# **Lightroom Al Pitfalls: Protecting Your Competition Eligibility**

Lightroom (version 14.5.1)



#### Introduction

The rapid advancement of Al-generative technology in photo post processing has fundamentally transformed the creative process. Adobe's integration of Firefly Algenerative 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 Al-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)

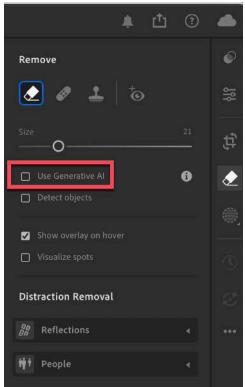


Figure 1 – Screen capture of the Remove window with not activating the Use Generative AI option.

- **X FLAGGED TOOLS** (Content Credentials added)
  - Generative Remove (selecting Use Generative AI)

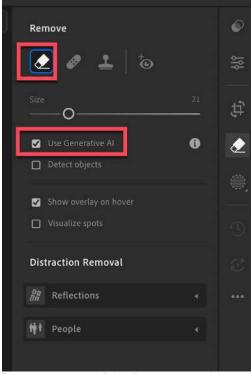


Figure 2 – Screen capture of the Remove window with the "Use Generative AI" feature selected.

• Distraction Removal (selecting Use Generative AI)

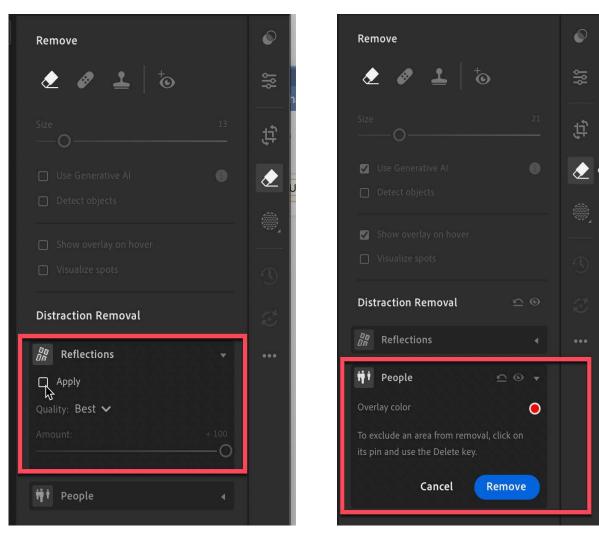


Figure 3 - Screen capture of the Distraction Remove - Reflection & People

# **Critical Mode Settings**

### **REMOVE TOOL MODES**

Mode	Result	Use When
"Use Generative AI" Not	✓ No content	Want to remove details
selected	credentials	with no Al usage
"Use Generative AI"	X Always adds content	Want AI system to
selected	credentials	remove selected area

#### DISTRACTION REMOVAL MODES

Mode	Result	Use When
"Use Generative AI"	X Always adds	Want to remove
selected with <b>Distraction</b>	credentials	distracting reflection
Reflection		
"Use Generative AI"	X Always adds	Want to remove
NOT selected with	credentials	distracting reflection
Distraction Reflection		
"Use Generative AI"	X Always adds	Want to remove
selected with <b>Distraction</b>	credentials	distracting people
People		
"Use Generative AI"	X Always adds	Want to remove
NOT selected with	credentials	distracting people
Distraction 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 Al involvement by using the C2PA's Content Credential webpage (https://contentcredentials.org/verify)

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

# **Content Credentials Setup**

#### **Lightroom Classic** – Cloud Subscription Versions (2022 to Current)

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.

**Supported Versions (2022 and later):** When working with supported versions of Lightroom, 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 Al-generative features.

All metadata includes the application and version used for editing. Adobe introduced Algenerative features in May 2023, making metadata tracking increasingly important for competition compliance.

#### **Setup Instructions – For Classic Subscription Versions**

It is essential that the following setup be undertaken <u>prior to the commencement of the</u> editing of an image.

**Step 1**: Open any image in Lightroom and navigate to **Adobe Lightroom > Preferences** as shown in the figure 4



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

**Step 2**: Click **Preference** option and **Export** window will be presented. See figure 5 below on what will appear in the **Export** window.

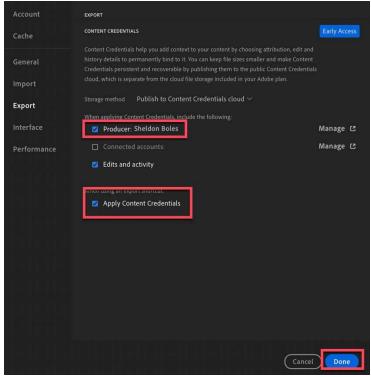


Figure 5 – Screen capture of the Lightroom Export window.

**Step 3**: Select the **Apply Content Credentials** and double-click the **Done** button to activate **Content Credentials** feature.

**Lightroom Classic - Standalone** (version 6.0) – discontinued Dec. 31, 2023

There is no setup for Content Credential in this version of Lightroom Classic.

However, photographers are asked to export their images with the Content Credentials, with this version of Lightroom.

Export step-to-step procedures are outlined later in this document.

To track your editing history, you'll need to enable Content Credentials **for each image** in Lightroom Classic. The software captures this editing information when you export your files, but you'll need an internet connection for Content Credentials to work.

#### **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:**

- Activate Content Credentials as noted above
- 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

# **Export Image – Classic Subscription Versions**

**Step 1:** Complete your image editing process.

#### Step 2: Select File > Export > Export

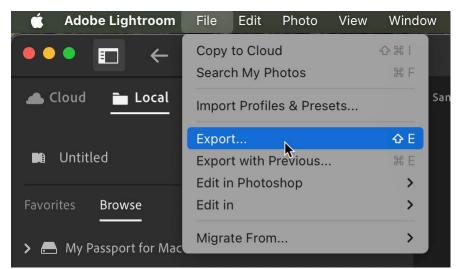


Figure 6 – Screen capture of the Lightroom File dropdown menu with the Export option highlighted.

Based on this **Export** selection, the **Export** window will appear as shown in figure 7 below.

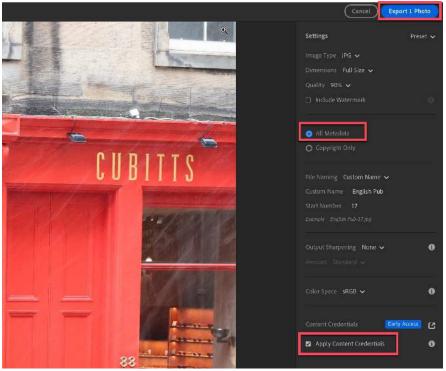


Figure 7 – Screen capture of the Lightroom Export window.

**Step 3:** Select the **All Metadata** and **Apply Content Credentials** then double-click the **Export** button, as shown in figure 7 above

**Export Image – Classic Standalone** (version 6.0) – discontinued Dec. 31, 2023

#### **How to Enable Content Credentials**

- **Step 1**: After editing a photo, select **File > Export** and scroll down and locate the **Content Credentials**
- **Step 2**: Select the **Apply Content Information** option, currently available in early access in the **Content Information** (early access) section.

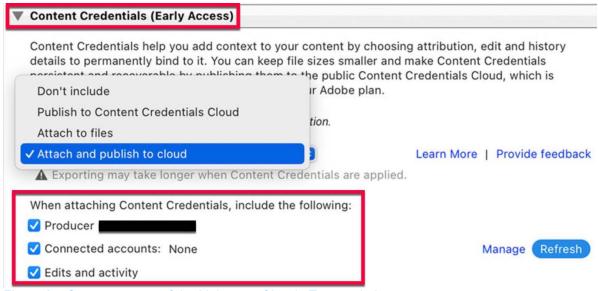


Figure 8 – Screen capture of the Lightroom Classic Export window.

#### **Step 3**: Select a **Storage method**:

- Publish to Content Credentials cloud when selected, the Content
  Credentials are published to Adobe's public Content Credentials cloud, which is
  separate from your Adobe plan's cloud file storage. This makes the credentials
  persistent and searchable publicly. Under this option, the image's Content
  Credentials data (not necessarily the whole image) is uploaded to
  contentcredential.org/verify or an equivalent Adobe verification sit; OR
- Attached to Files the Content Credentials metadata is embedded only inside the exported file, and the image is NOT uploaded to the Content Credentials cloud. This keeps the file more private but increases file size, and no public record in the cloud is created. Using this option, the image will be identified as containing Content Credentials, including generative AI usage if present; OR
- Attach and publish to cloud This option does both: embeds the credentials inside the file and publishes them to the cloud.

**Step 4**: Select the information you want to include:

- Producer The name listed on your Adobe account.
- Connected accounts Select Manage to connect your Instagram, Facebook, or other social media accounts, and select your preferred account to add Content Credentials for the file.

#### Step 5: Click Export

**Note** - Once the content credentials are uploaded, you can check the image on <u>Adobe</u> <u>Inspect</u>.

**Resource** - Check Anthony Moranti's Youtube video entitled "<u>Protect Your Pictures – Lightroom (version 6.0) Content Credentials</u>"

# **Verify Your Image Metadata**

Upload your image to **Adobe's Content Credentials website** (<a href="https://contentcredentials.org/verify">https://contentcredentials.org/verify</a>) to upload and verify if image editing in Photoshop contains generative AI created elements.

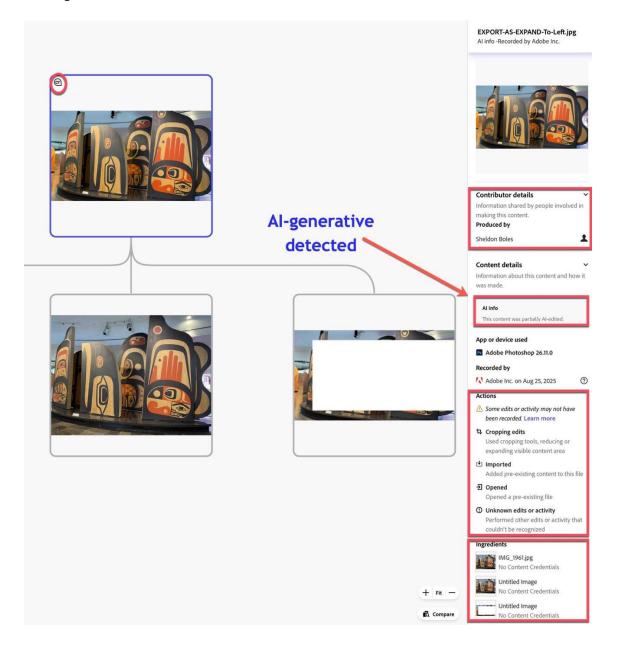


Figure 9 – Screen capture of Content Credentials/verify analysis of an image containing Algenerative feature.

# Note – Image identified as containing generative AI element will require the maker to either:

- Re-edit the image without activating any generative features, or
- Decide not to enter 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 or DNG) 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 Al-generated imagery.

If you have any questions or concerns relating to the above details, you can email the writer at <a href="mailto:competitions@capacanada.ca">competitions@capacanada.ca</a>

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