Web Log Storming

Web Log Storming

User Manual

by Dataland Software

Thank you for choosing Web Log Storming. We are certain that you won't be dissapointed with its abilities to analyze your web stats.

We hope that this manual will serve you well as an additional guide.

Table of Contents

Introduction

Part I

1 Introduction

1.1 Overview

You won't believe how much additional information you can get from your web logs.

Web Log Storming is an **interactive, desktop-based Web Log Analyzer for Windows**. The whole **new concept of log analysis** makes it clearly different from any other web log analyzer 5 .

Web Log Storming does far more than just generate common reports - it displays **detailed web site statistics** with **interactive graphs and reports**. Very complete **detailed log analysis of activity** from every visitor to your web site is only a mouse-click away.

It's easy to track **sessions**, **hits**, **page views**, **downloads**, or whatever metric is most important to each user. You can look at **referring pages** and see which **search engines** and **keywords** were used to bring visitors to the site. Web site **behavior**, from the **top entry and exit pages**, to the **paths** that users follow, can be analyzed. You can learn which **countries** and **cities** (*Pro*) your visitors came from, and which **operating systems** and **browsers** they use. You'll learn how your **bandwidth** is being used, and how much **time users spend** on your site. You can tell how popular your **files**, **images**, **directories**, and **queries** are.

In addition to standard web log analyzer features, **Web Log Storming** allows you to:

❑ **Track individual visitors** with or without cookies, including previous visits and paths through the web site
❑ Easily improve your **ROI – stop wasting money and bandwidth** with low-quality traffic
❑ Extensive **on-the-fly filtering** and **complete interactivity** lets you to create new reports **in seconds**
❑ **Hybrid analysis** - optionally include self-hosted script to collect additional information
❑ Check if visitors **behave as you expect**. Determine if your links are prominent enough
❑ Practically **unlimited number of interactive reports and graphs**
❑ Your web logs are kept in **fast computer memory**, allowing you to **view filtered results immediately**
❑ Keep your log files compressed to save disk space – it **uncompresses zip, gz and tar files automatically**
❑ **Cache** previously read log files for faster analysis
❑ Connect to **FTP** or **HTTP** server and **download** updated log files **automatically**

❑ **Export** reports to **HTML** files, send them by **e-mail**, or copy them to the **clipboard**

See also

1.2   Log file formats

Currently, Web Log Storming supports:

- ❑   **Apache Combined** log file format
- ❑   **NGINX Combined** log file format
- ❑   **IIS W3C Extended** log file format

If you have problems with your log file format, you can use Tools | Parsing problems⌐47⌐ option and send us a sample for further analysis.

1.3 Differences

Web Log Storming is a web log analyzer that clearly stands out from the crowd with its unique features.

Compared to JavaScript web analytics	Compared to other log analyzers
❑ **Code editing**, **cookies** or **scripts** not required, but **optional for hybrid analysis**	❑ **Code editing**, **cookies** or **scripts** optional for **hybrid analysis**, but not required
❑ Uses **existing log files**, even from the past, and you are free to switch from or to another software **without losing information**	❑ **Flexible and interactive reports** - don't just accept developer's assumptions about what you are interested to see - **create your own reports**
❑ **Full control** - data is kept on your computer and/or server, it's **not collected or used by third-parties**	❑ Track **individual visitors** - see any visitor's detail available in log files, including previous visits, hit details, accessed pages, etc.
❑ **No foreign scripts.** In addition to **privacy concerns**, every script hosted on another domain **slows your website down** and/or there's a risk they won't load, or that are blocked by browser	❑ Change **filters ad-hoc** - adjust filters (parameters) **"on-the-fly"** and immediately see specific reports you need
❑ Shows **any file type visits** - you see stats for other files, not just pages (**images, videos, PDFs, EXE, ZIP...**)	❑ **Goal conversions** - define goals that you want to track and check how they **relate to any segment**
❑ Shows **access errors** - you can investigate any error, such are missing files, internal server errors, access to forbidden areas, etc.	❑ **Bookmarks** - save custom reports so you can easily run them again later
❑ **Spiders/bots** - easily include or exclude spider visits from reports, with just one click	❑ **Every detail counts** - analyze every bit of information - grouping less popular items under the "Other" label optional
❑ **Bandwidth control** - see if anyone is wasting your bandwidth by repeatedly downloading large files, embedding images to their pages, etc.	❑ **Optimized memory model** - most other log analyzers use slow database systems to process data, which limits possibilities

1.4   Terminology

Understanding the words and phrases we use with the Web Log Storming software and documentation will make the software easier to use, and you will be more productive.

Raw log files
> Files created by web servers that contain information about every hit requested by visitors. Each time a visitor's browser requests a file (whether it's a page, image, stylesheet or script file), the web server adds a line to the raw log file.

Hit
> A hit is a single **retrieval request** for any file on the web server (one line from the raw log file).

Request
> Same as Hit.

Query
> It's part of URL after **"?"** mark (i.e. /page.php?**option=1&type=some**). A query is used to send data to web scripts.

Session
> One session contains hits from a single visitor in a predefined timeframe. It's impossible to tell exactly which hits belong to each session, but our goal is to achieve the best guess. To determine which hits belong to each session, Web Log Storming uses the visitor's IP address and a session timeout value 35 .

Visitor
> Visitor is a guess of one physical person (or robot) who visited the web site at least once (one or more sessions). As with sessions, it's impossible to tell exactly what one visitor is.

> Some of reasons for this possible inaccuracy are:
>
> - One visitor can use more than one IP address. For example, he can use more computers (i.e. home and work) or Internet connection with dynamically assigned IP address.
> - More people can use same computer or connects through same network (local networks with shared Internet access).
> - Some visitors use proxy servers, and they will all have the same IP address.
> - Some visitors are not actually *people* (i.e. search engine spiders or other robots).
>
> It's clear that log files do not provide sufficient information to achieve 100% of accuracy. However, Web Log Storming allows you to browse statistics into details and you will be able to manually identify spiders and robots and add them to Spiders list 44 .

Bandwidth
> The amount of data transferred from the server to client (visitor's computer).

Bps (bandwidth per second)
> In our case, it's a number of kilobytes that was transferred in one second. This information is not always available – to calculate it Web Log Storming needs a "Time taken" value, which is, for example, not a standard part of Apache combined log files. On the other hand, the default IIS log file configuration does contain this value.

Referrer
> It's a web site or web page that "sends" visitors to your site. For example, if visitor finds your site through the Google search engine, the referrer will be a Google.

Path
> It's a sequence of pages and files (identification wildcards are configurable in Options window 35) your visitor accessed in one session.

1.5   Compare editions

Please use this table to compare features for Standard and Professional editions of Web Log Storming.

Feature	Standard	Professional
Number of websites allowed to analyze	Unlimited	Unlimited
Interactive clickable reports	✓	✓
Drill-down into individual visitor's details	✓	✓
Parameters - "on-the-fly" (dynamic) filters	✓	✓
Global (static) filters	✓	✓
Quick Spider / Human / JavaScript filtering	Spider / Human only	✓
Tabbed reports	✓	✓
Optional log file caching	✓	✓
Customizable file types (pages, files and images)	✓	✓
Customizable operating system, browser, search engine and spider recognition texts	✓	✓
Hybrid (combined log file and page-tagging) analysis		✓
Filter sessions that support JavScript (requires Hybrid)		✓
Goals for easy conversions measuring		✓
Bookmarks to quickly view custom reports		✓
Regions and Cities reports		✓
Authenticated Users report		✓
Number of Entry / Exit pages to group (in Path reports)	1	Unlimited
IP to host name resolving (reverse DNS lookup)		✓

Manually edit host names		✅
Custom IP resolving for shared access (from any web server)		✅
Export reports to HTML files		✅
Send reports by EMail		✅
Copy reports to clipboard and transfer them to another application (such is Excel spreadsheet)		✅
Analyze log lines directly from the clipboard		✅
Print reports		✅

Getting started

Part

II
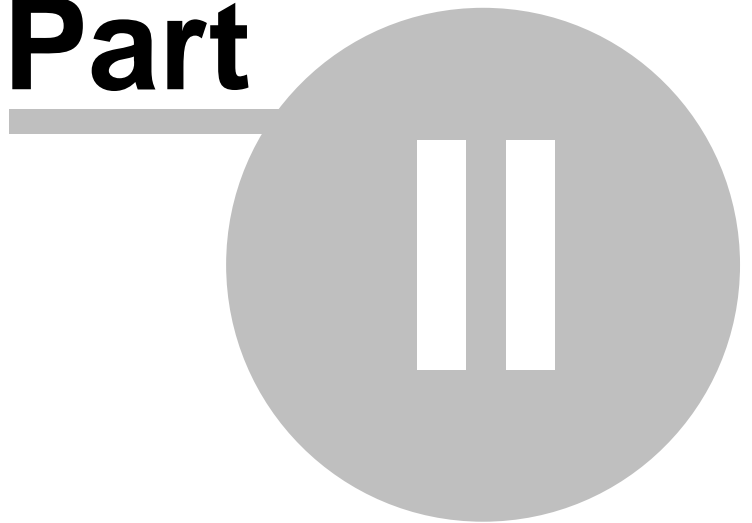
2   Getting started

First-time users may need an assistance to start using **Web Log Storming**.

To understand why Web Log Storming is different from other web log analyzers, please read the Overview 2
and Differences from other web log analyzers 5 pages. Also, if you are not familiar with log analysis, you
might need explanations about the terminology 6 we use in the software and this document.

Once you are ready, continue with one of following topics.

2.1 Choose log files

Web Log Storming is project based software. It uses its own file format (**.WLS**) that defines essentials like log file locations, basic configuration and global filters.

> To quickly analyze your log raw files without any pre-configuration, simply **drag them from the Windows Explorer** to the Web Log Storming main window. However, although convenient, this method is not suitable for more serious log analysis.

Step 0: Locate raw log files

Web Log Storming doesn't require you to embed any code into web pages. Instead, it uses **raw log files** to create stats and you'll need to locate them before using Web Log Storming. Log files are originally located on your web server and you can usually download them using FTP. Please contact your hosting provider for further instructions.

Once you locate them, you can retrieve them manually with any FTP client, or you can configure Web Log Storming to do this automatically.

Step 1: Create a new Web Log Storming project

- ❑ Select **File | New** from the main menu
- ❑ Select **New project file** icon from the toolbar
- ❑ Use **Start New Project** from the Home screen [20]

You should see the Project Properties [25] window.
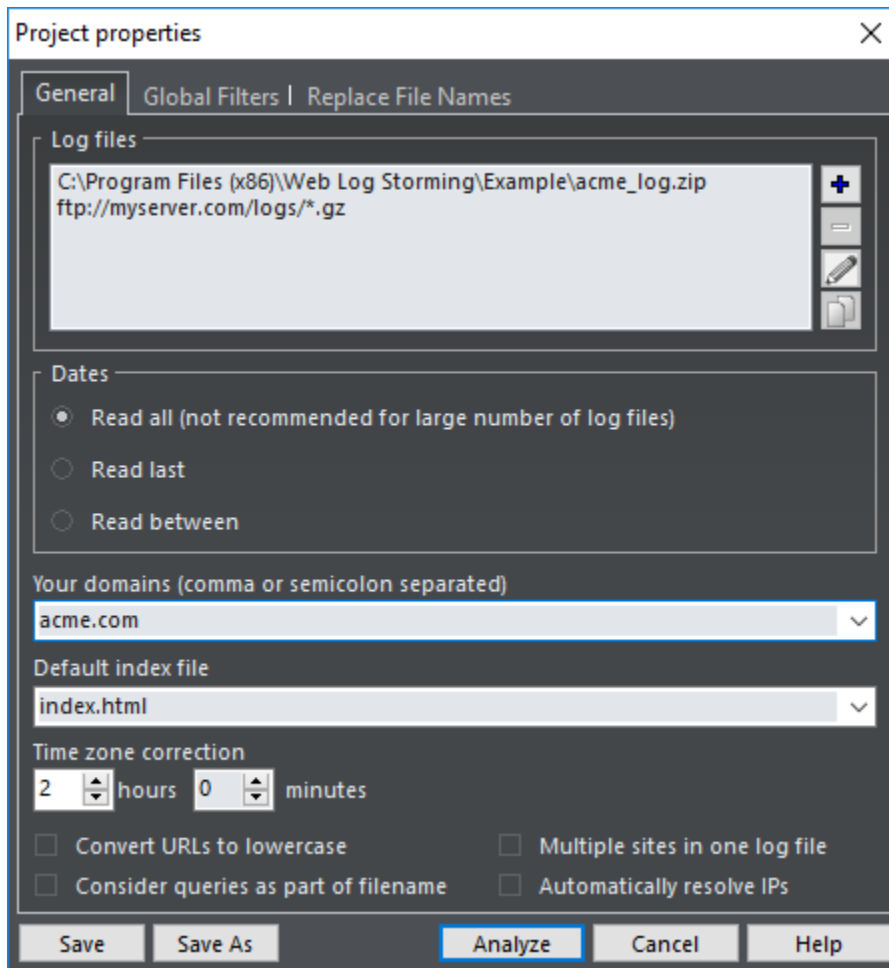
Step 2: Choose log file locations

You can choose one or more log file sets (locations). Logs will be **combined –** they don't need to originate from the same website and they can be even written in different formats. You can distinguish statistics from different websites by entering a **prefix** that will be added to file requests. Wildcards and archive types are also allowed.

Three types of log file locations are supported: **Local**, **FTP** and **HTTP**. If you select either FTP or HTTP types, **only changed** files will be automatically downloaded before the analysis.

> *Examples:*
> ```
> C:\Log Files\*.log
> C:\Log Files\2004*.zip
> ftp://myserver.com/logs/*.gz
> ```

See also: Log File Location editor 29
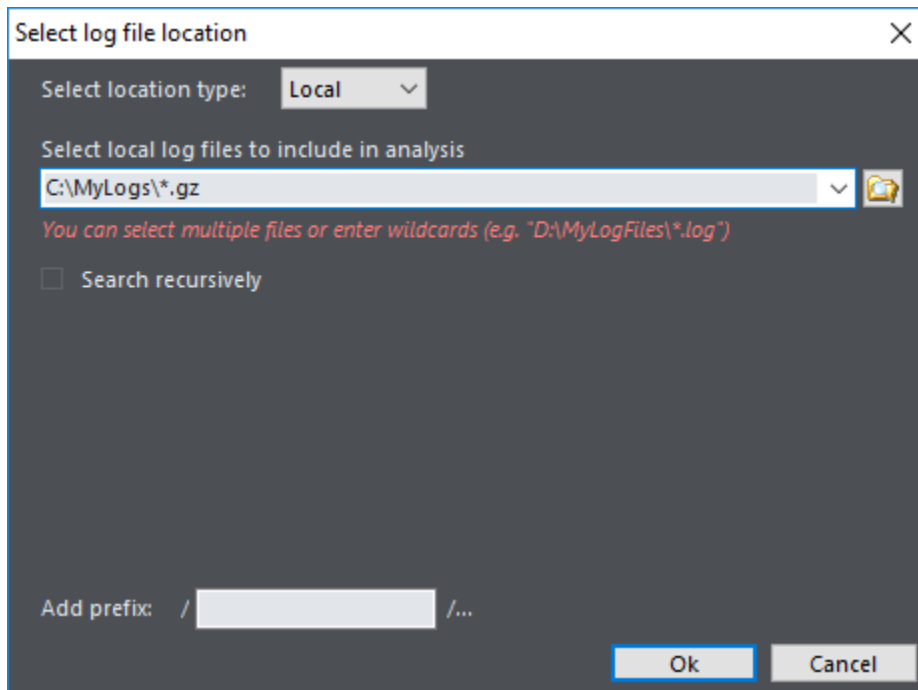
Step 3: Set other options

Dates

> Limit dates that you want to examine. Web Log Storming remembers which dates are contained in specific log files, so it doesn't need to re-read all of the log files every analysis.
>
> **Read all**
>
> > All selected log files are read and analyzed. Depending on size of log files, this could be time-consuming and it's **not recommended**.
>
> **Read last**
>
> > Reads last X days only. This option is **recommended** for regular analysis.
>
> **Read between**
>
> > Define exact start and end date to read and analyze. Use it when you want to analyze a specific time period.

Your domains

> Domains added here (separated by comma or semicolon) will be excluded from referrer reports.
>
> *Examples:*
> > `mydomain.net`
> > `acme.com, otheracme.com`

Default index file

> All web servers send a default page when a visitor accesses a directory without a filename. For example, if visitor points his browser to **http://www.myserver.com/**, depending on configuration, the server will actually send a **http://www.myserver.com/index.html** page. In this case, enter **index.html** here and all **.../** request will be replaced with **.../index.html** in the reports.

Examples:
```
index.html
index.htm
index.php
default.asp
```

Time zone correction

If your web server doesn't log time for your time zone, you can enter the time difference here.

Other options and Global filters

Please view the Project Properties 25 page for descriptions and other options.

Step 4: Analyze

When you are finished with these settings, click the **Analyze** or **Save** buttons.

See also

2.2 Analyze statistics

Once your log files are processed, use the Reports 50 tree on the left to select which predefined reports to view. These predefined reports are commonly used by most log analyzers.

However, one of main advantages of **Web Log Storming** is its unique capability to arbitrary change reports, by clicking on items to browse, and being able to drill-down into details that other web statistic packages don't provide.

See also
    Reports 50

2.2.1 Browse through statistics

In Web Log Storming, reports are click-sensitive. This means you can click on any item to see all sessions related to the item. For example, in the Countries 66 report, click on the pie slice that represents **Canada**, and you will see all sessions 70 from Canada (note that the **Country** parameter value is automatically changed). Furthermore, in the Sessions 70 report, click on a specific session to see its details and hits 70 (IP address, referrer, user agent, etc). This way you can **identify individual visitors** and examine their behavior. You can also right-click on items for more options.

Web Log Storming has features common to web browsers:

- ❑ Use the **Back** and **Forward** buttons to see previously selected reports
- ❑ Press and hold **Ctrl** to open a report in new tab
- ❑ Use the Bookmarks 72 menu to easily see same report in the future

An additional tool for browsing is the **Keep parameters and select** option: right-click the Reports tree and choose this option to view any report while keeping same parameters ad-hoc parameters.

See also
    Reports 50
    Bookmarks 72

2.2.2 Use parameters

An unique feature of Web Log Storming lets you browse with **on-the-fly parameters** 74. This lets you easily focus on specific segments without re-reading log files.

When you click report items, parameters are automatically set. However, you will often need to set them manually in the **Parameters** panel - for example, if you want to use wildcards, segment data by more than one constraint or fine-tune them.

Parameters are grouped by type (Date 75, File 75, Referrer 77, Visitor 78 and report-specific parameters 74) and you can see detailed description on separate pages.

When you click report items, the parameters are automatically set. However, if you want fine tune the parameters (for example, use wildcards, or segment data by more than one constraint), they can be set manually on the **Parameters** panel.

See also
    Reports 50
    Parameters 74

2.3 Page tagging for hybrid analysis

Professional 7 edition only

To eliminate limitations of log file compared to script-based web analytics, such are better visitor/spider identification and more information, you can consider using **page tagging** with Web Log Storming. It works similarly to various widely-known web analytics, with one of important differences that **data stays on your server**. This way, Web Log Storming combines best features of two web analytics worlds. Page tagging is required if you wish to see **Cookie IDs** or **Screen Resolutions** reports or if you wish better detection of **previous visits**, **spiders** and **time spent** on page.

How to use it?

Page tagging feature uses a small JavaScript that hosted on your server (no third-party involvement) and additional information will be written directly to regular log files (no databases or additional files), which you already analyze in Web Log Storming.

Step 1: Download wls_log.zip arhive and unpack it to root of your server (so file paths are **/wls_log/wls_log.js** and **/wls_log/wls_log.gif**).

Step 2: Include this one line in your pages that you want to track (template, header file, all static html files, whatever matches your system):

```
<head>
...
<script src="/wls_log/wls_log.js"></script><script>wlsInit();</script>
...
</head>
```

Wait a bit to collect some data and that's it. No additional configuration of Web Log Storming is needed - if it finds additional information, it will use it. Otherwise, it will simply work like before. Note that putting this line into HEAD tag is preferable, but not mandatory.

See also
Cookies IDs report
Screen Resolutions report
Time Spent report

2.4　Improving performance

The size of your web site, your log files, the speed of your Internet connection, the computer's speed and memory all affect how fast Web Log Storming can analyze your files. Every site has files that don't affect stat results (logos, buttons, stylesheets, etc). Almost as a rule, these files receive the most hits and thus require the most processing time. **Global filters** can be used to filter out the hits that you are not interested in. Using global filters allows Web Log Storming to be more efficient.

All web log analyzers support the well-known concept of **global filters**. While this is the only type of filter other analyzers recognize, for Web Log Storming it's just an additional tool particularly useful for improving performance. If you use global filters to exclude hits that you don't need in your reports, you will save a considerable amount of memory, which will considerably improve the processing speed.

For example, your pages probably contain logos, background, buttons, divider images, stylesheets, scripts, etc, etc. Each of these collateral types of files will cause the server to write another hit-line in the log file. Let's say that you have 10 links to those files on each of your pages (and you could easily have more). That means that every page view will be recorded as 1 + 10 = 11 lines in log file. Now, if you **exclude** collateral files by defining **global filters**, in this particular example you will **reduce memory consumption by 90%**! And that means that you will be able to analyze 10 times more data **without losing performance or useful information**.

As we have stated, Web Log Storming is different than other log analyzers. Generating static reports is an "easy task". Other analyzers can free the memory after creating predefined reports. Other analyzers ignore hits/visitors that don't meet their filter criteria. Other analyzers ignore report items that are not significant enough (i.e. ignoring or grouping rare referrers as "Others").

From the beginning, we thought about the idea of "**live**" (or "**on-the-fly**") filters. It means that the software doesn't want to know in advance what reports the user will want. It doesn't know what filters will be applied to inspect different cross-reports. Furthermore, nothing is insignificant for the Web Log Storming unless the user explicitly says so. If user decides to get Countries report for visitors that saw a least popular page, he can get it with just few clicks – without the need of re-reading log files with different filter settings.

To accomplish this kind of full interactivity, we needed to keep all relevant log data in the memory. Although our team spent a substantial amount of time developing a highly optimized memory model, some users might experience a major slowdown when analyzing log files. Our main goal was to find a meaningful compromise between processing, searching, and sorting speed on one side, and memory consumption on other side. In our opinion, results are more than satisfactory, especially if the user keeps in mind these facts, and makes a few tweaks to achieve the best results.

How exactly you define global filter depends on your web site structure. One example can look like this:

```
-*.css; -*.gif; -/script/*; -/forum/*
```

Sign "-" in front of wildcards means "exclude", and wildcards can be delimited with ";" or ",".

Of course, if you eventually wish to inspect some of excluded files later, you always can make another project file with a global filter that will include all or only files that you wish to analyze.

User Interface

Part III

3 User Interface

3.1 Home screen

On program startup, you'll see a **Home screen** that helps you to quickly and easily choose a task that you want to accomplish. You can also invoke it by choose **Help | Home screen** from the main menu or use 🏠 toolbar icon.
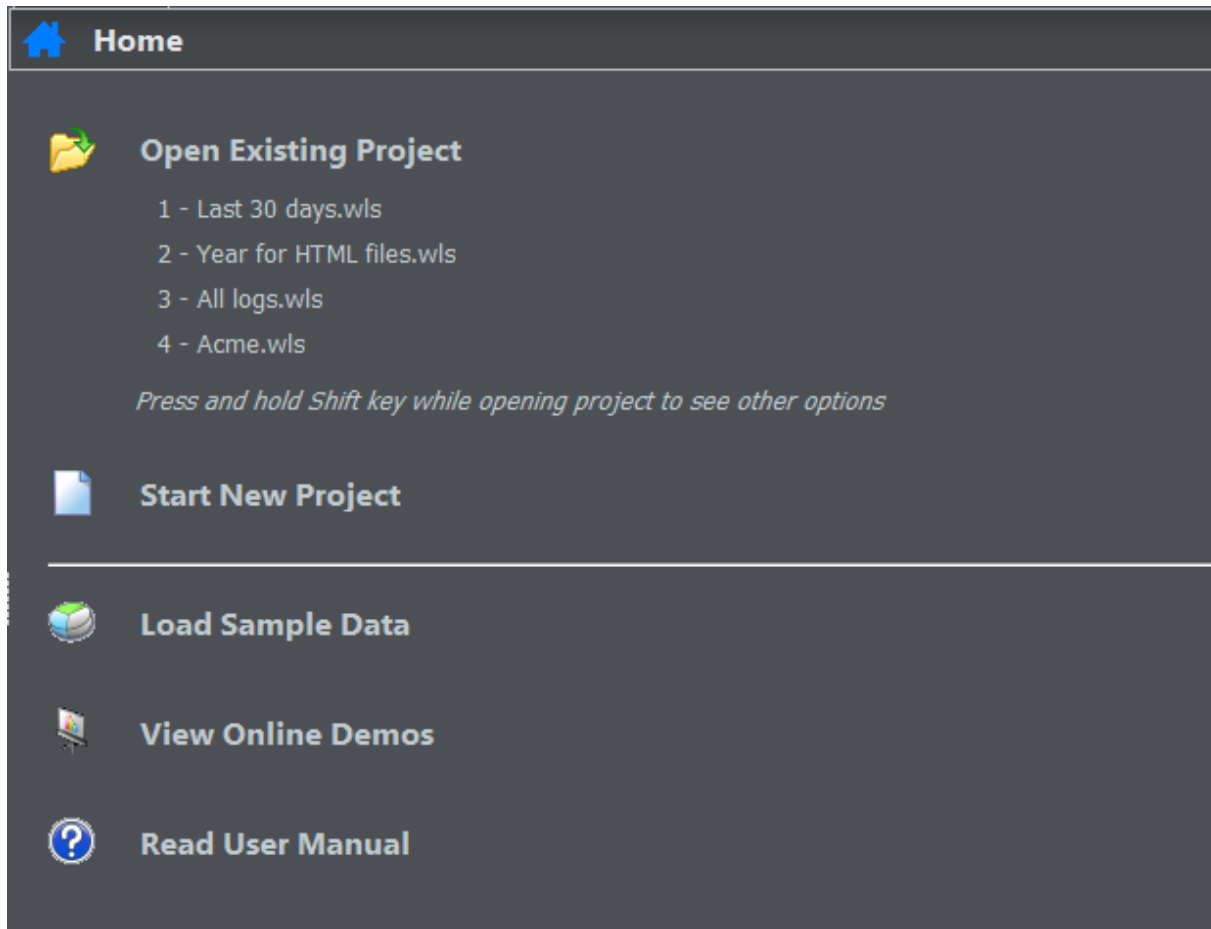
Open Existing File	Choose this option to open an **existing project** (.wls) file from a local disk. Recently used projects are listed below this option and you will be able to **open them directly** by clicking on the file name.
	Normally, when the project is opened, the software displays the Open project tasks 32 window. If this option is turned off, you can force the window to be displayed by holding the **Shift** key.
Start New Project	**Create new** project file
Load Sample Data	Open the **sample project and log files** included in the installation. Logs are randomly generated by us and they are not based on any real-life data
See On-line Demos	Watch **on-line demos** on the web
Read User Manual	Open help file

See also
　　Open project tasks window 32
　　Project properties 25

3.2 Main Menu

3.2.1 File menu

This menu contains basic file and print operations.

📄	**New Project** ⌐25⌐		Create new project file (*.wls)
📂	**Open Project**	Ctrl+O	Open existing project file (*.wls)
💾	**Save Project**	Ctrl+S	Save project to disk
	Save Project As...		Save project under another name
	Recent ▸		List of recently used projects
📋	**Properties** ⌐25⌐	F10	Edit project properties ⌐25⌐
	Analyze From Cipboard	Ctrl+Shift+V	Analyze log lines from clipboard *[Pro]*
🖼	**Export**		Export all reports to HTML pages *[Pro]*
✉	**Send by E-mail**		Send selected report by e-mail (opens E-mail client) *[Pro]*
🖨	**Print Selected Report**	Ctrl+P	Print selected report *[Pro]*
📋	**Copy to Clipboard**	Ctrl+C	Copy the contents of the selected report to clipboard *[Pro]*
	Exit	Alt+F4	Close application

See also
Project Properties ⌐25⌐
Log File Locations editor ⌐4⌐

3.2.2 Bookmarks menu

Professional ⌐7⌐ *edition only*

This menu contains bookmark options.

Add Current Report to Bookmarks ⌐72⌐	Ctrl+D	Adds currently visible report to bookmarks
Update Bookmark		If currently visible report is a bookmark, use this option to remember parameter changes
Rename Bookmark		Change the selected bookmark's name
Delete Bookmark		Delete the currently selected bookmark

See also
Bookmarks ⌐72⌐

3.2.3 View menu

This menu allows you to change viewing options.

Style	Change visual style of user interface

🕐	**Based on IP and timeout**		If this option is selected, reports are based on **time-limited** sessions
(IP)	**Based on IP only**		If selected, reports are based on **time-unlimited** sessions. That means that all hits from same IP address will be included in **one session**. Use this option to easily see reports based on visitors instead on time-limited sessions.
	All		View all visitors
	Human		View only visitors identified as human
	Spiders		View only visitors identified as spiders (bots, crawlers)
	JavaScript Only		View only visitors with JavaScript enabled. Requires Hybrid analysis 16. *[Pro]*
	Split Panes		Split Reports and Parameters panes (especially useful for wide screens and multiple monitors setup)
	Options 35		Program options
	Find 40	Ctrl+F	Search current report for text
	Find Next	F3	Find next occurrence of searched text
	Refresh	F5	Recalculate current report

See also
Page tagging for hybrid analysis 16
Options 35
Spiders editor 45
Find 40

3.2.4 Tools menu

This menu contains various tools.

Host Resolving 41	Host resolving tool (find domain name from IP) *[Pro]*
Edit Goals 33	Edit goals *[Pro]*
Parsing Problems 47	See parsing problems
Folders ▸	Easily locate settings and error log files
Operating Systems 44	Edit operating systems identification list
Browsers 44	Edit browsers identification list
Search Engines 44	Edit search engines identification list
Status and Errors 44	Edit status and errors descriptions
Spider User Agents 45	Edit User Agents used by spiders (bots, crawlers)
Spider Domains 45	Edit IP and domain names used by spiders (bots, crawlers)

See also
Host Resolving 41
Goals 33
Parsing problems 47
Advanced Editors 44

3.3   Project Properties

Essential data including log file locations [29], date limits and other settings are defined in the Project properties window. These options are separated into two tabs: **General** and **Global Filters**.

General
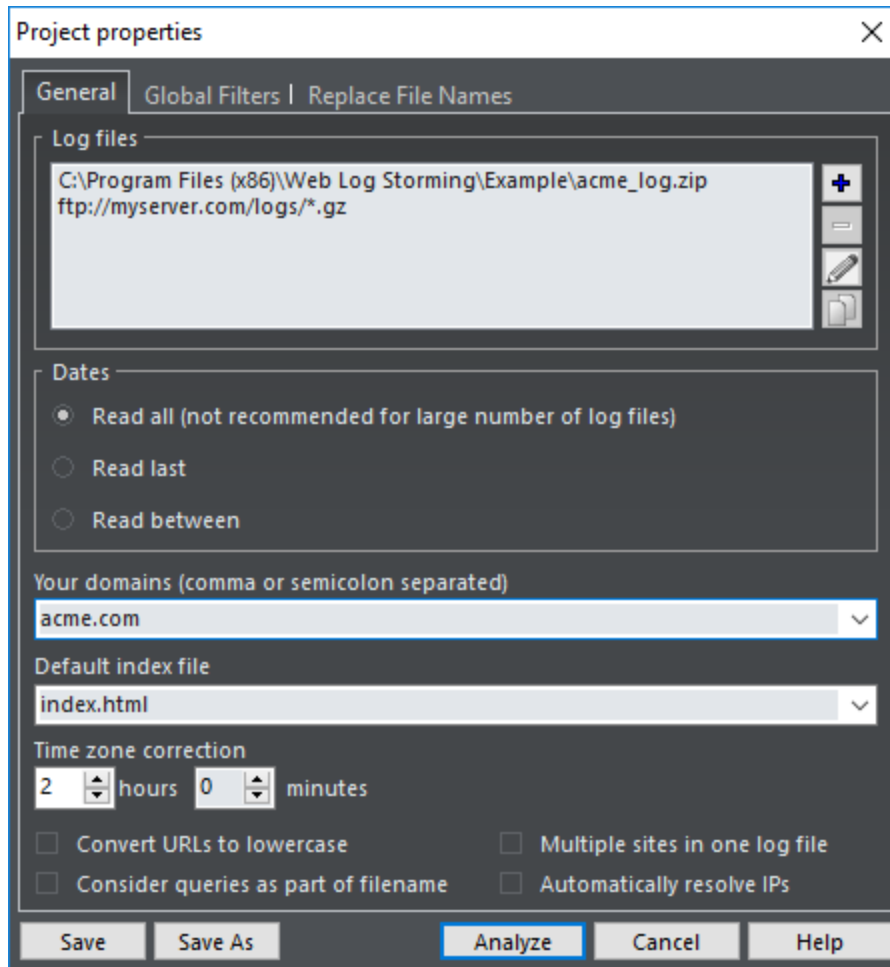
Log files

> You can choose one or more log file sets (locations). Logs will be **combined –** they don't need to originate from the same website and they can be even written in different format. You can distinguish statistics from different websites by entering a **prefix** that will be added to file requests. Wildcards and archive types are also allowed.

> Three types of log file locations are supported: **Local**, **FTP** and **HTTP**. In case you select FTP or HTTP type, **only changed** files will be automatically downloaded before the analysis.

> *Examples:*
> ```
> C:\Log Files\*.log
> C:\Log Files\2004*.zip
> ftp://myserver.com/logs/*.gz
> ```

> Use Log File Location editor [29] to define sets.

Dates

Limit dates that you want to examine. Web Log Storming remembers which dates are contained in specific log files, so it doesn't need to re-read all of the log files every analysis.

Read all

All selected log files are read and analyzed. Depending on size of log files, this could be time-consuming and it's **not recommended**.

Read last

Reads last X days only. This option is **recommended** for regular analysis.

Read between

Define exact start and end date to read and analyze. Use it when you want to analyze a specific time period.

Your domains

Domains added here (separated by comma or semicolon) will be excluded from referrer reports.

Examples:
```
mydomain.net
acme.com, otheracme.com
```

Default index file

All web servers send a default page when a visitor accesses a directory without a filename. For example, if visitor points his browser to **http://www.myserver.com/**, depending on configuration, the server will actually send a **http://www.myserver.com/index.html** page. In this case, enter **index.html** here and all **.../** request will be replaced with **.../index.html** in the reports.

Examples:
```
index.html
index.htm
index.php
default.asp
```

Time zone correction

If your web server doesn't log time for your time zone, you can enter the time difference here.

Convert URLs to lowercase

Apache servers are case sensitive, IIS is not. If you are using the Apache server, **page.html**, **Page.html** and **PAGE.HTML** are all different pages. IIS treats those URLs as the same page. Check this box to convert all URLs to lowercase.

Multiple sites in one log file

Sometimes web servers log requests from several different websites are placed in the **same file**. When you are only interested in one (or few) of them, check this option. Web Log Storming uses **Your domains** setting (see above) to filter out logs that should be ignored.

Consider queries as part of file name

Sometimes websites use queries to determine which content to send, while there is just one physical file that's requested. This is very common with some Content Management Systems. For example: **/index.php?page_id=1** and **/index.php?page_id=2** could be completely different pages. If this is the case with your website, check this option and those two URLs will be treated as two different pages.

Automatically resolve IPs

If this options is checked, IP to host name resolving will be automatically executed for currently loaded domains.

Global Filters

When a large number of log files needs to be read and analyzed, you would be strongly advised to use global filters to save system resources.

Using global filters will slightly slow down reading (because of additional comparisons), but speed will be remarkably improved later during multiple analyses, as the result of reduced memory consumption.

All fields support wildcards (see separate topic 82 for details), and you can use the "include and exclude" editor by clicking on the *pencil* button.

> Note that, due to technical limitations, these filters apply to **hits**, **not sessions**. In other words, if you define **Referrer** global filter, reports will include **only the first (direct) hit** originating from it. If you want to see complete sessions use parameters 74 instead.

File wildcards	File wildcards to include or exclude from results. Use **Click here to add usual file types** option for a quick start.
Host/IP	Host name or IP address wildcards to include or exclude from results
Query	Query wildcards to include or exclude from results

Referrer	Referrer wildcards to include or exclude from results
Status	Enter status/error code to include or exclude from results
Remove zero-bandwidth hits	Check this option to remove all hits with "0 bytes" bandwidth

Replace file names

If you wish to replace web server file names during analyzing, you can do that here. This way, any accessed file that matches left column wildcard, in reports will be replaced by right column text.

Examples:
```
/images/*          /anyimage.jpg
```
Grouping all hits to **/images/** directory as a single imaginary file **/anyimage.jpg**

```
*.gif                /notimportant
*.css                /notimportant
```
Grouping all ***.gif** and ***.css** hits as single imaginary file **/notimportant**

See also

3.4   Log File Location

In this dialog you can define location of raw log files. Web Log Storming supports three types of locations:
Local, **FTP** and **HTTP.** Available options depend on this location selection.

Add prefix

Any text entered here will be added to file names found in these log files. This way you can easily
analyze logs from several websites into combined stats and distinguish them by this prefix. A prefix
behaves like a directory.

Examples: **website1** (for one log file location)
                      website2 (for second log file location)

All files from the first website will be represented as **/website1/*.***, and from the
second as **/website2/*.***.

Local
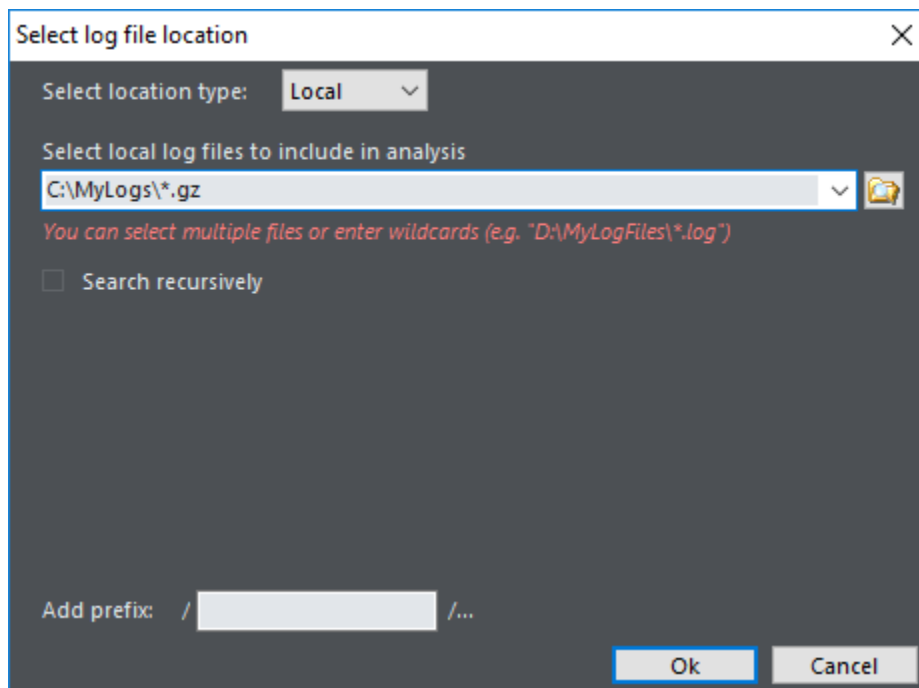
Select folder where you keep your log files (recursive option possible).

Examples: **C:\Log Files*.log**
                      C:\Log Files\2004*.zip

FTP(S)

Note: SFTP (FTP over SSH) is not yet supported, but FTPS (FTP over TLS/SSL) is.

FTP server address and **Port**	Enter the FTP server address and port
Passive	Turn on if you need to connect to the FTP server in passive mode
Resume if possible	If this option is turned on, Web Log Storming will try to resume downloading a log file instead of downloading the whole file again. Note that resuming is not always possible (depending on server configuration)
FTP path to log files	Enter the path on FTP server where log files are located
Username and **Password**	Enter username and password needed to login on the FTP server
Local path to store downloaded log files	Enter the local path where downloaded files will be saved. If you leave this field empty, log files will be saved in the default folder ("…\Application Data\Web Log Storming\Cache")
Delete files from the FTP server older than	If this option is checked, software will automatically delete remote log files that match wildcard above and that are older than specified number of days

HTTP

URL to log file	Type the exact URL to the log file (wildcards are **not** supported, due to nature of HTTP server)
Username and **Password**	Enter the username and password needed to login on the HTTP server. If your server doesn't require login, leave these two fields empty
Local path to store downloaded log files	Enter the local path where downloaded files will be saved. If you leave this field empty, log files will be saved in the default folder ("...\Application Data\Web Log Storming\Cache")

See also

3.5   Open project tasks

When you open a project file you will be able to choose an action.
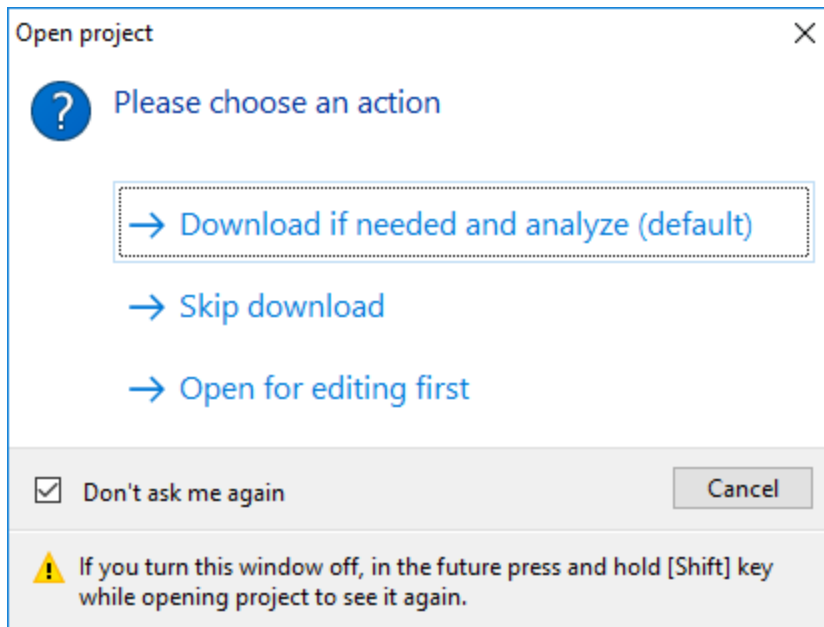
Download if needed and analyze	Opens project file, downloads the log files (if needed), and analyzes them. This is the default action
Skip download	If project contains a FTP or HTTP location 29, Web Log Storming will not download log files. Instead, it will only analyze logs previously downloaded
Open for editing first	If you want to change project options or global filters 25 before an analysis, use this action
Don't ask me again	Check this box to avoid showing this window every time you open a project file, and the software will perform the default action (**Just analyze**). You'll still be able to choose a different task by holding **Shift** key while the project is opened.

See also

3.6 Edit Goals

Professional⟦7⟧ edition only

We believe every webmaster should optimize their web site to accomplish their goals. Examples of user-defined goals include getting the visitor through the web site to the order or subscription form, or to download a file, etc. We also believe it's very important to measure these goals, and Web Log Storming offers an easy way to do it.

Similar to using File parameters⟦75⟧, you define a list of goals that you are trying to accomplish. After your goals are defined, almost all reports will contain new fields to show your goal conversion totals and percentages.

When adding or editing goals, you can change their name, reorder them or mark them as **Global**. Global goals are visible in **all projects**, while non-global can be selected only if you are currently analyzing the associated project file (.wls).

Non-global goals are **written to the .wls file**, so make sure you save the file to avoid losing changes.

For details how to fill the goal form see File parameters⟦75⟧ topic.

See also
     File parameters⟦75⟧

3.7 Options

Program options are set here.

General

Wildcards	
Session timeout (minutes)	Session timeout to use when analyzing sessions. Log files should be re-read before an analysis if you change this option
Auto check for updates	If selected, Web Log Storming will automatically check for new versions of software
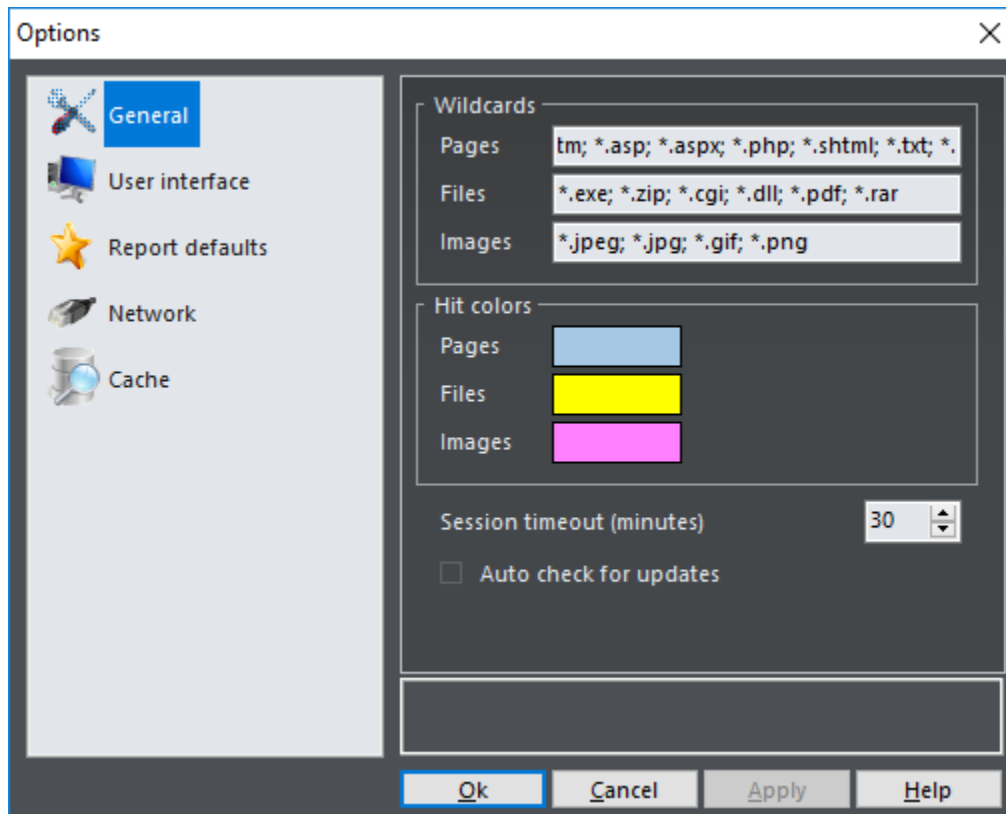
Wildcards	Page, file and images wildcards
Hit colors	Customizable colors for particular types of hits
Session timeout (minutes)	Session timeout to use when analyzing sessions. Log files should be re-read before an analysis if you change this option
Auto check for updates	If selected, Web Log Storming will automatically check for new versions of software

User interface
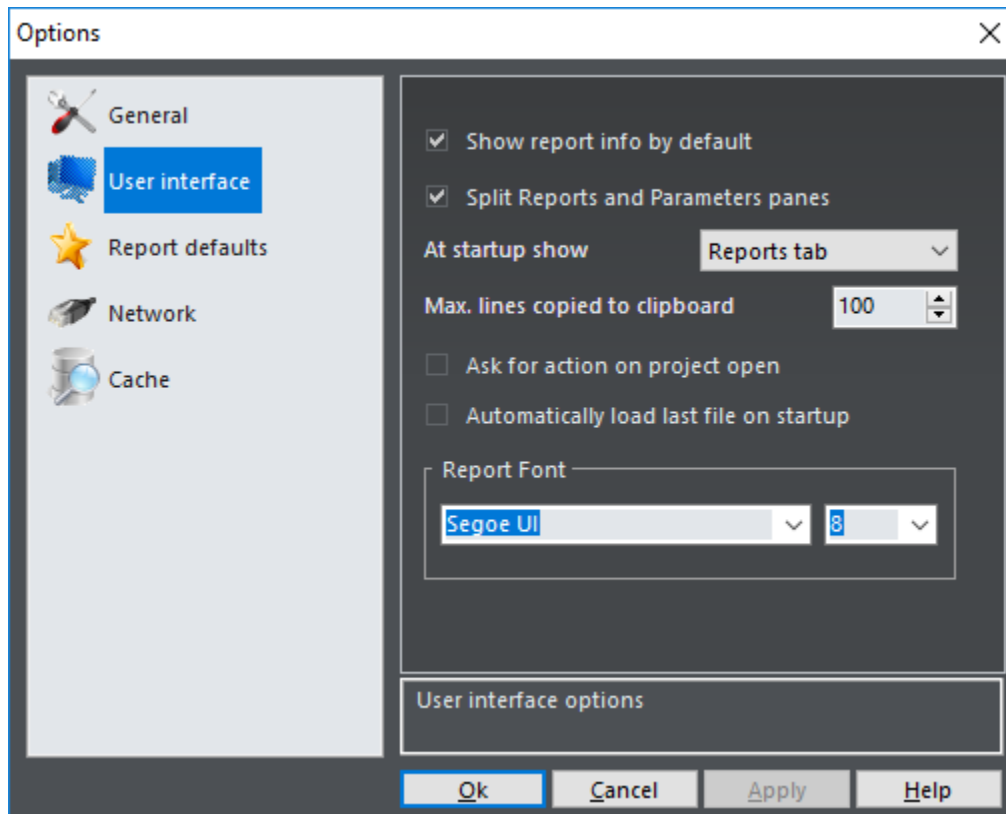
Show report info by default	Turns on or off short report information at the bottom of the screen
Split Reports and Parameters panes	Split Reports and Parameters panes (especially useful for wide screens)
At startup show	Choose tab to be shown at startup. Available options: **Reports tab** and **Parameters tab**. Useful only if previous option is turned off
Max. lines copied to clipboard	Limit the number of lines when copying report content to the clipboard. Same limitation apply to **Print** and **Export** options *Professional* 7 *edition only*
Ask for action on project open	If this option is checked, you will be able to choose what you want to do before analysis (i.e. edit project or skip download)
Automatically load last file on startup	If you turn this option on, every time you start Web Log Storming, it will automatically load last analyzed file
Report Font	Choose font name and font size for report lists and report tree

Report defaults
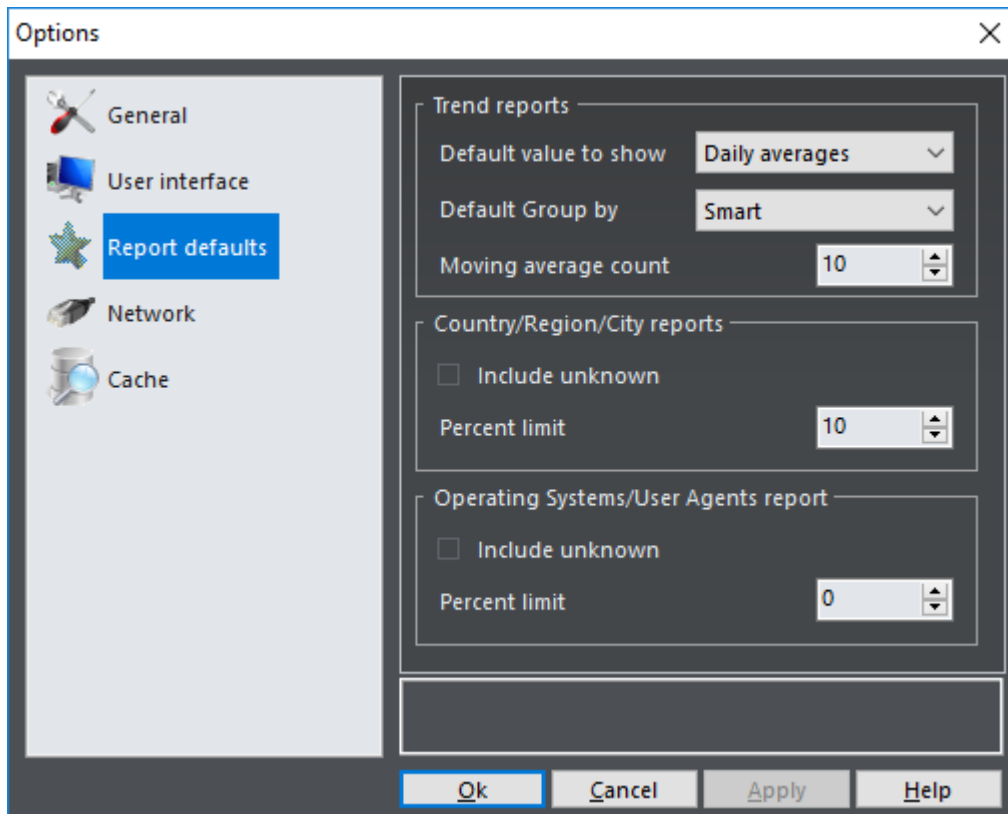
Trend reports	Default options for Trend parameters [80]
Default value to show	Value that will be shown if report is not grouped by day. Available options: **Daily averages** and **Totals**
Default Group by	Controls how trend reports will be grouped. Available options: **Smart** (automatically determine for best visibility) and **Day** (force grouping by day regardless of number of bars)
Country/Region/City reports	Sets defaults for country, region and city Pie parameters [81]
Operating Systems/User Agents reports	Sets defaults for operating system and user agents Pie parameters [81]

Network
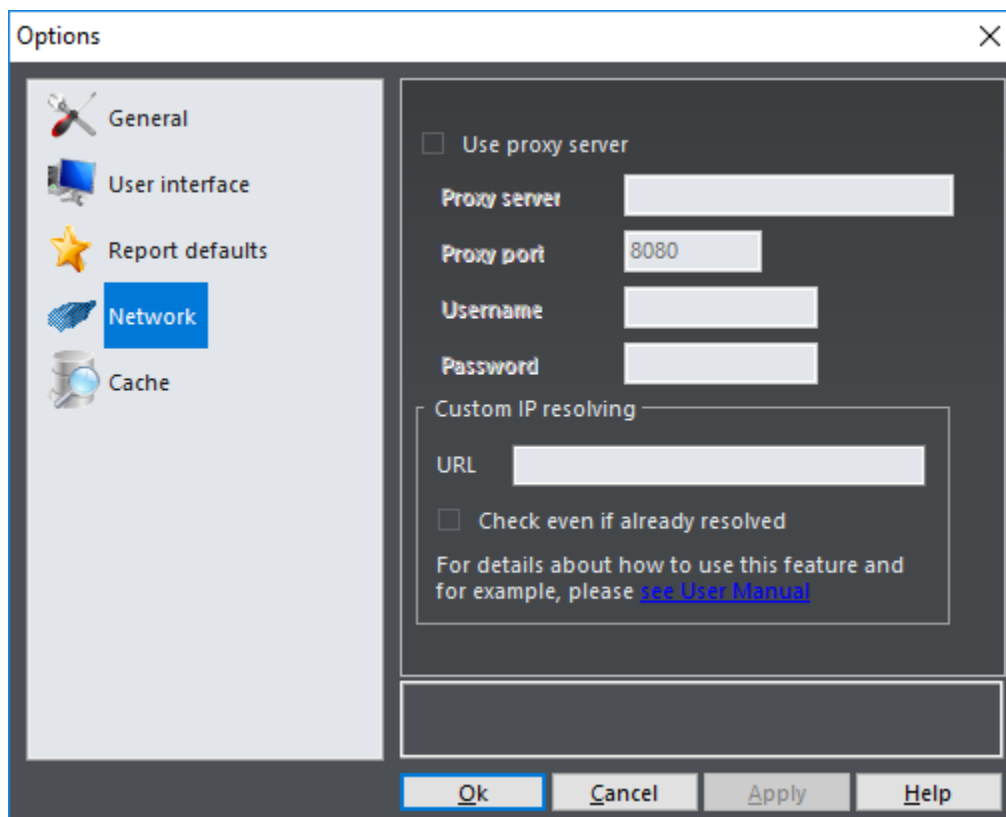
Use proxy server	If your connection requires using of proxy server, turn this option on
Proxy server	Enter proxy server name
Proxy port	Enter proxy server port
Username and Password	Enter username and password, if required
Custom IP resolving	*Professional* 7 *edition only*
URL	URL to check IP before regular resolving
Check even if already resolved	Always check, even if domain is already resolved. It could significantly slow down the process

Cache
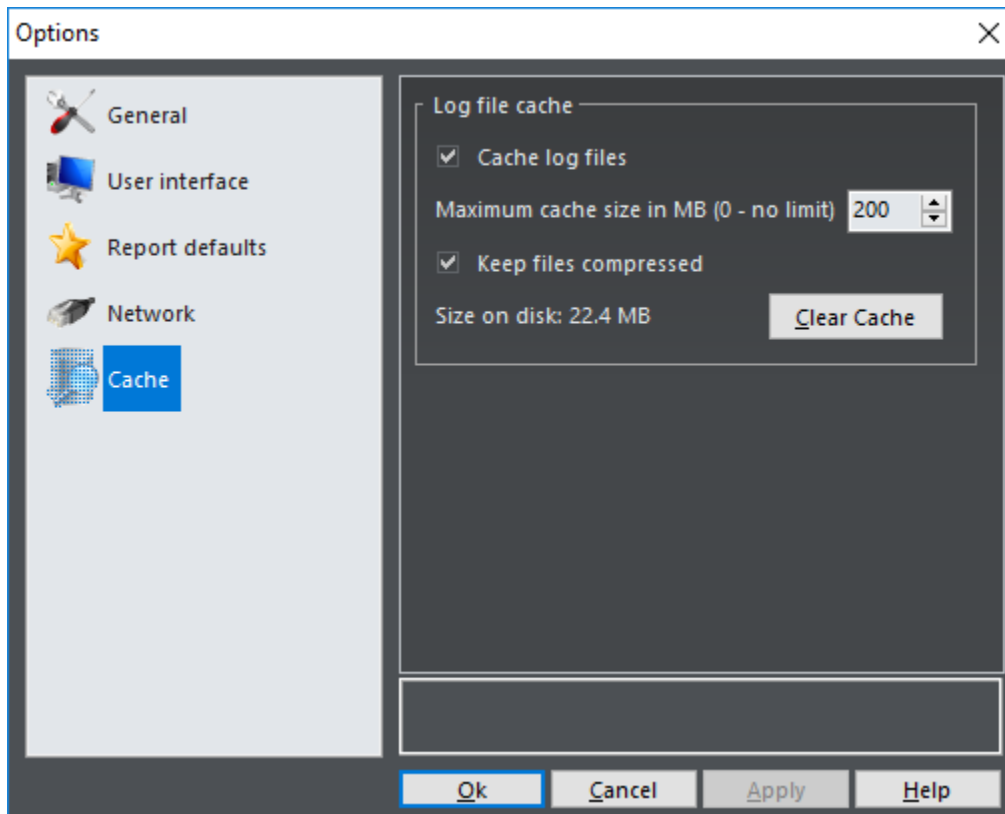
Cache log files	Save parsed log files for faster analyzing next time
Maximum cache size	Delete old cache when total size exceeds designated size
Keep files compressed	Slightly slows down reading, but significantly reduces disk space
Size on disk	Current cache size on disk
Clear Cache	Delete all cache files

See also

3.8 Find

By choosing **View | Find** or pressing **Ctrl+F**, the search panel will appear at the bottom of the report. While you type, any item that contains the specified text will be automatically marked (incremental search). Use **Next** button or press **F3** to jump to a next match.

3.9   Host Resolving

Professional ⌐7⌐ *edition only*

In case your server doesn't resolve IP addresses to host names automatically, you can use this tool. Note that Web Log Storming must have access to the Internet while resolving.
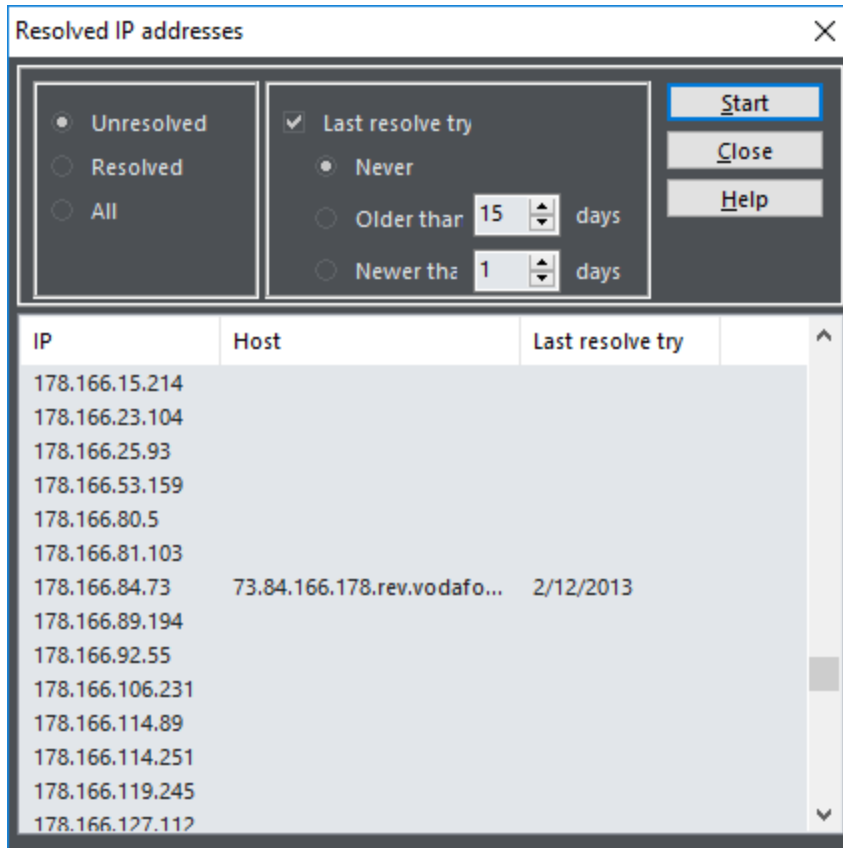
Use the top part of the window to resolve choose which IP addresses will be resolved, and the bottom part (and its right-click menu) to select and resolve individual addresses.

Unresolved	Resolve only **unresolved** IPs (including Unknown)
Resolved	Resolve **resolved** IPs again
All	Resolve all, resolved and unresolved IPs
Last resolve try	Limit resolving according to last resolve attempt. Available options: **Never**, **Older than X days** and **Newer than X days**

When you set appropriate options, click **Start** to start resolving.

See also

3.10 Custom IP resolving

Professional ⌐7⌐ *edition only*

In Options ⌐35⌐ window on **Network** page you can define custom URL that will be checked prior to regular IP to domain name resolving. It can be used by team members who want to share manually edited host names with each other.

The script on your web server should comply to precise but simple rules. To the URL you define in Options ⌐35⌐ window, Web Log Storming will add parameters that your script should respond to.

cmd   Command that should be execute. Possible values: **get** or **set**.

ip   IP address

domain   Domain name (only if command is **set**)

In other words, if you define this as URL:

> **http://mydomain.com/resolveip.php**

It will be used as:

> **http://mydomain.com/resolveip.php?cmd=get&ip=1.2.3.4**

or

> **http://mydomain.com/resolveip.php?cmd=set&ip=1.2.3.4&domain=John**

Return values

For **get** command, the script should just **return domain name** and nothing else. If not found, it should return **empty text**.

For **set** command, the script should write ip/domain pair into database (or whatever means you decide to use) and return **"OK"** if successful.

Example

Here is a simple example in php.

```php
<?php

// first, we get cmd and ip from parameters
$cmd = $_GET['cmd'];
$ip = $_GET['ip'];

// then we check cmd
if ($cmd == 'get') {

    // for 'get' command, we find $ip in database
    // by using custom find_ip() function...
    $domain = find_ip($ip);

    // ...and write the result to output
    echo $domain;

} elseif ($cmd = 'set') {

    // for 'set' command, we find read 'domain' parameter...
    $domain = $_GET['ip'];
```

```
// and call a function to write a pair into database
if (write_ip($ip, $domain)) {
        echo "OK";
} else {
        echo "Error";
}

}

?>
```

3.11 Advanced Editors

Use advanced editors to customize **operating system**, **browser**, **search engine, status/error descriptions** and **spider identification lists**.

> You can also edit these lists manually with **any text editor**. To find files use **Tools | Folders | All User Settings** option from the main menu.

Operating Systems, Browsers and Status/Errors

Editors for all three lists are similar.
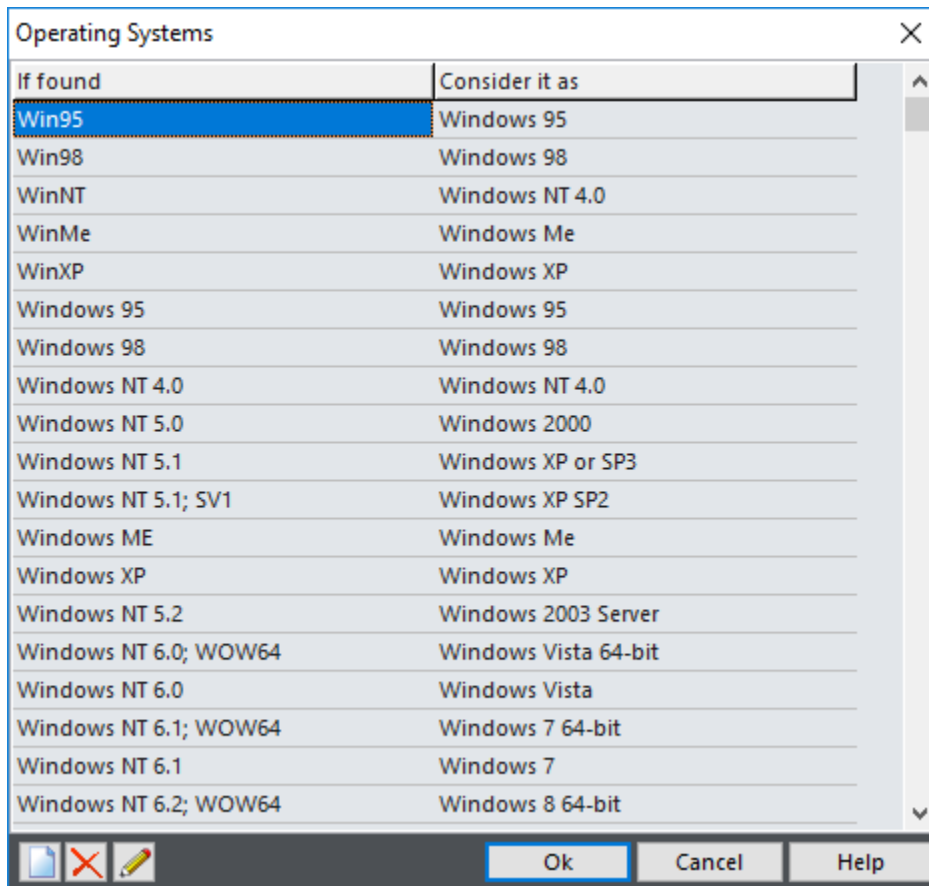
If found	Part of User Agent text that identifies item
Consider it as	Human-readable description

Search Engines

This editor is used to define how Web Log Storming recognizes search engines and search texts. Compared to the editors previously described, this editor is slightly different - it contains four columns.

If found	Search Query begins with	Result page nr. begins with	Page number divided with
search.yahoo	p	n	10
google.yahoo	p	b	20
google.	q	start	10
altavista	q	stq	10
search.msn	q		
web.ask.com	q	page	1
search.netscape	query	start	10
aolsearch.aol	query	page	1
alltheweb	q	o	10
excite	qkw	top	1
lycos	query	first	11
zdnet.search.com	q	start	10
bing	q	first	10
baidu	wd	pn	10
yandex	text	p	1
duckduckgo	q		

Search Engines window with Ok, Cancel, Help buttons

If found	Part of referrer text that identifies a search engine. It's also used in reports as a human-readable name
Search Query begins with	Value name from referrer query that represents search text. For example, Google and MSN use "**q**" ("...?**q**=search+text") and Yahoo uses "**p**" ("...?**p**=search+text").
Result page nr. begins with	**(Optional)** Value name from referrer query that represents result page number. For Google it's "**start**" ("...?...&**start**=20").
Page number divided with	**(Optional)** Depending on the search engine, the page number value can represent the index of first visible result instead of the real page number. For example, if Google sends "start=20" in referrer text, it's actually 3rd and not 20th page. To correct this, enter **10** into this column. In other words, here you should enter **default number of results on one page** used by the search engine.

Note that Google decided **not to share search keyword information** anymore, so there is no way for you to learn which Google search terms visitors use to find your website, by using Web Log Storming or any other web analytics solution. We have hoped that this policy will be changed, but apparently it won't happen. You can still see keywords from Yahoo, Bing and other search engines.

Spider User Agents and Domains

In these windows you can enter parts of User Agents that identify them as a spider (bot, crawler) and their IP addresses or domains. Note that not all spiders "behave" properly and that they sometimes introduce themselves as legitimate web browsers. In that case, you should define IP address wildcards by using **Tools | Spider Domains**.
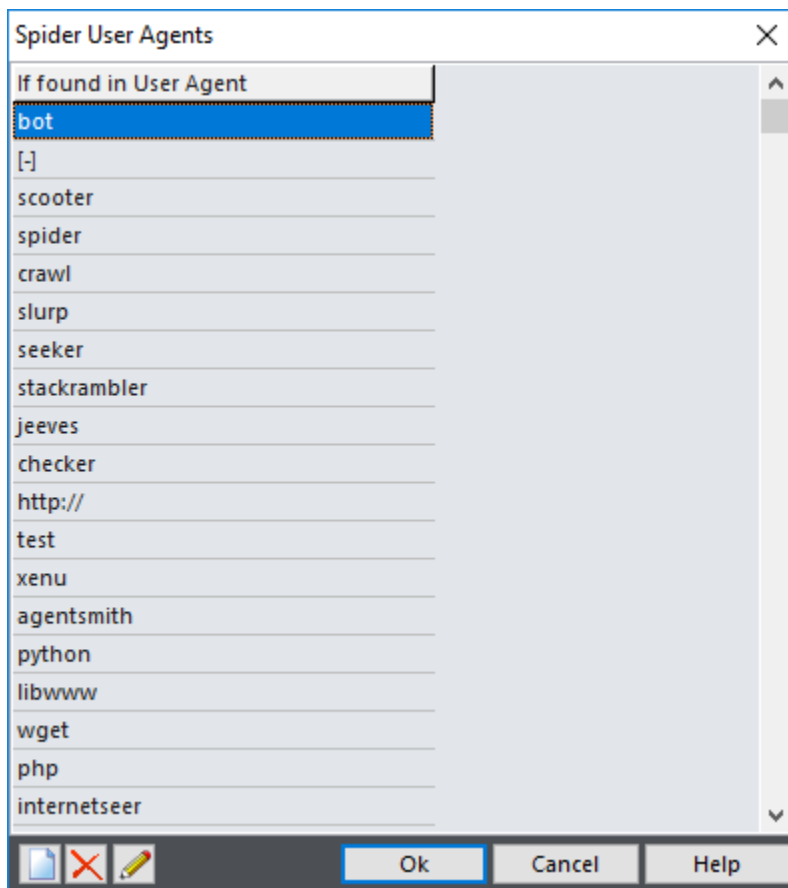
If found	Part of User Agent text that identifies spiders

In addition to this method, Web Log Storming also considers all visitors that access the **/robots.txt** file as a spider.

3.12 Parsing problems

Sometimes Web Log Storming can't read some log file lines. You can see error details in this window by choosing **Tools | Parsing problems**.
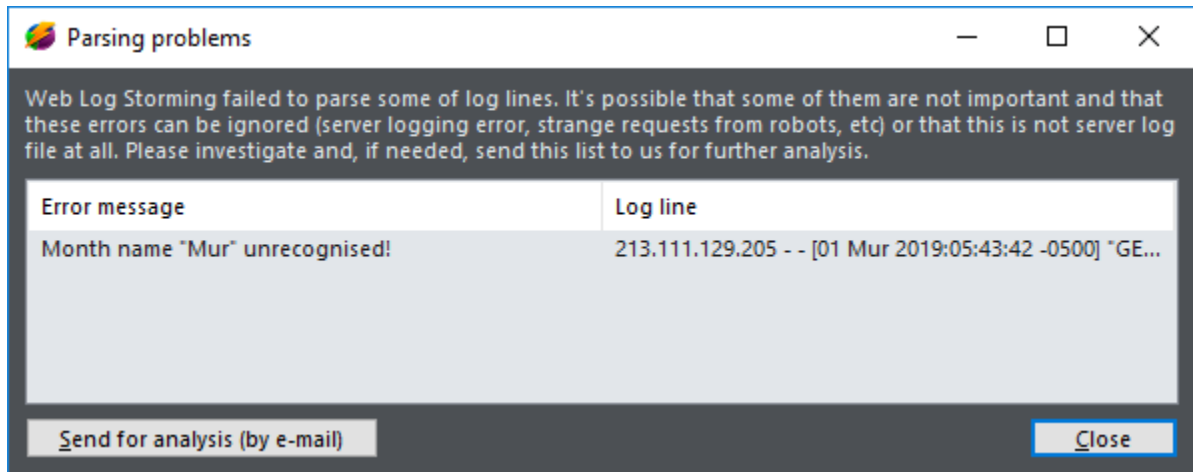
> When Web Log Storming detects an obvious format problem (i.e. when number of errors exceeds 5% of total lines), reading will be automatically canceled to avoid wasting time dealing with an unreadable file.

Reasons for errors could be different:

- ❑ **Small number** of individual lines are **corrupted** (due to server logging error, strange requests from robots, etc). In this case you will **see stats as usual**, but they won't contain these hits (in most cases it's safe to ignore these sporadic errors)
- ❑ There's a slight difference from expected log file format (for example, different date format). Your stats will **lack of significant amount of data** or, more likely, you will get **No data** results
- ❑ Log file format is not supported at all

In second or third case, please use the **Send for analysis** button so we can inspect what could be wrong and release a fix, if possible.

See also
          Log file formats supported 4

Reports

Part IV

4 Reports

One of main advantages of **Web Log Storming** is its unique capability to **easily change report results**, **browse** by clicking on items, and **drill-down** into details that other web statistics packages don't provide. Each report has both, chart and table representation. Charts are nicer, but tables are more complete and useful, especially if you wish to copy data (to a spreadsheet, for example).

Just like web browsers, Web Log Storming keeps a history of visited reports in the memory allowing you to use **Back** and **Forward** buttons for convenient browsing. Also, starting with version 2.0 Web Log Storming supports a **tabbed interface**. You can open any report in a new tab by holding the **Ctrl** button. This way you can switch between different reports for easy comparison.

You can choose from pre-defined basic reports and configure them to get an **unlimited number** of different reports. In this chapter, you will learn about each one of these pre-defined basic reports, and the use of parameters 74 and bookmarks 72 (*Pro*) features to create additional customizable reports.

4.1   Overview

Overview report gives you the summary information about the web log data currently loaded into the memory

Dates covered

Start date
Date and time of the first hit

End date
Date and time of the last hit

Total time
Difference between the start and end dates

Sessions and Hits

Total sessions
Total number of sessions

Average session per day
Average number of sessions per day (24 hours). Calculation is based on Total time value, not on the number of days covered. For example:

Total time:	**12 hours**
Total sessions:	**1000**
Average:	**2000**

Total hits
Total number of hits

Average hits per day
Average number of hits per day (24 hours), also based on Total time value.

Average hits per session
Average number of hits in one session

Page views and Downloads

Total different pages viewed
Number of pages viewed **at least once** in a session. **Three hits** on the same page in one session is considered as **one page view**

Average different pages viewed per session
Average number of different page views per session

Total different files downloaded
Total number of different files downloaded at least once in a session

Average different files downloaded per session
Average number of different files downloaded per session

Bounces (exactly one / at least one page)
Number of bounces compared to total number of visitors. It's not considered as a bounce if visitor hits more than one page **or** downloads a file

Visitors

Total visitor IP addresses
Number of different IP addresses (**unique visitors**)

Average session per IP address
Average number of sessions per IP address (**returning visitors** metric)

Average visitors at one moment
Average number of visitors browsing a website simultaneously

Bandwidth

Total bandwidth
Total data size transferred from your website

Average bandwidth per second
Average transfer speed. Note that "*Time spent*" value must exist in your log files - it's usually not available with the Apache Combined log file format

Average bandwidth per session
Average data size transferred per session

Average bandwidth per hit
Average data size transferred per hit

Time spent

Total time spent
Total time spent on your website by all visitors

Average time spent per session
Average time spent per session

Goals (*Pro*)

Conversions (totals and percentages) for user-defined Goals 33

See also
Parameters 74

4.2 Traffic

4.2.1 Visitors trend

This report shows the number of sessions between the start and end dates. Click on any bar to see list of sessions from a particular day (or range, depending on grouping options 80).

Bars represent **average** (or **total**) number of sessions in date/time range.

Red line represents a **cumulative average** - an average of all previous values. For example, the first value is same as the first bar value, second is an average of first and second bar value, and so forth.

Blue line is a **moving average** - an average of last 10 (configurable 80) bar values.

See also
Trend parameters 80
Parameters 74

4.2.2 Hits trend

This report shows the number of hits between the start and end dates. Click on any bar to see list of hits from a particular day (or range, depending on grouping options 80).

Bars represent **average** (or **total**) number of hits in date/time range.

Red line represents a **cumulative average** - an average of all previous values. For example, the first value is same as the first bar value, second is an average of first and second bar value, and so forth.

Blue line is a **moving average** - an average of last 10 (configurable 80) bar values.

See also
Trend parameters 80
Parameters 74

4.2.3 Bandwidth trend

This report shows transferred data between the start and end dates. Click on any bar to see list of sessions from a particular day (or range, depending on grouping options 80).

Bars represent **average** (or **total**) data size transferred in date/time range.

Red line represents a **cumulative average** - an average of all previous values. For example, the first value is same as the first bar value, second is an average of first and second bar value, and so forth.

Blue line is a **moving average** - an average of last 10 (configurable 80) bar values.

See also
Trend parameters 80
Parameters 74

4.2.4 Bps trend

This report shows transfer speed between the start and end dates. Click on any bar to see list of sessions from a particular day (or range, depending on grouping options 80).

This report requires a "*Time-taken*" value in log files. By default, Apache Combined log file format doesn't contain this value.

Bars represent **average** transfer speed in date/time range.

Red line represents a **cumulative average** - an average of all previous values. For example, the first value is same as the first bar value, second is an average of first and second bar value, and so forth.

Blue line is a **moving average** - an average of last 10 (configurable 80⌐) bar values.

See also

4.3 Top files and queries

4.3.1 All files

This report shows all files accessed by visitors, regardless of type.

Count is the number of **sessions** that accessed a file **at least once**, not the total number of hits.

File
> File name

Count
> Number of sessions accessed file at least once

Percent (%)
> Share of total file visits

Bandwidth
> Total data transferred while retrieving this file

Percent (%)
> Share of total bandwidth

Bw/Sess
> Average data transferred per session for the specific file

Bounces
> Number of bounces (not visited another page and not downloaded a file)

Percent (%)
> Bounce rate in percents

Goals and %
> Conversions (totals and percentages) for user-defined Goals 33

See also
> Goals 33
> Parameters 74

4.3.2 Pages

This report shows pages accessed by visitors.

Count is the number of **sessions** that accessed a page **at least once**, not the total number of hits.

File
> Page name

Count
> Number of sessions accessed page at least once

Percent (%)
> Share of total page visits

Bandwidth
> Total data transferred while retrieving this page

Percent (%)

Share of total bandwidth

Bw/Sess

Average data transferred per session for the specific page

Bounces

Number of bounces (not visited another page and not downloaded a file)

Percent (%)

Bounce rate in percents

Goals and %

Conversions (totals and percentages) for user-defined Goals 33

See also

Goals 33
Parameters 74
Options 35

4.3.3   Files

This report shows files downloaded by visitors.

Count is the number of **sessions** that accessed a file **at least once**, not the total number of hits.

File

File name

Count

Number of sessions accessed file at least once

Percent (%)

Share of total file downloads

Bandwidth

Total data transferred while downloading this file

Percent (%)

Share of total bandwidth

Bw/Sess

Average data transferred per session for the specific file

Bounces

Number of bounces (not visited another page and not downloaded a file)

Percent (%)

Bounce rate in percents

Goals and %

Conversions (totals and percentages) for user-defined Goals 33

See also

Goals 33
Parameters 74
Options 35

4.3.4 Images

This report shows images accessed by visitors.

Count is the number of **sessions** that accessed an image **at least once**, not the total number of hits.

File
Image name

Count
Number of sessions accessed image at least once

Percent (%)
Share of total image visits

Bandwidth
Total data transferred while retrieving this image

Percent (%)
Share of total bandwidth

Bw/Sess
Average data transferred per session for the specific image

Bounces
Number of bounces (not visited another page and not downloaded a file)

Percent (%)
Bounce rate in percents

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Goals 33
Parameters 74
Options 35

4.3.5 File types

This report shows file types (extensions) accessed by visitors.

Count is the number of **sessions** that accessed a file of a specific type **at least once**, not the total number of hits.

File
File type (extension)

Count
Number of sessions accessed file of this type at least once

Percent (%)
Share of total file type visits

Bandwidth
Total data transferred while retrieving this file type

Percent (%)
Share of total bandwidth

Bw/Sess
      Average data transferred per session for the specific file type

Bounces
      Number of bounces (not visited another page and not downloaded a file)

Percent (%)
      Bounce rate in percents

Goals and %
      Conversions (totals and percentages) for user-defined Goals 33

See also
      Goals 33
      Parameters 74

4.3.6   Directories

This report shows directories accessed by visitors. Additionally, if you defined custom **prefix** in the Log File Location 29 window, the prefix is included in this report.

> *Count* is the number of **sessions** that accessed a directory **at least once**, not the total number of hits.

File
      Directory name

Count
      Number of sessions accessed directory at least once

Percent (%)
      Share of total directory visits

Bandwidth
      Total data transferred while retrieving files from this directory

Percent (%)
      Share of total bandwidth

Bw/Sess
      Average data transferred per session for files from specific directory

Bounces
      Number of bounces (not visited another page and not downloaded a file)

Percent (%)
      Bounce rate in percents

Goals and %
      Conversions (totals and percentages) for user-defined Goals 33

See also
      Goals 33
      Parameters 74

4.3.7 Queries

This report shows queries (text after "?" mark in URL) used when accessing pages/files.

Count is the number of **sessions** that used a query **at least once**, not the total number of hits.

Query
> Query text

Count
> Number of sessions used a query at least once

Percent (%)
> Share of total query uses

Bandwidth
> Total data transferred while using this query

Percent (%)
> Share of total bandwidth

Bw/Sess
> Average data transferred per session for the specific query

Goals and %
> Conversions (totals and percentages) for user-defined Goals ⌐33⌐

See also
> Goals ⌐33⌐
> Parameters ⌐74⌐

4.3.8 Query Parts

Similar to Queries ⌐59⌐, this report shows query parts (text after "?" mark in URL, divided by "&" and counted separately) used when accessing pages/files.

Count is the number of **sessions** that used a query **at least once**, not the total number of hits.

Query Part
> Query part text

Count
> Number of sessions used a query part at least once

Percent (%)
> Share of total query part uses

Bandwidth
> Total data transferred while using this query part

Percent (%)
> Share of total bandwidth

Bw/Sess
> Average data transferred per session for the specific query part

Goals and %
> Conversions (totals and percentages) for user-defined Goals ⌐33⌐

See also

4.4 Referrers

4.4.1 Referrer Pages

This report shows web pages that visitors came from.

Referrer
> Referrer page URL

Count
> Number of sessions initiated by referrer page

Percent (%)
> Share of total referrals

Bw/Sess
> Average data transferred per session that was initiated by a specific referrer page

Bounces
> Number of bounces (not visited another page and not downloaded a file)

Percent (%)
> Bounce rate in percents

Goals and %
> Conversions (totals and percentages) for user-defined Goals [33]

See also
> Goals [33]
> Parameters [74]

4.4.2 Referrer Groups

This report shows referrer groups that visitors came from. Referrer group is the text that remains after removing "www", page and top-level domain parts of URL. For example, www.**google**.com, www.**google**.co.uk and www.google.co.ca all belong to the same group: **google**.

Referrer Group
> Referrer group name

Count
> Number of sessions initiated by referrers from the group

Percent (%)
> Share of total referrals

Bw/Sess
> Average data transferred per session that was initiated by referrers from a specific group

Percent (%)
> Bounce rate in percents

Goals and %
> Conversions (totals and percentages) for user-defined Goals [33]

See also
> Goals [33]
> Parameters [74]

4.4.3   Search Engines

This report shows search engines that visitors came from. It is similar to the Referrer Groups $\boxed{61}$ report, except it contains only search engines (recognition list is configurable in Search Engines $\boxed{62}$ editor).

Referrer Group
>   Search engine group name

Count
>   Number of sessions initiated by search engine

Percent (%)
>   Share of total referrals

Bw/Sess
>   Average data transferred per session that was initiated by a specific search engine

Percent (%)
>   Bounce rate in percents

Goals and %
>   Conversions (totals and percentages) for user-defined Goals $\boxed{33}$

See also
>   Search Engines editor $\boxed{44}$
>   Goals $\boxed{33}$
>   Parameters $\boxed{74}$

4.4.4   Search Engine Phrases

This report shows search phrases used by visitors.

Phrase
>   Phrase text

Pages
>   Originating search result page number (or range)

Count
>   Number of sessions initiated by specific search phrase

Percent (%)
>   Share of total referrals

Bw/Sess
>   Average data transferred per session that was initiated by a specific phrase

Percent (%)
>   Bounce rate in percents

Goals and %
>   Conversions (totals and percentages) for user-defined Goals $\boxed{33}$

See also
>   Search Engines editor $\boxed{44}$
>   Goals $\boxed{33}$
>   Parameters $\boxed{74}$

4.4.5   Search Engine Words

This report shows search engine words used by visitors.

Word
> Word text

Count
> Number of sessions initiated by specific search word

Percent (%)
> Share of total referrals

Bw/Sess
> Average data transferred per session that was initiated by a specific word

Percent (%)
> Bounce rate in percents

Goals and %
> Conversions (totals and percentages) for user-defined Goals 33

See also
> Search Engines editor 44
> Goals 33
> Parameters 74

4.5 Visitor behavior

4.5.1 Top Entry pages

This report shows list of entry pages or files. By adjusting Path parameters 80, you can control the way paths will be grouped. By default this report is grouped by first page/file only, and you can change this value to the first two pages or more.

Path
Sequence of pages/files

Count
Number of sessions used specific sequence

Percent (%)
Share of total visits

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Path parameters 80
Goals 33
Parameters 74

4.5.2 Top Exit pages

This report shows list of exit pages or files. By adjusting Path parameters 80, you can control the way paths will be grouped. By default this report is grouped by last page/file only, and you can change this value to the last two pages or more.

Path
Sequence of pages/files

Count
Number of sessions used specific sequence

Percent (%)
Share of total visits

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Path parameters 80
Goals 33
Parameters 74

4.5.3 Paths

This report shows list of paths through website. By adjusting Path parameters 80, you can control the way paths will be grouped. By default this report is not grouped.

Path
Sequence of pages/files

Count
Number of sessions used specific sequence

Percent (%)
        Share of total visits

Goals and %
        Conversions (totals and percentages) for user-defined Goals [33]

See also
        Path parameters [80]
        Goals [33]
        Parameters [74]

4.5.4   Time Spent

This report shows visit durations per groups.

> If you don't use Hybrid analysis [16], this information can only be extracted from log files, meaning that only the time of the hit will be taken in the consideration - there is no way to know how much time visitor spent reading the last page he visits. However, if you do use Hybrid analysis [16], it will be **more accurate**, as the script will periodically make "artificial hits", as long visitor moves a mouse over the page at least a bit.

Time Spent
        Group of visit duration

Count
        Number of sessions that belong to specific group

Percent (%)
        Share of total visits

Bandwidth
        Total data transferred by sessions from this group

Percent (%)
        Share of total bandwidth

Bw/Sess
        Average data transferred per session that belong to this group

Goals and %
        Conversions (totals and percentages) for user-defined Goals [33]

See also
        Page tagging for hybrid analysis [16]
        Goals [33]
        Parameters [74]

4.6 Visitor info

4.6.1 Countries

This report shows top countries your visitors originate from (based on IP address). By clicking a pie slice you can view a list of sessions from a specific country.

See also
> Pie parameters⎡81⎤
> Parameters⎡74⎤

4.6.2 Regions

Professional⎡7⎤ edition only

This report shows top regions your visitors originate from (based on IP address). By clicking a pie slice you can view a list of sessions from a specific region.

See also
> Pie parameters⎡81⎤
> Parameters⎡74⎤

4.6.3 Cities

Professional⎡7⎤ edition only

This report shows top cities your visitors originate from (based on IP address). By clicking a pie slice you can see list of sessions from a specific city.

See also
> Pie parameters⎡81⎤
> Parameters⎡74⎤

4.6.4 Cookie IDs

Professional⎡7⎤ edition only

This report shows visitor cookie IDs assigned to each visitor (provided JavaScript is enabled). It is required to include short script code on your pages for this to work (see more information⎡16⎤).

Cookie ID
> Random Cookie ID assigned to each visitor on first visit

Count
> Number of sessions with specific Cookie ID

Bandwidth
> Total data transferred

Percent (%)
> Share of total bandwidth

Bw/Sess

Average data transferred per session with this Cookie ID

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Page tagging for hybrid analysis 16
Goals 33
Parameters 74

4.6.5   Domains

This report shows visitor's IP addresses and/or host names.

Domain
Visitor's IP address or host name

Count
Number of sessions from specific domain

Bandwidth
Total data transferred from specific domain

Percent (%)
Share of total bandwidth

Bw/Sess
Average data transferred per session from this domain

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Host Resolving 41
Goals 33
Parameters 74

4.6.6   Operating Systems

This report shows top operating systems that website visitors use. By clicking a pie slice you can view a list of sessions using specific operating systems.

See also
Operating Systems editor 44
Pie parameters 81
Parameters 74

4.6.7   Browsers

This report shows top browsers, download manager or other type of client applications that website visitors use. By clicking a pie slice you can view a list of sessions using a specific client application.

See also
Browsers editor 44

Pie parameters 81
Parameters 74

4.6.8 Screen Resolutions

Professional 7 *edition only*

This report shows visitor's screen resolutions (provided JavaScript is enabled). It is required to include short script code on your pages for this to work (see more information 16).

Screen Resolution
Screen resolution detected via script

Count
Number of sessions with specific resolution

Percent (%)
Share of total bandwidth

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Page tagging for hybrid analysis 16
Goals 33
Parameters 74

4.6.9 Users

Professional 7 *edition only*

This report shows authenticated users that accessed a website.

User
Visitor's user name

Count
Number of sessions from specific user

Percent (%)
Share of total sessions

Goals and %
Conversions (totals and percentages) for user-defined Goals 33

See also
Goals 33
Parameters 74

4.7   Status/Errors

4.7.1   Status/Errors

This report shows plain status and error codes generated by your web server.

Status
> Status code

Description
> Description of status/error code

Count
> Number of hits resulted with specific status code

See also
> Status editor 44
> Parameters 74

4.7.2   Page not found (404)

This report shows attempts to access files that don't exist (404 error code).

File
> File name

Count
> Number of sessions attempted to access a non-existing file at least once

Percent (%)
> Share of total visits with 404 status code

Bandwidth
> Total data transferred while downloading this file

Percent (%)
> Share of total bandwidth

Bw/Sess
> Average data transferred per session for the specific file

Bounces
> Number of bounces (not visited another page and not downloaded a file)

Percent (%)
> Bounce rate in percents

Goals and %
> Conversions (totals and percentages) for user-defined Goals 33

See also
> Parameters 74

4.8   Raw data

4.8.1   Sessions

This report shows a raw session list.

Date and time
> Session start date and time

Host
> Visitor's host IP address or name, if available (see Host Resolving 41)

Cookie ID
> Visitor's Cookie ID, if available (see Hybrid analysis 16)

Hits
> Number of total hits in session

Pages
> Number of different pages viewed in this session

Bandwidth
> Data size transferred in this session

Country
> Visitor's country

Referrer
> Referrer page that session was initiated from

Goals
> Shows if user-defined Goals 33 are fulfilled in this session

See also
> Host Resolving 41
> Goals 33
> Parameters 74

4.8.2   Hits

This report shows a raw hit list. Each hit type is represented by different color (see Options 35). You can temporarily hide specific types by using checkboxes at the bottom of the screen.

Date and time
> Hit date and time

Client host
> Visitor's host IP address or name, if available (see Host Resolving 41)

File
> File name

Query
> Query, if it exists

Status
> Status code generated by server

Bandwidth
> Data size transferred for this hit

Method
> Method used to access file (GET, POST, HEAD...)

Referrer
> Referrer page that hit was initiated from

See also
> Host Resolving ⌐41⌐
> Goals ⌐33⌐
> Parameters ⌐74⌐
> Options ⌐35⌐

4.8.3   Raw User Agents

This report shows raw user agent texts sent by visitor's client application. It is also used for Operating Systems and Browsers ⌐44⌐ and Spiders ⌐45⌐ identification.

User Agent
> Raw user agent text

Count
> Number of sessions used specific user agent

Percent (%)
> Share of total sessions

Goals and %
> Conversions (totals and percentages) for user-defined Goals ⌐33⌐

See also
> Advanced Editors ⌐44⌐
> Operating Systems report ⌐67⌐
> Browsers report ⌐67⌐
> Goals ⌐33⌐
> Parameters ⌐74⌐

4.9 Bookmarks

Professional [7] *edition only*

While using browsing [15] features and tweaking parameters [15], you will occasionally find a report that you'll want to be able to view again. Use options from the Bookmark menu [22] or press **Ctrl+D** to add the current report to the list of favorites.

Bookmark	✕
Name **Referrer Groups**	
☐ Global for all projects	
	Ok Cancel
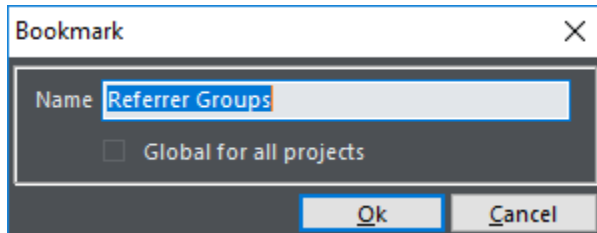
When adding or editing a bookmark, you can change its name or mark it as **Global**. Global bookmarks are visible in **all projects**, while non-global can be selected only if you are currently analyzing the associated project file.
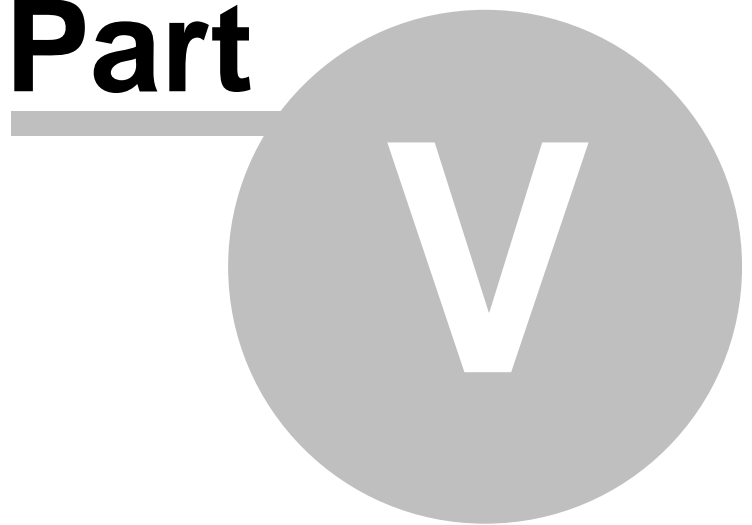
Non-global bookmarks are **written to the .wls file**, so make sure you save the .wls file to avoid losing changes.

See also
Bookmarks menu [22]

Parameters

Part V

5   Parameters

Parameters are unique feature and main advantage of **Web Log Storming** compared to other web log analyzers. They are basically "on-the-fly" filters used to easily segment results, allowing you to quickly analyze various aspects of web statistics. Technology used here is essential for the browsing capabilities 15 of **Web Log Storming**.

Parameters are grouped by several pages. Each individual page values can be "locked" by clicking on the 🔒 button so they don't change when you switch to another report. To keep all parameter values intact press and hold the **Shift** key or use the **Keep parameters and select** report tree context-menu option.

Some of pages are available for all reports:

- ❑   Date 75
- ❑   File 75
- ❑   Referrer 77
- ❑   Visitor 78

Other parameter pages are applicable for specific report types only:

- ❑   Trend 80 (for trend reports)
- ❑   Path 80 (for path-based reports)
- ❑   Pie parameters 81 (for pie reports)

5.1 General

5.1.1 Date parameters

Date parameters limit resulting statistics by date and/or time.

All

> Base statistics on all available dates

Range

> Base statistics on range of dates

Relative

> Base statistics on relative date range. Available options:
>
> - ❑ Today
> - ❑ Yesterday
> - ❑ Last 7 days
> - ❑ Last 30 days
> - ❑ This week
> - ❑ Last week
> - ❑ This month
> - ❑ Last month
> - ❑ This year
> - ❑ Last year

From hour, To hour

> Limit results to a specific time of the day range

Day of the week

> Limit results to a specific day of the week

Month of the year

> Limit results to a specific month of the year

5.1.2 File parameters

File parameters limit resulting statistics by files, queries, status, bandwidth and path. This parameter page is also used by the Goals 33 editor.

> This pane is also used to Edit Goals 33 and it includes few shortcuts at the bottom.

Same hit match

> If this checkbox is checked, **Wildcards**, **Query**, **Status** and **Bandwidth** filters must all match **a single hit**. If you leave this option unchecked, filters will be matched to **any hit** in the session.
>
> *Example:*
>
> Wildcard = **/page1.html**
> Query = **GoogleAdword**
>
>
> **Session1:**/page1.html
>   /page2.html?GoogleAdword

        Session2:/page1.html?GoogleAdword
               /page2.html

If **Same hit match** is **checked**, only **Session2** will be included in stats, because both constraints are fulfilled in the first hit.
If **not checked**, **both** sessions will be included in stats, because both constraints are fulfilled in different hits.

File wildcards

Enter file names or file wildcards⌐82⌐ to limit statistics. You can separate them by comma or semicolon and use operators (see examples).

Examples:

/page1.html
    Session must contain hit to /page1.html file

*.pdf
    Session must contain any of *.pdf files

+/page1.html, +/page2.html, -/dir/*
    To qualify, session most contain **both**, /page1.html and /page2.html files, and mustn't contain any file from /dir/ directory

/page1.html, /page2.html, -/dir/*
    Without "+" signs, session must contain **at least one** of two specified files, and still mustn't contain any file from /dir/ directory

-*.gif|spec*.gif
    Excludes **all sessions** that accessed any of ***.gif** files, except **spec*.gif**

.gif|spec.gif
    Includes **only sessions** that accessed any of ***.gif** files, except **spec*.gif**. Same effect can be accomplished with **"*.gif, -spec*.gif"**

Query

Enter query text or wildcards⌐82⌐ to limit report results to whole or part of the queries.

Example:

version=1.0, *version=1.1*

Query part

Similar to previous, but only looks through part of queries divided by "&". Wildcards⌐82⌐ supported.

Example:

version=1.0, *version=1.1*

Status

Limit results to specified status. Wildcards and operators are not supported here.

Examples:

200
404

Method

Use this drop-down list to select which access methods will be shown in results.

Examples:

```
All
GET
POST
```

Hit bandwidth

Show results depending on bandwidth of single hit

Examples:

```
>= 100 KB
<= 1 KB
```

Total time spent

Show results depending on visit duration. You can enter lower and upper limit.

Examples:

```
1 minutes - 30 minutes
1 hour - 3 days
```

Path

Limit results to sessions with specified page sequence. Syntax is similar to **File wildcards**, except it doesn't support operators, and delimited values are handled differently (as a sequence).

Examples:

```
/index.html, /dir/*, *
```
To qualify, session must start with **/index.html**, then **directly** access any file from **/dir/** directory. The rest of the hits don't affect results.

```
/index.html, *, /dir/*
```
Note the difference in sequence (**"*"** is moved between other two parts). Here, session must **start** with **/index.html** and **exit** from any files from **/dir/** directory. What happens in between doesn't matter.

```
*, /index.html
```
Session must **exit** from /index.html page. What happens before doesn't matter.

Show only files matching

If entered, the report will only show matching files. **File wildcard** parameter above filters **sessions**, while this parameter filters the result list. It only applicable for file-based reports.

Examples:

```
*.pdf
```
Report list will only PDF files.

See also

5.1.3   Referrer parameters

Referrer parameters limit resulting statistics by referrers and search engine phrases/words. There are two parts of this page that can be combined together:

- ❑ **Referrer** and **Referrer Group**
- ❑ **Search Phrase** and **Search Word**

Combine them by choosing **AND** or **OR** option.

> Two values of the same part are related (referrer group text is already contained in referrer page URL, and search word is contained in search phrase text). Therefore, there is no sense to enter both values from the same part (changing clears the other one).

Examples:

Referrer Group = `google`
[AND]
Search Phrase = `my search phrase`
    Sessions referred by Google with "my search phrase" search.

Referrer Group = `google`
[OR]
Search Phrase = `my search phrase`
    Sessions referred by Google (with **any phrase**), or searching for "my search phrase" (with **any search engine**).

As in other text-based parameters, wildcards 82 are supported.

See also
    Wildcards 82
    Search Engines editor 44

5.1.4   Visitor parameters

Visitor parameters limit resulting statistics by visitor and session based information.

Visitor's IP address

    Enter IP address or a wildcard 82

    Example:

        `111.222.*`
            Includes session from specified IP range only

Visitor's host name

    Filter by visitor's host name or a wildcard 82

    Example:

        `*.provider.net, *.other.org`
            Includes session from either one of specified host names

Cookie ID

    Filter by visitor's Cookie ID, if it's available

    Example:

        `150303*`
            Includes sessions with first visit on 2015-03-03.

Country

    Select country from the list to limit resulting statistics

Region

Select region from the list to limit resulting statistics

City

Select city from the list to limit resulting statistics

Because of the large number of items, you can only select **Region** and **City** after you choose **Country**.

Operating System

Select operating system from the list to limit resulting statistics

Browser

Select browser from the list to limit resulting statistics

Screen Resolutions

Select screen resolution. Hybrid analysis 16 required.

Raw User Agent text

Enter wildcard 82 for raw user agent. Use this when you need advanced filtering (i.e. when **Operating System** and **Browser** parameters don't suffice).

Authenticated user

Show results depending on user (HTTP Basic Authentication)

Total session bandwidth

Show results depending on total session bandwidth

Examples:

```
>= 100 KB
<= 1 KB
```

See also
Advanced Editors 44

5.2 Report specific

5.2.1 Trend parameters

Details for trend type reports are configured here. Default values are configured in the Options 37 window.

Value type

When the trend report is grouped by period instead of day, it can show **average** or **total** numbers. Default is **average**. Note that changing this value will not affect the general "shape" of report, but numbers on the left axis could be different.

If report is grouped by day, average and total values are the same and you won't notice any difference.

Group By

When you are analyzing a large time period, bars could become too thin to click. To avoid this (or if you simply want to see differently presented graph), group results by custom time range.

Available options:

- ❏ Default
- ❏ Day
- ❏ Day of week
- ❏ Week
- ❏ Month
- ❏ Month of year
- ❏ Hour

If you choose **Default**, the report will be grouped according to default configured in the Options 37 window.

Moving average count

Enter number of values to use when calculating moving average

See also
Options 37

5.2.2 Path parameters

Configure how path-based reports will be grouped.

All

All path items are presented separately and will contain an unlimited number of pages/files

Group first, **Group last**

Group path items by first (or last) X pages/files

Example:

Group first, 1
Shows list of entry pages/files (same as Top Entry pages 64 report)

Group last, 2
Shows list of paths grouped by pairs of two last exit pages/files

5.2.3   Pie parameters

Configure pie type reports appearance.

Include unknown

If checked, Unknown items will be included in the report (for example, unknown countries or cities)

Percent limit

If this value is not zero, Web Log Storming will "cut off" less popular items that sum to the maximum of specified value and group them in the **Other** slice.

5.3   Wildcards

Most of the text-based parameters support wildcards with multiple parts and operators. Parts can be separated with **semicolon** (";") or **comma** (",").

Supported operators are:

without operator	**"Soft" include** - include if **either one** of specified conditions is fulfilled
"-"	**Exclude**
"+"	**"Hard" include** - **all** specified conditions must be fulfilled (only makes sense for file parameters 75)
"|"	**Except**

Examples:

```
condition1
```
Session/hit qualifies if **condition1** is **true**

```
-condition1
```
Qualifies only if **condition1** is **false**

```
condition1, -condition2
```
Qualifies if **condition1** is **true** and **condition2** is **false**

```
condition1, condition2
```
Qualifies if **either one** of conditions is **true**

```
+condition1, +condition2
```
Qualifies if **both** of conditions are **true**

```
+condition1, condition2, condition3
```
Qualifies if **condition1** is **true** and either one of remaining conditions is **true**

> When there is only one condition without any operator, engine behaves same as if you put a "+" operator in front of it. For example, "soft" include of single condition means that it **must** be fulfilled. Similarly, `"+condition1, +condition2, condition3"` is same as `"+condition1, +condition2, +condition3"`. In both examples conditions 1 and 2 must be true (because of **"+"** operator), but one of remaining ("soft") conditions must also be true, and there's only one.

```
condition1, -condition2
```
Qualifies if **condition1** is **true** and **condition2** is **false**

```
-condition1|condition2
```
Qualifies only if **condition1** is **false** except when **condition2** is **true**

```
condition1|condition2
```
Qualifies only if **condition1** is **true** except if **condition2** is **true**

See also

Other information

Part VI

6 Other information

6.1 Purchase

We offer a **free trial** for **Web Log Storming** so you can investigate its benefits in detail before your final decision. For any further assistance, please contact us 86.

- ❑ Fully functional and **unlimited version**
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- ❑ **Free updates** for two years regardless of version, a **discount** afterwards
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Buy now:
https://www.weblogstorming.com/purchase.html

6.2 Credits

We would like to use this page to thank to developers who made their products and libraries available.

CodeGear Delphi
Main development environment
http://www.codegear.com/

IP Location Tools
GeoIP database
http://www.iplocationtools.com/

TMS Component Pack
Various components
http://www.tmssoftware.com/

SpTBXLib
Menus, toolbars and custom themes (skins)
http://www.silverpointdevelopment.com/sptbxlib/

TurboPower Abbrevia
Compression libraries
http://tpabbrevia.sourceforge.net/

JEDI components
Various components
http://www.delphi-jedi.org/

MaxComponents
Auto-update component
http://www.maxcomponents.net/

Icons
http://www.icons-icons.com/, http://www.famfamfam.com/, http://www.dsbglobal.com/
, ...

6.3   Contact

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Index

- - -

- operator   82

- | -

| operator   82

- + -

+ operator   82

- 4 -

404 report   69

- A -

advantages   5
all files report   55
analyze   15
auto-check for updates   35

- B -

bandwidth   6
bandwidth trend report   53
bookmarks   72
bookmarks menu   22
bps   6
bpw trend report   53
browsers configuration   44
Browsers editor   44
browsers report   67
browsing   15
buy   84

- C -

caching   35
cities report   66

clipboard, lines to copy   35
company hompage   86
compare editions   7
contact   86
cookie ids   66
countries report   66
Credits   85
custom ip resolving   42

- D -

date parameters   75
default report settings   35
define project   25
differences   5
directories report   58
domains report   67
download log files   29
duration   65

- E -

edit project   25
errors report   69
examples, wildcards   82
export, lines to export   35
extensions report   57

- F -

file formats   4
file menu   22
file parameters   75
file types report   57
file wildcards configuration   35
files report   56
find in report   40
FTP   29

- G -

getting started   10
global filters   25
goals   33
group by   80
grouping paths   80

- H -

- I -

- J -

- L -

- M -

- N -

- O -

- P -

- Q -

- R -

referrer   6
referrer groups report   61
referrer pages report   61
referrer parameters   77
regions report   66
register   84
report defaults   35
reports   50
request   6
resolution   16
resolutions   68

- S -

screen resolutions   68
script   16
search engine phrases report   62
search engine words report   63
search engines configuration   44
Search Engines editor   44
search engines report   62
search phrases and words parameters   77
search report   40
session   6
session details   70
session list   70
session timeout configuration   35
session timeout value   6
sessions report   70
slow processing   17
spiders configuration   44
Spiders editor   45
standard edition   7
start screen   20
status and error configuration   44
status and errors report   69
Status/Error descriptions editor   44
strengths   5
support   86

- T -

terminology   6
time on website   65
time spent   65
tools menu   23
top entry pages report   64

top exit pages report   64
trend parameters   80
trend reports   53

- U -

use parameters   15
user agents report   71
user id   16
users report   68

- V -

view menu   22
visit duration   65
visitor   6
visitor id   16
visitor parameters   78
visitor tracking   66
visitors trend report   53

- W -

where to start   10
wildcards   82
window size   68