



## Measuring Rich Media applications

a white paper from

**Speed-Trap**

With the growth of rich media applications on the web, whether it be a simple movie, Flash banner campaign or an entire Flash-driven web site, it is becoming increasingly more important to be able to measure how visitors interact with not just your web page, but the applications within it.

This paper discusses how Speed-Trap's technology can be used to report on how your visitors are using your multimedia applications.

## Introduction

“ Speed-Trap pioneered the route to tag-free web analytics and neatly side-stepped the pain of tagging which we highlighted as being the biggest cost and source of inaccuracy in the industry. By extending this capability into the rich media space with Flash, Flex and media players like QuickTime, Realplayer and Windows Media Player, Speed-Trap technology will really help us analyse customer interactions with rich media to help our customers develop better content, sites and marketing campaigns. ”

**Matthew Tod**  
*Chief Executive*  
Logan Tod & Co

Today's web sites are no longer just plain, flat HTML. Today's web sites contain many different active technologies to keep the visitor engaged ranging from a simple Flash banner campaign to a streaming movie or a podcast.

Even more significantly, with the proliferation of the Adobe Flash plug-in (installed in 98% of browsers), some web sites are entirely developed using Flash giving the visitor a rich, desktop-like experience, all within a single web 'page'.

Whilst embedding multimedia applications within a web page is highly attractive for the visitor, analysing your visitors' behaviour within this rich media environment is a headache for traditional solutions. No longer is a visitor's interaction with your site a sequence of viewed 'web pages', instead they are interacting with your rich web application which will often be on a single page, so traditional solutions lose all sight of what is happening, the customer experience, behaviour and actions - the customer's journey .

A simple example is a streaming movie. A visitor may visit a page which contains a 10 minute promotional movie about your organisation. Although you know the visitor has landed on the page, how much of the movie did they watch? Did they watch the first 2 minutes then fast forward to the final minute? Did they rewind the movie to watch the same snippet over and over again? This may be particularly useful for compliance. Did people who click on a movie watch it to the end?

Another example may be a Flash application for configuring the perfect car on a manufacturer's site . Did the customer select alloy wheels then de-select when they saw the cost? Did they ever look at the finance figures? Did they enter their contact details but not click the submission form? This activity may occur within the visitor's browser without them ever submitting any information across the web. This is important information about your visitor's behaviour.

This document describes how Speed-Trap's unique and patented customer insight solutions can be used to capture and analyse visitor behaviour with rich media applications such as Flash, Flex, Microsoft Windows Media Player, Quick Time or Real Player.

## Measuring "movie engagement"



Flash, video and other rich media sources are vital to a company like ghd to convey the dynamic brand values to the site's audience.

We are very excited by Speed-Trap's announcement of the enhancement to their systems to support rich media. We have been using Speed-Trap for the last year or so to really understand our online customer base and their interactions with the ghd site. The ability to extend that analysis to the flash and video components of the site in the same tag-free way will be invaluable.



**Spencer Hudson**  
*Internet Technical  
 Solutions Manager*  
 ghd

When a web site visitor watches a movie via either a Flash movie player, Windows Media Player, Quicktime or Real Player, they are usually interacting with the actual movie player rather than the web page that contains the player. This is usually via a panel allowing the visitor to play, pause, stop or seek within the movie. All the time they are interacting with the player, they are on the same web page, so a traditional "web analytics" solution will see none of this interaction

Using Speed-Trap's Dynamic Collection™ technology, 'events' from the players are captured along with the current playhead position (i.e. where the visitor is within the movie). For example, a visitor may watch a 10 minute movie for the first 2 minutes then fast forward to the last minute.

Speed-Trap collects each of the above events as follows:

Action	Playhead Time
Play	0 minutes, 0 seconds
Seek	2 minutes, 0 seconds
Play	9 minutes, 0 seconds
Stop	10 minutes, 0 seconds

It is clear from this information that this particular visitor lost interest after 2 minutes and then skipped forward to watch the final minute.

Speed-Trap also captures how long the movie is, so even if a visitor watches the first 2 minutes of a 10 minute movie but did not load the entire movie, Speed-Trap will know the visitor had only watched 20%.

The system also captures player state changes (play, pause, load, unload) etc. and source data (helping with content identification).

With such granular detail, Speed-Trap allows you to understand a lot more about your media and how your audience interacts with it. It may highlight that new visitors to your site watch less of a particular movie compared to visitors who have purchased a product. It may show nobody ever watches past the first minute of a particular movie or if they skip advertising or promotional segments. This could be vital information when production costs of movies are high or when selling movie real estate to possible advertisers.

*Online video ads spending is expected to grow 72 percent in the U.S. in the next five years, to \$7.1 billion - Forrester Research*

## Flash/Flex Application interaction

Some web sites are developed entirely on the Flash platform, delivering highly interactive, rich applications delivered within a web browser. Measuring how the user interacts with the Flash or Flex application is key to understanding visitor behaviour and the web application's performance.

As described above, Speed-Trap captures 'events' within the page. With Flash applications Speed-Trap can capture additional event information useful for reporting. Some example events are as follows:

Event	Description
Click	Whenever a click on a Flash object occurs
Select	Whenever a value is selected on a control such as a RadioButton, CheckBox, DataGrid, DateField or Slider control
Text Change	Whenever text is entered in a text field
Tab Navigation	Whenever a user selects a new Tab within the application

All the above events also include names, IDs, position and values of the elements within the Flash application.

Using this information, standard analytical information can be reported on just as if it were a standard web page, for example most popular links, success of a form etc, even though all activity happened within the Flash application.

## Reach

If you have a Flash or Flex application that could be used across other web sites (e.g. as part of a viral campaign), Speed-Trap will capture the domain where it is hosted along with its name which is essential when measuring the reach of a particular Flash application (although to obtain full event monitoring the page in which the object is embedded will also need to be instrumented with Speed-Trap's HTML insert).

An example may be a Flash game application. It may be downloaded and used across many other web sites. With Speed-Trap, you can see how many times people access the game, when they did it and what domain it was accessed from.

## Speed-Trap Dynamic Collection

Using Speed-Trap's unique Dynamic Collection™ technology, each 'event' that is triggered within the Flash application is captured. As with standard HTML pages, just 5 lines of ActionScript is placed into your Flash application. These are the same regardless of the application (car configurator, mortgage calculator, ad banner etc), it never changes. This means there is no need to know in advance what you want to capture and consequently have to 'tag-up':

```

<HTML>
  <BODY>

  var ldr:Loader=new Loader();
  var url:String="http://[site]/SpeedTrapCSA.swf";
  var urlReq:URLRequest=new URLRequest(url);
  ldr.load(urlReq);
  addChild(ldr);

  Flash File

  <SCRIPT> ... SRC="SpeedTrapInsert.js"/>
  <BODY>
</HTML> ...

```

## Conclusion

With the web now becoming the natural place for the delivery of rich media and applications, it is becoming ever more important to be able to measure how they perform. Speed-Trap's technology can provide out-of-the-box solutions to capture and report on your rich media applications, ensuring a full understanding of the effectiveness of your web applications, as an integrated part of our User Interface Capture solution.

## Speed-Trap: Some background

Speed-Trap is an award winning software developer that provides e-Business Intelligence solutions for blue-chip clients including Tourism, Airlines, Retailers, Financial Services Companies and e-Government Departments.

Speed-Trap invented its Dynamic Collection™ technology to provide solid and proven foundation from which almost any data can be obtained from a user's browser, as they interact with a web site – from individual mouse moves to exact copies of dynamic HTML pages.

Because the data is collected directly from the users' browsers, the data is intrinsically accurate and complete. The system's simple deployment (via a single HTML common tag that gets implemented in every web page or frame), lack of reliance on third-party cookies, Java or Plug-ins and support for secure pages means that virtually every user action in every page from every visitor is there for collection.



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