iab australia

# VAST 4.x

## VIDEO AD SERVING TEMPLATE: UPDATED PRODUCT SUMMARY

AUGUST 2019

# EXECUTIVE SUMMARY

The current VAST and VPAID standards have faced challenges in keeping up with technology (growth of mobile, OTT, SSAI, multitude of device/bandwidth profiles, etc.) in delivering required media assets, and needed to be 'hacked' in order to support various use cases like verification and interactivity. They have also not kept up with privacy and data leakage concerns. The new set of standards VAST 4.x, SIMID & OMID address these technology challenges whilst also applying some discipline around the standards by focusing on specific use cases.

**VAST** (Video Ad Serving Template)
Exists for the delivery of video advertising. Describes the video ad, beacons, and where to download the various critical assets such as media files, verification scripts and interactive scripts.

**OMID** (Open Measurement Interface Definition)
Exists for measurement and viewability, supported by Open Measurement SDK (OMSDK) for actual implementation.

**SIMID** (Secure Interactive Media Interface Definition)
Exists only for interactivity.

In relation to the past:

- VAST 2/3 is being replaced by VAST 4.x.
- VPAID is being replaced by 2 standards (each focused on very different use cases) – OMID for verification and SIMID for interactivity.

The goal is to have just these three core specifications cover all of the three core video advertising requirements (ad delivery, verification and interactivity) and work across all platforms (desktop, mobile and OTT/CTV).

# WHAT HAS CHANGED?

## 1 VAST4.x (https://iabtechlab.com/standards/vast/):

- Separating the media file (mp4) from executable code (VPAID in the past).
- Clear identification of the verification code (OMID) and interactive code (SIMID) so that publishers can handle them correctly.
- Features intended to support SSAI ad delivery (mezzanine file, macros, UniversalAdID, guidance for User Agents and http headers to help with verification, etc.).
- Standardized ad requests to improve video ad workflows (this should significantly reduce number of VAST errors once implemented).
- Audio ad support.
- Other "minor" features (closed captioning, categories, etc).

## 2 OMID / OM SDK (https://iabtechlab.com/standards/open-measurement-sdk/):

- Single and consistent technology to support all platforms (instead of confusion across VPAID/MRAID/proprietary stacks).
- Support all verification vendors with a single SDK implementation.
- Consistent measurement data across platforms and campaigns.
- OMID will verify video measurement only and not interactive creative like overlay or actions user may take after initiating a hotspot or rich-media creative. That said, OMID does enables indicating that user has opted to interact with any rich media creative.
- Measurement of user interactions with rich-media creative can be managed separately via rich media vendor technology.

## 3 SIMID (https://iabtechlab.com/simid/):

- Only for interactivity.
- Sandboxed execution to encourage more publishers to support interactive inventory.
- Pre- cache assets for better user experience.
- Support for SSAI & OTT.

# REMAINING CHALLENGES

## 1 ADOPTION

- Requires support from both buy and sell side to support adoption of VAST 4.x and accompanying components- OMID and SIMID.

## 2 COMPREHENSIVE SUPPORT FOR ALL USES CASES

- Some elements are not ready yet since this is a significant set of changes. While some of these do not impact status quo (e.g. brand safety on mobile, or support on OTT/SSAI platforms), some of them still do (e.g. support for brand safety on desktop).

- There will be a transition period where the old and new standards will co-exist and may require platform specific decisions.

# SUGGESTED ROLL-OUT PLAN

Although guidance has been provided for some components to work in previous VAST (2.0, 3.0) versions, full benefits are achieved only through transition to VAST 4.x and developing capabilities for OMID (implementing OM SDK) and SIMID. IAB Tech Lab's current recommendation is to move to VAST 4.x immediately and start enabling the inventory in a phased manner. Firstly, with VAST 4.x and OMSDK followed by SIMID. OMID is already being rolled out.
This also attempts to define an exit strategy for VPAID. In the transition period, platform and environment specific decisions will need to be made based on availability of API capabilities via Open RTB requests.

The suggested phases are as per the below:

0

## Phase 0 - Mobile support for OMID & OMSDK (already underway).

**Start Now**

- OM SDK and OMID are available for Android and iOS.
- Deployed by over 30 mobile SDK platforms and apps. E.g. Google SDK has over 75% of inventory enabled with OM SDK.
- OMID is enabled for VAST 2/3 via extension and guidance for Open RTB 2.5 and 3.0 is available. (Note - OMID is supported natively in VAST 4.x - read next).

1

## Phase 1 - Baseline VAST 4.x implementation for better measurement.

**Start Now**

- Support OMID on VAST 4.x at the same time as implementing support on VAST 2/3 (even without implementing all other VAST4.x features).
- Use OMID 1.2 on Android and iOS.
- *Note - VPAID can still be used while in transition of implementing SIMID and OMSDK.
- Support VAST4 "Ad Request Macros" immediately send to reduce errors & improve workflows (This is backwards compatible, plus no harm if other side does not support).
- Consider requiring the use of VAST4 DOMAIN, PAGEURL, APPBUNDLE macros for basic brand safety.

2

## Phase 2 – SSAI (Server-Side Ad Insertion) use cases.

**Start now if relevant**

- Use VAST4.x SSAI features to improve creative management, tracking(mezzanine files, media file & VPAID clean up, UniversalAdID support, http headers, Ad request macros and tracking macros).
- OMID 1.2 can be executed for SSAI where client-side JS execution is possible (Android, iOS, soon to be released web browser OM SDK).

# SUGGESTED ROLL-OUT PLAN

3

**Phase 3 - Interactive support.**

**Start now if relevant**

Develop creatives and Support interactive ads with SIMID.
Use interactive creative node in VAST4.x to deliver SIMID.
*Note - start to depreciate VPAID interactive usage in favour of SIMID support.

4

**Phase 4 - Desktop video support with OMID 1.3.**

**Start once OMID 1.3 is ready**

Move to OMID for desktop (once available).
VPAID may be used for brand safety. Consider requiring the use of VAST4 DOMAIN, PAGEURL, APPBUNDLE macros for basic brand safety.
OMID will support sending content URL for brand safety evaluation in OMID 1.3 with support for web browser.

5

**Phase 5 - Support brand safety with OMID.**

**TBD**

Use OMID (version TBD) for brand safety.
This is where VPAID can be eliminated for all use cases (since OMID & SIMID together will cover all VPAID use cases at this point).

# DETAILED FEATURES & BENEFITS

- Mezzanine file support
- 'Ready to serve file' support
- Separation of Media file from Interactive code / Verification code
- Verification & Viewability support - via Open Measurement
- Interactivity via SIMID
- Universal AdID
- SSAI features
- Support for Audio
- Categories
- Closed Captioning
- New error
- Standardized Macro based Ad Requests

| MAJOR UPDATES & FEATURES | DESCRIPTION | BENEFITS FOR PUBLISHERS | BENEFITS FOR ADVERTISERS | BENEFITS FOR CONSUMERS |
|---|---|---|---|---|
| **Mezzanine file support** | High-quality media file that can be used to transcode to any desired quality - by SSAI servers as well as 3rd party ad-servers | Ability to support SSAI with all its related benefits:<br>- more device coverage<br>- better UX/quality<br>- no ad blocking | Ensure that the best quality video is delivered across all platforms and publishers.<br>Ads can be delivered to more devices | Higher quality video advertising across all devices |
| **'Ready to serve file' support (low/med/high res media files)** | x3 pre-defined quality media files that can be used for adaptive streaming.<br><br>Video player will choose the most appropriate file depending upon the viewer's streaming environment and will seamlessly transition between video files if the environment or streaming capabilities change during video playback | Better ad quality / experience<br><br>Ensures video will always play regardless of viewer's streaming environment | Better ad quality / experience<br><br>Ensures the best quality video will always play regardless of viewer's streaming environment | No more lag when fluctuating between good and bad service<br><br>More opportunities to stream in bad service areas, since ad has 'low spec' option |

# DETAILED FEATURES & BENEFITS

| MAJOR UPDATES & FEATURES | DESCRIPTION | BENEFITS FOR PUBLISHERS | BENEFITS FOR ADVERTISERS | BENEFITS FOR CONSUMERS |
|---|---|---|---|---|
| **Separation of Media file from Interactive code / Verification code** | VAST 4 has separate nodes for the media file (mp4 etc.), the verification code and the interactive code | Transparency: No more VPAID 'black boxes' where the publisher is unaware of what is inside the VPAID tag. Verification and Interactive code are clearly marked, as is the source<br><br>Safety: Now that the purpose and source of executable code is clear, correct levels of access can be provided. Interactive code can be run in 'safe' iframes and the verification code can be run with more access<br><br>Execution: Fewer problems due to executable code - better support for mobile and OTT platforms | Simpler / easier architecture<br><br>Creators can focus on interactive ad units and no longer require complex VPAID code that has to handle playback and verification in addition to interactivity<br><br>Verification vendors provide verification code (Open Measurement)<br><br>Ads can now focus purely on interactive code<br>Better support for mobile and OTT platforms. Unlike VPAID which could not be run at all on those platforms, here the media file is guaranteed to be run (SSAI or not), and the executable code can be layered on<br><br>A VAST tag that provides the video file separate from APIs can display more successfully across platforms and devices | Better user experience (since likelihood of bad code is reduced)<br><br>Fewer ad time-out errors |
| **Verification & Viewability support - via Open Measurement** | Better support for Verification (separate node, viewability & verification beacons) | Publishers are more likely to support verification (rather than allow black box VPAID)<br><br>Open Measurement allows pubs to support all verification vendors without custom tags<br><br>VAST4 + OMID allows a single tag to work across all platforms | More verifiable inventory available<br><br>Better support across all verification vendors<br><br>VAST4 + OMID allows a single tag to work across all platforms | Faster page loads due to simplified architecture |
| **Interactivity via SIMID** | Better support for interactivity with separate node, safe execution. | Publishers are more likely to support interactive code since the code can be run in safe iframes without risk of bad user experience/data leakage | More interactive inventory.<br><br>Easier to write interactive code since the code doesnt have to worry about VPAID wrappers etc. | More opportunity for interactive ads regardless of device |
| **Universal AdID** | Mechanism to clearly identify video assets, using standard registries (like AdID) | Easier to track asset details for use cases such as brand safety<br><br>Better measurement/reporting capabilities since it is possible to connect to a specific asset | Easier to track asset details for use cases such as brand safety<br><br>Better measurement/reporting capabilities | Delivery of more relevant ads |

# DETAILED FEATURES & BENEFITS

| MAJOR UPDATES & FEATURES | DESCRIPTION | BENEFITS FOR PUBLISHERS | BENEFITS FOR ADVERTISERS | BENEFITS FOR CONSUMERS |
|---|---|---|---|---|
| **SSAI features** | Other than Mezzanine file support described above, separation of code from media file, directions for handling headers, tracking beacons, ad requests, etc. | SSAI benefits above | SSAI benefits above | Better ad experience across more devices<br><br>Simpler and faster clients / UX |
| **Support for Audio Ads** | DAAST merged into VAST, plus hybrid audio ad support | No need to support DAAST separately<br><br>Support more interesting ad experiences such as audio fall backs, where an audio only ad plays instead of the video in case the video player or the app itself is in the background | No need to create a separate DAAST tag<br><br>Support more interesting ad experiences such as audio fall backs | More interesting audio experiences |
| **Categories** | Separate node for ad categories.<br>Well defined registries | Better support for brand safety and competitive separation | Better support for brand safety and competitive separation | Viewer experiences more variety in advertising<br>Prevent kids from being exposed to inappropriate ads |
| **Closed Captioning** | | Better accessibility support | Better accessibility support | Better accessibility support |
| **New error codes** | Much more granular error codes | Better debugging and reporting | Better debugging and reporting | Improved ad experiences over time |
| **Standardized Macro based Ad Requests** | Ability to send client context including player capabilities. This means that the VAST response can be built to match the player's capabilities<br><br>Standardized server-to-server communication | Fewer errors due to better VAST tags<br><br>Better workflows due to more context across the entire delivery chain | Fewer errors due to better VAST tags<br><br>Better workflows due to more context across the entire delivery chain | Fewer errors due to better VAST tags<br><br>Better workflows due to more context across the entire delivery chain |