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Manage User Guide: Tag Management Essentials

Tag Management Essentials

A web page tag is a piece of JavaScript code added to your web pages that collects data about your site and its visitors. These tags drive all the third-party digital marketing services – from web analytics to advertising and social media sharing – that web enterprises have come to rely on. Normally these tags add hundreds of lines of JavaScript code to a modern web page, slowing page load times. The proliferation of all these tags also challenges IT organizations with how to manage them. Most organizations are reliant upon IT or external agencies for tagging, which makes deploying and managing tags a slow process. This stymies the ability of web analytics and marketing departments to keep sites competitive.

An emerging category of software – Tag Management Systems (TMS) – solves these critical digital marketing challenges. Major players including IBM and Adobe moved into the tag management space in late 2011. A flourishing of coverage at the start of 2012 by research firms including Forrester, Gartner, Web Analytics Demystified and eConsultancy has validated the legitimacy and growing importance of Tag Management Systems to web analytics, online advertising and IT professionals.

Ensighten is the innovator in enterprise-grade tag management and website compliance, supporting major global brands and providing unparalleled speed and reliability.

Ensighten's suite of products helps digital marketers:

- Accelerate page load times by off-loading excessive code
- Quickly deploy, test, and manage tags
- Ensure accuracy and legal compliance of tag data collection

If you use Omniture SiteCatalyst, Google Analytics, OpinionLab, Facebook Like, Google +1, Criteo, DART, PriceGrabber – or any other third-party digital marketing

service – then you have tags on your website. Tags are snippets of JavaScript-based code that are added to the HTML code of your web pages. A tag is also sometimes referred to as a pixel, web beacon, tracking bug, ad tag or clear GIF. Tags use JavaScript to send data about a web page and page visitors to third-party vendors who provide digital marketers with valuable – if not essential – marketing data and services, including web analytics, pay-per-click (PPC), social media interaction, affiliate tracking, content optimization, consumer surveys, and more.

Today's web-based businesses are powered by these third-party digital marketing services. All these services depend upon their JavaScript tags being implemented on your web pages, with an average online business employing dozens of these services across dozens of domains.

Tags collect data from websites. When a browser opens a web page, it reads and fires the tags on that page. These tags communicate with external servers, collecting and transmitting data to be analyzed later (like where the visitor came from, time spent on the page, links clicked). Tags also deliver content to web pages (such as ads) or to browsers (such as cookies), and provide services to web pages (like a user being able to share a page on Facebook or initiate a live chat with customer service). While many tags were historically a simple transparent pixel or image loaded onto a web page used to track conversion, most tags today are more complex, consisting of JavaScript code placed within the HTML code of web pages.

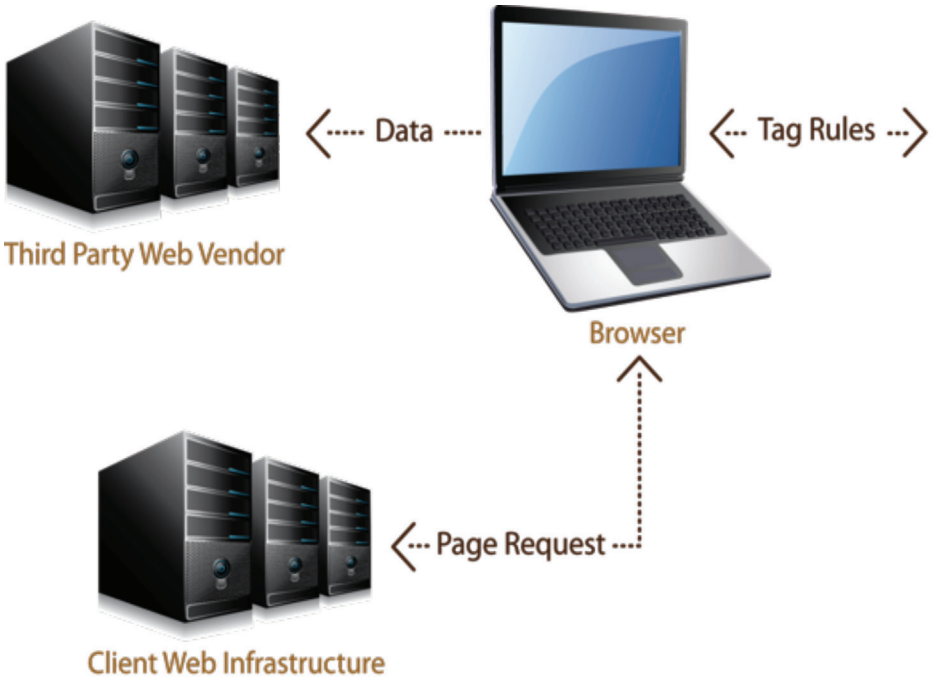
A typical website will have anywhere from 50 to 100 simple and complex tags. Home pages and shopping cart pages frequently contain as many as 20 tags, which normally can add up to thousands of lines of Javascript code.

By contrast, you can leverage Ensighten Manage 2.0 simply by deploying a single line of HTML code on the pages of your web site. We recommend placing the code at the very beginning of the HEAD section of each page:

```
<script type= "text/javascript" src="//nexus.ensighten.
com/clientID/Bootstrap.js"></script>
```

The easiest and the most efficient way of deploying the code is by inserting it into a template or master pages that are used for generating each page on a web site. This ensures that all pages of the web site contain the code.

The HTML code is static, meaning it does not require any customization or any changes after deployment. It does not ever change and requires no variable declarations for it to function, so it will never require the modification of your site for it to function. The tag is implemented only once and does not involve any maintenance by web server administrators or developers.



WEB BEACON

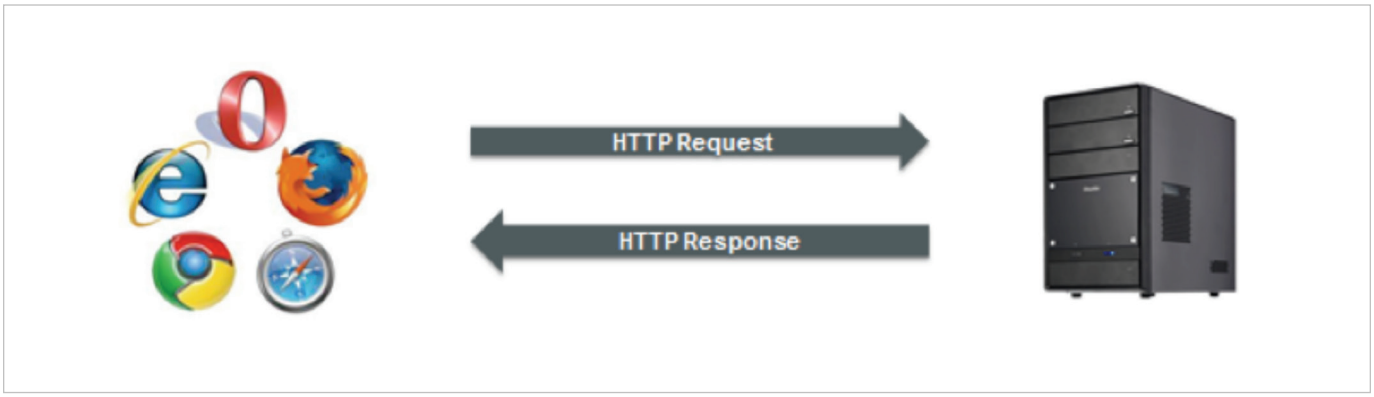
A *web beacon* is a request for information, such as an image, an external Javascript library file, or an iFrame. A web beacons can be a pixel, an image pixel, a data pixel, or a tracking pixel. Web beacons are sometimes referred to as image beacons, web bugs, image requests, data requests, and data calls. For example, consider this website (http://jbt81.com/ensighten/videos/webbeacon.html):

If you open that page in your browser and view the source, you will see a simple img tag:

```
<html>
  <head>
  </head>
  <body>
    <img src="http://2.bp.blogspot.com/-    OP68NnlxdKY/
UJpn2bjajKI/AAAAAAAASMI/uQ3JTHE0qpQ/s400/cassini_saturn_
tinymimas.jpg" />
  </body>
</html>
```

The browser requests this URL, and HTML is returned. The browser's rendering engine parses the HTML and builds what's called the DOM (or the document object model) for this page. Inside the DOM there is an image. The browser asks its cache if it already has that image. If so, it retrieves the image from its local cache. Otherwise, it submits a request to the browser's fetching engine, which will then generate an HTTP request to the web server that has the image. That web server will generate an HTTP response that includes the resource (the image in this case). Once the image is obtained from cache or the fetching engine, the browser's rendering engine will then display it on the page. This same mechanism is how data is collected by web analytic, online advertising, and optimization tools:

To change the request to a web beacon, add a query string to the source location of



the image. For example, the string `?name=value&key=value&page=home%20page&browser=Firefox` was added to the HTML for the web page:

```
<html>
  <head>
  </head>
  <body>
    <img src="http://2.bp.blogspot.com/-    OP68NnlxdKY/UJpn2bjajKI/AAAAAAAASMI/uQ3JTHE0qpQ/s400/cassini_saturn_tinymimas.jpg?name=value&key=value&page=home%20page&browser=Firefox" />
  </body>
</html>
```

The servers for a marketing tool like Webtrends or Google Analytics would be looking for that specific data in the query string and would retrieve, process, and save it.

Tools are available for inspecting web beacons. You can use a proxy tool such as Charles (see Charles Web Debugging Proxy Application) to retrieve the image request URL. To decode the URL and view it in a readable form, paste it into a site such as http://meyerweb.com/eric/tools/dencoder/.

The HTTP interactions for marketing technologies deployed with Ensighten mostly depend on GET methods. The HTTP headers contain metadata that is often collected by marketing technology vendors, and are also important to the usage of browser cookies, which can sometimes be set via a web server in an HTTP RESPONSE HEADER directive called Set-Cookie. Many marketing technologies assign a visitor ID, which is not personally identifiable, to each person that visits their website. In many cases this visitor ID is stored in a persistent browser cookie that is set by a web server and helps the tool to either track data at the individual visitor level or personalize the site experience for that visitor.