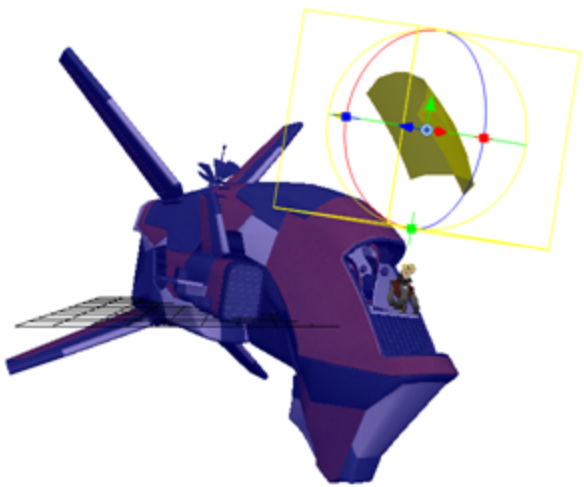
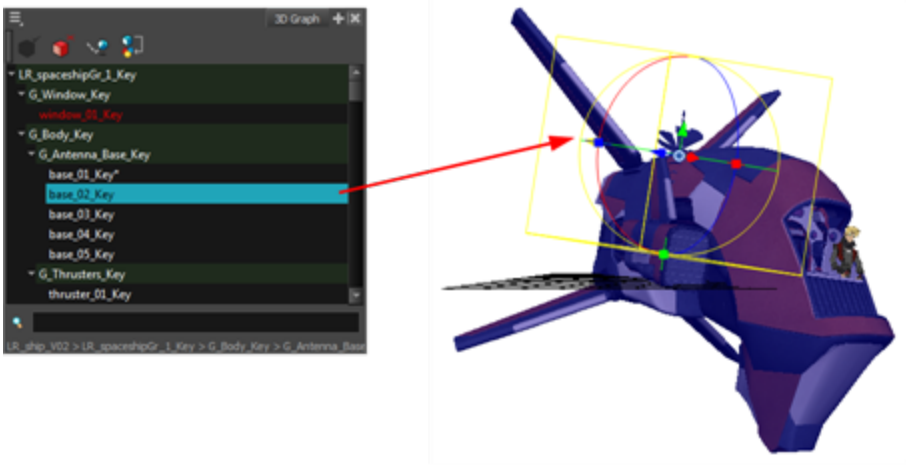
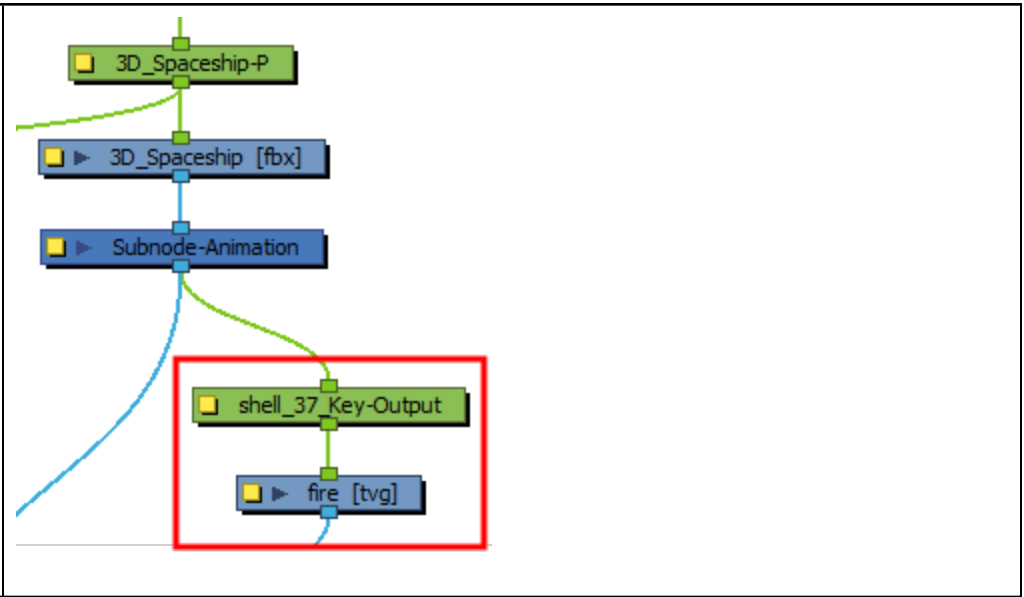
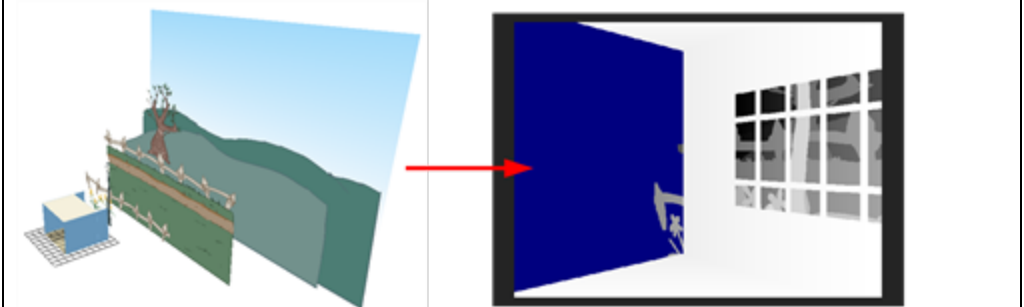
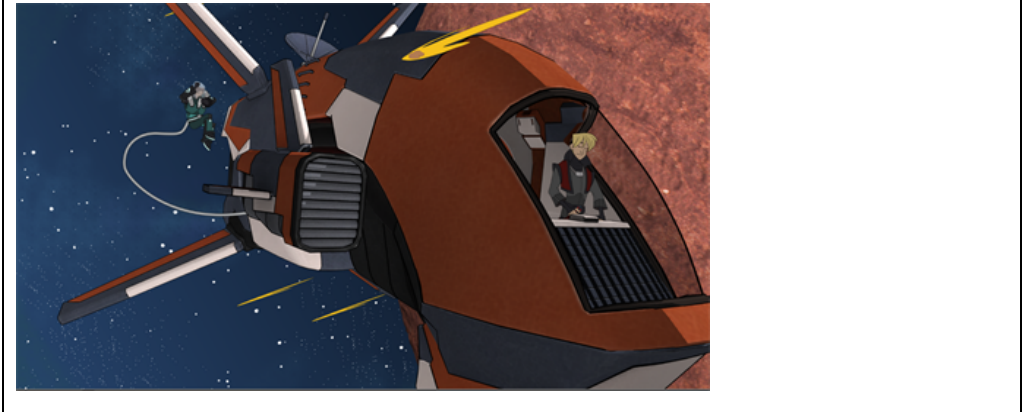


Toon Boom Harmony 14.0.0 Release Notes

Here are the new features and bug fixes in Toon Boom Harmony 14.0.0:

3D Features

Feature	Description
<p>Ability to animate individual parts of a 3D model</p>	<p>A new node called SubNodeAnimation allows you to select and animate any part of a 3D mode.</p> 
<p>3D Graph view</p>	<p>A new view allows you to see the hierarchy of subnodes in your 3D model.</p> 
<p>3D Kinematic Output node</p>	<p>The new 3D Kinematic Output node transmits the position, rotation and scale/skew value from a 3D subnode to a 2D layer.</p>

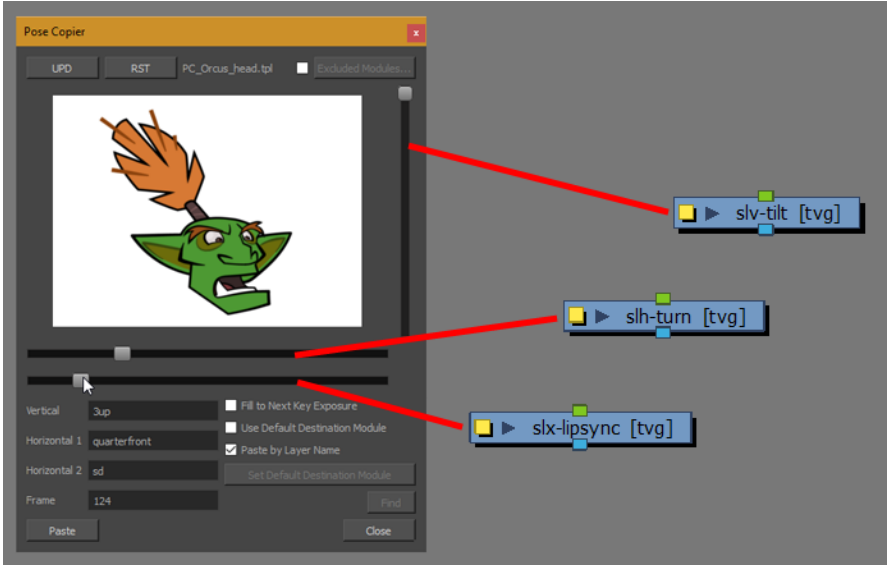
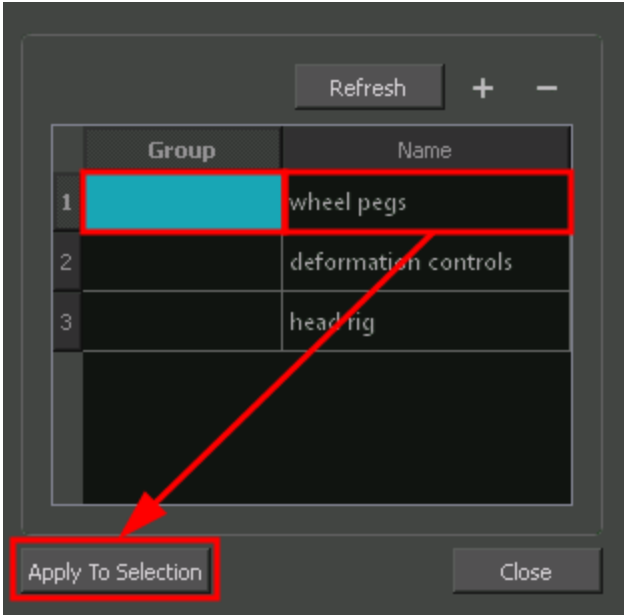
	
<p>Z Depth View in Camera View</p>	<p>The Depth View mode can come in handy when positioning 3D models, creating multiplane backgrounds and building sets in 3D space.</p> 
<p>Deep image compositing with Arnold and RenderMan</p>	<p>Using the Arnold or RenderMan renderers for 3D objects, Harmony now supports deep image compositing. This allows you to have semi-transparent pixels with Z depth information so you can place your 2D objects inside 3D models transparent parts. Harmony uses EXR file format that supports deep image information. It also addresses issues of antialiasing between 3D models and 2D elements.</p> 
<p>3D Model conversion to FBX when importing</p>	<p>The textures are incorporated in the .fbx file created in the conversion. By doing so, they appear in OpenGL display.</p>
<p>3D Maya files are incorporated inside templates</p>	<p>When creating templates using 3D objects, the 3D Maya files are now incorporated inside the template.</p>

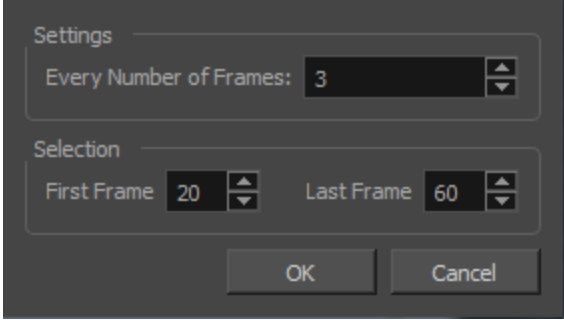
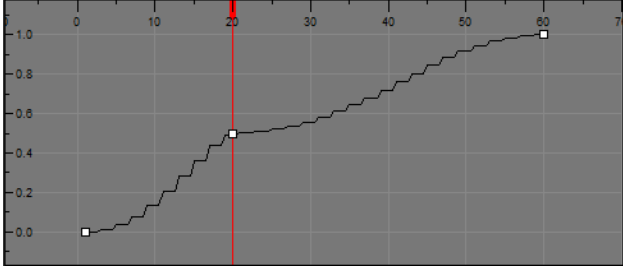
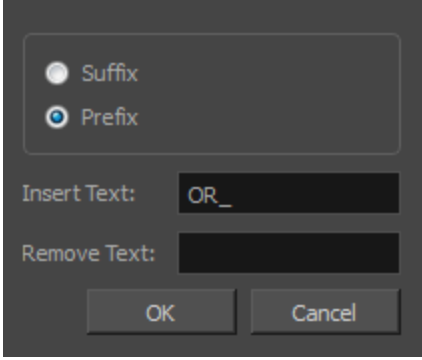
Face Selected to Draw	Renamed the Look at Selected command item in the Perspective View menu to Face Selected to Draw and implemented the Look at Selected function to behave like standard 3D applications.
EXR and DTEX as an output format in the Write node	The EXR and DTEX output formats have been added to the Write node's supported output formats.
Deep image support for Cutter nodes	The Cutter node now supports deep image compositing.
MayaBatchRenderServer is removed	The MayaBatchRenderServer node has been removed from the Node Library view.

Gaming Features

Feature	Description
Ability to create multiple animation cycles in the same scene when exporting to Unity	You can add Scene markers to define different cycles of animation.


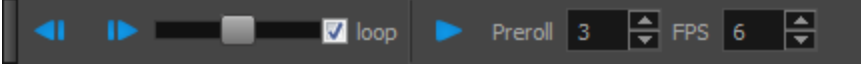
Scripting Features

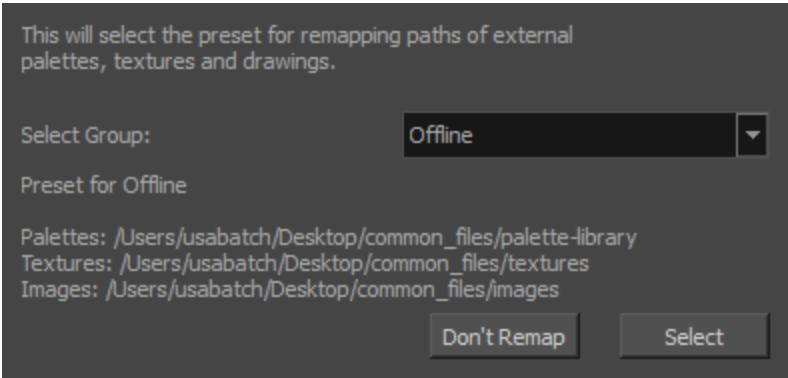
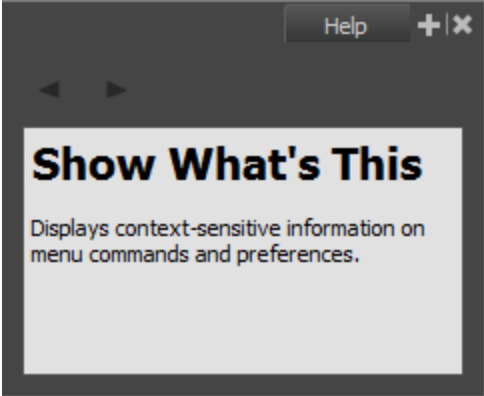
Feature	Description
<p>New options in the Pose Copier script</p>	<p>You can now paste Paste by Name so that if your cut-out rig doesn't use groups it will still work. You need to create your templates from the Node view. When you paste a pose with the Pose Copier's interface you can extend the exposure till the next key exposure. Previously it would only paste one frame.</p> 
<p>Selection Presets</p>	<p>As you're animating, you might find that you are constantly selecting the same pegs, drawing layers, bezier points on a deformation envelope, part of a character rig, etc. You can create a preset that automatically selects any defined element or group of elements.</p> <p>You can now create presets of selected objects like pegs, drawing layers, subnodes, deformer controls.</p> 

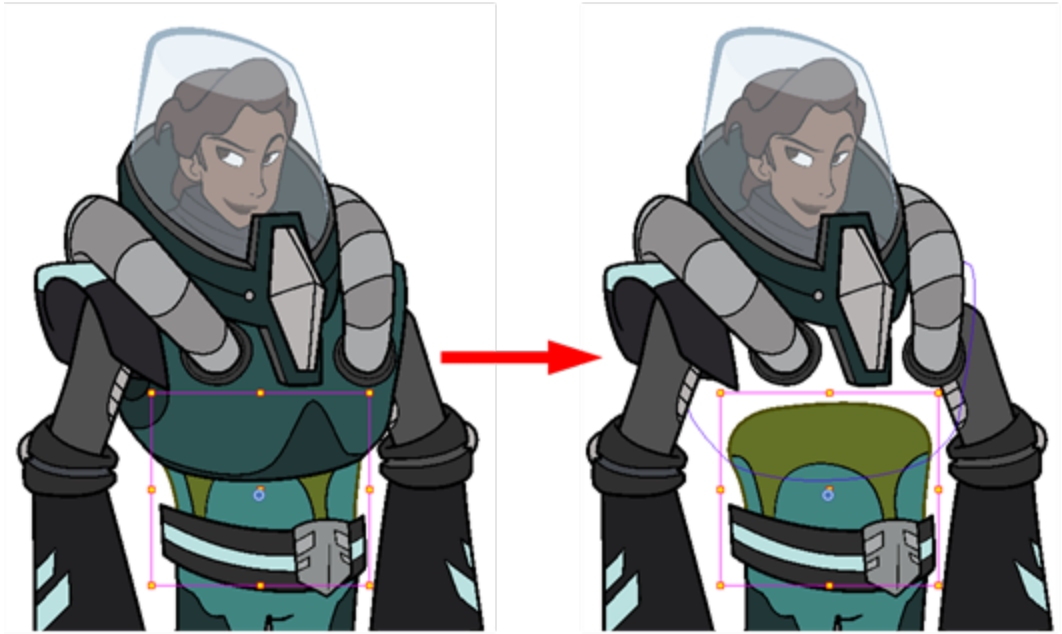
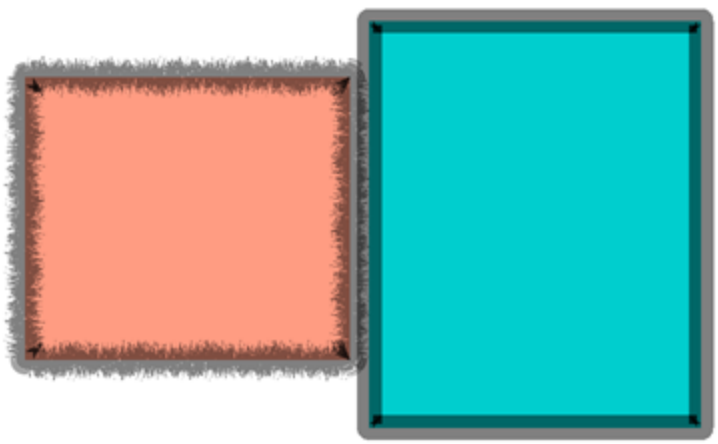
<p>Set function curves on step</p>	<p>You can now use a script, TB_CreateStepsOn, to set function curves velocity on step of 2's, 3's, and so on.</p>  
<p>Remove Part of Node Names</p>	<p>There is a new option in the Add Prefix/Suffix function to remove part of the name of selected nodes.</p> 
<p>TB_CreateKeyFramesOn.js script in Essentials</p>	<p>The TB_CreateKeyFramesOn.js script was added in Harmony Essentials.</p>
<p>FBX, Collada, and IO files creation via scripting</p>	<p>Element using FBX, Collada and other IO files can now be created by the scripting interface.</p>
<p>TB_Set_3dRenderer_paths script</p>	<p>There is a new script, TB_Set_3dRenderer_paths, to help set the paths for Maya and RenderMan applications.</p>

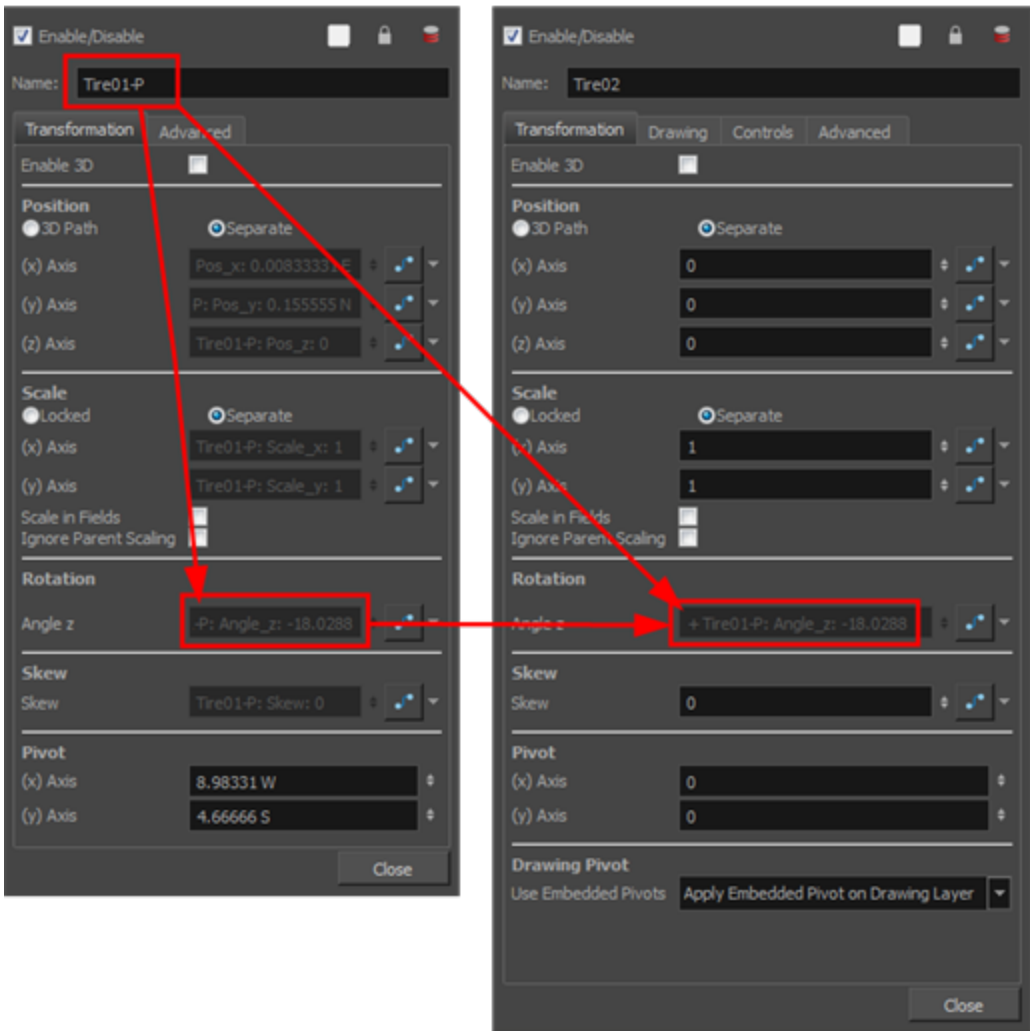
Miscellaneous Features

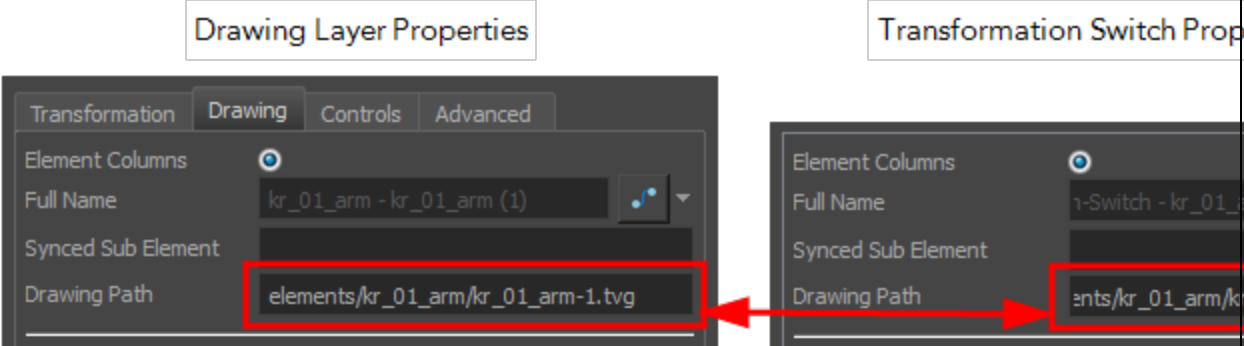
Feature	Description
Service	The Service Launcher is a new application that let's you run the different services as non-administrator users.

<p>Launcher application</p>	<p>You can start the batch rendering and vectorization processes, the database server, the Web Control Center server and the Link server with this application. It will also restart them periodically if one stops.</p>
<p>Multi-layer Syncing</p>	<p>Use the Sync Layer feature when you need drawings to be separated on different layers, but to have the same timing, such as with the front and back of a shirt collar. The drawing exposures of synced layers not only update automatically, but their drawing substitutions correspond as well, as long as the drawings are labelled properly.</p> 
<p>Easy Flipping toolbar new options</p>	<p>One key press starts a playback of drawings with pre and after roll. The Preroll option sets the number of drawings to be flipped through before the starting drawing. The starting drawing is determined by the position of the red playhead in the Timeline view.</p> 
<p>Paste Special new option</p>	<p>You can now perform a validation to match by Node/Layer name.</p>
<p>Remapping of Palettes, Textures and linked images</p>	<p>When working in a studio, shared palettes, images and textures used in colour-overrides are saved to specific locations, at the environment or job level, on the Harmony server. When you export your scene to work offline at another location, such as from home, you will find that when you open the scene from the new location, Harmony will be unable to find these files.</p> <p>To avoid this problem, you can create presets that will point to where these shared files are located when you are working offline from a different location, as well as presets to point back to the Harmony server when you get back to the studio.</p> <p>You will still need the studio to give you a package with the shared palettes, textures and images.</p>

	 <p>Once you have created remapping presets, the Choose the Remapping Group dialog box will open every time you open a scene –see Remapping Palettes, Textures and Linked Images in .</p>
<p>Support Spanish translations</p>	<p>Harmony 14 is now available in Spanish.</p>
<p>Integrated Help view</p>	<p>If you are unsure about what a certain menu item is in the Top menu or the function of a specific preference in the Preferences panel, use the Integrated Help.</p> <p>If you keep the Integrated Help window open for the entire duration of your work session, then you can use the forward and backward arrows to scroll through a history of the help information that you called up during your session.</p> 
<p>Separated the toggle Add/Remove keyframes in the Function Editor into Add and Delete buttons</p>	<p>In the Function view, the Add/Remove Keyframes button has been divided in two buttons, Add and Delete.</p>
<p>Non-contiguous layer selection</p>	<p>You can now perform a a non-contiguous layer selection in the left side of the Timeline view.</p>
<p>Support of</p>	<p>Harmony now supports the import of new Photoshop PSB file format.</p>

<p>new Photoshop PSB file format</p>	
<p>Support of multi-layer PSD files in 16 bits per channel</p>	<p>Harmony now supports the import of multi-layer PSD files in 16 bits per channel.</p>
<p>Current drawing available in Outline in the Camera view</p>	<p>You can use the Outline mode to temporarily convert all the drawings on a layer to outlines. You can still select and manipulate the drawings in this mode. Select a drawing by selecting its outline. The fill is not taken into account when making selections in this mode.</p> 
<p>New OpenGL Pencil Opacity Preference</p>	<p>The new preference lets you display all the pencil lines less opaque so that you can better judge where the centre line, used for paint area, falls. It's especially useful with textured pencil outlines where you want to make sure that two areas are close enough but don't overlap one another. You can also access it from the Top Light icon in the Camera view toolbar.</p> 

<p>New option in dbu and dbe to help synchronize databases</p>	<p>The purpose of this feature is to be able to avoid shutting down the whole database when you want to synchronize two different databases. Users trying to work while it's in pause mode won't be able to and, in the case of saving a scene, a warning message saying that the server is paused will appear.</p>
<p>Updates on the Center on Selection in Timeline view feature</p>	<p>The operation Center on Selection goes to the layer selected and if you do it multiple times it will toggle between showing the collapsed children layers or not.</p>
<p>Option to copy/paste a function's link</p>	<p>You can now use the Copy Function Link and Paste Function link commands to easily link parameters to a same function.</p> 
<p>Import Images, Import Movie, Link to image and Import from Scanner</p>	<p>Removed the Create Symbol for Imported Items.</p>

interface changes	
<p>New “Associate Parent Transformation Switch with Selected Element” button in the Deformation toolbar</p>	<p>When a drawing is selected, it will relink the transformation switch to it, if it wasn't already the case. It can relink more than one transformation switches at a time—see Reusing Deformation Groups for Multi-pose Rigs.</p> 
<p>Tooltips in the Colour-Override node show the path to the palette</p>	<p>The Colour-Override node now has tooltips to show the path to the palette.</p>
<p>Struck missing palettes</p>	<p>Colour palettes now have a strike-through over their name when they are missing.</p>
<p>Support for reading and writing 16 bits per channel rgb and rgba png files</p>	<p>Harmony now supports the reading and writing of 16 bits per channel rgb and rgba png files.</p>

Web Control Center Features

Feature	Description
<p>Partial updates between database and offline scene through Web Control Center</p>	<p>Web Control Center allows you to update a database scene with only the changes you made to the same scene on your local computer, and vice versa. If there were changes to the database scene, you can download them to its offline version on your local computer. Web Control Center works in tandem with Harmony to make the upload, download and updating of scenes seamless and quick.</p> <p>When uploading or downloading a scene, Harmony prepares the export package with only the changes in the scene, zips it, sends it over the Internet, unzips it and finally imports it, updating the destination scene. This is done directly in Harmony Premium or Harmony Advanced; there is no need to do this in the Web Control Center.</p>
<p>Allow multiple users to use Web Control Center at the same time</p>	<p>When multiple users, on different machines, use the Web Control Center to do operations, anything done on one station will be updated live on the others. Add useQueue</p>

and keep their interface up to date	as an option.
Update Web Control Center scene without the highest privileges	In Web Control Center, Harmony allows the owner of a scene to change the status of that scene even if he doesn't have the highest privileges.

What's Fixed?

Item Fixed	Description
Crash	Fixed crash when adding node metadata.
	Fixed issue where an erroneous OFX plugin would make Harmony crash at start up.
	Fixed crash when enabling the Flatten option of the Line Art node.
	Fixed crash while using Envelope tool on brush drawing.
	Fixed crash in the Function Editor when typing a value in an Ease curve.
	Fixed crash while exiting Harmony if two Camera views were displayed, one in OpenGL and one in Render mode, in the process of rendering.
	Fixed crash while exiting Harmony before a render was finished.
	Fixed issue where Harmony crashed after performing "Group with composite" on nodes that are connected through different Multi-Port-Out ports inside a group.
	Fixed crash that occurred when deleting cables and then panning in the Node view.
	Fixed crash if hitting the Esc key when in the Layer Properties view.
	Fixed crash while importing 3D model into an existing layer set to *.tiff image.
	Fixed crash while doing Shift and Trace in the Desk and enabling the Light Table.
	Fixed crash while playing with Deformation Scale controls.
	Fixed crash while merging layers that had been cloned.
Start up	Fixed issue where Xsheet type users cannot open Harmony Premium.
	Fixed situation where Harmony would not start because of some OFX plugin installed.
	Fix for warning "Cannot open the scene because: No such version for this scene: 6...". This could happen when opening scenes with multiple versions.
User Interface	On Windows, the default high-dpi setting was disabled so that text and UI element are shown properly. The application will appear a bit blurry but the text and UI elements will be displayed properly. The previous behaviour is available by starting the application, Harmony [edition].exe , from the command line using the -enableHighDpi option. To not have to start using the command line, the shortcut to start Harmony can be modified to add the option at the end of the target: "C:\Program Files (x86)\Toon Boom Animation\Toon Boom Harmony 14.0 Premium\win64\bin\wstart.exe" Harmony[edition].exe -enableHighDpi Replace the [edition] portion with the name of your edition (capitalized).
	Fixed Colour Picker so that it works with Retina displays.
	Paste Special window has been changed to fit on a Mac 11" laptop.

	Fixed the Connect to Composite list so it appears in alphabetical order.
	Fixed issue where the palettes in the Colour-Override's database browser were not in alphabetical order on Linux.
	Fix menu in the Layer Properties window to assign element columns in alphabetical order.
Performance	Sped up the copy and paste process in the Timeline with large collapsed rigs.
	Fixed drawing lag on Mac 10.11 OS when had overlapping toolbars.
	Fix for Camera view Lag when Wacom Tablet pen is hovering over tablet.
	Fixed issue when rendering some heavy scenes interactively where the memory was not released so it kept taking more and more of it.
	Fixed issue where opening Control Center in script mode on a tcp socket and then opening a second instance specifying the same port, Control Center would eat up all available RAM and the system froze.
Drawing	Fix for Select tool overriding pencil texture of selected lines.
	Fixed issue where unselecting one stroke with the Perspective tool would unselect all strokes.
	Fix loss of drawing when you rename it to the same number as a previously deleted one.
	Fixed script "TB_PL_Duplicate_Drawing" so it can create duplicate of drawings.
	Fixed Drawing and Element names that could not start with "-" (hyphen character).
	Fixed issue where expanding a drawing's exposure with the Extend Exposure and the Overwrite option into another drawing replaced the second drawing up until the end of its exposure rather than up until the selected frame.
Xsheet	Fixed issue where you can't Mark Drawing as Key, Breakdown or In-between from the Xsheet menu.
	Fixed issue where "Clone Selected Columns: Drawing and Timing" in the Xsheet would clone the selected column and all its clones.
	Fixed Expand and Collapse menu item of the Xsheet view.
Gaming	Fixed export to Unity. Importing assets from harmony into Unity with specific value broke the construction of the assets. Everything would appear in front of one another without recognizing the location of each element.
	Fixed issue where game metadata was not completely removed when deleted.
	Fixed LoopOne and LoopAll components that had their name reversed. In Unity, it is possible to attach to an object the LoopAll or the LoopOne scripts, however, those scripts have their names interchanged. The names now correctly reflect their functionality.
	Fixed issue with having the wrong prop name in Unity.
Deformation	Fix so that we can add Kinematic Output nodes in the Timeline view directly above a deformer node.
	Fixed issue where we couldn't create a deformer under a Kinematic Output node if it was positioned under multiple deformation chains.
	Fixed issue where a Kinematic Output node moved the wrong Curve point when a parent Curve was selected.

	Fixed issue where you couldn't add multiple deformation chains to the child layer of a Kinematic Output node.
	Fixed zone of influence's red area that appeared far from its control point. Happened when converting from Ellipse to Shape zone of influence.
	Fixed issue where Peg nodes between Deformer and Kinematic Output nodes are ignored.
	Fix so to be able to manipulate the Deformation Uniform Scale controls.
	Fix for curve deformers giving bad artifacts.
	Fixed script TB_ConvertLegacyDeformation cannot convert with an Alt box selection.
Shortcuts	Fixed Arrow keys so that they work with Advanced Animation tools.
	Fixed issue where Shortcuts with some special characters were not saved.
	Fix for Hand tool that stayed stuck after pressing Space + ⌘ (Mac OS X) and releasing the Space key first.
	Fixed shortcuts F and G to work if you cleared and then reset the default values.
	Fix so that F, G, (.) and (,) shortcuts work in the Library view.
	Share Functions is now shortcutable.
	Fixed issue where items in Palette Browser are not truly selected when using the arrow keys.
	On Linux, fixed nudging on the Z-axis with the Alt+ arrow shortcuts so that it works not only on the first time.
	Fix so that you can set the Space key as the shortcut for Toggle Playback.
Import	Fixed import of OSB file in Chinese interface.
	Fix done so we can scan drawing with letters in their cell names.
	Fixed layer name not being updated when multiple images are selected in the Import dialog box.
	Fixed issue where pressing enter in the Import Image dialog would cancel the operation.
	Fixed colour refresh issue on flash imported drawing. Issue was related to old pencil line model.
	Fixed the importing of SWF into a scene set to 16 alignment that would mess up the position of the drawings.
Library	Fix so that you can drop a template into the Model view.
	Fixed loss of drawings when importing a template from a remote drive.
Rendering and Export	Fixed issue where you could not open Queue or send to batch render from previous versions in a database setup.
	Fixed rendering with Mentalray and PXToon.
	Fixed Write Node Movie Option (QuickTime) which could only get set to Animation.
	Fixed Export Movie that didn't take the length of the scene into account.
	Fix in the Flash export script so that it keeps the layering order.
	Fixed issue where the scene length was not kept when exporting to SWF.
	Fix so that you can create PDF on Mac even if you hid or deleted a column of the

	Xsheet.
Layers	Fixed issue where the Timeline and Node view were not showing the same order after dragging layers in the Timeline.
	Fixed issue where after we renamed a layer, we could not name a new layer with the same original name.
	Fixed Import Images operation so that drawing names with numbers after an underscore would messes up the layer names.
Bitmap	Fixed issue where Bitmap Layer Resolution was set to 65k for new bitmap layers after creating or importing a template.
	Fixed issue where creating a new column as vector and then changing it to bitmap in the Xsheet would not save properly. No element folder would be created.
Palette	Fixed issue where loading an offline scene that was residing on a remote machine and the palettes in the Colour Override nodes were not found.
	Fixed Remove Unused Files dialog box to not show palettes used by the Text tool so they are not removed.
Effects and Nodes	Fix so that the maximum value of the magnitude attribute of the Dither node is not limited to 1.
	Fix so that the Gradient node can be locked.
	Fixed issue where a scene background would flicker on and off. It happened because two nodes were using the same bitmap image but set to different Transparency types.
	Fixed issue where undoing "Group selection with composite" would leave elements connected through different multi-port-out port invisible.
Keyframes and Functions	Fixed issue where doing a rotation in the Y axis of a 3D object created rotation in X and Z axes that were not undoable.
	Fixed issue in the Function Editor view where changing the tension would modify the keyframe's value.
	Fixed issue where undoing a translation (X,Y,Z) over time of several attribute keyframes did not undo all attributes at the same time.
	Fix for inaccurate angle value when adding a keyframe to a Velobased rotation curve.
	Fixed missing line to show interpolation when keyframe is after the last frame of the scene. It was happening with drawing layers.
	Fixed issue where modifying the Set Ease Type from the Timeline toolbar would change the keyframe also.
	Fixed issue where main keyframes in effect nodes were not offset when removing or inserting frames in the Timeline view.
	Fixed issue where moving an element that was not enabled for animation in Camera view while holding the Alt key would not move its parent peg on the Z-axis. It now moves it.
Preferences	Fixed penstyles.xml in preferences that got corrupted when running several instances of Harmony.
	Provided a preference that enable the logging of all IO operations.

Scripting	Fix done so Control Center scripting can handle Unicode like environment names.
	Fix in scripting, saveAsNewVersion did not correctly update the currentVersionName.
	Fixed the scripting interface so that setExtendScene works. This method determines if the target scene adds frames when a template is dropped that is longer than the scene can handle.
	Fixed scripting interface so that Paste Special with offset keyframes works and to have access to the Palette manager from the command line.
	Fixed Javascript so that it respects "try/catch/finally".
	Fixed issue where errors in scripts triggered from the Scripting toolbar were not reports the errors. It nows displays the error message.
	Fixed Script interface saveAsNewVersion so it can work in database mode.
Unicode	Fixed issue where you could not import a scene with Japanese Unicode name.
	Fixed import of scenes with Japanese Unicode names.
	Fix so that you can open a Unicode scene in Web Control Center on Linux and Mac.
	Fix so we can create a custom status in Unicode.
	Flash import script can now understand the Allow Unicode Name preference.
	Fixed issue where numerical values in the database were read with decimal values when local was set to French.
Vectorization	Fixed Vectorize Line Art in Selected Drawings that showed vectorized preview all black.
	Fixed Unvectorize operations in Control Center.
Locks and Rights	Fixed issue where you could not Get Rights to Drawings in an alternate Stage session.
	Fixed Control Center's Lock Manager so that it shows all the locks.
	Fixed issue on Windows when trying to get rights to a Library folder on a remote machine.
Saving	Fixed issue where saving as a new version on Linux could not be done if the Compress Saved Keyframes option was on.
	In Database mode, fixed issue of lost drawings that were created and attempted to be saved while not having the Get Rights to Modify. Taking the rights and attempting to save again would cause the drawings to not show up when reopening the scene.
	Fixed error while doing Advanced Save. "Internal DB error: field maximum length exceeded (table:...".
	On Windows, fixed issue where drawing folders in elements were not deleted upon saving.
Pasting	Fixed issue where Paste Special combined with Alt + drag wouldn't override normal paste presets options.
Control Center and Server	Fixed the Download Database Changes so that we can do partial updates.
	Fix so we can open a scene in Web Control Center on Mac OS X.
	Fixed issue where Control Center would pop up an error message for every part of an operation like deleting multiple problematic scenes.
	Various fixes for ConsolidateDb app.
Plugin	Fixed issue where plugins were loaded twice.