



[www.apacheviewer.com](http://www.apacheviewer.com)

# Apache Logs Viewer Manual

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## 1. Introduction

Welcome to Apache Logs Viewer, the free<sup>1</sup> tool that will help you analyze and monitor your Apache, IIS, nginx or other custom web server log files. Apache Logs Viewer has a number of features which makes it quite a powerful tool, namely Filters, Search, Reports and Statistics. Throughout this manual each of these features is explained in detail so that you can get the most out of Apache Logs Viewer.

The screenshot shows the Apache Log Viewer application window. The main area displays a table of log entries. The columns are: IP Address, Date, Request, Stat., Size, Country, and Referrer. The data is sorted by Date in descending order. The status codes are color-coded: 200 (green), 304 (yellow), and 404 (red).

IP Address	Date	Request	Stat.	Size	Country	Referrer
157.55.33.113	7/25/2013 12:23:30 AM	GET / HTTP/1.1	200	3759	United States	-
66.249.72.135	7/25/2013 12:47:30 AM	GET /ahata/mamuru.png HTTP/1.1	304	0	United States	-
203.176.183.196	7/25/2013 1:12:09 AM	GET /hyperblog.pdf HTTP/1.0	200	1529968	Indonesia	http://hyperlanet.org/
184.134.115.4	7/25/2013 1:42:38 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	United States	http://hyperlanet.org/
80.115.170.108	7/25/2013 1:56:44 AM	GET /hyperblog.pdf HTTP/1.0	200	1529968	United States	http://hyperlanet.org/
250.109.228.67	7/25/2013 3:09:42 AM	GET /hyperblog.pdf HTTP/1.0	200	1529968	Venezuela	http://hyperlanet.org/
186.46.144.22	7/25/2013 3:11:04 AM	GET /hyperblog.pdf HTTP/1.0	200	1529968	United States	http://hyperlanet.org/
108.178.10.18	7/25/2013 3:24:07 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	United States	http://hyperlanet.org/
156.143.143.29	7/25/2013 3:57:39 AM	GET /hyperblog.pdf HTTP/1.0	200	1529968	United States	http://hyperlanet.org/
178.255.215.72	7/25/2013 5:06:51 AM	GET /robots.txt HTTP/1.1	200	66	France	-
178.255.215.72	7/25/2013 5:06:51 AM	GET /home.html HTTP/1.1	200	6832	France	-
129.39.66.193	7/25/2013 5:29:12 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	China	http://hyperlanet.org/
211.244.83.215	7/25/2013 6:13:17 AM	GET /robots.txt HTTP/1.1	200	66	Korea, Republic of	http://search.daum.net/
211.244.83.215	7/25/2013 6:13:18 AM	GET / HTTP/1.1	200	3759	Korea, Republic of	http://search.daum.net/
211.244.83.215	7/25/2013 6:13:19 AM	GET /home.html HTTP/1.1	200	6832	Korea, Republic of	http://search.daum.net/
176.31.83.172	7/25/2013 6:36:25 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	France	http://hyperlanet.org/
66.249.72.135	7/25/2013 7:40:17 AM	GET / HTTP/1.1	200	3759	United States	-
129.125.71.69	7/25/2013 7:48:06 AM	GET / HTTP/1.1	200	3759	China	-
220.181.108.161	7/25/2013 7:48:52 AM	GET / HTTP/1.1	200	3759	China	-
221.11.67.115	7/25/2013 8:05:42 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	China	http://hyperlanet.org/
76.114.103.109	7/25/2013 8:40:40 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	Romania	http://hyperlanet.org/
66.249.72.135	7/25/2013 10:59:49 AM	GET /ahata/mamuru.png?b HTTP/1.1	304	0	United States	-
37.59.179.232	7/25/2013 11:29:53 AM	GET /hyperblog.pdf HTTP/1.1	200	1529968	France	http://hyperlanet.org/
208.115.111.75	7/25/2013 11:42:45 AM	GET /robots.txt HTTP/1.1	200	66	United States	-
157.55.33.113	7/25/2013 11:44:30 AM	GET /robots.txt HTTP/1.1	200	66	United States	-
157.55.33.113	7/25/2013 11:51:09 AM	GET / HTTP/1.1	200	3759	United States	-
72.225.47.26	7/25/2013 12:14:16 PM	GET /hyperblog.pdf HTTP/1.1	200	1529968	United States	http://hyperlanet.org/
150.118.151.131	7/25/2013 12:34:56 PM	GET /hyperblog.pdf HTTP/1.0	200	1529968	United States	http://hyperlanet.org/
198.27.82.151	7/25/2013 12:36:17 PM	GET /robots.txt HTTP/1.1	200	66	Canada	-
198.27.82.151	7/25/2013 12:36:18 PM	GET / HTTP/1.1	200	3759	Canada	-
198.27.82.151	7/25/2013 12:36:18 PM	GET /favicon.ico HTTP/1.1	200	2238	Canada	-
198.27.82.151	7/25/2013 12:36:18 PM	GET /apple-touch-icon.png HTTP/1.1	404	218	Canada	-
208.115.111.75	7/25/2013 12:53:48 PM	GET /lock/ HTTP/1.1	200	5147	United States	-
66.248.202.64	7/25/2013 1:04:22 PM	GET /hyperblog.pdf HTTP/1.0	200	1529968	Canada	http://hyperlanet.org/
84.23.164.207	7/25/2013 1:45:00 PM	GET /hyperblog.pdf HTTP/1.1	200	1529968	Germany	http://hyperlanet.org/

Figure 1 Apache Log Viewer Main Window

## 2. Installation

Apache Logs Viewer can be installed on any Windows OS provided that you have Microsoft .NET Framework v4.0/v4.5/v4.6 or later installed (<http://www.microsoft.com/net>). This is already installed on Windows 7/8/8.1/10 and later. On systems such as Windows XP/2003/Vista/2008 you need to download it and manually install it before you can continue with the Apache Logs Viewer installation.

If you are unsure if this is already installed the setup will prompt you and open the website for you to download this component from Microsoft website.

<sup>1</sup> Certain features are locked and are disabled without an unlock code. See Unlocking

#### Hardware Requirements:

- 1 (GHz) or faster 32-bit (x86) or 64-bit (x64) processor (x64 recommended)
- 1GB of RAM or more
- 55 MB available hard disk space

To complete the installation please follow the setup and press *Finish* to finalize the installation. Once done you can open Apache Logs Viewer from the start menu. (Additional 50MB is required for IP databases if updated)

## 3. Using Apache Logs Viewer

### 3.1 Log Files

There are different types of Log files: access and error logs. Access log files contain the most important information, i.e. client requests to the web server, and are heavily used for analyzing web traffic to the server for different applications such as SEO, performance issues, DDos analysis etc.

Access logs are normally formatted in three standard formats: Common, Combined and W3C. Below you can see detailed information on each log format and what data it contains.

- Common log format

This log format includes the basic information that is required to identify the host and the request. It is normally displayed as this:

```
%h %l %u %t \"%r\" %>s %b
```

<b>%h</b>	IP Address of client (remote host)
<b>%l</b>	Identd of client (normally unavailable)
<b>%u</b>	User id of user requesting object
<b>%t</b>	Time of request
<b>%r</b>	Full request string
<b>%&gt;s</b>	Status code
<b>%b</b>	Size of request (excluding headers)

- Combined log format

This log format contains the information available in the common log format but it also includes the referrer information and the browser information.

```
%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-agent}i\"
```

<b>%{Referer}i</b>	The previous webpage
<b>%{User-agent}i</b>	The Client's browser

- W3C logs

This log format is a standard used by Microsoft Internet Information Services IIS.

```
#Fields: date time s-ip cs-method cs-uri-stem cs-uri-query s-port cs-username c-ip cs(User-Agent) cs(Referer)
sc-status sc-substatus sc-win32-status time-taken
```

Apache Logs Viewer accepts all of these log formats. To add a new log file click the Add log button (first button) from the main toolbar this can be seen below.



Figure 2 Main Toolbar

This toolbar has 4 buttons the Add Access log button, Add Error log button, the Split Log button and the Find Button.

### 3.1.1 Open Access Log File

When you open a new log from the 'Add Access Log' button in the main toolbar you can select what log format you should use.

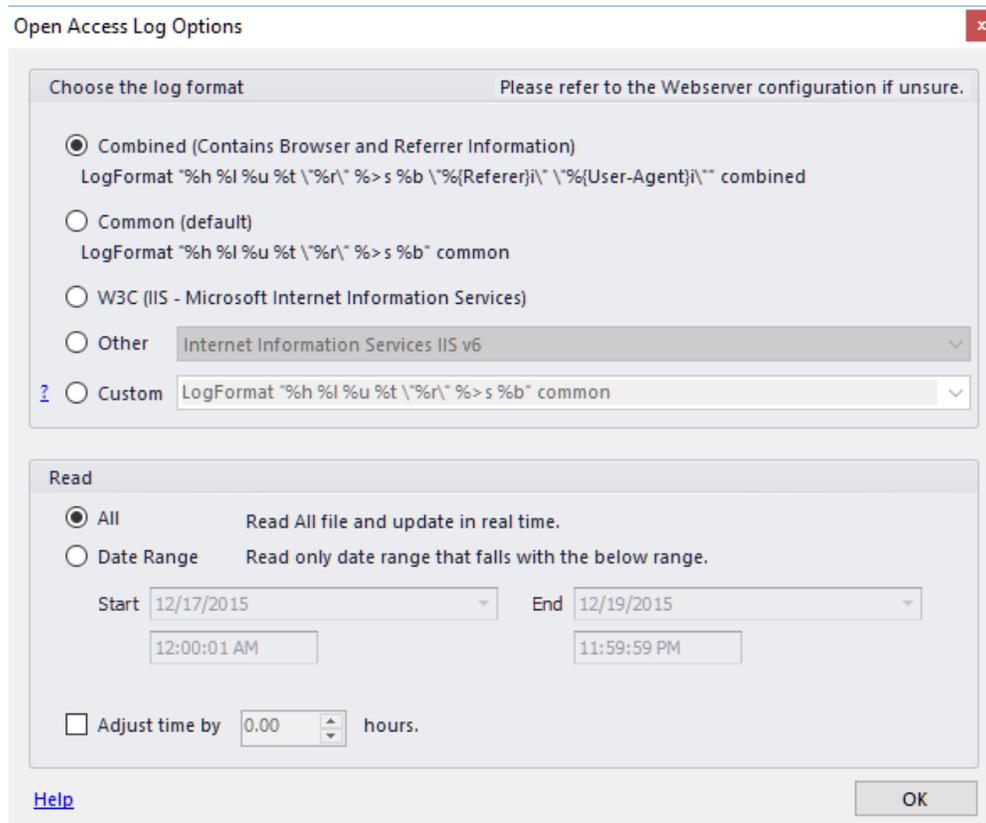


Figure 3 Add Access Log - Selecting the Log Format

The window shown above will be shown after you select the log file. In the top section you can choose the format (common/combined). If common is selected than it is assumed that the log file does not contain referrer and user agent information. On the other hand if combined is selected than the log file would contain referrer and user agent information.

For Microsoft IIS logs use the W3C option.

Several other custom (yet popular) formats are listed in the *Other* drop down section. If your custom LogFormat is not shown here you can type the custom log format in the Custom section. This would be obtained from the httpd.conf file of your server.

*If common is selected and the log file is in combined format Apache Log Viewer will still load the file correctly but the referrer and user agent information will be missing.*

In the bottom section you can specify if the whole file will be read or just a section of it. This is particularly useful if the log is very large. Specify the date range and Apache Logs Viewer will load only that part.

*Note: You can add even log files that are in use by the web server, making Apache Logs Viewer ideal to monitor the log file in real time and generate real time data on the fly.*

For servers located in a timezone which is not what you wish you can use the adjust time by value. Here you can enter any number of hours (both negative and positive) to adjust the time of each request.

### 3.1.2 Open Remote Access Log File (over FTP/SFTP)

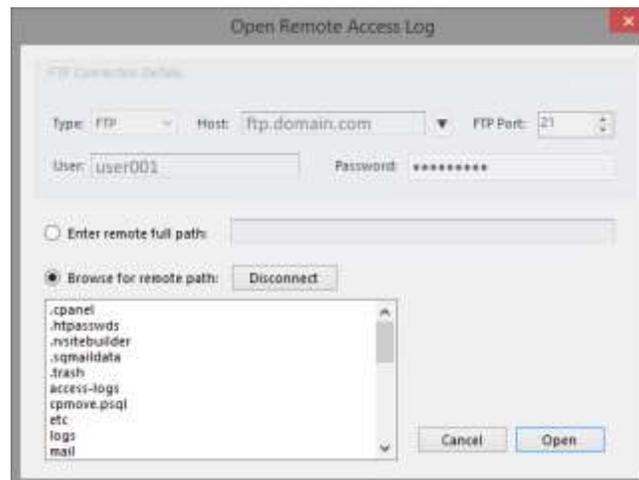


Figure 4 Open Remote Access Log Dialog

With this option you can open remote files found on FTP or SFTP directly from Apache Logs Viewer. Simply enter the Host, User, Password (and port) and enter the remote log path. Alternatively you can browse for the log file. Once you have selected the log file click on open. The dialog shown in option 3.1.1 is shown to identify the type of log.

Log files opened from remote locations are also updated at 30 seconds intervals and only the updated section is downloaded. This ensures that you do not waste bandwidth downloading the whole log file. You also get real-time all the benefits of monitoring directly from your desktop.

### 3.1.3 Open IIS Access Log File

IIS (Microsoft Internet Information Services) uses two common formats, both of which are supported by Apache Logs Viewer. These are the:

- NCSA format
- W3C format

Please refer to your IIS configuration to determine which format you have. The NCSA format is the identical to the Apache Logs Viewer Common format. Recent IIS servers use the W3C format.

Note: For IIS6 logs use *Other ... Internet Information Services 6*

### 3.1.4 Open Nginx Access Log File

Nginx (engine x) stores log files in the format shown below. To open a log created by nginx select

*Other ... Nginx*

```
LogFormat "%h %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-agent}i\"" nginx
```

### 3.1.5 Open Error Log File

Another type of log file processed by Apache Logs Viewer is the error log file. This file will contain errors that apache/nginx will meet while servicing requests. In most cases a line in the error log will have the equivalent entry in the access log.

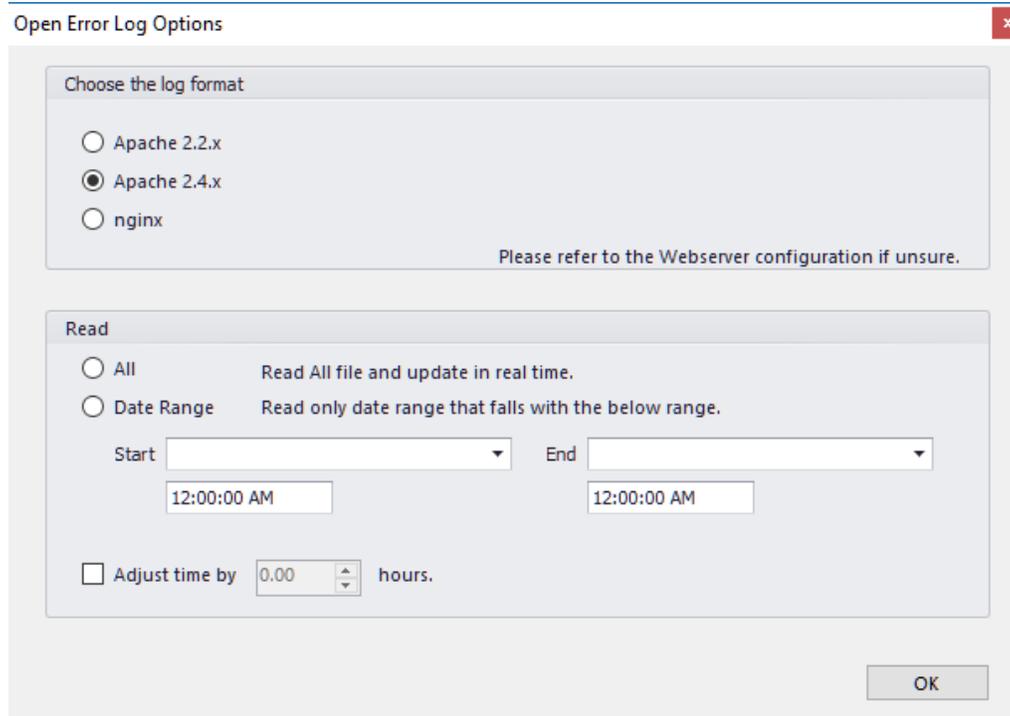


Figure 5 Selecting Error Log Format

In Apache 2.4 onwards the error log format has changed. The above dialog box allows you to select the type of error file that you have.

Apache Error log files can also be opened from remote using the *Add Remote Error Log* feature.

For error logs you can also read the entire log or parts of it, similar to the features offered in an access log. Time zone adjustments can also be made by specifying the number of hours to adjust in *Adjust time by* field.

### 3.1.6 Appending a Log

Some situations can arise where you would want to concatenate multiple logs into one view. This is possible using the *Append Log* function. To append a log to the existing one visible simply click on the *Append Log* function from the File menu and follow the instructions similar to when adding a new log. It is possible to select multiple logs at one go for this option.

## 3.2 Log Lines

When you open a log file the log will be read and each entry will be displayed in the Apache Logs Viewer window.

Log lines are identified by a distinct color depending on the status code for access log files and error codes for error log files. The default colors are shown below. These can be changed from the settings panel.

Access Log Lines Colors:

Color	Status Code	Description
Grey	100 - 199	Informational
Blue	200 - 299	Successful
Green	300 - 399	Redirection
Red	400 - 499	Client Error
Orange	500 - 599	Server Error

Error Log Lines Colors:

Color	Error Description
Red	Emergency
Orange	Warning
Dark Red	Alert
Violet	Notice
Light Violet	Critical
Green	Information
Dark Red	Error
Black	Debug

### 3.3 Log File Split

If a log file is very large then it is possible to split it up into smaller files to make processing easier. Once split, the files on disk can be opened individually in Apache Logs Viewer. The original file is left intact as new files are always created.

You can split both access and error logs using any of the following two methods:

- by size
- by time (days or months)

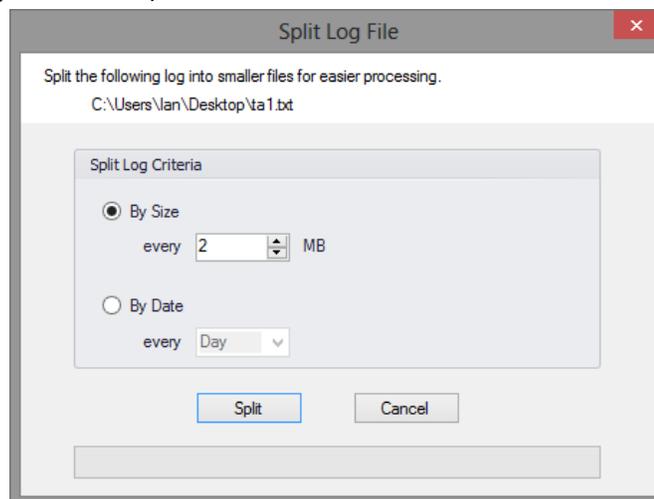


Figure 6 Split Log File Options Window

To split a file click on the 'Split Log File' button in the toolbar and select the file to split. Then you will be prompted with the window shown above so as to select the split parameters. Click on *Split* to start the file split operation. The resultant files will be found in the same directory where the original file is.

### 3.4 Filters

Apache Logs Viewer lets you filter either by IP Address, by Status code, by Request type or a combination. Start by selecting a status code from the drop down list. You can either select a specific code or else you can select a range of codes denoted by two subsequent 'xx' like 4xx which will match all 401 and 404 errors. At the end of the list there is also a specific code named 'none' which will match all codes.



Figure 7 Filter toolbar

Then select the inclusion list for the status code. If you want to include the status code then you would select to 'Include' otherwise you would select the 'Exclude' from the drop down list. When in include mode the status box will be highlighted as green while the exclude will highlight it as red. The white indicates that the status criteria will be ignored.



Figure 8 Menu to Include, Exclude or Ignore particular filter criteria

The same would apply for the IP Address. You would select an 'Include', 'Exclude' or 'Ignore' from the drop down and enter the IP Address. IP Addresses can be delimited by a semi-colon ';' thus you can filter by multiple IP Addresses. You can also compute a set of IP Addresses quickly by clicking on the 'Get IP Addresses....' button.

Note: Filtering for IP Addresses can be done by part of the IP address if 1 IP Address is entered (eg 192.168.). However for multiple IP Addresses the full IP Addresses need to be entered and an exact match is performed.

The Request type can be set to filter the type of requests you want i.e. GET, HEAD, POST, or else All request types.



Figure 9 Filter toolbar to include both Status code and IP Address

The above filter configuration will match all not found/moved i.e. 301, 302, 303, 304 errors and all IP addresses (since the IP Address field is blank). This has a similar effect as leaving the IP Address to 'Ignore' mode.

➔ To apply the filter click on the '**Apply Filter**' button. This will apply the filter on the visible list.

Once that the filter has been activated you can export the list to a CSV, for more analysis. You can also select one of the statistics (described below). To return to the full list click on the Clear button to disable any filter that is active.

### 3.4.1 Advanced Filtering

Advanced Filtering<sup>2</sup> is used in conjunction with the filters listed in the previous section. With advanced filtering you can either filter by request, User-Agent , User and or by referrer. The advanced filter can be either active or inactive and it can be in include or exclude mode. These criteria can be specified through the Advanced Filter toolbar shown below.



Figure 10 Advanced Filter - Active in Include mode

To include/exclude specific criteria enter something in the respective text box. If a text box is left empty then this is not taken into account. To filter the items according to this filter use the button found on the Filter toolbar (Figure 10). It is possible to include or exclude the criteria of the advanced filter, simply set the filter criteria to Include, Exclude or Ignore respectively as per (Figure 8).



Figure 11 Exclude User Agent, Include Referrer

In the figure above the Advanced Filter will exclude all items that have 'Firefox' in the User-Agent header and have 'google.com' in the Referrer URL. (It will also consider the criteria specified in the Basic Filter – not shown here.)

### 3.4.2 Regex Include Exclude Filtering

Apache Logs Viewer also supports filtering by regex expressions for the most advanced users. Regex is a form of pattern matching used to match values by using wildcards instead of equal values. For more information on the regex syntax refer to [Microsoft .NET Regex syntax](#).

Imagine you have the following two requests:

```
GET /robots.txt HTTP/1.1
GET /favicon.ico HTTP/1.1
```

<sup>2</sup> (Note that the Advanced Filter is only available in the unlocked versions of Apache Logs Viewer. See section 5 – Unlocking. )

To exclude or include the above use the following term (`robots.txt|favicon.ico`), with the respective *Include Regex/Exclude Regex* request filter.

### 3.5 Highlight

Another feature of Apache Logs Viewer is the Highlight feature. With this feature it is possible to color specific log lines for further analysis.

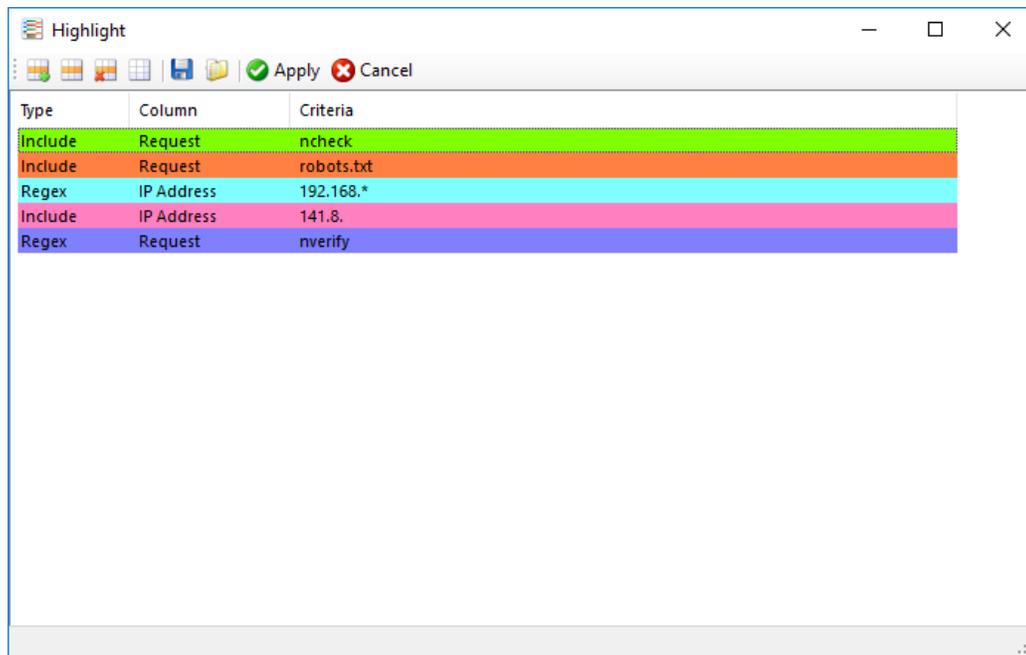


Figure 12 Highlight configuration window

Highlighting is possible for the Request, IP Address, User-Agent and Referrer columns. Each criteria can be a simple match or using a regex expression. Multiple highlight colors can be used for the same log. It is possible to save the highlight setup for use later on.

For the IP matching you can either specify the first chunk of the IP address eg 192.168., the full IP Address or multiple IP Addresses delimited by comma ','. Eg 192.168.1.2, 192.168.1.3.

For Regex matching please refer to [Microsoft .NET Regex syntax](#) for further information on this syntax.

### 3.6 Sorting

Sorting is available from the sort toolbar shown in Figure 13. You can sort on any of the available fields. Simply select the requested field by clicking on the Sort drop down button. Once the desired column has been selected, click on the ASC (ascending) or DSC (descending) buttons to apply the sort.



Figure 13 Sort Toolbar

You can also combine a Filter with the sort functionality. First apply the required filter and then sort the list using any column as the sorting order.

### 3.7 Search

In Apache Log Viewer you can search for a particular request. The find dialog box (see Figure 14) can be used to lookup a particular line using one of the criteria found in the table below.

Search Column	Criteria
Request	Part of
Date	Exact, Greater of Less match (no time)
IP Address	First part
Referrer	Exact match

When searching for a request, all requests which contain the criteria (at any position) will be matched. The IP Address on the other hand will be matched from the start. Thus if you need to look for an IP address that ranges from 192.168.12.0 to 192.168.12.255 you will enter 192.168.12. The referrer will need to match exactly (ignoring case).

Once that the criteria has been specified you can click on *Find* to find the first item. Then you can either select *Find All* to find all lines that match the particular criteria entered or *Find Next...* (or press F3) to find the next matching line.

Figure 14 Find Dialog Box

Once that some items are selected you can easily export them from Apache Log Viewer to a number of different formats (see below).

### 3.8 Export

The export function can be used to export log lines from Apache Log Viewer to various file formats. This is particularly useful if you need to import the data into another program such as a spreadsheet for further analysis.

You can export the entire list or just the selected items such as after a search (using Find All). The following file formats are supported: Text file (.txt), Comma Separated Value (.csv), HTML file (.html) or Log file (.log).

Exporting is simple just click on *Export List* to export the entire list or *Export Selected* to export just the selected items. Specify the filename and click on save to save the file to disk.

### 3.9 Reports

There are two main kinds of reports: pie/bar charts and maps. These give you a visual representation of the data in the log file. There are two modes for the Reports set from the Preferences section (Reports Scope):

#### 1. Visible List

Using this mode of operation the report data is generated from what's visible in the list. This means that any active filters will be taken into account. Thus if you want to generate the *Status Codes per Day* report but you want to leave the 4xx errors out of the report first you filter the list to omit 4xx status codes and then you generate the *Status Codes per Day* report which will consist of a bar chart with 404 status codes omitted.

#### 2. All List

The reports work on the log file in whole and enabled filters don't have any effects on the reports.

For bar/pie charts once the report is generated you can either Print or Export. The export functionality lets you either export to Microsoft Excel Workbook or else to an Adobe PDF document. For maps you can save to a BMP, JPEG, GIF or PNG file.

The available reports, their type and a description on each report are shown in the table below.

Report Name	Type	Description
<b>UserAgent</b>		
User Agent	Pie	Hits from a particular User Agent
Desktop Browser (hits)	Pie	Hits originating from desktop browsers
Mobile Browser (hits)	Pie	Hits originating from mobile browsers
By Request (hits)	Pie	Hits from a particular browser requesting a specific request
By Country (hits)	Pie	Hits from a particular browser originating for a specific country
Hits Each Day	Column	Hits per day
<b>Visits by Country</b>		
Visits by Country	Pie	Hits and the originating country
Visits by Country (Reduced)	Pie	Similar as Visits by Country but only displays a selection of the top countries
Visits by Region	Pie	Hits and the originating region - North America, South America, Europe, Africa, Asia & Pacific
<b>Browsers</b>		
Desktop Browsers	Pie	Unique hits originating from the traditional desktop browsers
Mobile Browsers	Pie	Unique hits originating from mobile browsers
Desktop vs Mobile	Pie	Unique hits showing total traditional desktop vs mobile browser
By Request	Pie	Unique hits from a particular browser requesting a specific request
By Country	Pie	Unique hits from a particular browser originating for a specific country
<b>Vists (Hits)</b>		
Visits by IP	Column	Hits from a particular IP Address
Visits by Referrer	Column	Hits originating from a particular referer
Visits by Request	Column	Hits originating for a particular request
Visits from Country	Column	Hits originating from a particular country
Visits by UserAgent	Column	Hits originating from a particular user agent
Visits by User	Column	Hits originating from a particular user
<b>Visits (Unique Hits)</b>		
Unique Hits	Column	Unique hits per day
Unique Hits (Bots Excluded)	Column	Unique hits per day but excluding bots. (bots are determined via requests to robots.txt)
Unique Hits (start date)	Column	Unique hits per day but only from a particular date onwards
Visits by IP	Column	Unique hits from a particular IP Address
Visits by Referrer	Column	Unique hits from a particular referrer

Visits by Request	Column	Unique hits for a particular request
Visits from Country	Column	Unique hits from a particular country
Visits by UserAgent	Column	Unique hits from a particular user agent
Visits by IP & Request	Column	Unique hits from a particular IP Address for a particular request
Visits by Request & UserAgent	Column	Unique hits from a particular request and a particular user agent
Visits by Country & Request	Column	Unique hits from a particular country and for a particular request
Visits by User	Column	Unique hits from a particular user
<b>Hits per Hour</b>		
Any	Column	Hits per Hour for a particular day
From IP	Column	Hits per Hour from a particular IP Address
From User	Column	Hits from a particular user
For Request	Column	Hits per Hour for a particular request in a particular day
For Request (substring)	Column	Similar as above but takes part of the request
<b>Hits Each</b>		
Hits each Month	Column	Number of hits in a particular month
Hits each Week	Column	Number of hits aggregated per week
<b>Bots</b>		
Bot Hits	Column	Hits from Bots (determined by requests to robots.txt)
Bot Hits (by UserAgent)	Column	Hits from Bots (determined by UserAgent header)
<b>IPv6</b>		
IPv6 per Day	Column	Hits from an IP version 6 address
IPv6 per Day (Unique)	Column	Unique hits from an IP version 6 address
<b>IP</b>		
Top IP Hits per Day	Stacked Column	Top IP Addresses per day
Top Error IP Hits per Day	Stacked Column	Top IP Addresses resulting in 4xx status codes per day
IP Hits per Day	Stacked Column	Particular IP Addresses requesting requests per day
<b>Requests</b>		
Request Analysis	Pie	Shows which parts of the website were accessed and by what percentage.
Top Requests per Day	Stacked Column	Shows which requests are the most requested (popular)
Top Error Requests per Day	Stacked Column	Shows which requests result in 4xx status codes
Requests per Day	Stacked Column	Shows number of fetches for a set of requests

Requests & Average TimeTaken	Bar	Shows request and average time taken to serve requests (must have time taken data in log)
Traffic Sources	Pie	Shows referrer source i.e. Direct, Referrer or Search Engine
Geo Country Visits	Map	Shows graphical map with intensity of visits
Geo Country Visits (start date)	Map	Shows graphical map with intensity of visits but after a specific date
<b>Search Visits</b>		
Search Visits		Shows request that came from search visits
Search Terms per Day	Stacked Column	Shows terms that have been used in search terms per day
Spider Visits	Column	Shows number of visits from spider bots
<b>Status Codes</b>		
Status Code	Pie	Shows percentage of status codes
Status Codes per Day	Stacked Column	Shows number of status codes per day
<b>Users</b>		
Users per Day		
Users and Average TimeTaken		
Operating System	Pie	Shows percentage of each operating system used to visit
<b>Bandwidth</b>		
Bandwidth	Line	Shows total bandwidth used to serve hits
Bandwidth by Type	Stacked Column	Shows bandwidth count for particular file types on a per day basis
File Types per Day	Stacked Column	Shows total hits for specific file types on specific days
Referrers per Day	Stacked Column	Shows referers on a per day basis

*Note: Most reports are only available with a valid unlock code. (see Unlocking). These reports are disabled (greyed out) in the free version of Apache Logs Viewer.*

#### **Note:** Hits vs. Unique Hits

The difference between *hits* and *unique hits* is that a hit is a single request to the web server. A web page can consist of multiple hits from the same IP Address over a period of time. On the other hand a unique hit is grouping of hits from an IP Address during that day. Thus if a client request a page using 5 different hits in the same day then they would be counted as only one.

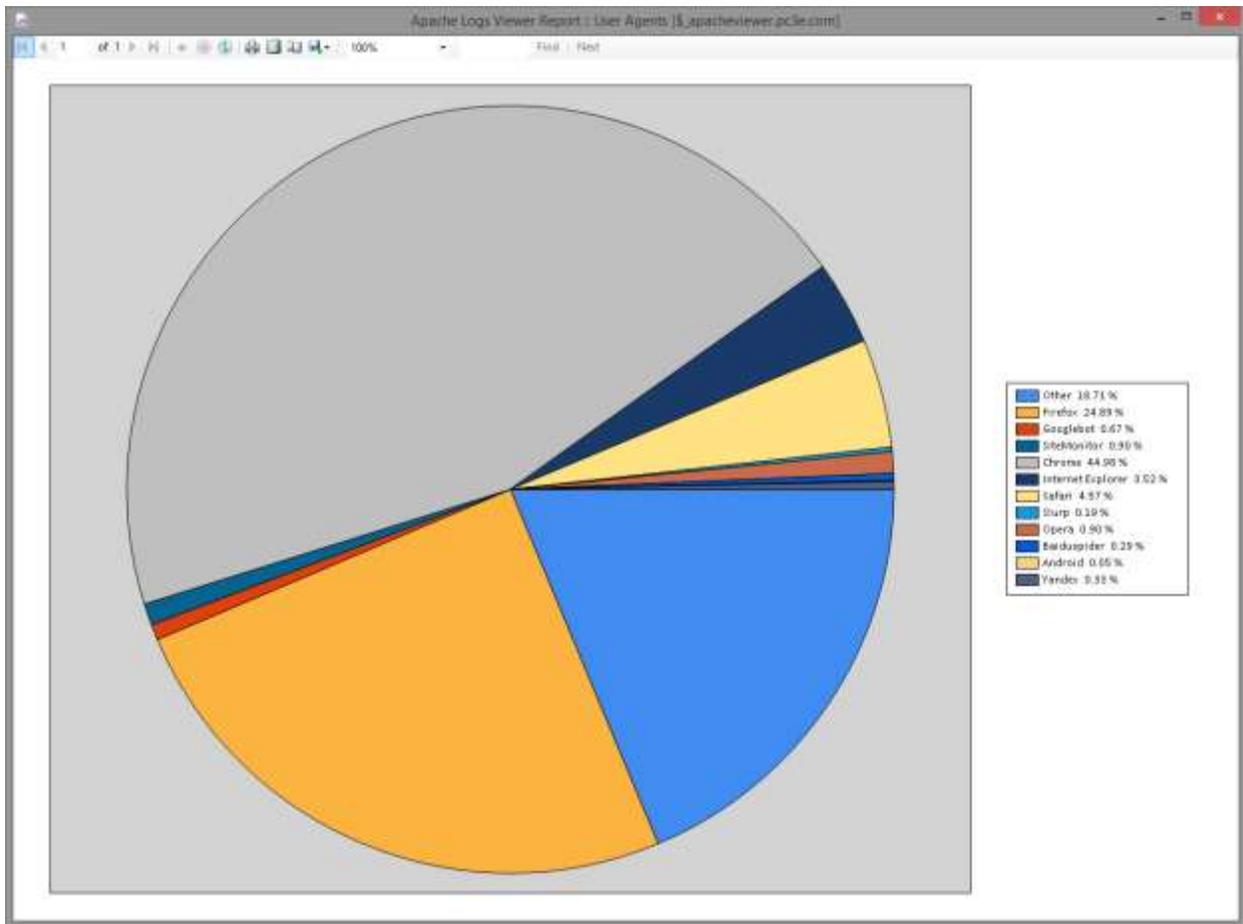


Figure 15 User Agents Report

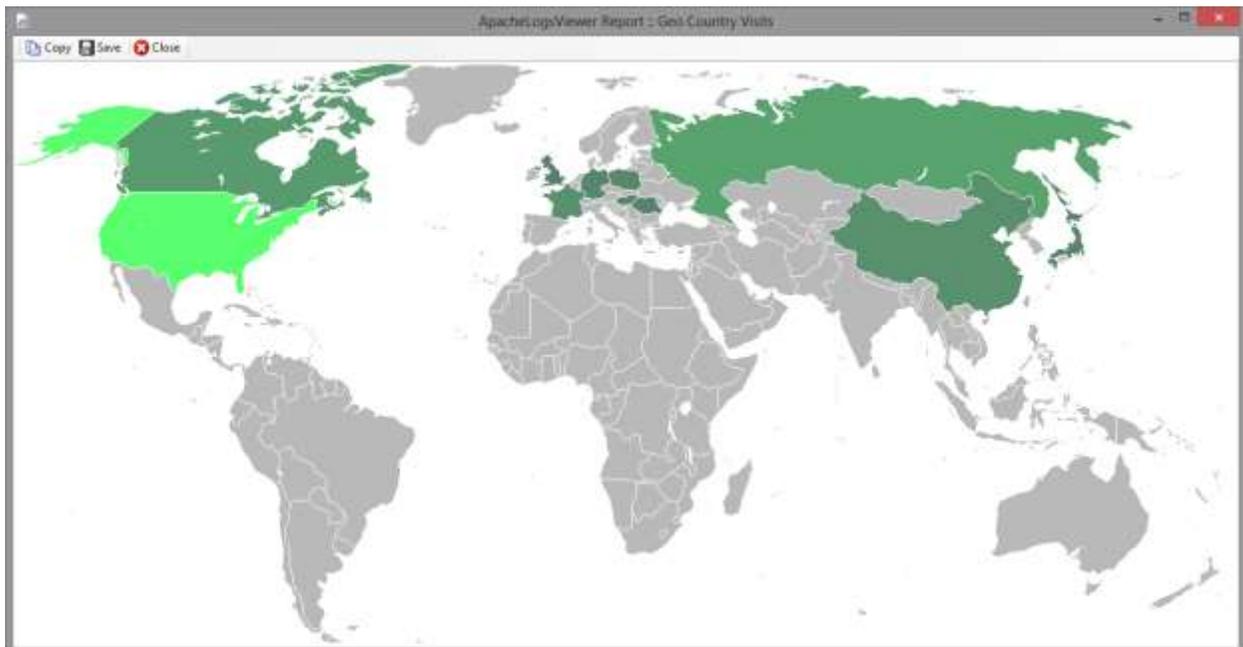


Figure 16 Geo Country Visits Report

### 3.10 Statistics

Statistics give a numerical representation for number of criteria. Unlike reports statistics work either on the log file as a whole or else on the visible log including any enabled filters (see Preferences section for more info about this).

The statistics available can be found in the table below. Some statistics prompt for a start date when to start counting as can be seen below.

Name	Start Date	Description
Hits	<input checked="" type="checkbox"/>	Hits (number of requests) each day
Status Codes	<input checked="" type="checkbox"/>	Count of status code each day
Bandwidth	<input checked="" type="checkbox"/>	Total bandwidth per day
Top IP Addresses	<input checked="" type="checkbox"/>	The IP Addresses which made the most number of hits
Top Error IP Addresses	<input checked="" type="checkbox"/>	IP Addresses which caused 404 errors
Top Requests	<input checked="" type="checkbox"/>	The Requests that were requested most
Top Countries	<input checked="" type="checkbox"/>	The Countries that made the most number of hits
Top 404 URLs	<input checked="" type="checkbox"/>	The most frequent 404 URLs
Top Referrers	<input checked="" type="checkbox"/>	The most frequent referrers
Top User Agents	<input checked="" type="checkbox"/>	The most popular User Agents found in log file.
Bot IP Addresses	<input checked="" type="checkbox"/>	The whole set of IP Addresses of bots (identified from requests to robots.txt)
Country IP Addresses	<input checked="" type="checkbox"/>	The whole set of IP Addresses from a particular country
City IP Addresses	<input checked="" type="checkbox"/>	The whole set of IP Addresses from a particular city
Error IP Addresses	<input checked="" type="checkbox"/>	List of IP Addresses which had a hit which resulted in a 4xx or 5xx status code.
Unique IP Addresses	<input checked="" type="checkbox"/>	List of unique IP addresses
Unique Request	<input checked="" type="checkbox"/>	List of unique requests
Unique Referrer	<input checked="" type="checkbox"/>	List of unique referrers
Unique User-Agent	<input checked="" type="checkbox"/>	List of unique user agent strings
File Types	<input checked="" type="checkbox"/>	The file types requested
Pages	<input checked="" type="checkbox"/>	List pages requested and count for each.
IPv4 vs IPv6	<input checked="" type="checkbox"/>	The number of IPv4 and IPv6 hits per day
External Referrer	<input checked="" type="checkbox"/>	The list of external referrers pointing to your website.
Referrer Visits	<input checked="" type="checkbox"/>	The visits from referrers
Referrer Hotlinking	<input checked="" type="checkbox"/>	Visits from referrers which requested a media type.
Search Terms	<input checked="" type="checkbox"/>	Terms/keywords used in searches (from referrer data)
Visit Count	<input checked="" type="checkbox"/>	Count of Visits from the same IP Address
Time Taken for User	<input checked="" type="checkbox"/>	Time taken for each user
Time Taken for Request	<input checked="" type="checkbox"/>	Time taken for each request
Hits Count	<input checked="" type="checkbox"/>	Count of hits from the same IP Address

### 3.11 Node Graph

Apache Logs Viewer can draw a node graph of the aggregated visits that are found within a log file. This gives you an indication of the most visited pages as well as the flow. This shows the entry points to available pages as well as the exit routes for visitors who leave your site.

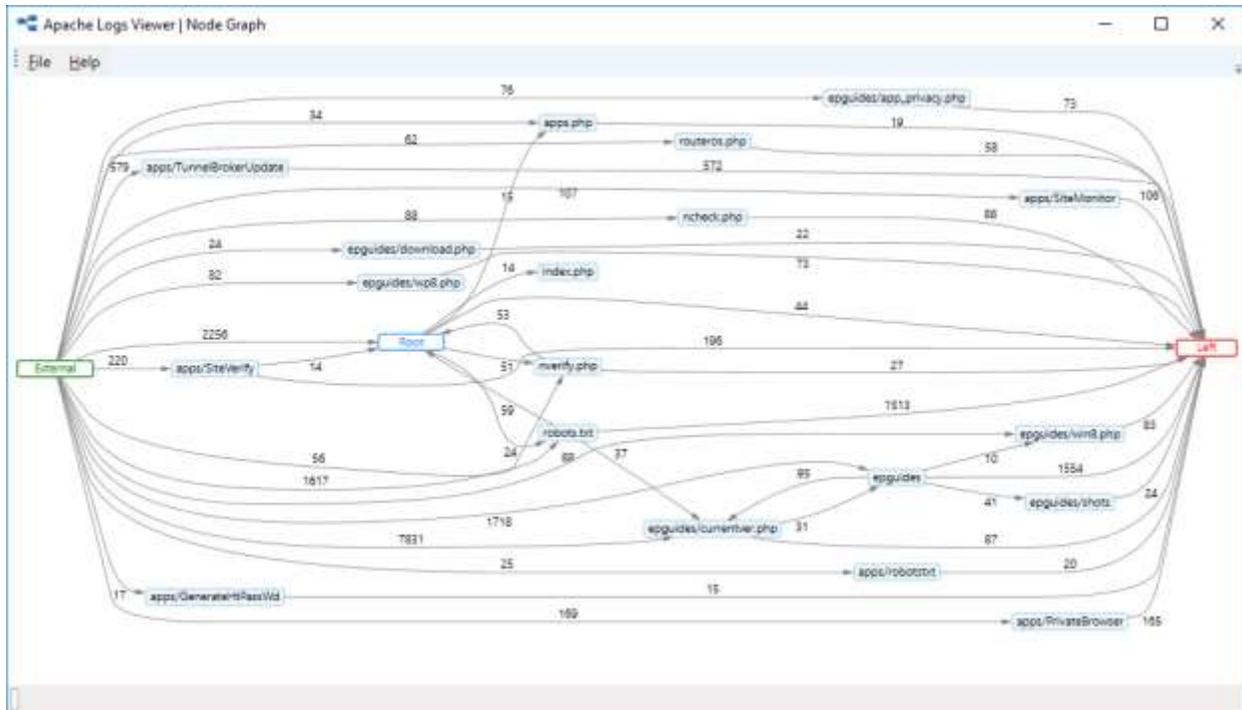


Figure 17 Node Graph

To create a node graph, select the option from the Graph menu. It is possible to have the graph drawn either the filtered view or the full list. Typically, you would want to exclude some requests like bots for example, since these skew the results.

The input parameters for the graph are:

- The maximum number of nodes for a particular path, i.e. the deepest to draw. Default value is 20, indicating 20 consecutive page visits.
- The minimum edge count. This would indicate the minimum number of visits to draw an edge. Default value is 10 however this also depends on how many visits you have in the log file.

### 3.12 Refresh Toolbar

The refresh toolbar is used to enable or disable the automatic refresh functionality and the automatic scrolling.



Figure 18 Refresh Toolbar

These features are particularly useful when the log file is being updated and analyzed in real time. The third button forces ALV to refresh the log, similar to pressing F5.

### 3.13 Command Line Arguments

The following command line arguments can be used when calling Apache Logs Viewer:

Argument	Description
<code>/lowmem</code>	Start Apache Logs Viewer in low memory mode to reduce the memory usage.
<code>/tray</code>	Minimize Apache Logs Viewer to the tray on startup.
<code>/?</code>	Display the supported command line arguments and exit.
<code>/default</code>	Restores default configuration and starts ALV. This is particularly useful if ALV is taking too long to start up due to a very large log file.

## 4. Preferences

You can change some of Apache Logs Viewer settings from the Preferences Dialog Page. This dialog is accessible from Edit...Preferences.

### General

*Auto Monitor on startup* – Tick if you want ALV to start monitoring files when ALV is opened.

*Truncate Large Logs* – Tick if you want to read only the last part of the log file. The size is specified in KB in the adjacent box.

*Enable Auto Refresh* – Tick to enable refreshing of the list automatically when new lines are added (for realtime viewing)

*Scroll to the last entry on refresh* – Tick if you want to scroll to the last entry when the log file is refreshed. You can also set the refresh timeout in the textbox beneath.

### Reports

*Reports Scope* – Change the scope you want to be used for your reports. The scope can be on the whole list (no filters) or else it can be on the visible list (ie taking into consideration any enabled filters.)

### Statistics

*Statistics Top Number* – Set the value which will be used when optioning the top statistics. The default value is 10.

*Statistics Scope* – Change the scope you want to be used in your statistics. The scope can be on the whole list (no filters) or else it can take into consideration any enabled filters.

### Colors

*HTTP Status Code Colors* - Set the colors for each different status code.

*Error Log Codes* - Set the colors for the different error codes in the error log.

### Columns

Select the columns that you want to display for each log.

*Show Custom Columns* enables the addition of columns which are not known or identified by Apache Logs Viewer. Such columns start with C: and are followed by what's found in the LogFormat.

### Geolocation

In this section you can select the type of Geolocation to utilize. Apache Logs Viewer can show both the country and the city. To enable the city it's important that the city database is downloaded using the built in DB Updater.

See section 7 for any help on troubleshooting issues with Apache Logs Viewer settings.

## 4.1 IP Database

Apache Logs Viewer has a built-in database to convert IP Addresses to countries or even cities. The databases can be updated using the DB Update utility.

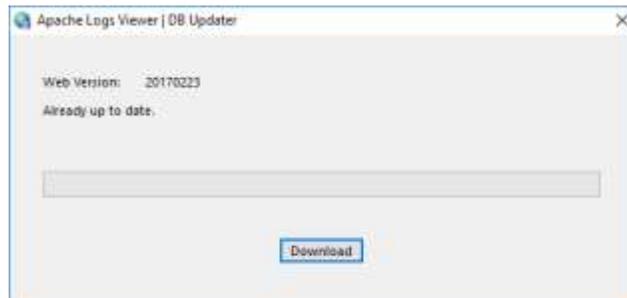


Figure 19 IP to Country/City Database Update utility

The application is only shipped with a default country database. It is recommended to update this database to the latest version for the most accurate results. Periodically such databases are also updated.

Note: Apache Logs Viewer main application needs to be closed for the update operation to be done. Please close all Apache Logs Viewer windows prior starting the Download and update process. Databases take around 55MB in size.

## 5. Unlocking

Apache Log Viewer has some features (some reports and statistics) which are disabled by default. To enable such features, you require a unique unlock code. Please note that you can still use Apache Log Viewer without an unlock code. Apache Logs Viewer is free and will remain free.

An unlock code can be obtained by purchasing an unlock code. Please follow the links either in the Apache Logs Viewer window or this link <http://www.apacheviewer.com/purchase.php>. All payments will be used to continue maintaining Apache Logs Viewer.

Once the payment has been received a unique unlock code will be emailed to you which will be valid for any future updates to the version. You can enter the unlock code from the Help menu.

## 6. Support

If you have any queries or suggestions for Apache Logs Viewer please leave your feedback on <http://www.apacheviewer.com/contactus.php>. All your suggestions / queries are welcome.

Similarly, if your log format is not supported by Apache Logs Viewer, let us know and we will try to add it. For Apache logs you should submit the LogFormat directive of the Apache configuration file, and ideally a sample log file.

## 7. Troubleshooting

To reset the settings run the ResetSettings.exe application from the installation folder. This will reset the Apache Logs Viewer configuration to default.

Apache Logs Viewer always saves a backup copy of your settings in case they get lost or corrupted. This file is saved in %appdata%\apachelogsview

## 8. Terms used in this document

TERM	EXPLANATION
<b>REQUEST</b>	A request for a particular resource. The request is one of the columns found in the log file and subsequently in ALV.
<b>REFERER</b>	The URL of the page prior to the particular page being requested. In normal usage scenarios this would be the page where the user click in the browser. It can also be empty in case one enters the URL in the browser.
<b>USER-AGENT</b>	The web browser or program requesting the resource.
<b>HIT</b>	A single request in a log file for any resource.
<b>VISIT</b>	A visit by a visitor which requests a number of resources (hits)
<b>BOT</b>	A robot that requests a particular resource. Robots are identified by the user agent or from requesting robots.txt

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