



Australian Code of Practice on Disinformation and Misinformation  
Adobe, Inc.  
Annual Transparency Report  
January 2023 – December 2023

## Summary

Adobe is pleased to continue its participation in the Australian Code of Practice on Disinformation and Misinformation.

Adobe is a global leader in digital marketing and digital media solutions. Since the company's foundation in December 1982, we have pushed the boundaries of creativity with products and services that allow our customers to create, deploy, and enhance digital content. Our purpose is to serve the creator and respect the consumer, and our heritage is built on providing trustworthy and innovative solutions to our customers.

With the increasing volume and velocity of digital content creation, including synthetic media, it is critical to ensure transparency, understanding, and trust in what we are consuming online while empowering consumers. Adobe feels a responsibility to support the creative community, and society at large, and is committed to finding solutions that help address the issues of manipulated media and tackle misinformation and disinformation.

As such, content provenance is a major focus for Adobe and the work we lead on the Content Authenticity Initiative (CAI). We are focused on cross-industry participation, with an open, extensible approach for providing media transparency to allow for better evaluation of content.

The CAI advocates for a set of open standards that can be used to create and reveal provenance for images, documents, time-based media (video, audio) and streaming content. Provenance, sometimes referred to as attribution, empowers content creators, editors, and publishers, regardless of their geographic location or degree of access to technology, to voluntarily disclose information about who created or changed an asset, what was changed and how it was changed.

In February 2021, Adobe, Arm, BBC, Intel, Microsoft, and Truepic launched a formal coalition for standards development: The Coalition for Content Provenance and Authenticity (C2PA). The C2PA is a mutually governed consortium created to accelerate the pursuit of pragmatic, adoptable standards for digital provenance, serving creators, editors, publishers, media platforms, and consumers.

In January 2022, the C2PA publicly released the open technical specification for digital provenance, which provides platforms with a blueprint to define what information is associated with each type of asset (e.g. images, videos, audio, or documents), how that information is presented and stored, and how evidence of tampering can be identified.

In March 2023, Adobe's new generative AI model, [Firefly](#), was announced, and along with it our commitment to leveraging CAI's Content Credentials to bring transparency to generative AI outputs. Every asset produced with Firefly has embedded a Content Credential indicating the model used and its version. This is significant — it not only builds on our mission to ensure tools like Firefly are used responsibly, but also gives viewers of this content important context to understand what they're seeing or hearing, enabling them to make trust decisions when necessary.

2023 was the most vibrant year yet for the CAI, C2PA and Content Credentials, and we can't wait to build on the momentum alongside our members and industry partners to ensure an even greater and lasting impact in 2024 and beyond. As of April 2024, we are at over 3,000 members in the Content Authenticity Initiative.

When we come together across technology, government, and civil society, listening to creators and information consumers, we bolster a basic right for everyone to understand how the content they consume was made.

<p><b>Objective 1 Safeguards against Disinformation and Misinformation:</b></p> <p>Outcome 1a: Signatories contribute to reducing the risk of Harms that may arise from the propagation of Disinformation and Misinformation on digital platforms by adopting a range of scalable measures.</p> <p><b>Specifically measures implemented under 5.9:</b></p> <ul style="list-style-type: none"><li>H. the provision or use of technologies which assist digital platforms or their users to check authenticity or accuracy or to identify the provenance or source of digital content;</li><li>I. exposing metadata to users about the source of content;</li></ul>
<p><b>Objective 3 Work to ensure the integrity and security of services and products delivered by digital platforms:</b></p> <p>Outcome 3: The risk that Inauthentic User Behaviours undermine the integrity and security of services and products is reduced.</p> <p>Please see Objective 1a.</p>
<p><b>Objective 4 Empower consumers to make better informed choices of digital content:</b></p> <p>Outcome 4: Users are enabled to make more informed choices about the source of news and factual content accessed via digital platforms and are better equipped to identify Misinformation.</p> <p>5.21. Signatories will implement measures to enable users to make informed choices about Digital Content and to access alternative sources of information.</p> <p>Specifically, measures developed and implemented in accordance with the commitment:</p> <ul style="list-style-type: none"><li>C. the provision or use of technologies which signal the credibility of news sources, or which assist digital platforms or their users to check the authenticity or accuracy of online news content, or to identify its provenance or source;</li><li>D. the promotion of digital literacy interventions, informed by evidence or expert analysis</li></ul> <p>Please also see Objective 1a.</p>

**Objective 6 Strengthen public understanding of Disinformation and Misinformation through support of strategic research:**

Outcome 6: Signatories support the efforts of independent researchers to improve public understanding of Disinformation and Misinformation.

**Objective 7 Publicise the measures we take to combat Disinformation:**

Outcome 7: The public can access information about the measures Signatories have taken to combat Disinformation and Misinformation.

Following the Code's guidance on signatories nominating to report on specified provisions in the Code, we have again this year reported on measures that are "proportionate and relevant" to our business. Adobe has considered the Code's guiding principles and the context in which our products and services might to contribute to the harms arising from the spread of disinformation and misinformation on online platforms.

Adobe produces content creation and editing tools to help individuals and enterprises accelerate their productivity as they create, publish, and promote their creative work. While some of our products – most notably Behance – allow users to share, showcase, and promote their content online, Adobe is not a social media company. None of our products facilitate global conversations about current events or allow users to share and disseminate news content to global audiences. We believe digital creative works – the primary purpose of Adobe's suite of products – and any associated harms that stem from them are not the focus of the Code.

While Adobe's products and services fall outside the scope of the Code, we share the expressed concerns about harms that may result from malicious actors using our tools to produce inaccurate digital content. Therefore, we have opted into the provisions of the Code that focus on technologies we are developing to help users authenticate online media. To help mitigate the negative impact of misinformation and disinformation, Adobe is focused on providing tools to digital platforms that can help their users determine the sources and authenticity of online content.

## **Reporting against Commitments**

### **Outcome 1a: Reducing harm by adopting scalable measures**

At Adobe we have focused on four core areas to meet this Commitment.

1. Sharing open-source code with the community to help support adoption of provenance.
2. Implementing provenance technology in Adobe products so that our millions of customers can use this technology to show metadata about content created.
3. Providing a resource for audiences everywhere to check for provenance and attribution history.
4. Supporting CAI members with their integration of provenance using the open-source code and the C2PA standard.

### **Open Source**

In June 2022, Adobe released a suite of open-source developer tools based on the C2PA specification, enabling more developers to integrate content provenance across web, desktop, and mobile projects

— for free. This is helping to get provenance tools into the hands of millions of creators and developers to create a safer, more transparent digital ecosystem, while providing users with information to be better informed about the content they see online.

Our team supports three options for open-source tools to implement C2PA standards beyond just Adobe apps. These tools include options from lightweight JavaScript to read Content Credentials on your site or app to completely customisable tools with the full SDK. Building on from our original release of the open-source tools, in early 2023 we updated them and now include both documentation and quicker file processing time to improve the developer experience. In addition to support for selected video and audio formats, and mobile development, as we continue to explore how we can expand content provenance to new mediums. Since the open-source tools were first published they have been downloaded over 8200 times.

### **Provenance Technology in Products – ex. Adobe Firefly**

In 2023, the world saw that generative AI has the powerful ability to create new content in seconds using just a few keystrokes. It is transforming the way we work, create, and communicate. For example, generative AI allows you to generate convincing synthetic images of political leaders, celebrities, and other imagined scenes almost instantly. Across all types of generative AI content, it is becoming increasingly difficult to distinguish between fact and fiction. While we are optimistic about the technology and encourage its use, we also wanted to provide the tools to ensure the transparency needed to help create trust.

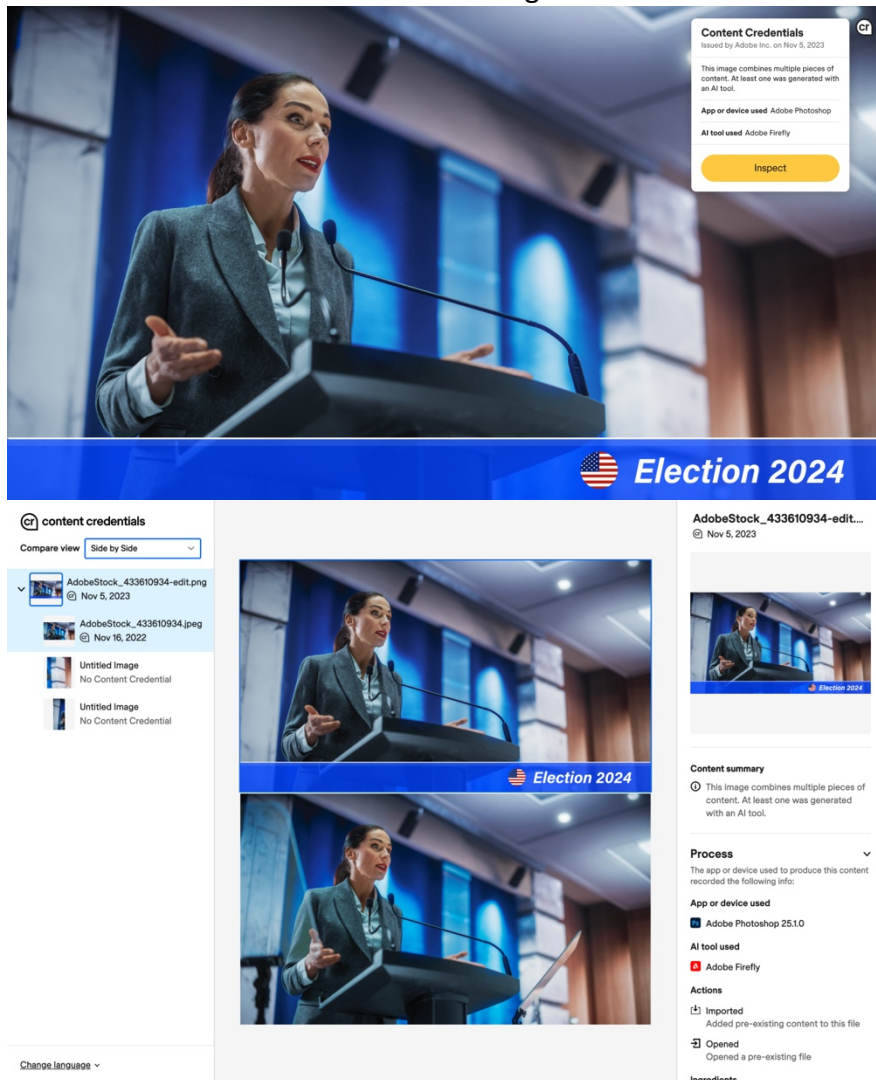
In March 2023, Adobe launched our own family of generative AI models, called Adobe Firefly. Since its launch, it has been used to generate over six billion assets. In keeping with our AI Ethics program, our leadership and product teams quickly made the decision that Content Credentials should be attached to content generated by Firefly, indicating that generative AI was used.

When a user creates and then downloads an asset in Firefly, a notification appears to the user to confirm that Content Credentials have been attached, letting people know that a generative AI tool has been used and which model. Content Credentials are then attached once the image is downloaded. The image can then be dropped into Adobe's inspection tool, "Verify," which will display this provenance information. Using open-source tools, publishers are able to add an interactive Content Credentials icon to appear within the digital content, allowing the viewer to see this provenance information with a simple mouse click

This decision was significant as it builds on our mission to ensure that AI tools like Firefly are used responsibly, giving viewers of digital content important context to help them understand what they are seeing and allowing them to make their own decisions about whether to trust the content.

In addition, we also transparently disclose to users of Firefly that Content Credentials will be attached. All users of Firefly agree to Adobe's Generative AI Additional Terms, which govern their use of generative AI features in our services and software and explicitly require that users "must not remove or alter any watermarks or Content Authenticity Initiative metadata (e.g., Content Credentials) that may be generated with the output, or otherwise attempt to mislead others about the origin of the output."

Pictured: Content Credentials on an Image



## Providing Resources

In 2023, the C2PA unveiled a new Content Credentials icon, a symbol of transparency designed to signal trustworthy digital content. After two years of collaborative research, design, and development, the community of technical leaders and UX experts unanimously agreed on this minimalist icon. It features the letters "CR" enclosed in a pin and can be etched into media like images and videos. When users scroll over the icon, it reveals a "digital nutrition label" with verified information about the content's origin, creation date, tools used, and any edits made. Major brands and industry leaders will integrate this icon to enhance digital content transparency from creation to consumption. The goal is for it to become universally recognized, akin to the copyright symbol, and restore trust and transparency online.



In 2023, the C2PA launched a new online hub called ContentCredentials.org as a central place to learn more about Content Credentials, as well as an ongoing resource for consumers and creators alike to go and verify content – <http://contentcredentials.org/>. This included a re-imaging of the “Verify” tool where anyone can go to learn more about the content they are consuming.

### **Supporting implementation:**

With the mature, open C2PA standard and CAI free, open-source tooling, Content Credentials now spans a swiftly growing range of platforms and technologies, including cameras, smartphones, software and more. Below are just a few examples that shed light on Content Credentials momentum in the past year, including what we've achieved as part of the collective work from both the CAI and C2PA.

### **Leica introduces world's first camera with Content Credentials built-in**

In October 2023, [Leica introduced](#) the world's first camera with Content Credentials built-in within the new Leica M11-P — revolutionizing the field of photojournalism by ensuring authenticity at the point of capture. As more photojournalists and creatives use this technology, consumers are going to start to see Content Credentials on more digital content — helping them better navigate the digital world.

### **Nikon plans to adopt Content Credentials into Camera models soon**

Nikon has affirmed progress towards its commitment to bringing Content Credentials into upcoming camera models. With its vast set of consumer and professional customers worldwide, Nikon's future implementation will help empower broad awareness and adoption. Nikon is now [collaborating with international news agency, Agency France-Presse \(AFP\)](#), to begin practical verification of this image provenance function — specifically to support authenticity and reliability in photojournalism and the fact-checking process.

### **Qualcomm integrates Content Credentials at the chip level for next generation smartphones**

Provenance technology will soon come to your smartphone with Content Credentials embedded at the chip level — supporting photo authenticity for consumers and their devices. In October 2023, Qualcomm [announced its latest Snapdragon 8 Gen3 mobile platform](#) that works with Truepic to support Content Credentials in camera systems, based on the global C2PA standard format

### **Objective 3: Work to ensure the integrity and security of services and products delivered by digital platforms.**

In addition to the upward trend of progress explained in detail in Objective 1a, it is also worth noting the tangible progress in the two organisations which underpin the eco-systems' efforts on content provenance which Adobe has taken a very active role in.

The Content Authenticity Initiative (CAI) which was launched in late 2019 is an Adobe-led initiative with more than 3,000 members and partners working to increase trust online through provenance, which are the facts about the origins of a piece of digital content. In 2023, we reached over 2,000 members including — CEPIC, Dentsu, Omnicom Group, National Geographic Society, National Public Radio (NPR), Photoshelter, and Publicis Groupe. We currently have 78 CAI members in Australia, including Woolworths and the Australian Associated Press.

Internally, at Adobe we have a team of full-time employees dedicated to working on CAI. This includes engineers helping to develop and maintain our open-source tooling for the community, user-experience designers, and a team dedicated to recruiting partners, supporting adoption and growing the community globally.

In addition, Adobe is an active member of the independent standards organisation, the Coalition of Content Provenance and Authenticity, and sits on the Steering Committee which meets weekly, Chairs the Technical Working Group and has representatives on the Threats and Harms Task Force, plus support from Adobe employees from our Communications and Policy team for C2PA external engagement.

We are committed to working with other C2PA members such as Microsoft, BBC, ARM, Intel and Sony to ensure open technical specifications for provenance are maintained to the highest standards and used to implement content provenance across the eco-system in a manner that is interoperable and ultimately adopted by international standards organisations as the single, unified way to address disinformation by empowering users with transparency.

#### **Objective 4: Empower consumers to make better informed choices of digital content.**

As mentioned above, the mission of the work Adobe is leading in tackling mis/disinformation is focused on supporting the provision of ubiquitous tools to help consumers make better informed decisions about the content they are consuming online.

As more and more CAI members adopt provenance technology and creators and media publishers use the technology to disclose details about how their content is made and altered, we will have an increasing amount of provenance-enabled content available so that consumers can check the veracity of content.

To date, we know over 200M assets have been created with Content Credentials using Adobe products.

In 2023, we continued to help publish and improve on a "CAI Media Literacy Curriculum." We recognise that media literacy is a vital component of the fight to tackle mis/disinformation. These curricula, created in collaboration with education experts, are crafted to help students develop critical media and visual literacy skills to better navigate the ever-changing digital information landscape. Each curriculum includes a foundational unit as well as lessons for use in social studies, the arts, and English & language arts (ELA), with media literacy lessons and themes integrated throughout all components. In 2023, we also added lessons on Generative AI. These standards-aligned lessons introduce students to generative AI and engage them in critical conversations surrounding the technology.

These materials are available for free at Adobe Education Exchange - <https://edex.adobe.com/> a free education platform and will be available for use by educators and students globally.

As mentioned in 1a, we also have introduced a new "Content Credentials" icon, symbolizing transparency and trust in digital content. The initiative aims for widespread adoption, akin to the copyright symbol, to bolster online trust and transparency.

**Objective 6: Strengthen public understanding of Disinformation and Misinformation through support of strategic research.**

In 2023, Adobe published research on EKILA, a new decentralized system designed to help artists and creators get proper recognition and payment for their work in generative AI. EKILA uses a sophisticated method to trace and credit the original sources of AI-generated images, aligning with the latest standards for tracking content origins (C2PA). Additionally, EKILA expands the use of non-fungible tokens (NFTs) by creating a new form of token that represents ownership rights, thus establishing a three-way link between the ownership, rights, and credit for an asset. This ORA framework allows creators to have control over how their work is used in AI training and to receive a share of the profits, such as royalty payments, when their creations are used in GenAI projects.

**Objective 7: Signatories will publicise the measures they take to combat Disinformation.**

Adobe has consistently published details of all the major milestones noted in Objective 1a. which link to Adobe blog pages. In addition, the CAI regularly posts blogs updating the community of progression of our mission and has recordings of the quarterly community webinars on the CAI website. CAI and Content Credentials were prominently featured on our large, annual [conferences such as Adobe MAX](#).

2023 saw a lot of prominent and public activity on Adobe's on Content Authenticity and Content Credentials. Our senior leaders have consistently talked about our role combating misinformation and development of content credentials. There are many examples, but one prominent [was an op-ed published](#) by our General Counsel talking the importance in combating misinformation in elections.

In 2023, we also held a CAI Symposium. This stands as a testament to the remarkable growth and impact of efforts around content provenance. The inaugural gathering in 2020 had 59 organizations, which focused on media literacy and the burgeoning challenges of misinformation. The symposium has burgeoned into a pivotal event, attracting over 200 participants this year. These attendees, ranging from industry leaders to policy experts, shared a unified dedication to fostering an open, trustworthy, and transparent digital ecosystem. The symposium showcased the significant strides made in deploying Content Credentials and the C2PA standard, highlighting innovations like the world's first Content Credentials-enabled camera and the integration of transparency measures into mobile devices. As we look towards the future, the CAI Symposium 2023 has laid a solid foundation for continued progress in ensuring the integrity of our digital media landscape. In addition, this year's conference held a working session to understand solutions for the growing problem of image abuse, where bad actors create deepfakes of people they know to cause shame or emotional harm.

In July 2023, our General Counsel and Chief Trust Officer Dana Rao testified before the US Senate Committee on Judiciary, Subcommittee on Intellectual Property. Dana Rao, Executive Vice President and General Counsel at Adobe, emphasizes the transformative power of AI in creativity and the need for responsible innovation. He highlighted Adobe's commitment to empowering creators through technologies like Content Credentials, which enable artists to attach a "Do Not Train" tag to their work, ensuring control over AI training data.



Adobe has enjoyed a strong relationship to the creative community have published many examples of how they are using Content Credentials. In 2023, we ran several artists and creative series that features how Content Credentials can help them secure trust and attribution in their work. [One featured Australian-born Melissa Findley.](#)

## **Concluding remarks**

Addressing the issue of content authenticity at scale to tackle mis/disinformation is a long-term, interdisciplinary, collaborative mission. As demonstrated in this year's report, the work Adobe is undertaking with its own products, and the efforts we are leading with the CAI community and our active role in the C2PA is beginning to show real and meaningful progress. 2023 was a year of building momentum in utility and adoption, built upon the foundation of previous years.

Globally, we are constantly working to expand and diversify the membership of both CAI and C2PA and increase support among stakeholders for the standard. These efforts include encouraging software companies, device manufacturers, publishers, and social media platforms to adopt content provenance solutions to expose a wider range of consumers to these tools.

Specifically, in Australia, our goal over the next year is to continue to educate media outlets and journalists on the value of CAI so they can work with these tools embedded into their platforms, and to continue to socialize the C2PA standard with policy makers and stakeholders.

And this work is more essential than ever before with the arrival of mainstream generative AI. We are already seeing the implications of this new technology and how content authenticity can and will be a significant part of this new era of innovation. The democratization of use and scale of accessibility to these tools will have implications for how we tackle mis/disinformation.

**Adobe**