



JACOBS  
UNIVERSITY

A report on  
Comparison of two web analytics tools

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# INSTALLATION

- Source

## SAWMILL ANALYTICS

[HTTPS://WWW.SAWMILL.CO.UK](https://www.sawmill.co.uk)

## NIHUO WEB LOG ANALYZER

<https://www.loganalyzer.net>

- Steps

## SAWMILL ANALYTICS

- **DOWNLOAD THE “.EXE” FILE FROM THE WEB PAGE AND INSTALL THE APPLICATION.**
- **THE INSTALLATION TAKES LONGER TIME ALTHOUGH THE FILE SIZE IS COMPARE TO ITS COUNTERPART IS SMALLER(34.1 MB).**

## NIHUO WEB LOG ANALYZER

- Download the “.exe” file from the web page and install the application.
- The installation takes lesser time although the file size compare to its counterpart is larger(66.6 Mb).

- Simplicity

## SAWMILL ANALYTICS

- **INSTALLATION WAS SIMPLE AND UPLOADING THE LOG FILE WAS ALSO SIMPLE AND PRETTY STRAIGHT FORWARD.**

## NIHUO WEB LOG ANALYZER

- Installation was simple and uploading the log file was also simple and pretty straight forward.

- Cost

## SAWMILL ANALYTICS

LITE	PROFESSIONAL	ENTERPRISE
<ul style="list-style-type: none"><li>• Supported formats: 1022</li><li>• Small project solution</li><li>• Autonomous/Agent free</li><li>• Single Profile/Single</li><li>• Report Single log source Limited configurability</li></ul>	<ul style="list-style-type: none"><li>• Supported formats: 1022</li><li>• Large projects / big data</li><li>• Autonomous /agent-free</li><li>• Integrated database</li><li>• Multi-profiles/multi-reports</li><li>• Multiple log sources</li><li>• Extensive configurability</li></ul>	<ul style="list-style-type: none"><li>• Supported formats: 1022</li><li>• Large projects / big data</li><li>• Autonomous /agent-free</li><li>• Integrated database</li><li>• Sql databases supported</li><li>• Multi-profiles/multi-reports</li><li>• Multiple log sources</li><li>• Extensive configurability</li><li>Optional white label</li></ul>
\$99	\$155	\$350

## NIHUO WEB LOG ANALYZER

STANDARD EDITION	Individual license	\$99
PROFESSIONAL EDITION	Individual license	\$149
	10 User corporate license	\$499
ENTERPRISE EDITION	Individual license	\$299
	10 User corporate license	\$999
	Unlimited license	\$1999

## KPI's

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SAWMILL ANALYTICS	NIHUO WEB LOG ANALYZER
<ul style="list-style-type: none"><li>• Date/times</li><li>• Content</li><li>• Visitor demographics</li><li>• Users</li><li>• Server response</li><li>• Sessions</li><li>• Log details</li></ul>	<ul style="list-style-type: none"><li>• Activity statistics</li><li>• Resources Accessed</li><li>• Visitor &amp; Demographics</li><li>• Referrers</li><li>• Search Engines</li><li>• Browser and Platforms</li><li>• Errors</li></ul>

The KPI's covered by both the Analytical tools are almost the same. The nomenclature given to the KPI's is bit different. Though the KPI's covered by Sawmill seems to be more extensive than Nihuo web log analyzer but the activity covered by both the tools is pretty same.

Some definitions of the KPI's Covered by Sawmill Analytics:

- **Date/times** – It shows the number of page visits by users on yearly / monthly / weekly / daily / hourly basis.
- **Content** – It shows the user's visit on page/director or pages alone or on file type.
- **Visitors demographics** – It downsize the visitors based on demographics. The visitors can be categorized on the basis Hostnames, what domain they are accessing the website from, from which country/region/city they are accessing the website.
- **Users** – This can be used to verify if the user is external user(authentic) or whether it is a user from the internal organization's department. The user can be grouped as well on the basis of the department from which the website is being accessed.
- **Server response** – It shows what pages were hits and what all pages showed some sort of error when a user accessed the page/website.
- **Sessions** – It shows the number of sessions instead of number of users whether they are new user or a repeated user and if they are repeated user how many times they have visited the page/website based on the cookie information stored.
- **Log details** – It shows the detailed overview of the users activity on the website.

Some definitions of the KPI's Covered by Nihuo web log analyzer:

- **Activity statistics** – It is basically an overview of the visitors visits and hits on specific page/website. It can be downsized on the basis of the number of visits or hits on yearly/monthly/weekly/daily/hourly basis.
- **Resources Accessed** – It shows the pages visited by the user on the URLs/page/images/directory basis. It also shows what was the entry page and from what page the user exited. It also shows the bounce rate, stay length of each page visited, file visited.
- **Visitor & Demographics** – It downsize the customer based on from which country/city they are visiting. It also shows the stay length, the bandwidth they used.
- **Referrers** – It gives the information about the websites and URLs from where the visitors has been referred from to the our website.
- **Search Engines** – It gives brief information of the search engine from where our visitor is being redirected to our webpage. It also gives the information of the keyword and key phrase the user searched for to reach to our webpage.

- **Browser and Platforms** – It shows the web browser our visitors are using as well as the operating system the visitor are using. It also shows the activity of the spider/crawlers. It also identifies the browser language.
- **Errors** - It show the error message showed up on the webpages and on which webpage it actually showed up.

## PLOTS / DATA ANALYSIS

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- Analysis based on the plots of Sawmill (*plots not added as it is a slow analytical tool*)
  - There were in total 167 page views within the date range of 30<sup>th</sup> and 31<sup>st</sup> January 2010.
  - Total visitors were 22 with in total 8 sessions.
  - Majorly the website was accessed from United States following was Netherland and United Kingdom. Major cities in United states was Mountain View from California State.
  - All 167 hits were authentic as the groups were not formed by the admin of the website for the users that should not be involved in the analysis.
  - Out of 167 hits 155 were responded OK and 2 were found Error 404(Not Found).
  - Total session events were 167. There are in total 8 sessions that happened. There was only one user and so total session user was 1.
- Analysis based on the plots of Nihuo web log Analyzer
  - There are in total 206 hits out of which 27 were normal hits, 178 were spider hits 2 were failed request. In this tool if a web page is visited and it has 5 images it is counted as 6 hits i.e. one for the web page and 5 for the images.
  - Majorly the website was accessed from United States following was Netherland and United Kingdom. Major cities in United states was Bristow from Virginia State.
  - There were only two major referrers; namely modelingcommons.org and dvdrental.com.
  - The only search engine was Google.
  - Top searched phrase was “netlogo” sokoban. The top searched keyword were netlogo and sokoban.
  - Majorly internet explorer was used as the browser following firefox and opera.
  - The majorly used operating system was Windows XP followed by Linux and windows 2003.

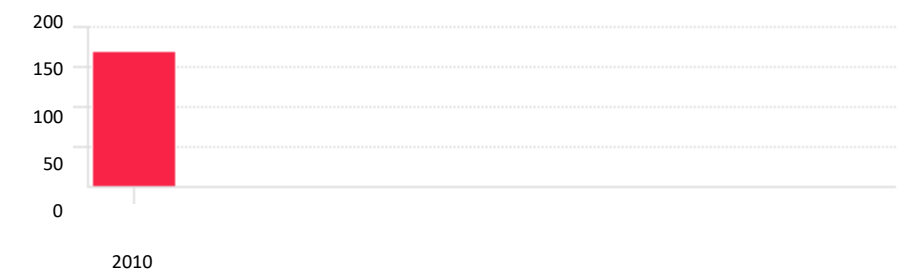
# SINGLE-PAGE SUMMARY 30/JAN/2010 – 31/JAN/2010, 2 DAYS


## Overview

		Avg/day
Page views	167	83.5
Visitors	22	11.0
Size	6.58 M	3.29 M
Sessions	8	4.0
Session duration	1d 15:04:00	19:32:00

## Date/times

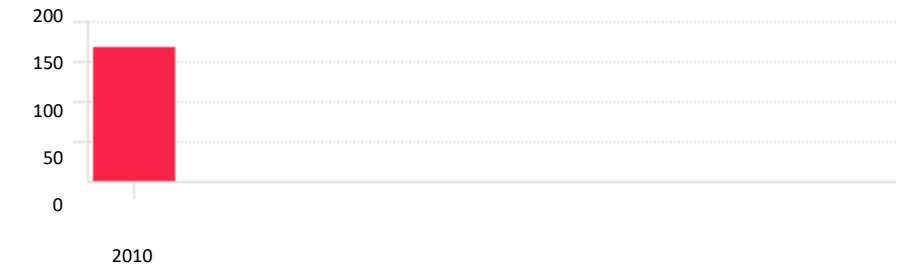
### Page views



	↑ Date/time	Page views	Visitors	Size	Sessions	Session duration
1	 2010	167	22	6.58 M	8	1d 15:04:00
	Total	167	–	6.58 M	–	1d 15:04:00

## Years

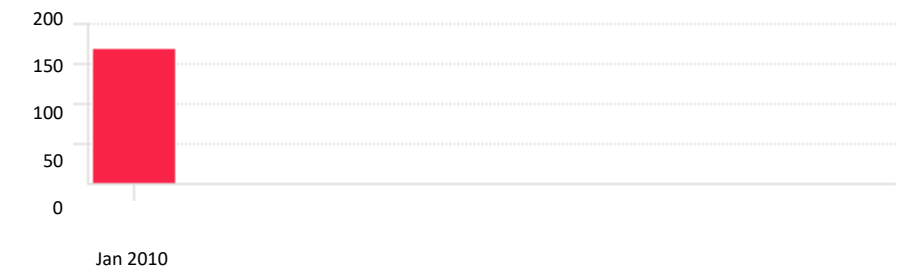
### Page views



	↑ Year	Page views	Visitors	Size	Sessions	Session duration
1	2010	167	22	6.58 M	8	1d 15:04:00
	Total	167	–	6.58 M	–	1d 15:04:00

Months

Page views



	↑Month	Page views	Visitors	Size	Sessions	Session duration
1	Jan/2010	167	22	6.58 M	8	1d 15:04:00
	Total	167	–	6.58 M	–	1d 15:04:00

Days

Page views



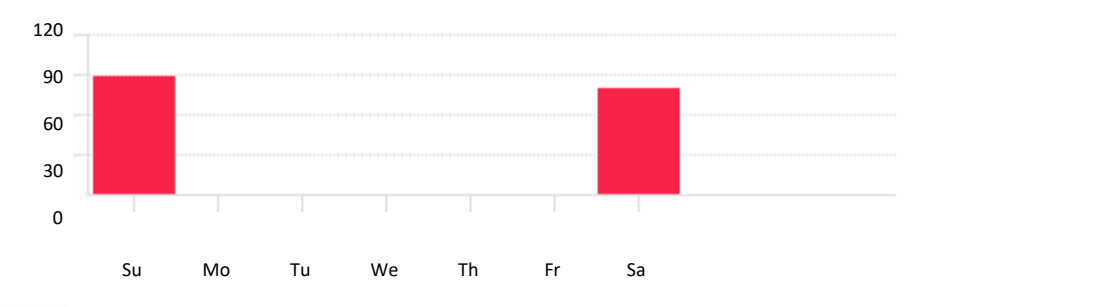
0

Sa 30 Jan 2010 Su 31 Jan 2010

	↑Day	Page views	Visitors	Size	Sessions	Session duration
1	30/Jan/2010	79	16	888.11 K	6	20:05:03
2	31/Jan/2010	88	8	5.71 M	3	18:58:57
	Total	167	—	6.58 M	—	1d 15:04:00

Days of week

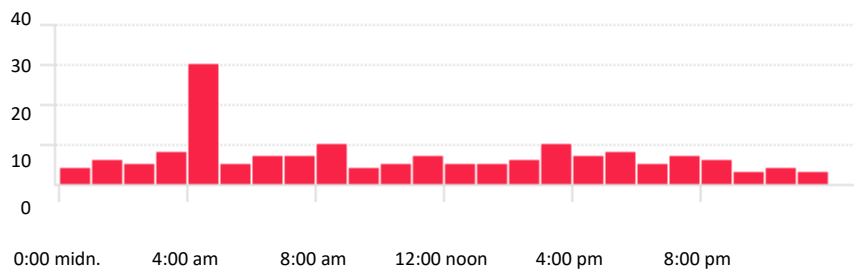
Page views



	↑Day of week	Page views	Visitors	Size	Sessions	Session duration
1	Sunday	88	8	5.71 M	3	18:58:57
2	Saturday	79	16	888.11 K	6	20:05:03
	Total	167	—	6.58 M	—	1d 15:04:00

Hours of day

Page views








	↑Hour of day	Page views	Visitors	Size	Sessions	Session duration
1	midnight - 1:00 AM	4	3	40.63 K	2	00:11:47
2	1:00 AM - 2:00 AM	6	4	5.12 K	2	01:02:39
3	2:00 AM - 3:00 AM	5	2	30.16 K	3	00:19:24
4	3:00 AM - 4:00 AM	8	2	77.42 K	3	01:37:39
5	4:00 AM - 5:00 AM	30	4	205.00 K	2	01:48:16
6	5:00 AM - 6:00 AM	5	2	28.59 K	2	01:48:14
7	6:00 AM - 7:00 AM	7	2	2.98 M	2	02:11:35
8	7:00 AM - 8:00 AM	7	3	1.65 M	2	02:19:01
9	8:00 AM - 9:00 AM	10	4	120.94 K	2	02:13:19
10	9:00 AM - 10:00 AM	4	2	10.96 K	2	01:48:17
11	10:00 AM - 11:00 AM	5	2	190.69 K	2	01:48:11
12	11:00 AM - noon	7	3	60.04 K	2	02:13:35
13	noon - 1:00 PM	5	2	161.38 K	2	01:48:07
14	1:00 PM - 2:00 PM	5	2	98.48 K	2	02:13:16
15	2:00 PM - 3:00 PM	6	3	102.14 K	2	01:33:16
16	3:00 PM - 4:00 PM	10	5	53.42 K	2	02:03:23
17	4:00 PM - 5:00 PM	7	3	268.62 K	2	02:13:14
18	5:00 PM - 6:00 PM	8	3	215.57 K	2	01:48:30



	↑Hour of day	Page views	Visitors	Size	Sessions	Session duration
19	6:00 PM - 7:00 PM	5	1	41.44 K	2	01:48:27
20	7:00 PM - 8:00 PM	7	2	103.95 K	2	02:13:12
21	8:00 PM - 9:00 PM	6	1	101.54 K	2	01:32:36
22	9:00 PM - 10:00 PM	3	1	20.79 K	1	01:17:29
23	10:00 PM - 11:00 PM	4	2	24.92 K	1	00:56:12
24	11:00 PM - midnight	3	1	34.67 K	2	00:14:21
	<b>Total</b>	<b>167</b>	<b>—</b>	<b>6.58 M</b>	<b>—</b>	<b>1d 15:04:00</b>

## Pages/directories

	Pages/directories	↓Page views	Visitor s	Size	Session s	Session duration
1	 /browse/	12 1 72.5 %	11	6.31 M	8	1d 10:59:09
2	/robots.txt	16 9.6 %	15	1.55 K	7	00:33:47
3	 /account/	15 9.0 %	9	100.48 K	3	01:38:26
4	/ (default page)	5 3.0 %	5	543 B	3	00:27:40
5	 /tags/	4 2.4 %	2	16.26 K	2	00:13:30
6	/?(parameters)	3 1.8 %	2	20.13 K	2	00:40:48
7	/help	2 1.2 %	2	5.55 K	2	00:03:56
8	/dvdrental.com	1 0.6 %	1	947 B	1	00:26:44
9	 /javascripts/	0 0.0 %	1	114.98 K	0	00:00:00
10	 /system/	0 0.0 %	1	0 B	0	00:00:00
	<b>2 other items</b>	<b>0 0.0 %</b>	<b>—</b>	<b>17.36 K</b>	<b>—</b>	<b>00:00:00</b>

Pages/directories		↓Page views		Visitors	Size	Sessions	Session duration
Total		167	100.0 %	—	6.58 M	—	1d 15:04:00

## Pages

Page	↓Page views		Visitors	Size	Sessions	Session duration
1 /robots.txt	16	9.6 %	15	1.55 K	7	00:33:47
2 / (default page)	5	3.0 %	5	543 B	3	00:27:40
3 /account/login	5	3.0 %	4	20.97 K	2	00:20:09
4 /?(parameters)	3	1.8 %	2	20.13 K	2	00:40:48
5 /account/new	2	1.2 %	2	2.17 K	2	00:11:37
6 /browse/list_models	2	1.2 %	2	21.24 K	1	00:06:07
7 /account/models/33	2	1.2 %	1	46.43 K	1	00:12:49
8 /browse/browse_applet_tab/2593	2	1.2 %	2	20.13 K	2	00:26:57
9 /help	2	1.2 %	2	5.5 K	2	00:03:56
10 /browse/download_model/2508?(parameters)	2	1.2 %	1	22.21 K	1	00:57:46

Page	↓Page views		Visitors	Size	Sessions	Session duration
130 other items	126	75.4 %	—	6.42 M	—	1d 11:02:24
Total	167	100.0 %	—	6.58 M	—	1d 15:04:00

### File types

File type	↓Page views		Visitors	Size	Sessions	Session duration
1 (no type)	147	88.0 %	20	6.44 M	8	1d 13:55:15
2 TXT	16	9.6 %	15	1.55 K	7	00:33:47
3 ATOM	3	1.8 %	2	5.98 K	3	00:08:14
4 COM	1	0.6 %	1	947 B	1	00:26:44
5 JS	0	0.0 %	1	114.98 K	0	00:00:00
6 PNG	0	0.0 %	2	677 B	0	00:00:00
7 CSS	0	0.0 %	2	16.70 K	0	00:00:00
Total	167	100.0 %	—	6.58 M	—	1d 15:04:00

### Hostnames

Hostname	↓Page views		Visitors	Size	Sessions	Session duration
1 66.249.65.38	76	45.5 %	1	5.89 M	4	23:44:24
2 66.249.65.12	31	18.6 %	1	403.14 K	2	11:21:29

	Hostname	↓Page views			Visitors	Size	Sessions	Session duration
3	89.248.172.58	22	13.2 %	—	1	166.24 K	1	00:12:10
4	66.249.65.43	3	1.8 %	—	1	2.10 K	1	00:10:02
5	65.55.207.50	3	1.8 %	—	1	2.09 K	1	00:07:06
6	66.249.71.65	3	1.8 %	—	1	48.79 K	2	00:03:25
7	67.195.112.35	2	1.2 %	—	1	10.62 K	1	00:03:56
8	74.52.245.146	2	1.2 %	—	1	5.77 K	1	00:04:25
9	65.55.106.131	2	1.2 %	—	1	2.23 K	1	00:10:03
10	65.55.106.183	2	1.2 %	—	1	2.23 K	1	00:00:43
	<b>12 other items</b>	<b>21</b>	<b>12.6 %</b>	—	—	<b>56.97 K</b>	—	<b>03:06:17</b>
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>		—	<b>6.58 M</b>	—	<b>1d 15:04:00</b>

## Domain descriptions

	Domain description	↓Page views			Visitors	Size	Sessions	Session duration
1	IP Address	167	100.0 %	—	22	6.58 M	8	1d 15:04:00
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>		—	<b>6.58 M</b>	—	<b>1d 15:04:00</b>

## Countries

	Country	↓Page views			Visitors	Size	Sessions	Session duration
1	United States/	143	85.6 %	—	20	6.37 M	8	1d 14:39:01
2	Netherlands/	22	13.2 %	—	1	166.24 K	1	00:12:10
3	United Kingdom/	2	1.2 %	—	1	46.43 K	1	00:12:49
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>		—	<b>6.58 M</b>	—	<b>1d 15:04:00</b>

### Regions

	Region	↓Page views			Visitors	Size	Sessions	Session duration
1	United States/CA/	118	70.7 %	—	7	6.35 M	7	1d 12:12:11
2	United States/WA/	22	13.2 %	—	11	15.86 K	4	01:55:41
3	Netherlands/(unknown city)	22	13.2 %	—	1	166.24 K	1	00:12:10
4	United Kingdom/Blackpool/	2	1.2 %	—	1	46.43 K	1	00:12:49
5	United States/TX/	2	1.2 %	—	1	5.77 K	1	00:04:25
6	United States/FL/	1	0.6 %	—	1	947 B	1	00:26:44
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>		—	<b>6.58 M</b>	—	<b>1d 15:04:00</b>

### Cities

	City	↓Page views			Visitors	Size	Sessions	Session duration
1	United States/CA/Mountain View	112	67.1 %	—	4	6.29 M	6	1d 11:37:18

City		↓Page views		Visitors	Size	Sessions	Session duration
2	United States/WA/Redmond	22	13.2 %	11	15.86 K	4	01:55:41
3	Netherlands/(unknown city)	22	13.2 %	1	166.24 K	1	00:12:10
4	United States/CA/Rancho Palos Verdes	3	1.8 %	1	48.79 K	2	00:03:25
5	United States/TX/Houston	2	1.2 %	1	5.77 K	1	00:04:25
6	United Kingdom/Blackpool/Blackpool	2	1.2 %	1	46.43 K	1	00:12:49
7	United States/CA/Sunnyvale	2	1.2 %	1	10.62 K	1	00:03:56
8	United States/FL/Fort Lauderdale	1	0.6 %	1	947 B	1	00:26:44
9	United States/CA/San Diego	1	0.6 %	1	106 B	1	00:27:32
Total		167	100.0 %	—	6.58 M	—	1d 15:04:00

## Authenticated users

Authenticated user		↓Page views		Visitors	Size	Sessions	Session duration
1	(not authenticated)	167	100.0 %	22	6.58 M	8	1d 15:04:00
Total		167	100.0 %	—	6.58 M	—	1d 15:04:00

## Groups

	Group	↓Page views		Visitors	Size	Sessions	Session duration
1	Default	167	100.0 %	22	6.58 M	8	1d 15:04:00
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>	–	<b>6.58 M</b>	–	<b>1d 15:04:00</b>

## Server responses

	Server response	↓Page views		Visitors	Size	Sessions	Session duration
1	200 (OK)	155	92.8 %	19	6.58 M	8	1d 13:16:58
2	302 (Found)	6	3.6 %	6	661 B	3	00:27:48
3	304 (Not Modified)	4	2.4 %	5	0 B	2	00:45:12
4	404 (Not Found)	2	1.2 %	2	1.49 K	2	00:34:02
	<b>Total</b>	<b>167</b>	<b>100.0 %</b>	–	<b>6.58 M</b>	–	<b>1d 15:04:00</b>

## LIMITATIONS

- Limitations of Sawmill Analytics
  - Its processing is slow.
  - Graphs are separately processed and plotting graph with few customization takes time.
- Limitation of Nihuo web log Analyzer
  - Limited customization options.
  - The graphs are also of only two types i.e. bar and line which some times can be hard for analysis.

## ANALYTICAL TOOL FOR JACOBS UNIVERSITY

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- Sawmill Analytics would be a verdict from my point of view reason being if we keep aside the slow processing time it gives extensive and accurate results like the page visits and from which region the visits are coming. It also shows that what all pages the user has visited has it reached the application page or has just visited the home page and left the website. It also gives various options of customization within each of its KPIs; on top of all the tool is cheaper than its counter part.

## REFERENCES

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<https://www.sawmill.co.uk>
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