Lightroom Desktop - AI Pitfalls:
Protecting Your Competition Eligibility

Introduction

The rapid advancement of AI-generative technology in photo post processing has fundamentally transformed the creative process. Adobe's integration of Firefly AI-generative technology into Lightroom exemplifies this shift, consisting of **seamless artificial intelligence that can generate or reconstruct image elements extending beyond the photographer's original capture**.

Adobe offers Content Credentials to document photo editing and AI use, though it's an **opt-in feature** rather than a default setting.

The setup process varies depending on whether you're using Lightroom's cloud subscription versions (2022-current) or the discontinued standalone version (6.0), with detailed instructions provided for both below.

Photography competitions are adapting to AI technology by establishing clearer submission criteria. Entrants should review these updated standards carefully before submitting work to prevent automatic rejection.

CAPA Competition Guidelines

CAPA has established clear eligibility criteria regarding AI-generative technology in competition submissions. Understanding these restrictions is essential for photographers who want to ensure their work remains eligible for CAPA competitions:

Images that have been created or modified using specific AI generative techniques are not permitted for submission into our competitions. This includes:

In-painting (where AI fills in generated elements not captured by the photographer or removes and replaces elements from a photograph with AI-generated content);

Out-painting (where AI extends beyond the original boundaries of the photograph using generated elements); and

Image-to-image AI (where AI transforms an entire photograph based on text prompts or style references)

Text-to-image (where images are generated from scratch based on text entered into a prompt description)

These restrictions apply whether or not text prompts are used in the AI generation process.

All parts of the submitted image are the creator's original work, containing no elements produced or captured by others

This document provides detailed guidance to help photographers navigate Lightroom's features safely while maintaining competition eligibility.

Safe vs. Flagged Tools

✅ **SAFE TOOLS** (No Content Credentials added)

- Basic adjustments (e.g. exposure, highlights, shadows, blacks adjustment)
- Brush adjustments
- Chromatic aberration removal
- Enhance details
- Graduated filters
- Lens blur
- Noise reduction
- Post-crop vignetting
- Sharpening
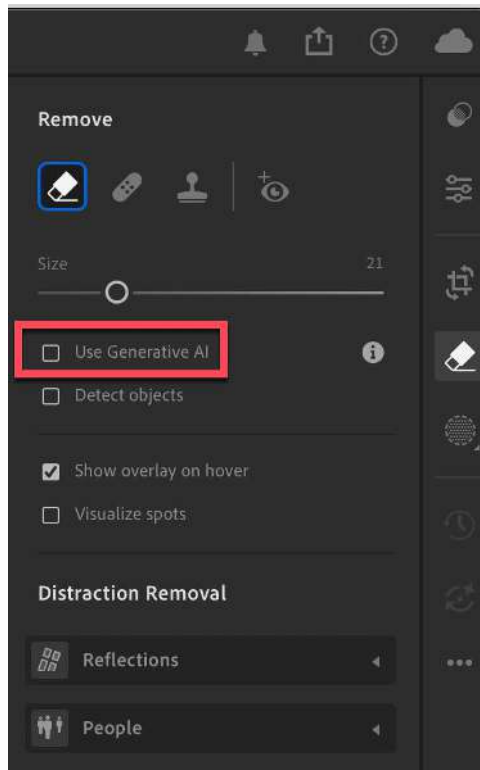- Generative Remove (**without** selecting **Use Generative AI**)

Figure 1 – Screen capture of the Remove window with not activating the Use Generative AI option.

❌ **FLAGGED TOOLS** (Content Credentials added)

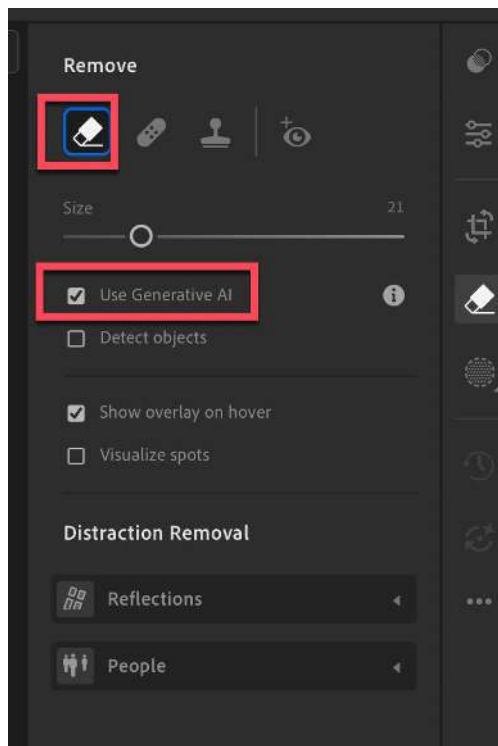- **Generative Remove** (selecting **Use Generative AI**)

Figure 2 – Screen capture of the Remove window with the "Use Generative AI" feature selected.

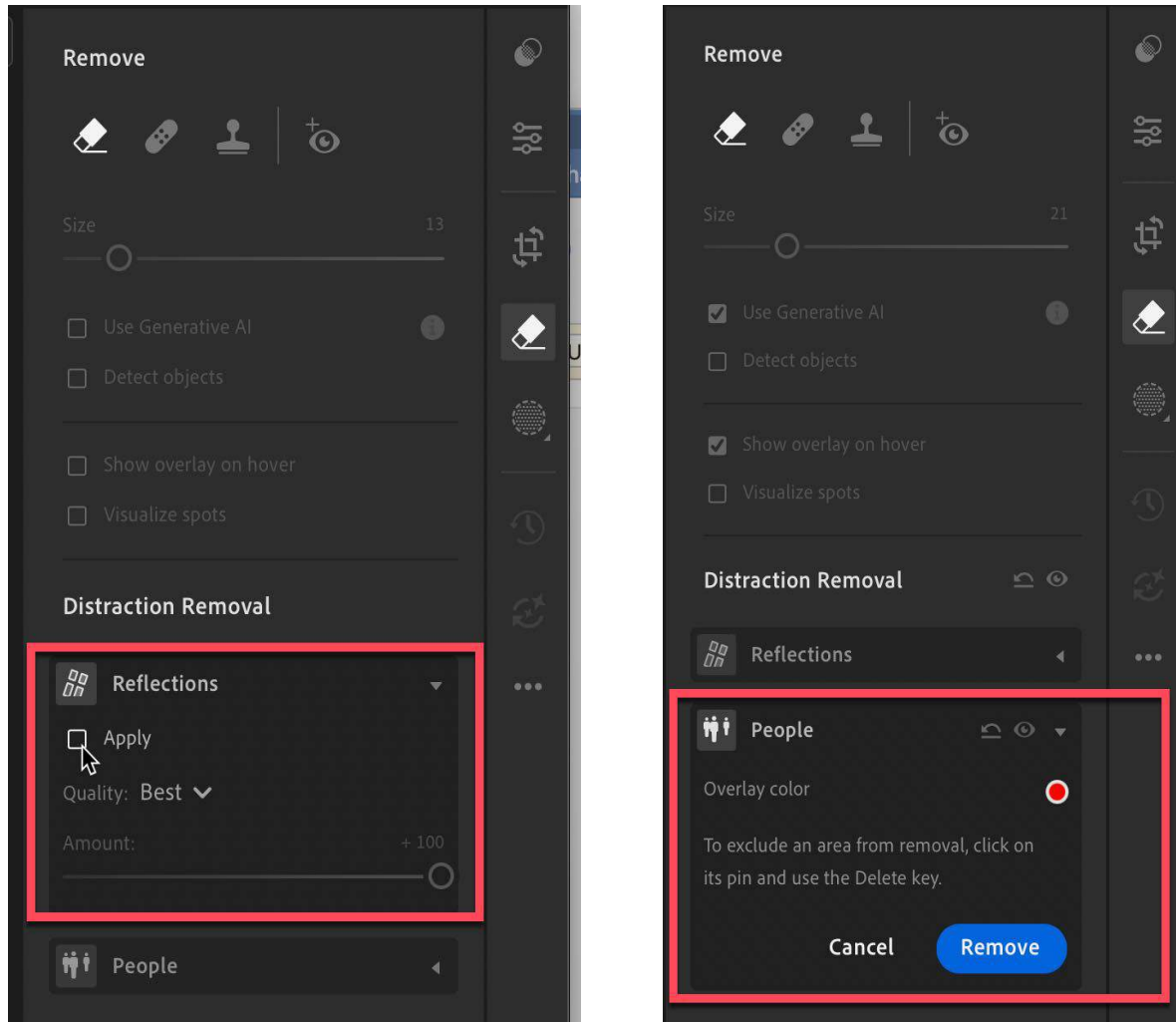- **Distraction Removal** (selecting **Use Generative AI**)

Figure 3 - Screen capture of the Distraction Remove – Reflection & People

Critical Mode Settings

REMOVE TOOL MODES

Mode	Result	Use When
"Use Generative AI" Not selected	✅ Add content credentials	Want to remove details with no AI usage
"Use Generative AI" selected	❌ Always adds credentials & AI note	Want AI system to remove selected area

DISTRACTION REMOVAL MODES

Mode	Result	Use When
"Use Generative AI" selected with **Distraction Reflection**	❌ Always adds credentials & AI note	Want to remove distracting reflection
"Use Generative AI" NOT selected with **Distraction Reflection**	❌ Always adds credentials & AI note	Want to remove distracting reflection
"Use Generative AI" selected with **Distraction People**	❌ Always adds credentials & AI note	Want to remove distracting people
"Use Generative AI" NOT selected with **Distraction People**	❌ Always adds credentials & AI note	Want to remove distracting people

Content Credentials Benefits

Before diving into tool-specific guidance, it's important to understand why Content Credentials are valuable for photographers:

Enhanced Attribution and Recognition

- Content Credentials embed secure metadata explaining who created the image and how it was edited
- This metadata acts as a digital fingerprint, giving photographers credit as their work is shared online

Protection Against Image Theft

- Since credentials remain attached to images, tracing and verifying original creators becomes easier
- Content Credentials serve as proof of content provenance, offering defense against image theft and unauthorized commercial use

Privacy Protection

- Content Credentials focus on verified creator identity and general editing overview without exposing sensitive personal metadata like exact camera settings, timestamps, or GPS coordinates
- Helps photographers maintain privacy around personal shooting information while still benefiting from protected attribution

Competition Verification Benefits

- Provides competition coordinators with an objective technical method to verify AI involvement by using the C2PA's Content Credential webpage (https://contentcredentials.org/verify)

- Enables transparent detection of AI generative techniques like in-painting or out-painting
- Helps maintain fair play and trust in judging outcomes

Export – Lightroom Desktop (cloud based)

Content Credentials allow photographers to embed verifiable metadata directly into their images. This feature can be activated within Lightroom and customized to include specific information with each exported file.

When working with supported versions of Lightroom Desktop (2024 & later), photographers must use Adobe's Content Credentials feature.

Simply activate this feature before you begin editing and select it when saving your work. This automatically preserves complete image metadata including the activation of all AI-generative features.

For **all** Lightroom Desktop subscription-based applications, the following steps will be **required** for submission into our photo competitions.

Content Credentials Setup

Content Credentials are digital signature that provide transparency about how images were created and edited. When enabled, they record editing actions, creator information, and can help verify image authenticity.

To activate Content Credentials, Lightroom Desktop needs to be configured. This configuration only needs to be once. These settings will apply to all future exports until they are changed.

Step 1: Open any image in Lightroom and navigate to **Adobe Lightroom > Preferences** (on a Mac) or **Adobe Lightroom > Edit > Preferences** (on Windows) in the figure 4

Figure 4 – Screen capture of the Adobe Lightroom's dropdown menu with the Preferences option highlighted.

Step 2: Select **Preference** option and select the Done button as shown in figure 5 below.
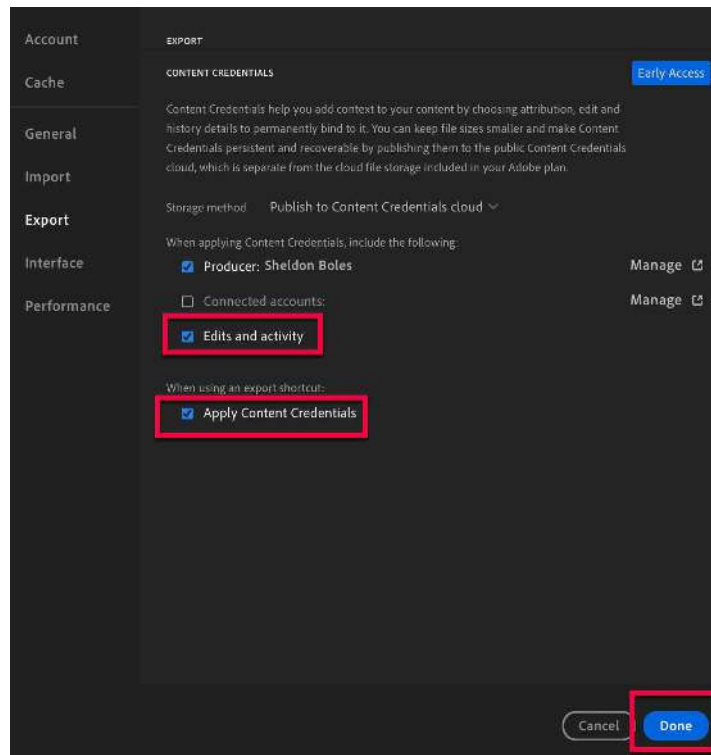

Figure 5 – Screen capture of the Lightroom Export window.

The window includes:

- **Producer:** The name listed on your Adobe account.
- **Connected accounts:** Select your preferred social media account. You can connect your Behance, Instagram, or any other social media account by selecting Connect accounts.

Step 3: Select on the **Edits and activity:** The editing and processing actions taken to produce the final image. – **This feature should be turned on**

Step 4: Select the **Apply Content Credentials**

Step 5: Select the **Done** button

Activating Content Credentials - When Required

With Lightroom Desktop being configured with Content Credentials settings, they can be included when images are saved after editing.

Here's how to activate this feature for individual photos.

Special Note - These steps are must be performed each time an image is saved with Content Credentials.

Step 6: Select the **right button on your mouse** and options will be presented to you as shown in figure 6 below
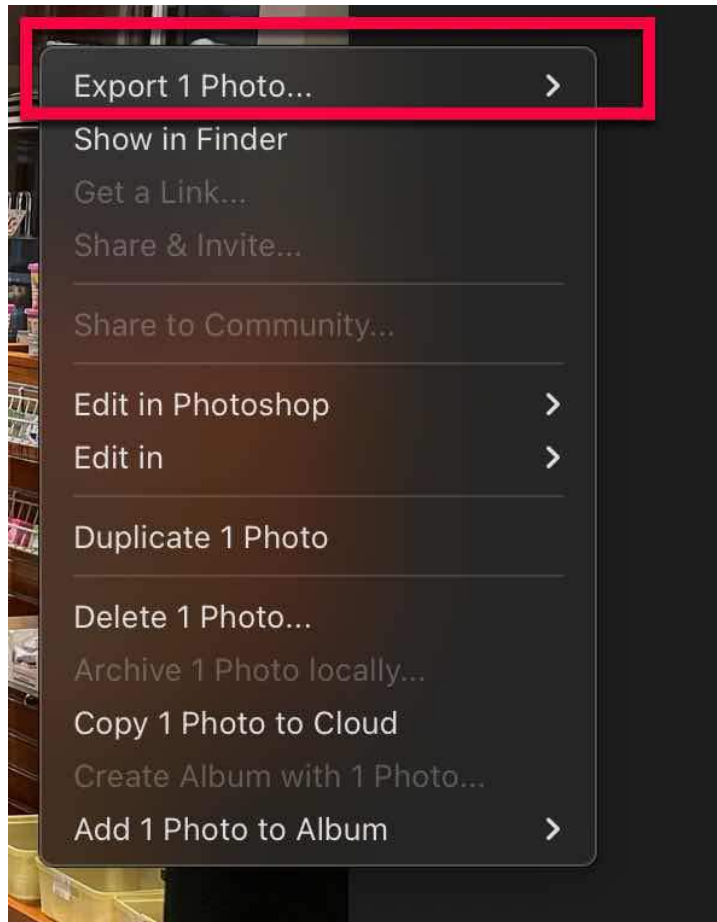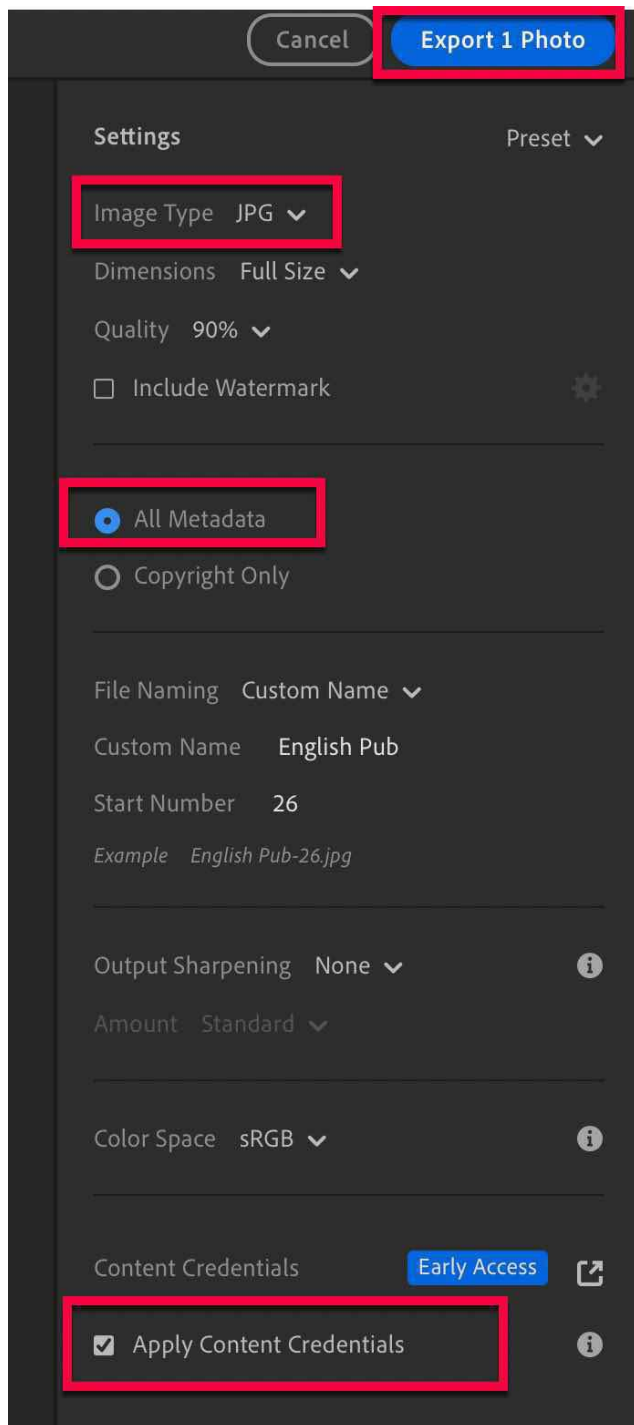

Figure 6 – Screen capture of the on-image right mouse button activation.

Step 7: Select **Export 1 Photo** option and by doing so the **Export** option window will be presented as shown in figure 7 below

Step 8: Select Image **Type to JPG**

Special Note: Only JPG format can be used for Content Credentials.

Step 9: Check the **All Metadata** option

Step 10: Check the **Apply Content Credentials** options

Figure 7 – Screen capture of the Lightroom Desk Export window.

Step 11: Select the **Export** button which appears in the upper right hand corner of the Export window.

Best Practices Workflow

Before Editing (photo competition compliant)

- **Preserve your original files** and work on copies when editing. For JPEG files, always duplicate the original before making any edits to maintain an untouched backup. For RAW files, this isn't necessary since RAW editors work non-destructively. Your edits are stored as instructions separate from the original file, and changes are only applied when you export the final image. The original RAW file always remains unmodified.
- **Use traditional tools**: Stick to Spot Healing, Healing Brush, Clone Stamp, Content-Aware Fill

During Editing:

- Utilize local processing modes when possible
- Avoid any tools that generate new image content
- Keep detailed records of your editing process
- When in doubt, use traditional (non-AI) editing methods

Verify Your Image Metadata

One the image with Content Credentials has been Exported, the image can be checked using the **Adobe's Content Credentials website** (https://contentcredentials.org/verify) to upload and verify if image editing in Lightroom contains generative AI created elements.

Figure 18 – Screen capture of Content Credentials/verify analysis of an image containing AI-generative feature.

Content Credentials Analysis Overview

The "*Ingredients*" section of Content Credentials displays the source images that were used during the editing process to create the final image under review.

The critical indicator in this analysis is the presence of the CR symbol, which confirms that the image has been properly registered as a Content Credentials document.

Competition Requirement: All images edited using Photoshop or Lightroom must display the CR registration symbol when examined through Content Credentials analysis to meet our competition standards. **Images failing to contain the CR symbol must be exported as outlined in this document.**

Images identified as containing generative AI elements will require the maker to either:

- Re-edit the image without activating any generative features, or
- Decide not to enter the image into competition

Image Requirements for Competition Winners

CAPA **may** request the following image files from the potential winners:

- Original unedited JPEG or RAW file
- All source images used in composites or blends
- Working file (PSD) showing your editing process
- XMP metadata file (when applicable)

  Special Note - Keep these files accessible throughout the competition period.

Verification & Authentication Processes: All requested files will be subjected to our analysis to ensure the authenticity of the submitted image and verify compliance with competition guidelines.

Important: Images that cannot provide the required verification files or fail our authenticity analysis will be disqualified and competition results will be adjusted accordingly.

Closing Comments

By implementing Adobe Content Credentials, photographers can protect their creative work, strengthen their reputations, and establish trust in an era of digital manipulation and AI-generated imagery.

If you have any questions or concerns relating to the above details, you can email the writer at competitions@capacanada.ca

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