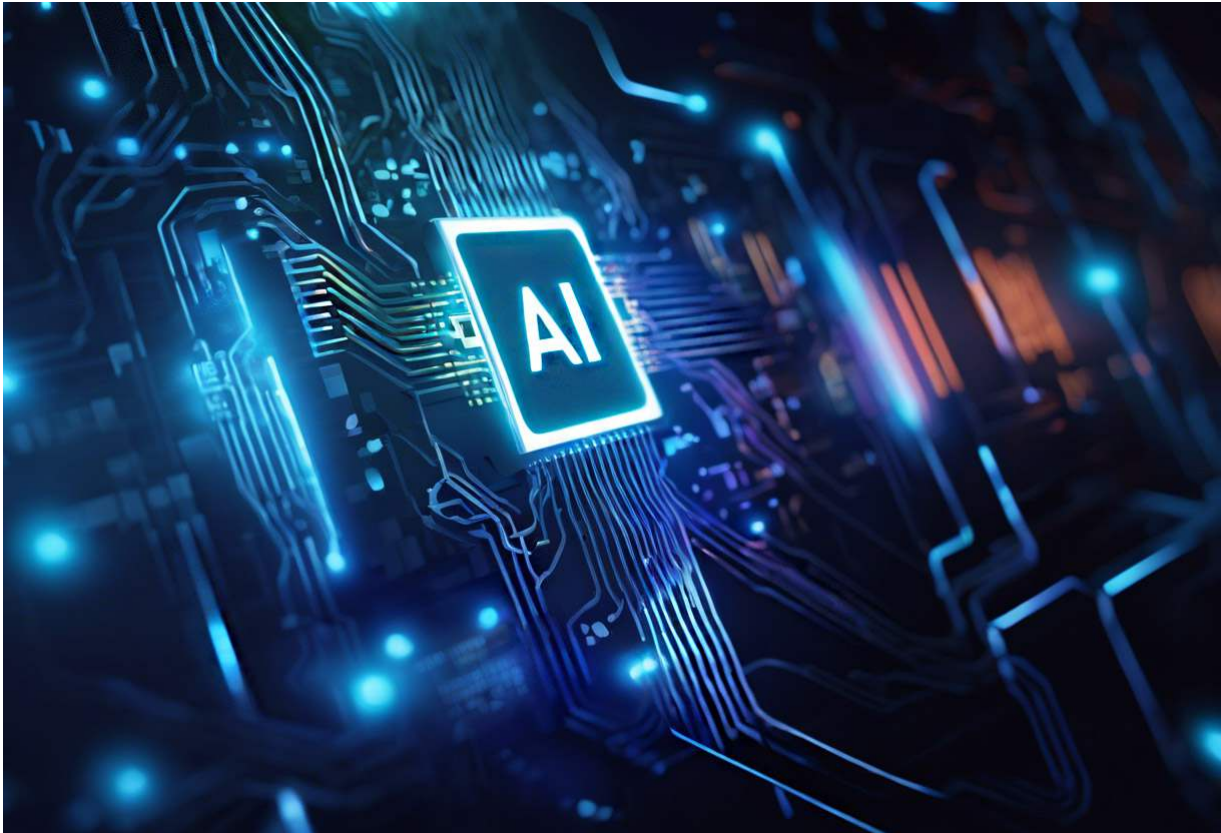


CAPA's Stance on Artificial Intelligence in Photo Competitions



AI Processing Chip image generated using Dream Studio AI system.

Updates from December 13, 2024 Edition – Shown in Red

We are currently working to enhance the accessibility of documentation for French-speaking photographers by covering a wide range of software available in both languages. To ensure the accuracy and cultural relevance of this resource, we kindly request screenshots that correspond to those shown in this document. Your contributions will help us create a more comprehensive and user-friendly French-language resource.

Introduction

Photography is entering a transformative era with the emergence of artificial intelligence (AI) technology. To protect the integrity of traditional photography while acknowledging technological advancement, CAPA has established comprehensive guidelines regarding the use of AI in our competitions.

These guidelines are detailed in two key locations: the CAPA Eligibility Criteria webpage and our individual competition rule sets and make clear distinctions between:

- Traditional photography skills and techniques that form the foundation of our craft;
- Permitted AI enhancement tools that preserve original photographic elements; and
- Prohibited generative AI functionality tools that modify existing images by adding new elements drawn from external AI trained datasets.

Traditional photography embodies distinct skills and artistry - from understanding light, composition, and timing - to mastering camera techniques and thoughtful post-processing. The CAPA guidelines aim to preserve these fundamental elements while providing clear parameters for acceptable AI enhancement tools.

Photography competitions have always operated with specific rules, not to censor, but to maintain fair competitions within defined categories. The CAPA AI guidelines follow this same principle and are similar to the established rules prohibiting staged nature/wildlife images or manipulated photojournalist images.

Permitted AI Enhancements Tools For Photo Competition Entries

Effective January 1, 2025, entrants may use AI-enhanced editing tools that improve existing images without adding new elements drawn from external AI training datasets.

Adobe Neural Filters

Adobe Neural Filters use Adobe Sensei's AI and Generative Adversarial Networks (GAN) models to edit images based on professional editing examples. The following Neural Filters are permitted as they enhance existing elements without adding new content:

- **Colorize:** A local Photoshop feature that does not access the Adobe Cloud
- **Color Restore:** An Adobe cloud-based filter that reconstructs original colors in faded/damaged images without adding new elements
- **Harmonize Color and Luminosity:** Adjusts color and luminosity using cloud processing without adding new elements
- **Photo Restoration:** Local Photoshop function for removing scratches and correcting colors without adding new elements
- **JPEG Artifacts Removal:** Local Photoshop feature that reduces compression artifacts without adding elements
- **Skin Smoothing:** Local Photoshop feature for blending skin tones and textures using sliders

The Neural Filters listed below cannot be used in our competitions as they incorporate significant elements from third-party AI models:

- **Backdrop:** Offers pre-made images and AI-generated content
- **Deep Blur:** Adds elements like bokeh circles and light dispersion
- **Landscape Mixer:** Creates new landscapes by combining different images
- **Makeup Transfer:** Applies makeup details from source images
- **Smart Portrait:** Modifies facial features and expressions using cloud processing
- **Style Transfer:** Changes visual texture, colors, and patterns
- **Super Zoom:** Creates new pixels to fill enlarged images

Generative AI: From Photo Enhancement to Creation

In the area of generative AI technology there are currently three categories:

Photo Enhancement – Fill / Expand Boundaries:

- Modifies existing photos by filling or modifying specific areas. This is done by adding elements drawn from external AI training datasets;
- Focuses on blending external elements into an existing image;
- Examples of post processing applications containing Generative AI enhancements:

Adobe Photoshop - Remove Distractions, Generative Fill, Expand, Generative AI Erase;

Adobe Lightroom - Generative AI Remove;

Fotor - Image Extender;

Luminar Neo - Generative Fill, Generative Crop, Generative Erase;

ON1 Photo RAW - Erase with option 'Stability AI' activated and Erase Distractions with option selected.

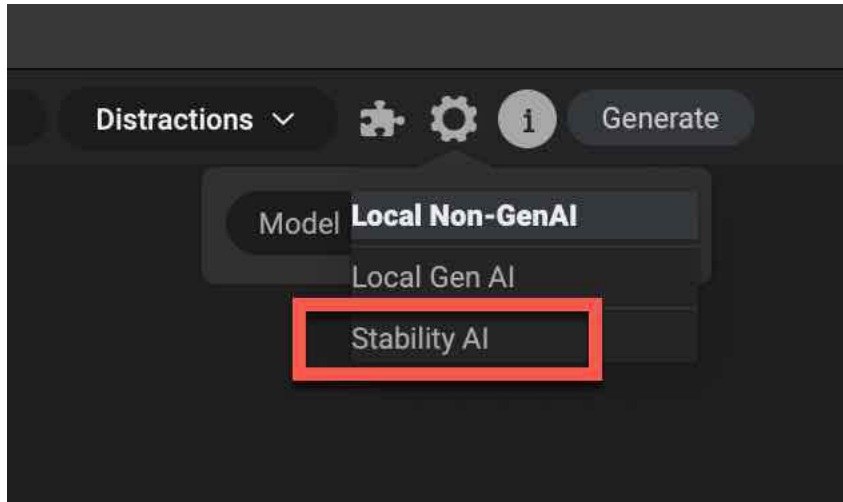


Figure 1 – Screen capture of the On1 Photo Raw's Erase option window.

- Picsart AI** - AI Expand;
- Pixelr** - Generative Expand;
- Recraft AI** - Generative Fill and Expand;
- Microsoft Paint** - Generative Fill, Generative Crop, Generative Erase;
- Runway** - Expand Image.

Photo Image-to-Image:

- Transforms an entire photo, based on text prompts or style references;
- Preserves basic structure while changing style, content, or attributes;
- Provides more control over output compared to text-to-image;
- Examples of Generative AI systems with image-to-image features:

DALL-E 3
Image FX
Stable Diffusion

DeepAI
Imagen AI

Dream Studio
Midjourney

Text-to-Image:

- Generates images from scratch based on text entered into a prompt description
- Provides complete creative freedom but less control over the specific details produced by the system
- Examples of Generative AI image generators:

Adobe Firefly AI
Crayon
Designify
Flux AI
Imagen 2 AI
Midjourney
Stable Diffusion

Bing AI
DALL-E 3
Dream Studio
Gork AI
Leonardo AI
NightCafe Studio

Canvas Magic Media
DeepDream
Foto AI Image Generator
Idogram AI
Meta AI
SeaArt AI

Our photo competitions exclude all entries that incorporate any form of Generative AI technology as described above.

Potential winning images in a competition undergo a comprehensive verification process. Images showing evidence of generative AI use - whether through metadata tags, visual indicators, or other markers - will be disqualified. In such cases, competition rankings will be recalculated to ensure fair results for all participants who adhered to the guidelines.

Permitted AI Enhancement Tools For Competition Entries

Effective December 9, 2024, competitors may utilize AI-enhanced editing tools that improve existing image elements without adding new elements drawn from external AI training datasets.

Below are the approved AI-powered features available in common editing software:

- **Adobe Photoshop:** Standard editing tools including spot healing brush, remove tool (without Generative AI), healing brush, patch tool, content-aware move, and red-eye correction. These remain permitted, as these functions don't engage the Firefly generative system.
- **Adobe:** Lightroom and Adobe Raw editor feature called "Enhance" operates using internal AI algorithms that process raw image data directly, rather than utilizing external dataset for enhancements. As such, this feature is approved for our competitions.

Adobe: Camera Raw editor contains a feature called "Distraction Removal - Reflections" tool, operates internal AI algorithm that process raw images directly, without the utilizing external dataset . Consequently, this feature is approved for our competitions. Figure 2 below highlights this feature within Camera Raw editor:

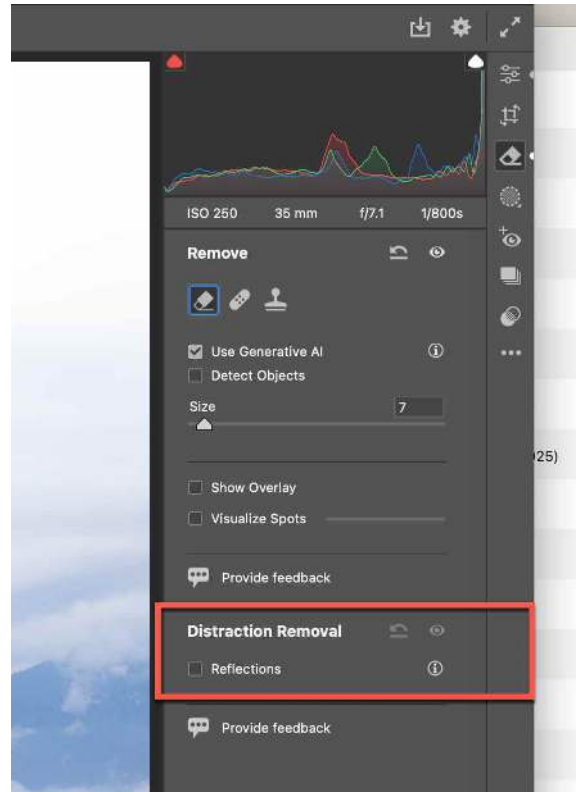


Figure 2 – screen capture of the “Distraction Removal – Reflections” within Adobe Camera Raw.

- **Aperty:** Approved AI features include facial retouching, reshape tools, and creative adjustments for lighting, color enhancement, and light placement.
- **DxO PhotoLab:** DeepPRIME AI technology is permitted for image enhancement, including denoising, sharpening, and PRIME deblurring functions.
- **Luminar Neo:** Acceptable AI tools include Structure enhancement, Skin Enhancer, and Sky Replacement features.
- **ON1 Photo RAW:** Permitted AI capabilities include Auto Enhance, Match Batch Processing, No-Noise reduction, Generative Crop, **Remove elements or distractions ONLY using the option of Local Non-GenAI and Local Gen AI.**
- **Topaz Labs AI:** Approved application which now includes image enhancement tools for noise reduction, sharpening and upscaling. Past versions of DeNoise AI (for noise reduction) and Sharpen AI (for image clarification) are also approved although these applications can no longer be purchased. Gigapixel AI (for image upscaling) is also approved for our competitions.

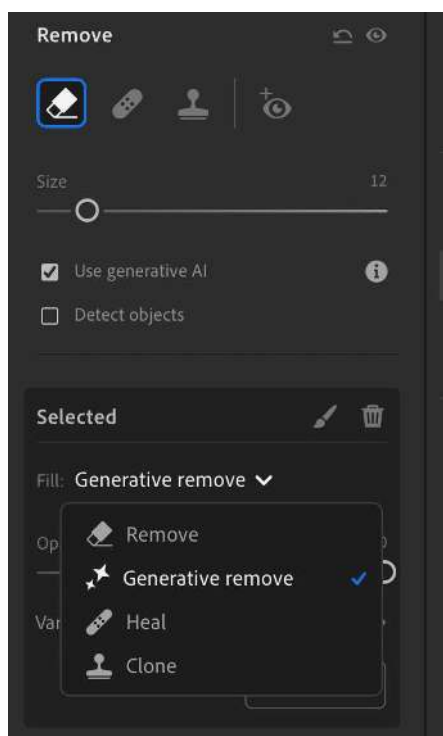
Important: For the purposes of our competitions, a photographic image is defined “as being a captured image on a light-sensitive device (e.g. film camera, digital camera, smartphone, tablet, etc...) and recorded on film or in a digital format.”

All parts of the submitted image are the creator’s original work, containing no elements produced or captured by others; therefore, they hold and retain the copyright for the image.

Special Note - Before using any tools or apps that aren't specifically mentioned in CAPA's rules, competitors must get CAPA's approval. If you're unsure whether a particular tool is allowed, please ask us. This helps ensure everyone follows the same standards and competes fairly.

Lightroom Editing Guidelines: Guidelines & Restrictions

Adobe's Lightroom introduced a significant new feature called "Generative AI Remove" on May 21, 2024, which is powered by their Firefly AI technology. This tool allows photographers to eliminate unwanted objects from photos with just one click. Figure 3 below provides a screen capture of the Lightroom’s Remove menu options.



There's a crucial distinction between this new AI tool and traditional photo editing methods:

Traditional Heal/Remove Tools: Only uses pixels from within an original photograph and maintains image authenticity.

These tools are allowed in competition submissions

Generative AI Remove: Creates new content by drawing from external image databases and adds elements not present in your original photographs. These tools are NOT allowed in competition submissions.

Figure 3 – Screen capture of the Lightroom Remove feature

For competition purposes, to avoid having an image disqualified please use only traditional editing tools that preserve your original image data.

Photoshop's AI Removal Tools: Guidelines & Restrictions

Adobe expanded Photoshop's capabilities on October 14, 2024, by introducing the Remove AI Tool feature, powered by Adobe Firefly AI technology. This enhancement provides users with advanced options for removing unwanted elements from images.

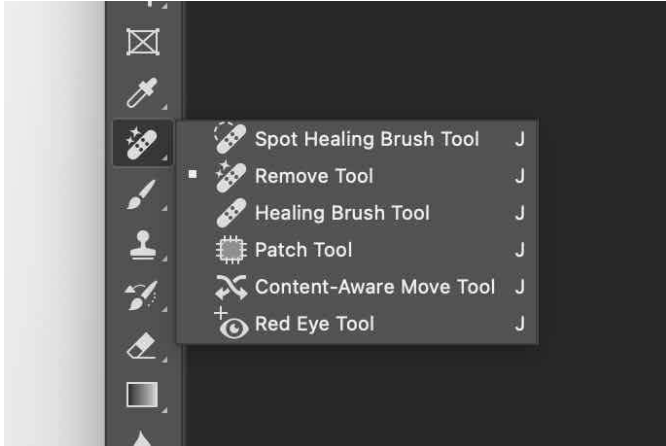


Figure 4 – Screen capture of Photoshop's Healing and Remove features.

When the Remove tool is selected, the Mode options appear in the top Photoshop bar, figure 5 below identifies the Mode option field.

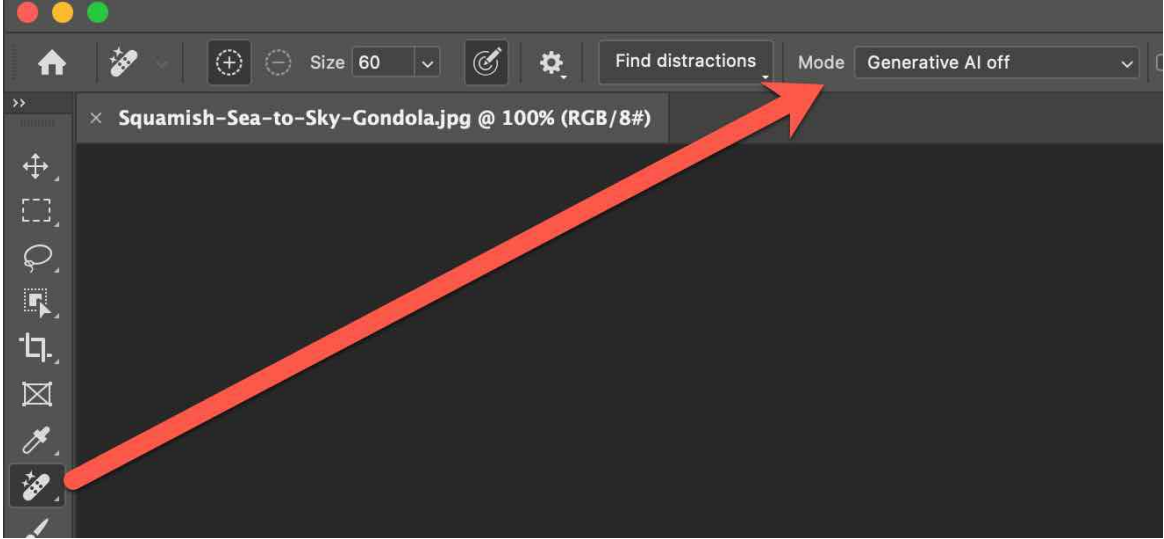


Figure 5 – Screen capture of the Mode option in Photoshop.

The Erase options are displayed when opening the Mode dropdown menu, figure 6 below provides an example of the Mode options.

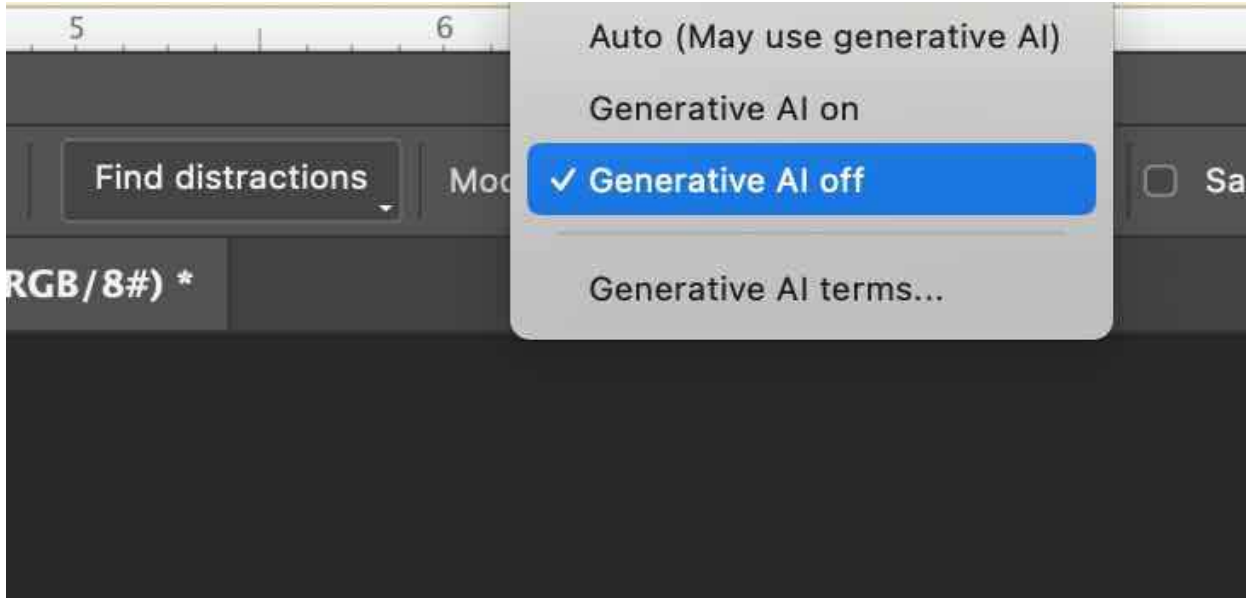


Figure 6 – Screen capture of Photoshop’s Find Distraction Feature with available options.

For competition submissions, there are strict guidelines regarding AI usage:

- All element removal must be performed with the "Generative AI off" setting.
- Images processed using either "Auto" or "Generative AI on" modes will automatically receive Adobe Firefly metadata tags, including "Adobe Firefly" and "Generated Image" identifiers.

Photoshop’s “Find Distractions” Feature: Guidelines & Restrictions

The October 2024 update to Adobe Photoshop 26.0 introduced an AI-powered feature called "**Find Distractions**" within the Remove tool. This feature allows users to automatically identify and remove unwanted background elements such as people and wires. However, its use has specific implications for competition submissions.

The “Find Distractions” dropdown menu appears in the top menu bar when the Remove/Clue option is selected.

Available distraction removal options include:

- Wires and cables
- People

The Find Distraction options are displayed when opening the Mode dropdown menu, figure 7 below provides an example of the Mode options.

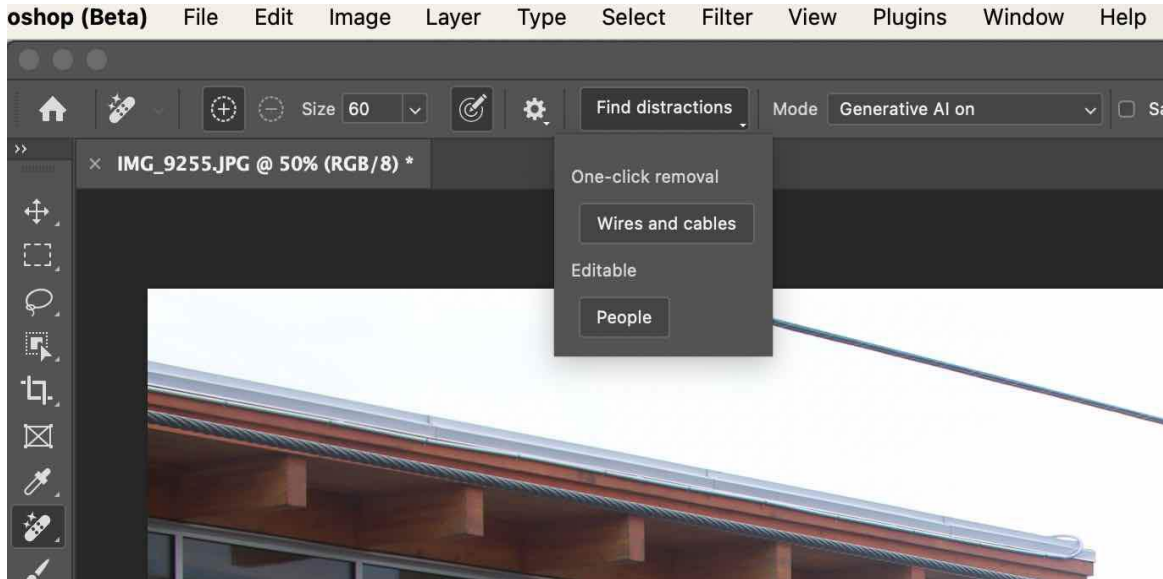


Figure 7 – Screen capture of Photoshop’s new “Find distractions” dropdown menu.

Important Competition Guidelines:

- When preparing images for competition submission, users **MUST** select "Generative AI off" in the Mode dropdown menu – Figure 8 below provides a screen capture of the Mode menu.

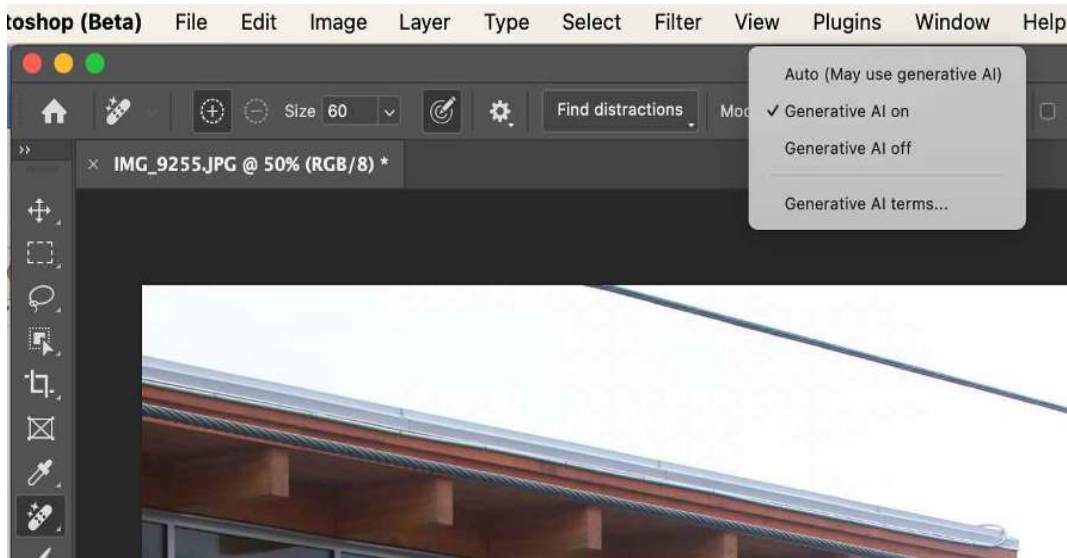


Figure 8 – Screen capture of the Mode dropdown menu options.

- Using either "Auto (May use generative AI)" or "Generative AI on" settings while activating the Find Distractions feature will result in the Adobe Firefly AI algorithm adding tags to your image metadata.
- The metadata will include six tags, including "Firefly AI" and "Generative AI Image".

Adobe RAW Generative AI Remove: Guidelines & Restrictions

Adobe introduced the Generative AI Remove feature on October 14, 2024, as part of the Adobe RAW editor.

This feature provides two distinct removal options:

1. **Traditional Remove:** Eliminates selected elements from an image by analyzing and using existing image details for replacement
2. **Generative AI Remove:** Uses Adobe Firefly AI dataset to generate new content for replacing selected elements

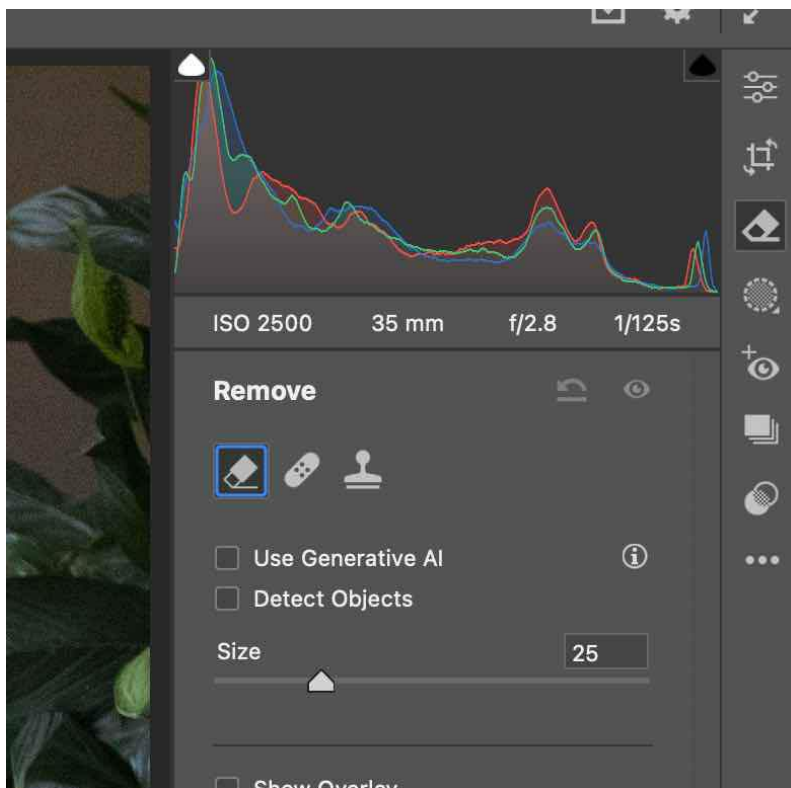


Figure 9 – Screen capture of the Remove features within Adobe RAW application.

To introduce you to these new AI features, check out this video – “**Streamline Your Edits with Adobe Camera Raw's AI Tools**” (Youtube video)

<https://www.youtube.com/watch?v=BPJfYx4dEo0>

To enable the "Use Generative AI" option, the area for removal is selected, the Remove feature is selected and, the system:

- Displays the selected area in red;
- Analyzes the selected region;
- Generates replacement elements using the Adobe Firefly AI dataset;

- Automatically adds six metadata tags to the image, including "Firefly AI" and "Generative AI Image".

To maintain the integrity of our photo competitions:

- Images edited using the "Use Generative AI" feature are not permitted;
- To remove elements from an image, use the erase **without selecting** the "Use Generative AI" option.

On1 Photo's Generative AI Features: Guidelines & Restriction

On1 Photo RAW 2025, announced on October 21, 2024, introduces two new Stability AI-powered features: Generative Erase and Generative Crop.

The following On1 traditional tools are allowed in photo competitions as they only use existing pixels from the original image:

- Healing Brush
- Perfect Eraser
- Retouching Brush
- Clone Stamp

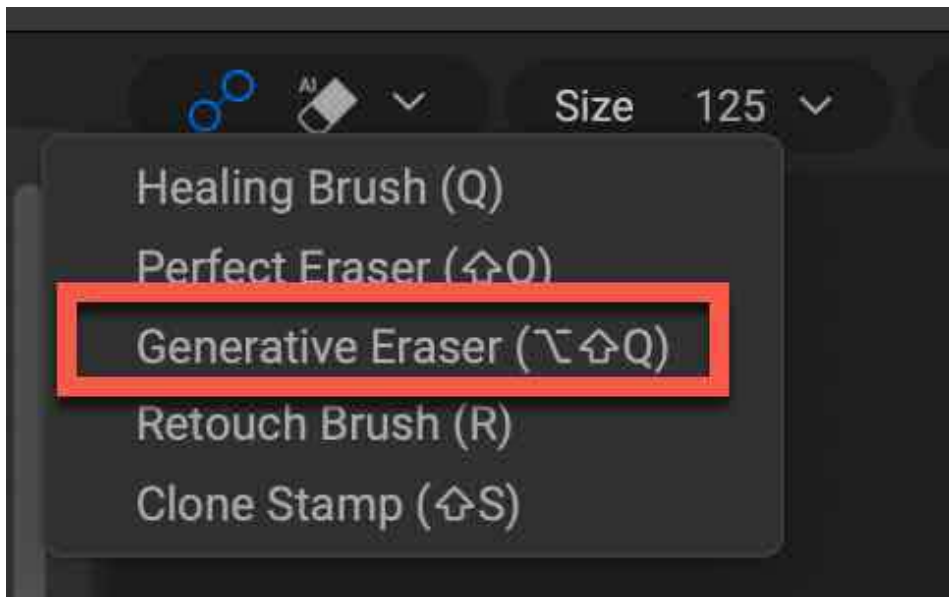


Figure 10 – Screen capture from the On1 Photo Raw's Erase feature options

Generative Erase

This feature utilizes Stability AI models with access to 8.58 billion text-image pairs. Due to its use of external image data, this tool is not permitted for competition submissions.

Generative Crop

This feature offers three options:

1. **Off:** Enables use of traditional erase features without AI assistance (permitted in competitions).
2. **Local Gen AI:**
 - Works offline within ON1;
 - Uses machine learning to analyze your personal editing history;
 - Only processes your own captured images;
 - Permitted in photo competitions since it doesn't add external elements.
3. **Stability AI:**
 - Pulls content from external databases;
 - Adds elements not captured by the photographer;
 - Not permitted in photo competitions.

Figure 11 below illustrates the three Generative Crop options.

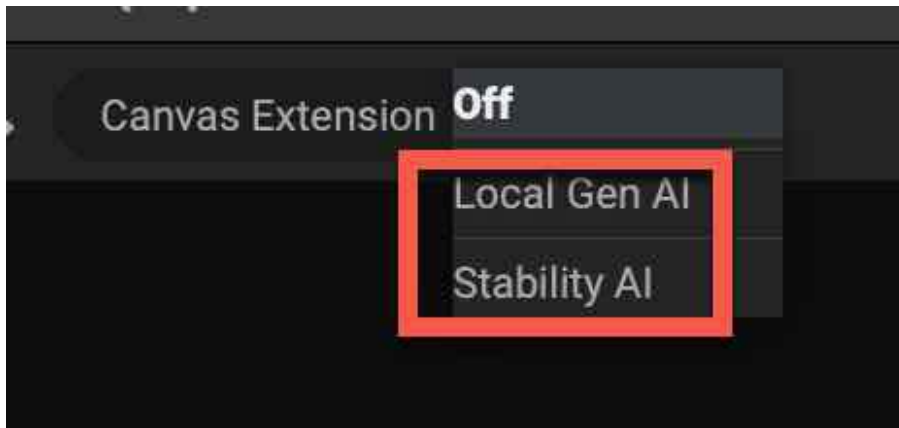


Figure 11 – Screen capture from On1's Generative Crop options window.

Key difference: Local Gen AI only processes your own photos offline, while Stability AI adds external content from online databases.

TOPAZ LABS – Gigapixel AI Competition Guidelines

Topaz Labs has integrated Generative AI capabilities into Gigapixel 8 as of October 24, 2024. This upscaling software uses machine learning technology that has been trained on millions of images to intelligently enhance image resolution while maintaining detail and natural appearance.

While Topaz Labs offers cloud-based processing for faster results on a credit-fee basis, it's important to note that the AI's upscaling process relies on its' training data rather than directly accessing images stored in Topaz's cloud database.

After careful review, we have determined that photographs processed using Topaz Labs Gigapixel AI are eligible for submission in our photo competitions.

CLOSING COMMENTS

At CAPA, we are committed to maintaining the integrity of traditional photography while adapting to technological changes. Through extensive testing and evaluation of emerging AI image generation and editing tools, we have developed clear guidelines that:

- Preserve the fundamental elements of photography;
- Distinguish between permitted AI enhancement tools and prohibited generative AI features;
- Maintain fair competition standards.

These guidelines are reflected in our updated competition Editing Criteria and CAPA Eligibility Criteria. We understand that navigating these new technologies can be challenging, and we're always available to support our photography community.

If you have any questions about our AI technology guidelines or competition rules, please contact me at competitions@capacanada.ca

Sheldon Boles – FCAPA
CAPA Director of Competitions