The DASH Industry Forum -
Who we are and what we do!

DVB Webinar: DASH - from on-demand to large scale live for premium services   March 31, 2020

Thomas Stockhammer (Qualcomm Incorporated)

DASH-IF Interoperability WG Chair

Who we are?

- DASH Industry Forum (DASH-IF) was founded in 2012 to promote and catalyze the adoption of MPEG-DASH and help transition it from a specification into a real business.

- With more than 80 members, DASH-IF represents a large footprint of the ecosystem, including service providers, content delivery network operators and broadcasters, as well as technology providers in different domains, and connects the dots in an otherwise fragmented world of internet streaming services.

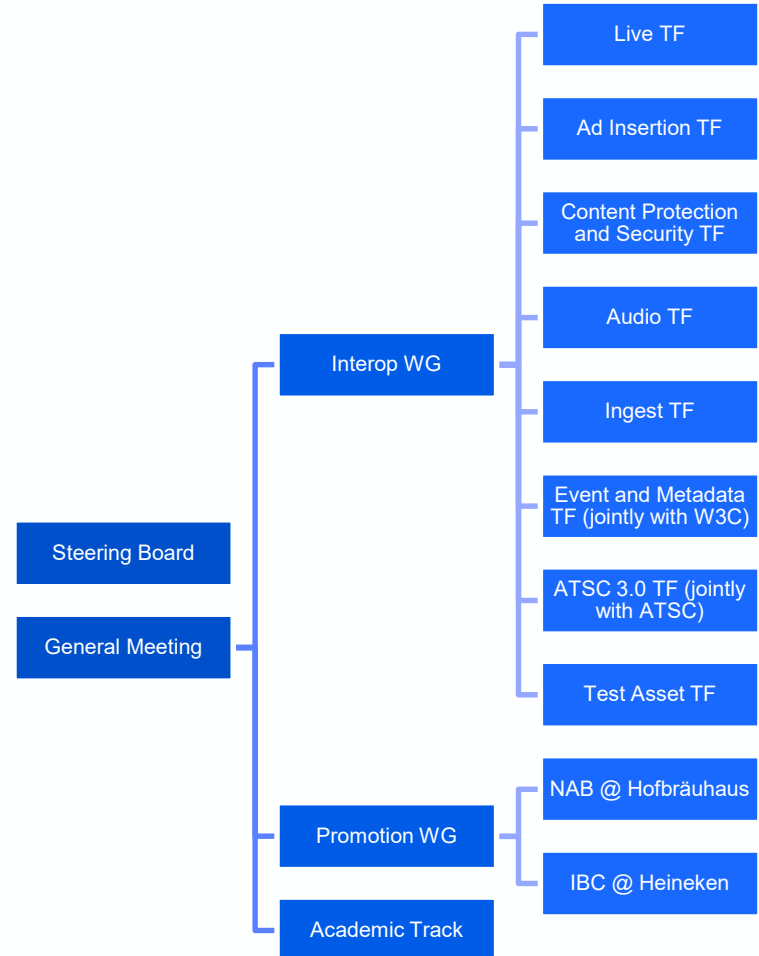- DASH-IF also serves as the point of contact for other standards organizations when introducing new DASH-based distribution means.
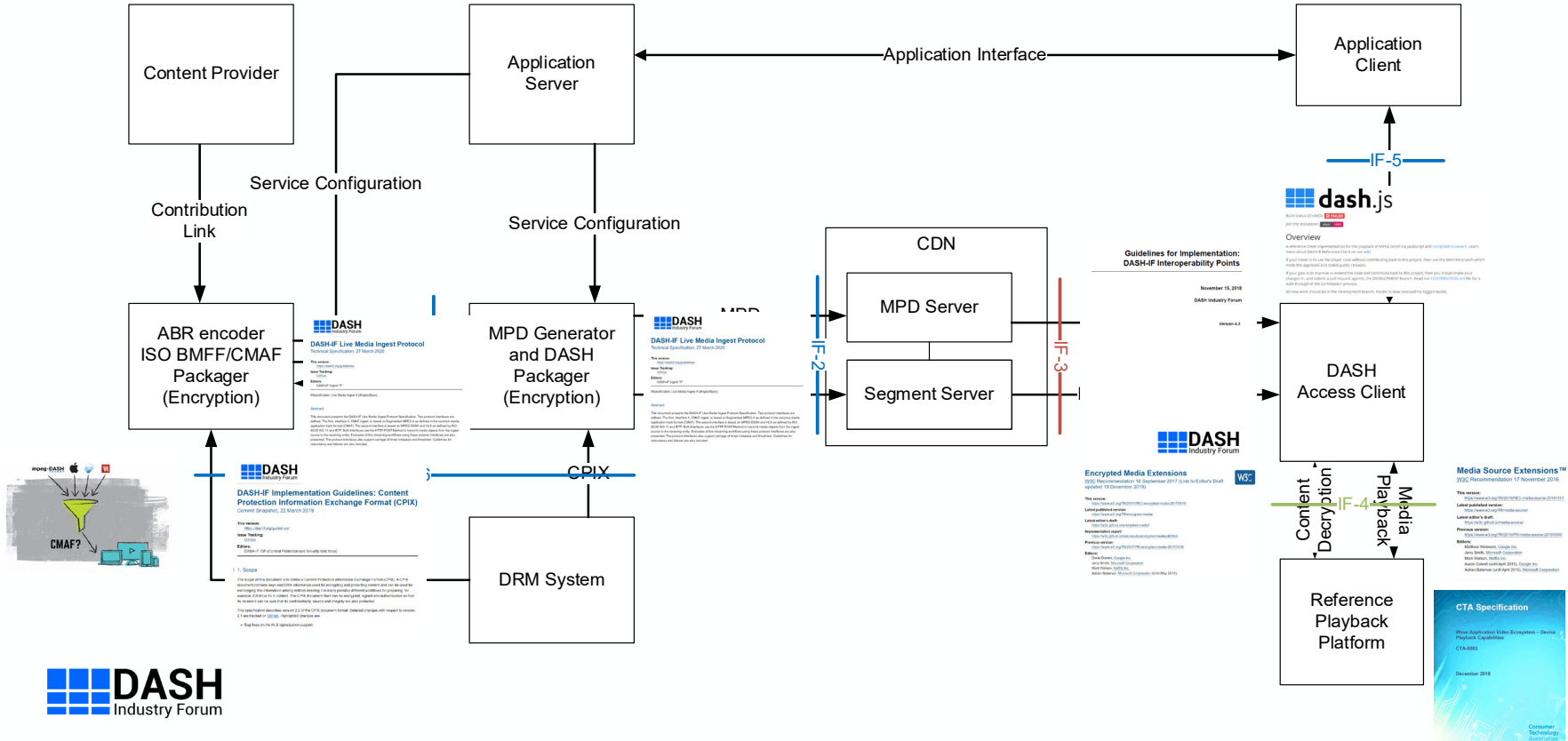
How do we operate?

We try to be lean, agile, flexible and open …

- Weekly or bi-weekly calls in working groups and active task forces. Two annual f2f meetings.

- Development of specifications, guidelines, liaison based on work items and github issues

- Publication of guidelines through DASH-IF web page: http://www.dashif.org

- Community Reviews for public

- PAS Agreement with ETSI established to publish specifications.

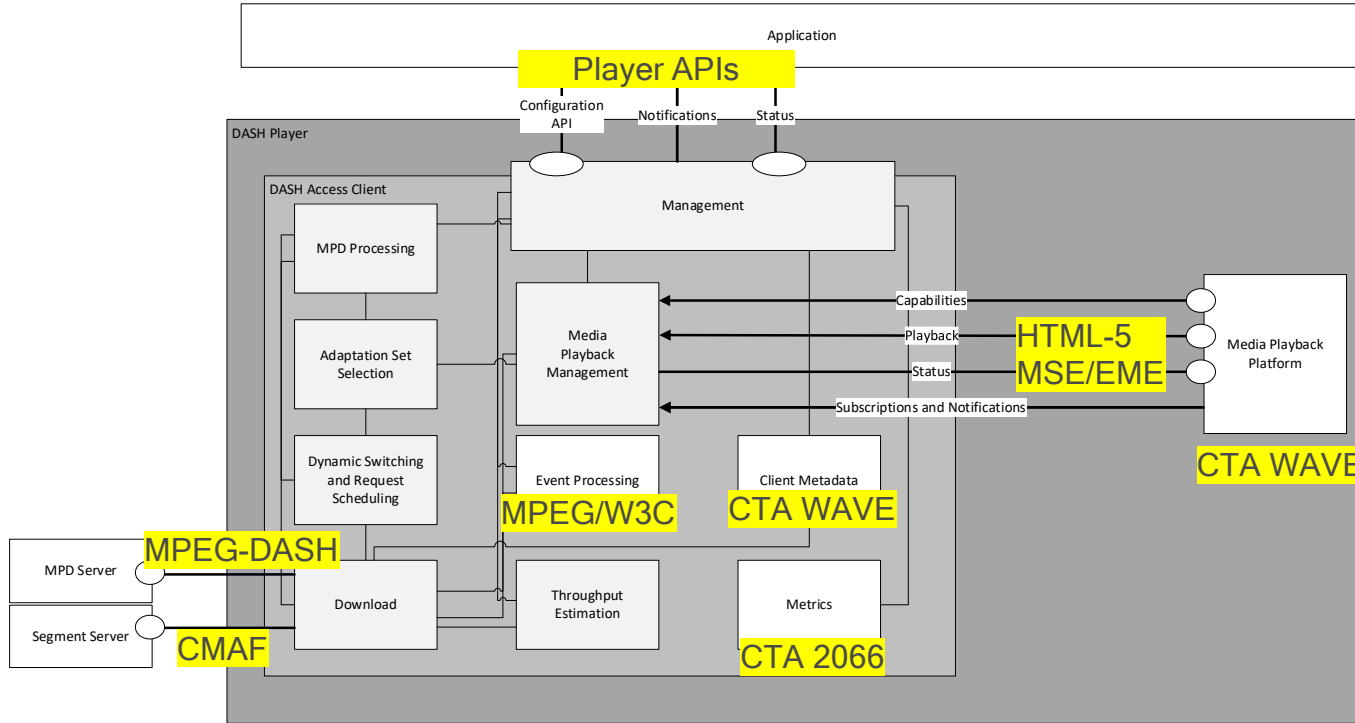- Commissioning and sponsoring of conformance, reference and test tools

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Steering Board

General Meeting

Interop WG
- Live TF
- Ad Insertion TF
- Content Protection and Security TF
- Audio TF
- Ingest TF
- Event and Metadata TF (jointly with W3C)
- ATSC 3.0 TF (jointly with ATSC)
- Test Asset TF

Promotion WG
- NAB @ Hofbräuhaus
- IBC @ Heineken

Academic Track

Interoperability
DASH-IF IOP Guidelines

DASH-IF recently completed and ongoing work
Please check http://www.dashif.org

- DASH-IF IOP version 5 – expect community review by Q2/2020 and publication by Q3/2020
  – Convergence with CMAF and Reference Platform MSE/CTA WAVE Playback
  – Rolling in many recent advances as follow below

- DASH-IF Low Latency Modes (Will, Ali and JB will speak on this)
  – Technically frozen CR published 03/20: https://dashif.org/news/low-latency-dash/

- Ad Insertion: Focus on Server-Side Ad Insertion (Zach will speak on this)
  – 2nd Community Review published 03/20: https://dashif.org/guidelines/#ad-insertion-in-dash

- Live Media Ingest: protocol to ingest DASH and CMAF content using the HTTP POST
  – Specification published 03/20: https://dashif.org/guidelines/#dash-if-technical-specification-live-media-ingest

- DASH Player Application Events and timed metadata processing and APIs
  – Joint work with 3GPP, MPEG and W3C
  – Change Request will be published in 04/20

- DASH-IF implementation guidelines: content protection and security (Laurent will speak to this)
  – Community Review published 03/20: https://dashif.org/guidelines/#content-protection-and-security

- Content Protection Information Exchange (CPIX) alignment with AWS SPEKE (Laurent will speak to this)
  – Work Item started in 01/20
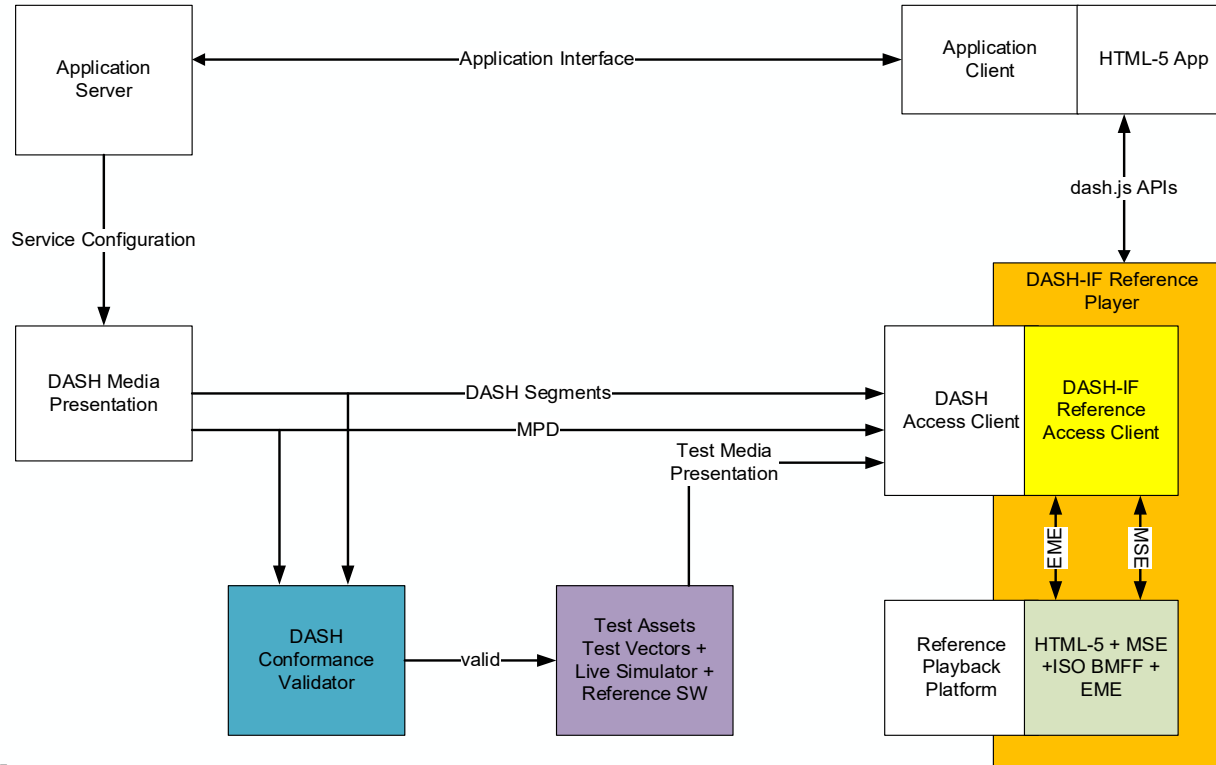
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DASH-IF IOP v5

Important Topics based from client perspective

- Multi-Period
- Multi-Track
- Multi-Experience
- Multi-DRM
- On-Demand
- Live
- Low-Latency Live
- Metadata
- Events
- Media Profiles

More than just specs: Reference and Conformance Tools

Conformance and Reference Resources

- DASH-IF Conformance Validator is used to validate DASH Media Presentations against the requirements and recommendations of a DASH Media Presentation profile
  - open source software available on GitHub at https://github.com/Dash-Industry-Forum/DASH-IF-Conformance. This tool is also hosted by DASH-IF at https://conformance.dashif.org/
  - Live validator: http://vm1.dashif.org/DynamicServiceValidator

- DASH-IF Reference Player dash.js is a free, open source MPEG-DASH player that serves as a JavaScript reference client for implementing production-grade players
  - at https://github.com/Dash-Industry-Forum/dash.js and https://reference.dashif.org/dash.js

- Public Test assets for client developers (also reference and examples for developers)
  - Static test assets https://testassets.dashif.org/
  - DASH-IF live emulator service is at https://livesim.dashif.org
  - Extensions for FFMPEG to support LL-DASH: https://ffmpeg.org/ffmpeg-formats.html#dash-2

- Is this perfect? No! Please help to improve, contribute and consider sponsoring

Thank you

Please join and support us at http://dashif.org