

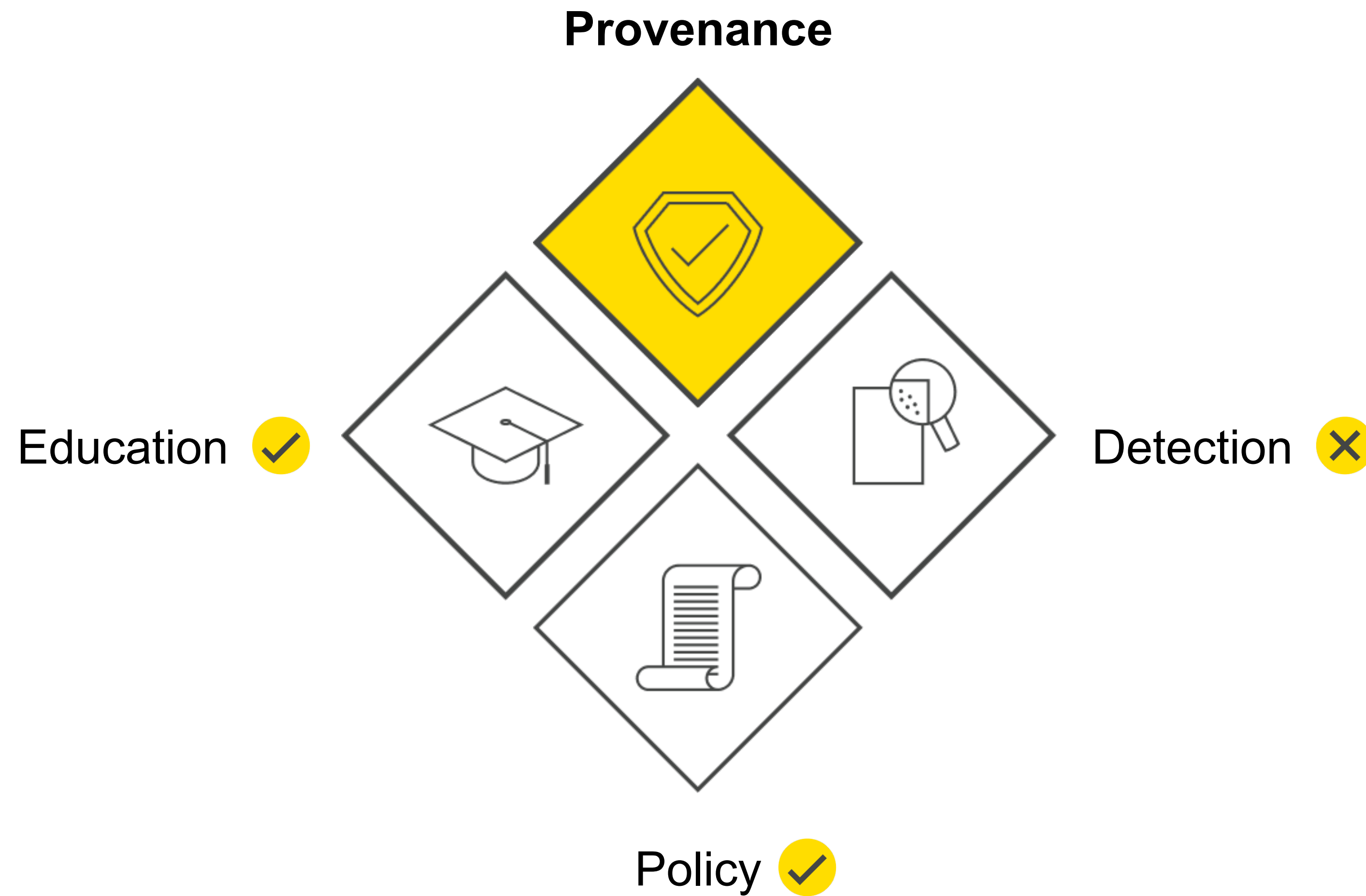
Content Authenticity Initiative



Gen AI Images purporting to show North Carolina flooding, 2024



Pillars of Transparency and Authenticity



Provenance

The basic trustworthy facts about the origins of a piece of digital content.
(image, video, audio recording, document)

Provenance

The basic trustworthy facts about the origins of a piece of digital content (image, video, audio recording, document).



Instead of guessing what is fake, we can provide information about the truth.

Provenance

Proving what things are (As opposed to detecting what is false)

- ▶ Creators
- ▶ News media
- ▶ Generative AI
- ▶ Brand reputation
- ▶ Consumer Protection
- ▶ Insurance
- ▶ Auditing
- ▶ Law enforcement
- ▶ Medical/Scientific
- ▶ Satellite imagery
- ▶ Election Integrity
- ▶ Archival use

Content Credentials



A “digital nutrition label” for online content

- Photos
- Video
- Audio
- Gen AI
- And more.....

Nutrition Facts	
16 servings per container	
Serving size	1 Tbsp. (21g)
Amount per serving	
Calories	60
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 17g	6%
Dietary Fiber 0g	0%
Total Sugars 17g	34%†
Protein 0g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 0mg	0%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	
† One serving adds 17g of sugar to your diet and represents 34% of the Daily Value for Added Sugars.	

Content Credentials

Issued by Adobe Inc on Oct 4, 2023

This image combines multiple pieces of content. At least one was generated with an AI tool.

Produced by Benoit Lemoine

Caption
Penguins seen in the desert.

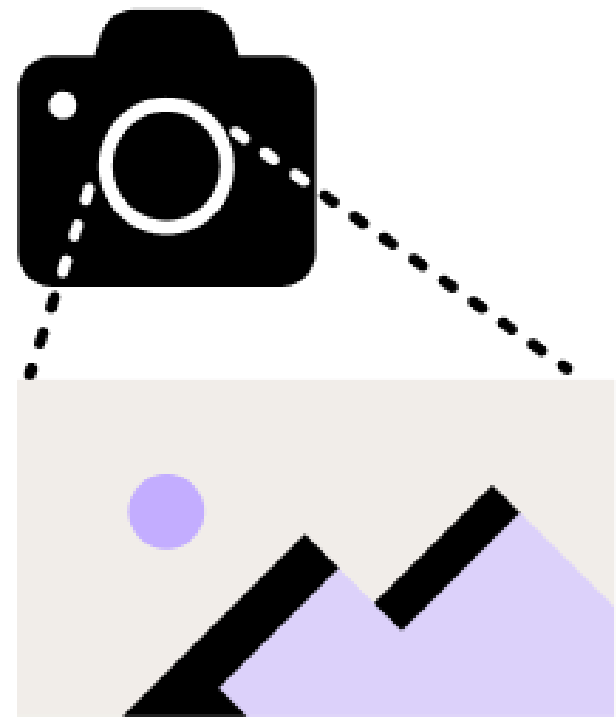
App or device used Adobe Photoshop

AI tool used Adobe Firefly

Additional history Yes

Inspect

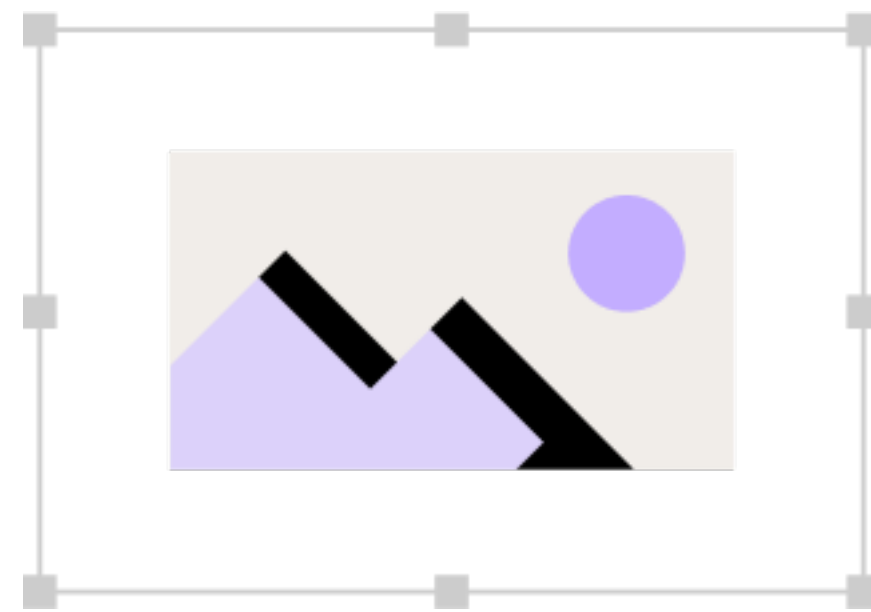
Content Credentials (from C2PA)



1.

Capture

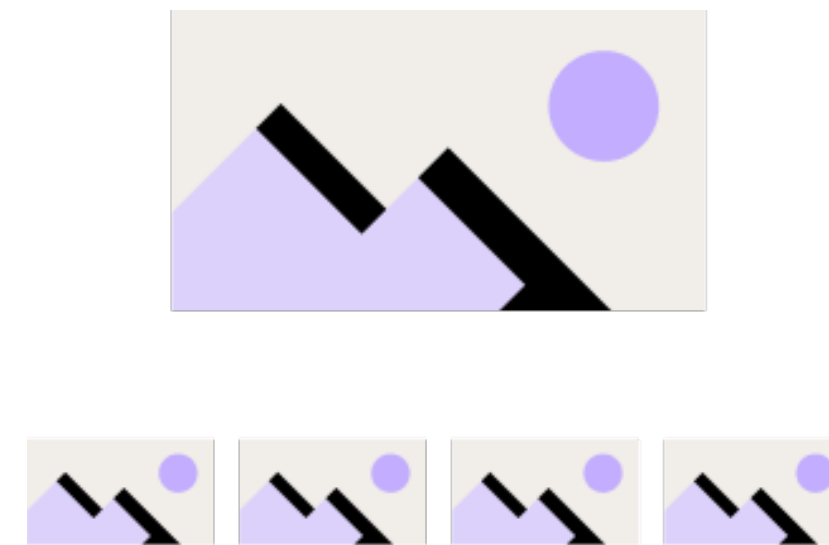
Work with manufacturers to integrate Content Credentials into smartphones and cameras.



2.

Edit

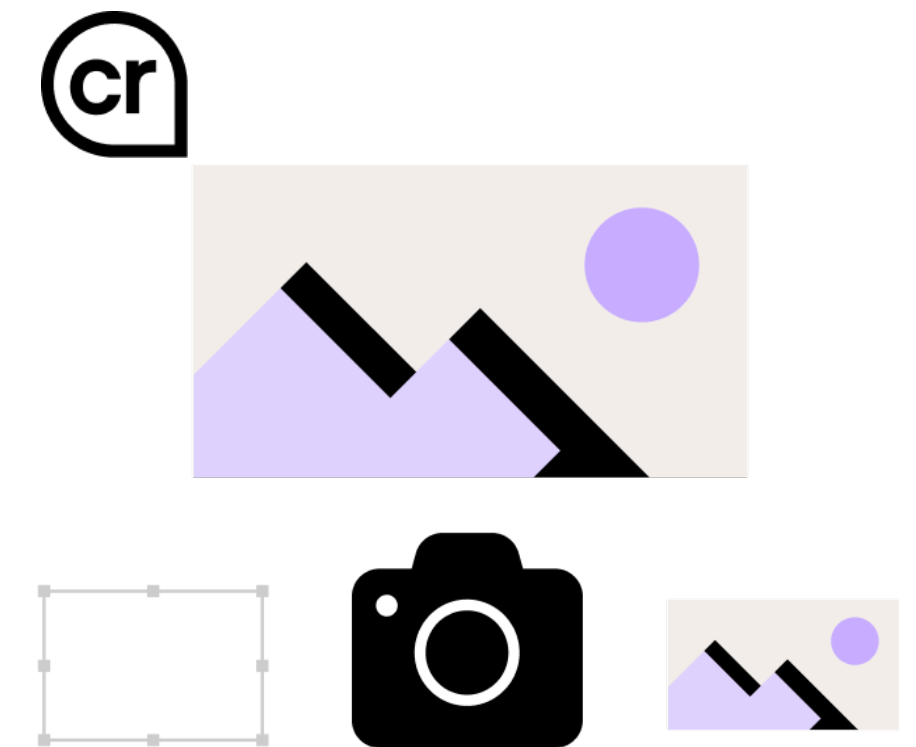
Integrate Content Credentials into editing tools, both Adobe products and others.



3.

Publish

Publishing systems maintain Content Credentials throughout their platforms.



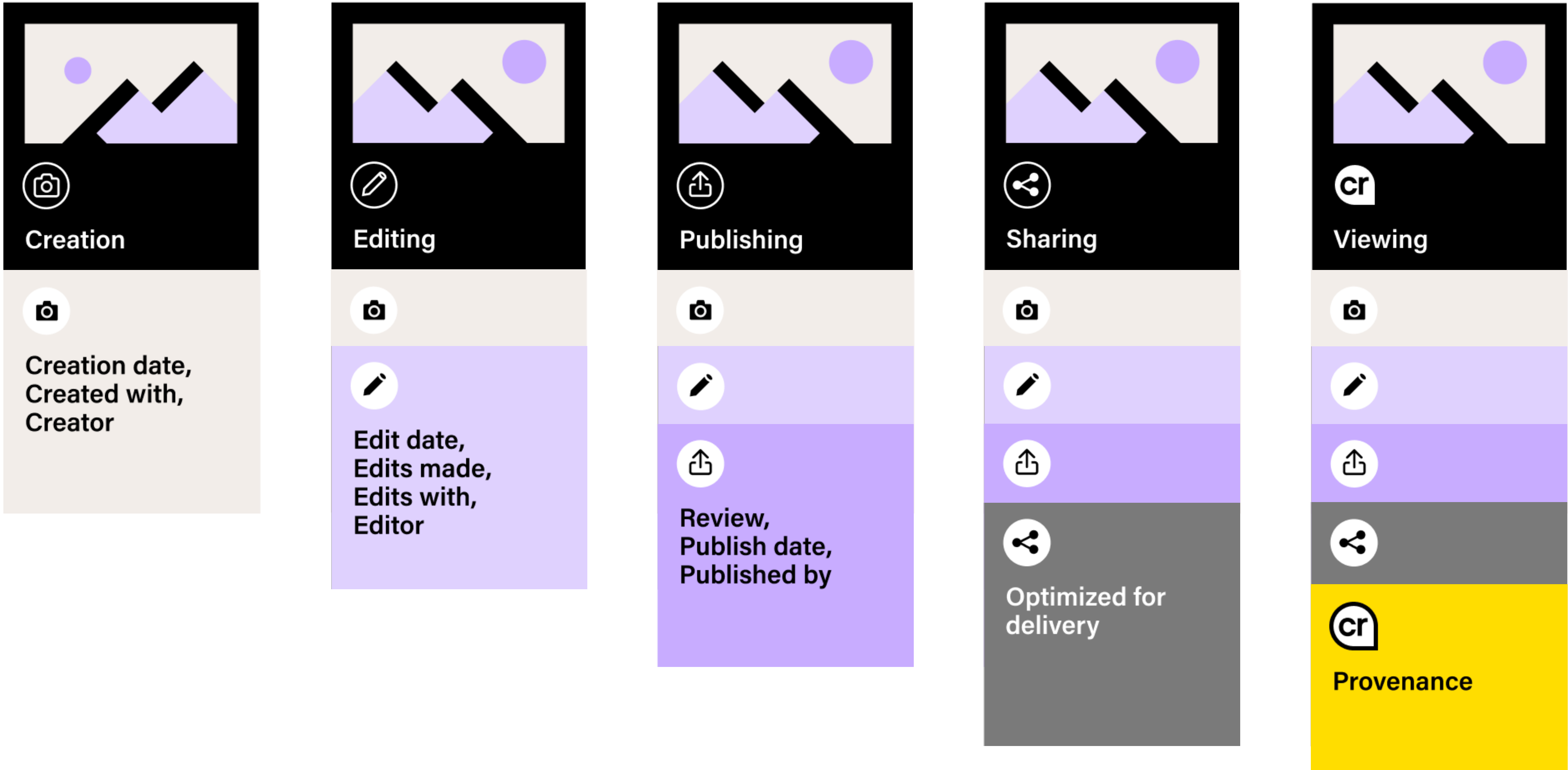
4.

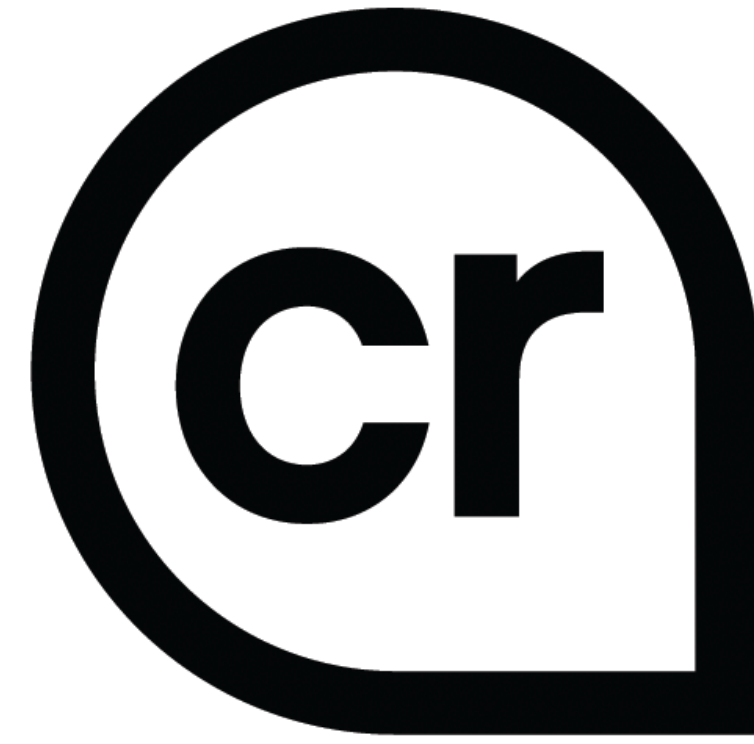
Trust

Clear & universal user experience reveals provenance information.



Content Credentials

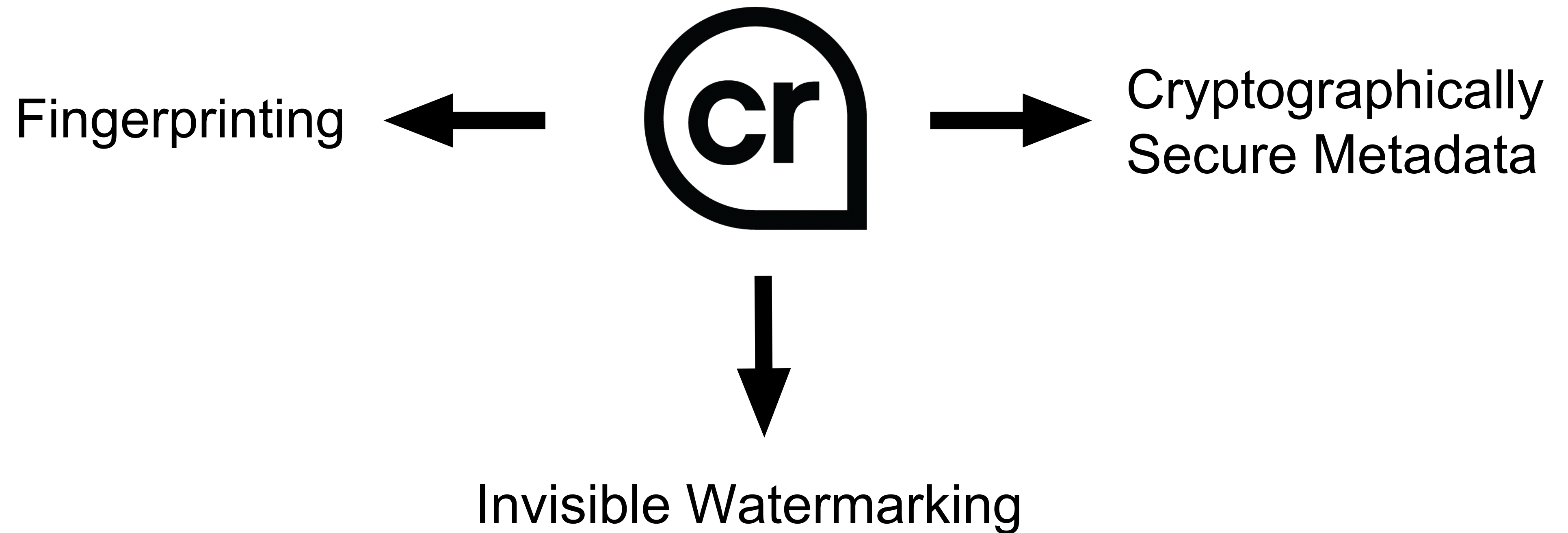




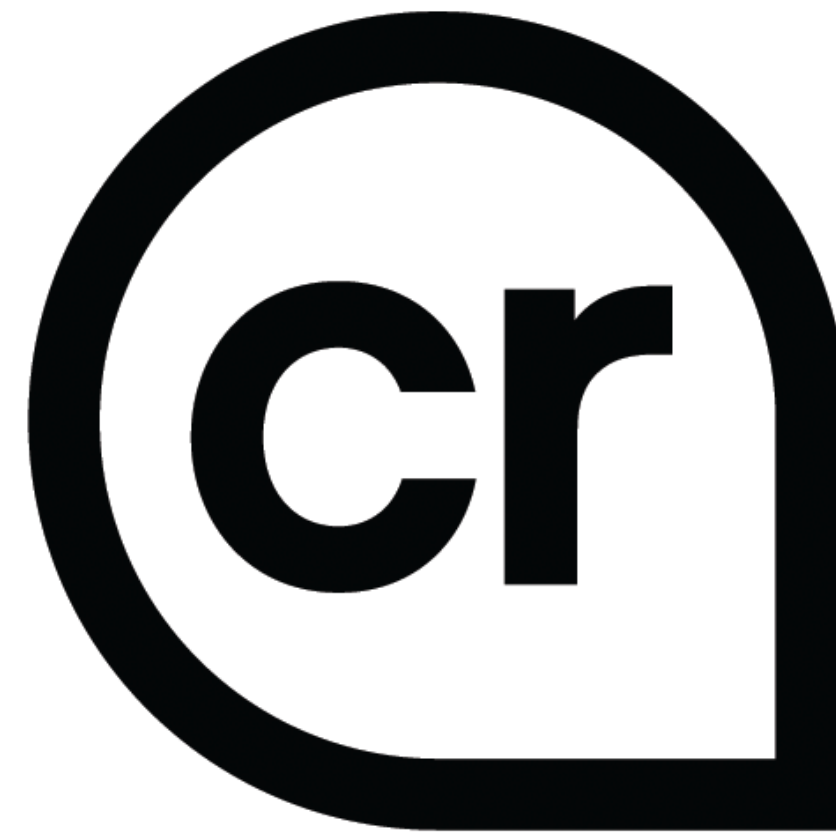
content credentials

Durable Content Credentials

Three Components of Resilience

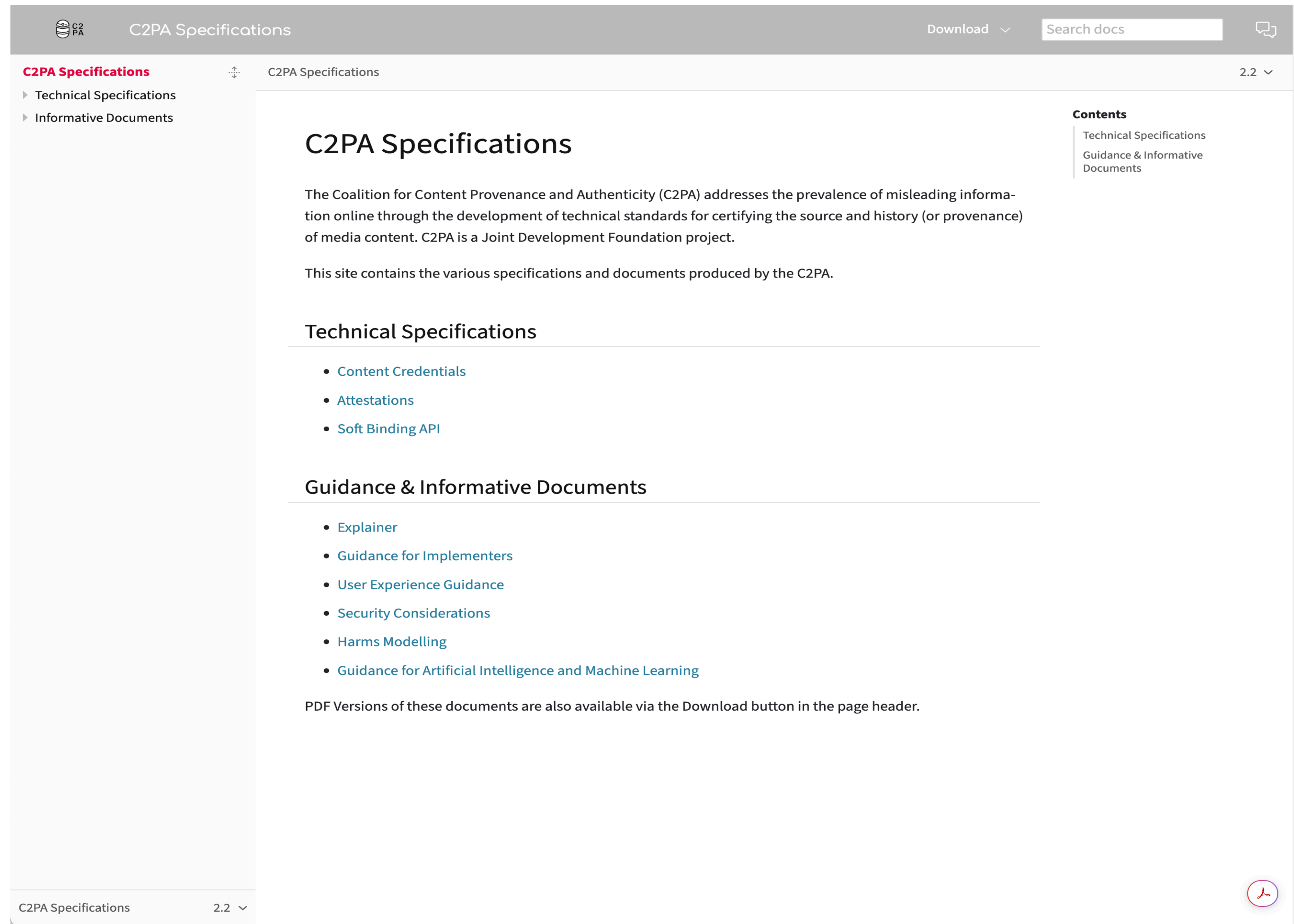


Protection From Data Scraping



Do Not Train

Specification (v2.2) Available - <https://c2pa.org/specifications/>



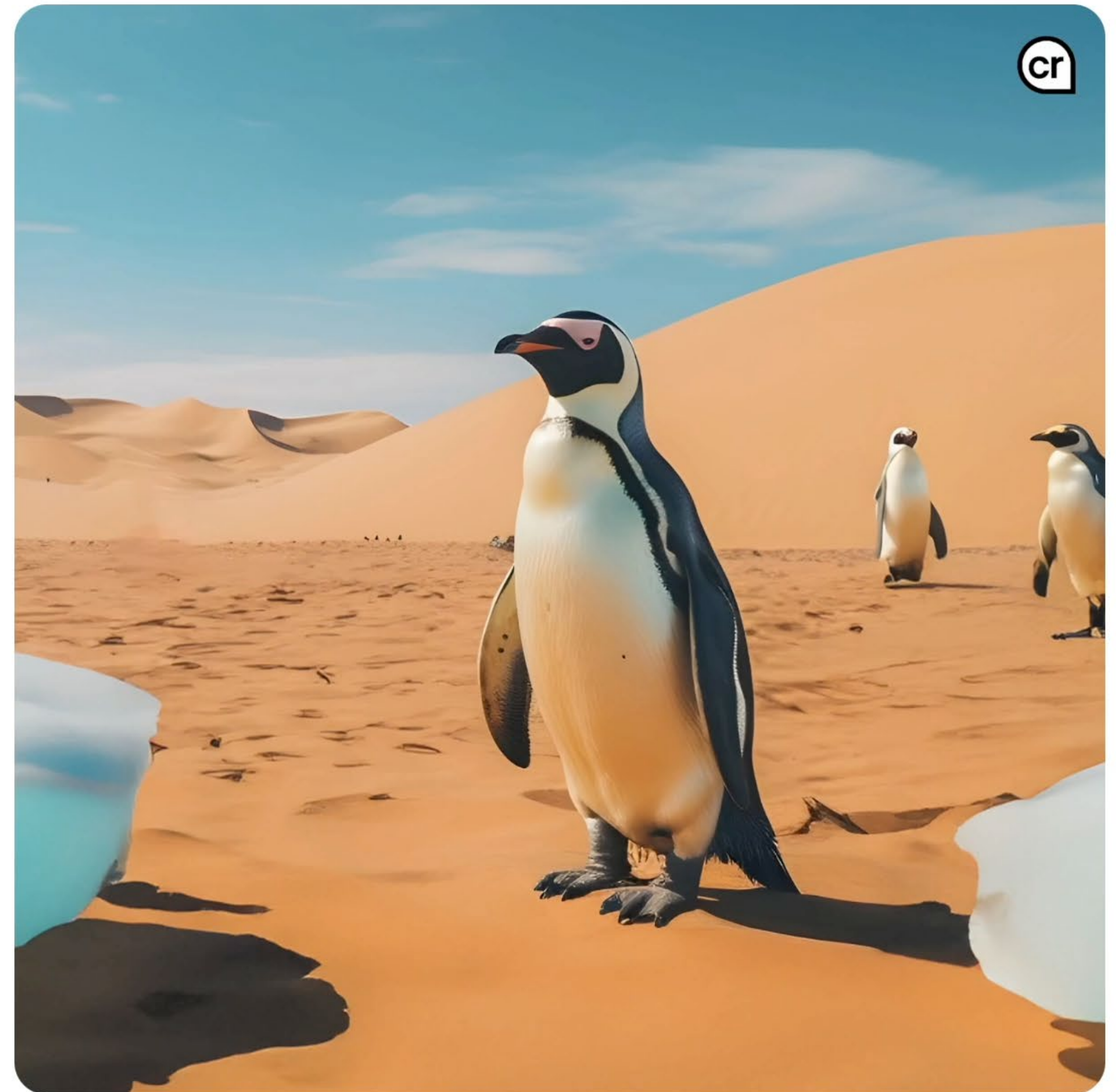
On its way to becoming an ISO standard (ISO 22144)



What about AI?

Wait, where did this image come from?

Deepfakes. Voice cloning. Synthetic media. It's hard to tell what's accurate and authentic these days.



2 Invalid video Content Credentials or assets

This sample shows how the Content Credentials player can surface important information to viewers when there are issues with a video's Content Credentials or segments within a video.



ARCHIVAL USE CASES

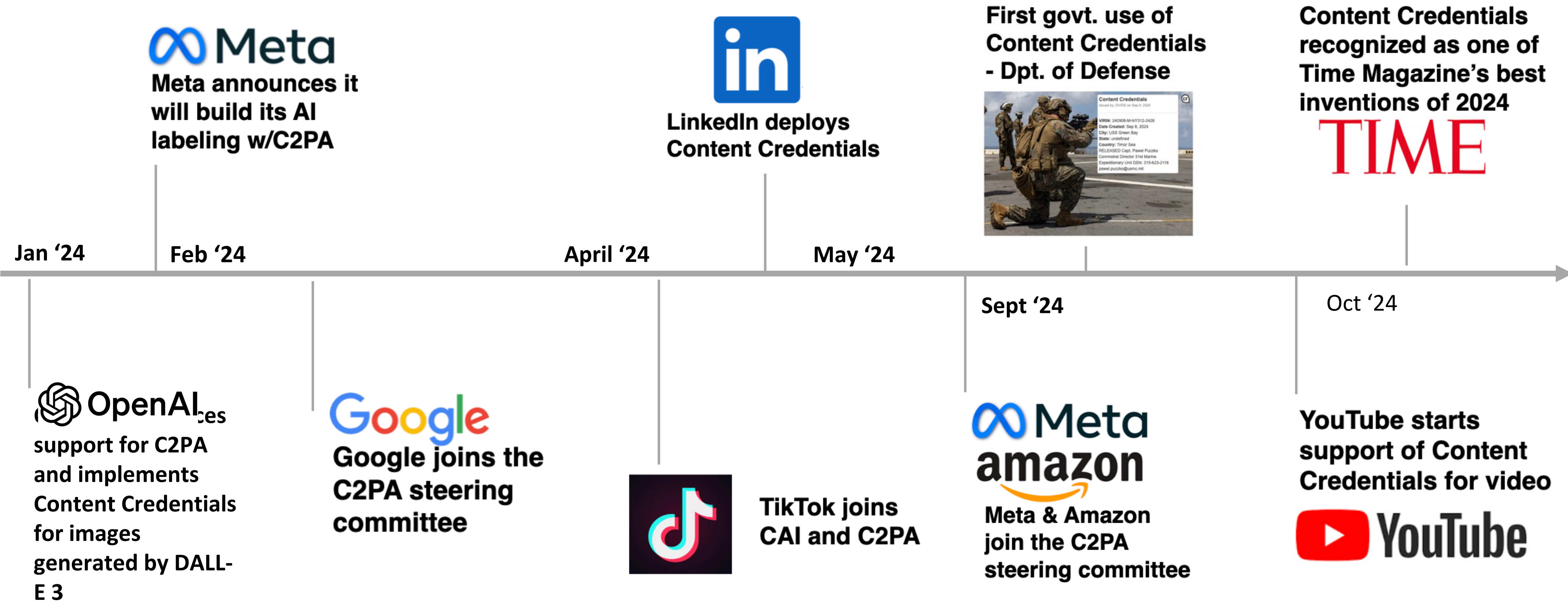
- Retrofit Content Credentials to existent digitized archives
- Add Content Credentials while digitizing physical items
- Display Content Credentials on archival interfaces
- DAMS attaches Content Credentials at time of download

The Coalition for Content Provenance and Authenticity (C2PA)

- Standards organization
- Within Linux Foundation
- 500+ tech companies involved
- Adobe Chairs TWG



Growing CAI & C2PA Momentum – 2024






SONY








Phones










LatestStartupsVentureAppleSecurityAIAppsStartup Battlefield

Sign In





GADGETS



Samsung Unpacked: Samsung’s Galaxy S25 will support Content Credentials to identify AI-generated images

Brian Heater — 11:38 AM PST · January 22, 2025

IMAGE CREDITS: SAMSUNG

OpenAI



+ Fit -

Compare

image.png

Issued by OpenAI on Feb 1, 2024



Content summary

This image was generated with an AI tool.

Process

The app or device used to produce this content recorded the following info:

App or device used

OpenAI-API

AI tool used

DALL-E

Actions

Created
Created a new file or content

About this Content Credential



SmartFrame

Home / Sport / Rugby

All Blacks v Ireland: How All Blacks could look for Rugby World Cup quarter-final



By [Liam Napier](#)

12 Oct, 2023 12:53 AM ⌚ 6 mins to read

Save

Share

28 Comments

If Telea is ruled out, the All Blacks will turn to Leicester Fainga'anuku's powerful presence after he impressed from the left wing to claim four tries against Namibia and Uruguay.

Fainga'anuku also savoured a brief stint - his first at any level - at second five-eighths in the All Blacks final pool match where he beat nine defenders.

cr

Content Credentials



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▶ 24 Nov 12:12 AM

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- ☐ Captains Run
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- ☐ Fixtures
- ☐ Head Shots
- ☐ Media Event
- ☐ Other
- ☐ Season Launch
- ☐ Sponsorship Event
- ☐ Test Match
- ☐ Training

Location

Year

Any

Search results

Search

Reset Filters

2023 RWC Final - All Blacks v South Africa (28/10)

ADD TO LIGHTBOX

DOWNLOAD

EMBED

All Blacks Beauden Barret scores a try in the 2023 Rugby World Cup final between New Zealand and South Africa at the Stade de France, Paris, France, Saturday, October 28, 2023 (Photo by Bob Martin / action press)

Image number:	00114463
Photographer:	Bob Martin Show all from this author
Image Size:	6929px x 4619px 91.6MB 58.7cm x 39.1cm (300dpi)

Lightbox

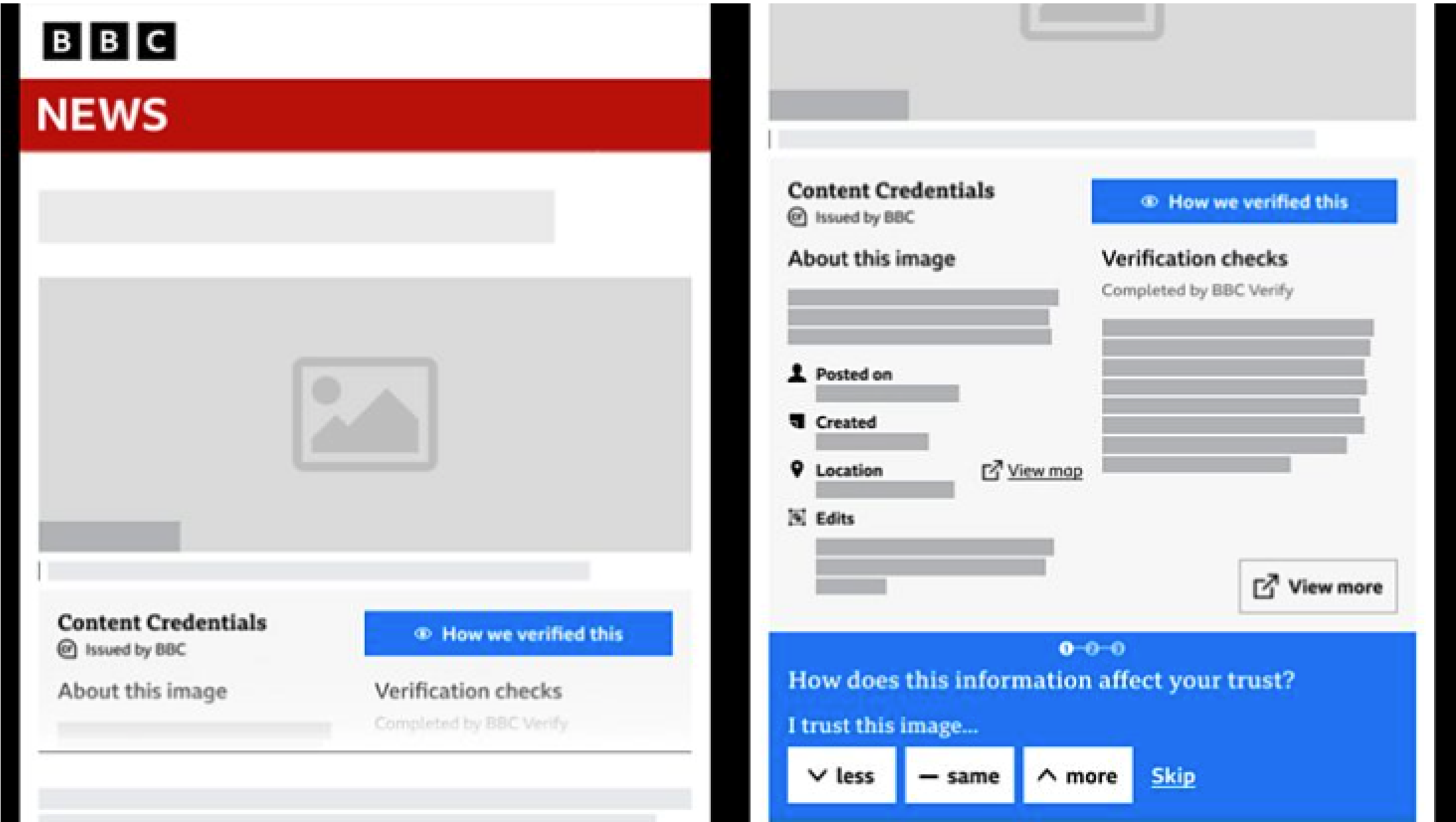


BBC News

New technology to show why images and video are genuine launches on BBC News

'Content credentials' will show how BBC journalists have verified content's authenticity

Published: 4 March 2024



BBC News has introduced a new 'content credentials' feature, which confirms where an image or video has come from and how its authenticity has been verified. It also uses new technology to embed this information within the image or video itself – helping to counter disinformation when the content is shared outside the BBC.



LinkedIn

linkedin.com/feed/update/urn:li:activity:7297987653319155712/

in

Search

Home

My Network

Jobs

couldn't be more excited to help gather a talented

cr

cr

Content Credentials

×

Source or history information is available for this media. [Learn more](#)

App or device used: Adobe Content Authenticity

Content Credentials issued by Adobe Inc.

Content Credentials issue date: Feb 18, 2025

wait. In today's digital age protecting your creative attribution requires more than just adding text to a post.

Join us for artist talks and a panel discussion that explores why robust creative attribution with Content Credentials matters now more than ever—and what it means for the communities we collaborate with and the stories we help bring to life.

Wednesday, March 5
6-8pm

ARTIST TALKS FEATURING

Adam Perez
Photographer, Director

Coleen Jose
Head of Community & Editorial
Content Authenticity, Adobe

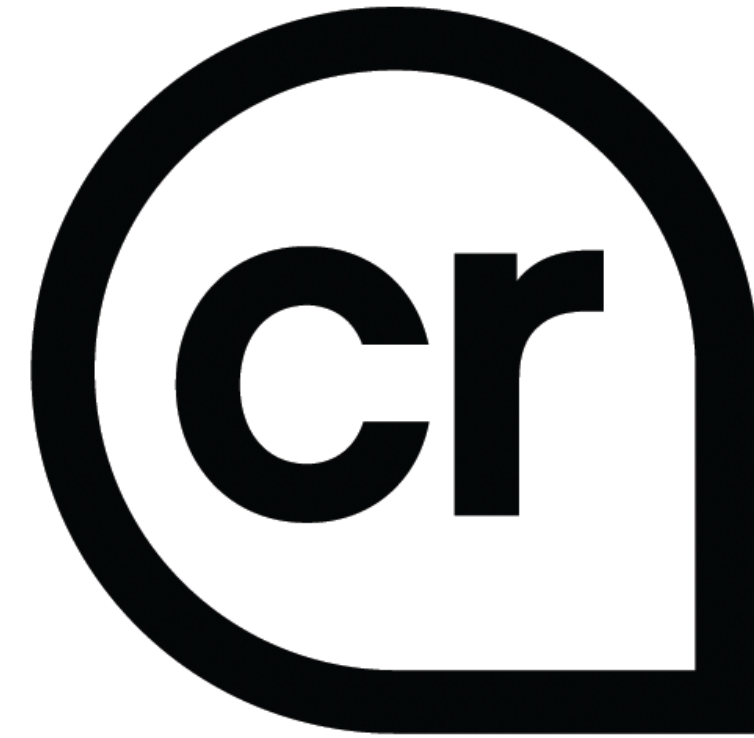
Deanne Fitzmaurice
Photographer

Noga Hurwitz
Product Manager
Content Authenticity, Adobe

Ted Chin
Surrealist Artist,
Photographer

62

8 comments · 8 reposts



Content Credentials in Action

THREE KEY PILLARS

Provenance

- Secure Metadata
- Invisible Watermarking
- Fingerprinting

Education

- Media Literacy
- Societal Education
- Consumer Education

Policy

- Forming
- Implementing
- Enforcing

Enterprise Content Credentials

CONCEPT

Take control of your assets with transparency and attribution

The challenge:

Enterprises must understand asset creation in their workflows and ensure asset integrity for customers

How we're solving it:

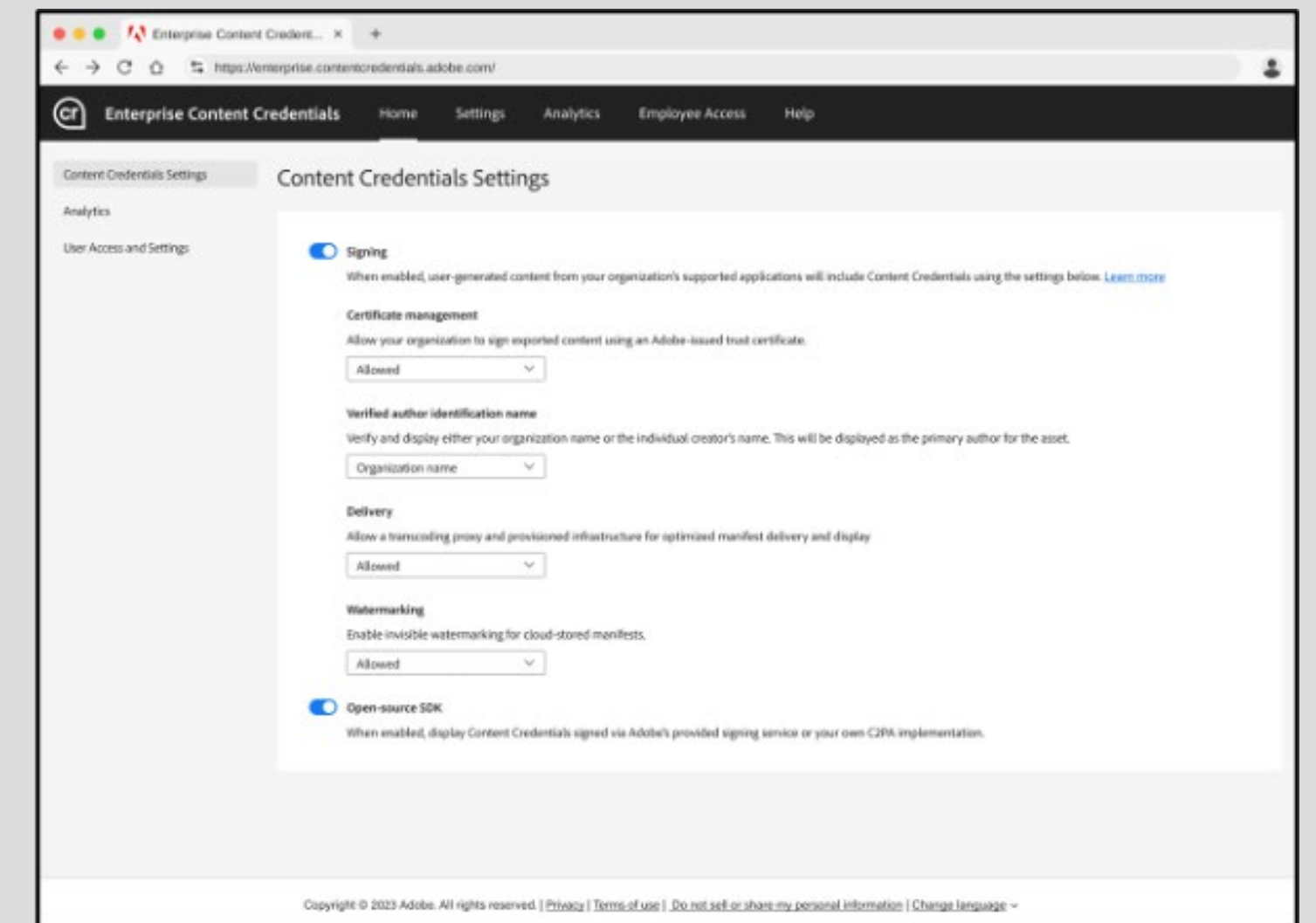
Transparency: Track content creation, including AI usage, and maintain provenance records, even if redacted publicly

Retrieval: Quickly locate assets. Audit their origin and custody with watermarking and fingerprinting

Attribution: Embed identity in assets to ensure genuine customer connection with the enterprise

CAI - API Services Pilot

- Configuration
- Signing
- Watermarking
- Lookup and retrieval
- UI Toolkit



One slide added by Arno Fiedler:

**Any European Perspective
on CAI and C2PA needed?**

Axel Springer

stern

dpa

Leica

D-TRUST

Nimbus

Join Us



**Content
Authenticity
Initiative**