

# ***Authenticity and the Future of the Web***

Dan Appelquist, Samsung Open Source Group

# Intro: Daniel Appelquist

Open Source Strategist at Samsung

ex-of UK Government Digital Service, Vodafone,  
Telefónica

Co-Chair W3C Advisory Board

Co-Chair of OpenSSF Global Cyber Policy Working  
Group

UK & US Dual National living in London

**SAMSUNG**





***Authenticity.***

## § 2.7 The web makes it possible to verify information

Society relies on the integrity of public information. We have a responsibility to build web technologies to counter misinformation and to maintain the integrity of information for public good. The public needs verifiable source and context information to recognize trustworthy web publishers and content. The concept of origin and [its relationship with information sources](#) are core to the web's security model.

What is the threat?

Misinformation

Disinformation

Deep fakes

AI generated images



<https://www.bbc.com/news/world-us-canada-68440150>

# Why does it matter?

We cannot have a functioning society without consensus on what is real.

- Reputation
- Expertise
- Reputable sources
- Manipulation

cr





C2  
PA

**Coalition for Content  
Provenance and  
Authenticity**



**content credentials**

<https://contentcredentials.org/>

# The Coalition for Content Provenance and Authenticity (C2PA)

---

- Standards organization (SDO)
- Linux Foundation JDF
- 10 Steering Committee members
- Over 500 General & Contributor members





Qualities for Content Provenance and Authenticity (CPA) standards may be applied to the iOS Series and will require an update to devices updating One UI 7. For images generated with Generative AI, Switch to Image, Portrait, Studio, Drawing Assist, and AI Sticker (Samsung). A white watermark may be overlaid on the image output upon saving in order to indicate that the image is generated by AI. Availability may vary by model.



# Mark the good stuff: Content provenance and the fight against disinformation



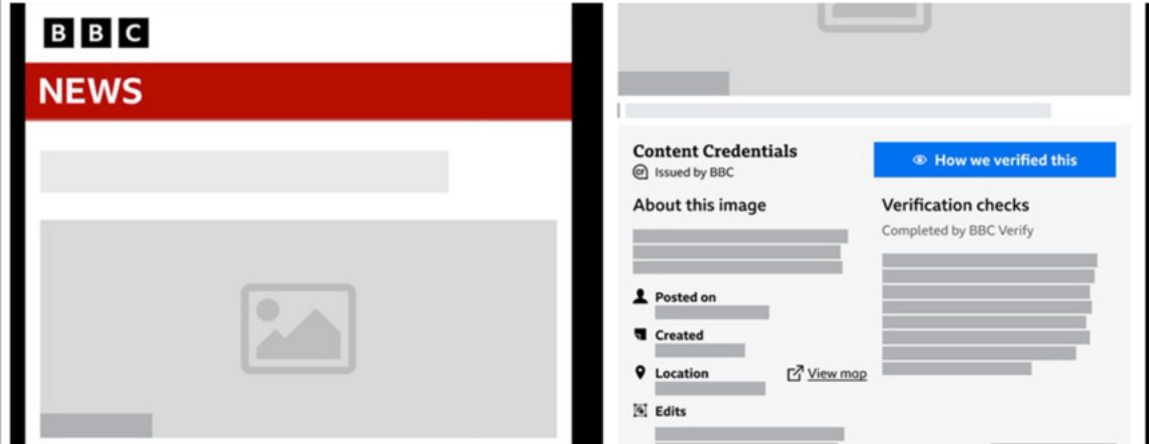
**Charlie Halford**

Principal Research Engineer

🕒 Published: 5 March 2024

**BBC News's Verify team** is a dedicated group of 60 journalists who fact-check, verify video, counter disinformation, analyse data and - crucially - explain complex stories in the pursuit of truth. On Monday, March 4th, **Verify published their first article using a new open media provenance technology called C2PA.**

The C2PA standard is a technology that records digitally signed information about the provenance of imagery, video and audio – information (or signals) that shows where a piece of media has come from and how it's been edited. Like an audit trail or a history, these signals are called 'content credentials'.



## What is the C2PA Specification?

An open standard for storing and accessing cryptographically verifiable and tamper-evident information whose trustworthiness can be assessed based on a defined trust model.

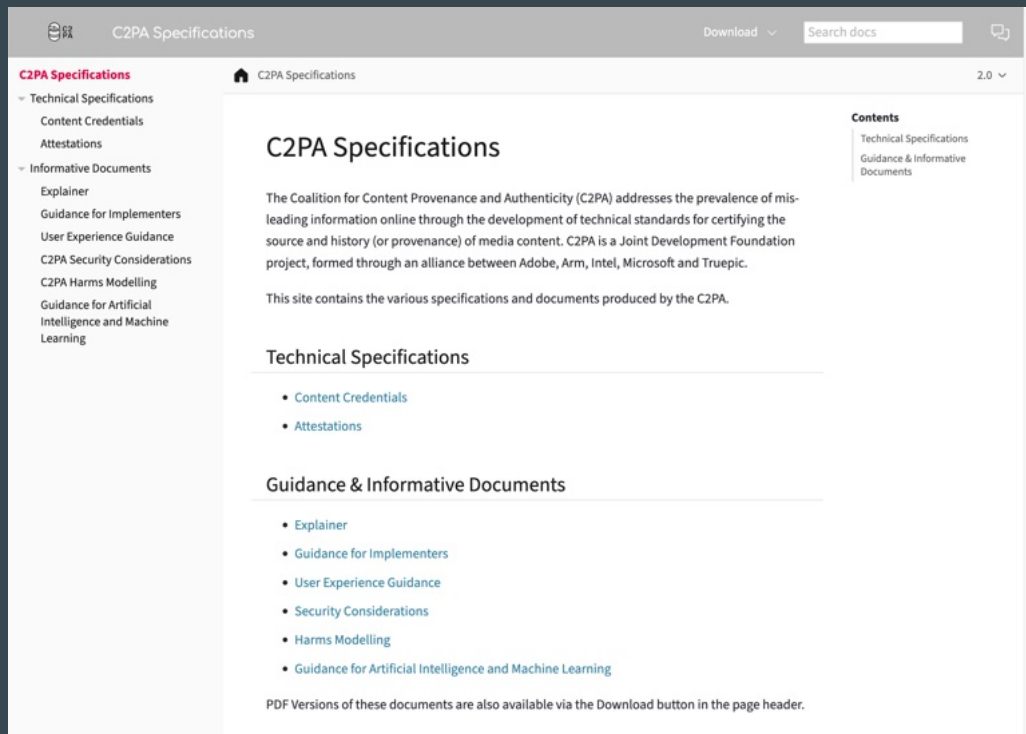


Developed in the Linux Foundation's  
“Joint Development Foundation” (JDF)

W3C-Compatible Royalty-Free Licensing

Threats & Harms task force explores any  
potential misuse or human rights  
considerations.

# Specification (v2.4) Available - <https://c2pa.org/specifications/>

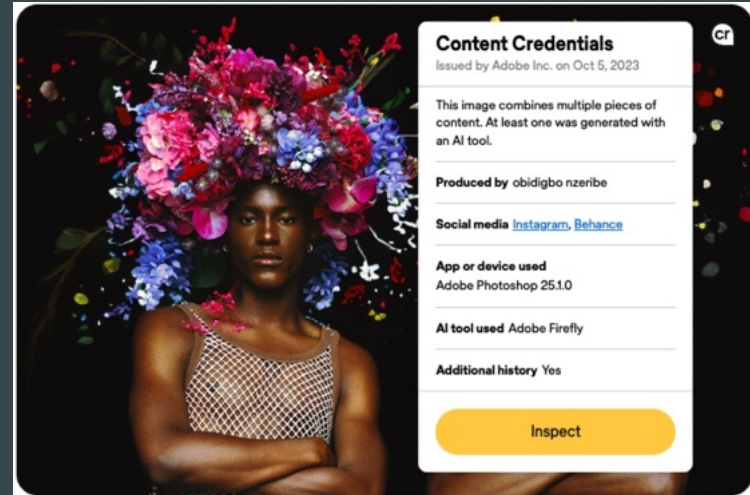


The screenshot displays the C2PA Specifications website. The header includes the C2PA logo, the title "C2PA Specifications", a "Download" button, and a search bar. The left sidebar lists the following categories: "C2PA Specifications", "Technical Specifications" (with sub-items: Content Credentials, Attestations), and "Informative Documents" (with sub-items: Explainer, Guidance for Implementers, User Experience Guidance, C2PA Security Considerations, C2PA Harms Modelling, Guidance for Artificial Intelligence and Machine Learning). The main content area features the title "C2PA Specifications" and a paragraph explaining that the Coalition for Content Provenance and Authenticity (C2PA) addresses misleading information through technical standards. Below this, there are two sections: "Technical Specifications" with links to "Content Credentials" and "Attestations", and "Guidance & Informative Documents" with links to "Explainer", "Guidance for Implementers", "User Experience Guidance", "Security Considerations", "Harms Modelling", and "Guidance for Artificial Intelligence and Machine Learning". A "Contents" sidebar on the right lists "Technical Specifications" and "Guidance & Informative Documents". At the bottom, a note states: "PDF Versions of these documents are also available via the Download button in the page header."

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

# Functionality around Generative AI

Identifying assets & regions of interest that have been created/modified by AI



This does not “solve”  
misinformation & disinformation.

It provide secures provenance info and  
allows users to make their own decisions.

This is real.

Like Comment Repost Send

**DevTalksRomania**  
10,010 followers  
22h · 🌐

📍 On January 30th at AFI Lakeview, Matrix42 is hosting the first DevAfterWork of 2025. Paul Zanfir, Principal Software Engineer, will be talking about augmenting entity information by building smarter systems with Dap powered ...more

**Content Credentials** ✕

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

- 📱 App or device used: Adobe Illustrator
- ⚙️ Content Credentials issued by Adobe Inc.
- 📅 Content Credentials issue date: Dec 11, 2024

Powered by **MATRIX42**

Principal Software Engineer  
@ Matrix42 Romania

AFI Lakeview  
30<sup>th</sup> of January 6 PM

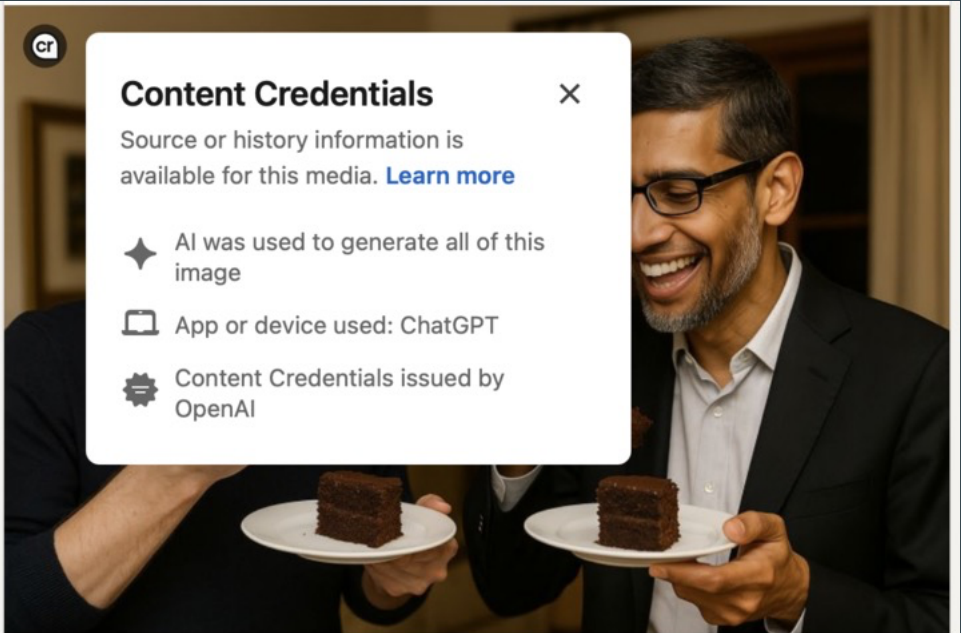
**Speaker**

👤 3

**Content Credentials** ✕

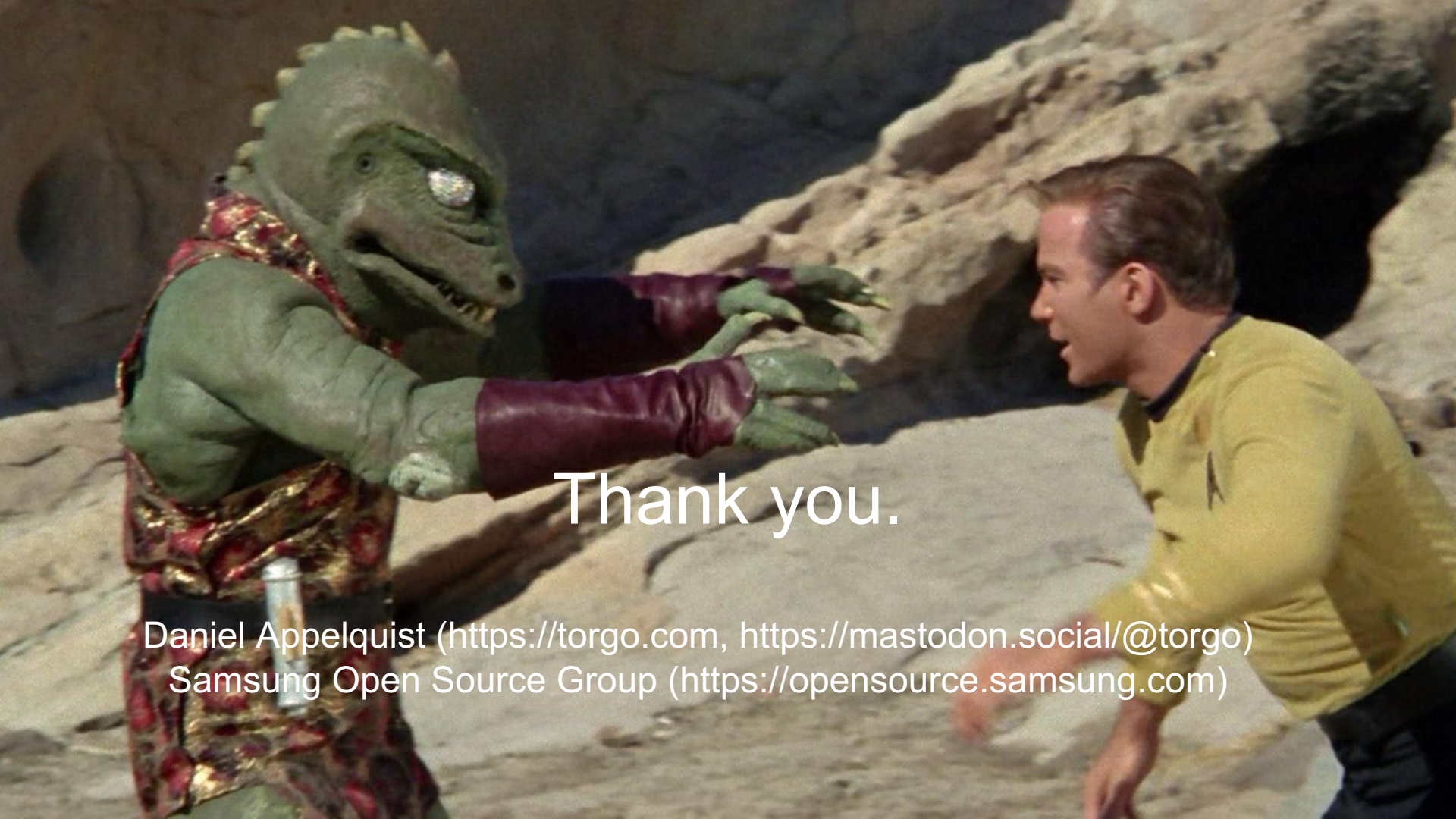
Source or history information is available for this media. [Learn more](#)

- ✦ AI was used to generate all of this image
- 📱 App or device used: ChatGPT
- ⚙️ Content Credentials issued by OpenAI





As we marvel at the wonders that “AI” bring us, let’s not forget to *also* be aware of threats and harms.



Thank you.

Daniel Appelquist (<https://torgo.com>, <https://mastodon.social/@torgo>)  
Samsung Open Source Group (<https://opensource.samsung.com>)