



Open Measurement SDK

Integration Validation Test Cases

Updated June 2021

Executive Summary

The Open Measurement Software Development Kit (OM SDK) is designed to facilitate third party viewability and verification measurement without requiring multiple Ad Verification Service Provider (Measurement Provider) SDKs. We have SDKs for ads served to mobile apps and web video applications that load and render all viewable content exclusively through HTML5.

The OM SDK consists of native libraries for iOS, Android, JavaScript (for web) as well as a JavaScript API, named Open Measurement Interface Definition (OMID), that Integration Partners develop into their mobile apps, ad SDKs, website or video player. The native library collects various signals, such as ad container geometry and playback events in the case of video, using direct communication with the mobile device's native operating system (OS) and media players, and publishes these signals via the OMID JavaScript API.

The collection, processing, analysis, and reporting of information surfaced by the OM SDK is the responsibility of the Measurement Provider using their respective JavaScript tag that is served with the ad creative.

Completing the SDK integration alone does not guarantee that it will be compatible with Measurement Provider tags or be accepted as valid for the purposes of measurement; implementation errors or other issues may interfere with compatibility. To ensure that the Measurement Provider is collecting data from a reliable implementation of the integration partner's OM SDK implementation, IAB Tech Lab has developed a certification program for validating the integration. The certification program outlined in the Integration Validation Compliance document, found [here](https://omsdk-files.s3-us-west-2.amazonaws.com/docs/Integration+Validation+Compliance+Guide.pdf): <https://omsdk-files.s3-us-west-2.amazonaws.com/docs/Integration+Validation+Compliance+Guide.pdf> is voluntary and serves to ensure that your integration is compatible with Measurement Provider measurement tags.

This guide describes the test cases for each version of OM SDK Integration Validation Compliance (OM IVC).

OM SDK is developed and managed by the [Open Measurement Working Group](#)

Audience

The test cases are for Ad SDK developers, App publishers, web publishers and video players (Integration Partners) who have integrated the OM SDK in their products.

About IAB Tech Lab

The IAB Technology Laboratory is an independent, international, research and development consortium charged with producing and helping companies implement global industry technical standards. Comprised of marketers, advertising agencies, digital publishers and ad technology firms, as well as other companies with interests in the interactive marketing arena, the IAB Tech Lab's goal is to reduce friction associated with the digital advertising and marketing supply chain, while contributing to the safe and secure growth of the industry. Learn more about IAB Tech Lab [here](#).

More information available at: <https://www.iabtechlab.com>

Open Measurement Working Group

Commit Group Members

DoubleVerify	Nielsen
Google	Oracle's Moat
Integral Ad Science	Pandora

IAB Tech Lab	
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Working Group Members

AdColony	IAB Tech Lab	Protected Media
Adform	InMobi	Pubfinitly
ADLOOX	Innovid	Publicis Media
Admixer EU Gmbh	Integral Ad Science	PubMatic
Adverty	ironSource	RTBAsia
Amazon Advertising	Jun Group	Sizmek by Amazon
AppNexus	JW Player	Smaato
BARC India	KERV Interactive	Smart AdServer
Bidstack	Kochava	Spark Foundry
Browsi	Lucidity	SpotX
Comscore	Macromill, Inc.	Taboola
Cyber Communications Inc.	Magnite	Tapjoy
Dailymotion	Meetrics	Teads
Display.io	Microsoft Advertising	TikTok
DoubleVerify	Mintegral	Timehop
Extreme Reach	MoPub (a division of Twitter, Inc.)	TripleLift
Fiducia DLT Ltd	NBCUniversal	Twitter
Flipboard	Nielsen	UNICORN Inc.

Forensiq	Noqoush	Unity
FreeWheel	Ogury	Verizon Media
Fyber	OpenX	Vlion
Google	Oracle Data Cloud	White Ops
Gridsum	Pandora	Xandr
GroupM	Pixalate	YOSPACE

* Working Group membership as of November 5, 2020

Learn more about Open Measurement Working Group [here](#)

(<https://iabtechlab.com/working-groups/open-measurement-working-group/>)

Change Log

Revision	Description	Author	Date
Version 1.0	Document created to keep all version test cases together instead of with each integration guide	Jill Wittkopp (jill@iabtechlab.com)	11/05/2020
Version 2.0	Document updated with new web video test cases to support access modes	Jill Wittkopp (jill@iabtechlab.com)	06/24/2021

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Test Cases

These test cases have been developed based on the Open Measurement Interface Definition (OMID) Application Programming Interface (API) to validate that the integration of OM SDK has been performed properly and all the required elements are functioning as expected. Please read the onboarding guide

(<https://omsdk-files.s3-us-west-2.amazonaws.com/docs/WebVideo/Onboarding+Guide+for+Integrators.pdf>) for downloading the SDK and other integration instructions

1.3 Integration Test Cases

S.No.	Ad Type	Test Case	Scenario	Event/ Signal	Expected Result/ value/ comment
1	All	Set-up testing	Confirm that the app can be installed and from what source Should testing be targeted to specific devices? Device types?	App installation	App installed without error, and can be opened
2	All	Set-up testing	Did the int partner provide any specific credentials for testing?	Log-in screen	Log-in successful
3	All	Set-up testing	Does the app re-use the same code for multiple placements, so that they can be checked as a group rather than individually?	Confirmation from Integrator	Confirmation from Integrator

4	All	Set-up testing	Is the generic verification script trafficked with the ad?	Check ad / impression events	Signals from generic verification script
5	All	Set-up testing	Only ads to be tested are being served with tracking	Confirmation from Integrator	Confirmation from Integrator
6	All	Check OMID compatibility and whether active	Load the app page with the ad	OmidSupported[true]	OmidSupported[true]
7	All	Ad session is correctly instantiated	Load the page with the ad or reload the page with the ad	ad session id	return new ad session-unique ad session id, timestamp unique ad session value like: 2196C74D-6A27-4807-A3D3-B08E4F6E0ABA and timestamp aue like 1531749570462
8	All	Ad session is correctly instantiated	Ad session context is established properly	environment	app e.f "environment":"app", timestamp":"1531749570462"
9	All	Ad session is correctly instantiated		adSessionType	native or html
10	All	Ad session is correctly instantiated		supports	clid for all ad types except vlid for video
11	All	Ad session is correctly instantiated		omidNativeInfo	partnerName (this is same as namespace assigned at the time of OM SDK download) and partnerVersion {"partnerName":"someSDK", partnerVersion:"x.y"}, timestamp":"1531749570462"
12	All	Ad session is correctly instantiated		omidJsInfo	serviceVersion, sessionClientVersion, partnerName,partnerVersion E.g. "omidJsInfo":{"serviceVersion":"1.1.2-iab443", "omidimplementer":"omsdk"}, timestamp":"1531749570462"

13	All	Ad session is correctly instantiated		app	libraryVersion and appld (com.example.appname) "app":{"appld":"com.example.ent", "libraryVersion":"1.1.2-partnername"}, timestamp:"1531749570462"
14	All	Ad session is correctly instantiated		Device Info	mobile device details e.g. "deviceInfo":{"deviceType":"iPhone7,2", "os":"iOS", "osVersion":"11.4.1"}, timestamp:"1531749570462"
15	All	Ad session is correctly instantiated	Impression Type for what OMID impression event you are declaring. Required "definedByJavaScript" if JavaScript layer is setting the creativetype . See Migration Guide for more details.	impressionType	"loaded", "beginToRender", "onePixel", "viewable", "audible", "other", "unspecified", "definedByJavaScript" e.g. "impressionType": "viewable",
16	All	Ad session is correctly instantiated	Value will be true for all video sessions and for display sessions where integration uses new API. Value will be false for display sessions where integration uses old API. For 1.3 certification, integrations are required to use 1.3 API. "supportsLoadedEvent" should be true for all 1.3 certifiable integrations.	supportsLoadedEvent	"supportsLoadedEvent": true "supportsLoadedEvent": false,
17	All	Ad session is correctly instantiated	URL of top-level web page, as determined by OM SDK JS service. Null when JS service is cross-domain or running in a mobile app.	pageUrl	"pageUrl": www.domain.com
18	All	Ad session is correctly instantiated	URL of top-level web page, as provided by OM integration. Null when integration does not pass contentUrl parameter on Context constructor.	contentUrl	"contentUrl": www.domain.com

19	All	Ad session is correctly instantiated		verificationParameters	verification parameter provided by the measurement provider undefined for display ads e.g. verificationParameters:"undefined" Also displays access mode. Always limited when using OM SDK "accessmode":"limited" For native and video ads verificationParameters:"iabtechlab or some text", "accessmode":limited
20	All	Ad session is correctly instantiated		customReferenceData (not required)	any string value
21	All	Ad session has error instantiating		errorType	Generic or Video when video ads
22	All	Ad session has error instantiating		message	string value describing the error
23	All	Ad session slow to instantiate	Ad is slow to load, eg from throttling	ad loaded	Impression events fire only once the ad has loaded. The "loaded" event should also fire only after the ad has loaded. <pre> { "timestamp":1531376049725, "type":"impression", "data":{"creativeType":"display","viewport":undefined, "adView":undefined, </pre>
24	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
25	All	Ad session start and loaded	Load the page with the ad	loaded	Ad is loaded and impression occurs <pre> { "timestamp":1571415828196, "type":"loaded", "data":{"mediaType":"display","creativeType" </pre>

					:"nativeDisplay", "impressionType":"onePixel"]}}
26	All	Impression has Occurred	Part of loaded event - check as part of loaded event	mediaType	display or video {"adSessionId":"fb54e94d-5f26-443e-ba9a-6b54f44af9bf","timestamp":1571954146094,"type":"loaded","data":{"mediaType":"display","creativeType":"htmlDisplay", "impressionType":"onePixel"]}}
27	All	Impression has Occurred	Part of loaded event - check as part of loaded event	creativeType	htmlDisplay, nativeDisplay, video or audio definedByJavaScript for special cases e.g. "creativeType": "nativeDisplay", 10/25/2019, 3:25:46 AM::{"adSessionId":"fb54e94d-5f26-443e-ba9a-6b54f44af9bf","timestamp":1571954146094,"type":"loaded","data":{"mediaType":"display","creativeType":"htmlDisplay", "impressionType":"onePixel"]}}
28	All	Impression has Occurred	Impression Type for what OMID impression event you are declaring. Part of loaded event - check as part of loaded event	impressionType	"loaded", "beginToRender", "onePixel", "viewable", "audible", "other", "unspecified", "definedByJavaScript" e.g. "impressionType": "viewable", "timestamp":1571415828196, "type":"loaded","data":{"mediaType":"display","creativeType": :"nativeDisplay", "impressionType":"onePixel"]}}
29	Video	Impression has occurred	Sunsetted	videoEventAdaptorType	Empty / NULL - Does not apply for 1.3
30	Video	Impression has occurred	Sunsetted	videoEventAdaptorVersion (not required)	Empty / NULL - Does not apply for 1.3
31	All	Impression has occurred		viewport	viewport size of the device in height and width

32	All	Impression has occurred		adView	This is geometry change data. E.g. <pre> { "adView": { "percentageInView": 100, "reasons": [], "timestamp": "1531376050520", "geometry": { "width": 351, "height": 351, "x": 12, "y": 80, "onScreenGeometry": { "width": 351, "height": 351, "x": 12, "y": 80 } } } } </pre>
33	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
34	All	Geometry Change data	All the geometry events are to be displayed for all ads	percentageInView	value between 0-100
35	All	Geometry Change data		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
36	All	Geometry Change data		onScreenGeometry	{ } x: 0, y: 0, width: 320, height: 50, obstructions:[
37	All	Geometry Change data	Required for creative measurement. Creative Measurement is used for HTML creative	containerGeometry	"containerGeometry":{"width":320,"height":49.818180084228516,"x":36.3636360168457,"y":451.6363525390625},
38	All	Geometry Change data	Required for creative measurement. Creative Measurement is used for HTML creative	onScreenContainerGeometry	"onScreenContainerGeometry":{"width":320,"height":49.818180084228516,"x":36.3636360168457,"y":451.6363525390625},
	All	Geometry Change data	Required for creative measurement. Creative Measurement is used for HTML creative. If true, the geometry of both the creative element inside of the webview and of the native view representing that webview are being measured. The	measuringElement	boolean "measuringElement":true

			geometry of the native-layer webview is provided, in this case, as the containerGeometry and onScreenContainerGeometry properties.		
39	All	Geometry Change data	Obstruction is present in onScreen geometry	Obstruction data	In addition to existing fields "x", "y", "width", "height", add: "pixels": integer Count of visible pixels in ad. This considers obstructions, just like the "percentageInView" field.
40	All	Geometry Change data	Reason for obstruction	reason	one or more of: notfound, hidden, backgrounded, viewport, obstructed, clipped
41	All	Geometry Change data	the number of friendly obstructions declared by the integrator for this ad session.	declaredFriendlyObstructions	"declaredFriendlyObstructions": 1
42	All	Geometry Change data	the name of the native view class that is obstructing the ad	obstructionClass	"friendlyObstructions": [{"x": 339.4285583496094, "y": 200, "width": 56, "height": 28, "obstructionClass": "android.support.design.widget.FloatingActionButton", "obstructionPurpose": "OTHER"}]
43	Native	Geometry Change data	Classification for the friendly obstruction.	obstructionPurpose	"friendlyObstructions": [{"x": 339.4285583496094, "y": 200, "width": 56, "height": 28, "obstructionClass": "android.support.design.widget.FloatingActionButton", "obstructionPurpose": "OTHER"}]
44	All	Geometry Change data	Reason for obstruction	detailedReason	"friendlyObstructions": [{"x": 339.4285583496094, "y": 200, "width": 56, "height": 28, "obstructionClass": "android.support.design.widget.FloatingActionButton", "detailedReason": "some reason"}]
45	Video	Video player interaction and events	Events for video ads	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> }

					position values are - preroll,midroll, postroll, standalone (when it is not in video content)
46	Video	Video player interaction and events	Start playing the video	start	{ duration: <float>, videoPlayerVolume: <float>, deviceVolume: <float> } The videoPlayerVolume range is between 0 and 1. The deviceVolume range is between 0 and 1.
47	Video	Video player interaction and events	Play at least 1/4 of video length	firstquartile	firstquartile
48	Video	Video player interaction and events	Play at least half of video length	midpoint	midpoint
49	Video	Video player interaction and events	Play at least 3/4 of video length	thirdquartile	thirdquartile
50	Video	Video player interaction and events	Play full video	complete	complete
51	Video	Video player interaction and events	Pause the video	pause	pause
52	Video	Video player interaction and events	Resume after the pause	resume	resume
53	Video	Video player interaction and events	Start playing video	bufferstart	bufferstart
54	Video	Video player interaction and events		bufferfinish	bufferfinish
55	Video	Video player interaction and events	Use skip video is skip is available	skipped	Only for skippable videos
56	Video	Video player interaction and events	Change player volume or device volume	volumeChange	values are between 0 and 1- { videoPlayerVolume: <float>, deviceVolume: <float> }
57	Video	Video player interaction and events	Change player volume or device volume	mediaPlayerVolume	values are between 0 and 1- { mediaPlayerVolume: <float>, deviceVolume: <float>

					}
58	Video	Video player interaction and events	Hide Video by scrolling or expanding another page component so the video is hidden	playerStateChange	minimized
59	Video	Video player interaction and events	Change player volume	volumeChange	playerVolume should change, but deviceVolume should not
60	Video	Change device volume	volumeChange	deviceVolume should change, but playerVolume should not	
61	Video	Video player interaction and events	Mute player volume	volumeChange	{ videoPlayerVolume: 0, deviceVolume: <float> }
62	Video	Video player interaction and events	Mute device volume	volumeChange	{ videoPlayerVolume: <float>, deviceVolume: 0 }
63	Video	Video player interaction and events	Minimize the video or reduce in size if app allows that action	playerStateChange	collapsed
64	Video	Video player interaction and events	Play video in player default size	playerStateChange	normal
65	Video	Video player interaction and events	Expand the player if app allows or the app expands the video when it plays the video	playerStateChange	expanded
66	Video	Video player interaction and events	Tap on video to go full screen	playerStateChange	fullscreen
67	Video	Video player interaction and events		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
68	Video	Video player interaction and events	Click on video to open advertiser landing page- execute click through	adUserInteraction	{ interactionType: <click> }
69	Video	Video player interaction and events	Tap on video to engage with another ad experience	adUserInteraction	{ interactionType: <invitationAccept> }
70	Display	Banner ad session basic check	Load the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event

71	Display	Banner ad session basic check	Reload the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event
72	Display	Banner ad session basic check	On Android rotate the banner- this should start a new ad session	Check all ad session and impression events have occurred	see above for ad session and impression event
73	Display	Banner ad viewability geometry	Ad fully in view	percentageInView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
74	Display	Banner ad viewability geometry	Scroll ad partially out of view < 50% in view	percentageInView	value should be < 50
75	Display	Banner ad viewability geometry	Scroll ad partially back in view > 50% but < 100% in view	percentageInView	value should be >50 and < 100
76	Display	Banner ad viewability geometry	Scroll ad fully out of view	percentageInView	0
77	Display	Banner ad viewability geometry		reason	hidden and / or viewport
78	Display	Banner ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentageInView	between 0 and 100
79	Display	Banner ad obstructions		obstruction data	as described above
80	Display	Banner ad obstructions		reason	backgrounded
81	Display	Banner ad obstructions	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructed and/ or hidden
82	Display	Banner ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
83	Display	Banner ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invaitonAccept> }
84	Display	Ending the ad session	Tap on close button if there is e.g. anchored banners	session Finish	Finish

			or refresh the app page to get a fresh ad session		
85	Interstitial	Pre load scenario (confirm with app if this applies)	Load the app	Check all ad session and impression events have occurred	see above for ad session events
86	Interstitial	Ad shown in pre load scenario	Go to the interstitial page in the app (navigate from one page to another until interstitial is shown)	Check all impression occurred events	see above for impression events
87	Interstitial	Ad load and shown at the same time	GO to the interstitial page in the app (please confirm navigation with app owner)	Check all ad session and impression events have occurred	see above for ad session and impression event
88	Interstitial	Interstitial ad viewability geometry	Ad fully in view	percentageInView	90% or greater
89	Interstitial	Interstitial ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentageInView	between 0 and 100
90	Interstitial	Interstitial ad obstructions		obstruction data	as described above
91	Interstitial	Interstitial ad obstructions		reason	backgrounded
92	Interstitial	Interstitial ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
93	Interstitial	Interstitial ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invitaitonAccept> }
94	Interstitial	Ending the ad session	Tap on close button if there is or use app navigation to move out of the interstitial ad experience	session Finish	Finish
95	Video	Ad session start and impression for ads in video content	Play video content until pre roll or mid roll or post roll	Check all ad session and impression events have occurred	see above for ad session events
96	Video		When video ad appears additional video events need to be verified	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)

97	Video	Ad session start and impression for standalone ads- autoplay native or outstream ads	Load the page with the video ad	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
98	Video	Video ad viewability geometry for videos inline of the view	Ad fully in view	percentagelnView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
99	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially out of view < 50% in view	percentagelnView	value should be < 50
100	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially back in view > 50% but < 100% in view	percentagelnView	value should be >50 and < 100
101	Video	Video ad viewability geometry for videos inline of the view	Scroll ad fully out of view	percentagelnView	0
102	Video	Video ad viewability geometry for videos inline of the view		reason	hidden and / or viewport
103	Video	Video ad viewability geometry for videos inline of the view	Background the application (go to another app or start camera or lock the screen)	percentagelnView	between 0 and 100, video events available
104	Video	Video ad viewability geometry for videos inline of the view		obstruction data	as described above
105	Video	Video ad viewability geometry for		reason	backgrounded

		videos inline of the view			
106	Video	Video ad viewability geometry for videos inline of the view	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructed and/ or hidden
107	Video	Video playback events	Refer above test case for Video player interaction and events and execute all scenarios	see Video player interaction and events scenarios	see Video player interaction and events scenarios.
108	Video	End session	Click on close to close the video, stop the video or move to another page creating a new app page session	Session Finish	Finish
109	Native	Native ad viewability	Same as banner ads		Ensure ad session type is native and OMIDnative event has the right parameters
110	Audio	Audio player interaction and events	Play at least 1/4 of audio length	firstquartile	firstquartile
111	Audio	Audio player interaction and events	Play at least half of audio length	midpoint	midpoint
112	Audio	Audio player interaction and events	Play at least 3/4 of audio length	thirdquartile	thirdquartile
113	Audio	Audio player interaction and events	Play full audio	complete	complete
114	Audio	Audio player interaction and events	Pause the audio	pause	pause
115	Audio	Audio player interaction and events	Resume after the pause	resume	resume
116	Audio	Audio player interaction and events	Change player volume	volumeChange	mediaPlayerVolume should change, but deviceVolume should not
117	Audio	Change device volume	volumeChange	deviceVolume should change, but mediaPlayerVolume should not	
118	Audio	Audio player interaction and events	Mute player volume	volumeChange	{ mediaPlayerVolume : 0, deviceVolume: <float>

					}
119	Audio	Audio player interaction and events	Mute device volume	volumeChange	{ mediaPlayerVolume : <float>, deviceVolume: 0 }
120	Audio	Audio player interaction and events	Audio is backgrounded and still playing. when an app is backgrounded we still get OMID events (such as quartiles and device volume changes). audio can be 100% audible in the background	All Audio Events need to be checked	quartiles and volume
121	Audio	End session	Click on close to close the audio, stop the audio or move to another page creating a new app page session	Session Finish	Finish

1.2 Test Cases

S.No	Ad Type	Test Case	Scenario	Event/ Signal	Expected Result/ value/ comment
1	All	Set-up testing	Confirm that the app can be installed and from what source Should testing be targeted to specific devices? Device types?	App installation	App installed without error, and can be opened
2	All	Set-up testing	Did the int partner provide any specific credentials for testing?	Log-in screen	Log-in successful
3	All	Set-up testing	Does the app re-use the same code for multiple placements, so that they can be checked as a group rather than individually?	Confirmation from Integrator	Confirmation from Integrator
4	All	Set-up testing	Is the generic verification script trafficked with the ad?	Check ad / impression events	Signals from generic verification script
5	All	Set-up testing	Only ads to be tested are being served with tracking	Confirmation from Integrator	Confirmation from Integrator
6	All				

7	All	Check OMID compatibility and whether active	Load the app page with the ad	isCompatibleWithOmidApiVersion	version number of OMID library and application context. supported = 'yes'
8	All	Ad session is correctly instantiated	Load the page with the ad or reload the page with the ad	ad session id	return new ad session-unique ad session id, timestamp unique ad session value like: 2196C74D-6A27-4807-A3D3-B08E4F6E0ABA and timestamp aue like 1531749570462
9	All	Ad session is correctly instantiated	Ad session context is established properly	environment	app e.f "environment": "app", timestamp": "1531749570462"
10	All	Ad session is correctly instantiated		adSessionType	native or html
11	All	Ad session is correctly instantiated		supports	clid for all ad types except vlid for video
12	All	Ad session is correctly instantiated		omidNativeInfo	partnerName (this is same as namespace assigned at the time of OM SDK download) and partnerVersion {"partnerName": "someSDK", "partnerVersion": "x.y"}, timestamp": "1531749570462"
13	All	Ad session is correctly instantiated		omidJsInfo	serviceVersion, sessionClientVersion, partnerName, partnerVersion E.g. "omidJsInfo": {"serviceVersion": "1.1.2-iab443", "omidimplementer": "omSDK"}, timestamp": "1531749570462"
14	All	Ad session is correctly instantiated		app	libraryVersion and appld (com.example.appname) "app": {"appld": "com.example.ent", "libraryVersion": "1.1.2-partnername"}, timestamp": "1531749570462"
15	All	Ad session is correctly instantiated		Device Info	mobile device details e.g. "deviceInfo": {"deviceType": "iPhone7,2", "os": "iOS", "osVersion": "10.0"}

					n:"11.4.1"}, timestamp":"1531749570462"
16	All	Ad session is correctly instantiated		verificationParameters	verification parameter provided by the measurement provider undefined for display ads e.g. verificationParameters:"undefined" Also displays access mode. Always limited when using OM SDK "accessmode":"limited" For native and video ads verificationParameters:"iabtechlab or some text", "accessmode":limited
17	All	Ad session is correctly instantiated		customReferenceData (not required)	any string value
18	All	Ad session has error instantiating		errorType	Generic or Video when video ads
19	All	Ad session has error instantiating		message	string value describing the error
20	All	Ad session slow to instantiate	Ad is slow to load, eg from throttling	ad loaded	Impression events fire only once the ad has loaded ""timestamp"":""1531376049725"" ,"" ""type"":""impression"" ,"" ""data"":{""mediaType"":""display"" ,"" ""viewport"":undefined, ""adView"":undefined,"
21	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
22	All	Impression has occurred	As soon as the ad is displayed on the page	html	display or video
23	Video	Impression has occurred		videoEventAdaptorType	custom or nativecustom if the media type is video
24	Video	Impression has occurred		videoEventAdaptorVersion (not required)	version number is media type is video
25	All	Impression has occurred		viewport	viewport size of the device in height and width

26	All	Impression has occurred		adView	This is geometry change data. E.g. <pre> adView":{"percentageInView":100,"reasons":[], "timestamp":"1531376050520", "geometry":{"width":351,"height":351,"x":12,"y":80}, "onScreenGeometry":{"width":351,"height":351,"x":12,"y":80} </pre>
27	All	Geometry Change data	All the geometry events are to be displayed for all ads	percentageInView	value between 0-100
28	All	Geometry Change data		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
29	All	Geometry Change data		onScreenGeometry	{ } x: 0, y: 0, width: 320, height: 50, obstructions:[
30	All	Geometry Change data	Obstruction is present in onScreen geometry	Obstruction data	{ x: 0, y: 0, width: 320, } height: 50
31	All	Geometry Change data	Reason for obstruction	reason	one or more of: notfound, hidden, backgrounded, viewport,obstructed, clipped
32	Video	Video player interaction and events	Events for video ads	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
33	Video	Video player interaction and events	Start playing the video	start	{ duration: <float>, videoPlayerVolume: <float>, deviceVolume: <float> } The videoPlayerVolume range is between 0 and 1.

					The deviceVolume range is between 0 and 1.
34	Video	Video player interaction and events	Play at least 1/4 of video length	firstquartile	firstquartile
35	Video	Video player interaction and events	Play at least half of video length	midpoint	midpoint
36	Video	Video player interaction and events	Play at least 3/4 of video length	thirdquartile	thirdquartile
37	Video	Video player interaction and events	Play full video	complete	complete
38	Video	Video player interaction and events	Pause the video	pause	pause
39	Video	Video player interaction and events	Resume after the pause	resume	resume
40	Video	Video player interaction and events	Start playing video	bufferstart	bufferstart
41	Video	Video player interaction and events		bufferfinish	bufferfinish
42	Video	Video player interaction and events	Use skip video is skip is available	skipped	Only for skippable videos
43	Video	Video player interaction and events	Change player volume or device volume	volumeChange	values are between 0 and 1- { videoPlayerVolume: <float>, deviceVolume: <float> }
44	Video	Video player interaction and events	Hide Video by scrolling or expanding another page component so the video is hidden	playerStateChange	minimized
45	Video	Video player interaction and events	Change player volume	volumeChange	playerVolume should change, but deviceVolume should not
46	Video	Change device volume	volumeChange	deviceVolume should change, but playerVolume should not	
47	Video	Video player interaction and events	Mute player volume	volumeChange	{ videoPlayerVolume: 0, deviceVolume: <float> }

48	Video	Video player interaction and events	Mute device volume	volumeChange	{ videoPlayerVolume: <float>, deviceVolume: 0 }
49	Video	Video player interaction and events	Minimize the video or reduce in size if ap allows that action	playerStateChange	collapsed
50	Video	Video player interaction and events	Play video in player default size	playerStateChange	normal
51	Video	Video player interaction and events	Expand the player if app allows or the app expands the video when it plays the video	playerStateChange	expanded
52	Video	Video player interaction and events	Tap on video to go full screen	playerStateChange	fullscreen
53	Video	Video player interaction and events		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
54	Video	Video player interaction and events	Click on video to open advertiser landing page- execute click through	adUserInteraction	{ interactionType: <click> }
55	Video	Video player interaction and events	Tap on video to engage with another ad experience	adUserInteraction	{ interactionType: <invitationAccept> }
56	Display	Banner ad session basic check	Load the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event
57	Display	Banner ad session basic check	Reload the banner ad	Check all ad session and impression events have occurred	see above for ad session and impression event
58	Display	Banner ad session basic check	On Android rotate the banner- this should start a new ad session	Check all ad session and impression events have occurred	see above for ad session and impression event
59	Display	Banner ad viewability geometry	Ad fully in view	percentageInView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
60	Display	Banner ad viewability geometry	Scroll ad partially out of view < 50% in view	percentageInView	value should be < 50
61	Display	Banner ad viewability geometry	Scroll ad partially back in view > 50% but < 100% in view	percentageInView	value should be >50 and < 100

62	Display	Banner ad viewability geometry	Scroll ad fully out of view	percentagelnView	0
63	Display	Banner ad viewability geometry		reason	hidden and / or viewport
64	Display	Banner ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentagelnView	between 0 and 100
65	Display	Banner ad obstructions		obstruction data	as described above
66	Display	Banner ad obstructions		reason	backgrounded
67	Display	Banner ad obstructions	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructed and/ or hidden
68	Display	Banner ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
69	Display	Banner ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invitaitonAccept> }
70	Display	Ending the ad session	Tap on close button if there is e.g. anchored banners or refresh the app page to get a fresh ad session	session Finish	Finish
71	Interstitial	Pre load scenario (confirm with app if this applies)	Load the app	Check all ad session and impression events have occurred	see above for ad session events
72	Interstitial	Ad shown in pre load scenario	Go to the interstitial page in the app (navigate from one page to another until interstitial is shown)	Check all impression occurred events	see above for impression events
73	Interstitial	Ad load and shown at the same time	GO to the interstitial page in the app (please confirm navigation with app owner)	Check all ad session and impression events have occurred	see above for ad session and impression event
74	Interstitial	Interstitial ad viewability geometry	Ad fully in view	percentagelnView	90% or greater
75	Interstitial	Interstitial ad obstructions	Background the application (go to another app or start camera or lock the screen)	percentagelnView	between 0 and 100
76	Interstitial	Interstitial ad obstructions		obstruction data	as described above

77	Interstitial	Interstitial ad obstructions		reason	backgrounded
78	Interstitial	Interstitial ad interactions	Click to advertiser landing page	adUserInteraction	{ interactionType: <click> }
79	Interstitial	Interstitial ad interactions	Tap to engage with ad component like expand the ad	adUserInteraction	{ interactionType: <invaitonAccept> }
80	Interstitial	Ending the ad session	Tap on close button if there is or use app navigation to move out of the interstitial ad experience	session Finish	Finish
81	Video	Ad session start and impression for ads in video content	Play video content until pre roll or mid roll or post roll	Check all ad session and impression events have ocurred	see above for ad session events
82	Video		When video ad appears additional video events need to be verified	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
83	Video	Ad session start and impression for standalone ads- autoplay native or outstream ads	Load the page with the video ad	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
84	Video	Video ad viewability geometry for videos inline of the view	Ad fully in view	percentageInView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
85	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially out of view < 50% in view	percentageInView	value should be < 50
86	Video	Video ad viewability geometry for	Scroll ad partially back in view > 50% but < 100% in view	percentageInView	value should be >50 and < 100

		videos inline of the view			
87	Video	Video ad viewability geometry for videos inline of the view	Scroll ad fully out of view	percentageInView	0
88	Video	Video ad viewability geometry for videos inline of the view		reason	hidden and / or viewport
89	Video	Video ad viewability geometry for videos inline of the view	Background the application (go to another app or start camera or lock the screen)	percentageInView	between 0 and 100, video events available
90	Video	Video ad viewability geometry for videos inline of the view		obstruction data	as described above
91	Video	Video ad viewability geometry for videos inline of the view		reason	backgrounded
92	Video	Video ad viewability geometry for videos inline of the view	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	obstructed and/ or hidden
93	Video	Video playback events	Refer above test case for Video player interaction and events and execute all scenarios	see Video player interaction and events scenarios	see Video player interaction and events scenarios.
94	Video	End session	Click on close to close the video, stop the video or move to another page creating a new app page session	Session Finish	Finish
95	Native	Native ad viewability	Same as banner ads		Ensure ad session type is native and OMIDnative event has the right parameters

Web Video Test Cases

S.No.	Ad Type	Test Case	Scenario	Event/ Signal	Expected Result/ value/ comment
1	All	Set-up testing	Player loads on page	App installation	Specific url for test - web page load
2	All	Set-up testing	Did the int partner provide any specific credentials for testing?	Log-in screen	Log-in successful
3	All	Set-up testing	Can apply for in/out stream	Confirmation from Integrator	Outstream - outstream url instream - instream url URL Must be on a production ready url
4	All	Set-up testing	Is the generic verification script trafficked with the ad?	Check ad / impression events	Signals from generic verification script
5	All	Set-up testing	Only ads to be tested are being served with tracking	Confirmation from Integrator	Confirmation from Integrator
6	All	Check OMID compatibility and whether active	Load the app page with the ad	OmidSupported[true]	OmidSupported[true]
7	All	Ad session is correctly instantiated	Load the page with the ad or reload the page with the ad	ad session id	return new ad session- unique ad session id, timestamp unique ad session value like: 2196C74D-6A27-4807-A3D3-B08E4F6E0ABA and timestamp aue like 1531749570462
8	All	Ad session is correctly instantiated	Ad session context is established properly	environment	app e.f "environment":"web", timestamp":"1531749570462"
9	All	Ad session is correctly instantiated	Video Ad Session	adSessionType	html

10	All	Ad session is correctly instantiated		supports	vclid for video
11	All	Ad session is correctly instantiated		omidJsInfo	serviceVersion, sessionClientVersion, partnerName,partnerVersion E.g. "omidJsInfo":{"serviceVersion":"1.1.2-iab443","omidimplementer":"omsdk"}, timestamp:"1531749570462"
12	All	Ad session is correctly instantiated	Impression Type for what OMID impression event you are declaring	impressionType	"loaded", "beginToRender", "onePixel", "viewable", "audible", "other", "unspecified", "definedByJavaScript" e.g. "impressionType": "viewable",
13	All	Ad session is correctly instantiated	Value will be true for all video sessions and for display sessions where integration uses new API. Value will be false for display sessions where integration uses old API. For 1.3 certification, integrations are required to use 1.3 API. "supportsLoadedEvent" should be true for all 1.3 certifiable integrations.	supportsLoadedEvent	"supportsLoadedEvent": true "supportsLoadedEvent": false,
14	All	Ad session is correctly instantiated	URL of top-level web page, as determined by OM SDK JS service. Null when JS service is cross-domain or running in a mobile app.	pageUrl	"pageUrl": www.domain.com
15	All	Ad session is correctly instantiated	URL of top-level web page, as provided by OM integration. Null when integration does not pass contentUrl parameter on	contentUrl	"contentUrl": www.domain.com

			Context constructor.		
16	All	Ad session is correctly instantiated		underEvaluation	default is true, for prod set to false (Compliance should be true) "underEvaluation": true
17	All	Ad session is correctly instantiated		canMeasureVisibility	"canMeasureVisibility": true
18	All	Ad session is correctly instantiated		videoElement	DOM Video Element - Present but not parsed to avoid parse error
19	All	Ad session is correctly instantiated	For compliance testing, we will need a web app in each access mode to confirm that this signal may be reflective of the publisher's choice.	context	"accessmode": "limited" "domain" or "full"
20	All	Ad session is correctly instantiated		customReferencedData (not required)	any string value
21	All	Ad session has error instantiating		errorType	Generic or Video when video ads

22	All	Ad session has error instantiating		message	string value describing the error
23	All	Ad session slow to instantiate	Ad is slow to load, eg from throttling	ad loaded	Impression events fire only once the ad has loaded. The "loaded" event should also fire only after the ad has loaded. <pre> { "timestamp": 1531376049725, "type": "impression", "data": { "creativeType": "display", "viewport": undefined, "adView": undefined, } } </pre>
24	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
25	All	Ad session start and loaded	Load the page with the ad	loaded	Ad is loaded and impression occurs <pre> {"timestamp":1571415828196,"type":"loaded","data":{"mediaType":"video","creativeType":"video","impressionType":"onePixel"}} </pre>
26	All	Impression has Occurred	Part of loaded event - check as part of loaded event	mediaType	video <pre> {"adSessionId":"fb54e94d-5f26-443e-ba9a-6b54f44af9bf","timestamp":1571954146094,"type":"loaded","data":{"mediaType":"video","creativeType":"video","impressionType":"onePixel"}} </pre>
27	All	Impression has Occurred	Part of loaded event - check as part of loaded event	creativeType	video 10/25/2019, 3:25:46 AM::{"adSessionId":"fb54e94d-5f26-443e-ba9a-6b54f44af9bf","tim

					estamp":1571954146094,"type":loaded","data":{"mediaType":"video","creativeType":"video","impressionType":"onePixel"}}
28	All	Impression has Occurred	Impression Type for what OMID impression event you are declaring. Part of loaded event - check as part of loaded event	impressionType	loaded", "beginToRender", "onePixel", "viewable", "audible", "other", "unspecified", "definedByJavaScript" e.g. "impressionType": "viewable", "timestamp":1571415828196,"type":"loaded","data":{"mediaType":"video","creativeType":"video", "impressionType":"onePixel"}}
29	Video	Impression has occurred	Sunsetted	videoEventAdaptorType	Empty / NULL - Does not apply for Web Video
30	Video	Impression has occurred	Sunsetted	videoEventAdaptorVersion (not required)	Empty / NULL - Does not apply for Web Video
31	All	Impression has occurred	Used to check that access modes are set correctly. If using creative access mode, friendlyToTop must be false.	friendlyToTop	True or false If testing full-creative access mode, this must be false.
32	All	Impression has occurred	Results will vary based on friendlyToTop and Access Mode. If certifying all access modes, this test must be done in full and creative access modes.	viewport	viewport size is reported in full access. It will be reported as undefined in creative access mode. Limited and Domain could be either reported or undefined depending on whether friendlyToTop is true or false.

33	All	Impression has occurred	Results will vary based on access mode and friendlyToTop setting of all iframes in a nested iframe setup. If certifying all access modes, this test must be done in full, creative and limited access modes.	adView	<p>This is geometry change data. E.g.</p> <pre> ""adView"":{""percentageInView"":100, ""reasons"":[], ""timestamp"":""1531376050520"" }, ""geometry"":{""width"":351, ""height"":351, ""x"":12, ""y"":80}, ""onScreenGeometry"":{""width"":351, ""height"":351, ""x"":12, ""y"":80} </pre> <p>It will be reported as undefined in creative access mode. Limited and Domain could be either reported or undefined depending on whether friendlyToTop is true or false.</p>
34	All	Ad session has finished	End of ad session by closing the ad or starting a new page in app that will dismiss the current ad	sessionFinish	Finish
35	All	Geometry Change data	All the geometry events are to be displayed for all ads Ads need to scroll ad container all the way out of view	percentageInView	value between 0-100
36	All	Geometry Change data	viewport on the web may not apply.	geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
37	All	Geometry Change data		onScreenGeometry	{ } x: 0, y: 0, width: 320, height: 50, obstructions:[
38	All	Geometry Change data	Obstruction is present in onScreen geometry	Obstruction data	Empty for Web Video
39	All	Geometry Change data	Reason for obstruction Tab out of view or minimize browser. Tab not in focus or minimize	reason	one or more of: notfound, hidden, backgrounded, viewport, clipped

40	All	Geometry Change data	the number of friendly obstructions declared by the integrator for this ad session.	declaredFriendlyObstructions	Empty / NULL - Does not apply for Web Video
41	All	Geometry Change data	the name of the native view class that is obstructing the ad	obstructionClass	Empty / NULL - Does not apply for Web Video
42	All	Geometry Change data	Reason for obstruction	detailedReason	Empty / NULL - Does not apply for Web Video
43	Video	Video player interaction and events	Events for video ads	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
44	Video	Video player interaction and events	Start playing the video	start	{ duration: <float>, videoPlayerVolume: <float>, deviceVolume: <float> } The videoPlayerVolume range is between 0 and 1. The deviceVolume range is between 0 and 1.
45	Video	Video player interaction and events	Play at least 1/4 of video length	firstquartile	firstquartile
46	Video	Video player interaction and events	Play at least half of video length	midpoint	midpoint

47	Video	Video player interaction and events	Play at least 3/4 of video length	thirdquartile	thirdquartile
48	Video	Video player interaction and events	Play full video	complete	complete
49	Video	Video player interaction and events	Pause the video	pause	pause
50	Video	Video player interaction and events	Resume after the pause	resume	resume
51	Video	Video player interaction and events	Start playing video	bufferstart	bufferstart
52	Video	Video player interaction and events		bufferfinish	bufferfinish
53	Video	Video player interaction and events	Use skip video is skip is available	skipped	Only for skippable videos
54	Video	Video player interaction and events	Change player volume or device volume	volumeChange	values are between 0 and 1- { videoPlayerVolume: <float>, deviceVolume: <float> }
55	Video	Video player interaction and events	Change player volume or device volume	mediaPlayerVolume	values are between 0 and 1- { mediaPlayerVolume: <float>, deviceVolume: null }
56	Video	Video player interaction and events	Hide Video by scrolling or expanding another page component so the video is hidden	playerStateChange	minimized, collapsed, normal, fullscreen, expanded
57	Video	Video player interaction and events	Change player volume	volumeChange	playerVolume should change, but deviceVolume should not
58	Video	Change device volume	volumeChange - Set to 1 for Web Video	deviceVolume will be set by omsdk to 'null'	This is auto set to 'null' for web video

59	Video	Video player interaction and events	Mute player volume	volumeChange	{ videoPlayerVolume: 0, deviceVolume: null }
60	Video	Video player interaction and events	Mute device volume - This will be set to 'null' for Web video	volumeChange	{ videoPlayerVolume: <float>, deviceVolume: null }
61	Video	Video player interaction and events	Minimize the video or reduce in size if app allows that action	playerStateChange	collapsed
62	Video	Video player interaction and events	Play video in player default size	playerStateChange	normal
63	Video	Video player interaction and events	Expand the player if app allows or the app expands the video when it plays the video	playerStateChange	expanded
64	Video	Video player interaction and events	Tap on video to go full screen	playerStateChange	fullscreen
65	Video	Video player interaction and events		geometry	value like this: { x: 0, y: 0, width: 320, } height: 50
66	Video	Video player interaction and events	Click on video to open advertiser landing page- execute click through	adUserInteraction	{ interactionType: <click> }
67	Video	Video player interaction and events	Tap on video to engage with another ad experience	adUserInteraction	{ interactionType: <invitaitonAccept> }
68	Video	Ad session start and impression for ads in video content	Play video content until pre roll or mid roll or post roll	Check all ad session and impression events have occurred	see above for ad session events
69	Video		When video ad appears additional video events need to be verified	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string>

					} position values are - preroll,midroll, postroll, standalone (when it is not in video content)
70	Video	Ad session start and impression for standalone ads- autoplay native or outstream ads	Load the page with the video ad	loaded	{ skippable: <boolean>, skipOffset: <float>, autoPlay: <boolean>, position: <string> } position values are - preroll,midroll, postroll, standalone (when it is not in video content)
71	Video	Video ad viewability geometry for videos inline of the view	Ad fully in view	percentageInView	this should be 100- also check other geometry values- they should reflect device size in view port and ad size in X,Y parameters
72	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially out of view < 50% in view	percentageInView	value should be < 50
73	Video	Video ad viewability geometry for videos inline of the view	Scroll ad partially back in view > 50% but < 100% in view	percentageInView	value should be >50 and < 100
74	Video	Video ad viewability geometry for videos inline of the view	Scroll ad fully out of view	percentageInView	0
75	Video	Video ad viewability geometry for videos inline of the view		reason	hidden and / or viewport
76	Video	Video ad viewability geometry for videos inline of the view	Switch browser Tab or minimize	percentageInView	between 0 and 100, video events available
77	Video	Video ad viewability geometry for videos inline of		obstruction data	Empty / NULL - Does not apply for Web Video

		the view			
78	Video	Video ad viewability geometry for videos inline of the view		reason	backgrounded
79	Video	Video ad viewability geometry for videos inline of the view	Hide with another view by opening or expanding another component on the page in the app. e.g open a link that opens another web view	reason	Empty / NULL - Does not apply for Web Video
80	Video	Video playback events	Refer above test case for Video player interaction and events and execute all scenarios	see Video player interaction and events scenarios	see Video player interaction and events scenarios.
81	Video	End session	Click on close to close the video, stop the video or move to another page creating a new app page session	Session Finish	Finish