

# Media Provenance at Microsoft

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# Background

# Microsoft Azure Cloud

- Global cloud provider operating in 140 countries with 90+ compliance offerings
- Services 68,000+ industry partners and 95% Fortune 500 companies

## Provenance at Microsoft

### Company-wide investment

- Defending Democracy program
- Microsoft Research
- Coalition for Content Provenance and Authenticity (C2PA)

### Customer signals

- News media
- Fraud prevention
- Enterprise brand protection
- Content chain of custody

# Provenance on Azure Media Services

# Azure Media Services

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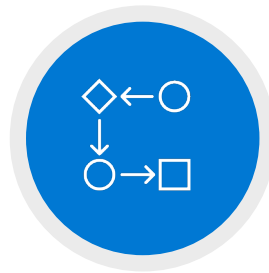
Global video/audio cloud service for storing, processing, and streaming content at scale

## Ingestion



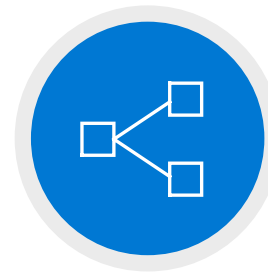
Video on demand (VOD)  
Live video

## Processing



VOD encoding  
Live encoding  
*Provenance*

## Distribution



Live and VOD streaming  
Content Distribution  
Network (CDN)

## Protection



Digital Rights  
Management (DRM)  
Encryption

Benefits: Lower cost, faster speed to deployment, and lower cost of maintenance

# Current State

## Implementation

- Compliant with C2PA version 1.0 specification, updating to version 1.2
- Manifest hashing
- Integration with Azure Key Vault for certification signing

## Private Preview

- Demoing private Application Programmer Interface (API) with select customers:
- *CBC/Radio-Canada*: Digital distribution of news media
- *Ravnur*: Content management system for government organizations

Looking Forward

# Future Implementation

## Features

- Update to then-current C2PA spec
- Add in additional provenance features
- Easy-to-deploy user experience
- Documentation and code samples

## Interested?

Tell us at [aka.ms/ProvenanceInterest](https://aka.ms/ProvenanceInterest)!



Thank you.

Contact: Jay Li ([jiayali@microsoft.com](mailto:jiayali@microsoft.com))

Interest form: [aka.ms/ProvenanceInterest](https://aka.ms/ProvenanceInterest)