Log4js - The Logging Framework for JavaScript

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ALL Log4js - The Logging Framework for JavaScript log4js, logging, javascript, ajax

Table of contents

1 Overview	2
2 Severals ways to log	2
3 Usage	
4 Browser Compatibility	
5 Architecture	
6 Conclusion.	

1. Overview

Log4js is a logging framework for JavaScript. The main goal is to have a robust and solid logging API which is very simmilar to the Java logging framework <u>Log4j</u> (http://logging.apache.org/log4j).

2. Severals ways to log

The current available Appenders are:

- WindowAppender: open a new window in the browser and insert log messages in real time.
- WindowsEventAppender: send log messages in the MS Windows event manager.
- FileAppender: write log messages in a local file on the client.
- AjaxAppender: allow to send log messages to the server with asynchronous HTTP request. There you can process the logging events like you want on server side (ASP.NET, Java Servlet, JSP, PHP, Ruby, etc.).
 - There is also a servlet for receiving these events tolog by Log4j or Java logging in the download section.
- MetatagAppender: add log messages as meta data.

Many Appender can be used in same time.

3. Usage

Log4js is a simple API, which could be included in your scripts:

```
<script src="log4js.js" type="text/javascript"></script>
<script type="text/javascript">
<!-- //
//initialize the logger with your category
var logger = Log4js.getLogger("ajaxTest");
//set the level of logging
logger.setLevel(Log4js.Level.ALL);
//set the Appender to write the log to
logger.addAppender(new AjaxAppender("./log4j.jsp"));
// --> </script>
```

Now you can call the log in your logic like follow line:

For more details have a look at the <u>users guide</u> (docu/users-guide.html).

4. Browser Compatibility

Log4js is compatible with almost all current browsers. Some browser could not be tested because of missing hardware (e.g. Mac).

Browser	Version	Platform	Compatibility	Note
KDE Konqueror	3.5.2	Linux KDE	full compatible	Some Appenders are browser specific and do not work on Konqueror.
Microsoft Internet Explorer	5, 6, 7	Windows	full compatible	Some Appenders are browser specific and do not work on IE. Some Appenders are IE specific.
Mozilla FireFox	1, 2, 3	Windows	full compatible	Some Appenders are browser specific and do not work on FireFox.
Mozilla FireFox	1	Linux	full compatible	Some Appenders are browser specific and do not work on FireFox.
Opera	8, 9	Windows	full compatible	Some Appenders are browser specific and do not work on Opera.
Safari	?	Mac OS	open	Currently no platform available for testing.

Table 1: Browser Compatibility Matrix

5. Architecture

The architecture is very close to log4j's architecture. There are only three main objects:

- 1. The static Logger,
- 2. an Appender and

3. a specific Layout.

Appenders and Layouts are exchangeable and have only to fullfill the interfaces.

6. Conclusion

There are <u>other libraries</u> (links.html#other) in order to reach this goal. We are discussing with the authors of other logging APIs in order to gather their efforts and provide a common framework - if possible.

Log4js is very simple to install and use.