Storyboard PRO 20

Toon Boom
Storyboard Pro 20
Release Notes

Legal Notices

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Storyboard Pro 20.1 Release Notes

> ⚠️ **IMPORTANT**
>
> If your studio uses a license server, you will need to upgrade your license server to Storyboard Pro 20.1 or Harmony 21.1.
>
> Even though licenses from Storyboard Pro 20 can be used to run Storyboard Pro 20.1, the server running the license server needs to be upgraded to Storyboard Pro 20.1 to support client workstations running Storyboard Pro 20.1. License from servers using earlier versions of Storyboard Pro cannot be used to run Storyboard Pro 20.1.

Here is the list of changes in Storyboard Pro 20.1. build 21.1.0.18395 (2022-05-04):

Feature	Description
Apple silicon support	The macOS version of Storyboard Pro is now compiled as a Universal 2 binary that runs natively on either Intel processor and ARM64-based Apple silicon Macs.
Retina and HiPDI screen support	Retina and HiDPI screens are now fully supported. The content of the Stage and Camera views are now displayed at each screen's native resolution.

Fixes

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

General

- Storyboard Pro may crash on startup on specific Windows 11 workstations. *SB-4658*

- Clicking the scrollbar of a panel in the Thumbnail view does not fully select the panel. *SB-4072*

- Playback performance degrades on macOS when using an advanced colour profile such as Color LCD. *SB-2944*

Drawing Tools

- Fonts installed at the user level are not available in the Text tool on Windows. *SB-4423*

- Storyboard Pro may hang when using the Perspective tool on colour texture applied using the Auto Fill mode of the Pencil tool. *SB-4434*

Timeline

- The wrong panel is selected in the Timeline when stopping playback. *SB-4024*

- Performance issue when changing the duration of panels from the Timeline when video track sync mode is active. *SB-4564*

- Using the New Scene Before command corrupts the timeline if the selected scene starts with a transition. *SB-4541*

Conformation

- Missing camera keyframe at the end of panels that are created while importing an XML or AAF for conformation. *SB-4583*

Cached Playback

- Clicking the Clear Current Project button in the Playback tab of the preferences does not completely delete the cache. *SB-4104*

- Storyboard Pro may crash when trying to clear the playback cache of the current project. *SB-4101*

Scripting

- `Project.SetMetadata` creates metadata at the panel level instead of the project level. *SB-4465*

- Rendered images are randomly expanded to frame all the camera frames when using the `exportToFCPXML` function from the `ExportManager` class. *SB-4328*

- `currentVersionName` is missing from the project class. *SB-4159*

Known Issues

- When there's not enough room for all the buttons in a toolbar, the extension that can be opened to access the buttons is hidden when it opens over an OpenGL view. *HAR-8186*

- Exporting to H.264 format is not available using the OpenH264 library on Apple silicon Macs. *HAR-8188*

- On macOS Mojave, GateKeeper prevents launching the Storyboard Pro unless the quarantine extended attribute is removed from the application bundle. The quarantine extended attribute can be removed using the following command in the Terminal:

```
sudo xattr -dr com.apple.quarantine "/Applications/Toon Boom Storyboard Pro
20.1"
```

Storyboard Pro 20.0.2 Release Notes

Here is the list of changes in Storyboard Pro 20.0.2, build 20.10.2.17538 (2021-10-15):

Scripting

Feature	Description
Insert Project	The following methods were added to the `PrjMgtManager` class to allow inserting projects in the currently opened project: `InsertProject()`: Insert the source project before the specified scene. `setCreateNewAudioTrack()`: Create new audio tracks in the current project when inserting the loaded project. `setUseProjectNameAsSequencePrefix()`: Use the loaded project name as a prefix for inserted sequences. `setUseProjectNameAsScenePrefix()`: Use the loaded project name as a prefix for inserted scenes.

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*

- Custom shortcuts set for the Centerline Editor and Polyline tools are lost when the application is restarted. *SB-4292*

- Storyboard Pro sometimes crashes when using the trackpad on a MacBook Pro. *SB-4136*

- Changing the duration of a panel takes about 5 times longer than in previous versions when working in large projects. *SB-4124*

PDF Export

- The dialog to add revision notes appears twice when exporting to PDF. *SB-4353*

- Page Duration is always printed as 00:00 in the footer. *SB-4157*

- Project copyright is not printed in the page footer. *SB-4127*

- PDF Export Full Page profile has the wrong font set for captions by default. *SB-4133*

Conformation

- Camera positions are lost when importing an XML or AFF in which clips were trimmed in the editing software. *SB-4383*

- SB_PANEL_TRACKING_DATE and SB_CAPTIONS metadata are missing when exporting an XML or an AAF. *SB-4120*

Scripting

- Movies generated using the exportToMovie()function from the ExportManager class in batch mode don't have audio. *SB-4359*

- Rendered images are randomly expanded to frame all the camera frames when using the exportToFCPXML function from the ExportManager class. *SB-4328*

- currentVersionName is missing from the project class. *SB-4159*

Storyboard Pro 20.0.1 Release Notes

Here is the list of changes in Storyboard Pro 20.0.1, build 20.10.1. 16823 (2021-03-09):

Changes and Improvements

- A new option is now available in the Generate Auto-Matte dialog to choose whether or not the newly generated layer is selected upon creation. The new Select Newly Created Layer option is only available when Create Matte on New Layer is selected.

- Changing the duration of a panel from its start is no longer possible when Animatic Editing Mode is disabled. Editing the duration of a panel from the start using the mouse is still possible when Animatic Editing Mode is enabled or when holding down the CTRL (command on macOS) modifier to switch from ripple edit (yellow pointer) to non-ripple edit (red pointer) mode.

- The waveform for both audio channels are now displayed in the Timeline for stereo files.

Fixes

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

Drawing

- Random crashes when drawing straight lines with the Pencil tool by pressing SHIFT. *SB-3980*

- Paint fills on some bitmap layers are red when Apply to Visible Drawing Layers is enabled. *SB-3962*

- Delay drawing with the Brush tool when using a mouse or a drawing tablet that has a high polling rate on macOS. *SB-4018*

- Random crashes while drawing using a textured brush on some systems. *SB-4048*

Timeline

- Drawing is forbidden in the selected panel after clicking in an audio track. *SB-3803*

- Duplicating a panel marks all panels in a scene to be marked as modified when Auto Tracking Mode is enabled. *SB-3325*

- Pasting a drawing object does not work when the focus is in the Timeline view. *SB-3999*

- Moving camera keyframes in the Timeline causes the ease in and ease out values to change. *SB-4015*

- Opacity animation is duplicated when using the Split Panel at Current Frame command. *SB-3815*

- Changing the duration of a transition from the Panel view causes markers with a duration of 1 frame or longer to disappear. *SB-3934*

- Templates created from imported PDF files create single frame panels when dropped in the Timeline. *SB-3981*

- Creating animation keyframes from the Timeline while multiple layers are selected only creates keyframes on the first selected layer. *SB-3969*

- Importing an image fails if the playhead over empty frames in the Timeline. *SB-3978*

- Frame offset value is not displayed when dragging a camera keyframe in the Timeline. *SB-4027*

- Crash when selecting a layer if the focus is on a video or audio track and that the track does not contain a clip at the current frame. *SB-4060*

- Crash when pasting a panel a second time after undoing if there is top or side view in the workspace while the Transform tool is selected. *SB-3975*

- Cannot reduce a panel's duration freely when one of its layers has in and out ease values on its animation keyframes. *SB-4073*

- Storyboard Pro hangs when dropping a template or a clip at the end of the storyboard track if there is a transition between the first and second scene. *SB-3977*

- Marker duration changes when panel duration is changed and that Ripple Markers is enabled. *SB-3951*

- Some operations cause markers to ripple even when Ripple Markers is disabled. *SB-4051*

Video Tracks and Video Track Layers

- Dropping a 3D model in a video clip does not prompt to use as a 3D Model or to Render to 2D. *SB-3983*

- 3D models in clips cannot be manipulated with the Transform tool. *SB-3877*

- Opacity keyframes don't move when changing the duration of a clip. *SB-3902*

- The previous clip is added to the selection when shift + click the first frame of a clip. *SB-3901*

- The Merge Layer command should ignore movie layers instead of removing them. *SB-3926*

- Dropping grouped layers in a video track creates an empty clip. *SB-3959*

- Layer animation is lost when dragging and dropping layers into a video track. *SB-3957*

- Opacity animation is lost when using the Split Clip at Current Frame command. *SB-3816*

- The Create Layer on Surface tool doesn't work on 3D models in video clips. *SB-4017*

- Crash when selecting a movie layer after renaming a video track. *SB-4045*

- Animated transformations are lost when splitting a video clip. *SB-4049*

Audio and Effects Stack

- Using the Split Clip at Current Frame command enables all the effects in the newly created clip. *SB-3940*

- Some volume keys are lost when splitting an audio file. *SB-3854*

- Multi-selection using Shift in the Effect Stack is not working properly. *SB-3961*

- Editing the values of audio effects by clicking and dragging in the Effect Stack does not work properly on macOS. *SB-4043*

Cached Playback

- Generating frames for the playback cache is slower when the Timeline is visible on macOS. *SB-3885*

- If a project does not have any audio clips, scrubbing in the timeline will make the software crash when Playback Mode is set to use a Blackmagic Design device and that Audio Scrubbing is enabled. *SB-3979*

- Audio is doubled when using a Playback View and that audio is set to output on Blackmagic Design device. *SB-3868*

- There is a big delay when starting a playback if the project Info overlay is enabled in cached playback. *SB-4093*

PDF Export

- Custom page format is not applied properly when exporting to PDF. *SB-4001*

- The camera mask is not printed in scenes that have a static camera. *SB-4041*

- Export to PDF dialog becomes unresponsive after changing the colour of the camera mask on macOS. *SB-4042*

- Storyboard Pro crashes when attempting to export a PDF Profile. *SB-4059*

Scripting

- *ExportManager::exportToAAF/XML* does not support captions overlay. *SB-3324*

- Scripted export doesn't work when using `setUseSelectedPanels`. *SB-3958*

- Crash when using **exportToNLE** in batch mode. *SB-4006*

- Crash when calling **exportToHarmony** in batch mode. *SB-4007*

- Crash setting the current tool preset using a script if there's a hidden layer. *SB-4034*

- **TB_ChangePanelDuration** script does not work. *SB-4038*

Open GL

- Stage and Camera views don't refresh when FSAA is off on macOS using Iris Pro Graphics 6200. *SB-3967*

- Memory leak when overlays are displayed in the Stage view or Camera view. *SB-3993*

UI and Miscellaneous

- Storyboard Pro crashes on systems that have CPUs with 128 logical cores or more. *SB-4009*

- Detached views that are not on the main monitor always go back to the main monitor when reloading. *SB-3872*

- Poor performance when clicking caption boxes in the Panel view when there is a large script in the Storyboard view. *SB-3881*

- The Text tool and the Burn-In preferences are missing some fonts on macOS since Catalina. *SB-3833, SB-3840*

- Difficult to see the active state of buttons when using the light UI mode on macOS. *SB-3255*

- Expand and collapse arrows in the Library, 3D Graph and Effect stack blend with the background when using the dark UI mode on macOS Big Sur. *SB-3888*

- Some shortcuts stop responding after clicking the Cancel button in the Keyboard Shortcuts dialog. *SB-3350*

- The content of the Stage and Camera view shift when a panel contains too many layers for the space available in the layer list and that the scrollbar appears. *SB-4071*

- Dropping a template in an existing panel clears the layers' metadatas and causes grouped layers to disappear. *SB-4039*

Storyboard Pro 20 Release Notes

Here is the list of changes in Storyboard Pro 20, build 20.10.0. 16510 (2020-11-22):

New Features

Drawing Tools

Feature	Description
Stencil Brush Tool	A new **Stencil Brush** tool is now available in Storyboard Pro. This tool is located in a drop-down menu under the Brush tool in the Tools toolbar. This tool has two modes, **Overlay Brush Mode** and **Repaint Brush Mode**. The two modes are available in the Stencil Brush Tool Properties, under the brush presets. **Repaint Brush Mode:** In this mode, the existing artwork is replaced and repainted, ignoring empty zones. The Stencil Brush always behaves as a Repaint Brush on bitmap layers. **Overlay Brush Mode:** In this mode, the existing artwork is not modified. Instead, the existing artwork is used as a mask to clip new brush

Feature	Description
	strokes on top of the existing artwork. You can perform a multi-layer selection and use the union of the artwork in all of the selected layers as the mask. Although all the selected layers participate in generating the mask, only the current active layer is modified with the new brush strokes. The Overlay Brush mode is available for vector layers only.
Pencil Textures	Pencil lines can now be drawn with textures. A pencil line texture is applied with regard to the width and direction of the pencil lines. For example, if you draw a spiral with a dash texture, the dashes will follow the curves of the spiral, and if you draw a thicker line with the same texture, the dashes will be both longer and thicker. Pencil textures can also be applied to the Line ✎ , Rectangle ☐ , Ellipse ○ and Polyline ⤴ tools. Default textures are found under the **Texture** tab in the Pencil ✐ tool extended properties. You can also import your own textures. Select the pencil line and in the Tool Properties assign a new texture.
Single Line and Multiple Lines Cutting Modes	The Cutter ✍ tool now has two gesture cutting modes available in the Tool Properties view: • **Single Line Cutting Gesture** ✶ : This mode trims the first line segment cut by a single straight gesture. • **Multiple Lines Cutting Gesture** ✳ : This new mode trims multiple line segments cut by the same gesture.
Options for drawing curves with the Line Tool	New options in the Line ✎ tool properties to curve the line on mouse up: • **Curve Line Mode** ⟋ : Allows for the drawing of a curved line by moving the mouse after drawing a straight line. Click or press Enter to commit the curved line. • **S-Curve Line Mode** ⟿ : Allows for the drawing of an S-shaped curved line. Moving the mouse after creating a straight line will curve the line from both ends until the mouse is clicked. The tail end of the line will then curve until the mouse is clicked again or Enter is pressed.
Auto Fill with Brush	New **Auto Fill** 🔴 option in the Brush tool properties. When active, drawing a closed shape with the Brush ✐ tool will automatically fill the closed shape with the currently assigned paint colour.
Select tool improvements	• The Select ➤ tool pivot now preserves its position when using the **Undo** and **Redo** commands.

Feature	Description
	• The Select tool pivot now follows the selection when scaling, rotating and skewing.
Centerline Editor tool improvements	Improvements have been added for editing brush strokes with the Centerline Editor tool: • Points can now be deleted from the centerline curve on brush strokes by selecting them and pressing the Delete key. • New **Centerline Smoothness** option to control the fitting of the center line is now available in the Tool Properties. • The centerline selection is now maintained when using the **Undo** and **Redo** commands.
Preserve selection when undoing or redoing	The Contour Editor , Perspective and Envelop tools now preserve the selection when using the **Undo** and **Redo** commands.
Adjusting eraser size	It's now possible to adjust the eraser size holding **o**, or by using the **[** and **]** shortcuts when using the eraser end of the Wacom pen.

Drawing Layers

Feature	Description
Scroll bar in the layer list	The layer list that appears in the Stage view, Camera view and in the panels in the Thumbnail view, now has a scrollbar to quickly move and scroll down the list of layers.
Toggling layer states	You can now toggle the different states (visibility, lock, Background Mode) of multiple layers by holding the Alt key when clicking on the **Show/Hide** , **Lock/Unlock** or **Background Mode** icons. Alt-clicking the Show/Hide icon on a layer will hide all other layers in the panel and only show the layer on which you clicked. If the layer that is being clicked is the only layer that is visible, Alt-clicking will enable all the layers in the panel.
Dropping layers in groups	Layers can now be dropped into collapsed groups. Once dropped, the layer will be placed at the top of the group.

Feature	Description
Animated Layer Opacity	The opacity value of layers can now be animated over time. To animate the opacity of a layer, in the Stage or Camera view, select the layer in the layer panel and click the ✚ button next to the **Opacity** value at the top of the layer list. This will create an opacity keyframe at the current frame. In the Timeline view, move the red playhead to select another frame and repeat these steps to have the opacity change over time.
Blurring Layers	It is now possible to preview Blur effects before applying them by using the new **Preview** button in the Blur dialogs. All the Blur effects (**Blur**, **Radial Zoom Blur** and **Directional Blur**) can now be applied to vector layers without having to convert them beforehand. Vector layers will be converted automatically when the effect is applied. A visual cue is now displayed in the Stage and Camera views to show the position of the focus point used for the **Radial Zoom Blur**.

Model View

Feature	Description
Model View	The Model view is now available in Storyboard Pro to display reference drawings. Drawings can be displayed in this view by dragging and dropping drawing layers into the Model view's window.

Stage and Camera Views

Feature	Description

Onion Skin Options	The following options are now available for better Onion Skin 🥤 display in the Camera tab of the Preferences:
	
	• **Lightness as Alpha**: In this mode, when displaying drawings before and after the current frame, dark areas remain opaque while light areas become transparent.
	
	• **Onion Skin Render Style** has replaced the **Enable Shade** option and has the following options:
	
	    • **Original Colours**: Gradually fades the colours in the drawings.
	
	    • **Coloured**: Uses the colours set in the Preferences > Colours tab.
	
	    • **Coloured Outline**: Displays the drawings as outline using the

Feature	Description
	colours set in Preferences > Colours tab. • **Onion Skin Position**: Allows you to select whether the onion skins are displayed under or over the current panel.
Proportion Grid	A new **Proportion Grid** ⊞ can now be displayed in the Stage and the Camera views. This grid follows the camera and can be used to help compose your drawings or your camera shots. The number of horizontal and vertical divisions for this grid can be customized from the Camera tab of the Preferences. By default, the grid is divided into 3 vertical and 3 horizontal sections to create the classic rule of thirds composition grid. A new button in the status bar of the Stage and Camera views is available to turn the grid on or off.
Show Drawing Grid Button	The **Show/Hide Grid** ⊞ button in the Stage and Camera view's status bars has now been replaced by the **12 Field Grid** 12 button and can be used to select which grid is displayed. Quickly clicking the **12 Field Grid** 12 button shows and hides the grid. Clicking and holding the **12 Field Grid** 12 button opens a small menu where all the grid sizes are displayed for selection.
16x12 Field Grid	A new **16x12 Field Grid** ⊞ has been added to the list of available drawing grids.

Playback

Feature	Description
Cached Playback	Storyboard Pro can now pre-render frames using OpenGL and save them in a cache. This cached playback can be used to reliably playback at the project's frame rate, without pausing or skipping. A cached playback can be viewed from the Playback view in Storyboard Pro or on a reference monitor through a Blackmagic Design playback device. The cached playback can be enabled in the Preferences > Playback tab, under the Playback Mode options: • **Disabled**: When this option is selected, cached playback is disabled. This is the default state. • **Playback View**: When this option is selected, the Playback view becomes available to add to the Storyboard Pro workspace. Relaunch is required. • **[Blackmagic Design playback device]**: If a Blackmagic Design playback device is installed or connected to your computer, the device

Feature	Description
	will be appear and be available for selection in the Playback Mode options drop-down.
Support for Blackmagic Design playback devices	Storyboard Pro now supports the use of Blackmagic Design playback devices when using cached playback. If a Blackmagic Design playback device is connected to your computer, it will be available in the Preferences > Playback tab > Playback Mode options drop-down.
Audio Output Device	Storyboard Pro now supports the use of Blackmagic Design devices for audio output. If a Blackmagic Design device is connected to your computer, it will be available in the Preferences > Playback tab > Audio Output Device options drop-down.
Playback Range	You can now define the playback range from the top menu, by selecting Play > Playback Range and one of the following: • **Storyboard Track** • **Track Storyboard and Audio Tracks** • **Working Range** When the **Working Range** option is selected, the Start and Stop Frames of the working range are displayed as adjustable black triangles in the Timeline view's ruler and the range selection is indicated in dark grey. A way to quickly redefine the range is to move the red playhead in the Timeline view and set the Start and Stop Frames, or to select a range of panels and set them as the range. This can be done from the top menu, by selecting Play > Playback Range and one of the following: • **Set Start Frame** • **Set Stop Frame** • **Set Range from Selection** All of the Playback Range options are also available by right-clicking on the Timeline view's ruler.

Audio Effects

Feature	Description
Effects Stack View	It is now possible to add audio effects to audio clips using the new **Effect Stack** view (Windows > Effect Stack). The following effects can be added and

Feature	Description
	managed in this view: • **Balance** • **Delay** • **High Pass Filter** • **Low Pass Filter** • **Pitch Shifter** • **Reverb** • **Volume** To add an effect to an audio clip, select the clip in the Timeline view, then at the bottom right of the Effect Stack view, click on the **Add Effect** 𝑓ₓ button.
Audio Speed/Duration	You can now change the speed and duration of audio clips using the new **Speed/Duration** dialog (accessed by right-clicking on an audio clip). The following options are available: • **Speed**: Sets the speed of the audio clip using a percentage. This automatically changes the duration. • **Duration**: Sets the duration of the audio clip. This automatically changes the speed. • **Original Duration**: Displays the duration of the clip at 100% speed. • **Ripple-Edit**: Shifts all the audio clips that come after the selected audio clip. • **Preserve Audio Pitch**: Use this option to preserve the current audio pitch when changing the speed or duration.

Timeline

Feature	Description
Creating empty clips on video tracks	It is now possible to create clips on video tracks that contain multiple drawing layers. To do this, position the red playhead to the desired location in the Timeline view, then right-click on the desired video track and from the menu select **New Empty Clip**. Select the newly created clip to display its layers in the Stage or Camera view. You can add more layers to the clip's layer stack or draw and create artwork on these layers.

Feature	Description
Creating a clip from a drawing panel	A clip can now be created by dragging a panel from the Storyboard track to a video track. This creates an independent copy of all the layers in that panel, now housed in a clip. The reverse is also possible, a clip can be dragged from a video track to the Storyboard track to create a panel. This works as long as the clip does not contain a movie file.
Image and Movie clip colours	Image clips and Movie clips on video tracks now have their own distinctive colours in the Timeline view. The default colours can be changed in the Preferences > Colours tab.
Ripple Markers	There is a new option to **Ripple Markers** in the Timeline view when editing panels. This option can be turned on or off from the Storyboard > Markers menu and in the contextual menu that appears when right-clicking on the Timeline view's ruler. When enabled, operations that cause the overall project duration to change will shift and ripple the markers to follow the panels. Deleting a panel ripples markers up the Timeline from the point of the deleted panel. Markers placed before or in the timecode range of the deleted panel will stay at their current timecode.
Timeline Marker Enhancements	To help keep the colour of markers consistent, a list of predefined colours is now available when editing the properties of a timeline marker. It is still possible to assign a custom colour using the **Custom** option at the bottom of the colour list. Additionally, markers now have a Name field in addition to the Note field.
Link Clips to Panel	A new command in the Timeline view now allows you to link audio and video clips to a specific panel. When linked to a panel, a clip will follow its linked panel instead of following the panel that is located at the clip's first frame, allowing to sync audio with any panel.

Conformation

Feature	Description
Conformation of Video Tracks	Video track information can now be exported in an XML or AAF file when exporting via the **File > Conformation > Export Project** command, by checking the new **Export video tracks** option in the Options tab of the Export Project

Feature	Description
	dialog box. When enabled, content of video tracks will be included in the generated XML or AAF file and the first frame of each clip on these tracks will be rendered as a flat image.
Exporting panels as movie files	Panels can now be exported in an XML or AAF file when exporting via the **File > Conformation > Export Project** command, by checking the new **Export panels as movies on additional track** option in the Options tab of the Export Project dialog box. All the panels in a project can be rendered as movies or only panels that have camera or layer motion by additionally selecting the **Only panels with motion** option.

Exporting and Pipeline Integration

Feature	Description
Support for additional QuickTime codecs on macOS	On macOS additional codecs are now available when exporting QuickTime movies. The list of codecs available depends on the version of macOS being used. The following are now available on Catalina: • **Apple ProRes 422 HQ** • **Apple ProRes 422 LT** • **Apple ProRes 422 Proxy** • **H.265** (Alpha channel support is available with Catalina)
QuickTime movies in full colour depth	Rendering to QuickTime on macOS now supports the codecs' full bit depth. **ProRes 4444** supports up to 12-bit for the RGB channels and **ProRes 422** supports 10-bit per channel.
Export Bitmaps with Custom Resolution	New options have been added to the resolution list in the Export to Bitmap dialog that allows exporting at twice the project resolution or using a custom resolution, without having to change the project resolution.
Movies with Transparent Background	A **Transparent Background** option is now available when exporting movies using a codec which supports alpha channel. On macOS, this option is greyed out if the selected QuickTime codec does not support an alpha channel. On Windows, the options cannot be greyed out automatically. A codec supporting an alpha channel with the depth set to Millions of Colors+ must be selected.

Feature	Description
	This option is available in both Movie and EDL/AAF/XML exports.
Bitmap Export with Transparent Background	The **Transparent Background** option now works for TGA and PNG image formats when using the Export > Bitmap command. In previous versions, this option was only available when exporting to PSD files.

Colour Space Management	Storyboard Pro now includes the OpenColorIO library for managing and converting colours to ensure consistent colours throughout your pipeline.
	
	• The working colour space for a project can be set when creating a project or from the project properties. This colour space is used for internal processing when rendering. All images imported into a project should use the same colour space as images are not converted on import.
	
	• The colour space used when exporting images and movies can be set from their respective export dialogs. If the colour space selected at export differs from the working colour space, the colours will be converted during the export process.
	
	• Exported images and videos in the following formats will be tagged with the colour space information. Other formats will only have the colour values converted and will not be tagged:
	
	  • PSD and PNG images
	
	  • QuickTime Movie export on macOS

Importing Audio Tracks from an AAF or FCP XML	A new dialog to import audio tracks from an XML or AAF file is now available in Storyboard Pro. The dialog can be opened using **File > Import > Audio Tracks** command and has the following options: • **Import to New Audio Tracks**: This option will create new audio tracks and import the audio to these tracks. • **Replace all Audio Tracks**: This option will remove all audio tracks from the project and replace them with new audio tracks on which the linked audio clips will be imported.
Importing media through Media Foundation	Importing audio and movie files on Windows is now done through Microsoft Media Foundation. Only audio and video files that are in a format supported by Microsoft Media Foundation can be imported in Storyboard Pro. See the list of supported formats here: https://docs.microsoft.com/en-us/windows/win32/medfound/supported-media-formats-in-media-foundation.
Harmony Export	Content of video tracks can now be exported as layers in Harmony when

Feature	Description
	exporting to Harmony using the **Original Scene** export type.

PDF Export

Feature	Description
Align Left Most Camera Frame	The **Align Left Most Camera Frame** option is now available on the Panels tab of the PDF Profile dialog. When a storyboard panel contains a camera motion, selecting this option will align the left most camera keyframe with the panel frames in the exported PDF. The artwork and camera movement will spread over the caption columns and to the other rows depending on the range of camera movement. This new alignment option works best when using the options in one of the three Japanese PDF profiles.
Unicode font support	PDF Export now uses Qt to better support languages with special characters. All fonts installed on the system can now be used to export captions. Note that password protection is not available with the Qt library. An external tool will need to be used if the PDF needs to be password protected.

Function Editor

Feature	Description
Editing Bezier Curves	The velocity functions for the camera and layer motion are now Bezier curves. These provide better editability in the Function Editor than the previous Ease curves.
Independent ease adjustment	The camera Rotation and Focal Length function curves are no longer velobased. These now use Bezier curves that can be edited independently from the velocity function to fine tune ease in and out.

Scripting

Feature	Description
Method to list the name of	Added the new `view.viewList()` function which returns all of the current

Feature	Description

views	views in Storyboard. It can alternatively be called with a parameter, a type of view, to only return the views of that type.
	
	Sample scripts:
	
	``
	var list = view.viewList();
	MessageLog.trace(list);
	for (var i in list)
	{ MessageLog.trace(view.type(list[i])); }
	``
	
	or
	
	``
	var list = view.viewList("Camera View");
	MessageLog.trace(list);
	for (var i in list)
	{ MessageLog.trace(list[i]); }
	``

Other Enhancements

- The **Easy Drag** option is now available in the Transform Tool properties. When enabled, you can move the selection by clicking anywhere inside its bounding box. When Easy Drag is disabled you must click directly on the selected artwork to be able to move it.

- The **Snap and Align** and **Snap to Alignment Guides** options can now be used with Bitmap layers and the drawing tools.

- The font list that appears in the Text T tool's Tool Properties view will now filter as you type the name of the font you're looking for.

- Shortcuts assigned to commands and tools are now displayed in the tooltips that appear when the mouse hovers over a button.

Fixed Issues

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

- The Movie Format always resets to the top option in the drop-down list after reopening the Export to EDL/AAF/XML dialog. *SB-3301*

- Layer transparency does not render properly in the Stage and Camera views. *SB-3224*

- When exporting a project for Conformation, if the **Always nest layers** option is unchecked, the exported images are blank. *SB-3082*

- Audio clips disappear from the Timeline view after splitting, prior to a Copy and Paste command followed by an Undo command. *SB-2583*

- Scripting: `SelectionManager::setLayerSelection` is not updated when changing panels. *SB-2094*

- Soundtrack name is different each time a project is exported to Toon Boom. *SB-1537*

- Captions > Format Captions > Clear Formatting does not clear all text formatting. *SB-3234*

- The codec previously selected in the Movie Options is not persisted after choosing another Movie Format for export. *SB-3300*

- Audio clips disappear from synched audio tracks when using the **Split Panel at Current Frame** command before a gap. *SB-3349*

- Rendering a 3D model to 2D does not give the same result as displaying the model in a 3D scene using the same focal length. *SB-3558*

- Changing the codec in QuickTime Video Config for Export > EDL AAF XML doesn't create a movie in the selected codec on Windows. *SB-3542*

- `ExportManager.setSplitTimeCountMode` and `setSplitTimeCountSplit` have their parameters inverted. *SB-3592*

- The mouse cursor sticks to the marquee selection and fills it with black after a right-clicking on the contextual video or audio track menu. *SB-3360*

- Typing is slow in the caption fields of the Storyboard view when there is large text. *SB-3780*

- New project from Final Draft freezes when including transitions if the **Preserve project length when adding transition** option is not enabled. *SB-3352*

- Suggested name when using the Save As command when working on a project in SBPZ format is the internal folder name instead of the name of the SBP file. *SB-3556*

- Overlapping vertical strokes are not displayed properly when lowering the opacity of a layer. *SB-3224*

- Snapshots created on the last frame of panels can't be edited, deleted and moved. *SB-3537*