



COLLABORATIVE EDITING



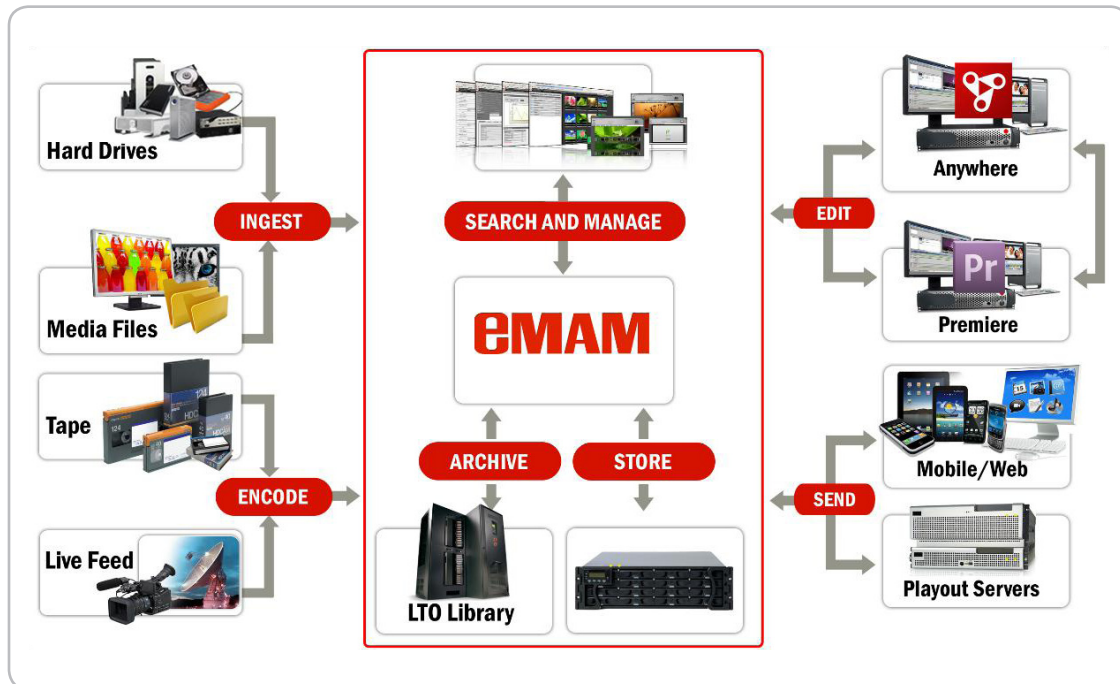
This whitepaper illustrates how the seamless integration of eMAM with Adobe Premiere Pro CC enhances the video editing workflow.

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Introduction

Managing the flood of content in the digital age has become a major challenge for organizations everywhere. Companies have had to adapt the manner in which they organize and share information while simultaneously transitioning from tape-based workflows to digital file-based environments. To manage these rapidly changing dynamics, Empress Media Asset Management, LLC developed eMAM™, a powerful and flexible web-accessible media asset management system for users to easily manage all of their digital assets throughout their workflow from any global location.



Adobe Premiere Pro CC - Choice of Professional Editors

Professional editing is a competitive field, so organizations must use the latest and most advanced technologies to maximize output while minimizing labor and other expenses. Integrated workflows maximize efficiency. The performance, speed, powerful tools, flexibility, and interoperability of Adobe® Premiere® Pro CC helps editors work faster and smarter. The Creative Cloud minimizes IT work while providing an integrated suite of solutions for users. The Adobe Premiere Pro CC workspace is simple to understand and to customize, allowing users to save workspace layouts appropriate to their current needs.

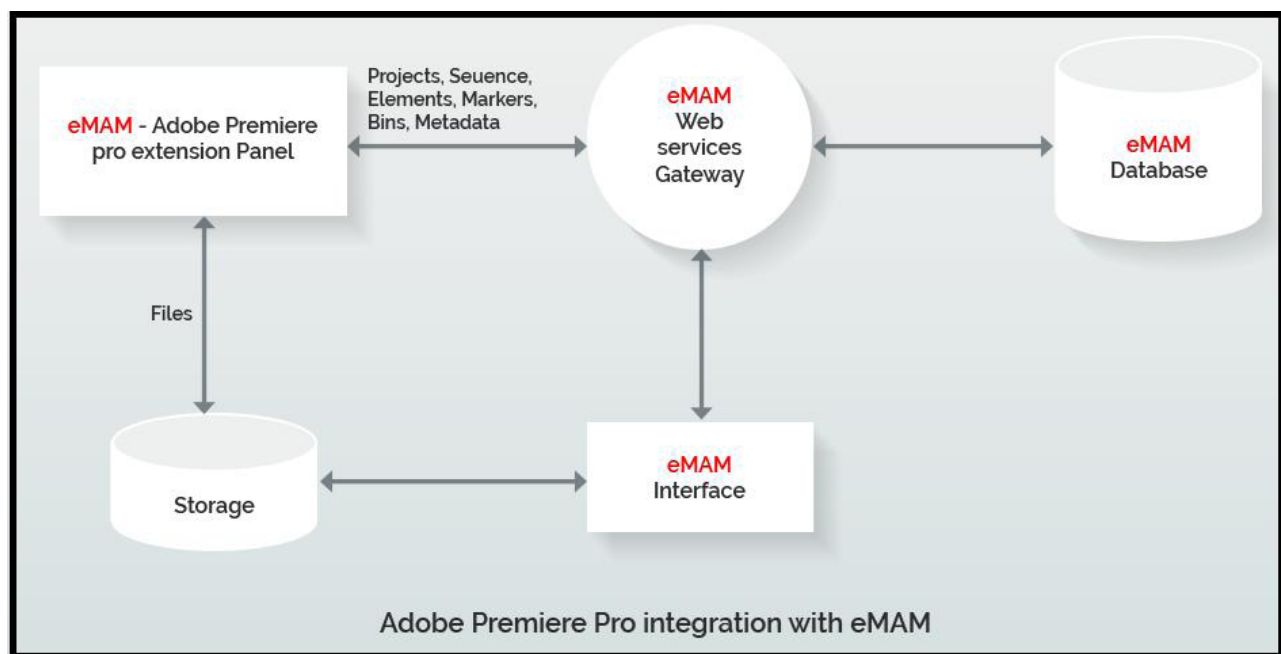
Virtually all video formats can be imported without transcoding, and edited natively. Adobe Premiere Pro CC links to industry-standard file-based media, such as P2 cards, XDCAM, RED, and ARRIRAW. It works directly with Apple ProRes and MOV files captured by DSLR cameras, with full metadata support—no transcoding or rewrapping required.

Familiarity with other Adobe® products such as After Effects® CC or Photoshop® CC shortens the learning curve for Adobe Premiere Pro CC because the Adobe Creative Cloud® applications share common commands, panels, and keyboard shortcuts. The integration with the other Creative Cloud applications creates one of the most efficient workflows in the industry. Using Dynamic Link in Adobe Premiere Pro CC, users include After Effects compositions in their sequences, where they look and act just like any other clip: changes in After Effects are automatically reflected in the Adobe Premiere Pro CC sequence.

eMAM and Premiere Pro CC Integration

eMAM can integrate multiple workflows for a variety of different organizations. This white paper will highlight workflows that rely on the combined strengths of the eMAM and Adobe Premiere Pro CC production pipelines. With a built-in panel in Adobe Premiere Pro CC, eMAM makes editing an open process through its powerful media asset management tools.

In a shared editing environment, multiple editors can work on the same Premiere Pro CC project from a shared centralized storage environment. eMAM manages content in such an environment, and can now open up the editing and media management workflow for worldwide collaboration and flexible storage possibilities.

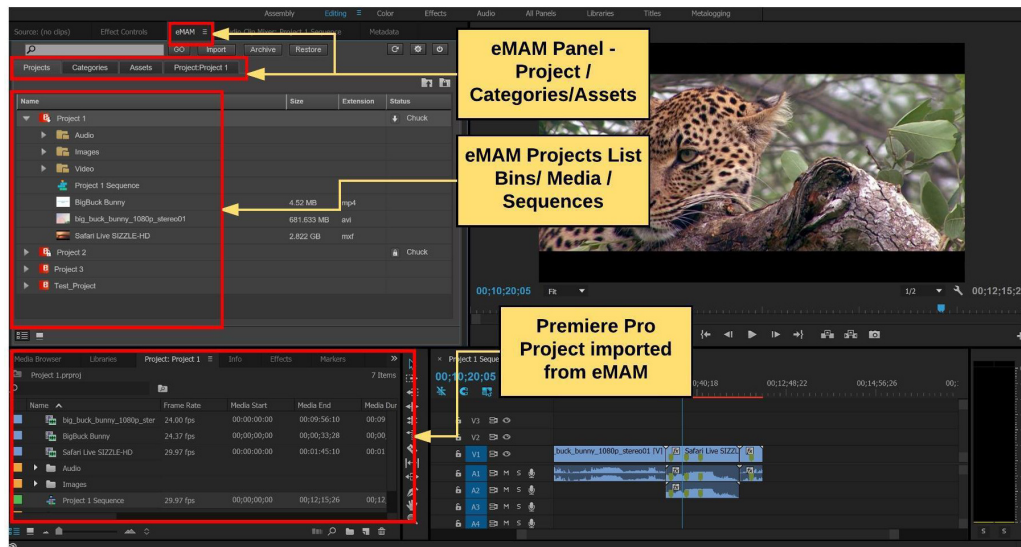


eMAM Integration Inside Premiere Pro CC

Project Creation and Sharing

Adobe Premiere Pro CC has extensive tools for capturing live feeds, allowing users to preview and choose incoming content from all popular camera and format types. The Media Browser allows editors to add clips/graphics by browsing from attached/network storage. Premiere Pro CC also supports an array of common graphic, audio, and video elements produced from other sources

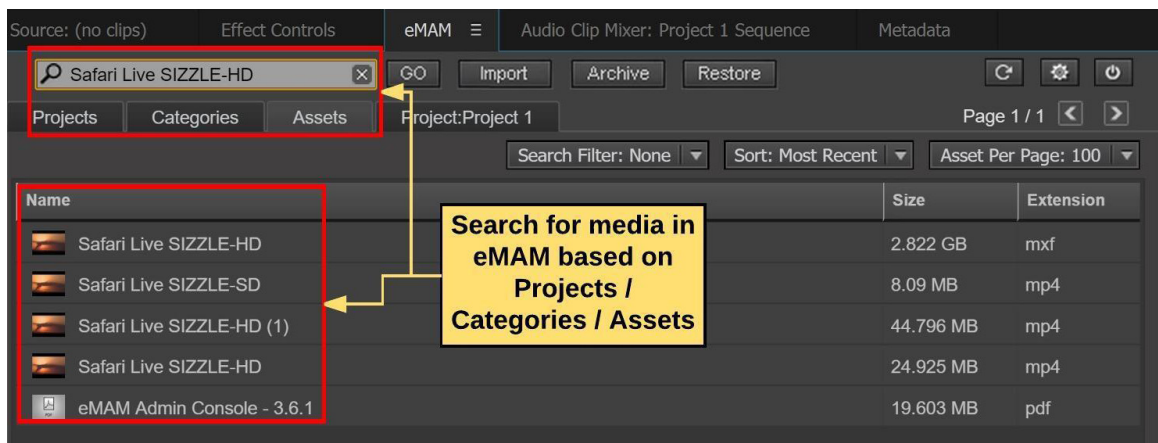
With the introduction of the eMAM extension panel, editors can now directly import clips, sequences, and projects managed by the eMAM library into Premiere Pro CC. The eMAM system can manage content on local SAN/NAS/DAS storage, in cloud storage locations, in archive, on the shelf, or any combination of storage locations. With all historical content at the editor's fingertips, time spent on searching for content is minimized, which maximizes productivity and increases efficiency..



eMAM Panel opened in Adobe Premiere Pro CC

Content Search

An editor can search all of the media based on title, description, metadata tags, or markers to find the best assets for the project at hand using the search option within the extension panel. eMAM also organizes groups of assets into categories and projects.



The entire eMAM library can be searched in the panel

Projects

eMAM organizes content into projects for logical organization or grouping as needed. Authorized eMAM users can create any number of eMAM Projects and assign them to various users. The eMAM extension panel will display the projects assigned to the editor. The eMAM Projects tab in Adobe Premiere Pro CC will show the bins, sequences and thumbnails of the elements along with the title, description, and other metadata from eMAM. This panel will also display Adobe Premiere Pro CC projects managed by eMAM. Adobe Premiere Pro CC users will be able to check out both eMAM and Adobe Premiere Pro CC projects and select which version they would like to edit. When a project is checked-out, other users will not be able to open the project until it is checked-in to the eMAM system. Projects may also be locked by an Adobe Premiere Pro CC user.

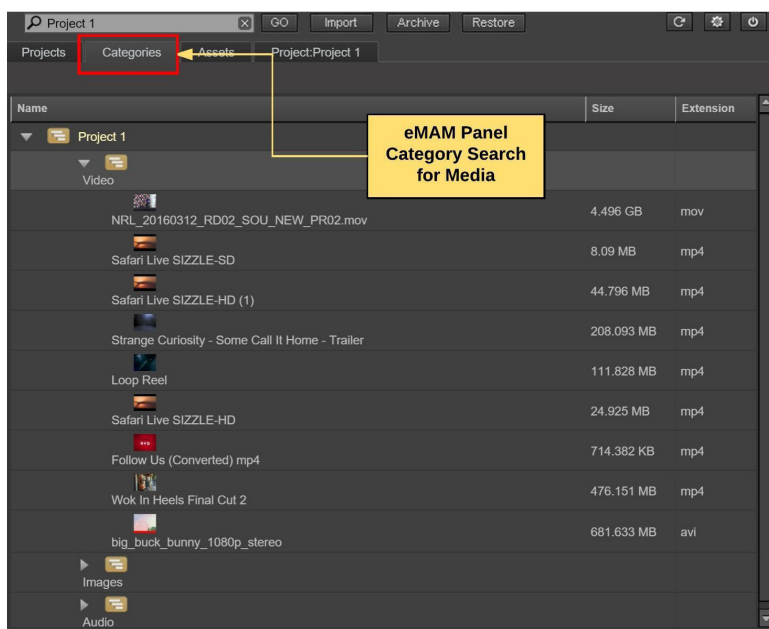


eMAM Projects Listed on the Adobe Premiere Pro CC eMAM Panel

Categories

Categories in eMAM are similar to directories in a file system. Similar to a directory structure, categories allow editors to browse through available content in the system. As a MAM system, eMAM focuses on minimizing redundant copies of files. One asset/element can belong to one or more categories and, unlike a typical file system, eMAM will not make copies of the files in different categories: it will simply keep pointers to the one stored copy of an asset.

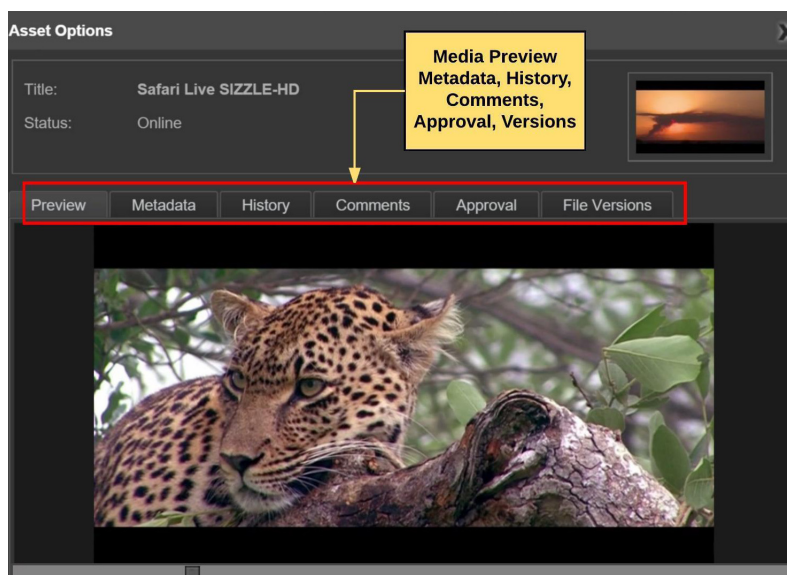
Individual users of eMAM are associated with one or more user groups, which are aligned with roles, permissions, and access in an organization. Therefore, an editor will only have the ability to use categories of assets which have been assigned to one or more user groups to which (s)he belongs. The category tab inside the extension panel displays the assigned categories and the assets in each category.



eMAM Categories Listed on eMAM Panel in Adobe Premiere Pro CC

Preview and Other Features

Double clicking on an asset will open the eMAM Preview player with a preset resolution, as specified by system Administrators. Users will be able to update metadata, review the history of an asset, review comments added to an asset, send Review and Approval requests, and select which version they would like to import into their project.



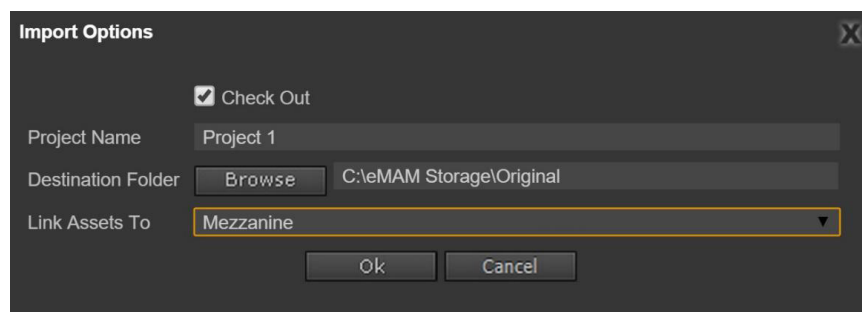
MAM features in the extension panel

Import

The **IMPORT** button allows users to transfer links to individual assets (video, audio, images), to entire projects, or to entire categories stored on eMAM managed storage to the Adobe Premiere Pro CC workspace. Sent along with the imported assets are metadata, markers and sequences from the eMAM system.

If an eMAM project is associated with a Premiere Pro CC project file (.prproj), then the existing Premiere Pro CC project will be closed and the project from eMAM will be loaded. If no Premiere Pro CC project file is associated with a project in eMAM, then the eMAM project will be imported as a bin for the existing project.

Upon ingest, users are prompted to check out a project, limiting other users from opening the same project from the eMAM Panel. Users will also have an option to link assets in this project to an edit mezzanine (proxy edit) format. This option allows editors to work from a NAS environment with slower bandwidth.



A Category will be imported as a bin and placed in the opened project in Adobe Premiere Pro CC.

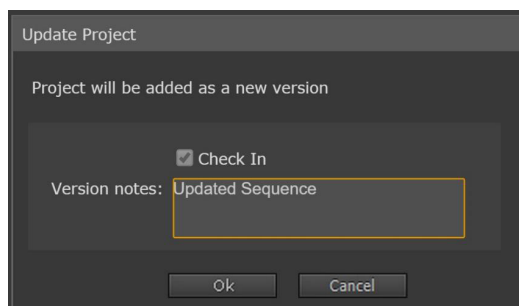
Export

An editor can also export a current Premiere Pro CC project to eMAM. The export function also supports workflows where Premiere Pro is used as a desktop ingest source for content into the eMAM library.

Steps for the export process are:

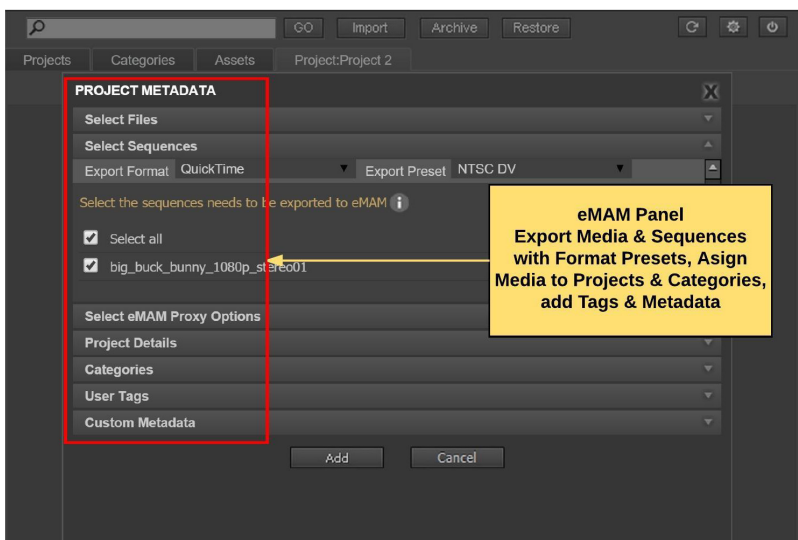
- i. The Adobe Premiere Pro CC Project is saved automatically.

- ii. If the Adobe Premiere Pro CC project exists in eMAM, the editor can update it or create a new project. The Project will be checked into eMAM automatically.
- iii. The editor can choose the sequences from the list for export.
- iv. The editor can enter project details, add tags, assign it to categories, and update custom metadata.



eMAM Update Project screen

- v. The system will move elements from local storage to centralized storage managed by eMAM. To avoid duplicate files in the system, the editor will be informed if one or more elements already existed in the eMAM library.
- vi. Proxy copies for search and preview in eMAM can be made locally using Adobe Media Encoder CC or can be done from a server based transcoder. The original native content and all associated metadata will be stored in the eMAM managed storage.



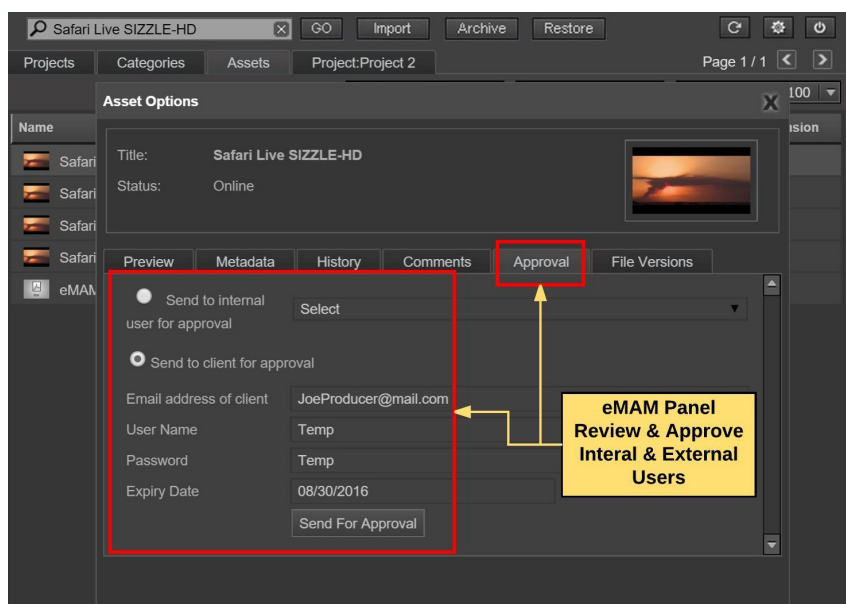
Project Export options

Refresh

In a multi-user environment, users can work simultaneously on the same project. The Refresh button updates the extension panel with the latest information in eMAM. Newly added projects, bins, clips, sequences, categories/subcategories, along with all the metadata, markers, and sub clips will be reflected in the panel upon refresh.

Review and Approve

Adobe Premiere Pro CC editors can send an approval request for a sequence to other users (internal) or anybody by email (external). A proxy file can be made at low, medium or high quality. Editors can select the asset to be reviewed, and send the link right from the eMAM Panel.



eMAM Panel – Review & Approve

Archive

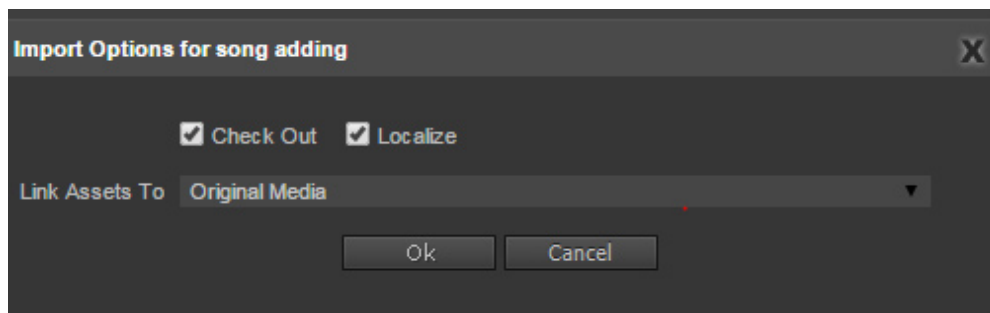
This moves the project media and associated elements of the selected Premiere Pro CC project into a preset archive location to conserve editing storage and permanently secure the media. Proxy copies will be kept in the current eMAM managed storage for power search, preview, and collaboration tools in the eMAM web or tablet interfaces. ***If media is used in other projects, then eMAM will ask the user before removing it from editing storage.***

Restore

Editors can restore media from archived projects directly from this extension panel button or the eMAM interface, bringing them back to editing storage for current use. Individual archived clips and other assets can be restored from the eMAM interface. Partial restore of video assets can be performed using supported SGL, Front Porch (Oracle), and ASG Atempo managed library systems.

Remote Offline editing from the eMAM Panel in Adobe Premiere Pro CC

Premiere editors can search and import projects, categories and assets from the eMAM panel from a remote location. Using the eMAM Panel, editors select the project they would like to edit, select Import, and then localize media. The media that is localized can be the high resolution original or a proxy edit mezzanine file, which is much smaller than the original file-making it much easier to transfer to a remote editing workstation.



Import Options

Once the project media has been delivered, the remote editor can begin editing the project using the downloaded media and locally ingested media. When the edit session is completed, the editor simply exports the Adobe Premiere CC project to the eMAM system. eMAM will collect the updated project, along with any new media and import it into the eMAM system. When the new project has reached the eMAM system, a local editor, using the eMAM panel, can Import the Project and relink the media files with the full resolution original files and finish the project.

Collaboration from the eMAM Web and Tablet Interfaces

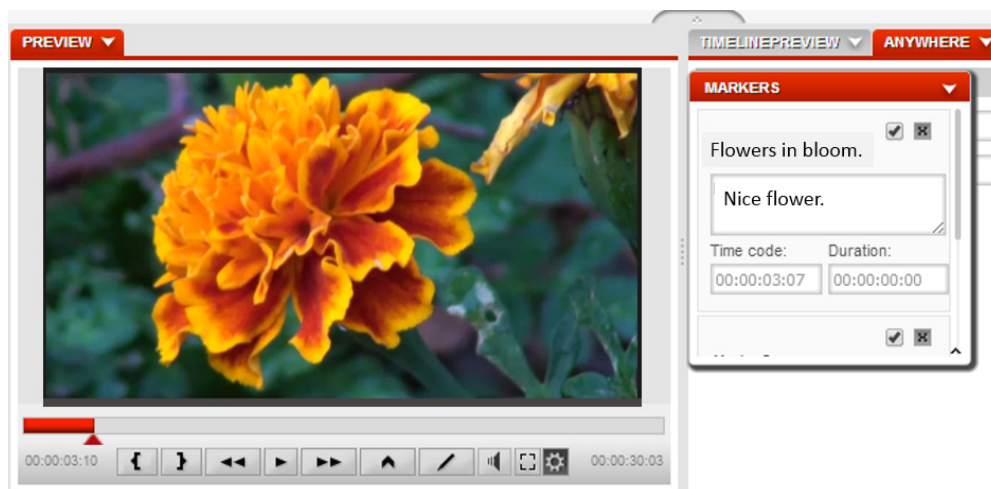
It is often difficult or impossible for stakeholders in different locations to access the content before and during the editing process due to cost, networking issues, and the inability of non-technical users to use editing systems. eMAM manages the original content and provides proxy copies for web based search, preview, and collaboration on projects/bins, categories/subcategories, and individual assets using any standard web browser or native applications for the Apple iPad and Android tablets.

Asset Options

The eMAM interface has a flexible, widget-driven HTML5 design so users can open, move, and resize widgets (tools) for which they have permission. The preview player has tools for working with individual assets. Comments can be made in the Comments widget, while public or private tags can be made within the Metadata widget.

Markers

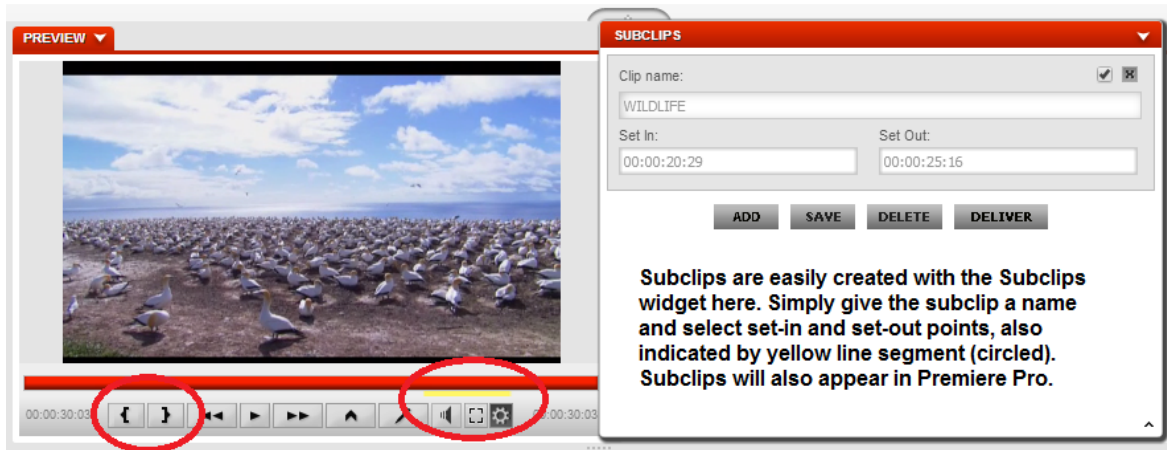
The marker functionality in eMAM Director allows the users to place marks on the Preview timeline, and label the marks within the Markers widget. These markers are then searchable in the eMAM system and are available for the editors within Premiere Pro.



Markers and Preview Widgets opened in eMAM

Subclips

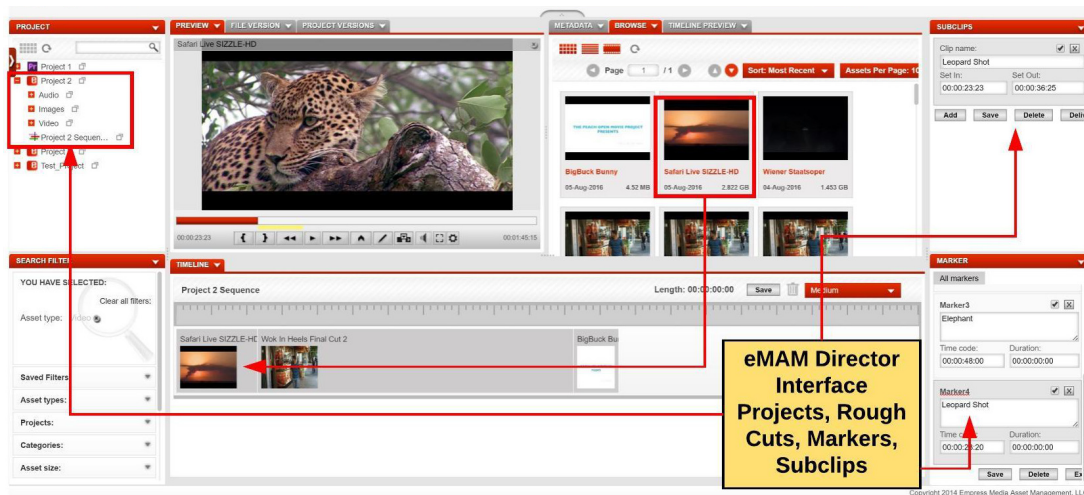
The Subclips widget in eMAM Director allows the users to mark time-in/time-out points of a video. These marks can be used to mark sections of a video, to build a sequence, to send an EDL, and do a partial restore for supported archive systems. They can also do a partial delivery of a rough cut of the native content: because eMAM manages the native resolution content, it can transcode the desired video segment(s) in the desired formats/codecs to the desired location.



Creating Subclips with the Preview and Subclips Widgets

Timelines in eMAM

eMAM users can build timelines, also known as sequences or storyboards. Using the Timeline widget, a user can create a timeline inside a project or subproject (bin). From the Browse widget, users can drag and drop videos onto the timeline. From the Subclips widget, users can also drag and drop subclips. Saved timelines are automatically available to editors in the Adobe Premiere Pro CC extension panel, or they can be exported as FCP XML.



eMAM Director Projects, Rough Cuts, Subclips & Markers

Media Sharing and Management

eMAM provides a range of tools for sharing and moving content. Media can be assigned to one or more projects and categories without making multiple copies. Finished material can be moved to a new category or metadata can be updated-designating the media as ready for review, delivery or archive. eMAM workflows and notifications can be automated.

Review and Approve

The Approval widget will send a single asset for internal or external approval. An external approval will be sent with a temporary password for email login to any user with the included video player. The recipient can preview a proxy of the asset, comment and choose “approve” or “reject”. After (dis)approval, the asset state changes from “pending approval” to “approved” or “rejected”, and the link is disabled for security.

Embed for Player Sharing

The Embed widget provides authorized users with the ability to generate an HTML embeddable link with a video player to play a video asset for embedding in an external website, or to generate a shareable URL address to share by email or social media as needed.

eBIN for Email and Social Media Sharing

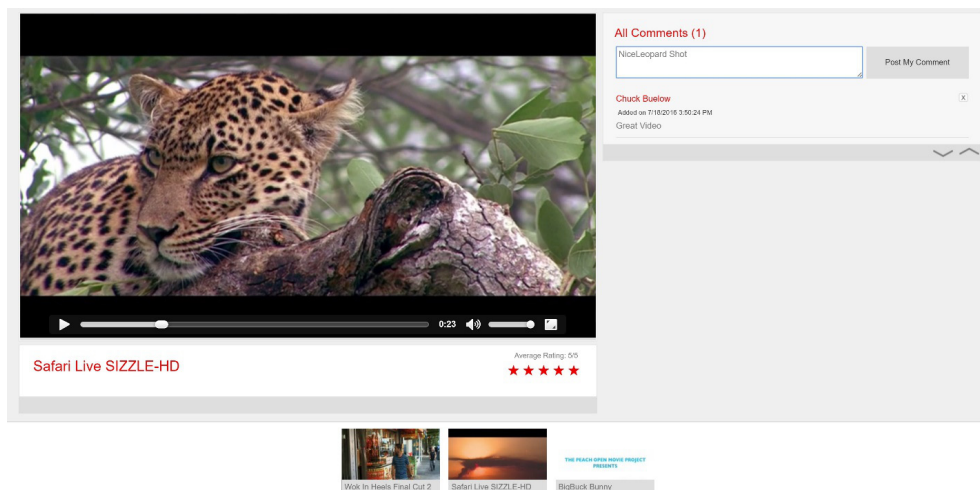
eMAM can send multiple assets through email using the eBIN widget. Assets can be added individually or in groups (e.g., entire categories) into an eBIN. The user can choose recipients from a predefined list, address book, or type in an email addresses individually. Security settings control message access and download rights. The user can also customize the email with choice of a logo and preset or customized theme settings.

The screenshot shows the 'eSEND' form with the following fields and options:

- Email addresses:** A text box containing 'dmiller@empressmam.com' and 'athomas@empressmam.com'.
- Subject:** A text box containing 'Show Name - New Episode'.
- Description:** A text box containing 'Season2 - Episode10. Includes screeners, music cuesheets, graphics and lower thirds.'
- eBIN options:**
 - Message Id:** A text box containing 'eSEND_LINK_12082016_031617'.
 - Email type:** A dropdown menu set to 'HTML'.
 - Expiry date:** A date picker set to '30-Sep-2016'.
 - Unlimited:** A checkbox that is unchecked.
 - Access limit:** A text box containing '3'.
 - Downloadable:** A checkbox that is unchecked.
 - Send me a copy:** A checkbox that is unchecked.
 - Unsubscribe:** A checkbox that is checked.
 - Enable report tracking:** A checkbox that is checked.
 - Allow comments:** A checkbox that is checked.
 - Forward:** A checkbox that is checked.
 - Clear your basket after send:** A checkbox that is unchecked.
- Theme settings:**
 - Email template theme:** A dropdown menu set to 'Eclipse'.
 - Preview template theme:** A dropdown menu set to 'Eclipse'.
- Buttons:** 'Send' and 'Clear' buttons at the bottom.

Setting up an eBIN to share links to content in eMAM

Recipients need only open the email to access the eBIN player. Different tabs will display videos, audios, images, and other documents. The recipient may be provided with a set of specific permissions which will allow them to comment, forward, and/or download the content.



The eBIN player

Sent eBIN messages are tracked. Users can easily update a previously sent eBIN message and resend for multistep approvals or to update sharing. eMAM can also publish eBIN content to popular social media platforms (e.g., Facebook, Twitter, Google+).

eSHARE
✕

Title:

Description:

eSHARE options


Link ID:

Expiry date: ☒ Unlimited Access limit:

<input checked="" type="checkbox"/> Downloadable	<input checked="" type="checkbox"/> Comment	<input checked="" type="checkbox"/> Enable eShare
<input checked="" type="checkbox"/> Enable login	<input checked="" type="checkbox"/> Clear your basket after send	<input checked="" type="checkbox"/> Autoplay
<input checked="" type="checkbox"/> Rating	<input checked="" type="checkbox"/> Like	

eShare Theme Settings

Preview template theme: Default ▼



Link sharing options

Delivery

The delivery option in eMAM can offload the transcoding/rendering and distribution processes from editing workstations onto the eMAM servers. This can free up the edit stations for other sessions.

Users can choose individual assets or group of assets to be added to the Delivery widget. Through tight integration with Harmonic Pro Media Carbon (WFS) and Telestream Vantage, eMAM can support delivery with transcoding to almost any desired format or codec. Because of the endless range of options, most organizations will preselect a list of delivery profiles for its users.

eMAM has integrated with Amazon AWS and Microsoft Azure cloud platforms, as well as all the platforms in the ComputeNext cloud market ecosystem, to provide a range of options for cloud delivery and storage. Accelerated file transfer is available using File Catalyst, Signiant, or Aspera. Customers can easily use any CDN system for distribution.

Archive and Storage

eMAM directly manages content, whether in local or remote storage, in cloud storage, or by using an HSM system to control an LTO archive. eMAM supports hybrid environments, where content is kept in multiple storage locations, with proxy copies served from the most appropriate location. eMAM also has the ability to keep proxy copies for offline (on the shelf) archived content and trigger notifications as needed to retrieve the content. The eMAM archive module can securely preserve final projects, elements and sequences in multi-tiered disk, cloud and LTO archive storages. Content can be permanently secured in a low cost archive with easy access. All eMAM managed content is available in the eMAM online library and the Premiere extension panel, so editors and others now have access to all the possible current and historical media, thereby increasing productivity while minimizing overhead costs for localized or redundant storage.

Building Collaborative Workflows

The integration of Adobe Premiere Pro CC and eMAM can be used to power a number of complete integrated workflows. Some of these combined processes are highlighted below.

Craft Editing for eMAM Projects

Content in eMAM can be used to create collaborative projects, which can be assigned to editors and others. eMAM users can use the Project, Markers, Subclips, and Timeline widgets to share assets, markers, subclips, and timelines for craft editing by Adobe Premiere Pro editors. After editing, assets can be shared as links, delivered, and archived from the eMAM system.

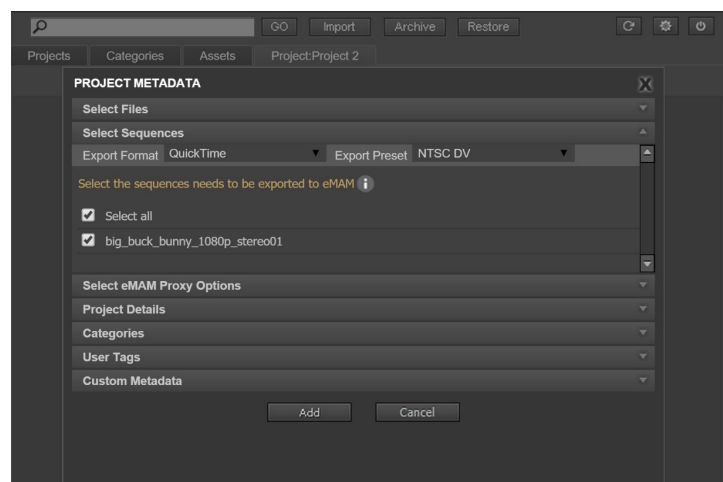
Collaboration with Other Editors and with Non-editors

Adobe Premiere Pro editors can export a project from the extension panel into eMAM for worldwide collaboration. Another Premiere Pro CC editor could use the extension panel to work on the project, syncing edits using the Export and Refresh panel buttons. eMAM users can collaborate in the editorial process, using the Project, Markers, Subclips, Timeline, and Comments widgets from the eMAM web interface. Alternatively, the editor could use the eMAM system to share edits using the Embed, eBIN, Delivery, and Approval widgets. Editors can import the revised or new projects back into Adobe Premiere Pro with relevant metadata using the panel Import button.

Sequence Sharing for Review and Approval

eMAM can be used to share only a rendered sequence instead of the entire Premiere Pro CC project. This is useful in a system where the editing work-in-progress highres content is not managed in the eMAM system. An example would be an eMAM Online cloud platform managing only proxy content. The eMAM system stores an H.264 proxy copy for all of the collaboration features. If necessary, users can request the original/native resolution content using the eBIN widget to make an eORDER, which will trigger an email notification for order fulfillment.

With the “Export to eMAM” plugin, Adobe Premiere Pro CC can be used to export sequences directly to the eMAM system. The export plugin uses the fast and powerful Adobe Media Encoder to perform the background encoding to prepare an H.264 copy of the rendered sequence. After extracting the embedded metadata, the proxy for the rendered sequence is moved to the online library.

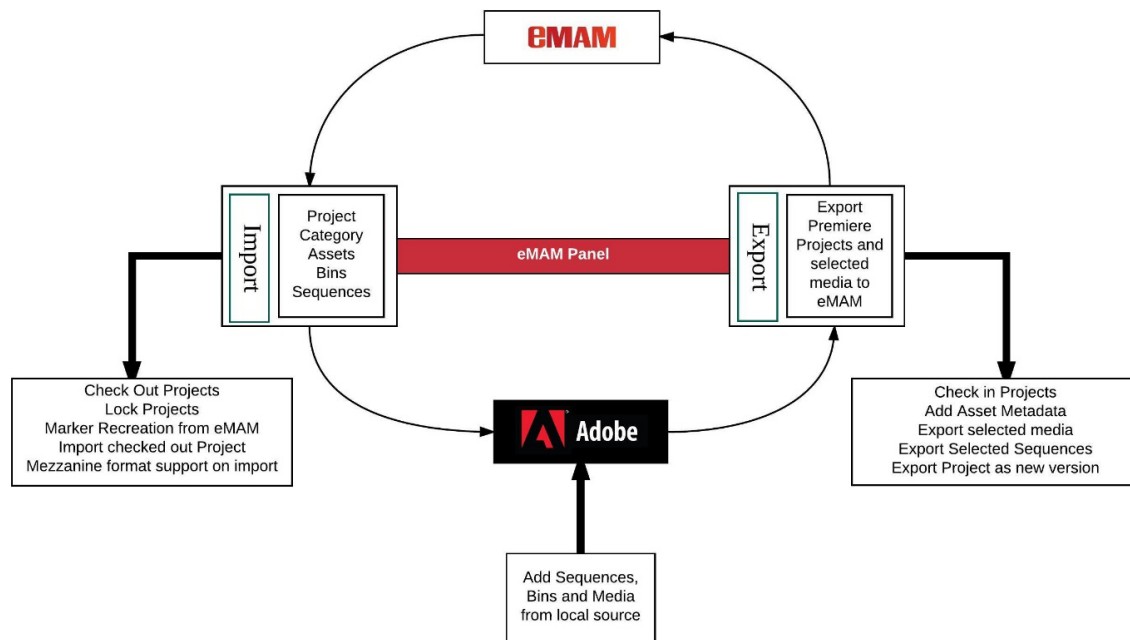


Export to eMAM option from the eMAM Panel in Adobe Premiere Pro CC

eMAM users could login to access and collaborate on the rendered sequence, or the editor could push as a link from eMAM using the eBIN, Approval, or Embed widgets.

Post Editorial

eMAM can power the post-editorial workflows of digital delivery, link sharing/publicity, and archive. Native resolution content can be delivered using the processing power of the eMAM servers, with transcoding and cloud functionalities. Social media and customized eBIN emails can be used to share links to finished content. Finally, projects can be permanently secured at low cost in an archive system, while preserving access to the content and opening up editing storage for new projects.



Premiere - eMAM workflow

Conclusion

Together eMAM and Adobe Premiere Pro CC offer a seamless extension panel integration so editors can access the features and content of eMAM without leaving the editing interface. eMAM tools can be used from tablets or any web enabled device, anywhere, anytime, to review, annotate, mark, perform rough cuts, create projects, and collaborate with the editorial process.

The integration of eMAM with Adobe Premiere Pro CC can be beneficial for editors, producers, and organization as a whole, as it offers:

1. Collaborative Editing
2. Project Management
3. Version Control
4. Permission and Security
5. Easy Access to the Content
6. Easy Archive and Restore

Together Adobe Premiere Pro CC and eMAM offer comprehensive, highly-integrated workflows with speed, performance, and features that video professionals need to deliver high-quality productions.



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