

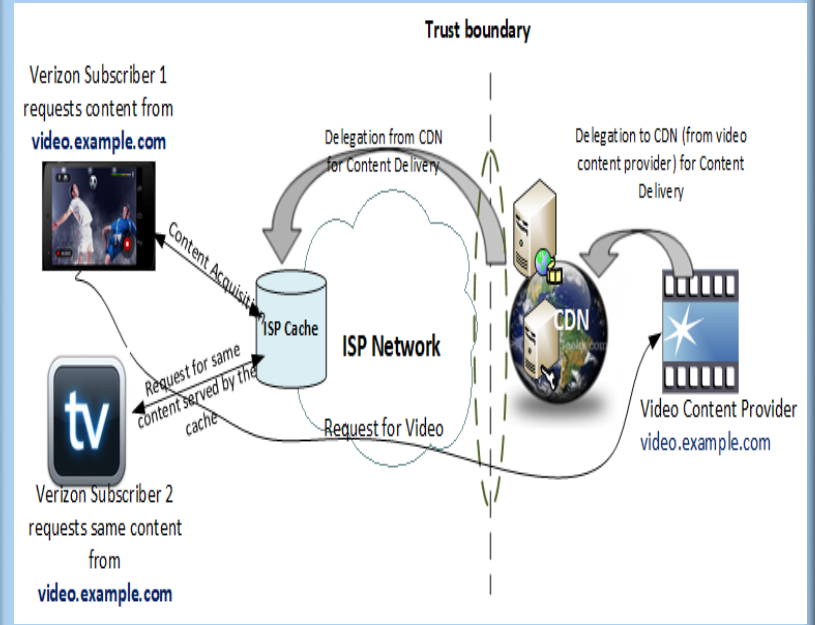
IETF 104:Video Interest Group

Read-out from Open Caching Working Group

Open Caching: A special case of IETF's CDNI Working Group

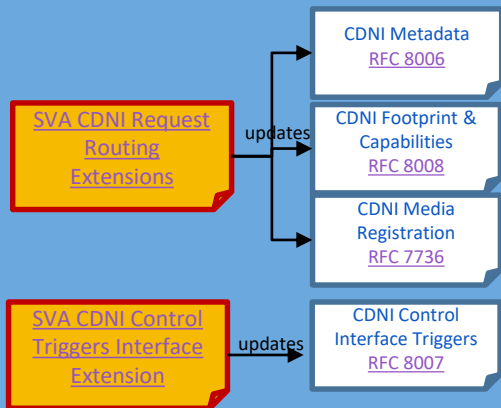
Open Caching solution, based on the [Streaming Video Alliance \(SVA\)](#), is a joint industry effort between Content Providers (CP), Content Distribution Networks (CDN) and Service Providers (SP) to deliver content (when delegated) at the last mile.

- Open Caching is Standards based and primarily builds upon RFCs defined by IETF's Content Delivery Networks Interconnection (CDNI) Working Group.
- Three major areas for Standardization based upon Open Caching
 - Open Caching adds capabilities not currently defined in the RFCs such as, dynamic footprint advertisement (add/remove coverage by market/region) and content management (preposition, purge, invalidate).
 - No standards for enabling delegation of encrypted content. Open Caching working group is taking a lead role in this area to explore an industry-based standards for delegating encrypted content (without CP sharing private keys of its SSL certificate).
 - Standardization across HTTP-streaming based User Agent video players.



Open Caching Standards Track

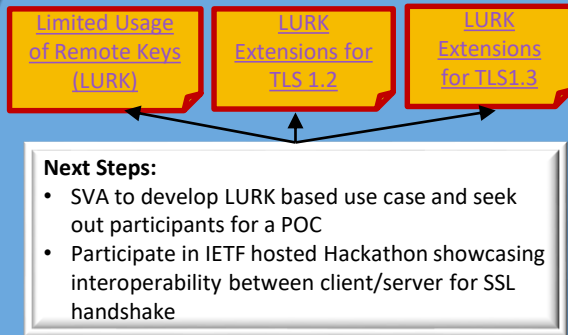
CDNI Enhancements



Next Steps:

- [SVA CDNI Request Routing](#) & [SVA CDNI Control Triggers Interface Extensions](#) have been submitted to CDNI WG
- Continue to work with IETF's CDNI WG for adoption of SVA proposed drafts and incorporate updates to the CDNI RFCs

Support for Encrypted Content



Next Steps:

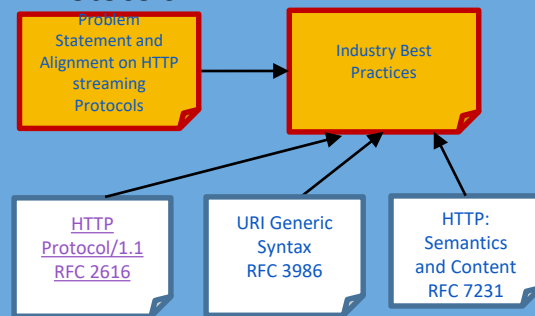
- SVA to develop LURK based use case and seek out participants for a POC
- Participate in IETF hosted Hackathon showcasing interoperability between client/server for SSL handshake



Next Steps:

- Submitted [CDNI Extensions for HTTPS Delegation](#) to CDNI WG.
- Work with CDNI WG for adoption and updates to [RFC 8006](#)

HTTP (ABR) Streaming Protocols



Next Steps:

- SVA to develop a technical paper based on RFCs [RFC 3986](#), [RFC7231](#) and [RFC 2616](#) a consistent interpretation for HTTP redirect directive to help maintain "sticky" session with the final redirected source
- Build consensus within HTTP standards and with media player vendors for adoption of Industry Best Practices

OCWG Specifications & Other work of interest

Open Caching Ongoing Work

Relayed Token Authentication Specification

Industry Best Practices/Internet RFC

Request Routing Manifest Specification

updates

SVA CDNI Request Routing Extensions

Open Caching QoE/QoS Metrics Specification

Publish as a OCWG specification

Next Steps:

- Publish specifications for member approval for final publication.

Open Caching in MEC/5G use case

Open Caching for MEC/5G Specification

ETSI MEC Specification

Next Steps:

- Develop open caching use for MEC over 5G
- Outreach to other organizations - 3GPP, IETF, ITU, ETSI - who are working on 5G MEC so the SVA can promote OC as an MEC application

HTTP WG: Work of interest to OCWG

CDN Loop Prevention

Defines the CDN-Loop request header field for HTTP to enable secure interoperability of forwarding CDNs.

Cache HTTP Response Header

Codifies semantics for HTTP headers appended by Caches to responses when detailing how they handled the request.

Details on the next page