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G R O U P SM

Enhancing Human Health

***Using Web Statistics:
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Overview

- Web Server Log Analysis Tools
- Interpretation of Statistics
- Frequently Asked Questions (FAQs)

Web Server Log Analysis Tools

How It Works

- A Web server generates a log file that records specific activity on a site.
- There are tools available that produce reports in a more user-friendly format, using the data from the log files.
- Log File Example –

Time | IP Address | Server | Action | Object | Result code and size | Browser / version and platform | Referring URL

```
01:50:17 216.126.148.89 - ICICWEB1 GET /pdq.html - 200 16391 295 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://cancernet.nci.nih.gov/pdqsrch.shtml
01:50:17 216.126.148.89 - ICICWEB1 GET /images/pdq.gif - 200 793 290 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:18 216.126.148.89 - ICICWEB1 GET /images/banner1.gif - 200 4067 294 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:18 216.126.148.89 - ICICWEB1 GET /images/news.gif - 200 1054 291 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:18 216.126.148.89 - ICICWEB1 GET /images/sn_top.gif - 200 277 293 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:19 216.126.148.89 - ICICWEB1 GET /images/sn_visitor.gif - 200 767 297 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:19 216.126.148.89 - ICICWEB1 GET /images/sn_rule.gif - 200 371 294 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:19 216.126.148.89 - ICICWEB1 GET /images/sn_new.gif - 200 911 293 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:19 216.126.148.89 - ICICWEB1 GET /images/sn_about.gif - 200 720 295 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:20 216.126.148.89 - ICICWEB1 GET /images/sn_ways.gif - 200 1066 294 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
01:50:20 216.126.148.89 - ICICWEB1 GET /images/sn_cis.gif - 304 139 379 Mozilla/4.0+(compatible;+MSIE+4.01;+Windows+98) http://128.231.164.190/pdq.html
```



Web Server Log Analysis Tools

- WebTrends, <http://www.netiq.com/solutions/analytics/default.asp>
 - Choose product suited for your purposes.
 - Some products are geared toward analyzing and improving e-business/e-commerce performance.
 - Other products focus on delivering web reporting for small business.
 - Intelligence Suite
 - Reporting Series
 - Log Analyzer Series



Web Server Log Analysis Tools

- Webalizer, <http://www.mrunix.net/webalizer/>
 - Open source product
 - Free web server log file analysis program that produces configurable usage reports in HTML format.

Web Server Log Analysis Tools

- Pilot HitList,
http://www.marketwave.com/products_solutions/hitlist.html
 - Web site analysis solution with a wide variety of collection methods.
 - Includes network collector that collects data at the network, resulting in more accurate analysis.

Web Server Log Analysis Tools

- NetTracker, <http://www.sane.com/products/NetTracker/>
- Web-based log file analysis software designed to analyze Web server, streaming media server, FTP server, proxy server and firewall log files.
- Generates detailed and interactive usage tracking reports.

Web Server Log Analysis Tools

- Other Tools

- NetGenesis, <http://www.spss.com/netgenesis/>
- Sawmill, <http://www.sawmill.net/>
- Azure Web Log Analyzer, <http://www.azuredesktop.com>
- Mach5 FastStats Analyzer, <http://www.mach5.com/products/analyzer/>
- Sitelogz, <http://www.sitelogz.com>

Interpretation of Statistics

Types of Information Gathered

- Visitor Traffic
 - General characteristics of visitors
- Visitor Activity
 - General trends and activity of visitors
- Errors
 - Possible problem areas of site

Interpretation of Statistics

- Visitor Traffic
 - Top Visitors
 - Top Referring Sites and URLs
 - New vs. Returning Visitors
 - Most Active Organizations
 - Top Geographic Regions
 - Most Active Countries, States, Provinces, and Cities

Interpretation of Statistics

- Visitor Activity
 - Most Requested Pages
 - Top Entry Pages
 - Top Exit Pages
 - Most Downloaded Accessed
 - Dynamic Pages & Forms
 - Activity Level by Day/Time Increment

Interpretation of Statistics

- Errors
 - Dynamic Pages & Forms Errors
 - Client Errors
 - Server Errors
 - 404 Errors

Interpretation of Statistics

- Most Valuable Statistics
 - Depending on the goals of the site, the importance of specific statistics will vary.
 - Unique Visitors
 - Most Requested Pages
 - Most Downloaded Files
 - Activity Levels
 - Top Referrers
 - Most Used Browsers & Platforms
 - Top Search Engines, Phrases, Keywords

Interpretation of Statistics

- Possibly Misleading Statistics
 - Hits
 - Visitor Session Statistics
 - Top Geographic Regions
 - New vs. Returning Visitors

Frequently Asked Questions (FAQs)

Common Questions Answered by Web Server Log Analysis

- How much traffic are you getting to your site?
- Where are your visitors coming from?
- Which search engines are driving traffic to your site?
- Is your site navigation leading visitors where you want them to go?
- What are the most popular sections of your site?
- What is the first thing your visitor's see?
- Are visitors leaving before completing their goals?
- Where are the ineffective pages on your site?
- Does your site encourage return visitors?
- Are technical problems leading to a negative visitor experience?



Frequently Asked Questions (FAQs)

- How is data collected?
- What type of information is collected?
- How accurate is the data?
- Can custom reports be created?
- Can intranet usage be analyzed?
- Why is Web site analysis important?



Resources

- FAQs About Analyzing Server Log Files,
<http://www.usability.gov/serverlog/index.html>
- “The 10 Reports...Every Small Business Lives For: A guide to measuring and improving your web site”,
<http://www.netiq.com/products/log/whitepapers.asp>
- “Web Site Analysis”,
http://www.marketwave.com/products_solutions/whitepapers_reg.html
- “Analyzing Web Site Traffic”,
<http://www.sane.com/products/NetTracker/whitepaper.pdf>



Questions?

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