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Storyboard Pro 7.0.4 Release Notes

Here is the list of changes in Storyboard Pro 7.0.4, build 17.10.4.17497 (2021-10-04):

- Fixed Issues on page 3
 - General on page 3
 - Scripting on page 3

Fixed Issues

The following issues have been fixed in this release of Storyboard Pro:

General

 Random crash when performing various drag and drop operations under the latest Windows 10 using an NVIDIA Quadro GPU. SB-4324

Scripting

- Movies generated using the exportToMovie() function from the ExportManager class in batch mode don't have audio. SB-4395
- Rendered images are randomly expanded to frame all the camera frames when using the exportToFCPXML function from the ExportManager class. SB-4328

Storyboard Pro 7.0.3 Release Notes

Here is the list of changes in Storyboard Pro 7.0.3, build 17.10.3.16542 (2020-11-27):



NOTE

Storyboard Pro does not natively support the new Apple M1 chip. On systems using the new Apple M1 chip, Storyboard Pro runs through Apple's Rosetta 2. This may cause compatibility issues when running on the new ARM-based macOS systems.

Fixed Issues

The following issues have been fixed in this release:

- Crash on macOS Big Sur when selecting the Tool Properties tab while the Brush, Pencil or Eraser tool is active. SB-3459
- The marquee selection appears as a black rectangle in the Timeline after a right-click. SB-3995
- Quicktime movies created when exporting to EDL/AAF/XML on Windows always use the H.264 codec. SB-3542
- **setMovieConfig()** is ignored when exporting movies using the scripting interface and movies are always created using the H.264/MPEG4 movie format. SB-3472
- Storyboard Pro stops working when creating a new project from a Final Draft file that contains transitions. SB-3352
- Audio clips disappear from the Timeline when splitting the last panel before empty frames. SB-3349

Storyboard Pro 7.0.2 Release Notes

Here is the list of changes in Storyboard Pro 7.0.2, build 17.10.2.16057 (2020-07-06):

- <u>Timeline View</u> on page 5
- Scripting on page 5
- <u>Preferences</u> on page 7
- Fixed Issues on page 7

Timeline View

Feature	Description
Enhancements	The video track section retains its size when increasing and decreasing the height of the Timeline. This mimics the behavior from previous versions of Storyboard Pro.

Scripting

Feature	Description
Export to Storyboard Pro	The exportToHarmony() method was added to the ExportManager class to export scenes to Harmony. A script, TB_ExportToHarmony.js, which contains a usage example of this method, has been added to the packaged scripts.
Shared export settings	The settings used by the various ExportManager methods are now shared. For more information, see the Generic export settings section of the ExportManager class in the Storyboard Pro Scripting Reference.
Burn-in time code	Options to burn in a time code have been added to the options that can be set through scripting in the ExportManager class. The new options are as follows: • setShowAdditionalDuration() • setSplitTimeCountMode() • setSplitTimeCountSplit() • setShowTimeCode() For more information, see the Generic export settings section of the ExportManager class in the Storyboard Pro Scripting Reference.

Feature	Description
Burn-in captions	Options to burn-in captions are now available in the ExportManager class. For more information, see the Caption burn-in settings section of the Storyboard Pro Scripting Reference.
Export destination and file name pattern for exporting FBX files	The setFBXExportDestination() and setFBXExportNamingPattern() methods have been added to the ExportManager class. For more information, see the FBX specific settings section of the ExportManager class documentation in the Storyboard Pro Scripting Reference.
Select video track	The setVideoTrackSelection() method has been added to the SelectionManager() class to select a video track by name. It can also be used to select the storyboard (panel) track:
	<pre>var sm = new SelectionManager(); // Select the video track named V2 sm.setVideoTrackSelection("V2"); // Select the Storyboard (panel) track sm.setVideoTrackSelection("TopLayer");</pre>
Blur bitmap layers	The new applyBlurToBitmap(), applyRadialZoomBlurToBitmap() and applyDirectionalBlurToBitmap() methods were added to the LayerManager class to allow applying blur effects to bitmap layers using the scripting interface.
Enable & disable layer animation	The new setLayerAnimated() method of the MotionManager class allows enabling and disabling animation on a layer: var sb = new StoryboardManager(); var mm = new MotionManager(); var panelId = sb.panelInProject(6); mm.setLayerAnimated(panelId, 0, false);
Set Expand Render Area to Scene Camera option	When using the ExportManager class to export a project for XML/AAF conformation, the Expand Render Area to Scene Camera option can now be set using the new setExpandRenderAreaToCamera () method. For more information, see the FCP XML/AAF specific settings section of the ExportManager class in the Storyboard Pro Scripting Reference.

Preferences

Feature	Description
	A hidden preference was added to allow the selection and manipulation of artwork in hidden layers.
	To enable this preference, run the following line in the << <sandbox>>> script of the Script Editor view, then restart Storyboard Pro.</sandbox>
	<pre>preferences.setBool("HIDDEN_LAYER_SELECTABLE", true);</pre>

Fixed Issues

The following issues have been fixed in this release:

- The selected movie format resets to H.264/MPG4 every time the Export Movie dialog is opened on macOS. SB-3273
- Renaming panels sequentially for the whole project using the **TB_RenamePanelProject.js** script, can result in incorrect panel names if panel and scene names are locked. SB-2077
- Rare crash when exporting to Harmony with the Apply Transformation on Drawings option enabled.
 SB-3289
- Hidden layers are included in scenes when exporting to Harmony. SB-3269
- Rare crash on macOS when using the Select tool in the Stage View or Camera View while the Full Scene Antialiasing preference is enabled. SB-3267
- Export to Bitmap and Export to Layout commands overwrite files without warning when exporting a subset of panels. SB-3266
- Generating a PDF using the Preview button in the PDF Export view takes a long time on large projects. \$B-3262
- Storyboard Pro sometimes freezes when stopping playback or scrubbing in the Timeline with audio enabled. SB-3259
- Captions written in Japanese don't spread properly when exporting to PDF. SB-3250
- Copying a scene changes the Z value if the camera Z position is 1.0 SB-3164
- The Split Current Scene command is not available in empty frames between panels. SB-2959
- The addCtrlPointAfterPath3d() method of the FunctionManager class changes the point before it is inserted. SB-3270
- The scene.saveAs() method does not work properly. SB-2818

- Renaming panels using the TB_RenamePanelByScene.js or TB_RenamePanelProject.js scripts, while panels and scenes names are locked, can result in incorrect panel names. SB-2077
- Crash may occur when attempting to delete a control point with the Centerline Editor. SB-1750

Storyboard Pro 7.0.1 Release Notes

Here is the list of changes in Storyboard Pro 7.0.1, build 17.10.1.15476 (2020-01-31):

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- Captions on page 9
- Scripting on page 10
- Enhancements on page 10
- Fixed Issues on page 11

Animatic

Feature	Description
Drag & drop panels in Animatic Editing Mode	It is now possible to drag and drop panels at any specific position in the timeline while Animatic Editing Mode is enabled. O0:01:53:13

Captions

Feature	Description
Background colour	The Text Formatting toolbar and the Format Captions dialog now have a Background Colour button. This allows you to select a background colour for the text in your project's captions.
	NOTE The background colour appears around the text, like this, and does affect the colour of the whole caption field.
Clear formatting	The Text Formatting toolbar and the Format Captions dialog now have a \$\mathbb{X}\$ Clear Formatting button which removes all font, font size, bold, italic, underline, text colour and background colour formatting from the selected captions. It does not however affect the alignment of the text.

Scripting

Feature	Description
Close project and open another	The new closeSceneAndOpenOffline () method of the scene class will close the current project and open another. NOTE This method is named as such because it is also used in the Harmony Stand Alone scripting interface to close a scene and open another.
Lock and unlock layers	The new setLayerLock() and getLayerLock() methods of the LayerManager class allow you to lock or unlock layers as well as to check whether a specific layer is locked.
Export progress signals	The exportSceneProgress() and exportFrameProgress() signals of the ExportManager class can be used while exporting your project using the scripting interface. They are triggered every time a scene and a frame are done exporting.
Get the name of an act	The new actNameOfScene() method of the StoryboardManager class will return the name of the act in which a given scene occurs.
Check if layer is empty	The isEmpty() method of the LayerManager class now returns true if the user has drawn inside the layer and then erased the artwork. Previously, it would only return true if nothing had ever been drawn in the layer before. NOTE
	This change makes the method slightly slower as it requires loading the layer's drawing file to check if it contains no artwork. Also, please note that the memory used by this method to load the drawing file cannot be freed afterwards.

Enhancements

- The distance for the pen stabilizer in the Pen Settings toolbar is now set to 20 by default.
- The state of the \(\subseteq \) Loop Playback option is now saved to your preferences and preserved after closing Storyboard Pro.

Fixed Issues

Stability

- Memory leak and crash could occur when rendering QuickTime movies on macOS.
- Crash could occur when exporting a project as Harmony scenes while a 3D model is selected with the
 Layer Transform tool.
- Crash could occur when importing an AAF sequence for conformation while the Thumbnail view is displayed.
- If the Override Rotation, Override Zoom Out or Override Zoom In keyboard shortcut was cleared, the Stage View and the Camera View would get stuck in Rotate, Zoom In or Zoom Out mode.

Project Creation & Saving

- When using the Save As command, the Save dialog would not always open in the project's actual location and the default project name would not always match the project's name.
- When saving a new version of the project, the old version would remain marked as open which would result in an error message when opening the old version.
- Scenes could be imported in the reverse order when creating a project from Harmony scenes.
- It was possible for the user to save a project even if no changes had been made.

Drawing & Layers

- Copying or duplicating layers inside groups would copy layers inside the group twice, once inside the copied group and once outside the copied group.
- Scaling or rotating an animation-enabled layer with the 🔛 Layer Transform tool would not create an animation keyframe.

Storyboard & Animatic

- It became impossible to draw or manipulate objects in the Stage or Camera view after selecting a sound clip and changing the current frame.
- It was not possible to select both video and sound clips simultaneously by drawing a rectangle around them with the mouse.
- When copying and pasting a movie clip with animation keyframes over itself, only the keyframes in the original clip that were not overwritten by the copy of the movie clip would get copied over.
- When adding a panel in a gap between two panels, if the panel was bigger than the gap, subsequent panels would be offset but not their camera keyframes.
- Moving a scene between two other scenes caused Storyboard Pro to prompt the user to rename the scene.

- The Paste command was greyed out when the timeline playhead was in a gap between two panels, making it impossible to paste panels in a gap.
- It was previously impossible to delete an audio track that was locked.
- Selecting all panels from a specific point forward by holding Ctrl (Windows) or

 (macOS) + Shift + Alt and clicking on a panel then deleting the selected panels would occasionally delete sound clips outside of the selected range and leave sound clips inside the selected range.

Captions

- When the Spelling dialog found a misspelled word for which it had no spelling suggestion, the Replace
 Once and Replace All buttons would be greyed out, even if the user typed in their own replacement
 word in the Replace With field.
- Spelling mistakes at the very end of a caption field did not get highlighted by the spell checker.

Import

- When importing multiple video files that contain audio with the Overwrite Existing Clips option, only one of the video file's audio streams would get imported.
- Attempting to import a Windows Media Video (.wmv) file on macOS would cause a progress bar to appear, loop indefinitely and soft-lock the application.



NOTE

Importing WMV files is not supported on macOS.

Storyboard Pro only allowed importing TIFF images with the .tif extension, and not with the .tiff extension.

Export

- The Movie Settings dialog on macOS had an **Alpha** option, despite Storyboard Pro not supporting the export of movies with transparency.
- An unclear error message would appear when attempting to export a movie in H.264/MPEG-4 (*.mov)
 format in a resolution that is not supported by this video encoder. Now, a message explaining the issue
 appears and prompts the user to export in a supported resolution instead.



NOTE

This video encoder supports resolutions of up to 4096×2304. Each dimension must be a multiple of 16 pixels.

- When exporting a movie that included an empty space in the timeline with burnt-in scene and panel
 information, the scene and panel information for the next panel would be burnt-in during the empty
 space section.
- Importing an AAF sequence for conformation would fail if it only contained audio tracks.
- When exporting a PDF in a vertical layout with the Expand Panels and the Spread Captions & Sketch
 options, the captions for panels with long horizontal camera movements (which get printed to a row
 below the thumbnail) would bleed outside of their respective caption fields.

Project Management

- The buttons in the Project Management view would disappear when switching to another view then back to the Project Management view when using the classic (light) stylesheet.
- When extracting a project from another project in Storyboard Pro Packed Files (.sbpz) format via the scripting interface, the extracted project would be linked to the original project's cache rather than the actual project file.
- No error information would be written to the report field of the Merge Modified Panels dialog box if the merge operation failed.

User Interface

- Text in the **Sequence**, **Scene**, **Panel** and **Duration** fields of the PDF Review workspace was cropped in High DPI / Retina mode.
- The perpand and collapse arrows would not appear in the same size in the Library and 3D Graph views, depending on the colour theme used and whether Storyboard Pro was running in normal resolution or in High DPI / Retina mode.

Storyboard Pro 7.0.0 Release Notes

Here is the list of changes in Storyboard Pro 7.0.0, build 17.10.0.15295 (2019-11-26):

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Drawing

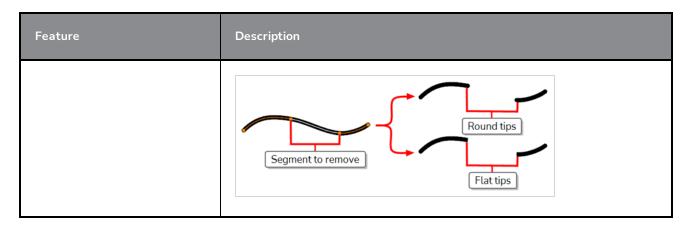
Feature	Description
Alignment guides	It is now possible to add horizontal and vertical guides to the Stage View and the Camera View. Alignment guides can be used with the Layer Transform tool as well as various drawing tools such as the Select, Contour Editor, Perspective, Brush, Pencil, Rectangle, Ellipse and Line tools, to help you position elements and draw along their axes. You can add the Alignment Guides toolbar to your workspace by either: Right-clicking on any toolbar and select Alignment Guides. Selecting Windows > Toolbars > Alignment Guides from the top menu.

Feature	Description
	You can also add alignment guides by selecting View > Alignment Guides from the top menu. You can manipulate alignment guides using the Layer Transform or the Select tool. You can also make your drawing tool snap to alignment guides by clicking on the Snapping button in the Tool Properties view and, in the pop-up menu, select Snap to Alignment Guides.
New & updated brushes	The brush presets for the Pursh tool have been updated. • Solid vector brushes are now sorted by size, starting from 5 and going to 25. Solid Brush 1 5 Solid Brush 2 10 Solid Brush 4 25 • Fine Pencil, Tilting Pencil and Chisel Tip brushes have been added. Fine Pencil 7 Tilting Pencil 20 Chisel Tip 20 Dark Charcoal 20
Pen stabilizer	The new pen stabilizer can help you draw smooth, stable lines by stabilizing your drawing strokes as you draw, without having to smooth them afterwards. It works by letting you draw a stroke without generating a line immediately, instead it starts generating a line that trails behind your mouse cursor or tablet pen once it reaches a certain length. By trailing behind your stroke, it can smooth out the flaws in your drawing gesture and generate a smooth stroke. There are two different stabilizing methods: • Average: Storyboard Pro calculates the average direction of all of your mouse or pen gestures between the end of the actual drawing stroke

Feature	Description
	and the current position of your mouse cursor or pen tip, and extends the stroke in this average direction, effectively evening out jitter and rounding sharp turns. • Pulled String: When you start drawing a stroke, Storyboard Pro positions the drawing tool where your stroke starts. As you move the mouse or tablet pen, the drawing tool remains in that position, but a "string" appears, linking your drawing tool to your mouse cursor or pen tip. Once a certain maximum length is reached, the string pulls the drawing tool in the direction of your mouse cursor or tablet pen. The distance between your mouse cursor or tablet pen and the stroke can be customized. This feature can be enabled by adding the Pen Settings toolbar to your workspace, and selecting either Average or Pulled String in the toolbar's drop-down menu.
Pen tilt support	If you have a tablet and pen that support reading the tilt angle of your pen, you can configure the Brush tool to use this information and draw with a tilted tip. A tilted tip will be stretched or projected at the angle in which you tilt your tablet pen, simulating the effect of drawing with a tilted pencil or felt pen. Pen tilted up or down Pen tilted up or down This feature can be used by adjusting the Pen Tilt Sensitivity parameter in the Brush Properties dialog.

Feature	Description
Pen rotation	If you have a tablet and pen that supports reading the rotation angle of your pen, you can configure the Brush tool to use this information so that the rotation of your brush tip is based on how you rotate your tablet pen. A stroke with a square tip without pen rotation A stroke with a square tip with pen rotation, with the pen rotated at 45° This feature can be used by enabling the Use Pen Rotation property in the Brush Properties dialog.
Pen pressure feel editor	Storyboard Pro now allows you to edit and customize the curve by which it processes the amount of pressure you put on your pen tablet to calculate the thickness, flow or opacity of your brush or pencil lines. Min Pressure 15 % Curve Preset Max Pressure 100 % to 100 more pencil lines. The Pen Pressure Feel dialog can be accessed by adding the Pen Settings toolbar to your workspace, then clicking on the Pen Pressure Feel button.
Easy Drag	The Select and Cutter tools now have an Easy Drag mode. When enabled, you can click anywhere inside the selection control box to drag the selection. By default, you have to click inside the artwork, which may be difficult when manipulating line art. To enable Easy Drag mode, click on the Easy Drag button in the Tool Properties view.
Lasso/Marquee Selection Mode	In the Tool Properties view, if you set the selection mode for the current tool to either Lasso or Marquee, the mode will be automatically saved in your preferences and will persist after you close and relaunch Storyboard Pro.

Feature	Description
	NOTE The selection mode can be set when using the Transform, Select, Cutter, Contour Editor, Perspective or Envelope tools. Setting the selection mode for any of these tools will change the selection mode for all of these tools.
Keyboard shortcut for Draw Behind	It is now possible to assign a keyboard shortcut to toggle the \(\bigcup \) Draw Behind tool property. This shortcut is listed as Draw Behind under the Drawing Tools section of the keyboard shortcuts list, and has no default assignment.
Tip Style option for the Eraser tool	The Fraser and now has a Tip Style option in the Tool Properties view. This option allows you to select which style of tips will be left over when you erase part of a pencil line. Round tips Flat tips Bevel tips
Tip Style option for the Contour Editor tool	The R Contour Editor tool now has a Tip Style option in the Tool Properties view. This option allows you to select which style of tips will be left over when you select and delete a pencil line segment with the R Contour Editor tool.



Drawing Guides

Feature	Description
New drawing guides	The Ruler allows you to position and rotate a simple straight axis, and then draw a line along that axis, like a regular ruler. The Isometric Perspective guide helps you draw lines that are parallel to one of three axes: The x-axis, the y-axis and the z-axis. The angle of each axis can be customized as needed. This type of pseudo-perspective, also referred to as parallel projection, is often used in 2D games, computer graphics and schematics to depict 3D objects and environments without using any actual perspective, foreshortening or 3D rendering. In 2D animation, it is often used to draw long panning backgrounds from a low or high angle. The 3-Point Perspective (Horizontal Pan) guide helps you draw horizontally panoramic backgrounds, with curvilinear horizontal lines. A vanishing point is placed in the middle of the horizon line, to help draw lines on the z-axis, and two vanishing points are placed on the horizon line outside of the camera field, to define the curve of horizontal lines. Vertical lines are made perpendicular to the horizon

Feature	Description
	line. This is useful for drawing backgrounds meant to be panned over horizontally. Panning the camera horizontally over a background drawn with a 3-Point Perspective (Horizontal Pan) guide will simulate a rotation of the camera on the y-axis.
	The 3-Point Perspective (Vertical Pan) guide helps you draw vertically panoramic backgrounds, with curvilinear vertical lines. A vanishing point is placed in the middle of the horizon line, to help draw lines on the z-axis, and two vanishing points are placed above and below the horizon line, outside of the camera field, to define the curve of vertical lines. Horizontal lines are made parallel to the horizon line. This is useful for drawing backgrounds meant to be panned over vertically. Panning the camera vertically over a background drawn with
	a 3-Point Perspective (Vertical Pan) guide will simulate a vertical rotation of the camera on the x-axis.
	The 4-Point Continuous Perspective guide is very similar to the 3 Point Perspective (Horizontal Pan) guide, except that it is designed to help draw full 360° panoramic backgrounds.
	This guide uses 5 vanishing points. When drawing a horizontal line, it is curved by arching over one of the vanishing points and reaching down to the two surrounding vanishing points. This creates a perspective effect where each vanishing point represents one of the cardinal points, except that the leftmost and the rightmost points represent the same cardinal point, effectively creating a looping background. Backgrounds made with the 4-Point Continuous Perspective guide can be looped horizontally to simulate a full rotation of the camera on the y-axis.

Feature	Description
	South East North West South
	• The 4-Point Perspective (Vertical Pan) is a lot like the 2-Point Perspective guide, except that its vertical lines are curvilinear, so it can be used to make vertically panning backgrounds. Two vanishing points are on the horizon line, outside of the camera field, to help draw lines on the x-axis and the z-axis, and two vanishing points are placed above and below the camera field to define the curve of the vertical lines.
	This is useful for drawing backgrounds meant to be panned over vertically, in which cuboid objects are seen from an angle.
	 The 5-Point Perspective (Fish Eye) guide helps you draw backgrounds that are curvilinear on both the x-axis and the y-axis. It has one central vanishing point on the horizon line, from which lines on the z-axis are drawn, two vanishing points at the extremities of its horizon line, to define the curve of horizontal lines, and two vanishing points above and below the horizon line, to define the curve of the vertical lines.
	This guide can be used to draw backgrounds with a fisheye-style wide angle lens effect. It can also be used to draw backgrounds that are meant to be panned in various directions.
	Each guide is available in the + Add Guide pop-up menu of the Guides view.

Feature	Description
Locking the guide angle	If you press and hold the Alt key while using drawing guides, the angle of the guide lines will stop following your mouse cursor and lock in position until you release the Alt key, allowing you to keep the guide lines at the right angle. By using this feature, you can rework the thickness or length of lines that you are drawing with a guide. It's also useful if you want to draw a dotted line along an axis.
Guide angle display	When you rotate a guide, its exact angle is displayed in the top-left corner of the Stage and Camera views.
Rotating guides from centre	Some guides can be rotated by moving one of the two points on their horizon line, which rotates them around the opposite point. If you press and hold the Alt key while moving one of their points, it will rotate the guide around its centre instead. This works for the following guides:
	• Ruler
	• 2-Point Perspective
	• 3-Point Perspective (Bird's-Eye View)
	3-Point Perspective (Worm's-Eye View)

Animatic

Feature	Description
Animatic editing mode	It is now possible to create gaps in your animatic when editing its timing, similarly to editing video clips in a video editing software. Gap between Gap between scenes By default, any change you make to your animatic will ripple to subsequent panels so as to avoid leaving gaps in the timeline. If you want to create gaps, you must enable Animatic Editing Mode. This can be done by clicking on the Animatic Editing Mode button in the bottom-left corner of the Timeline view. You can also temporarily toggle Animatic Editing Mode by pressing and holding the Ctrl (Windows) or # (macOS) key while changing the duration of a panel in the Timeline view.

Feature	Description
	NOTE Projects with gaps in their timeline cannot be opened in older versions of Storyboard Pro.
Enable & disable clip synchronization by track	By default, when you offset panels, sound clips and video clips that are cued during those panels will also be offset to remain synchronized with them. You can now disable the synchronization of video and sound clips for each video and audio track in your project. When synchronization is disabled for a track, its clips will not offset when you make changes to the timing of your animatic. To disable synchronization for a track, click on the Sync button next to that track in the Timeline view.
Separate video and audio sections	 The Timeline view is now divided in two separate areas: The video area, which contains your storyboard track, which has your project's panels, animations and camera movements, as well as all of your project's video tracks. The audio area, which contains all of your project's audio tracks. It is possible to reposition the divider between these two areas and to scroll each area vertically without affecting the other area.
Navigate to previous and next sequence	Commands to instantly navigate to the previous or the next sequence have been added to the Play menu. Those commands can also be added to the Navigation toolbar, which, by default, only has the Panel First Frame and the Panel Last Frame buttons. You can customize this toolbar by right-clicking on it and selecting Customize. You can also assign keyboard shortcuts to the Previous Sequence and Next Sequence commands, in the Play/Navigation section of the Keyboard Shortcuts dialog.

Stage and Camera Views

Feature	Description
Overlays	Where you could previously only display the current frame's time code as an

Feature	Description
	overlay in the Stage and Camera views, you can now also display the name (number) of the current scene and the current panel, as well as one type of captions.
	You can also customize where this information is displayed, as well as its font, font size and colour.
	To display overlays in the Stage and Camera view, click on the Overlays button in the toolbar at the bottom of either view.
	To customize the types of information displayed in the overlays, as well as how it is displayed, double-click or long-click on Show Overlays and, in the pop-up menu, select Overlay Settings.
	It is now possible to have several instances of the Camera View in your workspace.
Multiple Camera views	For example, you can now add a detached Camera View window to your workspace, and position it inside your workstation's second monitor. Your second monitor can then act as a preview and playback monitor.
	Each Camera View in your workspace has its own zoom level and angle. Additionally, the Action Safe Area, Title Safe Area, 4:3 Safe Area, 4:3 Area, Camera Mask and Show Overlay switches can be toggled independently on each Camera View.

Script & Captions

Feature	Description
Spell Checker	Storyboard Pro now has spell checker functionality. It checks the spelling of each word in your captions and in your project's script and underlines the words it does not find in its dictionary. It also allows you to go through each misspelled word in your project so that you can either correct or ignore them. By default, automatic spell checking is enabled. To toggle it off, select Caption > Spelling > Check Spelling While Typing from the top menu. To go through each spelling mistake in your project, or to select which dictionary to use to check your spelling, select Caption > Spelling > Spell Check from the top menu.

Video

Feature	Description
Import audio stream	When importing a movie file, you can now import its audio stream into your project's audio tracks by checking the Import Audio checkbox in the Import Videos/Images as Clips dialog.
Video with transparency	Storyboard Pro now supports videos with alpha (transparency).
Import WebM	It is now possible to import WebM files as video clips into your animatic. NOTE Importing the audio stream of a WebM file is currently not supported.
Use drawing layer as video clip	It is now possible to convert a drawing layer into a video clip. To do this, simply click and drag on a drawing layer, and drop it inside a video track.
Drag & drop movie file	You can now drag and drop a movie file from your operating system's file browser into one of your project's video tracks. This will instantly import the movie into the video track in which you dropped it.

Audio

Feature	Description
Sound clip volume	You can now set the volume for a sound clip without creating a volume keyframe. You can simply click and drag on their volume envelope to adjust their overall volume. If your sound clip has volume keyframes, you can also click and drag on the segment between two keyframes to offset both keyframes simultaneously.

Feature	Description
	RR_Line04_Terrance_02.wav
	It is possible to add a gain effect to sound clips. To do this, select one or several sound clips, then either:
	Right-click on the selection and select Audio Gain.
	 In the top menu, select Clips > Audio Gain.
Gain effect	Gain is different from volume in that it can actually amplify your sound clip. It is applied before the volume is applied. It is possible to select several sound clip and set or offset their gain simultaneously. Hence, if you notice disparities in volume between different sound clips, you can quickly even them out.
	Audio Gain is an effect which can be adjusted or undone at any time. It is supported with XML and AAF conformation. This means that if you export your animatic as an XML or AAF sequence for conformation and import the sequence in Final Cut Pro, Adobe Premiere and Avid Media Composer, you can adjust the gain on your sound clip in your video editing software, and import those changes into your Storyboard Pro project.
Precise volume control	When setting the volume of a sound clip or of a volume keyframe, the overlay that displays the volume you're setting it to in decibels now displays decimals.
	RR_Line04_Terrance_02.wav
Drag & drop sound file	You can now drag and drop a sound file from your operating system's file browser into one of your project's audio tracks. This will instantly import the sound file into the audio track in which you dropped it.

Images

Feature	Description
Drag & drop image file	You can now drag and drop an image file from your operating system's file browser into Storyboard Pro to import it as a layer in a panel, or as an image clip in a video track.
	You can drop the image file into the following areas of the user interface:
	 In the Stage View, Camera View or Layers view, which will import it as a layer in the current panel, on top of all the other layers.
	 In the Thumbnail or Timeline view, over the thumbnail for a panel, which willimport it as a layer in that specific panel.
	 In a video track in the Timeline view, which will import it as a static image clip.

Conformation

Feature	Description
Updating sound files	When importing an XML sequence for conformation, Storyboard Pro will check if the sound files linked to your sequence have been changed since they were exported from your project. If changes have been detected, Storyboard Pro will import the new sound files into your Storyboard Pro project.
Gaps in timeline	Since it is now possible to create gaps in the timeline of your animatic, it is also possible to import a sequence containing gaps for conformation. Gaps in your sequence will be imported into your animatic.

Export Movie

Feature	Description
Export in H.264 (AVC)	It is now possible to export a QuickTime Movie (.mov) file without using Apple QuickTime, by instead using a simple H.264 (AVC) encoder. To do this, when using the Export to Movie or the Export to EDL/XML/AAF dialog, select H.264/MPEG-4 (*.mov) in the Movie Format drop-down. This format is available on both Windows and macOS, even if Apple QuickTime is not installed. Movies exported using this option have a video stream encoded with the H.264 (AVC) video codec, and an audio stream in PCM format.

Feature	Description
New QuickTime movie interface for macOS	On macOS, Storyboard Pro now uses the Apple AVFoundation framework that is built into macOS to export movies in QuickTime Movie (.mov) format, instead of the QuickTime application. This allows Storyboard Pro to encode video using the H.264, Apple ProRes 442 and or Apple ProRes 4444 codecs built into AVFoundation.

Export PDF

Feature	Description
Better visual indication of scenes in Japanese storyboard	When exporting a PDF using one of the Japanese PDF profiles, horizontal lines are drawn in the CUT and TIME columns to indicate when a scene ends and the next scene starts.

Project Management

Feature	Description
Versioning	It is now possible to save multiple versions of your storyboard without having to save your entire project as a copy.
	By selecting File > Save as New Version from the top menu, you can save your project as a different project file, but inside the same project folder.
	Each project version will preserve their own animations, timing, video tracks, audio tracks and clip placements. However, the different versions of a single project will share the same drawing files, video files and audio files, as well as the same palette.
	Project versions will be saved as different .sboard files inside the project directory. To open a specific project version, simply open the corresponding project file.
	You can also save different project versions when working with Storyboard Packed Files (.sbpz). If you open a Storyboard Packed File that contains several project versions, you will be prompted to select which version you want to open.
Project Management view	The new Project Management view allows you to keep a list of all the projects that were created by splitting your project or by extracting parts of your project.

Feature	Description
	When you split your project, or when you extract smaller projects from your project, you can check the Link extracted project at the bottom of the Split Storyboard or Extract Storyboard dialog to add the smaller projects to the list in the Project Management view.
	This list displays the name as well as the full path to each project. It also indicates whether or not the project was modified, as well as if the project cannot be found in the location where it was extracted.
	This view also allows you to remap linked projects that were moved and to remove linked projects that were deleted, and to link other projects to yours. It also provides a quick access to all the commands that are available in File > Project Management in the top menu.
Merge modified panels	Using the new Project Management view, you can select a project in the list of linked projects, then click on the Merge Modified Panels from Selected Project button to import all the changes from the child project into your parent project.
	NOTE The first time you click on this button, you will be prompted to select some merging options. Afterwards, merging changes from a linked project will require a single click.
	You can also use the Merge Modified Panels dialog to browse for a project and select the merging options before you import it.

Preferences

Feature	Description
User interface language	It is now possible to select your preferred user interface language in the Preferences dialog. Storyboard Pro currently supports English, Chinese (Simplified), Japanese and Spanish. In previous versions, Storyboard Pro would always launch in the language of your operating system if supported, or in English otherwise. By setting this preference, you can make Storyboard Pro launch in a specific supported language regardless of the language of your operating system. You can change this preference in the Global UI tab of the Preferences dialog.
Panel number incrementing	The Increment name by preference allows you to configure how new panels

Feature	Description
	are numbered.
	For example, if you enable this preference and set it to 10 (the default value), panels in a new scene will be named 10, 20, 30, and so on when created in sequence.
	Then, if you create a new panel between two existing panels, the new panel will be named by using the number between the numbers assigned to the two neighbouring panels, rounded down. For example, if you create a panel between panel 10 and panel 20, this panel will be named 15. If you create another panel between panel 10 and 15, this panel will be named 12. When this option is disabled, if you create a panel between two existing panels, the new panel will be named based on the number of the previous panel + 1, and subsequent panels will be renamed to keep their numbers in sequence.
	This preference is available in the Naming tab of the Preferences dialog.
	A new panel naming rule has been added.
	This new panel is very similar to an existing panel naming rule, it uses letters instead of digits to number panels, in the following way:
	A Z, ZA ZZ, ZZA ZZZ, ZZZA
New panel naming rule	However, while the existing naming rule added Zs at the beginning of the panel's name to count how many times it reached Z, this new rule indicates the amount of Zs it reached using a number, in this way:
	A Z, ZA ZZ, 2ZA 2ZZ, 3ZA
	Hence, panel names always use at most two letters, and are otherwise preceded by a number.
	You can select this naming rule in the Naming tab of the Preferences dialog, in the Panel Auto-increment Rule drop-down.
Panel name length	The new Automatically Add Leading Zeroes preference, available in the Naming tab of the Preferences dialog, allows you to create panels with a specific amount of digits in their name, by adding leading zeroes as needed.
	For example, if you set the minimum amount of characters for panel names to 3, the first panel of a scene will be named 001.
Disable using GPU for effects	When applying a blur effect on a bitmap layer, by default, Storyboard Pro uses your computer's graphics processing unit (GPU) to generate the blurred image faster. This may not work as expected on some video cards. If you encounter this issue, you can now fix it by disabling the Render effects using GPU (OpenCL) preference in the Advanced tab of the Preferences dialog.

Feature	Description
Keyboard Shortcuts dialog	The Shortcuts tab of the Preferences dialog is now its own dialog, the Keyboard Shortcuts dialog. To access this dialog box, in the top menu, select Edit (Windows) or Storyboard Pro 7 (macOS) > Keyboard Shortcuts.
Create, export, import and switch between keyboard shortcuts sets	It is now possible to create your own keyboard shortcut sets. You can also export your keyboard shortcut sets as XML files and use them as backups or share them with project collaborators. You can create, export and import keyboard shortcut sets using the New, Load and Save buttons at the top of the Keyboard Shortcuts dialog.
Export and import preferences	It is now possible to export your preferences as XML files, and use them as backups or share them with project collaborators. You can export and import preferences using the new Load and Save buttons at the top of the Preferences dialog.
Default preference sets	Storyboard Pro now comes preloaded with three different sets of default preferences: Standard , Animatic and 3D . You can quickly switch between these sets in the Preferences dialog.

Installation & Packaging

Feature	Description
Single application on macOS	The Storyboard Pro package for macOS now only contains a single application. You can launch License Wizard by selecting Storyboard Pro 7 > Storyboard Pro Tools > License Wizard from the top menu.
Easy authorization on macOS	The way Storyboard Pro is packaged for macOS no longer triggers the operating system's security mechanisms. Hence, it is no longer required to right-click on Storyboard Pro, select Open and authorize the application as a user with administrative privileges to be able to run Storyboard Pro. You will be able to launch Storyboard Pro as soon as it is copied to your Applications folder.
No more 32-bit executables	All 32-bit executables have been removed from the packaging on macOS to ensure that Storyboard Pro can run on macOS 10.15 (Catalina), which dropped

Feature	Description
	support for 32-bit applications.
	IMPORTANT In previous versions of Storyboard Pro, it was possible to open projects in the legacy project format created by Storyboard 1 and to convert them to the new format. This conversion used the 32-bit <code>Sboard2Xml</code> utility, which is no longer packaged with Storyboard Pro. As such, as of Storyboard Pro 7, it is no longer possible to open projects in the legacy Storyboard 1 format.

Scripting

Feature	Description
Smart Script Management	In the past, scripts packaged with Storyboard Pro were all automatically copied to your preferences folder, in the same location as your custom scripts. Now, scripts packaged with Storyboard Pro are only copied to your preferences if you make modifications to them. Otherwise, they are stored and executed from the Storyboard Pro installation folder.
	This solves several problems:
	The scripts folder in your user preferences is now reserved for your custom scripts and are no longer cluttered with Storyboard Pro scripts.
	 In previous versions, when installing a patch update, Storyboard Pro would not overwrite the scripts in your user preferences with the updated scripts, as this would risk overwriting one of your user scripts. This is no longer a problem, except in the rare case where you happen to have edited a script packaged with Storyboard Pro which was updated in a patch update. You can now easily restore the original version of a packaged Storyboard Pro script after having made changes to it.
Custom Script Folder	You can now set a custom location in which to store scripts. To do this, you must set the TOONBOOM_GLOBAL_SCRIPT_LOCATION environment variable to the location where you want to store scripts. The scripts in this location will be available in the Script Editor alongside scripts that are packaged with Storyboard Pro and scripts in your user preferences.
Export to EDL/AAF/XML	It is now possible to export your project as an EDL, AAF or XML sequence through scripting. You can do this by using the exportToNLE() method of

Feature	Description
	the ExportManager class. The setOneMoviePerPanel() method was also added to the ExportManager class to support exporting one movie file per panel.
User Interface Responders	The scripting interface now provides you with a list of responders from the Storyboard Pro user interface. You can obtain this list with the <code>getResponderList()</code> method. You can obtain the list of actions for a given responder with the <code>getActionList()</code> method.
Convert a coordinate for single axis between fields and OpenGL coordinates	The following methods were added to the scene class to convert the coordinate for a single axis from field coordinates to OpenGL coordinates, and from OpenGL to field coordinates: toOGLX(), toOGLY(), toOGLZ(), fromOGLX(), fromOGLY() and fromOGLZ().
Get individual version numbers	The new getMajorVersion(), getMinorVersion(), getPatchVersion() and getBuildNumber() methods of the about class will provide their respective values from the currently installed version of Storyboard Pro.

Enhancements

- ullet The T Text tool now remembers the last font you used with it.
- Storyboard Pro now supports True Type Collection (.ttc) fonts. These are font packages containing several True Type Font (.ttf) files. If you have any TTC font installed on your system, you will be able to use them with the T Text tool, when formatting captions as well as in Burn-in options when exporting your project.
- The Terminology Style option was removed from the Japanese localization of Storyboard Pro, as Japanese terminology is the same for animation and live action.
- The **Start Dictation** and **Emoji and Symbols** menu entries have been removed from the **Edit** top menu. These entries were automatically added by macOS and were not compatible with Storyboard Pro.
- Toolbars in the top menu and the context menu are now listed in alphabetical order.
- Views in the top menu are now listed in alphabetical order.

Fixed Issues

The following issues have been fixed in this release:

- Storyboard Pro fails to launch on macOS 10.15 Catalina.
- Storyboard Pro crashes when undoing changes done with the
 \(\times \) Centerline Editor tool.

- On Windows, when drawing a very long brush stroke with a pen tablet then immediately drawing another stroke, the second stroke starts off with a straight line segment.
- The Spacebar key can still be used to pan views after the user unsets it as the keyboard shortcut for the Free Pan and Zoom command.
- Mouse pointer becomes default mouse pointer when a notification appears on macOS.
- Storyboard Pro fails to import XML sequences exported from OpenTimelinelO for conformation.
- Custom Write node parameters are not exported when exporting Harmony scenes with the Rendered Animatic option.
- Exporting a storyboard in PDF format by running a Storyboard Pro script in a command line interface may cause it to have missing information and garbage text.
- When using the 2 Stamp tool with the \(\infty \) Draw Behind tool mode, the different strokes in the stamp's artwork are laid on the canvas in their reverse order.
- Using the <a>Cutter tool on multiple drawings makes some of the selected artwork turn red.
- On macOS, attempting to Save As causes Storyboard Pro to freeze if a folder with the same name as your project name exists in the target directory.
- Attempting to Save As inside the project folder will cause the ensuing error message to keep reappearing indefinitely.
- Storyboard Pro crashes if the user cuts and paste a clip, then undoes and pastes again.
- Selecting View > Show Tab Bar from the top menu may cause Storyboard Pro to crash on macOS 10.12.
- When using the ☐ Rectangle, Ellipse or / Line tool with the ☼ Snap and Align tool mode, scrolling in or out of the drawing space causes the alignment hints to be offset.
- Pressing the Del (Windows) or (macOS) causes Storyboard Pro to crash in the following circumstances:
 - When moving a camera keyframe.
 - When adjusting the in-point, out-point of a sound clip, or when moving one of its volume keyframes.
 - When moving an animation keyframe in a video clip.
- Pressing Del (Windows) or (macOS) to delete the selected panel while attempting to resize it resizes the previous panel.
- Attempting to import a 3D model into a 2D scene while the timeline playhead is past the last panel in the project, then cancelling, causes Storyboard Pro to crash.
- Attempting to add a scene between two scenes and then cancelling may cause Storyboard Pro to crash if a custom default panel layout is saved to the user's preferences.

- Attempting to import an XML sequence that contains video files instead of images for conformation causes Storyboard Pro to crash.
- Camera frame in Stage View and Camera View is too thin when using a High DPI (Windows) or Retina (macOS) display.
- When duplicating a panel containing vector artwork imported from a PDF, the layers in the duplicate panel are copied from different panels.
- In the Timeline view, the zone in which a template can be dropped to insert it as a new panel at the end
 of the scene is too narrow and is easy to miss.
- The overlay indicating a volume keyframe's value in dB remains on the screen when dragging the keyframe outside the sound clip to delete it.
- Crash may occur when attempting to add a new sequence while the Timeline View playhead is beyond
 the last panel.
- If the user extracts a scene from a project, deletes the extracted project and extracts the same scene in the same target folder with the same name, the audio in the extracted project will be corrupted.
- Moving panels in the Timeline view has no effect if the Timeline view is not docked to the main application window.
- Main application window does not appear if workspace configuration file is invalid or corrupted.
- When drawing a closed shape with the Auto Fill tool mode and a custom colour that does not exist in the project's palette, the shape gets filled with red.
- Playback skips frames when playing a project for the first time since opening it on macOS.
- Exporting a Windows Media Video (.wmv) movie at 100% quality creates a corrupted movie file.
- The value of volume keyframes, displayed in decibels, is slightly inaccurate relative to their actual value, which is stored in amplitude ratio, in the project file.
- Drawing stroke does not appear until it is completed when drawing with the Pencil tool with the Traw Behind tool mode enabled and while using any modifier key.
- The ☐ Easy Drag mode of the ► Select tool does not work when pressing and holding the ☐ key on macOS.
- The @ Show / Hide button for a video track does not work properly if the timeline playhead is over a video clip, but not over a panel.
- Left and right area of the Timeline view end up scrolled at different positions when clicking and dragging on the timeline playhead up and down to make it scroll vertically.
- The Export Current Image command does not work when there are video clips but no panel at the current frame.

- When making a PDF preview of a panel using the Panel PDF Options view, if the PDF profile has a
 background image, it will obscure everything in the PDF preview except for the thumbnails and the
 logo.
- When using Storyboard Pro to run a script in a command line interface, the process does not terminate and outputs the following error:

QThread: Destroyed while thread is still running

- Pasting formatted text in a caption field may result in lines temporarily overlapping each other.
- Attempting to open a Storyboard Pro Packed File that was created in Japanese trial mode (.tbpz) in full license mode results in Storyboard Pro attempting and failing to open an empty project.
- Entry in the Undo menu for updating the position of a 3D model rendered into a 2D layer has no text.
- It is possible to edit the artwork in a locked or hidden layer using the ★ Select, ∠ Cutter, △ Perspective, ☐ Edit Gradient/Texture, ✔ Eraser, Paint or Close Gap tool if the artwork in this layer is selected using the ⇔ Select All Drawings in Scene option of the ★ Select tool or by selecting the locked or hidden layer among others layers and selecting the artwork with the ★ Select tool.
- PDF Export view is not listed in the right alphabetical position in the + Add View menu.
- No progress bar displays when saving a project on macOS.
- Checked state of the Remove exported panels from current project checkbox in the Split Storyboard dialog is saved even if the user clicks Cancel.
- Adding a transition fails if the default panel length is set to 3 frames or less and the **Preserve project length when adding transitions** preference is enabled.
- When a group layer is selected, its name does not appear in the status bar.
- Tool tip for the Overwrite Clips button is "Overwrite Sound Clips".
- Centre is misspelled "center" in various user interfaces.
- Error message when attempting to open a project created in Japanese trial mode in full license mode is not localized in languages other than English.
- Adding a transition between two scenes offsets the video and sound clips cued during the second scene backwards.
- The Perspective tool has an Align to Grid tool mode, which should only be available in Harmony.