



Device Platform Tests / Web Platform Tests

TPAC2020 Media & Entertainment IG Meeting

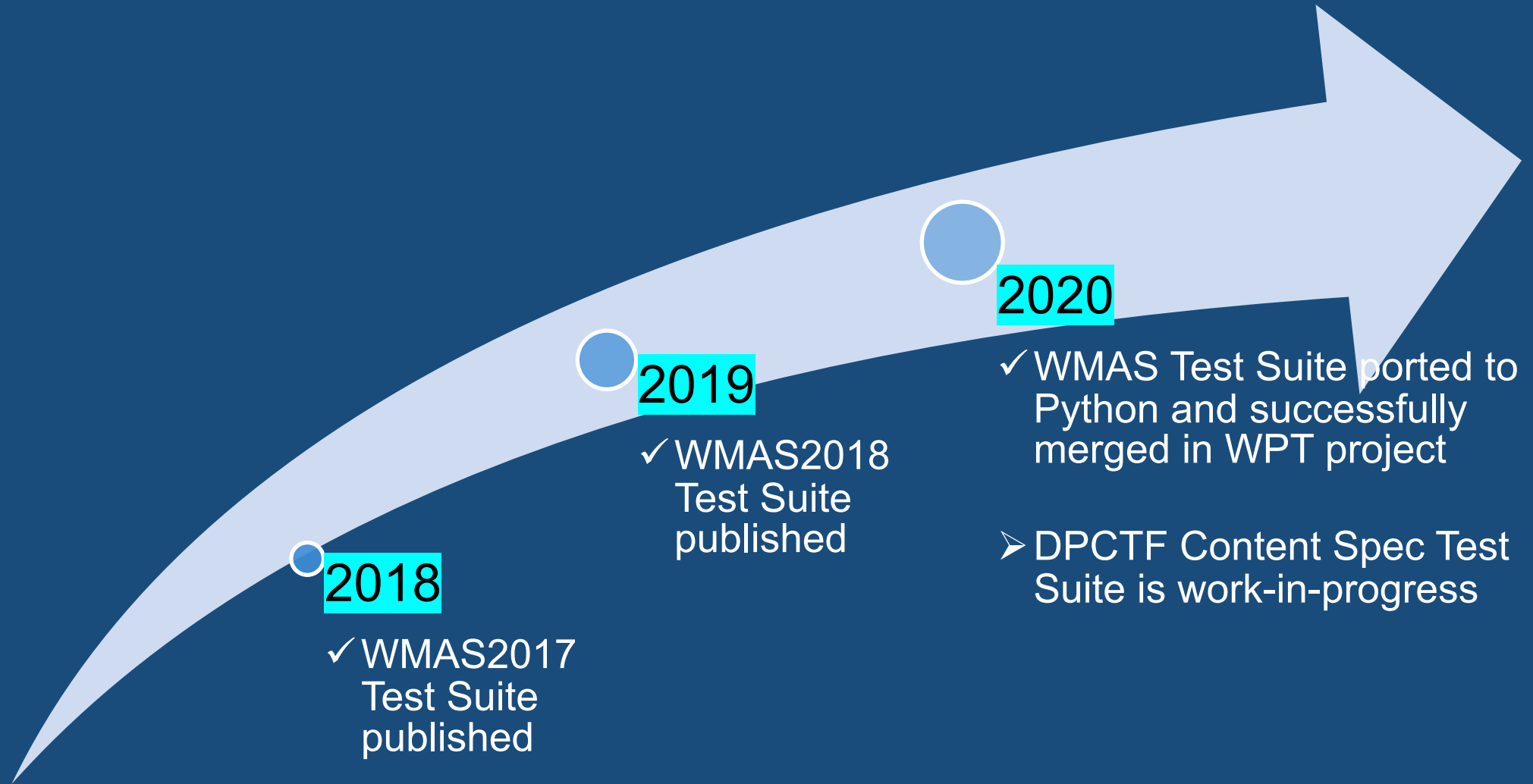
Dr. Louay Bassbouss | TPAC2020 | 19 October 2020

Introduction

- The web-platform-tests project WPT provides a cross-browser test suite for the Web-platform stack
- WPT includes a large set of tests for Web platform specs including WHATWG, W3C, and others
- WPT Provides several ways to run tests via Browser or command line
- Limitation: Embedded devices like TVs, STBs and game consoles are not supported
- The WAVE “Web Media API Snapshot” (WMAS) Test Suite Project extends the WPT project:
 1. Support of embedded devices. This also includes a companion web app for configuration of test sessions, monitoring test progress and generation of test reports
 2. Subsetting of WPT Tests according to WMAS Spec versions (WMAS2017, WAMS2018, ...)
 3. Filtering of tests based of test results of the 4 Browser code bases: Chrome, Safari, Edge, Firefox
 4. Integration of external tests (non WPT tests) especially ECMAScript and WebGL tests
 5. REST API for better integration with external tools

WPT: <https://github.com/web-platform-tests/wpt>

History



Demo – Start Test Session

WAVE WMAS Test Suite

[GitHub](#) -

New test session



Token: 589953fe-11fe-11eb-b700-029b70c1403a

Expires: 19/10/2020, 13:59:27
(Session start revokes expiration.)

Configure a new session on a second device by scanning the QR-Code, or click the button:

Configure Session

The tests will start running in this window, as soon as the session is started from the configuration view.

Resume running session

Last session: f4deff36-11fc-11eb-9e72-029b70c1403a

Resume

DUT

webapitests2019.ctawave.org — Private

Results Overview

Pause

Stop

Delete

Result

Session details

Token

589953fe-11fe-11eb-b700-029b70c1403a

User Agent

Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_6)
AppleWebKit/537.36 (KHTML, like Gecko)
Chrome/86.0.4240.80 Safari/537.36

Test Paths

/IndexedDB, /xhr

Excluded Test Paths

0

show

Total Test Files

644

Status

running

Test Timeouts

Companion Device

Demo – Companion Web App

Session Results - Web Platform

webapitests2019.ctawave.org/wave/results.html?token=589...

Labels

Add

Last Timed-Out Test Files

(most recent first)

- No Timed-Out Tests -

API Results

API	Pass	Fail	Timeout	Not Run	Test Files Run	Export
IndexedDB	1151 (100%)	0 (0%)	0 (0%)	0 (0%)	357/357 (100%)	jsonreport
xhr	16 (94.11%)	1 (5.88%)	0 (0%)	0 (0%)	15/287 (5.22%)	jsonreport
Total	1167 (99.91%)	1 (0.08%)	0 (0%)	0 (0%)	372/644 (57.76%)	

Export

Results

Download results for import into other WMAS Test Suite instances.

Download Zip

All JSON Files

Download JSON files containing results of completed test files.

Download Zip

Session result HTML

Download this sessions result as standalone HTML page, similar to this page.

Download HTML

Web Media API Snapshot 2017 Test Suite

- Considers APIs listed in the Final Community Group Report of the “Web Media API Snapshot 2017” published in December 2017 → <https://www.w3.org/2017/12/webmediaapi.html>
- These Web APIs are supported across all four of the most widely used user agent code bases
- The Test Suite is available as Open Source on GitHub → <https://github.com/cta-wave/WMAS/tree/master>
- Integrates ECMASCRIPT 5.1 tests from the [ECMASCRIPT test suite GitHub repository](#)
- Hosted Version of WMAS2017 Test Suite: <https://webapitests2017.ctawave.org/>

Web Media API Snapshot 2017



Final Community Group Report 20
December 2017 (References fixed 15
May 2018)

Latest editor's draft:

<https://w3c.github.io/webmediaapi/>

Editors:

David Evans ([British Broadcasting Corporation](#))

Mark Vickers ([Comcast](#))

Participate:

[GitHub w3c/webmediaapi](#)

[File a bug](#)

[Commit history](#)

[Pull requests](#)

[Copyright](#) © 2017 the Contributors to the Web Media API Snapshot 2017 Specification, published by the [Web Media API Community Group](#) under the [W3C Community Final Specification Agreement \(FSA\)](#). A human-readable [summary](#) is available.

Web Media API Snapshot 2018 Test Suite

- Considers APIs listed in the Final CG Report of the “Web Media API Snapshot 2018” published in December 2018 → <https://www.w3.org/2018/12/webmediaapi.html>
- Test Runner Ported to Python → <https://github.com/cta-wave/WMAS/>
- New Features: Enhanced Session Configuration, REST API, Filter Test Reports, Export/Import Sessions, etc.
- Integrates ECMAScript 6.0 tests from the [ECMAScript test suite GitHub repository](#)
- Integrates WebGL Tests from the [official Khronos WebGL Repository](#)
- Hosted Version of WMAS2018 Test Suite (): <https://webapitests2018.ctawave.org/>
- Hosted Version of WMAS2018 Test Suite with latest features: <https://webapitests2019.ctawave.org/wave/index.html> (do not get confused with 2019 in the URL)

Web Media API Snapshot 2018



Final Community Group Report 13
December 2018

Latest editor's draft:

<https://w3c.github.io/webmediaapi/>

Test suite:

<https://webapitests2018.ctawave.org>

Editors:

Jon Piesing ([TP Vision Belgium N.V.](#))

Mark Vickers ([Comcast](#))

Former editor:

David Evans ([British Broadcasting Corporation](#))

Participate:

[GitHub w3c/webmediaapi](#)

[File a bug](#)

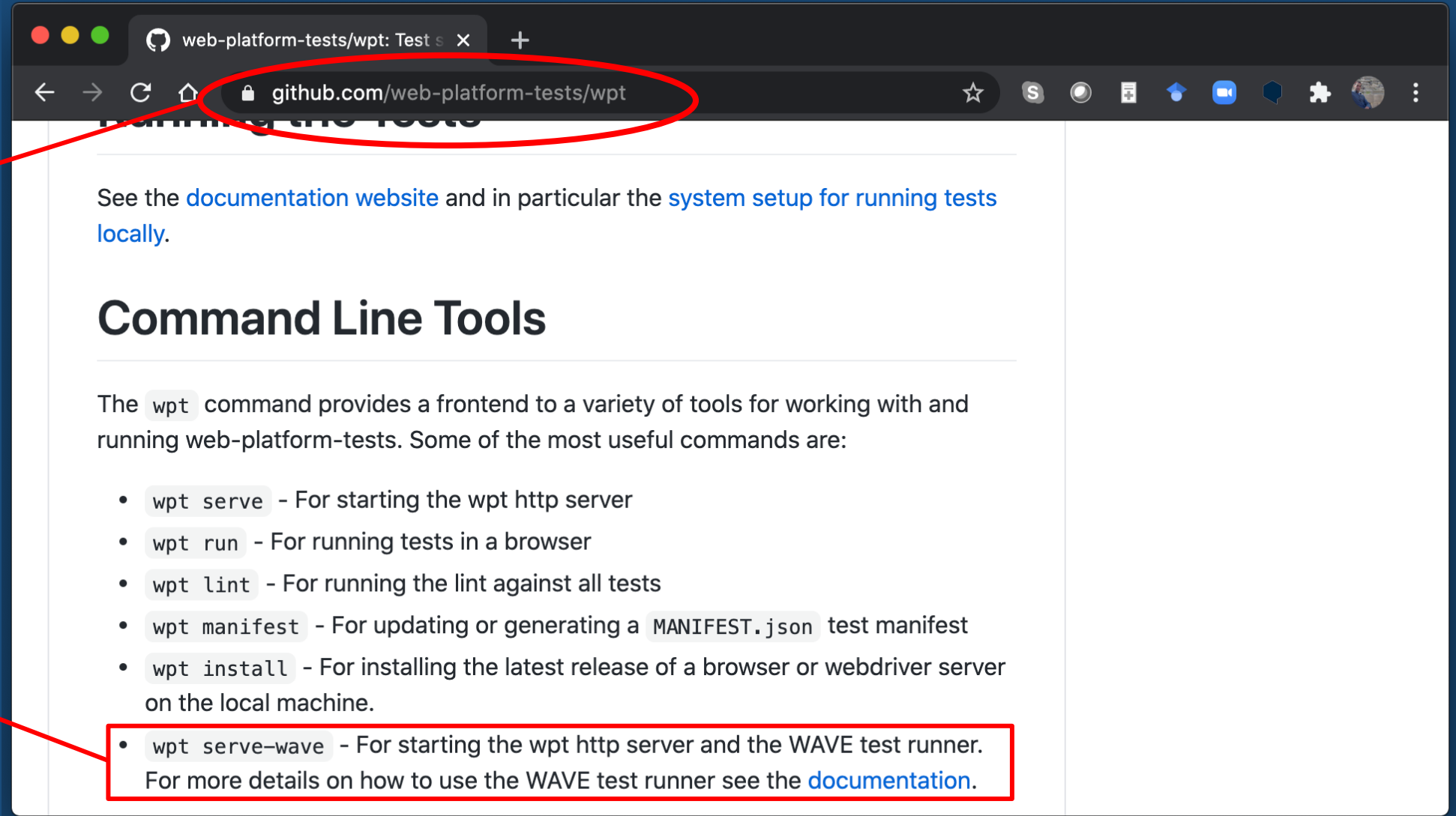
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[Pull requests](#)

WMAS Test Runner merged in WPT project

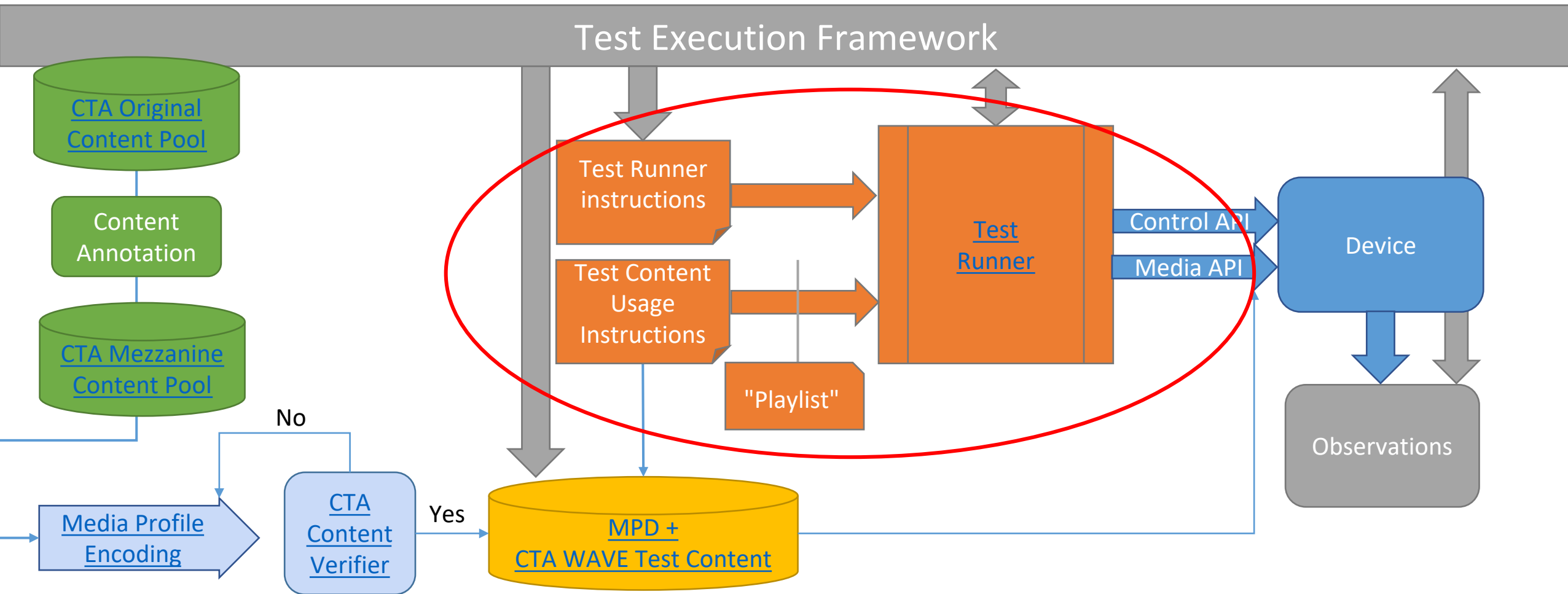
WPT Project

New Command
for WMAS Test
Runner



Source: <https://github.com/web-platform-tests/wpt>

DPCTF (Device Playback Capabilities Task Force) Test Suite



DPCTF Test Runner: <https://github.com/cta-wave/dpctf-test-runner>
GitHub Repos → DPCTF Tests: <https://github.com/cta-wave/dpctf-tests>
DPCTF Deployment: <https://github.com/cta-wave/dpctf-deploy>

Thank you

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