Common Access Token

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Background

- CAT is the work of the:
  - Consumer Technology Association; and
  - Software Video Alliance
- Specifically, the Web Application Video Ecosystem
- Focus: Streaming Media
- Goal: Single token that covers all existing usage
Background (cont.)

- CWT-based
- Receivers MUST support most claims
- No built-in delegation support
What’s New?

- More concrete list of claims
- Encrypted claims now in a generic composite claim
- Revamped renewal
- Still working on the if claim
Core Claims

- Issuer
- Subject
- Audience
- Expiration
- Not Before
- Issued At
- CWT ID
General CAT Claims

- Version
- Network
- URI Regex
- URI Hash
- Method
- ALPN
- Header Regexes
- Geographic Country
- Geographic Detail
- TLS Public Key
Composition Claims

*These are documented as CAT Claims, but are fully generic.*

- Critical: reference to other required claims
- Encrypted: COSE object with other claims inside
- And, Or, and Nor: list of claims for boolean logic

Minimum limits for implementations require four levels of nesting and fifty list elements, but token length maximums can kick in sooner.
Encryption Requirements

- Must be encrypted:
  - Network claims more than /24 or /56
  - Subject claims that identify people
  - Geographic Detail claims

- May not be encrypted:
  - Version claims
  - Critical claims
Action Claims

- Renewal: none, cookie, or header
  - Cookie renewal now has arbitrary parameters that can be specified
- if: control response when content is not served
  - Can be used to redirect or set specific error code
  - Still being worked on
Finishing up

- Needs restructuring, to make generic sections generic
  - Matching: Regexes and Hashes
  - Normalization
  - Composition

- Guidance sections
  - Security

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