



Device Playback Capability Test








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1. Device Playback Capability Test Suite
2. Device Observation Framework
3. Video and Audio Observations
4. Inclusion of WAVE testing in HbbTV/ATSC conformance testing

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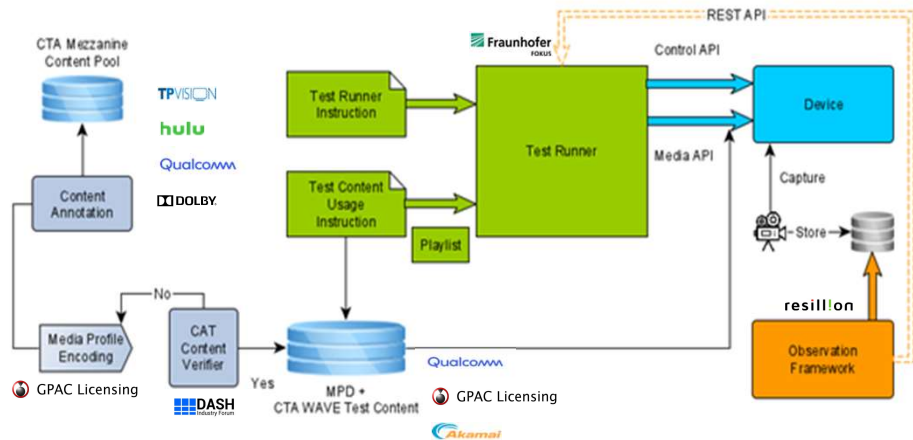
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DPC Test Suite

<https://cta-wave.github.io/dpc-test-suite/>

The DPC(Device Playback Capability) test suite verifies device behaviour against requirements for hardware capabilities identified within the Device Playback Capabilities Task Force of the CTA WAVE (Web Application Video Ecosystem) project.

- Mezzanine Content
- Test Content
- Test Runner
- Observation Framework



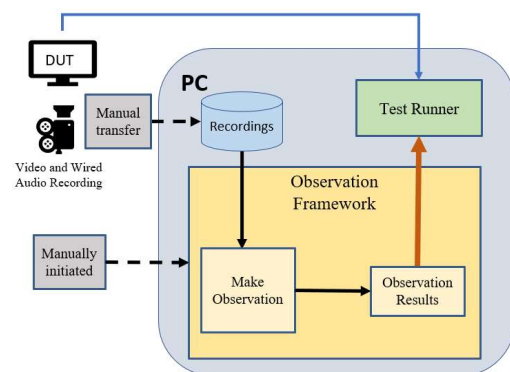
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Device Observation Framework



1. User sets up camera and equipment in a controlled environment and connects a device under test to the Test Runner landing page.
2. User configures a test session on a companion device via test runner configuration page.
3. User manually starts the camera recording and starts the test session.
4. When completed, user stops recording and manually transfers the recording of the test session to a PC.
5. User runs Device Observation Framework application.
6. Observation Framework analyses the recording and reports results of each test back to the Test Runner.
7. Test results are available from the Test Runner.

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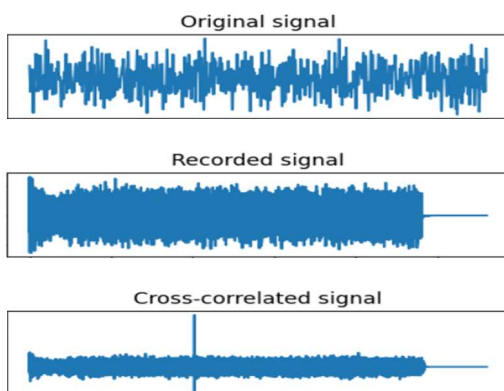
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Video Observations



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Audio Observations

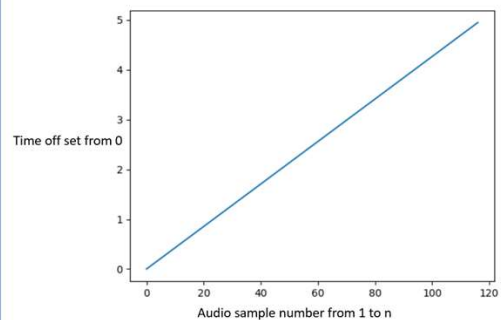


Offsets:

```

0.128
0.17066666666666666
0.21335416666666666
0.25602083333333333
0.2986875
0.34135416666666667
0.38402083333333333
0.4266875
0.46935416666666667
0.51202083333333333
0.55470833333333334
0.597375
0.64004166666666666
0.68270833333333334
0.725375
0.76804166666666666
0.81072916666666666
0.85339583333333334
0.8960625
0.93872916666666666
0.98139583333333334
1.0240625
1.0667291666666667
1.1094166666666667
1.1520833333333333
1.19475
1.2374166666666666
1.2800833333333332
1.32275
1.3654375
1.4081041666666667
1.4507708333333333
1.4934375
1.5361041666666666
1.5787708333333332
  
```

Compare offsets with media time:



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How will WAVE testing be incorporated into HbbTV/ATSC conformance testing?

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HbbTV 2.0.4 and ATSC 3.0 reference WAVE WMAS

1. HbbTV and ATSC (NEXTGEN TV) have existing Test Conformance Suites
2. The scope of the full WMAS tests is very broad, would add a lot of manual testing to the existing test suites
3. It is known not all the WMAS test could be expected to pass on the population of browsers in use in receivers in the market today
4. WAVE, HbbTV and ATSC have discussed a pragmatic approach to scale down the WMAS coverage to a more practical and useful subset...

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Subsetting WPT

A WPT subset For ATSC3.0 and HbbTV

1. Start from the set of tests that **pass on each of the reference browser versions** and **existed at the appropriate cut-off date** for the WMAS version to be tested
2. Eliminate all **manual tests**
3. Eliminate any specific tests identified on a **manually curated 'block' list**
4. For each web standard being tested, **select a pre-determined proportion** of 'established' tests and a pre-determined proportion of 'recent' tests, appropriate to that web standard
5. Add any specific tests identified on a **manually curated 'must include' list**

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