

Transport Stream API

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Motivation

- Broadcasting signals contain in-band resources and metadata that change temporally and are used to express contexts of channels and programs.
- To allow web applications to function synergistically with the contexts, web apps need to get the in-band information.
- Broadcasters and CE manufactures have implemented this function through regional extensions to web standards prior to HTML5. What we've learned through the extensions is that the syntax of the extensions are different from region to region but the semantics are shared. This means this use case has universality.
- I would like to propose W3C defines the syntax for such extensions within HTML5/5.1. This will bring new and better balance to international and regional standards and make broadcasting industries in each region implement the use case more easily.

Agenda

- Target Transport Stream Specifications
- Approach to Developing API: top-down or bottom-up
- Potential Discussion Spaces
- Potential Contributors and Liaisons
- Next Steps and Action Items

Target Transport Stream Specifications

- Candidates
 - MPEG-2 Transport Stream
 - MPEG Media Transport
- Other possibilities
 - MPEG DASH
 - FLUTE
 - ISO Base Media Format
 - RTP

Approach to Developing API

- Top-Down Approach
 - Firstly, we study all target transport stream specs and develop an abstract model for all transport streams.
 - Secondly, we define an abstract API in W3C.
 - Thirdly, we define APIs for each transport stream spec in W3C or other international/regional SDOs.
- Bottom-Up Approach
 - Firstly, we define the API for MPEG-2 TS in W3C since this transport stream is matured and widely used, as a 'tracer bullet' for this work.
 - Secondly, we generalize the API to cover other transport stream specs.

Potential Discussion Space

- Web and Broadcasting BG
 - Business use cases
- TF in Web and TV IG
 - Requirements
- HTML WG / DAP WG / WAP WG
 - Specifications
- New WG
 - Specifications

Potential Contributors and Liaisons

- Some companies need IPR clarification for joining this kind of activity. I would like to find out who is interested in this activity before the IPR clarification.
- Liaisons
 - Internal
 - External
 - MPEG?
 - IETF?

Next Steps and Action Items

- Write a charter
 - Determine leader(s)
 - Determine editor(s)
 - Determine project management style
 - Determine meeting style and frequency