

***Measuring Internet Marketing Success using Log Files***

As the Internet has developed and matured, businesses are investing more money in this technology with expectations of a greater return. At the same time, we would like to see more information about our extended investments. Unlike other forms of media, it is possible to track successes and failures of Web campaigns with statistics that are available online and updated daily.

Many different reports exist; and, while these reports may vary, they all share the most common elements. The explanation below attempts to explain, in layman's terms, the most important of these elements.

The data and reports illustrated are from an actual PaulBunyanTrail.com log file report for the month of May 2007. This Log File Analysis Report is, however, by no means a complete report—printed in its entirety, it would take 22 pages. The software that generates this report is *Analogue*, which is one of the most common reporting programs.

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***Key Components of a Log Analysis Report:***

Each element below is identified by a number. Refer to the corresponding notation on the following pages to see how this element is represented in the web server statistics provided to all Midwest Captions hosting clients.

1. **Hits:** The term *hits* is widely misused when discussing website statistics. *Hits* has various definitions which makes misuse of the term more widespread. Frequently, people use this word when referring to the number of visitors their site has had but, instead, quote the number of *Successful Requests*, which is actually a figure that tracks a combination everything: pages, images and scripts. In this example, Successful Requests are 271,958; site visitors would be better represented by Distinct Hosts (please refer to 3.Distinct Hosts below), which is 9,377.
2. **Page Views:** This element is the most important because it reflects the actual content your visitors view. Also, the numbers are the most accurate. Note that, in this report, the figures in parentheses are for the most recent 7 day period. So, you could accurately state that *78,767 pages were viewed on this site during May 2007*.
3. **Distinct Hosts:** This figure is an *attempt* to indicate the number of people that visit your site. However, there is no accurate way to actually measure people (or even computers) that have accessed a website. In this case, *Distinct Hosts* indicates the number of unique IP addresses—not people—that accessed this site. Complicating this statistic further is the fact that many large businesses and institutions access the Internet using **only one IP address**. Some reports, such as WebTrends, calculate the number of visitors based on 'time'; this method is a widely accepted industry practice.
4. **Daily Report:** Typically, this number is presented as a graph that represents Page Views for one day. The Daily Report is a handy feature for a quick site traffic review.
5. **Referrer Report:** If you are participating in a Pay Per Click promotion or if you are paying for links to your site, this element is very important. It documents the websites that have sent (referred) visitors to YOUR site. When reading the report, you will see some entries are indented under another link. In this case, only count the first entry; **do not count indented entries**.
6. **Request Report:** By reviewing this element, you should be able to determine the popularity of various pages in your site. Only look for HTML files—other files (jpg and gif) are not relevant.
7. **Log file example:** Just in case you have not seen this before, we have included a brief extract from a log file. Note that for a single page there may be 10-20 lines entered into the file; each element on the page (an image, for example) registers as one line.

## Web Server Statistics for Paul Bunyan Trail

Program started at Thu-31-May-2007 23:40.

Analysed requests from Tue-01-May-2007 00:06 to Thu-31-May-2007 23:31 (30.98 days).

## General Summary

*This report contains overall statistics.*

(Figures in parentheses refer to the 7-day period ending 31-May-2007 23:40).

## 1. Successful requests: 271,958 (49,048)

**Average successful requests per day: 8,779 (7,006)**

## 2. Successful requests for pages: 78,767 (14,130)

**Average successful requests for pages per day: 2,542 (2,018)**

**Failed requests:** 14,083 (2,714)

**Redirected requests: 23 (8)**

**Distinct files requested: 790 (498)**

### 3. Distinct hosts served: 9,377 (2,614)

**Corrupt logfile lines: 2**

**Data transferred:** 2.104 Gbytes (408.246 Mbytes)

**Average data transferred per day:** 69.569 Mbytes (58.320 Mbytes)

## 4. Daily Report

*This report lists the activity in each day.*

Each unit (■) represents 150 requests for pages or part thereof.

date: reqs: pages:

$$\begin{array}{ccc} \text{---} & \text{---} & \text{---} \\ | & | & | \\ \text{---} & \text{---} & \text{---} \end{array}$$


1/May/07: 10774: 2996: 

2/May/07: 17254: 5465: 

3/May/07: 11061: 3562: 

4/May/07: 8499: 2597: 

5/May/07: 3460: 964: 

6/May/07: 5519: 1469: 


7/May/07: 16241: 5671: 

8/May/07: 9920: 2850: 

9/May/07: 9934: 3013: 

10/May/07: 10091: 3330: 

11/May/07: 5199: 1459: 

12/May/07: 3824: 1092: 

13/May/07: 6021: 1957: 

14/May/07: 10355: 3057: 

15/May/07: 14458: 3789: 

16/May/07: 15119: 4319: 

17/May/07: 11740: 3124: 

## 5. Referrer Report

*This report lists the referrers (where people followed links from, or pages which included this site's images).*  
Listing referring URLs with at least 5 requests, sorted by the number of requests.

reqs: URL

----: ----

1465: <http://www.google.com/search>  
80: <http://www.google.com/search?hl=en&q=paul+bunyan>  
54: <http://www.google.com/search?hl=en&sa=X&oi=spell&resnum=0&ct=result&cd=1&q=paul+bunyan&spell=1>  
39: <http://www.google.com/search?hl=en&q=Paul+Bunyan>  
1183: <http://profile.myspace.com/index.cfm>  
292: <http://profile.myspace.com/index.cfm?fuseaction=user.viewprofile&friendid=3137865>  
200: <http://profile.myspace.com/index.cfm?fuseaction=user.viewprofile&friendid=48633362>  
804: <http://www.42explore.com/talltale.htm>  
719: <http://search.yahoo.com/search>  
101: <http://search.yahoo.com/search?p=paul+bunyan&fr=yfp-t-501&toggle=1&cop=mss&ei=UTF-8>  
35: <http://search.yahoo.com/search?p=Paul+Bunyan&fr=yfp-t-501&toggle=1&cop=mss&ei=UTF-8>  
349: <http://www.first-school.ws/activities/onlinestory/books/pbunyan.htm>

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## 6. Request Report

*This report lists the files on the site.*

Listing files with at least 10 requests, sorted by the number of requests.

reqs: %bytes: last time: file

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2043: 2.14%: 31/May/07 23:09: </page10.html>  
1917: 2.02%: 31/May/07 23:09: </page11.html>  
1829: 1.92%: 31/May/07 23:09: </page12.html>  
1746: 1.85%: 31/May/07 23:09: </page13.html>  
1673: 1.76%: 31/May/07 23:09: </page14.html>  
1621: 1.72%: 31/May/07 23:09: </page15.html>  
1526: 1.60%: 31/May/07 23:09: </page16.html>  
1418: 1.58%: 31/May/07 23:10: </page17.html>  
1156: 2.01%: 31/May/07 22:37: [/trail\\_maps/](/trail_maps/)  
691: 1.45%: 31/May/07 22:13: </towns.html>  
544: 0.63%: 31/May/07 20:49: </miles.html>  
542: 0.82%: 31/May/07 22:14: </pastpres.html>  
436: 0.47%: 31/May/07 22:37: </highlights.html>  
430: 0.54%: 31/May/07 23:19: [/trail\\_maps/section1.html](/trail_maps/section1.html)  
397: 0.41%: 31/May/07 21:33: </lodging.html>

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## 7. Log File Example

206.107.114.12 - - [18/Oct/2007:09:51:07 -0500] "GET / HTTP/1.1" 200 17285 "<http://www.google.com/search?hl=en&q=paul+buyan&btnG=Search>"  
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322)"  
206.107.114.12 - - [18/Oct/2007:09:51:08 -0500] "GET /images2/pbt17.jpg HTTP/1.1" 200 10166 "<http://www.paulbunyantrail.com/>" "Mozilla/4.0  
(compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322)"  
206.107.114.12 - - [18/Oct/2007:09:51:08 -0500] "GET /images/jim-ride-ad-icon.gif HTTP/1.1" 200 12487 "<http://www.paulbunyantrail.com/>"  
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322)"  
206.107.114.12 - - [18/Oct/2007:09:51:08 -0500] "GET /images/bike\_maps\_icon.gif HTTP/1.1" 200 3806 "<http://www.paulbunyantrail.com/>"  
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4322)"  
206.107.114.12 - - [18/Oct/2007:09:51:08 -0500] "GET /banner/b\_lostlake.gif HTTP/1.1" 200 4870 "<http://www.paulbunyantrail.com/>" "Mozilla/4.0  
(compatible; MSIE 6.0; Windows NT 5.1; SV1; .NET CLR 1.1.4 322)"  
134.50.71.151 - - [18/Oct/2007:09:51:12 -0500] "GET /page3.html HTTP/1.1"  
200 7435 "<http://www.paulbunyantrail.com/page2.html>" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.6) Gecko/200707  
25 Firefox/2.0.0.6"