Scenes and Fragments – Use Cases

This document is divided into two parts

PART I (page 1-15): Web site usability
Attention tool supports analysis of browsing sessions with Internet Explorer 9. After a recording you can analyse the gaze data on the different webpages. There are two ways to split the recording into scenes – manual and automatic.

Automatic For fast paced analysis use the automatic scene generation that divides the recording into visits on the different URLs that were visited during the session. The automatic scene generation is useful for fast aggregation across respondents.

Manual When the website contains a lot of dynamic contents (flash, videos, dynamic HTML) it is often necessary to carefully analyse each recording session in order split the recording into scenes that are common across the set of tested respondents. In this case you will define the fragments manually.

PART II (page 16-18): Flash animations, video and other
You can test flash animations on a standalone application through the screen recording stimulus type. Furthermore with this guide you can see how you can test videos on websites and still have the benefit of dynamic visualisation through gaze replay on individual respondents, beeswarm and dynamic heatmap.

Definitions
Scene A part of a recording that is (or can be) common to all respondents. The concept makes it possible to analyse aggregations over respondents with metrics like AOI and heatmaps.
Web Scene Scenes defined on a web site, in most cases each scene represents a visit to particular URL, for example the front page and its subdivisions into underpages. This makes it possible to aggregate over respondents on a URL.
Fragment A fragment is the particular interval of time the respondent was gazing at the defined scene.
PART I: Web site analysis

1  Before You Start
2  Set up a Recording
4  Test Respondents
5  Scene Editor - Overview
6  Make Scene for URL
11 Calculate Results for Web Scenes
12 Results for Web Scenes
15 Additional Info for Scene Editor
Overview of the web recording workflow

**Web Scene** A part of the recording that is (or can be) common to all respondents. Typically it is defined by a particular URL, for example the front page of a website.

**Fragment** A fragment is the particular interval of time the respondent was gazing at the defined Web Scene. Web Scenes with their Fragments make it possible to aggregate over respondents.

<table>
<thead>
<tr>
<th>Setup Study</th>
<th>Test Respondents</th>
<th>Define Webscenes</th>
<th>Create Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set study parameters. Set web URL. No light calibration. No interslides. No outlier detection</td>
<td>Test respondent. Check the physical environment. Only accept gaze calibrations that are Excellent or Good.</td>
<td>Define the web scenes, each corresponding to a target URL that you wish to analyse into detail, aggregate data over respondents etc.</td>
<td>Make analysis based on the full base of respondents or a sub-segment.</td>
</tr>
</tbody>
</table>

Page 2

Page 4

Page 5 - 10

Page 11 - 14

BEFORE YOU START: READ PAGE 1
Please be aware about the following requirements before you start testing web pages.

- **Browser Internet Explorer 9.** The solution is specifically optimized and integrated with Internet Explorer 9.  
  **Note on browser:** Web study will always use Internet Explorer, no matter what your preferred browser is.  
  Attention Tool controls and captures information from the browser using interfaces that are only available in IE.

- **Zoom Factor 100%:** Make sure the zoom factor is set to 100%, check this every time you set up a recording.

- **Dual Screen:** Setup and run study in dual screen setup mode.

- **No Browser Add-ons:** Remove/disable unnecessary add-ons (for example 3rd party tool bars).

- **Resolution:** For optimal performance it is recommended to record with a screen resolution of 1280 x 1024 px.

- **Turn off Live Gaze:** during recording, in order to save system resources you may turn off the live gaze viewer (Global Settings)

- **Browse in Full Screen:** Web stimuli will automatically open in full screen mode, do not change the size of the browser.

---

Check the zoom under **Tools-Zoom**

Check Internet Explorer version under **Tools-About Internet Explorer**
A few remarks on the study parameters:
- Disable the outlier system – set Threshold to None
- Note, if you intend to have more than one recording stimulus in the study, consider how you want them presented. A fixed order may be the best option. Typically for web recordings, there is only one web-stimulus and stimulus ordering is not necessary to consider.
- The exposure time is not fixed, the web recording stops when the browser is closed down (upper right corner “x”)
Set up a Web Recording

4. Set the start page for the web recording.

5. Add a web site:
   - Website Address: www.imotionsglobal.com
   - Display Name: iMotions website
   - Image Icon: [Image Icon]

Set the start page for the web recording.
Test Respondents & Scenes

The respondents can freely browse around once the browser is automatically opened by Attention Tool after pressing the “Run Study” button.

If you wish to record the respondent’s face and sound for example in a Think Aloud test, remember to enable camera and sound recording in Global Settings.

After the test of the first respondent finishes you can set up the scenes. Open the Scene Editor using the button shown to the right. Read the instructions on the following pages.

In the recording editor you can make a number of scenes – each scene corresponds to visiting one URL.

For example the opening page of the test is one scene. Any visit to a sub-page from the opening page is a scene as well.

You only have to define the scenes for the first respondent. Any respondent tested after that who visits URLs coinciding with already defined scenes will automatically be included in the analysis. If you need to add more scenes you can do so at any point.

The following pages show you how to use the Scene Editor to create scenes. Note that this information is relevant for web recordings only. Other types of recording are covered in the second part of this document.
Scene Editor - Overview

Overview of all events during the browsing session. Particularly interesting is the PageReady event, that tells you the browser is finished loading a particular URL, for which you can make a Web Scene. Click on an event to jump to that time on the recording.

A web scene common to all respondents. The illustrated web scene represents the gaze recording of a respondent on the website's front page.

Use these buttons to create a screen copy of the particular web scene. Click on an event to jump to that time on the recording. When a particular web scene, representing an URL is active and you click Browser Goto a browser with that URL will open.

The recording of the screen during the browsing session. Mouse click events are indicated as green circles. Use the timeline event indicator to jump directly to interesting parts of the recording.

A fragment. The time interval this particular respondent used to visit this particular web scene (URL).

See page 15 for more info.
Use the event navigator to find and click on the event **PageReady**.
See the recording viewer to verify that the page is correct.
The PageReady event is a recorded event that marks a page has been fully loaded and rendered on the screen.
Make Scene for URL – STEP 2

The purpose of this step is to make a high resolution screen dump of the fully rendered page.

Click on Browser Goto, to open the browser on that URL, in order to create a high definition screen dump for that URL. The browser will open on the secondary screen.
When browser has correctly opened the URL and page is fully rendered, click on Create WebScene. After that the thumbnail image appears for review. Click save to create the scene.

You may change the name if necessary.
You now see an entry on the scene list representing a web scene and a fragment. The fragment is automatically set to start at **PAGEREADY** and end at **NAVSTART** for the current URL.

If you want to have a custom time period for the fragment, delete the fragment and make a new fragment using the *Begin-End buttons*.

You can now continue to make scenes for the remaining URLs that the respondent has visited.

**Go back to Step 1.**
For the second respondent, you will see that there is already a Web Scene defined for the URL of interest. The fragment is also automatically defined according to the registered time spent on the particular URL - The fragment is the time segment between the **PageReady** and **NavStart** events.

If you want **customize** the fragment, delete it. Deletion is done by right clicking on the fragment and chose “delete”.

New fragments can be defined by the **Begin and End buttons**.
Calculate Results for Scenes

A Web Scene is represented by a thumbnail next to the Web-Stimulus thumbnail.

To generate the results for web recording and aggregated results for scenes, add a new analysis for the study.

Click + in the lower left part of Attention Tool

Add a new analysis
After adding an analysis for the Web usability study, the Attention Tool screen is changed to this view.

The central area contains the visualization of the metrics. If you click on “Fullscreen” the visualization uses all the screen.

Each icon (below) represents a metric (or visualization) type.

**Recording Stimulus**: Statistics and Gaze Replay (per respondent) are available.

**Scene**: Statistics, Heatmap, AOI, Gaze Replay, Reading and Bee Swarm.
For the Web Scene we created on the previous slides, we can now obtain standard eye tracking metrics, like heatmaps and Areas Of Interest (AOI).

Some web pages are long and the user might need to scroll. The default view is a zoomed-out view, where the whole page is visible. Therefore you might need to zoom in on a particular area to get better insight into the eye tracking metrics for that area.

Export the current result type (Heatmap AOI etc) to a file for reporting.

Zoom thumbnail
Move square to pan the zoomed the image

Generated great insight and valuable inputs. In order to improve our decision processes, we are testing this use case for product design – from start of the packaging design to the end of sales

Results for Web Scenes - Zoom Control
A full screen view of the result screen for Areas of Interest.

An AOI with statistics. 31 out of 37 respondents visited this AOI. It took 5.0 seconds to arrive into this area from stimulus beginning (i.e. from PageReady event). 0.4 second was spent inside this AOI. No respondent clicked with mouse inside AOI.

Some web pages are long and the user might need to scroll. Therefore you might need to zoom in on a particular area to get better insight into the eye tracking metrics for that area.

Export the current result type (Heatmap AOI etc) to a file for reporting.
The typical events observed during a web session:

**PageReady** – when the downloaded content has been displayed on the screen.

**Click** – Indicates a mouse click with information about the x and y coordinates.

**NavStart** – when user click on a link, the browser connects to website and starts downloading the page.

**NavEnd** – when the page has been downloaded.

Usually the most interesting events are **PageReady** and **Click**. Click tells something about user choices and the click on links. PageReady tells when the browser is finished loading a page – for example the page belonging to the link the user clicked on.

Activating the **Detailed** view gives more information about the events. Especially interesting is the information on where the NavStart/End point to (URL) and PageReady (Page name).

When defining scenes and fragments, NavStart and PageReady events are of particular interest. In order to remove uninteresting events from the view, open the filter dialogue to enable/disable the events necessary to do the scene editing.
PART II: Flash Animations and Videos

You can test flash animations on a standalone application through the **screen recording stimulus type**. Furthermore with this guide you can see how you can test videos on websites and still have the benefit of dynamic visualisation through gaze replay on individual respondents, beeswarm and dynamic heatmap. If you wish to have these outputs you must set up a screen recording stimulus and then open the browser (either by command or manually for each session).

<table>
<thead>
<tr>
<th>16</th>
<th>Study Setup</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Open the Scene Editor</td>
</tr>
<tr>
<td>18</td>
<td>Define a New Scene</td>
</tr>
<tr>
<td>19</td>
<td>Define the Type of Fragment</td>
</tr>
<tr>
<td>20</td>
<td>Add the Fragment to the Scene</td>
</tr>
</tbody>
</table>
Study Setup

This guide is relevant for the **Screen Recording** type of stimulus.

Screen Recording allows you to test any type of application. You can set up the study to automatically start up an application for example a PDF viewer or Flash player. Alternatively you can manually start up an application for each session.

Here you may set up an application to be started up automatically. Or you can choose to start an application manually for each session.
Access the scene editor by clicking on a respondent and open the editor by clicking the video-icon.
Define a New Scene

Define a scene by clicking “Create Scene”
Define the Type of Fragment

**Variable segments, allocated manually**
This scene behaves the same way as the scenes have behaved in previous releases and is the default. If this is what you want, you need do nothing else other than click ok. However, you can/should use the slider to position the video to where you want the scene snapshot to be taken.

**Fixed sized segment allocated automatically**
This creates a scene with a fixed length which occurs at a fixed point in the timeline. Use the Start/End boxes to select the segment you want. This sort of scene behaves a lot like the scenes on Videos and images – where every respondent who has been tested will have a fragment allocated at the entered start/end time, unless they had an exposure that finished before the start time. If they have an exposure that finished before the end time then the allocated fragment will be from the start value -> end of exposure.

**Fixed sized segment allocated manually**
This creates a scene with a fixed duration, but the actual position on the timeline where the fragment is allocated must be inserted manually in the recording editor. For the current respondent, it is assumed that the fragment will correspond exactly to the start/end times entered in the dialog and the fragment is added automatically.

---

**Video result output**
For the fixed duration scenes, it is also possible to set the type of result you want – either an image or video. If you select video, then a video file will be generated using the entered start/end times, and the resulting scene will only have dynamic results available i.e. gaze replay and beeswarm.
For manually allocated fixed-length scenes, the operator must use the recording editor to enter the fragment. However, in contrast to a regular scene, when you click the “Begin” button, it adds a whole fragment of the appropriate length.
**Fixed-length scenes** only allow the user to add one fragment to the scene, and the fragment is automatically set to be the appropriate length, based on the start/end times entered when the scene was created. Note that the fragment is inserted at the current playback position.

**Deleting Fragments**
Fixed-length scenes allow the fragments to be deleted, and subsequently added at a different place on the timeline. This is even true for scenes where the fragment is initially added automatically. This allows the operator to fine tune things if the timing of the exposures are not completely consistent for all respondents.
Can we help you?

If you have any questions or doubts do not hesitate to contact us

support@imotionsglobal.com

Happy Testing!

The iMotions Team