



## Storm Reviewer's Guide

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# STORM REVIEWER'S GUIDE

## Introduction

Welcome to the Storm Reviewer's Guide! If you've had a look at the User Guide—which we highly recommend—you already know something about Storm's capabilities. This guide aims to show you how to pull everything together through a series of practical examples.

## The Projects

- [Importing Media](#)—how to get your media into Storm, start playback, and save a Production.
- [Customising Your Workspace](#)—workspace basics and creating a custom Dual View layout.
- [Tagging and Organising Media](#)—use Storm's Tags, create a custom Tag, and filter, flag and organise your media.
- [Looks and Effects](#)—apply a Look, adjust a clip's RED Look, apply an effect, and create your own custom Look.
- [Editing and Timelines](#)—set some In and Out markers on source media and produce a rough edit using the Timeline.
- [Export to Final Cut Pro](#)—exporting a Timeline to Final Cut Pro using some typical export options.
- [Importing XML from Final Cut Pro](#)—getting XML back from Final Cut Pro as part of a round-trip.
- [Managing RMDs](#)—saving and managing RMD files for use further down the post pipeline.
- [Exporting to DPX and EXR](#)—exporting high quality DPX and EXR sequences.

## Example Images

This guide uses specific footage so, before you continue, download the sample files from [www.thefoundry.co.uk/products/storm/reviewers-guide/](http://www.thefoundry.co.uk/products/storm/reviewers-guide/) and move them to a directory you'll create, called "Storm\_Tutorials".

**Note:** *You may need to unzip the files before you can use them.*

It's up to you where you put the sample files, but bear in mind that you'll need them to complete these example procedures.

## Importing Media

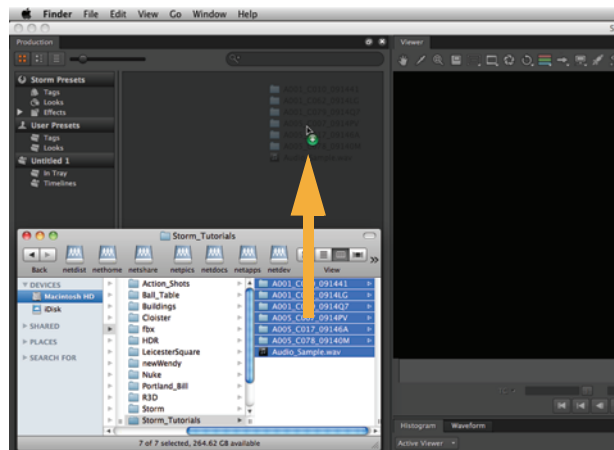
Adding media to Storm is as simple as drag-and-drop from the Finder or selecting **File > Import Folder**. Storm imports your media into your In Tray providing you with a thumbnail view of all of your clips.

Drag your media directly from the Storm\_Tutorials folder into the Storm icon in the dock. Storm launches automatically and places your media in the **In Tray**. You can import:

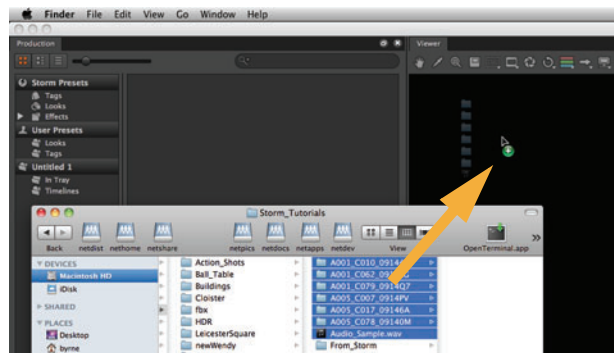
- Individual files
- Multiple files
- Individual folders containing files
- Folders containing multiple sub-folders and files



Or launch Storm and drag your media directly from the Storm\_Tutorials folder in the Finder to the **In Tray**...

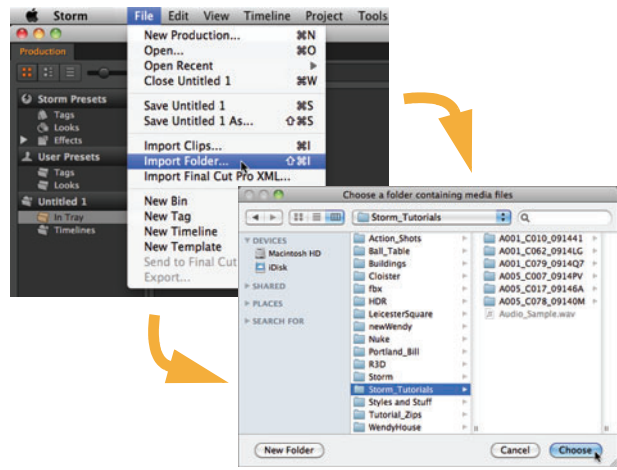


...or directly into the Viewer.



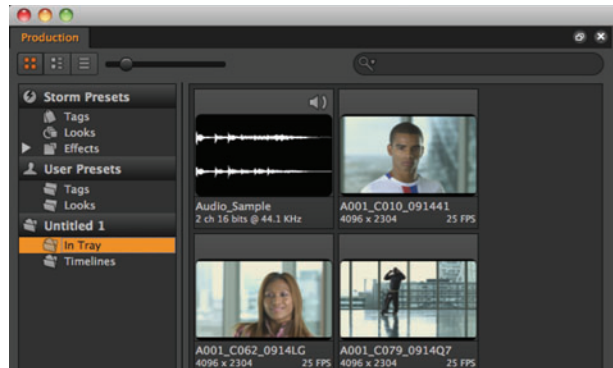
You can also navigate to the **File** menu to import media. You can select:

- **Import Clips**—to import individual files
- **Import Folder**—to import folders containing multiple sub-folders and files.



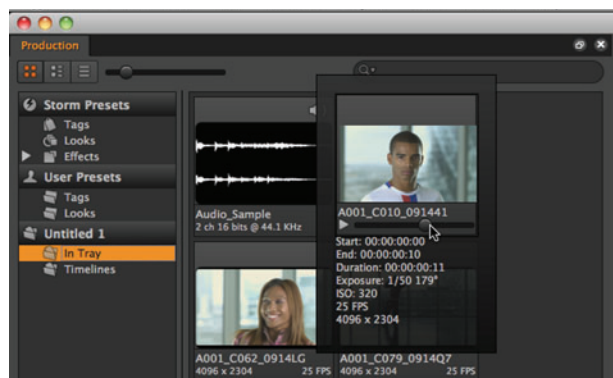
Media is placed in the **Production > In Tray** and displayed in thumbnail format by default.

Storm ignores unsupported media, so don't worry about sorting your folders before importing!

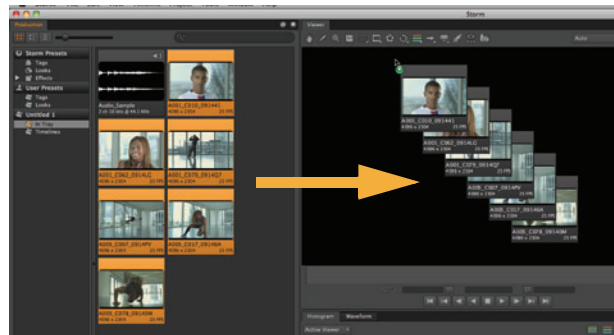




Hover over a thumbnail to display an overlay featuring basic media data and play and scrub controls.

**Note:** You can enable or disable this feature by going to **Storm > Preferences > General > Enable automatic bin clip pop up.**



Drag-and-drop media into the Viewer individually or as a group.



Use the Viewer tools, such as **Magnifier**  and **Region of Interest** , and standard playback tools to check content.

Clip information located at the bottom-left of the Viewer lets you know which clip is currently displayed.

Realtime Histogram and Waveforms update as you play through media in the Viewer.

Navigate to **File > Save Untitled1** and save the Production as **Storm\_Tutorials**.



## Customising Your Workspace

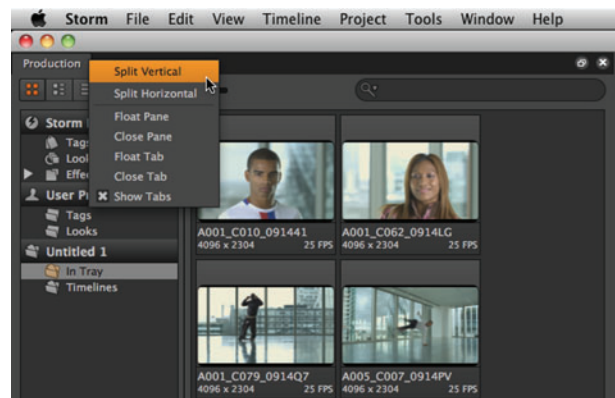
Storm's workspace consists of panes, which act like containers, and tabs which describe the individual areas you work with in Storm. In this example, we'll create a simple dual view setup with histogram, waveform, and vectorscope.

*Tip: You can return to the saved version of a workspace by navigating to **Window > Workspace > Reset Workspace**.*

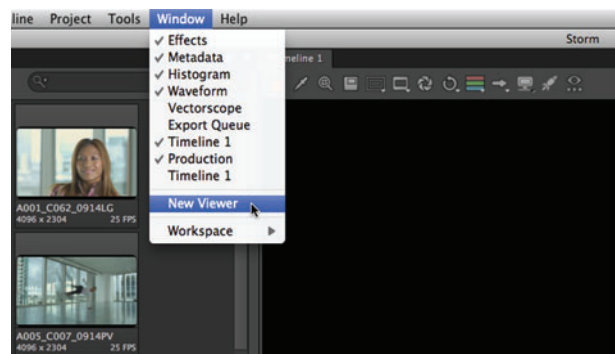
- 1 Right-click the **Production** tab and select **Split Vertical**.

Repeat the process for the **Effects** tab on the right.

You should now have two empty panes to contain the tabs we're going use.

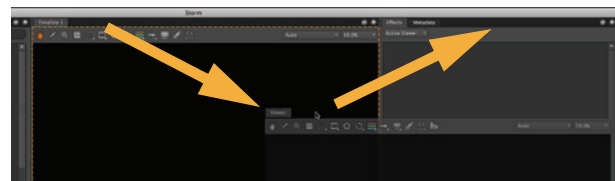


- 2 Navigate to **Window > New Viewer** to add a second **Viewer** tab.

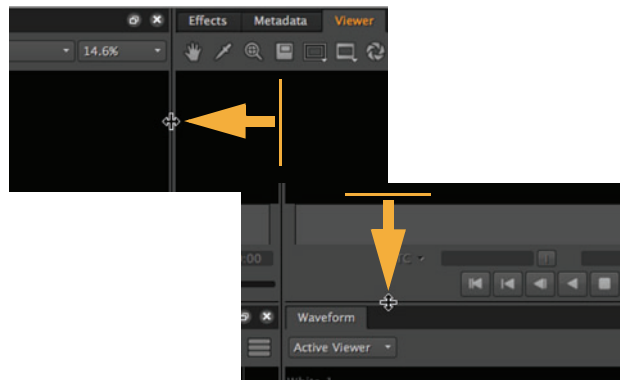


- 3 Drag the second **Viewer** tab to the right-hand pane and drop it into the pane to dock it.

Drag the **Waveform** tab to the lower right-hand pane in the same way.

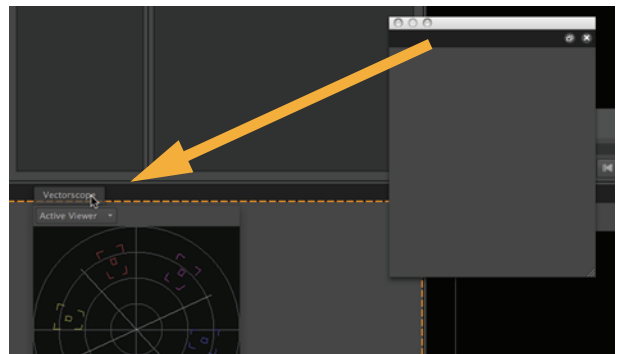


- 4 Resize the panes by hovering over the borders until the cursor changes, then drag the borders as required.



- 5 Open up a Vectorscope by navigating to **Window > Vectorscope**.

Drag-and-drop the scope to the lower left-hand pane as shown.

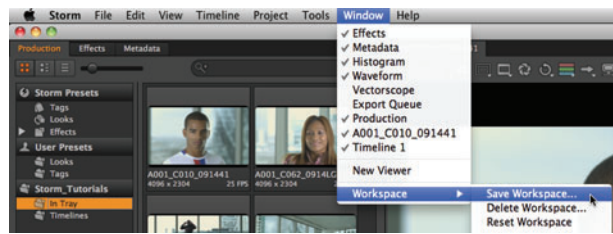


- 6 Drag-and-drop clips into both Viewers to view them side-by-side.

Note that the scopes only show information on the **Active Viewer** by default.



**7** Navigate to **Window > Workspace > Save Workspace** and enter a name for your new layout to save it.



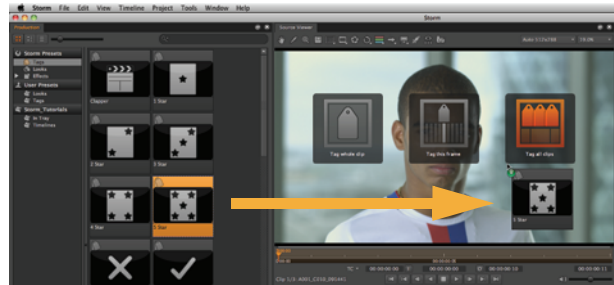
## Tagging and Organising Media

You can use Tags and metadata templates to mark shots of a particular type or content as you organise your Production into Bins ready for editing. Storm has a rich collection of default Tags, but you can also create custom Tags and templates.

- 1 Drag-and-drop three clips into the Viewer and open up **Storm Presets > Tags**.

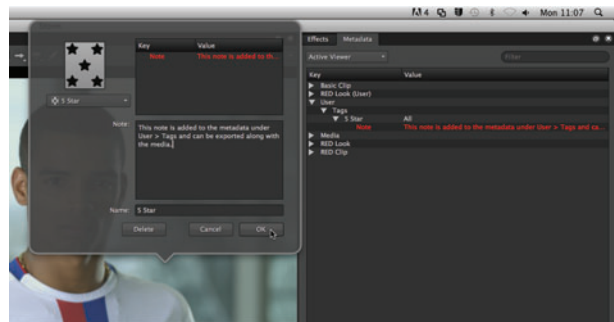
Drag a **Five Star** Tag to the Viewer and drop the Tag on the **Tag all clips** hotspot.

*Tip: You can double-click the **Tags** folder to float it for easy access.*



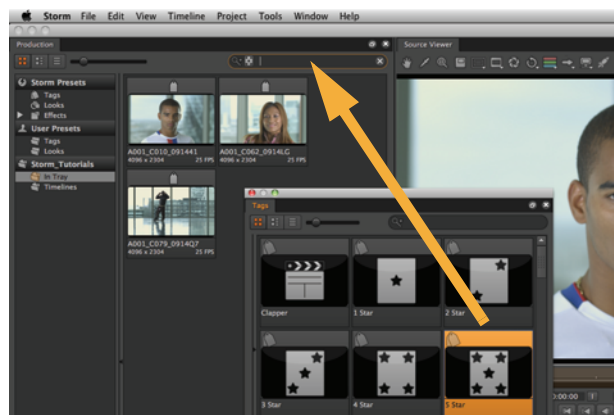
- 2 Tagged clips are marked with the tag icon above the Viewer or on a specific frame, depending on which hotspot you used.

Click the Tag icon to add a note. Notes are added to the metadata and exported along with the media.

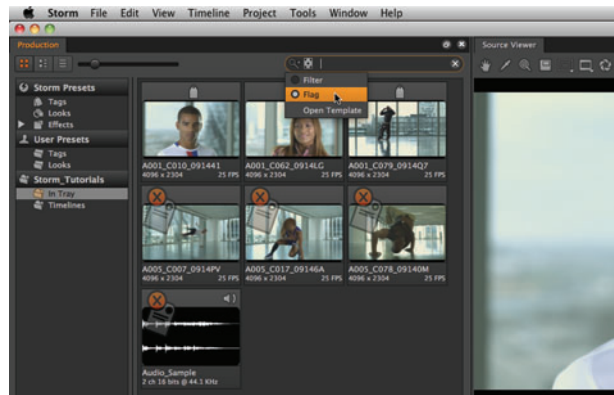


- 3 Drop the same Tag into the searchbox above the thumbnail view.

By default, Storm **Filters** Bins by Tags that you place in the searchbox, displaying only media containing the selected search criteria.



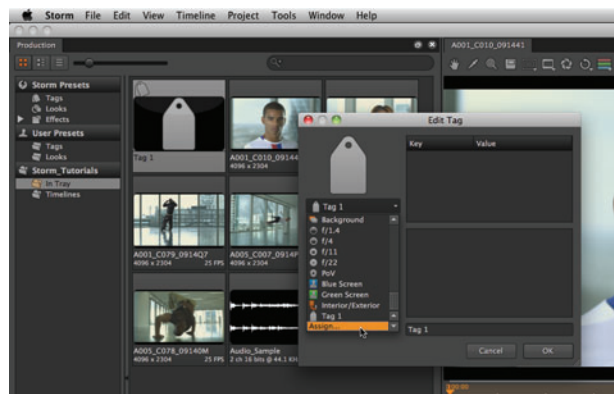
- 4** Click the searchbox dropdown and select **Flag** to highlight all the media that **doesn't** contain the selected search criteria.



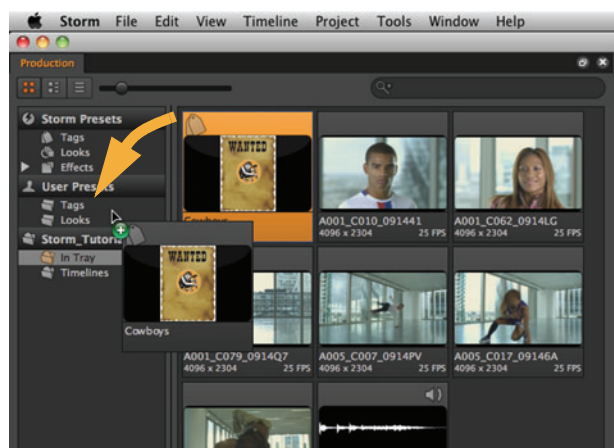
- 5** You can create your own custom Tags using the **cmd + Y** hotkey or navigating to **File > New Tag**.

The new Tag is added to the **In Tray**, where you can double-click, give it a name, and assign an icon.

*Tip: Select **Assign** from the dropdown menu to use an image of your choice!*



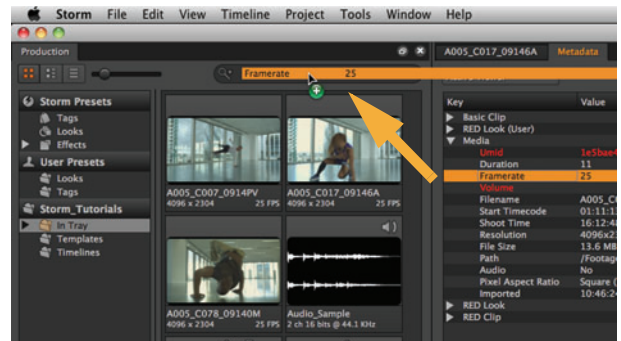
- 6** Drag-and-drop the new Tag to **User Presets > Tags** to make it available in future Productions.



**7** You can also **Filter** and **Flag** by dragging one or more metadata keys to the searchbox.

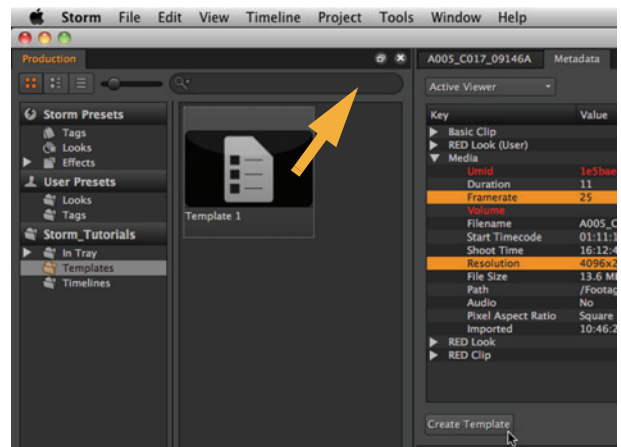
Open the **Metadata** tab and reveal the **Media** metadata.

Drag-and-drop **Framerate** into the searchbox to filter the **In Tray** by Framerate.



**8** If you want to save your search criteria, click **Create Template**.

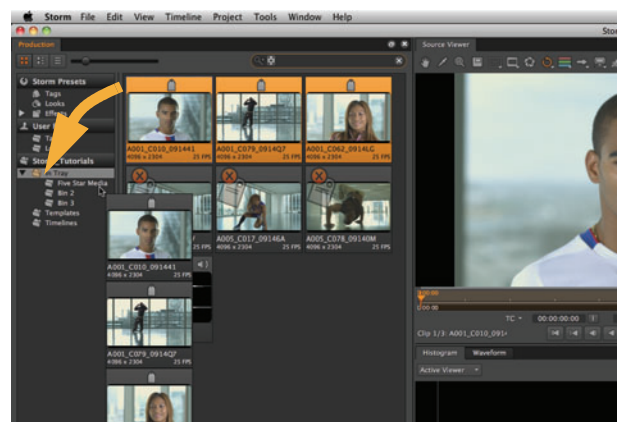
A new **Templates** folder is created containing the new template. Drag the template to the searchbox to filter the **In Tray**.



**9** After filtering your media, create some **Bins** using the **cmd + B** hotkey or navigate to **File > New Bin**.


Click a **Bin** to rename it, then drag the **Five Star** media to the new **Bin**.

Navigate to **File > Save Storm\_Tutorials**, or press **cmd + S**, to save the **Production**.



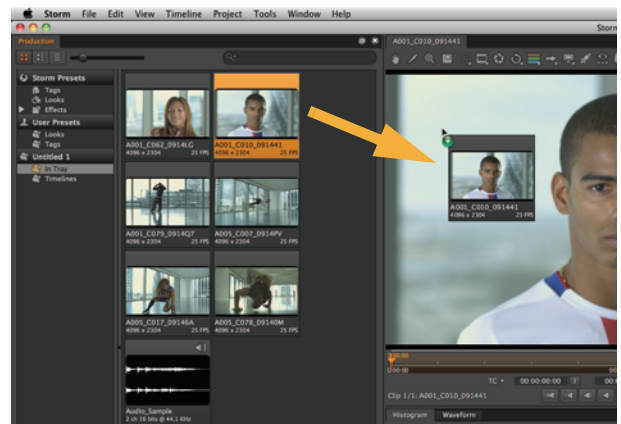
## Looks and Effects

Storm ships with preset Looks enabling you to experiment quickly with various effects to realise your creative intent. Storm also has a versatile Effects palette for use with your media, including RED Look, transform, colour, and blur effects. Effects can be added by drag-and-drop from the Production tab to either the Viewer or the Effects Stack.

*Tip:* You can quickly toggle on or off any effects you've applied using the  button above the Viewer.

1 Typically, one of the first tasks with new media is to balance the whites in the shot.

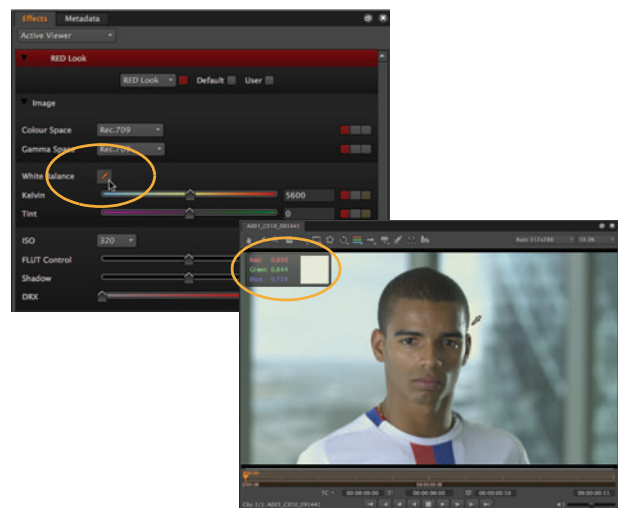
Drag a clip into the Viewer, if you haven't already!



2 Open up the Effects Stack and click the **White Balance** tool.

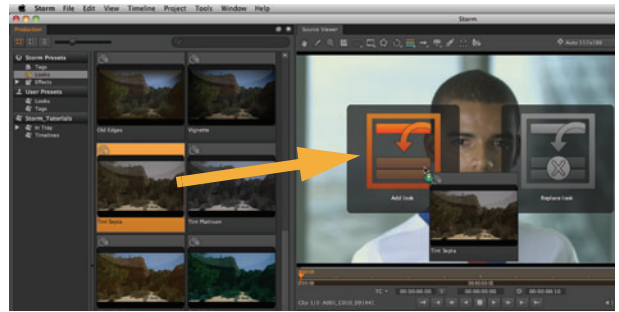
Locate an area of highlight and click the Viewer to auto White Balance the clip.

*Tip:* Use the **Colour Picker** in the top left corner of the Viewer to help you.



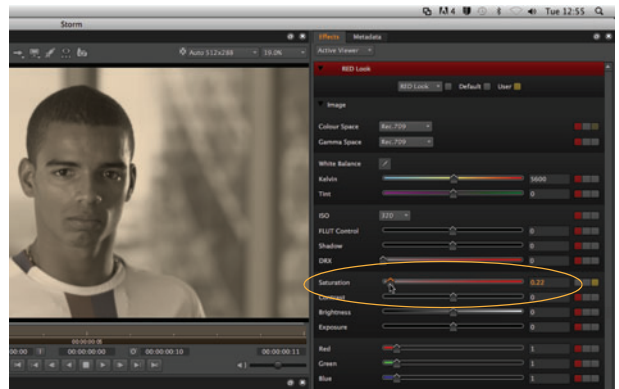
**3** Looks allow you to experiment with preset groups of effects or create and save your own Looks to create a consistent mood across your Production.

Drag-and-drop **Storm Presets > Looks > Tint Sepia** to the Viewer to add the Look to the Effects Stack.

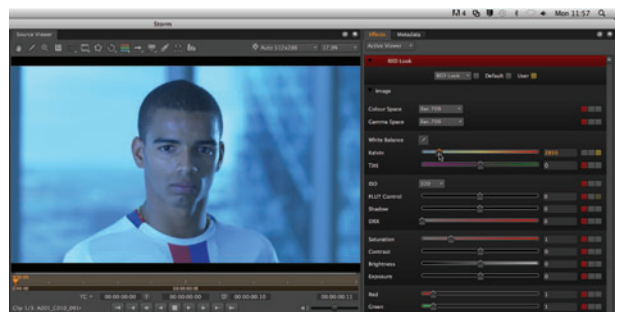


**4** You can modify a Look by adjusting controls in the Effects Stack.

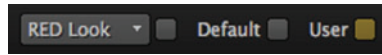
For example, try adjusting the **Saturation** slider to create a more pronounced Sepia.



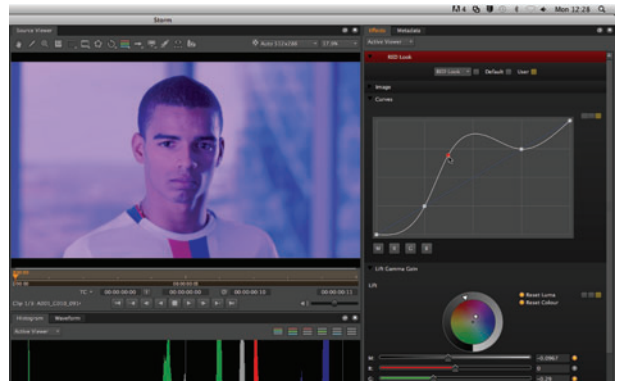
**5** Adjust some of the other **Image** sliders to update the Viewer and scopes in realtime.



**6** The RED Look also contains **Curve** and **Lift Gamma Gain** tools. You can quickly switch between overrides using the buttons at the top of the RED Look effect.

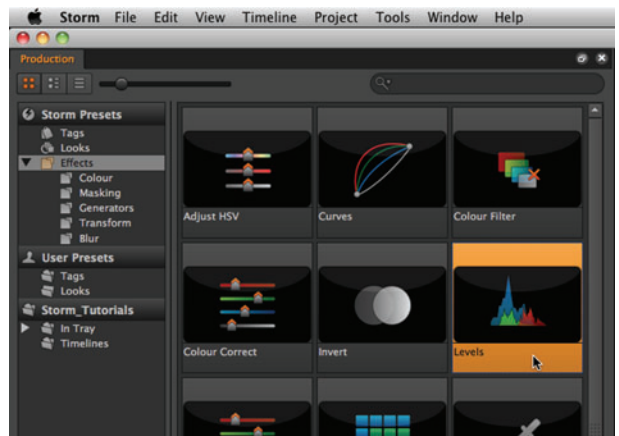


- **RED Look**—the clip displays with the onset decisions applied.
- **Default**—the clip without the onset changes applied, essentially the camera's factory settings.
- **User**—your graded look containing any changes you made in Storm.



**7** Storm also ships with a comprehensive suite of Effects found in **Storm Presets > Effects**.

*Tip: You can double-click the **Effects** folder to float it for easy access.*



8 Drag **Vignette** to the Viewer to add the effect to the media.

The effect controls are automatically added to the **Effects Stack**.



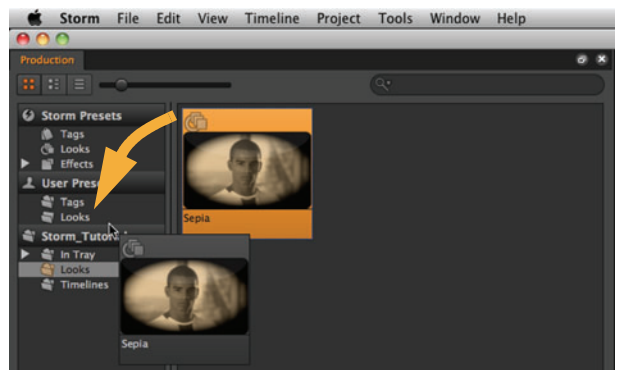
9 When you're happy with the Look, select **Tint** and **Vignette** in the Effects Stack.

Right-click the effects and select **Save as Look**.



10 Enter a Look name and click **OK** to save it in a new folder in **Storm\_Tutorials > Looks**.

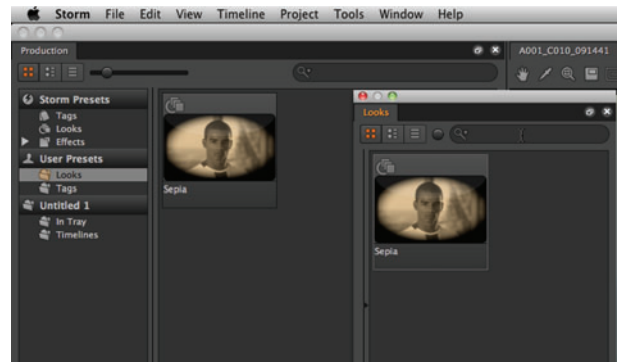
As with custom Tags, drag-and-drop the new Look to **User Presets > Looks** to make it available in future Productions.



**11** Once you've decided on a Look, you can apply it to multiple clips in a Bin.

Double-click the **User Presets > Looks Bin** to float the tab.

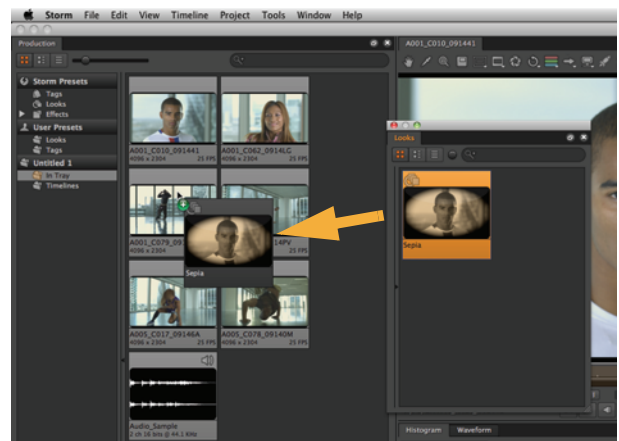
*Note: You can also apply Storm Presets Looks in the same way.*



**12** Navigate to the **In Tray** and select all the clips by pressing **cmd + A**.

Drag-and-drop the Sepia Look onto a selected clip to apply the effects.

Navigate to **File > Save Storm\_Tutorials**, or press **cmd + S**, to save the Production.



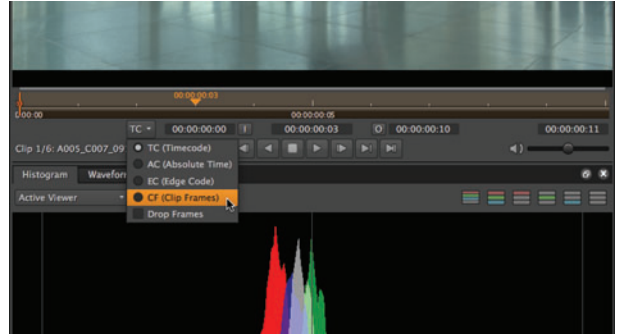
For more information on using effects and Looks, see **Editing and Effects** on page 48, and **Managing Looks** on page 65 of the **Storm User Guide**.

## Editing and Timelines

Once you've organised your media and verified intent, you're ready to start the editing process. You can add In and Out Points to create more accurate selections, then add your media to a Timeline to produce a rough edit ready for export to Final Cut Pro or a QuickTime review file.

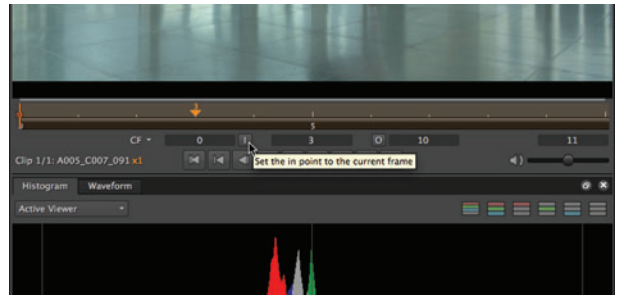
- 1 Drag-and-drop a video clip into the Viewer.

Use the **TC** dropdown under the Viewer to select **Clip Frames** to display the length of the clip in frames.

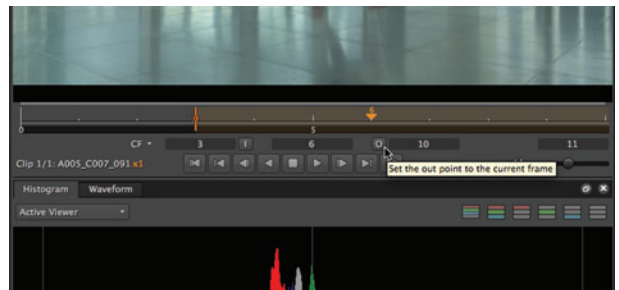


- 2 Advance the playhead 2 or 3 frames using the **Frame Forward** button or **→** key.

Set an **In** marker by clicking the **Mark In** button or pressing **I** on your keyboard.



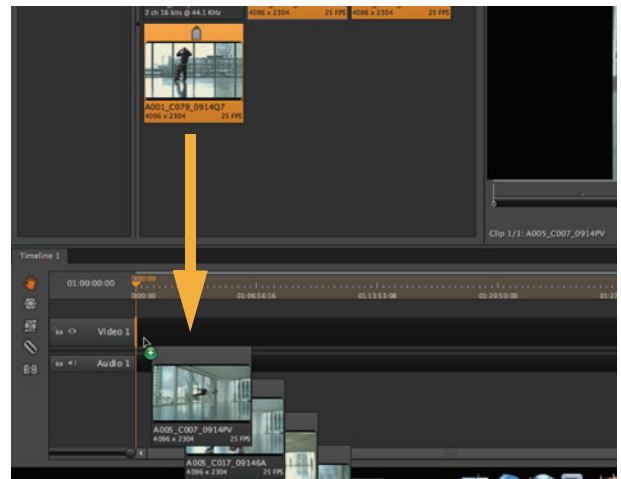
- 3 Repeat the process, except this time set an **Out** marker by clicking the **Mark Out** button or pressing **O** on your keyboard.



**4** Next, we'll add the media to a Timeline.

Switch to the default **Editing** Workspace by pressing **cmd + 1** or navigating to **Window > Workspace > Editing**.

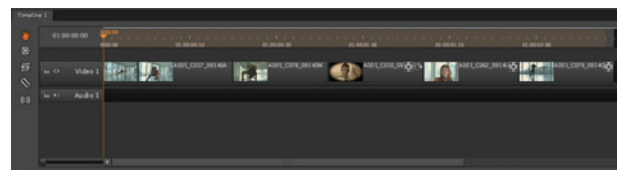
Drag-and-drop all the video clips to the Timeline—leave the audio clip alone for now.



**5** Press **F** to fit the clips to the available screen space.

Notice that one of the clips is shorter than the others because we added **In** and **Out** markers earlier.

The Tags and Effects applied are also visible on the Timeline.



**6** Drag the audio clip to the Timeline and drop it into the audio track.


Play through the Timeline by clicking the **Play** button or pressing **L**. You should see the media playing in the Viewer and hear the audio sample.


*Tip: If your Timeline doesn't appear in the Viewer, press **cmd + /** or navigate to **View > Show Timeline Editor**.*

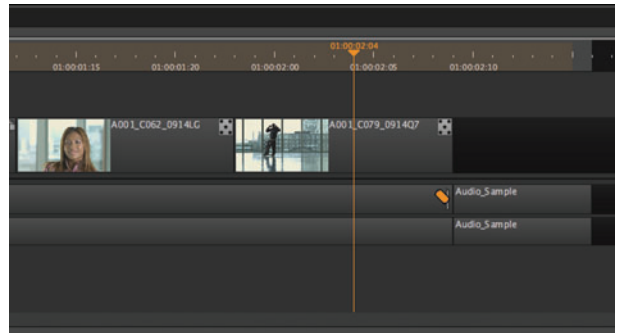



**7** Since we edited some frames out of the first clip, the audio track is slightly too long for the available video.

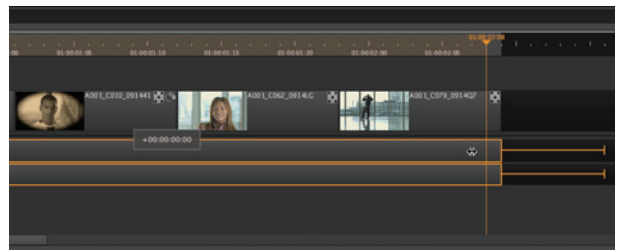
Using Storm's **Razor** and **Slip** tools, you can quickly correct this.

Select the **Razor** tool on the left side of the Timeline and cut off the end of the audio track. 


Switch to the **Move** tool and click the razored portion of the audio track. Press **Backspace** to remove it. 

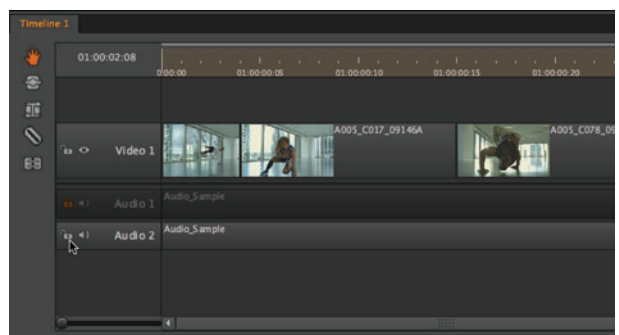


**8** Switch to the **Slip** tool and click the audio track. Notice the slip handles on the track? These show you the amount of slip within the clip you have to play with. 



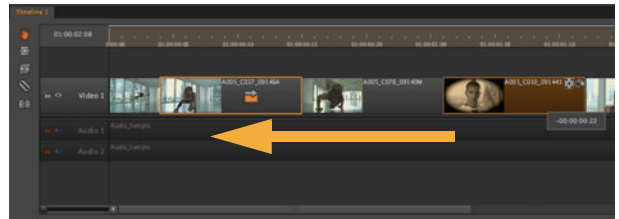
**9** Finally, lets move a clip up the Timeline using **Ripple** mode.

Lock the two audio tracks using the padlock icon, to avoid disturbing them by mistake. 



- 10** Select the **Move** tool. Drag the Vignette clip up the Timeline then hold **Alt** and drop it at an existing transition.

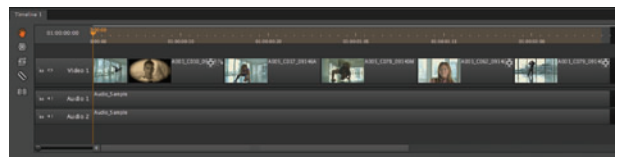
*Tip: The cursor shows  in **Ripple** mode.*



- 11** Select the gap left by the clip and press **Backspace** to close it.

When the Timeline looks something like this, we're ready to export it to Final Cut Pro.

Navigate to **File > Save Storm\_Tutorials**, or press **cmd + S**, to save the Production.



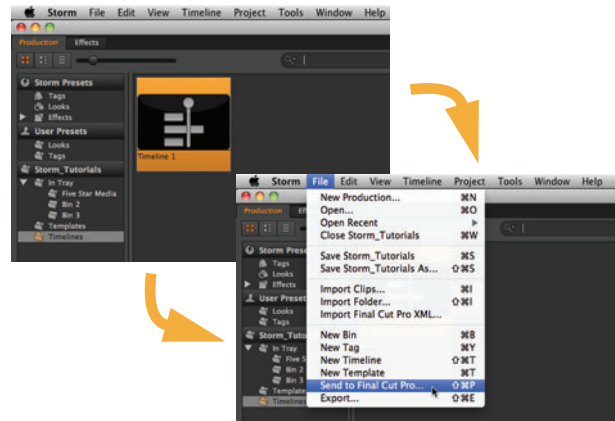
For more information, including using multitrack Timelines, see **Using the Timeline** on page 68 of the **Storm User Guide**.

## Export to Final Cut Pro

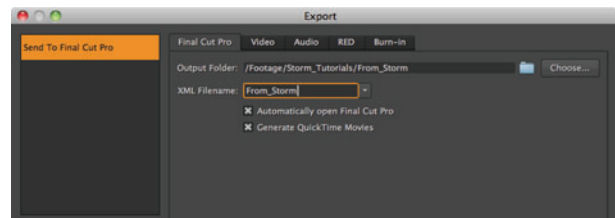
Storm supports round-tripping with Final Cut Pro for offline editing. Storm generates QuickTime Movies for your media combined with an associated XML file that contains the clip information and metadata.

The following example delivers a Timeline, but the process is similar for Bins and clips.

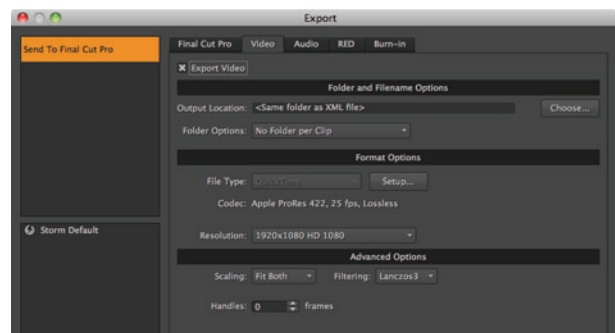
- 1 From **Storm\_Tutorials > Timelines**, select your Timeline.  
  
Navigate to **File > Send to Final Cut Pro**.



- 2 The **Export** dialog displays. Enter an **Output Folder** and **XML Filename** in the fields provided.  
  
If you don't want Final Cut Pro to open automatically, deselect the appropriate checkbox.



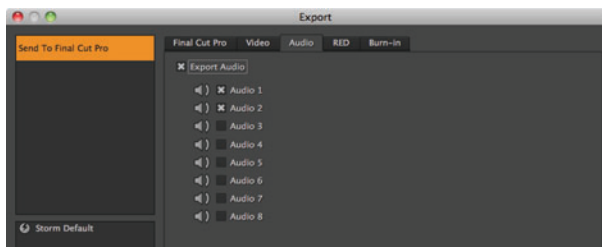
- 3 Click the **Video** tab and make some changes to the **Format** and **Advanced Options** to see what choices are available.  
  
For this tutorial, you can select anything you like because the clips are very short and won't take long to render.  
  
In reality, you might need to make some decisions on what result you require versus rendering time.



**4** Click the **Audio** tab and select **Export Audio**.

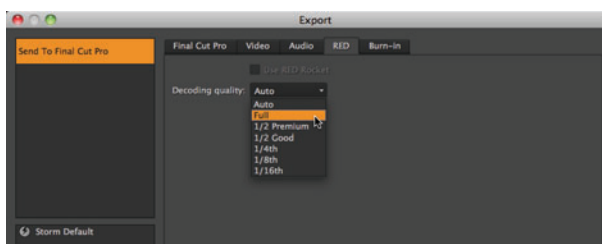
*Note: Storm doesn't export audio by default.*

Deselect **Audio 3** to **8** as there are only two audio tracks in the Timeline.



**5** Click the **RED** tab, select **Use RED Rocket**, and choose a **Decoding quality** from the dropdown menu.

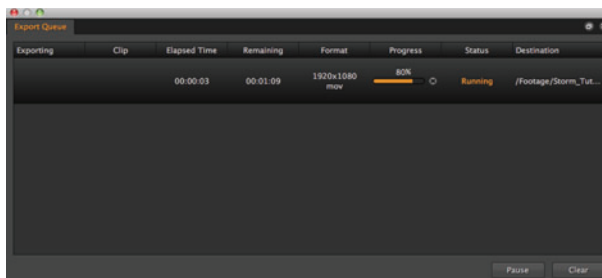
This option is only available if you have a RED Rocket installed.



For more information on export settings, see **Managing Storm Output** on page **86** of the **Storm User Guide**.

**6** Click **Export** to send the job to the background **Export Queue**.

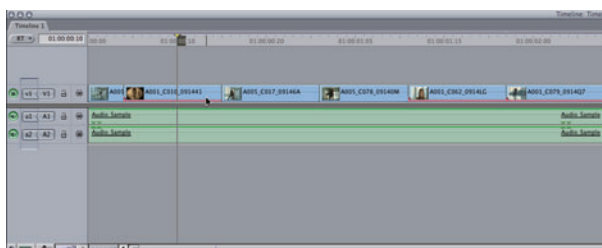
A progress bar displays the elapsed time and other useful information.



**7** Once the export is complete, Final Cut Pro launches.

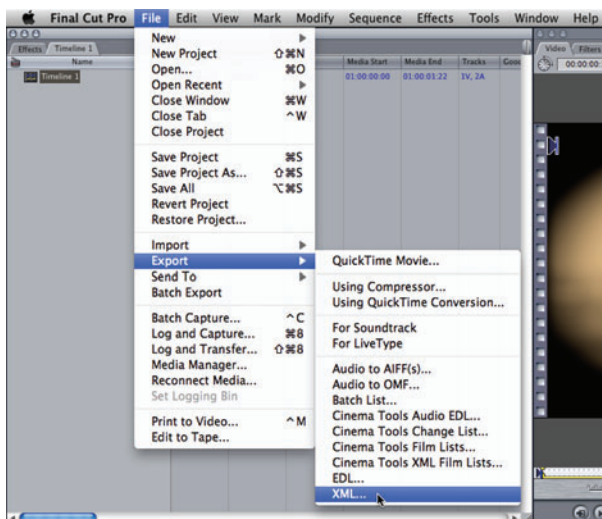
Click **OK** to accept the default settings and follow the onscreen prompts to automatically import the Timeline.

*Tip: Tagged clips are underscored in pink—you can double click them to display any notes you added.*



**8** Finally, make some simple edits to the Timeline so that it is obviously different to the original created in Storm.

Navigate to **File > Export > XML** and save the edited Timeline as **From\_FCP.xml**—you'll need this XML later on.



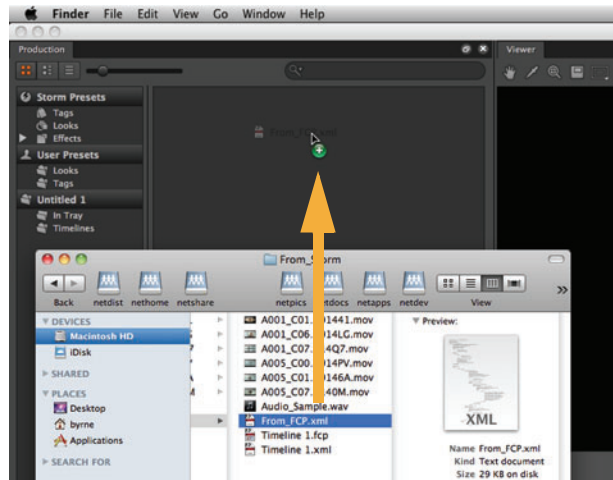
## Importing XML from Final Cut Pro

Storm can import XML files created by Final Cut Pro and relink the XML with the original RAW media.

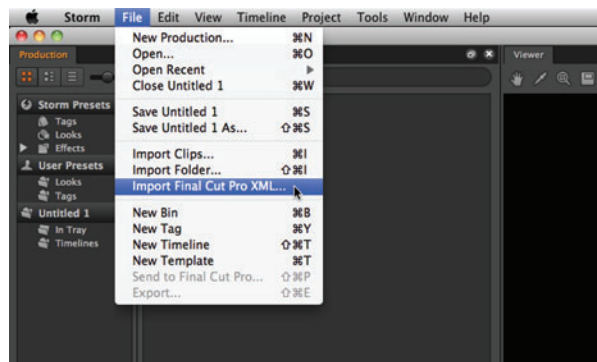
For the purposes of this example, we'll import the Timeline XML created in the [Export to Final Cut Pro](#) section and reconnect the media manually.

- 1 Launch Storm and switch to the default **Editing** Workspace by pressing **cmd + 1** or navigating to **Window > Workspace > Editing**.

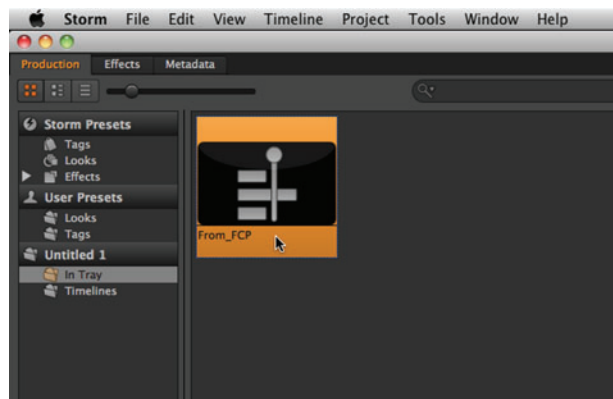
Drag-and-drop the **From FCP.xml** file into the **In Tray**.



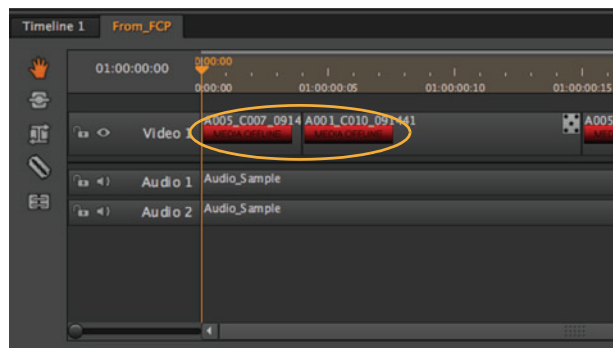
- 2 Alternatively, navigate to **File > Import Final Cut Pro XML**.



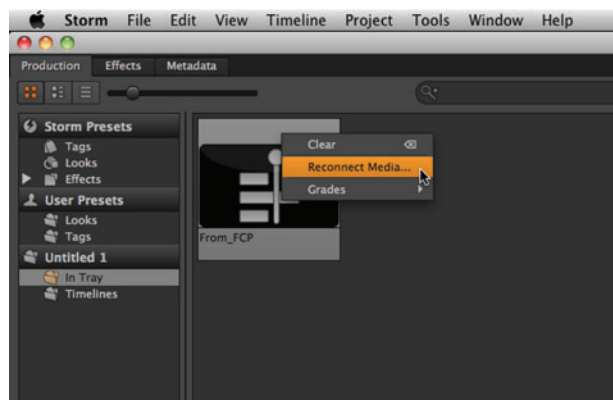
- 3** Navigate to **Production > Untitled1 > In Tray** and double-click **From\_FCP.xml**.



- 4** Storm opens the edited Timeline, but the clips are flagged as **Media Offline**.

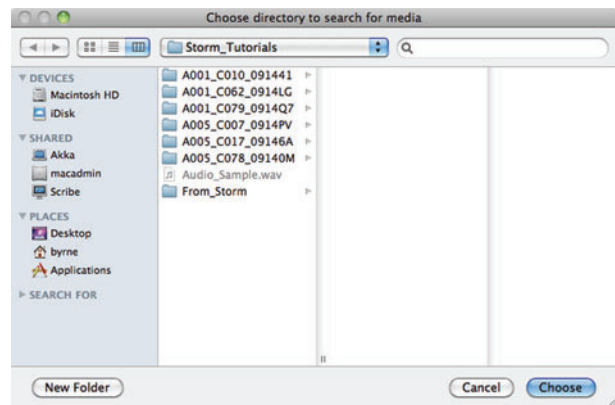


- 5** Right-click **From\_FCP** and select **Reconnect Media**.



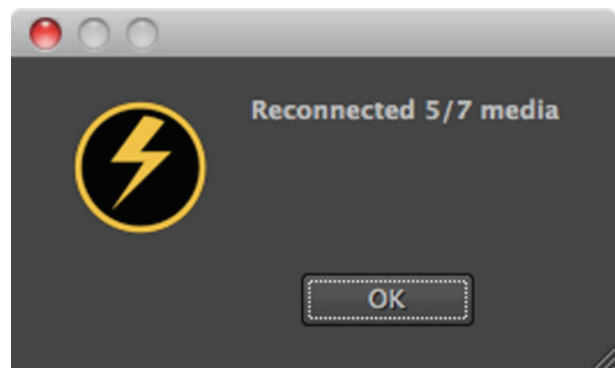
6 Storm prompts you for the directory containing the source R3D files.

Navigate to **Storm\_Tutorials** and click **Choose**.



Storm attempts to reconnect the clips on the Timeline to the source media.

In this case, only five from seven media could be reconnected—one clip was removed from the Timeline in Final Cut Pro, and separate audio clips don't require reconnection.



Your edit is now relinked to the original high quality R3D files and metadata, rather than the proxy files used by Final Cut Pro. This cooperative workflow allows multiple artists to work simultaneously on the same media.

For more information on relinking and conforming, see **Reconnecting and Conforming Media** on page 14 of the **Storm User Guide**.

## Managing RMDs

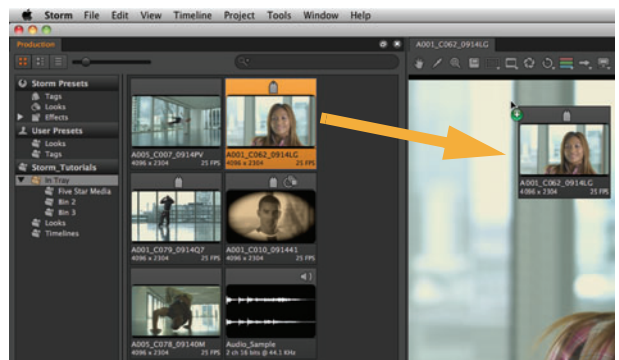
RED metadata files, or RMDs, are designed to deliver grade information from R3D to post production processes further down the pipeline. Storm can automatically create RMDs for all files, or you can create RMDs manually for specific clips or Bins.

**Note:** You can enable automatic RMD creation by navigating to *Storm > Preferences > General* and enabling *Automatically save RMD files*.

RMDs created by Storm reside in the same folder as the clip, along with the QuickTime reference files, and can be applied to other clips further down the workflow pipeline.

In this example, we'll create RMDs for two clips and explore a clip's RMD status.

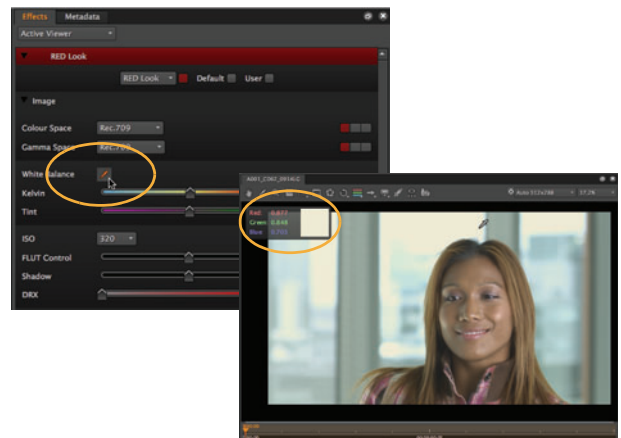
- 1 Switch to the default **Reviewing** workspace by pressing **cmd + 2** and drag-and-drop a clip into the Viewer.



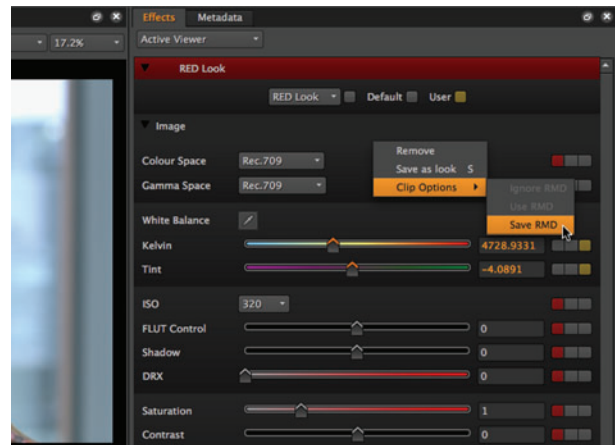
- 2 Open up the Effects Stack and click the **White Balance** tool.

Locate an area of highlight and click the Viewer to auto White Balance the clip.

**Tip:** Use the *Colour Picker* in the top left corner of the Viewer to help you.

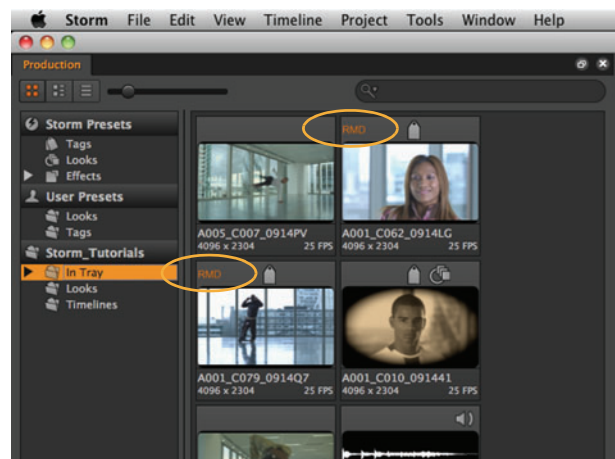


- 3 Right-click the mouse over the Effects Stack and select **Save RMD**.



- 4 Repeat the RMD creation process for a second clip.

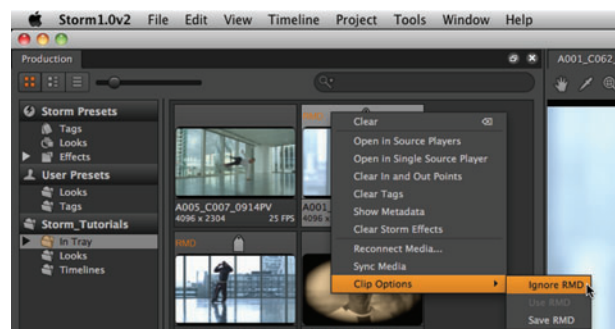
Check the **In Tray**—you should see the clips that you worked on now have RMD icons in the top left of their thumbnail.



- 5 Right-click a clip with an RMD to view the available options:

- **Ignore RMD**—disable clip RMD settings, removing your grade decisions.
- **Use RMD**—enable clip RMD settings.
- **Save RMD**—overwrite the existing RMD file with your current grade.

*Note: The icon is greyed out if the clip is set to **Ignore RMD**.*

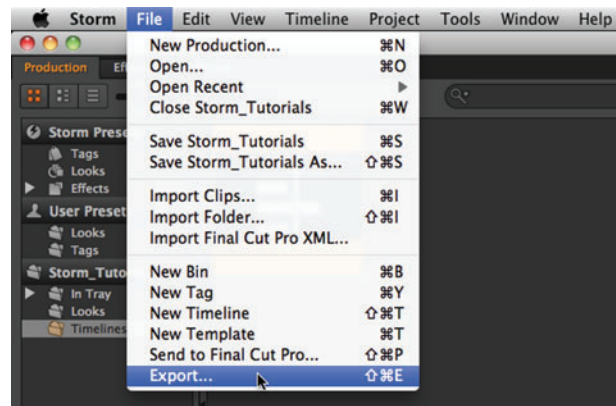


## Exporting to DPX and EXR

Exporting DPX and EXR files typically marks the end of Storm's involvement, producing high quality, graded images for the next stage in the post process. You can produce a series of stills from a clip, Bin, or Timeline using the DPX or EXR format.

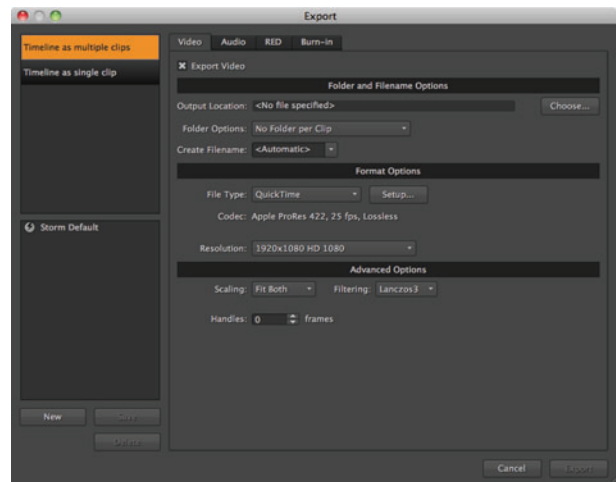
For the purposes of this example, we'll export a Timeline to a series of DPX format stills.

- 1 Select the Timeline from the **Production** tab and navigate to **File > Export**.

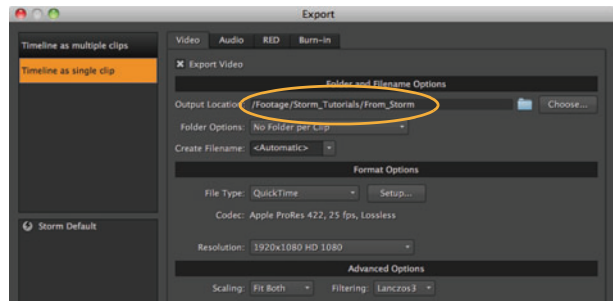


The **Export** dialog displays.

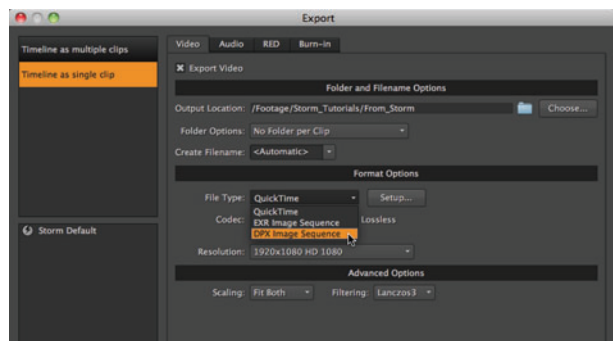
The options supplied are very similar to those employed when exporting to Final Cut Pro.



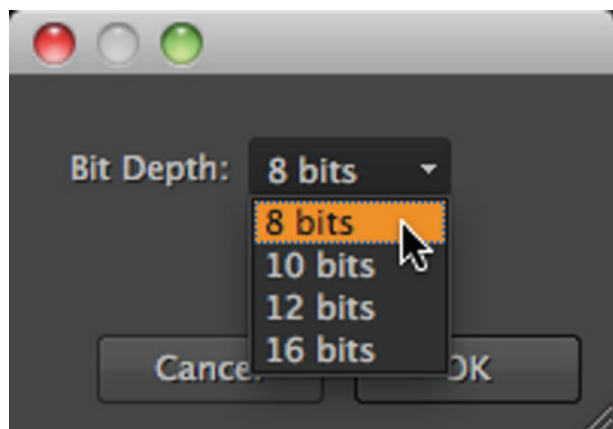
**2** For this example, select **Timeline as a single clip** and enter an **Output Location**.



**3** Under **Format Options > File Type**, select **DPX** from the dropdown menu.

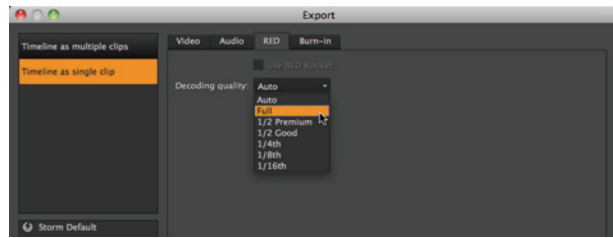


**4** Click **Setup** and select the required **Bit Depth**. To save rendering time, select **8-bit** and click **OK**.



- 5 Click the **RED** tab, select **Use RED Rocket**, and choose a **Decoding quality** from the dropdown menu.

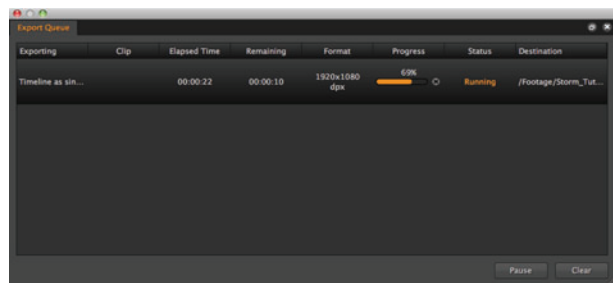
This option is only available if you have a RED Rocket installed.



- 6 Click **Export** to send the job to the background **Export Queue**.

A progress bar displays the elapsed time and other useful information.

When the render is complete, you should have a series of around sixty DPX files ready for use.



For more information on exporting DPX and EXRs, see **Exporting to Individual Frames** on page 101 of the **Storm User Guide**.