

Browser Compatibility: A Study of Print Media Sites of J&K, India

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Abstract

The user-side configurations have many combinations of web browsers and platforms. In order to ensure the compatibility, displaying effect and time of web applications, it is very important to perform compatibility testing for browsers under the different user-side configurations. It is a hard task to test compatibility issues of the different browsers, but now the tools are available for settling the issues. In this paper print media websites of the Jammu and Kashmir have been analyzed for the compatibility and loading time issues. In Linux platform, Elinks and Links performs worst by taking 25.83 minutes of time and in Windows platform Chrome 1.0 and Chrome 2.0 performs very poor by taking 48.33 minutes.

Introduction

With the continuous increasing growth of the users of the Internet in the current decade means that browsers having small market shares will have more users of that browser than the total entire market early on. The statistics of the most commonly used web browsers for the month of March 2011 reveals that IE is used by 25.8%, Firefox is used by 42.2%, Chrome is used by 25%, Safari by 4% and opera by 2.5% of the total internet users [1]. There are 88 million users of the internet users in India [2]. According to the latest statistics there are 1966514816 numbers of users in the world [4] and if we calculate the users according to available web browsers statistics there are 78660592 users of the safari browsers and 49162870 are opera users. The percentage of the users seems very small but the number of the users amounts to be very large. Therefore it becomes very important that information to be displayed by a particular organization should be compatible with the all the web browsers. Therefore restricting the web design only to the popular web browsers might not make sense in

order to expand the business or to exchange the information. Therefore it becomes extremely important to manage the browser compatibility issues before the web site is commercially launched. The objective of the current study is to analyze the most common available print media web sites of Jammu and Kashmir.

Literature Review

Singh and et. al. [5] analyzed three major access control flaws in today's browsers: (1) principal labeling is different for different resources, raising problems when resources interplay, (2) runtime changes to principal identities are handled inconsistently, and (3) browsers mismanage resources belonging to the user principal. Baowen Xu Lei Xu et. al.[6] showed that in order to ensure the displaying effect of Web applications, it is important to perform compatibility testing for browsers under the different user-side configurations. Since the user-side configurations have many combinations, it is a hard task to test the vast combinations efficiently and then they focused on the improvements for browser compatibility testing. They also built a model for browser compatibility testing based on the characters of Web applications. Ter Louw and et. al. [7] presented a new XSS defense strategy designed to be effective in widely deployed existing Web browsers, despite anomalous browser behavior.

Research Work

Restricting the web compatibility issues only to selected browsers might not make sense. In this paper print media websites of the Jammu and Kashmir have been analyzed using the commonly available tool for testing the issues of the web browsers i.e Browsershots. It is a free open-source online web application providing developers a convenient way to test their website's browser compatibility in one place. Browsershots makes screenshots of the web site in different operating systems and browsers. When you submit your web address, it will be added to the job queue. A number of distributed computers will open your website in their browser. Then they will make screenshots and upload them to our central dedicated servers for your review [3]. The sites of the print media for the analysis in the current study are www.earlytimes.in, www.statetimes.in, www.kashmirtimes.com, www.dailyexcelsior.com, www.greaterkashmir.com and www.risingkashmir.com. These are the most common available print media web sites of Jammu and Kashmir. The time for the loading and testing the compatibility of the different websites in different browsers is calculated by using browsershots. Then the average of the time for all websites is considered. Out of the 34 commonly available browsers in the Linux Platform, it is observed that ELinks 0.13 and Links 2.3 takes the largest time for checking the compatibility and loading time for the different web sites in Linux platform. The time amounts to 25.83 minutes. In windows platform, out of the 29 browsers selected, Chrome 1.0 and Chrome 2.0 takes 48.33 minutes and it is the largest time for checking the compatibility and loading followed by chrome 3.0. In BSD platform seven browsers were selected and observed that Konqueror 3.5 takes the largest time and that is 27.83.

Table 1: Data obtained from browsershopt.org for LINUX, BSD and WINDOWS platform.

LINUX Platform	www.earlytimes.in	www.athames.in	www.kashmirtimes.com	www.dailyexcelsior.com	www.greatkashmir.com	www.risqjashmir.com	BSD Platform	www.earlytimes.in	www.athames.in	www.kashmirtimes.com	www.dailyexcelsior.com	www.greatkashmir.com	www.risqjashmir.com	WINDOWS Platform	www.earlytimes.in	www.athames.in	www.kashmirtimes.com	www.dailyexcelsior.com	www.greatkashmir.com	www.risqjashmir.com
Chrome 10.0	-	-	3	-	3	3	Dillo 2.0	4	-	-	-	-	Avant 11.7	30	22	31	14	30	32	
Chrome 11.0	3	3	3	3	3	3	Epiphany 2.22	21	13	27	10	26	3	Chrome 1.0	45	45	55	40	63	42
Chrome 12.0	31	22	31	14	30	4	Firefox 3.0	29	20	30	12	29	12	Chrome 10.0	29	22	31	14	63	21
Chrome 5.0	-	-	-	-	-	-	Kazehakase 0.5	3	-	3	-	3	-	Chrome 2.0	45	45	55	40	63	42
Chrome 9.0	29	21	30	13	29	15	Konqueror 3.5	31	14	33	18	33	30	Chrome 3.0	45	45	55	40	30	42
Dillo 0.3	3	-	3	-	3	3	Opera 9.64	3	3	10	-	11	3	Chrome 9.0	30	22	31	14	31	17
Dillo 2.3	-	-	-	-	-	-	SeaMonkey 1.1	3	-	10	-	7	3	Firefox 1.5	30	22	31	18	31	33
ELinks 0.13	29	21	31	14	30	30							Firefox 2.0	30	22	31	16	30	33	
Epiphany 2.30	29	21	30	12	29	3							Firefox 3.5	30	22	31	14	30	31	
Firefox 1.0	31	22	31	14	31	27							Firefox 4.0	29	22	31	14	30	16	
Firefox 2.0	3	-	3	-	3	3							Flock 2.6	30	22	31	14	30	32	
Firefox 3.5	-	-	3	-	3	3							Flock 7.0	30	22	31	14	30	24	
Firefox 4.0	-	-	3	-	3	3							K-Meleon 1.5	30	22	31	14	30	32	
Flock 2.6	29	21	31	12	29	3							MSIE 6.0	33	22	31	14	30	32	
Galeon 2.0	3	-	3	-	3	3							MSIE 7.0	29	22	31	13	3	22	
Iceape 1.1	3	-	3	-	3	3							MSIE 8.0	3	3	3	3	30	3	
Iceweasel 2.0	10	3	11	-	13	3							Minifia-3.7	30	22	31	14	30	32	
Iceweasel 3.5	3	3	3	-	3	3							Navigator 9.0	30	22	31	15	30	32	
Kazehakase 0.5	-	-	-	-	-	-							Netscape 8.1	30	22	31	14	63	42	
Konqueror 3.5	3	-	3	-	3	3							Opera 10.65	45	45	55	40	31	33	
Konqueror 4.6	29	21	30	13	29	15							Opera 11.1	30	22	31	16	63	42	
Links 2.3	29	21	31	14	30	30							Opera 7.54	45	45	55	40	30	32	
Links 2.8	-	-	3	-	3	3							Opera 8.54	30	22	31	14	30	21	
Minifia-3.7	10	-	3	-	3	3							Opera 9.30	29	22	31	14	29	22	
Minifia-4.2	31	22	31	14	31	30							Safari 4.0	29	22	32	12	30	17	
Mozilla 1.7	29	22	31	14	31	-							Safari 5.0	29	22	31	14	3	3	
Navigator 9.0	-	-	3	-	3	-							SeaMonkey 1.1	3	3	3	13	30	32	
Opera 10.60	-	-	3	-	3	3							SeaMonkey 2.0	30	22	31	14	30	32	
Opera 11.10	29	21	31	12	29	3							Shiretoko 3.5	30	22	31	14	-	-	
Opera 9.80	-	-	3	-	3	15														
Safari 533.3	29	21	30	13	29	3														
SeaMonkey 1.1	3	-	3	-	3	-														
SeaMonkey 2.0	-	-	-	-	3	-														
Shiretoko 3.5	-	-	-	-	3	-														

Results and Future Scope

Elinks and Links in Linux platform is not the commonly used web browser. Therefore its worst performance does not amount the great performance loss. In windows platform Chrome 1.0 and Chrome 2.0 are popular browsers. Therefore the performance of these browsers is of serious concern. These versions have been replaced by the manufacturer but still these browsers are used.

The research work can be extended to the different tools and different websites for more comprehensive study.

References

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