



Viewability Certification

Promoting transparency in viewability measurement

November 2014 Report



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1. Executive Summary

The objective of this testing programme is to verify a viewability product's capability to count viewable impressions in accordance with the Viewability Product Principles (the Principles) agreed by JICWEBS (www.jicwebs.org).

Four products chose to be tested. Each was tested under several behaviour scenarios. Each scenario was run across five different combinations of browser and operating systems (OS) within a controlled environment.

The table on page 7 shows the results for each viewability product in each behaviour scenario and browser/OS combination.

Looking ahead, the Principles and testing will continue to be refined to reflect ongoing industry needs. Future developments may include expanding the testing programme to cover aspects such as mobile display advertising on mobile web browsers and products' ability to report video viewability.

2. Background

There's been much industry debate around how a viewable impression, or viewability, is defined. In addition, there has been confusion over how viewability products work, plus discrepancies in reporting. This has delayed the wide adoption of a new viewable impression metric.

In late 2012 ABC began drafting a set of viewability testing principles for review and approval by the UK industry via JICWEBS. Meanwhile, the IAB US and the MRC were conducting research into the capabilities of viewability technology, with a view to agreeing a standardised viewable impressions metric and subsequent trading currency. ABC set out to complement this body of work to deliver greater trust and transparency to viewability by:

- Ensuring that the UK market is performing its own technical reviews of the products in response to the demands of the UK industry.
- Doing ground work to enable ABC to establish how products can support the launch of any new trading metric.
- Creating a different testing environment to that of the MRC.

Following extensive consultation with expert practitioners and industry bodies, including the IAB UK, IPA and ISBA, ABC presented four Principles to JICWEBS for approval. The

Principles did not define a metric. Instead, they set out what a product must be able to measure (time and percentage in view) in order to support any subsequently agreed metric. Once JICWEBS approved these Principles (see Appendix B), ABC created the Viewability Certification Programme.

This report, the first of its kind in the UK, presents ABC's findings from the first round of the Viewability Certification Programme. Overall the testing showed that all four products, while technically different from each other, were capable of reporting viewability in basic behaviour scenarios (e.g. when scrolling up or down a web page or changing the size of the browser window). Where the behaviour scenarios become more complex (e.g. when the browser is physically removed from view or hidden) the results are more varied.

Importantly, these viewability products are playing significant roles during a period of change for our industry. Their ABC certification demonstrates support for greater transparency and trust in how this technology works, something the industry will benefit from when deciding how to trade online display advertising in the future.

3. ABC's Viewability Certification Programme

3.1 Objective

The objective of ABC's testing is to verify whether a product is capable of counting viewable impressions in accordance with the Principles.

For the purpose of this Certification Programme, "capable" is defined as:

Once configured, the product consistently measures and reports as expected under a variety of scenarios during the period of testing in the test environment.

Each participating viewability product is issued with a certificate detailing their results in a matrix format. Those results are summarised in this report.

3.2 Scope

The certification process involves ABC conducting seven behaviour scenario tests in a controlled environment across five commonly used combinations of browser and operating systems (OS) chosen after consultation with the industry.

The test environment has the following features:

- Tests were run on Windows 7 and MAC OS X at various screen resolutions.

- The following browsers were used: Firefox, Chrome, Safari, Internet Explorer 8 and Internet Explorer 11¹.
- A viewable impression was defined as at least 50% of the asset's area visible for at least one continuous second.
- Tests were consistent for all products.

3.3 Outside of Scope

ABC's testing is designed solely to confirm that the viewability product is capable, when configured correctly, of reporting viewability as expected in the behaviour scenarios tested. These tests do not guarantee that the product will function in all browser or device combinations in live environments.

It should be noted that:

- Testing was at a point in time and on a limited scale in our controlled environment.
- The test programme did not seek to verify the scalability of the product.
- The context of testing did not fully reflect real life conditions such as multiple campaigns running on multiple sites.
- The test programme did not attempt to quantify the implementation time necessary for live use.

4. General Findings

All vendors were able to correctly report when the browser scrolled away from the ad, and when the browser was resized to dimensions that were smaller than the ad.

Most vendors were able to report viewability when the ad was served in multiple cross-domain IFRAMEs, as is typical in the modern-day ad delivery chain.

Reporting IFRAME viewability was more challenging in Safari and Chrome due to their specific architecture; certain commands and methods to determine viewability which work in Internet Explorer and Firefox cannot be replicated in Chrome or, particularly, Safari.

Tests which required the product to evaluate the browser's status in relation to other applications, or the user's desktop, were the most demanding and had mixed results. Examples are scenarios 2, 5 and 7. For privacy and security reasons, the browsers being

¹ These browsers were chosen based on their distinctive characteristics.

tested often prevent third party applications from looking outside their parent page or the browser. It's more challenging for a product to evaluate viewability in these scenarios.

5. Future Testing

With the industry's agreement, future developments may include expanding the testing programme to cover aspects such as mobile display advertising on mobile web browsers and products' ability to report video viewability.

6. Table of Certified Results

The results presented on page 7 reflect the testing carried out in August to November 2014.

		Did the product perform as expected in the following scenarios?						
Browser and OS	Product	1. Ad is in view but served within multiple cross-domain IFRAMES	2. Browser window is moved off viewport	3. Page is scrolled away from ad	4. Browser is resized so that less than 50% of ad is visible	5. Page carrying ad is opened in a hidden page	6. Page carrying ad is opened in a hidden tab	7. Page carrying ad loses focus
Firefox Windows	comScore	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DoubleVerify	Yes	No	Yes	Yes	No	Yes	Yes
	Integral	Yes	No	Yes	Yes	No	Yes	No
	Moat	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chrome Windows	comScore	Yes	Yes	Yes	Not tested ¹	Yes	Not tested ¹	Yes
	DoubleVerify	See note ²	No	Yes		No		Yes
	Integral	Yes	No	Yes		No		No
	Moat	Yes	Yes	Yes		Yes		Yes
IE8 Windows	comScore	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DoubleVerify	Yes	No	Yes	Yes	No	No	Yes
	Integral	Yes	No	Yes	Yes	No	Yes	No
	Moat	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IE11 Windows	comScore	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	DoubleVerify	Yes	No	Yes	Yes	No	No	Yes
	Integral	Yes	No	Yes	Yes	No	Yes	No
	Moat	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Safari MacOS	comScore	See note ³	Not tested ¹	Yes	Yes	Not tested ¹	Not tested ¹	Not tested ¹
	DoubleVerify	See note ²		Yes	Yes			
	Integral	Yes		Yes	Yes			
	Moat	Yes		Yes	Yes			

Notes

1. "Not tested" shows where a particular test, in a particular browser, was not possible due to technical limitations in the testing and should not be considered a technical limitation of the product being tested.
2. DoubleVerify advises that for impressions served via cross-domain IFRAMES in Chrome and Safari, DoubleVerify uses statistical placement-level modelling to estimate viewability. For this test, for these browsers, DoubleVerify provided reporting at the aggregate level only, and the results were within tolerance of the expected level.
3. comScore advises that for impressions served via cross-domain IFRAMES in Safari, comScore uses placement-level projection techniques to estimate viewability for this browser in the Audience module of validated Campaign Essentials™.

7. Measuring in relation to Asset Render

In relation to Testing Principle No. 4, we asked each product to state at what point the measurement of viewability occurs in relation to asset render – in other words, whether measurement starts before, during or after delivery of the content creative.

The products' responses are below:

Product	Response
comScore	In order to determine whether a vCE-tagged ad is viewable, the measurement code must first find the ad, assuring it has been rendered. vCE measurement accounts for discovery of the ad at the time the measurement code is initially loaded (the ad is immediately identified, i.e., "Found") or shortly thereafter ("Late," with repeated attempts ranging from 1 to 9 seconds later, allowing the page to be scanned up and down up to ten times in total). If either of these two conditions is met, the ad is considered measurable, forming the base impressions for subsequent viewability measures reflecting the percentage of measurable impressions which meet the established viewability threshold.
DoubleVerify	The DV Digital IQ Ad Viewability solution runs a javascript tag to measure the viewable state of the creative asset. The DV tag is either 1) appended to the agency tag and served with the creative or 2) served on the page by the publisher for each creative. In both cases, DV has the ability to measure the creative or the creative container.
Integral	Integral Ad Science uses both a "piggy back" monitoring pixel and a wrapped tag solution to deliver our scripts to the page and calculate viewability. IAS measures the actual ad rather than the placement where implementation permits. IAS measures display campaigns at 100ms and video at 200ms pings from the point at which measurement begins and delivers a suite of custom reporting metrics.
Moat	The Moat tag is generally implemented on a creative by appending it after the creative code. Moat tag technology measures the actual ad creative for all its creative-focused metrics. Tracking of the ad creative for viewability and all other creative-focused metrics only begins after the creative has fully loaded and rendered on the page.

Our programme did not specifically confirm these statements other than ensuring results obtained were (or were not) as expected in each scenario.

Appendix A:

Jargon buster

- **Viewable impression:** An asset delivered onto a web page in a place that provides the user with an opportunity to see it.
- **Asset:** The item (e.g. an ad banner) which is having its viewability measured.
- **Viewability:** Whether something can be viewed (is visible) or not.
- **Application:** A computer programme designed to carry out a specific function.
- **Browser:** An application designed to retrieve, present and traverse through information on the internet.
- **Browser window:** The movable area containing the browser. The browser window can contain more than one Tab.
- **Tab:** Browsers can open multiple pages at once by putting each page in its own sheet (similar to the way spreadsheets work).
- **Viewport:** The entire physical area of a screen (typically rectangular) in which images can be rendered.
- **Rendering:** The process of generating an asset in a browser.
- **HTML:** HyperText Markup Language (HTML) is the standard language used to create web pages.
- **IFRAME:** Short for “inline frame”, is an area within a web page that contains content served from a different source (e.g. an advertisement) to the rest of the page.
 - **Cross domain IFRAME:** An IFRAME containing a document served from a different domain to the parent page.
 - **Nested IFRAMEs:** At least two IFRAMEs served one within the other one. In theory, there can be an infinite number of nested IFRAMEs.
- **In focus:** The application, window or tab that is active (uppermost) and visible.

Appendix B:

JICWEBS Viewability Product Principles

Version 1, January 2014

This document sets out the principles that have been approved by JICWEBS. The principles have been developed following research and consultation with media owners, technology suppliers and other industry bodies.

Note: These principles are not specific metrics but designed to be compatible with viewability metrics that may be agreed by the industry in due course. Principles are set out below in **bold** with supplementary information in *italics*.

1. **Percentage viewable when served:**

Can the product measure what % (in whole percentages) of the content's area was in view at the time of measurement? Could the content ever be seen?

2. **Average percentage viewable over a defined measurement period (e.g. hour, day, week):**

Can the product measure what % of the content space was in view over how long? This average should be measured in units of whole seconds, during which the content must be continuously viewable. A minimum "opportunity to see" should include thresholds on both continuous time and % of content area. Optionally, the product may also report on cumulative viewability.

3. **Standard measurement language:**

Can the product report on just variable 1 or both variables 1 and 2 above?

4. **Measurement and asset render requirements:**

Where this can be determined the testing programme must make clear at what point the measurement of viewability occurs in relation to asset render, i.e. whether pre, during or post delivery of the content creative. If this cannot be determined that fact will be clearly stated. It is recognised that Flash content may take a comparatively long time to render in a browser.

The ultimate objective of ABC's test programme is to verify whether a product is capable of counting "viewable impressions" in relation to the above principles. For this purpose:

- Capable is defined as once configured; the product consistently measures and reports as declared under a variety of scenarios during the period of testing in the test environment.
- Render is defined as the point at which the creative message is available to view, following the principle of 'opportunity to see'.

Appendix C:

Certified Viewability Products

1. comScore vCE Validation by comScore

comScore
6-7 St. Cross Street
2nd Floor
London
EC1N 8UA
(0044) 207 099 1760

2. DV Digital Impression Quality – Ad Viewability by DoubleVerify Ltd

DoubleVerify
575 8th Avenue
8th Floor
New York 10018
(001) 212 631 2111

3. Integral Ad Science Viewability by Integral Ad Science

Integral Ad Science
4th Floor
113 Regent Street
London
W1B 4HL
(0044) 203 6965586

4. Moat Analytics by Moat Inc.

Moat Inc.
162 5th Avenue
11th Floor
New York 10010
(001) 646 350 0099

Appendix D:

About ABC

ABC inspires confidence in the market across the media world by delivering a valued 'stamp of trust'.

ABC underpins the way billions of pounds worth of advertising budgets are traded across the converging media landscape in the UK and beyond. It has two roles:

1. To bring the industry together to agree standards that define media measurement and determine best practice.
2. To offer independent audit and compliance services, delivering certification which verifies that data and processes meet the industry-agreed Reporting Standards.

ABC is governed by the industry, for the industry. ABC's board consists of advertisers, media agencies, media owners and trade bodies. They represent the differing interests of the media industry and meet regularly to agree new standards and make strategic decisions as to how ABC is run. With Board consensus, ABC has the ability to provide certification for any platform. As advertising platforms develop, ABC continually innovates and evolves to ensure its portfolio of products and services delivers to the media industry's needs.

ABC UK was established in 1931 and is a founder member of the International Federation of ABC (IFABC), of which ABC UK CEO, Jerry Wright, is Secretary. Richard Foan, Group Executive Director of Communication & Innovation, ABC UK, also chairs the IFABC Web Standards Group, which works to deliver global standards and establish digital good practice across the world.

For further information please visit www.abc.org.uk/viewability

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