images as Layers</b></li> </ul>
Lock/Unlock Layer	 Locks/unlocks the selected layer.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Lock/Unlock Layer</b></li> <li>• [Alt]+[L]</li> </ul>
Merge Layer	 Merges one or more layers together.	<ul style="list-style-type: none"> <li>• <b>Select Layer &gt; Merge Layers</b></li> </ul>
Rename Current Layer	 Opens a dialog box to enter a new name for the selected layer.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Rename Current Layer</b></li> <li>• layer tab pop-up menu: <b>Rename Layer</b></li> </ul>
Reset Transform	 Removes all position, scaling and rotation changes made to drawing on the selected layer.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Reset Transform</b></li> <li>• Windows [Ctrl]+[R]</li> <li>• Mac OS X [Command]+[R]</li> </ul>
Spread Layer Motion	 Spreads the current layer motion across all panels in the same shot or a specified number of contiguous panels after the current panel in the same shot.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Spread Layer Motion</b></li> </ul>
Auto Light Table	 Toggles the Light Table on or off. Changes the opacity of all the layers except the current selected one.	<ul style="list-style-type: none"> <li>• <b>Layer &gt; Auto Light Table</b></li> </ul>







Command	Action	Other Access Methods
Toggle Show/Hide Layer	 Turns on and off the display for the selected layer's drawing objects.	<ul style="list-style-type: none"><li>•  (layer tab)</li><li>• <b>Layer &gt; Show/Hide Layer</b></li><li>• layer tab pop-up menu: <b>Show/Hide Layer</b></li></ul>
Toggle Onion Layer	 Turns on and off the display of the onion skin feature for the selected layer's drawing objects.	<ul style="list-style-type: none"><li>• <b>Layer &gt; Toggle Onion Layer</b></li></ul>
Toolbar Manager	 Customizes which tools appear on the selected toolbar.	

## Tools Toolbar

Use this toolbar to access tools to create and colour drawings, and apply transformations to objects. Many of these commands can be accessed from the Tools Menu.












Command	Action	Other Access Methods
Brush	 Draws brush stroke shapes. With a graphic tablet and pen, change the amount of pressure to draw variable-width strokes.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Brush</b></li><li>• panel pop-up menu: <b>Brush</b></li><li>• [Alt]+[B]</li></ul>
Camera Transform	 Allows you to select a camera transformation.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Camera Transform</b></li><li>• panel pop-up menu: <b>Camera Transform</b></li></ul>
Close Gap	 Finds gaps and adds vector lines to close them so that you can fill the zone with colour. Drag this tool near to an area where you think there are holes in the zones that you drew.  Press [Shift]+[Alt] to use the line ends, instead of the closest point, to close a gap.  To view strokes that you create with this tool, select the <b>Show Strokes</b> command.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Close Gap</b></li><li>• panel pop-up menu: <b>Close Gap</b></li></ul>
Dropper	 Selects a colour based on where you click your drawing. Toon Boom Storyboard selects the corresponding colour in the palette.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Dropper</b></li><li>• panel pop-up menu: <b>Dropper</b></li><li>• [Alt]+[D]</li></ul>

Command	Action	Other Access Methods
Ellipse	 Draws ellipses and circles. <ul style="list-style-type: none"> <li>Press [Shift] to draw circles.</li> <li>Press [Alt] to draw from the centre.</li> </ul>	<ul style="list-style-type: none"> <li><b>Tools &gt; Ellipse</b></li> <li>panel pop-up menu: <b>Ellipse</b></li> </ul>
Eraser	 Removes regions from a drawing object.	<ul style="list-style-type: none"> <li><b>Tools &gt; Eraser</b></li> <li>panel pop-up menu: <b>Eraser</b></li> <li>[Alt]+[E]</li> </ul>
First Frame Transform	 Determines the start position of a drawing that will be transformed in the panel over time. Transformations occur over time between the first frame and last frame of the panel.	<ul style="list-style-type: none"> <li><b>Tools &gt; First Frame Transform</b></li> <li>panel pop-up menu: <b>First Frame Transform</b></li> </ul>
Flatten	 Reduces the selected overlapping objects in a layer into a single drawing object.	<ul style="list-style-type: none"> <li><b>Tools &gt; Flatten</b></li> <li>panel pop-up menu: <b>Flatten</b></li> <li>[Alt]+[Shift]+[F]</li> </ul>
Freehand Cutter	 Draws cut selection shapes.	<ul style="list-style-type: none"> <li><b>Tools &gt; Freehand Cutter</b></li> <li>panel pop-up menu: <b>Freehand Cutter</b></li> <li>[Alt]+[T]</li> </ul>
Last Frame Transform	 Determines the end position of a drawing that will be transformed in the panel over time. Transformations occur over time between the first frame and last frame of the panel.	<ul style="list-style-type: none"> <li><b>Tools &gt; Last Frame Transform</b></li> <li>panel pop-up menu: <b>Last Frame Transform</b></li> </ul>
Line	 Draws straight lines. <ul style="list-style-type: none"> <li>Press [Shift] to draw lines at angles of 15 degrees.</li> <li>Press [Alt] to snap to a nearby line.</li> </ul>	<ul style="list-style-type: none"> <li><b>Tools &gt; Line</b></li> <li>panel pop-up menu: <b>Line</b></li> </ul>
Paint	 Fills the zones of a layer with a colour.	<ul style="list-style-type: none"> <li><b>Tools &gt; Paint</b></li> <li>[Alt]+[I]</li> <li>panel pop-up menu: <b>Paint</b></li> </ul>
Pan	 Pans your view vertically or horizontally.  This tool helps you see the part of the frame that is obscured while you are working on another part your drawing.	<ul style="list-style-type: none"> <li><b>Tools &gt; Pan</b></li> <li>panel pop-up menu: <b>Grabber</b></li> <li>Hold down the [Spacebar] while you click and drag the window.</li> </ul>

Command	Action	Other Access Methods
Rectangle	 Draws rectangles or squares. <ul style="list-style-type: none"><li>• Press [Shift] to draw squares.</li><li>• Press [Alt] to draw from the centre.</li></ul>	<ul style="list-style-type: none"><li>• <b>Tools &gt; Rectangle</b></li><li>• panel pop-up menu: <b>Rectangle</b></li></ul>
Rectangle Cutter	 Draws rectangular cut selections.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Rectangle Cutter</b></li><li>• panel pop-up menu: <b>Rectangle Cutter</b></li></ul>
Select	 Selects drawing objects. <p>By default, the selection tool is a lasso. Press [Alt] to switch temporarily between the lasso tool and the rectangular marquee selection tool.</p>	<ul style="list-style-type: none"><li>• <b>Tools &gt; Select</b></li><li>• panel pop-up menu: <b>Select</b></li><li>• [Alt]+[S]</li></ul>
Text	 Adds text to a layer.	<ul style="list-style-type: none"><li>• <b>Tools &gt; Text</b></li><li>• panel pop-up menu: <b>Text</b></li><li>• Windows [Ctrl]+[Shift]+[T]</li><li>• Mac OS X [Command]+[Shift]+[T]</li></ul>
Toolbar Manager	 Customizes which tools appear on the selected toolbar.	
Zoom Tool	 Selects the area of the frame that you want to zoom in or zoom out. <p>Click the area of the drawing where you want to zoom in.</p> <p>Drag the pointer to draw a rectangle around the area you want see.</p> <p>Press [Alt] and click the area where you want to zoom out.</p>	<ul style="list-style-type: none"><li>• <b>Tools &gt; Zoom</b></li><li>• panel pop-up menu: <b>Zoom</b></li><li>• [Alt]+[Z]</li><li>• Press [Ctrl]+[Spacebar] to enable the Zoom tool temporarily</li></ul>

## Sound Toolbar






Use this toolbar to manage sounds in the Timeline View. Many of these commands can also be accessed from the Sound Menu.

Command	Action	Other Access Methods
Add Snapshot	 Adds a snapshot marker  at the position indicated in the current panel.	<ul style="list-style-type: none"> <li>panel track pop-up menu: <b>Add Snapshot</b></li> </ul>
Delete Sound Sequence	 Delete the sound sequence selected in the sound track layer.	<ul style="list-style-type: none"> <li>sound track pop-up menu: <b>Delete Selected Sequence(s)</b></li> </ul>
Delete Sound Track	 Removes the selected sound track layer.	<ul style="list-style-type: none"> <li><b>Sound &gt; Delete Current Sound Track</b></li> <li>sound track pop-up menu: <b>Delete Sound Track</b></li> </ul>
Enable Scrubbing	 Turns on the sound track to allow you to hear it as you move the Current Frame slider forward or backward.	<ul style="list-style-type: none"> <li><b>Sound &gt; Sound Scrubbing</b></li> <li>sound track pop-up menu: <b>Sound Scrubbing</b></li> </ul>
Import Sound	 Imports a sound into the selected sound track layer.	<ul style="list-style-type: none"> <li><b>Sound &gt; Import Sound</b></li> <li>sound track pop-up menu: <b>Import Sound</b></li> </ul>
New Sound Track	 Adds a new sound track layer to the Timeline View.	<ul style="list-style-type: none"> <li><b>Sound &gt; New Sound Track</b></li> <li>sound track pop-up menu: <b>New Sound Track</b></li> </ul>
Show Volume	 Turns on the display of playback volume levels for each sound sequence.	<ul style="list-style-type: none"> <li><b>Sound &gt; Show Volume</b></li> <li>sound track pop-up menu: <b>Show Volume</b></li> </ul>
Show Waveform	 Turns on the display of the sound waveform for each sound sequence.	<ul style="list-style-type: none"> <li><b>Sound &gt; Show Waveform</b></li> <li>sound track pop-up menu: <b>Show Waveform</b></li> </ul>
Split Sequence At Current Frame	 Replaces the selected sound sequence by separating it into two new sequences. The second sequence begins at the current frame.	<ul style="list-style-type: none"> <li><b>Sound &gt; New Sound Track</b></li> <li>sound track pop-up menu: <b>Split Sequence at Current Frame</b></li> </ul>
Toolbar Manager	 Customizes which tools appear on the selected toolbar.	

# Play Toolbar



Use this toolbar to play back the storyboard sequence with or without sound. These commands can also be accessed from the Play Menu.










Command	Action	Other Access Methods
Camera Preview	 Preview your animatic with camera movement.	<ul style="list-style-type: none"><li>• <b>Play &gt; Enable Camera View</b></li></ul>
Loop	 Repeats the playback when it reaches the last frame in the selection.	<ul style="list-style-type: none"><li>• <b>Play &gt; Enable Loop</b></li></ul>
Play All Panels	 Plays all frames in the project.	<ul style="list-style-type: none"><li>• <b>Play &gt; Play All Panels</b></li></ul>
Play Current Panel	 Plays all frames in the current shot.	<ul style="list-style-type: none"><li>• <b>Play &gt; Play Current Panel</b></li><li>• [Shift]+[Return]</li></ul>
Sound	 Turns sound on during playback.	<ul style="list-style-type: none"><li>• <b>Play &gt; Enable Sound</b></li></ul>



# Navigation Toolbar








Use this toolbar to go backward and forward between panels and shots within your storyboard. These commands can also be accessed from the Play Menu.

Command	Action	Other Access Methods
First Frame	 Goes to the first frame of the current panel.	<ul style="list-style-type: none"><li>• <b>Play &gt; First Frame</b></li><li>• [Home]</li></ul>
First Panel	 Goes to the first panel in the storyboard.	<ul style="list-style-type: none"><li>• <b>Play &gt; First Panel</b></li></ul>
Last Frame	 Goes to the last frame in the current panel.	<ul style="list-style-type: none"><li>• <b>Play &gt; Last Frame</b></li><li>• [End]</li></ul>
Last Panel	 Goes to the first frame of the last panel in the storyboard.	<ul style="list-style-type: none"><li>• <b>Play &gt; Last Panel</b></li></ul>
Next Panel	 Goes to the first frame in the next panel.	<ul style="list-style-type: none"><li>• <b>Play &gt; Next Panel</b></li><li>• [F]</li></ul>
Next Shot	 Goes to the first frame in the first panel of the next shot.	<ul style="list-style-type: none"><li>• <b>Play &gt; Next Shot</b></li></ul>
Previous Panel	 Goes to the first frame in the previous panel.	<ul style="list-style-type: none"><li>• <b>Play &gt; Previous Panel</b></li><li>• [A]</li></ul>
Previous Shot	 Goes to the first frame in the first panel of the previous shot.	<ul style="list-style-type: none"><li>• <b>Play &gt; Previous Shot</b></li></ul>
Toolbar Manager	 Customizes which tools appear on the selected toolbar.	

# Onion Skin Toolbar

Use this toolbar to display drawings appearing in previous panels or next panels in the current panel.

Command		Action	Other Access Methods
Toggle Onion Skin		Toggle onion skinning on or off.	
Show Previous		Set the previous onion skin depth.	
Show Next		Set the next onion skin depth.	
Flipbook Slider		Click and drag the flipbook slider to flip between the drawings you have already selected with the onion skin tool.	
Flip Forward		To automatically play the onion-skinned drawings as a flipbook, click on the play button in the flipbook slider.	

# Storyboard Menus

The main menu bar includes a number of menus. Each menu lists commands that allow you to work with different components of your storyboard.

The following menus are found in the Toon Boom Storyboard menu bar:

- Toon Boom Storyboard Menu on page 165
- File Menu on page 166
- Edit Menu on page 167
- View Menu on page 169
- Play Menu on page 171
- Storyboard Menu on page 172
- Layer Menu on page 175
- Sound Menu on page 176
- Caption Menu on page 177
- Tools Menu on page 178
- Help Menu on page 181

## Toon Boom Storyboard Menu


This is the Mac OS X application menu. It contains commands to set your preference, display application information and close your session, as well as platform-specific display options.



Command	Action	Other Access Methods
About Storyboard	Opens a pop-up window displaying version information, legal notices, and credits.	<ul style="list-style-type: none"><li>• In Windows, displayed in Help Menu</li></ul>
Hide Others	Use this command to minimize all open windows except the Toon Boom Storyboard window.	<ul style="list-style-type: none"><li>• [Alt]+[Command]+[H]</li></ul>
Hide Toon Boom Storyboard	Use this command to minimize the Toon Boom Storyboard window.	<ul style="list-style-type: none"><li>• [Command]+[H]</li></ul>
Preferences	Opens the Preferences dialog box that you can use to change settings to suit your working style or needs.	<ul style="list-style-type: none"><li>• [Command]+[, ] (comma)</li></ul>

Command	Action	Other Access Methods
Quit Toon Boom Storyboard	Closes the current project and ends the current Toon Boom Storyboard session. If you have a storyboard currently open with unsaved changes, Toon Boom Storyboard prompts you to save your changes before closing it.	<ul style="list-style-type: none"> <li>• [Command]+[Q]</li> <li>• In Windows, use the Exit command in the Edit Menu</li> </ul>
Show All	Use this command to display all windows in use by the system.	

## File Menu




Use these menu commands to work with storyboard project files in Toon Boom Storyboard. Certain commands can also be accessed from the File Toolbar.



Command	Action	Other Access Methods
Export Current Image	Exports the current visible frame to TGA or JPEG image format.	
Export to EDL/AAF	Exports assets from your storyboard, a selection of shots or the current panel to EDL or AAF file format. QuickTime movies will be created of each shot or panel selected.	
Export to Movie	Exports your storyboard or the current panel to a Macromedia Flash or QuickTime movie.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[E]</li> <li>• Mac OS X [Command]+[E]</li> </ul>
Export to PDF	Exports your storyboard, a selection of shots or the current panel to a single document in the PDF file format.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[P]</li> <li>• Mac OS X [Command]+[P]</li> </ul>
Export to Toon Boom	Exports assets from your storyboard, a selection of shots or the current panel to files you can work with in Toon Boom Opus, Toon Boom Harmony or Toon Boom Solo.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[H]</li> </ul>
New Storyboard	Opens a dialog box where you can enter a new project name and directory location.	<ul style="list-style-type: none"> <li>•  (File Toolbar)</li> <li>• Windows [Ctrl]+[N]</li> <li>• Mac OS X [Command]+[N]</li> </ul>


Command	Action	Other Access Methods
Open Storyboard	Opens a dialog box where you can select the project you want to open. If you select this command when a project is open, the current project will close before the new project opens.	<ul style="list-style-type: none"> <li>•  (File Toolbar)</li> <li>• Windows [Ctrl]+[O]</li> <li>• Mac OS X [Command]+[O]</li> </ul>
Quit	Closes the current storyboard and ends the current session.  If you have a storyboard open with unsaved changes, Toon Boom Storyboard prompts you to save your changes before closing it.	<ul style="list-style-type: none"> <li>• [Ctrl]+[Q]</li> <li>• In Mac OS X, displayed in the Toon Boom Storyboard Menu</li> </ul>
Recent Storyboards	Displays a menu of recently used projects that you can select from.	
Save Storyboard	Saves all changes that you have made to the current project.	<ul style="list-style-type: none"> <li>•  (File Toolbar)</li> <li>• Windows [Ctrl]+[S]</li> <li>• Mac OS X [Command]+[S]</li> </ul>

## Edit Menu

Use these menu commands to undo and redo Toon Boom Storyboard operations. Certain commands can also be accessed from the Edit Toolbar and Sound Toolbar.






Command	Action	Other Access Methods
Copy	Copies selected objects and their properties.	<ul style="list-style-type: none"> <li>•  (Edit Toolbar)</li> <li>• Windows [Ctrl]+[C]</li> <li>• Mac OS X [Command]+[C]</li> </ul>
Cut	Removes selected objects. You can perform a paste to place the object or its properties to another object.	<ul style="list-style-type: none"> <li>•  (Edit Toolbar)</li> <li>• Windows [Ctrl]+[X]</li> <li>• Mac OS X [Command]+[X]</li> </ul>
Delete Selected Panels	Deletes one or more selected storyboard panels.	<ul style="list-style-type: none"> <li>•  (Storyboard Toolbar)</li> <li>• [Del]</li> <li>• panel track pop-up menu: <b>Delete Selected Panels</b></li> </ul>
Delete Selected Sound Sequences	Deletes one or more selected sequences in the sound track layer.	<ul style="list-style-type: none"> <li>• [Del]</li> <li>• sound track pop-up menu: <b>Delete Selected Sequences</b></li> </ul>



Command	Action	Other Access Methods
Delete Selection	Delete all selected drawing objects.	<ul style="list-style-type: none"> <li>• [Del]</li> </ul>
Deselect All	Deselect all drawing objects in the layer.	<ul style="list-style-type: none"> <li>• [Esc]</li> </ul>
Deselect All Panels	Deselect all panels in the storyboard, so that only the current panel is selected.	<ul style="list-style-type: none"> <li>• [Esc]</li> <li>• panel track pop-up menu: <b>Deselect All Panels</b></li> </ul>
Deselect All Sound Sequences	Deselect all sound sequences.	<ul style="list-style-type: none"> <li>• [Esc]</li> <li>• sound track pop-up menu: <b>Deselect All Sequences</b></li> </ul>
Paste	Places the object you cut or copied into the location you have selected.	<ul style="list-style-type: none"> <li>•  (Edit Toolbar)</li> <li>• Windows [Ctrl]+[V]</li> <li>• Mac OS X [Command]+[V]</li> </ul>
Preferences	Opens the Preferences dialog box. Use this dialog box to change Toon Boom Storyboard settings to suit your working style or needs.	<ul style="list-style-type: none"> <li>• In Mac OS X, displayed in the Toon Boom Storyboard Menu</li> </ul>
Redo	<p>Reapplies the last operation when you have undone an operation that you decide you want to keep.</p> <p>Click the arrow next to the button to see a list of actions that you can redo from the Redo list.</p>	<ul style="list-style-type: none"> <li>•  (Edit Toolbar)</li> <li>• Windows [Ctrl]+[Shift]+[Z]</li> <li>• Mac OS X [Command]+[Shift]+[Z]</li> </ul>
Select All	Selects all drawing objects in the layer.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[A]</li> <li>• Mac OS X [Command]+[A]</li> </ul>
Select All Panels	Selects all panels in the project.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[A]</li> <li>• Mac OS X [Command]+[A]</li> <li>• panel track pop-up menu: <b>Select All Panels</b></li> </ul>
Select All Sound Sequences	Select all sound sequences in the selected sound track layer.	<ul style="list-style-type: none"> <li>• Windows [Ctrl]+[A]</li> <li>• Mac OS X [Command]+[A]</li> <li>• sound track pop-up menu: <b>Select All Sequences</b></li> </ul>

Command	Action	Other Access Methods
Select Panels in Current Shot	Selects all the panels in the same shot as the current panel	
Undo	<p>Removes the last change you made to your project. Revert changes you have made, in the order you made them.</p> <p>Click the arrow next to the button to see a list of actions that you can undo from the Undo list.</p>	<ul style="list-style-type: none"><li> (Edit Toolbar)</li><li>Windows [Ctrl]+[Z]</li><li>Mac OS X [Command]+[Z]</li></ul>




## View Menu

Use these menu commands to manage the drawing workspace, including turning on and off the display of toolbars and panels. Certain commands can also be accessed from the View Toolbar.

Command	Action	Other Access Methods
Light Table	Toggles the Light Table on or off. Changes the opacity of all the layers except the current selected one.	<ul style="list-style-type: none"><li> (Layer Toolbar)</li></ul>
Combine Panel Tab	Includes the Panel Tab in the Tool Properties. Select the command again to display the contents of the Panel tab above the other Tool Properties tabs.	<ul style="list-style-type: none"><li> (View Toolbar)</li></ul>
Drawing Workspace	Activates a workspace displaying both the Drawing View and the Panel View.	<ul style="list-style-type: none"><li> (View Toolbar)</li><li>[3]</li></ul>
Grid	<p>Displays a uniform grid with a ratio of 1:1 (<b>Normal Grid</b>), 4:3 (<b>12 Field Grid</b>) or 4:3 (<b>16 Field Grid</b>).</p> <p>Turn on the grid display with the <b>Grid</b> command.</p>	<ul style="list-style-type: none"><li>drawing workspace pop-up menu: <b>View &gt; Grid</b></li><li>Windows [Ctrl]+[G]</li></ul> <p>Mac OS X [Command]+[G]</p>
Horizontal Workspace	Activates a workspace displaying the frames in a row, with each frame's caption properties below it.	<ul style="list-style-type: none"><li> (View Toolbar)</li><li>[6]</li></ul>
Overview Workspace	Activates a workspace displaying the panels in the Panel View as thumbnails.	<ul style="list-style-type: none"><li> (View Toolbar)</li><li>[5]</li></ul>







Command	Action	Other Access Methods
Reset Pan	Returns the drawing workspace to its original position.	<ul style="list-style-type: none"> <li>drawing workspace pop-up menu: <b>View &gt; Reset Pan</b></li> <li>[Shift]+[N]</li> </ul>
Reset Rotation	Returns the drawing workspace to its original unrotated position.	<ul style="list-style-type: none"> <li>drawing workspace pop-up menu: <b>View &gt; Reset Rotation</b></li> <li>[Shift]+[A]</li> </ul>
Reset View	Returns the drawing workspace to its original position and zoom level.	<ul style="list-style-type: none"> <li>drawing pop-up menu: <b>View &gt; Reset View</b></li> <li>[Shift]+[M]</li> </ul>
Reset Zoom	Returns the drawing workspace to its original zoom level.	<ul style="list-style-type: none"> <li>drawing workspace pop-up menu: <b>View &gt; Reset Zoom</b></li> <li>[Shift]+[Z]</li> </ul>
Rotate Clockwise	Rotates the drawing workspace 30 degrees to the right.	<ul style="list-style-type: none"> <li>drawing workspace pop-up menu: <b>View &gt; Rotate Clockwise</b></li> <li>[V]</li> </ul>
Rotate Counterclockwise	Rotates the drawing workspace 30 degrees to the left.	<ul style="list-style-type: none"> <li>drawing workspace pop-up menu: <b>View &gt; Rotate Counterclockwise</b></li> <li>[C]</li> </ul>
Show Strokes	<p>Turns on and off the display of contours that compose the strokes and shapes you draw.</p> <p>This command is useful when you want to locate the gaps that you want to close with the <b>Close Gap</b> tool.</p>	<ul style="list-style-type: none"> <li>drawing pop-up menu: <b>View &gt; Show Strokes</b></li> <li>[K]</li> </ul>
Show/Hide Toolbars	Turns on and off the selected toolbar.	
Timeline Workspace	Activates a workspace displaying both the Drawing View and the Timeline View.	<ul style="list-style-type: none"> <li> (View Toolbar)</li> <li>[4]</li> </ul>
Full Screen	Maximizes your current Toon Boom Storyboard window to its largest size.	<ul style="list-style-type: none"> <li>Windows [Ctrl]+[F]</li> <li>Mac OS X [Command]+[F]</li> </ul>
Onion Skin	Displays drawings appearing in previous panels or next panels in the current panel.	<ul style="list-style-type: none"> <li>Onion Skin toolbar</li> </ul>
Toggle Tool Properties	Turns on and off the display of the Tool Properties.	<ul style="list-style-type: none"> <li> (View Toolbar)</li> </ul>










Command	Action	Other Access Methods
Vertical Workspace	Activates a workspace displaying the frames in a column, with each frame's caption properties beside it.	<ul style="list-style-type: none"> <li>•  (View Toolbar)</li> <li>• [7]</li> </ul>
Zoom In	Increases the view magnification.	<ul style="list-style-type: none"> <li>•  (Sound Toolbar)</li> <li>• drawing workspace pop-up menu: <b>View &gt; Zoom In</b></li> <li>• [Spacebar] and move the middle mouse button downward.</li> <li>• [2]</li> </ul>
Zoom Out	Reduces the view magnification.	<ul style="list-style-type: none"> <li>•  (Sound Toolbar)</li> <li>• drawing workspace pop-up menu: <b>View &gt; Zoom Out</b></li> <li>• Press [Spacebar] and move the middle mouse button upward.</li> <li>• [1]</li> </ul>

## Play Menu






Use this menu to play back the storyboard sequence with or without sound, and move forward and backward within the storyboard. Certain commands can also be accessed from the Play Toolbar and Navigation Toolbar.









Command	Action	Other Access Methods
Enable Camera View	Preview your animatic with camera movement.	<ul style="list-style-type: none"> <li>•  (Play Toolbar)</li> </ul>
Enable Loop	Repeats the playback when it reaches the last frame in the selection.	<ul style="list-style-type: none"> <li>•  (Play Toolbar)</li> </ul>
Enable Sound	Turns sound on during playback.	<ul style="list-style-type: none"> <li>•  (Play Toolbar)</li> </ul>
First Frame	Goes to the first frame of the current panel.	<ul style="list-style-type: none"> <li>•  (Navigation Toolbar)</li> <li>• [Home]</li> </ul>
First Panel	Goes to the first panel in the storyboard.	<ul style="list-style-type: none"> <li>•  (Navigation Toolbar)</li> </ul>
Last Frame	Goes to the last frame in the current panel.	<ul style="list-style-type: none"> <li>•  (Navigation Toolbar)</li> <li>• [End]</li> </ul>





Command	Action	Other Access Methods
Last Panel	Goes to the first frame of the last panel in the storyboard.	<ul style="list-style-type: none"><li>•  (Navigation Toolbar)</li></ul>
Next Panel	Goes to the first frame in the next panel.	<ul style="list-style-type: none"><li>•  (Navigation Toolbar)</li><li>• [F]</li></ul>
Next Shot	Goes to the first frame in the first panel of the next shot.	<ul style="list-style-type: none"><li>•  (Navigation Toolbar)</li></ul>
Play All Panels	Plays all frames in the storyboard.	<ul style="list-style-type: none"><li>•  (Play Toolbar)</li></ul>
Play Current Panel	Plays all frames in the current panel.	<ul style="list-style-type: none"><li>•  (Play Toolbar)</li><li>• [Shift]+[Return]</li></ul>
Previous Panel	Goes to the first frame in the previous panel.	<ul style="list-style-type: none"><li>•  (Navigation Toolbar)</li><li>• [A]</li></ul>
Previous Shot	Goes to the first frame in the first panel of the previous shot.	<ul style="list-style-type: none"><li>•  (Navigation Toolbar)</li></ul>

## Storyboard Menu

Use these menu commands to add and modify panels in your project. Certain commands can also be accessed from the Storyboard Toolbar.











Command	Action	Other Access Methods
Add Panel	Adds a new panel to the shot. Positioned after the current panel.	<ul style="list-style-type: none"><li>•  (Storyboard Toolbar/Sound Toolbar)</li><li>• [P]</li></ul>
Add Shot	Adds a new unconnected panel after the current shot.	<ul style="list-style-type: none"><li>•  (Storyboard Toolbar)</li></ul>
Add Snapshot	Sets a snapshot marker  to print timing positions inside the current panel.	<ul style="list-style-type: none"><li>•  (Sound Toolbar)</li><li>• panel track pop-up menu: <b>Add Snapshot</b></li></ul>
Copy Camera End Position From Start Position In Next Panel	Uses the same camera position as the first frame in the next panel for the last frame in the current panel.	<ul style="list-style-type: none"><li>•  (Storyboard Toolbar)</li></ul>






Command	Action	Other Access Methods
Copy Camera End Position From Start Position In This Panel	Uses the same camera position as the first frame in the current panel for the last frame in the current panel.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Copy Camera Start Position From End Position In Previous Panel	Uses the same camera position as the last frame in the previous panel for the first frame in the current panel.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Copy Camera Start Position From End Position In This Panel	Uses the same camera position as the last frame in the current panel for the first frame in the current panel.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Delete Selected Panels	Deletes one or more selected storyboard panels.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> <li>sound track pop-up menu: <b>Delete Selected Panels</b></li> </ul>
Duplicate Selected Panels	Duplicates one or more selected storyboard panels.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Import Images As Shots	Opens a dialog box to navigate to the images you want to import into the storyboard. Creates a new shot for each image you import.	
Insert Transition	Inserts a transition after the selected panel.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> <li>panel track pop-up menu: <b>Insert Transition</b></li> </ul>
Join Selected Panels To Shot	Combines selected panels that are in consecutive order into a single shot.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Properties	Opens a dialog box used to change the default frame rate and camera size of your animatic, as well as define the project title, subtitle, episode and copyright.	<ul style="list-style-type: none"> <li>[Alt]+[Return]</li> </ul>
Record Voice Annotation	Opens a dialog box that allows you to record, stop and replay voice recordings for the selected panel.	<ul style="list-style-type: none"> <li> (Panel tab)</li> </ul>

Command	Action	Other Access Methods
Remove Transition	Deletes a selected transition.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> <li>panel track pop-up menu: <b>Delete Transition</b></li> </ul>
Rename Shot	Opens a dialog box used to rename the current shots or renumber selected shots that begin with a number.	
Reset Camera	Removes all position, scaling and rotation changes made to the camera.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>
Set Panel Duration	Opens a dialog box to enter the length of time represented in the panel.	
Set Panel Ease In Duration	Opens a dialog box to enter the number of frames after the first frame in which the change in camera movement is gradual.	
Set Panel Ease Out Duration	Opens a dialog box to enter the number of frames before the last frame in which the change in camera movement is gradual.	
Split Current Shot	Disconnects selected panels from any shots to which they are joined.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> <li>panel track pop-up menu: <b>Separate Selected Panels From Shot</b></li> </ul>
Spread Camera Motion	Spreads the current camera motion over several panels in the same shot or a specified number of contiguous panels after the current panel.	<ul style="list-style-type: none"> <li> (Storyboard Toolbar)</li> </ul>

## Layer Menu





Use these menu commands to add and modify panel layers. Certain commands can also be accessed from the Layer Toolbar and Panel tab panel.




Command	Action	Other Access Methods
Add Layer	Adds a drawing layer to the panel.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> <li>layer tab pop-up menu: <b>Add Layer</b></li> </ul>
Bring Layer Forward	Moves the selected layer on top of the layer in front of it.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Bring Layer To Front	Moves the selected layer on top of all other layers in the panel.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Copy Layer End Position From Start Position	Copies the position of the last frame from the current layer to the position of the first frame.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Copy Layer Start Position From End Position	Copies the position of the first frame from the current layer to the position of the last frame.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Delete Layer	Removes the selected layer from the panel.	<ul style="list-style-type: none"> <li>layer tab pop-up menu: <b>Delete Layer</b></li> </ul>
Import Images As Layers	Opens a dialog box to navigate to the image you want to import into the current panel.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Lock/Unlock Layer	Locks/unlocks the selected layer.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Merge Layers	Merges one or more layers together.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> </ul>
Rename Layer	Opens a dialog box to enter a new name for the selected layer.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> <li>layer tab pop-up menu: <b>Rename Layer</b></li> </ul>
Reset Transform	Removes all position, scaling and rotation changes made to drawing on the selected layer.	<ul style="list-style-type: none"> <li> (Layer Toolbar)</li> <li>Windows [Ctrl]+[R]</li> <li>Mac OS X [Command]+[R]</li> </ul>

Command	Action	Other Access Methods
Send Layer Backward	Moves the selected layer underneath the layer behind it.	<ul style="list-style-type: none"><li>•  (Layer Toolbar)</li></ul>
Send Layer To Back	Moves the selected layer underneath all other layers in the panel.	<ul style="list-style-type: none"><li>•  (Layer Toolbar)</li></ul>
Show/Hide Layer	Turns on and off the display of the selected layer.	<ul style="list-style-type: none"><li>•  (Layer Toolbar)</li><li>• layer tab pop-up menu: <b>Show/Hide Layer</b></li></ul>
Spread Layer Motion	Spreads the current layer motion over several panels in the same shot or a specified number of contiguous panels after the current panel.	<ul style="list-style-type: none"><li>•  (Layer Toolbar)</li></ul>
Toggle Onion Layer	Toggles the onion skin feature on or off for the selected layer.	<ul style="list-style-type: none"><li>•  (Layer Toolbar)</li></ul>

## Sound Menu

Use these menu commands to add and manage sound sequences and the sound tracks. Certain commands can also be accessed from the Sound Toolbar, when the Timeline View is displayed.

Command	Action	Other Access Methods
Delete Current Sound Track	Removes a sound layer from the Timeline View.	<ul style="list-style-type: none"><li>•  (Sound Toolbar)</li><li>• sound track pop-up menu: <b>Delete Sound Track</b></li></ul>
Import Sound	Imports a sound into the selected sound track layer.	<ul style="list-style-type: none"><li>•  (Sound Toolbar)</li><li>• sound track pop-up menu: <b>Import Sound</b></li></ul>
New Sound Track	Adds a new sound layer to the Timeline View.	<ul style="list-style-type: none"><li>•  (Sound Toolbar)</li><li>• sound track pop-up menu: <b>New Sound Track</b></li></ul>
Show Volume	Turns on the display of playback volume levels for each sound sequence.	<ul style="list-style-type: none"><li>•  (Sound Toolbar)</li><li>• sound track pop-up menu: <b>Show Volume</b></li></ul>

Command	Action	Other Access Methods
Show Waveform	Turns on the display of the sound waveform for each sound sequence.	<ul style="list-style-type: none"> <li> (Sound Toolbar)</li> <li>sound track pop-up menu: <b>Show Waveform</b></li> </ul>
Sound Scrubbing	Turns on the sound track to allow you to hear it as you move the Current Frame slider forward or backward.	<ul style="list-style-type: none"> <li> (Sound Toolbar)</li> <li>sound track pop-up menu: <b>Sound Scrubbing</b></li> </ul>
Split Sequence at Current Frame	Replaces the selected sound sequence by separating it into two new sequences. The second sequence begins at the current frame.	<ul style="list-style-type: none"> <li> (Sound Toolbar)</li> <li>sound track pop-up menu: <b>Split Sequence at Current Frame</b></li> </ul>







## Caption Menu

Use these menu commands to add and modify text fields in your project. These commands can also be accessed from the menus in the Panel Tab and Storyboard Tab.








Command	Action	Other Access Methods
Add Caption to Panels	Add a caption field to the panel.	<ul style="list-style-type: none"> <li><b>Add Caption</b> (Panel Tab)</li> </ul>
Add Caption to Storyboard	Add a caption field at the project level.	<ul style="list-style-type: none"> <li><b>Add Caption</b> (Storyboard Tab)</li> </ul>
Delete Caption	Delete the selected caption field.	<ul style="list-style-type: none"> <li><b>Delete Caption</b> (Panel Tab/Storyboard Tab)</li> </ul>
Find Text in Captions	Opens a dialog box used to search for text in the storyboard and panel caption fields.	<ul style="list-style-type: none"> <li><b>Find Text in Captions</b> (Panel Tab/Storyboard Tab)</li> <li>Windows [Ctrl]+[Shift]+[F]</li> <li>Mac OS X [Command]+[Shift]+[F]</li> </ul>
Rename Caption	Change the selected caption title.	<ul style="list-style-type: none"> <li><b>Rename Caption</b> (Panel Tab/Storyboard Tab)</li> </ul>
Save Captions Layout as Default	Saves the text field and toolbar changes for use in all Toon Boom Storyboard changes.	






# Tools Menu

Use these menu commands to access tools to create and colour drawings, and apply transformations to objects. These commands can also be accessed from the Tools Toolbar.

Command	Action	Other Access Methods
Brush	<p>Draws brush stroke shapes.</p> <p>With a graphic tablet and pen, change the amount of pressure to draw variable-width strokes.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>[Alt]+[B]</li></ul>
Camera Transform	<p>Allows you to select a camera transformation.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Camera Transform</b></li></ul>
Close Gap	<p>Finds gaps and adds vector lines to close them so that you can fill the zone with colour. Drag this tool near to an area where you think there are holes in the zones that you drew.</p> <p>Press [Shift]+[Alt] to use the line ends, instead of the closest point, to close a gap.</p> <p>To view strokes that you create with this tool, select the <b>Show Strokes</b> command.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Close Gap</b></li></ul>
Convert Template to Drawing	<p>Convert a template that has been dragged from the library to an editable drawing.</p>	<ul style="list-style-type: none"><li>panel pop-up menu: <b>Convert Template to Drawing</b></li></ul>
Dropper	<p>Selects a colour based on where you click your drawing. Toon Boom Storyboard selects the corresponding colour in the palette.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Dropper</b></li><li>[Alt]+[D]</li></ul>
Ellipse	<p>Draws circles and other round shapes.</p> <ul style="list-style-type: none"><li>Press [Shift] and draw circles.</li><li>Press [Alt] to draw from the centre.</li></ul>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Ellipse</b></li></ul>
Eraser	<p>Trims regions from a drawing object. If you create a new zone with the <b>Eraser</b> tool, you can fill this zone with colour.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>[Alt]+[E]</li><li>panel pop-up menu: <b>Eraser</b></li></ul>



Command	Action	Other Access Methods
First Frame Transform	Determines the start position of a drawing that will be transformed in the panel over time. Transformations occur over time between the first frame and last frame of the panel.	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> </ul>
Flatten	Reduces the selected overlapping objects in a layer into a single drawing object.	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> <li>panel pop-up menu: <b>Flatten</b></li> <li>[Alt]+[Shift]+[F]</li> </ul>
Flatten and Remove Invisible Lines	Reduces the selected overlapping objects in a layer into a single drawing object.	<ul style="list-style-type: none"> <li>panel pop-up menu: <b>Flatten and Remove Invisible Lines</b></li> </ul>
Flip Selection Horizontally	Reverses the selected drawing object or all drawing objects in the active layer horizontally, that is, from left to right.	<ul style="list-style-type: none"> <li>[Alt]+[H]</li> </ul>
Flip Selection Vertically	Reverses the selected drawing object or all drawing objects in the active layer vertically, that is, from top to bottom.	<ul style="list-style-type: none"> <li>[Alt]+[V]</li> </ul>
Freehand Cutter	Draws cut selection shapes.	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> <li>panel pop-up menu: <b>Freehand Cutter</b></li> </ul>
Last Frame Transform	Determines the end position of a drawing that will be transformed in the panel over time. Transformations occur over time between the first frame and last frame of the panel.	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> </ul>
Line	<p>Draws straight lines in the current frame.</p> <p>When this tool is active you can:</p> <p>Press [Shift] to draw lines at angles of 15 degrees.</p> <p>Press [Alt] to snap to a nearby line.</p>	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> <li>panel pop-up menu: <b>Line</b></li> </ul>
Paint	Fills the zones of a layer with a colour.	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> <li>[Alt]+[I]</li> <li>panel pop-up menu: <b>Paint</b></li> </ul>
Pan	<p>Pans your view vertically or horizontally.</p> <p>This tool helps you see the part of the frame that is obscured while you are working on another part your drawing.</p>	<ul style="list-style-type: none"> <li> (Tools Toolbar)</li> <li>Hold down the [Spacebar] while you click and drag the window.</li> </ul>

Command	Action	Other Access Methods
Rectangle	<p>Draws rectangles or squares.</p> <ul style="list-style-type: none"><li>Press [Shift] and draw squares.</li><li>Press [Alt] to draw from the centre.</li></ul>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Rectangle</b></li></ul>
Rectangle Cutter	<p>Draws rectangular cut selections.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Rectangle Cutter</b></li></ul>
Select	<p>Selects drawing objects.</p> <p>By default, the selection tool is a lasso. Press [Alt] to switch temporarily between the lasso and marquee selection tool.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>[Alt]+[S]</li></ul>
Text	<p>Adds text to a layer.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>panel pop-up menu: <b>Text</b></li><li>Windows [Ctrl]+[Shift]+[T]</li><li>Mac OS X [Command]+[Shift]+[T]</li></ul>
Zoom	<p>Selects the area of the frame that you want to zoom in or zoom out.</p> <p>When this tool is active:</p> <p>Zoom in by clicking the area you want to see in the drawing workspace.</p> <p>Zoom in by dragging the pointer to draw a rectangle around the area you want see.</p> <p>Zoom out by pressing [Alt] and clicking the area you want to see in the drawing workspace.</p>	<ul style="list-style-type: none"><li> (Tools Toolbar)</li><li>[Alt]+[Z]</li><li>Windows [Ctrl]+[Spacebar] to enable the Zoom tool temporarily.</li><li>Mac OS X [Command]+[Spacebar] to enable the Zoom tool temporarily.</li><li>panel pop-up menu: <b>Zoom</b></li></ul>

# Help Menu

Use these menu commands to play back the storyboard sequence with or without sound.

Command	Action	Other Access Methods
About	Opens a pop-up window displaying version information, legal notices, and credits.	<ul style="list-style-type: none"><li>• In Mac OS X, displayed in Toon Boom Storyboard Menu</li></ul>
Help	Opens the help in your default browser.	<ul style="list-style-type: none"><li>• Windows [F1]</li><li>• Mac OS X [F1]</li></ul>
Open Welcome Screen	Opens a screen allowing you to create a new project, open an existing project or access related links.	<ul style="list-style-type: none"><li>• At startup when Toon Boom Storyboard opens.</li></ul>
Storyboard on the Web	Opens your default Web browser on the Toon Boom Home page.	



# Keyboard Shortcuts

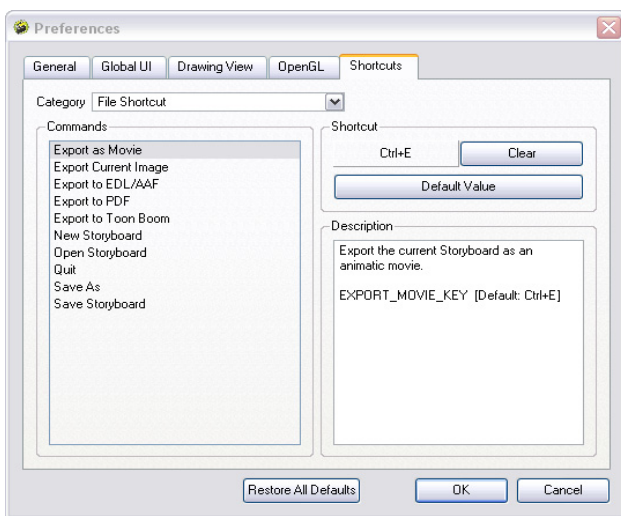
This document lists Toon Boom Storyboard's default keyboard shortcuts.

In this listing, each key in a sequence is inside square brackets for example, [Ctrl]+[A]. The brackets separate the key from the "+" sign; neither are part of the sequence.

To use a shortcut, press the key and the character key simultaneously. For example, in the keyboard shortcut [Ctrl]+[A] you would press the **Control** key and the **A** character key at the same time on your keyboard.

## To modify a shortcut:

1. Select **Edit > Preferences** (Windows) or **Toon Boom Storyboard > Preferences** (Mac OS X) to open the Preferences dialog box.



2. Select the type of command from the Category drop-down list.
3. Select the specific command from the Commands list.
  - ▶ To create a custom shortcut, click the shortcut, and type a new shortcut path.
  - ▶ To restore a shortcut to its original keyboard combination, press the **Default Value** button.
  - ▶ To remove the current shortcut, press the **Clear** button.
4. Click OK to save your changes.

If you want to restore all shortcuts to their original keyboard combinations, click the **Restore All Defaults** button and click OK.

APPLICATION SHORTCUTS

Command	Windows	Mac OS X
About		
Preferences		[Command]+[,] (comma)
Hide Toon Boom Storyboard		[Command]+[H]
Hide Others		[Alt]+[Command]+[H]
Show All		
Exit	[Ctrl]+[Q]	
New Storyboard	[Ctrl]+[N]	
Open Storyboard	[Ctrl]+[O]	
Help	[F1]	
Storyboard on the Web		
Open Welcome Screen		

FILE SHORTCUTS

Command	Windows	Mac OS X
Export Current Image		
Export to EDL/AAF		
Export as Movie	[Ctrl]+[E]	[Command]+[E]
Export to PDF	[Ctrl]+[P]	[Command]+[P]
Export to Toon Boom	[Ctrl]+[H]	
New Storyboard	[Ctrl]+[N]	[Command]+[N]
Open Storyboard	[Ctrl]+[O]	[Command]+[O]
Quit	[Ctrl]+[Q]	Displayed in the Toon Boom Storyboard Menu
Save Storyboard	[Ctrl]+[S]	[Command]+[S]

## EDIT SHORTCUTS

Command	Windows	Mac OS X
Copy	[Ctrl]+[C]	[Command]+[C]
Cut	[Ctrl]+[X]	[Command]+[X]
Delete	[Del]	[Del]
Deselect All	[Esc]	[Esc]
Paste	[Ctrl]+[V]	[Command]+[V]
Preferences		Displayed in the Toon Boom Storyboard Menu
Redo	[Ctrl]+[Shift]+[Z]	[Command]+[Shift]+[Z]
Select All	[Ctrl]+[A]	[Command]+[A]
Select All Panels in Current Scene/Shot		
Undo	[Ctrl]+[Z]	[Command]+[Z]

## VIEW SHORTCUTS

Command	Windows	Mac OS X
12 Field Grid		
16 Field Grid		
Combine Panel Tab		
Drawing Workspace	[3]	[3]
Free pan and zoom		
Horizontal Workspace	[6]	[6]
Normal Grid		
Overview Workspace	[5]	[5]
Reset Rotation	[Shift]+[A]	[Shift]+[A]

VIEW SHORTCUTS

Command	Windows	Mac OS X
Reset Pan	[Shift]+[N]	[Shift]+[N]
Reset View	[Shift]+[M]	[Shift]+[M]
Reset Zoom	[Shift]+[Z]	[Shift]+[Z]
Rotate Clockwise	[V]	[V]
Rotate Counterclockwise	[C]	[C]
Show Grid	[Ctrl]+[G]	[Command]+[G]
Show Strokes	[K]	[K]
Timeline Workspace	[4]	[4]
Toggle Full Screen	[Ctrl]+[F]	[Command]+[F]
Toggle Tool Properties		
Vertical Workspace	[7]	[7]
Zoom In	[2] [Spacebar] and move the middle mouse button downward.	[2] [Spacebar] and move the middle mouse button downward.
Zoom Out	[1] Press [Spacebar] and move the middle mouse button upward.	[1] Press [Spacebar] and move the middle mouse button upward.

PLAY SHORTCUTS

Command	Windows	Mac OS X
Enable Camera View		
Enable Loop		
Enable Sound		
First Frame	[Home]	[Home]
First Panel		



## PLAY SHORTCUTS

Command	Windows	Mac OS X
Last Frame	[End]	[End]
Last Panel		
Next Panel	[F]	[F]
Next Shot		
Play Current Panel	[Shift]+[Return]	[Shift]+[Return]
Play All Panels		
Previous Panel	[A]	[A]
Previous Shot		

## STORYBOARD SHORTCUTS

Command	Windows	Mac OS X
Add Panel	[P]	[P]
Add Shot		
Add Snapshot		
Add Transition		
Copy Camera End Position From Start Position In Next Panel		
Copy Camera End Position From Start Position In This Panel		
Copy Camera Start Position From End Position In Previous Panel		
Copy Camera Start Position From End Position In This Panel		
Duplicate Selected Panels		

STORYBOARD SHORTCUTS

Command	Windows	Mac OS X
Import Images As Shots		
Join Selected Panels to Shot		
Properties	[Alt]+[Return]	[Alt]+[Return]
Record Voice Annotation		
Remove Transition		
Rename Shot		
Reset Camera		
Set Panel Duration		
Set Panel Ease In Duration		
Set Panel Ease Out Duration		
Split Current Shot		
Spread Camera Motion		

LAYER SHORTCUTS

Command	Windows	Mac OS X
Add Layer		
Bring Layer Forward		
Bring Layer To Front		
Copy Layer End Position From Start Position		
Copy Layer Start Position From End Position		
Delete Layer		
Import Images As Layer		

LAYER SHORTCUTS

Command	Windows	Mac OS X
Lock Layer	[Alt]+[L]	[Alt]+[L]
Merge Layer Tabs		
Rename Layer		
Reset Transform	[Ctrl]+[R]	[Command]+[R]
Send Layer Backward		
Send Layer To Back		
Show/Hide Layer		
Spread Layer Motion		
Toggle Light Table		
Toggle Onion Layer		

SOUND SHORTCUTS

Command	Windows	Mac OS X
Delete Current Sound Track		
Import Sound Sequence		
New Sound Track		
Show Volume		
Show Waveform		
Sound Scrubbing		
Split Sequence at Current Position		

CAPTION SHORTCUTS		
Command	Windows	Mac OS X
Add Caption to Panels		
Add Caption to Storyboard		
Find Text in Caption	[Ctrl]+[Shift]+[F]	[Command]+[Shift]+[F]
Save Captions Layout as Default		

TOOLS SHORTCUTS		
Command	Windows	Mac OS X
Brush	[Alt]+[B]	[Alt]+[B]
Camera Transform		
Close Gap		
Convert Template to Drawing		
Dropper	[Alt]+[D]	[Alt]+[D]
Ellipse		
Eraser	[Alt]+[E]	[Alt]+[E]
First Frame Transform		
Flatten	[Alt]+[Shift]+[F]	[Alt]+[Shift]+[F]
Flatten and Remove Invisible Lines		
Flip Selection Horizontally	[Alt]+[H]	
Flip Selection Vertically	[Alt]+[V]	
Freehand Cutter	[Alt]+[T]	[Alt]+[T]
Last Frame Transform		

## TOOLS SHORTCUTS

Command	Windows	Mac OS X
Line		
Paint	[Alt]+[I]	[Alt]+[I]
Pan		
Rectangle		
Rectangle Cutter		
Resize Pen Style Tool	[O]	
Select	[Alt]+[S]	[Alt]+[S]
Text	[Ctrl]+[Shift]+[T]	[Command]+[Shift]+[T]
Zoom	[Alt]+[Z] [Ctrl]+[Spacebar] to enable the Zoom tool temporarily.	[Alt]+[Z] [Command]+[Spacebar] to enable the Zoom tool temporarily.

## HELP SHORTCUTS

Command	Windows	Mac OS X
About		
Help	[F1]	
Open Welcome Screen		
Storyboard on the Web		Displayed in Toon Boom Storyboard Menu

## LIBRARY SHORTCUTS

Command	Windows	Mac OS X
Close Library		
Delete Folder		

LIBRARY SHORTCUTS

Command	Windows	Mac OS X
Delete Thumbnails		
Generate Thumbnails		
Import Files		
New Folder		
Open Default Templates		
Open Library		
Refresh		
Rename Folder		
Right to Modify Library		

COLOUR SHORTCUTS

Command	Windows	Mac OS X
Add Colour		
Add Texture		
Edit Colour		
Edit Texture		

# Index

## Numerics

12 field grid 42

16 field grid 42

## A

### AAF

exporting to 106

### about

storyboard 7

Storyboard window 22

### adding

camera move 69

caption fields 75

captions 75

colour 28

layers 61

panels 46

pen styles 26

shots 46

snapshot markers 52

sound tracks 78

template library 91

text to layers 75

### advantages

in production cycle 8

speed 8

storyboard, of using 8

### analysis

of script 12

### animatic 101

displaying shot and panel names 103

displaying time code 103

editing 9

Flash 101

Leica reel 100

playing back in Storyboard 101

QuickTime 101

sound synchronization 9

test reel 100

time code colour 126

time code font size 126

time code height 126

time code position 127

### animatic feature

storyboard 9

### animating

transform tool 39

### animation terminology style 116

### annotations

text 74

voice 85

### application

keyboard shortcuts 184

### arranging

layers 62

panels 45

### aspect ratio

delivery 12

### audio notes

voice annotation 45

## B

### basics

storyboard 12

### bitmap

importing images 54

improving appearance of 126

### breakdown

of script 12

### broadcast

delivery 12

### brush

line thickness 27

### Brush tool 23

## C

### camera

adding a camera move 69

copy end position from start position 73

- copy from next panel 73
  - copy from previous panel 73
  - copy start position from end position 73
  - creating movement 70
  - delete move 74
  - preview movement 74
  - camera angles
    - shot evaluation 13
  - camera movements
    - shot evaluation 13
  - camera placement
    - visual guides 45
  - captions
    - adding
      - fields 75
      - text to 75
    - deleting fields 76
    - display options 76
    - finding 76
    - importing 45
    - keyboard shortcuts 190
    - panels 44
    - renaming 76
    - searching 76
    - using text 74
  - changing
    - default scene length 114
    - onion skin colour 125
    - pen styles 24
    - template library display options 89
    - undo levels 115
  - Choose Images Files dialog 55
  - closing
    - gaps in line art 125
  - colour 28
    - adding 28
    - changing
      - in onion skin 125
      - in panels 118
      - in shots 116
      - in sound sequences 119
      - in transitions 118
  - Colour Picker 28
  - gradient 30
  - keyboard shortcuts 192
  - mixing 30
  - pen styles 24
  - transition 30
  - undo list 28
  - Colour Picker 28
  - commands 152
  - Compression Settings dialog 102
  - converting
    - templates to drawings 88
  - copy
    - camera end position from start position 73
    - camera from next panel 73
    - camera from previous panel 73
    - camera start position from end position 73
    - layer end position from start position 40
    - layers in panels 62
    - layer start position from end position 40
  - creating
    - gradient 30
    - line textures 27
    - shot list 14
    - storyboard animatics 101
    - storyboard project 17
  - customizing
    - Drawing workspace 132
    - Horizontal Workspace 135
    - keyboard shortcuts 183
    - Overview Workspace 134
    - storyboard 112
    - Timeline Workspace 133
    - toolbars 112
    - Vertical Workspace 136
  - cutters
    - display problems 126
  - cutting
    - Cutter tools 31
    - Eraser tool 31
- ## D
- debug information
    - displaying 115



- define
  - pen style 27
- deleting
  - camera moves 74
  - caption fields 76
  - layers 61
  - panels 47
  - preferences 112
  - snapshot markers 54
  - sound sequences 82
  - sound tracks 79
  - transitions 52
- delivery
  - broadcast 12
- deselecting objects 34
- dialog
  - Choose Images Files 55
  - Compression Settings 102
  - Export to Bitmap 108
  - Export to CSV 109
  - Export to EDL/AAF 106
  - Export to Movie 102
  - Export to PDF 92
  - Export to Toon Boom 104
  - Flash Export Settings 103
  - Import Files 88
  - Import Sound Sequence 81
  - Merge Layers 64
  - New Resolution 19,20
  - New Storyboard 20
  - Open Storyboard 20
  - Page Layout 92,99
  - Pen Style 27,49,148
  - Preferences 112,165,168
  - Record a Voice Annotation 85
  - Search in Panel Captions 76
  - Sound Settings 102
  - Spread Camera Motion 72
  - Spread Layer Motion 67
  - Toolbar Manager 113
- disable writing to OpenGL back buffer 126
- displaying
  - camera 70
  - captions 76
  - debug information 115
  - duration in thumbnail panels 120
  - grid types 42
  - Timeline View 78
  - volume levels 84
  - waveforms 84
- display options
  - template libraries 89
- drawing
  - behind an object 61
  - Brush tool 23
  - converting templates 88
  - Cutter tools 31
  - display options 41
  - Drawing View 137
  - Drawing Workspace 132
  - Eraser tool 31
  - erasing
    - lines 31
    - shapes 31
  - flattening objects 38
  - flipping objects 41
  - Freehand Cutter tool 31
  - grid 41
  - in a panel 23
  - in layers 60
  - moving objects 34
  - nudging 34
  - panning 43
  - pivot point 36
  - Rectangular Cutter tool 31
  - resizing objects 34
  - retouching 26
  - reusing 62
  - rotating
    - Drawing View 42
    - objects 34
  - selecting objects 33
  - setting up Drawing View 41
  - shapes 24
  - Tools Toolbar 158
  - transforming over time 38
  - zoom in 43
- drawings
  - placing in template folder 87
- Drawing View 137

- drawing view preferences
  - editing 125
- Drawing Workspace 132
- duplicating
  - panels 47

## E

- editing
  - drawing view preferences 125
  - export preferences 126
  - general preferences 114
  - global UI preferences 116
  - preferences 114
  - sound sequences 83
- editing film
  - animatic stage 9
- Edit Menu 167
  - keyboard shortcuts 185
- Edit Toolbar 153
- EDL
  - exporting to 106
- Ellipse tool 24
- erasing
  - Cutter tool 31
  - Eraser tool 31
- evaluation
  - shots 13
- exporting
  - animatics 101
  - image assets 107
  - password protected PDFs 99
  - to AAF 106
  - to bitmap 108
  - to CSV 109
  - to EDL 106
  - to Flash 101
  - to image sequence 101
  - to JPEG 107
  - to JPG 108
  - to PDF 91
  - to PSD 107, 108
  - to QuickTime 101
  - to TGA 107, 108

- to Toon Boom applications 104
- Unicode text to PDF 94
- export preferences
  - editing 126
  - time code colour 126
  - time code font size 126
  - time code height 126
  - time code position 127
- Export to Bitmap dialog 108
- Export to CSV dialog 109
- Export to EDL/AAF dialog 106
- Export to Movie dialog 102
- Export to PDF dialog 92
- Export to Toon Boom dialog 104

## F

- fields
  - captions 75
- file
  - project optimization 110
- File Menu 166
  - keyboard shortcuts 184
- File Toolbar 152
- finding
  - captions 76
- Flash
  - export to 101
- Flash Export Settings dialog 103
- flipbook
  - onion skin 59
- flipping
  - drawing objects 41
- folders
  - managing template library 90
- format
  - aspect ratio 12
- frames
  - copy layer end position from start position 40
  - copy layer start position from end position 40
- Freehand Cutter tool 31

## G

- gap closing in line art 125
- general preferences
  - editing 114
- generating
  - library thumbnails automatically 115
- global UI preferences
  - editing 116
- gradient
  - creating 30
  - display problems 126
  - linear 30
  - radial 30
  - swatch 30
- graphic tablet, Brush tool 23
- grid
  - displaying 41
  - types of displays 42

## H

- hardness
  - pen pressure 27
- Harmony
  - exporting to 104
- Help Menu 181
  - keyboard shortcuts 191
- highlights
  - storyboard 7
- Horizontal Workspace 135
- how to
  - add a new pen 26
  - add a shot 46
  - add new colour 28
  - add panels 46
  - add panel to a shot 50
  - change pen styles 24
  - change pivot point 36
  - copy frame position 40
  - create a gradient colour 30
  - cut drawing objects 31
  - define pen style 27
  - delete a panel 47

- delete transitions 52
  - deselect objects 34
  - draw ellipses 24
  - draw in a panel 23
  - draw lines 24
  - draw rectangles 24
  - duplicate a panel 47
  - erase drawing objects 31
  - flatten drawing objects 38
  - flip drawing objects 41
  - import images 54
  - import images in template library 56
  - insert transitions between shots 52
  - mix colours 30
  - mix colours in a gradient 30
  - move objects 34
  - pan drawings 43
  - remove panel from a shot 51
  - rename a shot 48
  - renumber a shot 48
  - resize objects 34
  - rotate a drawing space 42
  - rotate objects 34
  - set onion skin options 58
  - setup the drawing space 41
  - start a storyboard project 17
  - start storyboard 15
  - transform drawing objects 38
  - use layers 59
  - use marquee tool 34
  - use onion skinning 57
  - use storyboard panels 44
  - use the brush tool 23
  - use the camera 69
  - use the Colour Picker 28
  - use the select tool 33
  - work with selections 33
  - zoom a drawing view 43
- HSV 28
- Colour Picker 28

- image assets
  - exporting 107

- images
  - importing 54
- image sequence
  - export to 101
- Import Files dialog 88
- importing
  - captions 45
  - images 54
    - into current storyboard 55
    - into template library 56
    - premultiply by alpha channel 115
  - sound sequence 80
- importing to
  - template folders 87
- Import Sound Sequence dialog 81
- inserting
  - transitions 52

## J

- JPEG
  - exporting to 107

## K

- keyboard shortcuts 183
  - changing 183

## L

- lasso selection tool 34
- launching
  - storyboard 15
- Layer Menu 175
  - keyboard shortcuts 188
- layers
  - adding 61
    - text to 75
  - arranging 62
  - copying
    - frame position 40
    - in panels 62
  - creating templates 86
  - deleting 61

- displaying with light table 63
- drawing in 60
- import images as 54
- locking 65
- merging 64
- renaming 61
- spreading motion across panels 66
- transforming 39
- unlocking 65
- using 59
- Layer Toolbar 156
- Leica reel
  - animatic 9,100
- libraries
  - templates 86
- Library Tab 146
  - keyboard shortcuts 191
- library thumbnails
  - generating automatically 115
- light table
  - displaying layers 63
- line
  - selecting 33
  - smoothness
    - pen style 27
    - select 27
  - texture
    - noise texture file 27
  - thickness
    - brush 27
- Line tool 24
- linking
  - sound tracks 79
- live action terminology style 116
- locking
  - layers 65
- Log Tab
  - displaying 115

## M

- managing
  - workspaces 130
- menus 165

- Caption 177
- Caption Tab 143
- Edit 167
- File 166
- Help 181
- Layer 175
- Panel 175
- Pen Tab 148, 149
- Sound 176
- Storyboard 172
- Text Tab 145
- Tools 178
- View 169
- Merge Layers dialog 64
- merging
  - layers 64
- mixing
  - colours in gradients 30
  - sound 78
- modifying
  - template folder
    - rights to 86
- mood
  - shot evaluation 13
- MOV
  - export to 101
- movie
  - export preferences 126
- moving
  - camera 70
  - transformations 38

## N

- Navigation Toolbar 163
- New Resolution dialog 19, 20
- New Storyboard dialog 20
- noise texture file option
  - line texture 27
- normal grid 42
- nudging
  - drawings 34

## O

- object movement
  - shot evaluation 13
- objects
  - flattening 38
  - flipping 41
- onion skin
  - flipbook 59
- onion skinning 57
  - setting
    - colour preferences 58
    - depth 58
    - shading 58
- Onion Skin Toolbar 164
- OpenGL back buffer
  - disable writing to 126
- opening
  - existing storyboard project 20
  - recent storyboard project 21
  - storyboard 15
- Open Storyboard dialog 20
- optimizing
  - project file 110
- output
  - production delivery formats 12
- Overview Workspace 134
- overwrite
  - existing sound sequences 81

## P

- Page Layout dialog 92, 99
- painting
  - Brush tool 23
  - Colour Picker 30
- palette
  - adding colour 28
  - mixing colour 30
- panel layout
  - printing 91
- Panel Menu 175
- panel name

- displaying in animatic 103
- panels
  - about 44
  - adding 46
    - captions 75
    - drawing layers 61
    - snapshot markers 52
    - text to layers 75
  - arranging 45
    - layers 62
  - camera 44
  - captions 44
  - changing colour of 118
  - copying layers 62
  - creating camera moves 70
  - deleting 47
    - camera moves 74
    - layers 61
    - snapshot markers 54
  - displaying drawings
    - from next panels 57
    - from previous panels 57
  - drawing 23
    - in layers 60
  - duplicating 47
  - duration type 95
  - joining to shot 50
  - renaming layers 61
  - splitting from shot 51
  - spreading layer motion 66
  - text in captions 74
  - using 44
- Panel Tab 141
- Panel View 138
- panning
  - camera 70
  - drawing 43
- password protecting PDFs 99
- PDF
  - adding security to 99
  - page layout 92
  - printing 91
    - duration 124
- pen style
  - adding 26
  - defining 27
  - line smoothness 27
  - line thickness 27
  - textured pen 27
  - texture pen 26
    - pen styles 26
  - using 24
- Pen Style dialog 27,49,148
- Pen Tab 148
  - changing
    - pen size 149
    - pen smoothness 149
    - draw behind object 149
- Pen Tab Menu 148,149
- pivot point
  - rotating 36
  - scaling 36
- playback
  - animatic 100
- Play Menu 171
  - keyboard shortcuts 186
- Play Toolbar 162
- preferences
  - deleting 112
  - editing 114
  - export movie 126
  - time code colour 126
  - time code font size 126
  - time code height 126
  - time code position 127
  - when exporting 126
- Preferences dialog 112,165,168
- premultiplied alpha
  - in imported images 115
- preparing
  - for storyboarding
    - broadcast delivery 12
    - script 11
    - script analysis and breakdown 12
    - shot evaluation 13
    - shot list creation 14
  - structure 12
- preparing for storyboarding
  - structure 12
- prevent accidental draw over

- in thumbnail images 116
- previewing
  - camera
    - move 74
    - movement 100
  - playback with sound 100
  - project 101
  - templates 89
- printing
  - full page shot of current panel 142
  - shot of current panel 142
  - storyboard 91
- production
  - aspect ratio 12
- project
  - creating new storyboard 17
  - file optimization 110
  - how to start 17
  - opening existing 21
  - preview 101
- project name
  - storyboard 19
- PSD
  - creating line textures 27
  - exporting to 107

## Q

- QuickTime
  - exporting animatics to 101
  - export to EDL 101

## R

- Record a Voice Annotation dialog 85
- recording
  - voice annotations 85
- Rectangle tool 24
- Rectangular Cutter tool 31
- Rectangular Marquee Selection tool 34
- reducing production times 8
- renaming
  - captions 76

- layers 61
- shots 48
- renumbering shots 48
- resizing
  - camera 70
  - drawing objects 34
- retouching
  - drawings using texture pen 26
- reusing
  - assets 86
  - drawings 62
- RGB 28
  - Colour Picker 28
- rotating
  - drawing objects 34
  - Drawing View 42
  - pivot point 36

## S

- scaling
  - pivot point 36
- scene length
  - changing default value 114
- screenplay
  - preparation 11
- script
  - breakdown and analysis 12
  - importing into script caption 76
  - preparing 11
- searching
  - captions 76
- Search in Panel Captions dialog 76
- selecting
  - drawing objects 33
  - line smoothness 27
- Select tool 33
  - switching between lasso and rectangular marquee 34, 125
- setting up
  - drawing space 41
- shapes
  - drawing 24

- selecting 33
- shortcuts
  - application 184
  - captions 190
  - colour 192
  - edit 185
  - file 184
  - help 191
  - layer 188
  - library 191
  - play 186
  - sound 189
  - storyboard 187
  - tools 190
  - view 185
- shot
  - terminology 116
- shot evaluation
  - camera angles 13
  - camera movements 13
  - mood creation 13
  - object movement 13
- Shot List 14
- shot name
  - displaying in animatic 103
- shots
  - adding 46
  - changing colour of bounding box 116
  - deleting transitions between 52
  - inserting transitions 52
  - renaming 48
  - renumbering 48
- slider
  - onion skin flipbook 59
- smooth textures 126
- snapshot markers
  - adding to a panel 52
  - delete from panel 54
- Solo
  - exporting to 104
- Sound Menu 176
  - keyboard shortcuts 189
- sounds
  - adding sound tracks 78
  - deleting
    - sound sequences 82
    - sound tracks 79
  - editing 83
  - importing sequences 80
  - mixing 78
  - overwriting existing sound sequences 81
  - placing in template folder 87
  - Sound Menu 176
  - splitting sequences 84
  - synchronization in animatic 9
  - turning
    - off 82
    - on 82
  - using 78
    - sequences 83
  - volume control 84
  - waveform 84
- sound sequences
  - changing colour of 119
  - creating templates 86
  - deleting 82
- Sound Settings dialog 102
- Sound Toolbar 161
- soundtrack
  - animatic 9
- sound tracks
  - linking 79
  - unlinking 79
  - using 78
- splitting
  - panels in shots 51
  - sound sequences 84
- Spread Camera Motion dialog 72
- spreading
  - layer motion 66
- Spread Layer Motion dialog 67
- starting
  - storyboard 15
- storyboard
  - about 7
  - animatic feature 9
  - basics 12
  - creating 17
    - animatics 101
  - customizing 112



- exporting 103
- export preferences 126
- highlights of 7
- importing images into current 55
- naming new project 19
- opening 15
  - existing 20
  - recent project 21
- preferences 112
  - drawing view 125
  - general 114
  - global UI 116
  - shortcuts 128
- printing 91
- production cycle advantages 8
- reasons for using 8
- starting 15
- using 15
- viewing animatics 101
- storyboarding cycle
  - reducing production times 8
- Storyboard Menu 172
  - keyboard shortcuts 187
- Storyboard Tab 144
- Storyboard Toolbar 155
- Storyboard window 22
- story reel
  - animatic 9
- strokes
  - selecting 33
  - texture quality 125
- structure
  - preparing 12
- style
  - terminology 116
- stylus
  - Brush tool 23
- swatch
  - gradient 30
- SWF
  - export to 101

## T

- template folder
  - adding drawings to 87
  - adding sounds to 87
  - rights to modify 86
- template folders
  - importing to 87
- template libraries 86
  - adding 91
  - converting templates to drawings 88
  - creating folders
    - manage 90
  - creating templates 86
  - deleting 90
  - display options 89
  - importing images into 56
  - organizing in folders 90
  - previewing 89
  - renaming templates 89
- template library folders 90
- terminology style
  - animation 116
  - live action 116
- test reel
  - animatic 100
- text
  - adding
    - captions 75
    - to layers 75
  - Caption Tab Menu 143
  - fields 75
  - importing captions 45
  - Storyboard Tab Caption Menu 145
  - Storyboard Tab Menu 145
  - Text Menu 177
  - Text Tab 150
  - using 74
- textured pen
  - pen style 27
- texture quality of strokes 125
- TGA
  - creating line textures 27
  - exporting to 107

- thumbnail images
    - preventing accidental draw over 116
  - thumbnail panels
    - displaying duration
      - as frames 120
      - as time code 120
  - time code
    - colour in animatic 126
    - displaying in animatic 103
    - font size in animatic 126
    - height in animatic 126
    - position in animatic 127
  - Timeline Toolbar 161
  - Timeline View 139
    - displaying 78
    - importing sound 80
  - Timeline Workspace 133
  - tip
    - locking or unlocking layers 65
    - script preparation 11
    - storyboard panel duration type 95
  - Toolbar Manager dialog 113
  - toolbars 152
    - customizing 112
    - Edit 153
    - File 152
    - Layer 156
    - Navigation 163
    - Onion Skin 164
    - Play 162
    - Sound 161
    - Storyboard 155
    - Tools 158
    - view 154
  - Tool Properties 140
    - Library Tab 146
    - Log Tab 115
    - Panel Tab 141
    - Pen Tab 148
    - Storyboard Tab 144
    - Text Tab 150
  - tools
    - Brush 23
    - Camera Transform 70
    - Ellipse 24
    - Eraser 31
    - Flatten 38
    - Freehand Cutter 31
    - keyboard shortcuts 190
    - Line 24
    - Rectangle 24
    - Rectangular Cutter 31
    - Transform 38
  - Tools Toolbar 158
  - Toon Boom applications
    - export to 104
  - transforming
    - camera positions 70
    - drawing objects 38
    - layers 39
    - Transform tool 38
  - transform tool
    - animating 39
  - transition colour 30
    - changing 118
  - transitions
    - deleting 52
    - inserting between shots 52
  - turning off
    - sound 82
  - turning on
    - sound 82
- ## U
- undo levels
    - changing 115
  - undo list
    - colour 28
  - Unicode text
    - exporting to PDF 94
  - unlinking
    - sound tracks 79
  - unlocking
    - layers 65
  - using
    - captions 75
    - layers 59
    - panels 44

- pen styles 24
- selections 33
- sound 78
- sound sequences 83
- storyboard 15
- template libraries 86
- text 74
- voice annotations 85

## V

- Vertical Workspace 136
- View Menu 169
  - keyboard shortcuts 185
- views 137
  - Drawing 137
  - Panel 138
  - Timeline 139
- View Toolbar 154
- visual guides
  - defining camera placement 45
- voice annotations
  - audio notes 45
  - using 85
- volume control
  - sound 84

## W

- waveform
  - sound sequences 84
- Welcome screen
  - description of 16
- workspaces
  - Drawing 132
  - Horizontal 135
  - managing 130
  - Overview 134
  - Timeline 133
  - Tool Properties, display options 141
  - Vertical 136
  - view Toolbar 154

## Z

- zoom
  - drawing 43

