

WEBSITE TESTING BAGIAN 4

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Apa yang Diuji???

- CROSS BROWSERS COMPATIBILITY
- LINKS VALIDATING
- **WEBSITE PERFORMANCE**



WEBSITE PERFORMANCE TEST


- ❑ Pengujian website performance merupakan pengujian yang digunakan untuk menentukan seberapa lama dan seberapa cepat website tersebut pada saat diakses.
- ❑ Pengujian website performance ini juga dipengaruhi oleh kecepatan akses internet yang digunakan oleh user / pengguna.
- ❑ Pengujian ini juga menggunakan browser yang bisa dipilih sesuai keinginan.


Mulai Pengujian

- Silakan buka browser anda kemudian ketikkan alamat berikut **<http://www.webpagetest.org/>**

Test a website's performance

 Analytical Review  Visual Comparison  Traceroute

Enter a Website URL 

Test Location 

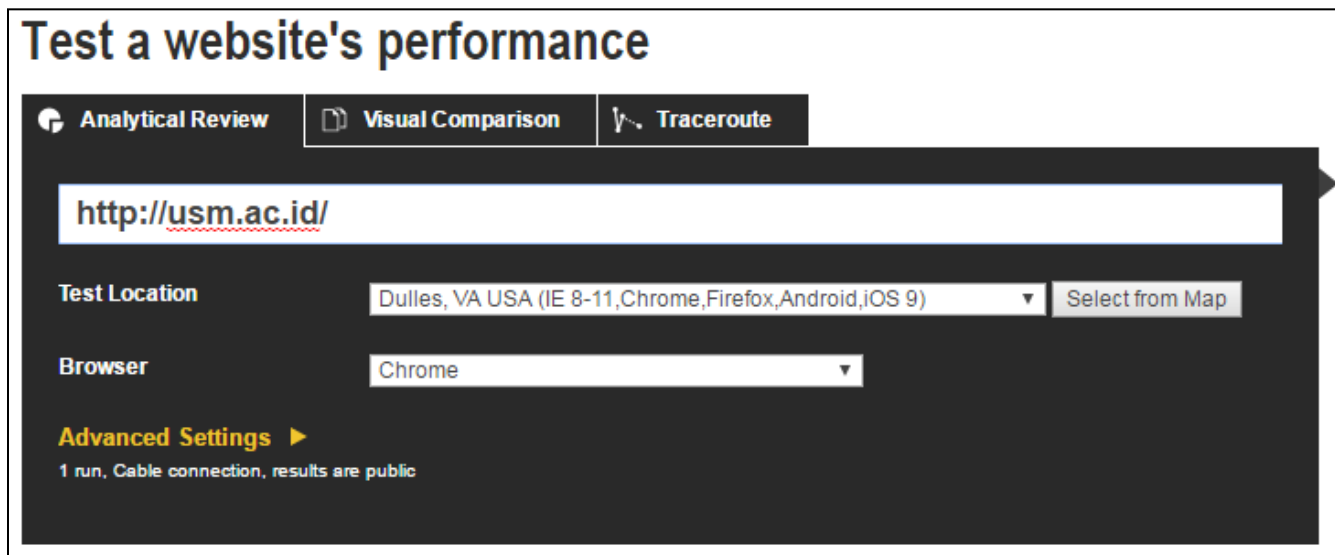
Browser

Advanced Settings ▶

1 run, Cable connection, results are public

Test Location dan Browser

- Silakan anda gunakan test location standar dan browser yang sedang anda gunakan.
- Kemudian masukkan website yang anda uji.
- Dalam hal ini, kita lakukan pengujian website USM **<http://usm.ac.id/>**



The screenshot shows a web application titled "Test a website's performance". It features three tabs: "Analytical Review" (active), "Visual Comparison", and "Traceroute". Below the tabs is a large input field containing the URL "http://usm.ac.id/". Underneath the URL field are two rows of configuration options. The first row is labeled "Test Location" and includes a dropdown menu showing "Dulles, VA USA (IE 8-11,Chrome,Firefox,Android,iOS 9)" and a "Select from Map" button. The second row is labeled "Browser" and includes a dropdown menu showing "Chrome". At the bottom left, there is a link for "Advanced Settings" with a right-pointing arrow, and below that, a status message: "1 run, Cable connection, results are public".

Test a website's performance

Analytical Review Visual Comparison Traceroute

<http://usm.ac.id/>

Test Location Dulles, VA USA (IE 8-11,Chrome,Firefox,Android,iOS 9) Select from Map

Browser Chrome

Advanced Settings ►

1 run, Cable connection, results are public

Start Test

- Silakan anda klik Start Test pada tombol di bagian kanan test location dan browser.
- Tunggu sebentar dan lihat hasilnya.

Url: <http://usm.ac.id/>
From: Dulles, VA - Chrome - Cable
Tester: VM3-04-192.168.101.134

Testing...

Waiting Testing Done

Test Started 1 minute ago

Jika Hasilnya Seperti Ini??

- Di bagian bawah ditampilkan keterangan bahwa *Test Error: Timed out waiting for the browser to start*
- Lakukan pengujian ulang dengan klik **Re-run the test** untuk melakukan pengujian kembali.

Tester: VM3-04-192.168.101.134

Re-run the test

[Raw page data](#) - [Raw object data](#)
[Export HTTP Archive \(.har\)](#)
[View Test Log](#)

				Document Complete			Fully Loaded			
	Load Time	First Byte	Start Render	Time	Requests	Bytes In	Time	Requests	Bytes In	Cost
First View	-	-	-	-	-	-	-	-	-	\$----
Repeat View	-	-	-	-	-	-	-	-	-	

Waterfall

Screen Shot

Video

First View: Test Error: Timed out waiting for the browser to start.

Repeat View: Test Error: Skipped repeat view, first view failed: Timed out waiting for the browser to start.

Hasil Pengujian (1)

Web Page Performance Test for

usm.ac.id/

From: Dulles, VA - Chrome - Cable
6/11/2016 10.26.31

F	A	F	B	F	X
First Byte Time	Keep-alive Enabled	Compress Transfer	Compress Images	Cache static content	Effective use of CDN

[Summary](#) [Details](#) [Performance Review](#) [Content Breakdown](#) [Domains](#) [Screen Shot](#)

Tester: VM1-02-192.168.101.112

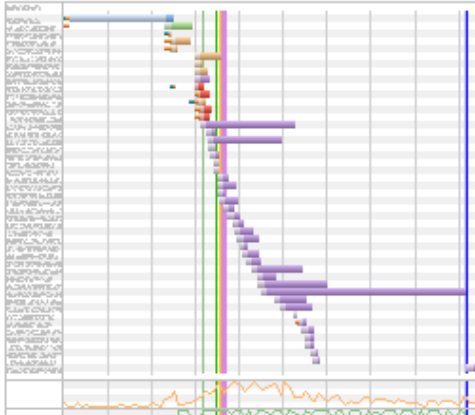

[Re-run the test](#)

[Raw page data](#) - [Raw object data](#)



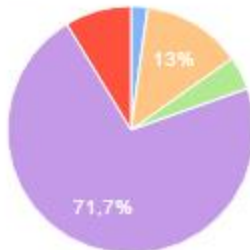

[Export HTTP Archive \(.har\)](#)

[View Test Log](#)

	Load Time	First Byte	Start Render	Speed Index	DOM Elements	Document Complete			Fully Loaded			
						Time	Requests	Bytes In	Time	Requests	Bytes In	Cost
First View	9.165s	2.293s	3.460s	4233	476	9.165s	46	3,913 KB	9.380s	47	3,954 KB	\$\$\$\$\$
Repeat View	2.460s	1.712s	2.306s	2474	476	2.460s	1	41 KB	2.460s	1	41 KB	

	Waterfall	Screen Shot	Video
First View (9.165s)			Filmstrip View - Watch Video

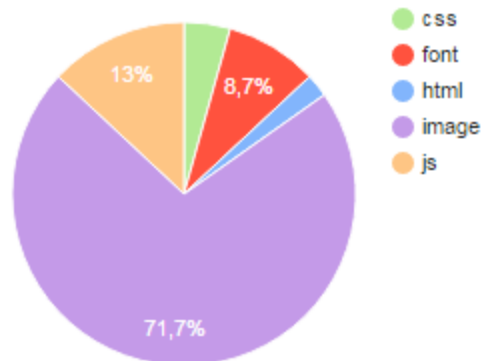
Hasil Pengujian (2)

Repeat View (2.460s)			Filmstrip View - Watch Video																								
Content Breakdown	<div><p>Requests</p><table><tr><th>Content Type</th><th>Percentage</th></tr><tr><td>image</td><td>71.7%</td></tr><tr><td>js</td><td>13%</td></tr><tr><td>font</td><td></td></tr><tr><td>css</td><td></td></tr><tr><td>html</td><td></td></tr></table></div> <div><p>Bytes</p><table><tr><th>Content Type</th><th>Percentage</th></tr><tr><td>image</td><td>88.3%</td></tr><tr><td>js</td><td></td></tr><tr><td>font</td><td></td></tr><tr><td>css</td><td></td></tr><tr><td>html</td><td></td></tr></table></div>			Content Type	Percentage	image	71.7%	js	13%	font		css		html		Content Type	Percentage	image	88.3%	js		font		css		html	
Content Type	Percentage																										
image	71.7%																										
js	13%																										
font																											
css																											
html																											
Content Type	Percentage																										
image	88.3%																										
js																											
font																											
css																											
html																											

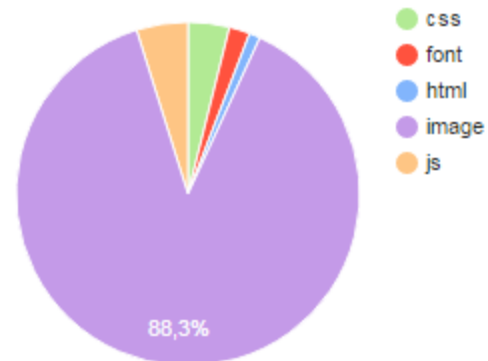
Content Breakdown

Content breakdown by MIME type (First View)

Requests



Bytes

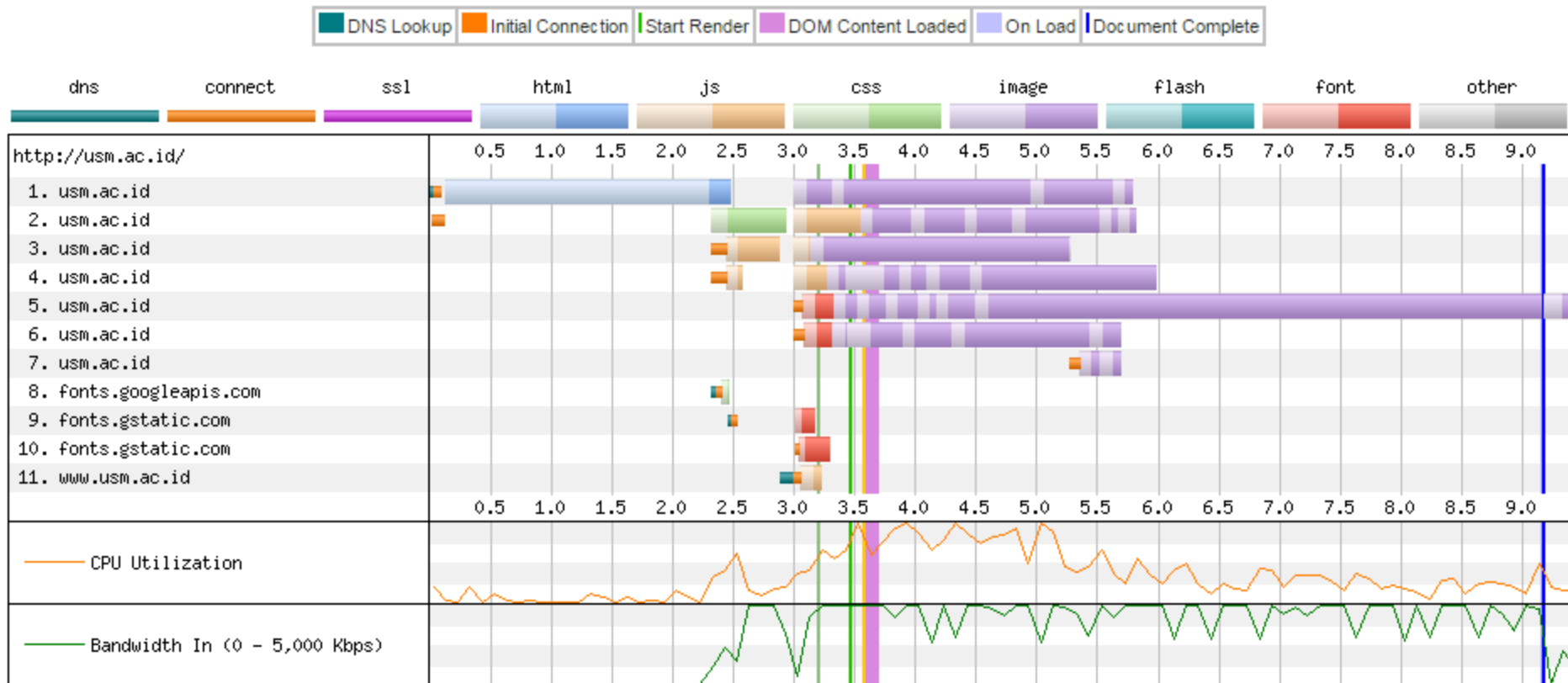


MIME Type	Requests ▾
image	33
js	6
font	4
css	2
html	1
flash	0
other	0

MIME Type	Bytes ▾
image	3.574.356
js	195.910
css	157.444
font	78.878
html	41.797
flash	0
other	0

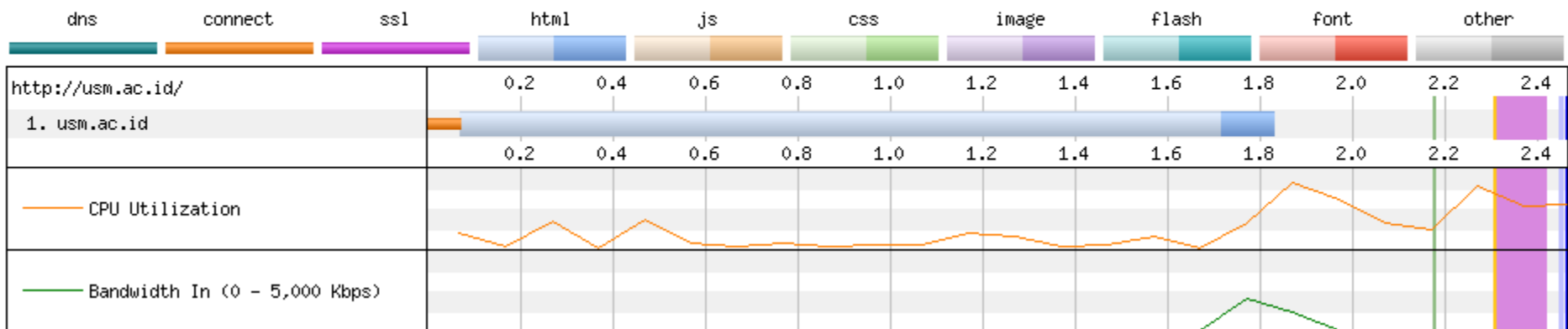
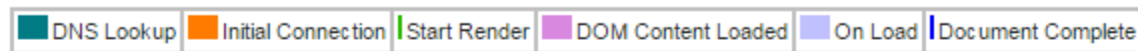
Connection View (1)

Connection View



Connection View (2)

Connection View



View Log

```
2016/11/06 03:26:04 - Test Created
2016/11/06 03:26:04 - Starting test (initiated by tester VM1-02-192.168.101.112)
2016/11/06 03:26:04 - Run 1 assigned to VM1-02-192.168.101.112
2016/11/06 03:26:22 - Test Run Complete. Run: 1, Cached: 0, Done: , Tester: VM1-02-192.168.101.112
2016/11/06 03:26:30 - Test Run Complete. Run: 1, Cached: 1, Done: , Tester: VM1-02-192.168.101.112
2016/11/06 03:26:31 - Test Run Complete. Run: 1, Cached: 1, Done: 1, Tester: VM1-02-192.168.101.112
2016/11/06 03:26:31 - Test Complete
2016/11/06 03:26:31 - Test post-processing complete
```

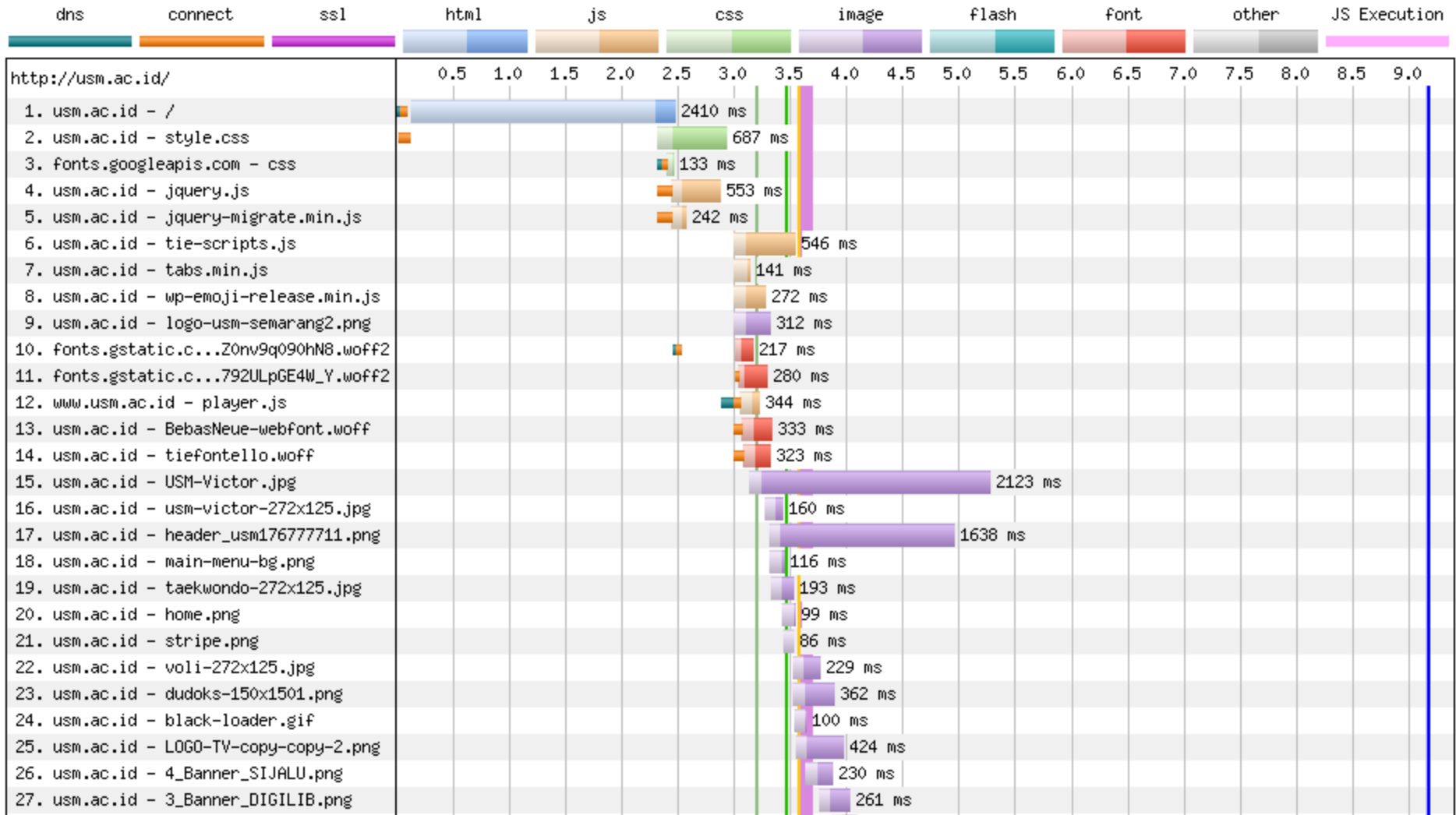
http://www.webpagetest.org/viewlog.php?test=161106_CN_3Q0

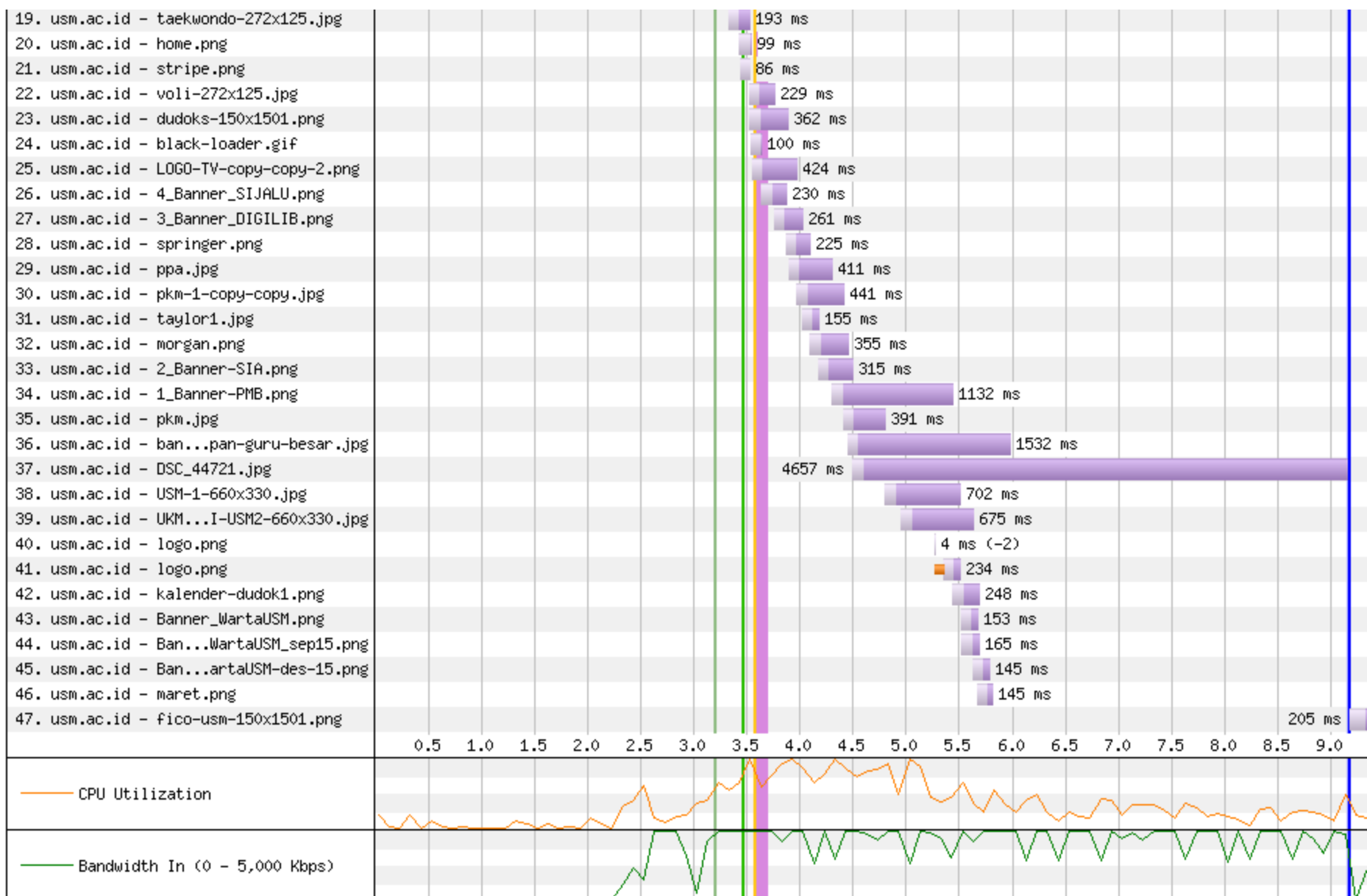
Details

Load Time	First Byte	Start Render	Visually Complete	<u>Speed Index</u>	DOM Elements	Result (error code)	Document Complete			Fully Loaded		
							Time	Requests	Bytes In	Time	Requests	Bytes In
9.165s	2.293s	3.460s	10.364s	4233	476	99999	9.165s	46	3,913 KB	9.380s	47	3,954 KB

RUM First Paint	<u>domInteractive</u>	<u>domContentLoaded</u>	<u>loadEvent</u>
3.188s	3.563s	3.563s - 3.690s (0.127s)	9.156s - 9.161s (0.005s)

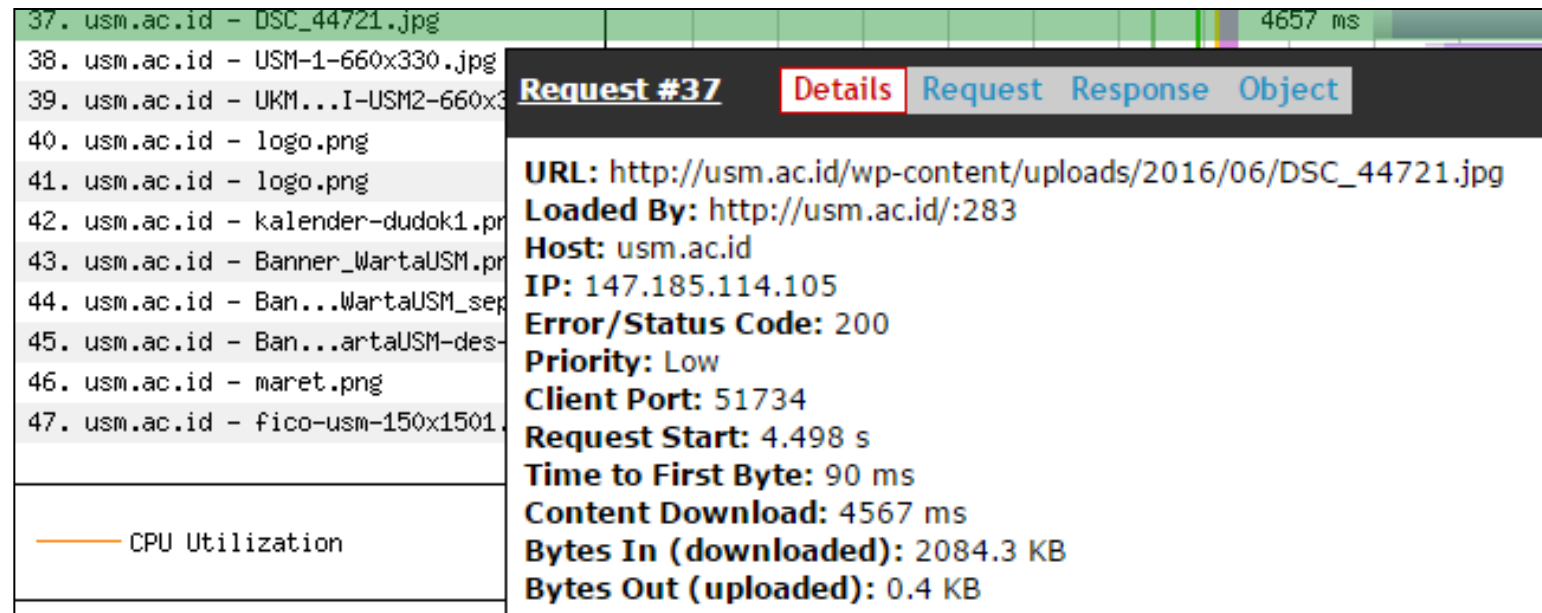
Waterfall View





Konten Lama Diakses/Dibuka

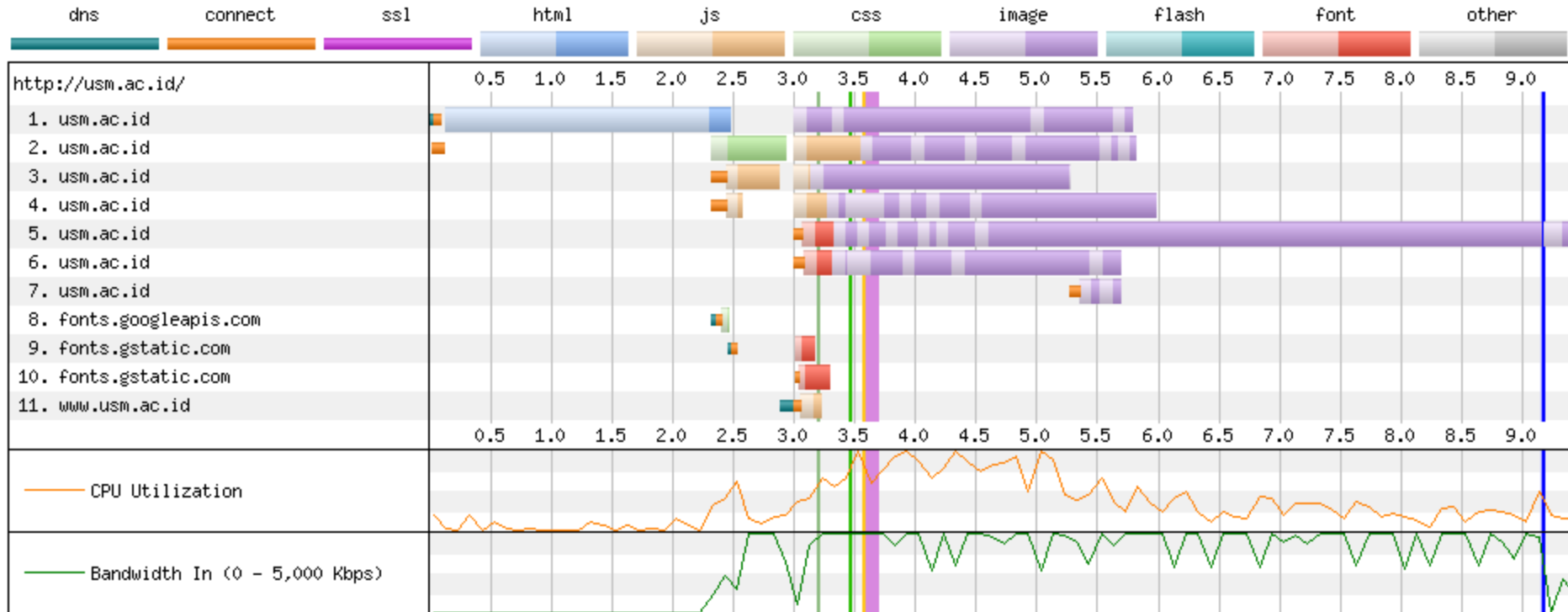
- Penyebab konten tersebut lama diakses adalah ukuran / resolusi file gambar tersebut terlalu besar.



http://usm.ac.id/wp-content/uploads/2016/06/DSC_44721.jpg

CPU Utilization

Connection View



Request Details

Before Start Render	Before On Load	After On Load
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Request Details

#	Resource	Content Type	Request Start	DNS Lookup	Initial Connection	Time to First Byte	Content Download	Bytes Downloaded	Error/Status Code	IP
1	http://usm.ac.id/	text/html	0.138 s	26 ms	68 ms	2155 ms	187 ms	40.8 KB	200	147.185.114.105
2	http://usm.ac.id/wp-.../style.css?ver=4.3.6	text/css	2.323 s	-	84 ms	124 ms	479 ms	152.9 KB	200	147.185.114.105
3	http://fonts.googleapis.com/...ular%2C700&ver=4.3.6	text/css	2.397 s	28 ms	46 ms	52 ms	7 ms	0.9 KB	200	216.58.217.106
4	http://usm.ac.id/wp-...jquery.js?ver=1.11.3	application/javascript	2.444 s	-	117 ms	86 ms	350 ms	94.1 KB	200	147.185.114.105
5	http://usm.ac.id/wp-...ate.min.js?ver=1.2.1	application/javascript	2.445 s	-	117 ms	90 ms	35 ms	7.4 KB	200	147.185.114.105
6	http://usm.ac.id/wp-...scripts.js?ver=4.3.6	application/javascript	3 s	-	-	91 ms	455 ms	61.6 KB	200	147.185.114.105
7	http://usm.ac.id/wp-...abs.min.js?ver=4.3.6	application/javascript	3.001 s	-	-	104 ms	37 ms	4.5 KB	200	147.185.114.105
8	http://usm.ac.id/wp-...ase.min.js?ver=4.3.6	application/javascript	3.001 s	-	-	100 ms	172 ms	15.9 KB	200	147.185.114.105
9	http://usm.ac.id/wp-...go-usm-semarang2.png	image/png	3.001 s	-	-	101 ms	211 ms	20.3 KB	200	147.185.114.105
10	http://fonts.gstatic.com/VIZ0nv9q090hN8.woff2	font/woff2	3.008 s	27 ms	34 ms	46 ms	110 ms	21.3 KB	200	172.217.2.195
11	http://fonts.gstatic.com/Ld792ULpGE4W_Y.woff2	font/woff2	3.047 s	-	35 ms	37 ms	208 ms	22.4 KB	200	172.217.2.195
12	http://www.usm.ac.id/player.js	application/javascript	3.057 s	100 ms	74 ms	92 ms	78 ms	7.8 KB	200	147.185.114.105
13	http://usm.ac.id/wp-...basNeue-webfont.woff	application/x-font-woff	3.071 s	-	71 ms	91 ms	171 ms	18.0 KB	200	147.185.114.105
14	http://usm.ac.id/wp-...ntello.woff?88026028	application/x-font-woff	3.076 s	-	76 ms	97 ms	150 ms	15.4 KB	200	147.185.114.105
15	http://usm.ac.id/wp-...16/11/USM-Victor.jpg	image/jpeg	3.143 s	-	-	92 ms	2031 ms	256.0 KB	200	147.185.114.105
16	http://usm.ac.id/wp-...m-victor-272x125.jpg	image/jpeg	3.274 s	-	-	90 ms	70 ms	12.3 KB	200	147.185.114.105
17	http://usm.ac.id/wp-...der_usm176777711.png	image/png	3.313 s	-	-	87 ms	1551 ms	195.7 KB	200	147.185.114.105
18	http://usm.ac.id/wp-...ges/main-menu-bg.png	image/png	3.325 s	-	-	94 ms	22 ms	3.1 KB	200	147.185.114.105
19	http://usm.ac.id/wp-...aekwondo-272x125.jpg	image/jpeg	3.334 s	-	-	87 ms	106 ms	15.6 KB	200	147.185.114.105
20	http://usm.ac.id/wp-...hfa/images/home.png	image/png	3.435 s	-	-	88 ms	11 ms	2.0 KB	200	147.185.114.105
21	http://usm.ac.id/wp-...fa/images/stripe.png	image/png	3.443 s	-	-	86 ms	-	0.4 KB	200	147.185.114.105
22	http://usm.ac.id/wp-.../11/voli-272x125.jpg	image/jpeg	3.528 s	-	-	85 ms	144 ms	17.9 KB	200	147.185.114.105

Full Optimization Checklist

	Keep-Alive	GZip	Compress Img	Progressive	Cache Static	CDN Detected
	100%	26%	88%	73%	4%	2%
http://usm.ac.id/	✓	✗				
1: usm.ac.id - /	✓	✗			✗	✗
2: usm.ac.id - style.css	✓	✗			✗	✗
3: fonts.googleapis.com - css	✓	✓			✗	✓
4: usm.ac.id - jquery.js	✓	✗			✗	✗
5: usm.ac.id - jquery-migrate.min.js	✓	✗			✗	✗
6: usm.ac.id - tie-scripts.js	✓	✗			✗	✗
7: usm.ac.id - tabs.min.js	✓	✗			✗	✗
8: usm.ac.id - wp-emoji-release.min.js	✓	✗			✗	✗
9: usm.ac.id - logo-usm-semarang2.png	✓		✓		✗	✗
10: fonts.gstatic.c...IZ0nv9q090hN8.woff2	✓				✓	
11: fonts.gstatic.c...d792ULpGE4W_Y.woff2	✓				✓	
12: www.usm.ac.id - player.js	✓	✗			✗	✗
13: usm.ac.id - BebasNeue-webfont.woff	✓				✗	
14: usm.ac.id - tieFontello.woff	✓				✗	
15: usm.ac.id - USM-Victor.jpg	✓		⚠	✗	✗	✗
16: usm.ac.id - usm-victor-272x125.jpg	✓		✓	✗	✗	✗
17: usm.ac.id - header_usm176777711.png	✓		✓		✗	✗
18: usm.ac.id - main-menu-bg.png	✓		✓		✗	✗
19: usm.ac.id - taekwondo-272x125.jpg	✓		✓	✗	✗	✗
20: usm.ac.id - home.png	✓		✓		✗	✗
21: usm.ac.id - stripe.png	✓		✓		✗	✗
22: usm.ac.id - voli-272x125.jpg	✓		✓	✗	✗	✗
23: usm.ac.id - dudoks-150x1501.png	✓		✓		✗	✗
24: usm.ac.id - black-loader.gif	✓		✓		✗	✗
25: usm.ac.id - LOGO-TV-copy-copy-2.png	✓		✓		✗	✗
26: usm.ac.id - 4_Banner_SIJALU.png	✓		✓		✗	✗
27: usm.ac.id - 3_Banner_DIGILIB.png	✓		✓		✗	✗
28: usm.ac.id - springer.png	✓		✓		✗	✗
29: usm.ac.id - ppa.jpg	✓		⚠	✗	✗	✗
30: usm.ac.id - pk1-1-copy-copy.jpg	✓		⚠	✗	✗	✗
31: usm.ac.id - taylor1.jpg	✓		✓	⚠	✗	✗

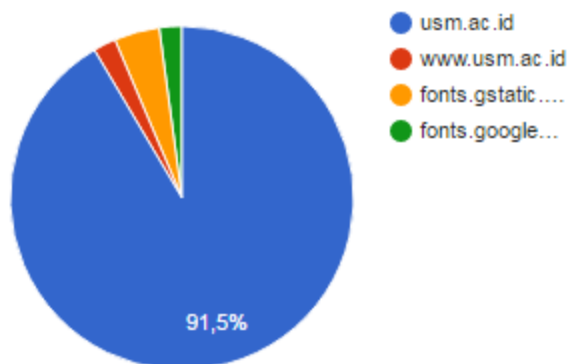
File Bermasalah (Tanda Merah)

19: usm.ac.id - taekwondo-272x125.jpg	✓		✓	✗	✗	✗
20: usm.ac.id - home.png	✓		✓		✗	✗
21: usm.ac.id - stripe.png	✓		✓		✗	✗
22: usm.ac.id - voli-272x125.jpg	✓		✓	✗	✗	✗
23: usm.ac.id - dudoks-150x1501.png	✓		✓		✗	✗
24: usm.ac.id - black-loader.gif	✓		✓		✗	✗
25: usm.ac.id - LOGO-TV-copy-copy-2.png	✓		✓		✗	✗
26: usm.ac.id - 4_Banner_SIJALU.png	✓		✓		✗	✗
27: usm.ac.id - 3_Banner_DIGILIB.png	✓		✓		✗	✗
28: usm.ac.id - springer.png	✓		✓		✗	✗
29: usm.ac.id - ppa.jpg	✓		⚠	✗	✗	✗
30: usm.ac.id - pk1-copy-copy.jpg	✓		⚠	✗	✗	✗
31: usm.ac.id - taylor1.jpg	✓		✓	⚠	✗	✗
32: usm.ac.id - morgan.png	✓		✓		✗	✗
33: usm.ac.id - 2_Banner-SIA.png	✓		✓		✗	✗
34: usm.ac.id - 1_Banner-PMB.png	✓		✓		✗	✗
35: usm.ac.id - pk1.jpg	✓		⚠	✗	✗	✗
36: usm.ac.id - ban...apan-guru-besar.jpg	✓		⚠	✗	✗	✗
37: usm.ac.id - DSC_44721.jpg	✓		✓	✓	✗	✗
38: usm.ac.id - USM-1-660x330.jpg	✓		⚠	✗	✗	✗
39: usm.ac.id - UKM-TARI-USM2-660x330.jpg	✓		⚠	✗	✗	✗
40: usm.ac.id - logo.png						
41: usm.ac.id - logo.png	✓		✓		✗	✗
42: usm.ac.id - kalender-dudok1.png	✓		✓		✗	✗
43: usm.ac.id - Banner_WartaUSM.png	✓		✓		✗	✗
44: usm.ac.id - Banner_WartaUSM_sep15.png	✓		✓		✗	✗
45: usm.ac.id - Ban...WartaUSM-des-15.png	✓		✓		✗	✗
46: usm.ac.id - maret.png	✓		✓		✗	✗
47: usm.ac.id - fico-usm-150x1501.png	✓		✓		✗	✗
	Keep-Alive	GZip	Compress Img	Progressive	Cache Static	CDN Detected

Load Konten ke Halaman Lain

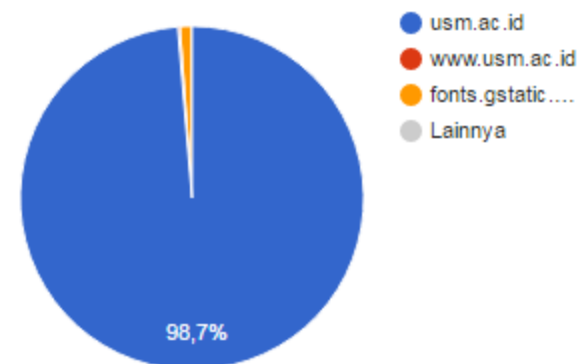
Content breakdown by domain (First View)

Requests



Domain	Requests ▾
usm.ac.id	43
fonts.gstatic.com	2
www.usm.ac.id	1
fonts.googleapis.com	1

Bytes



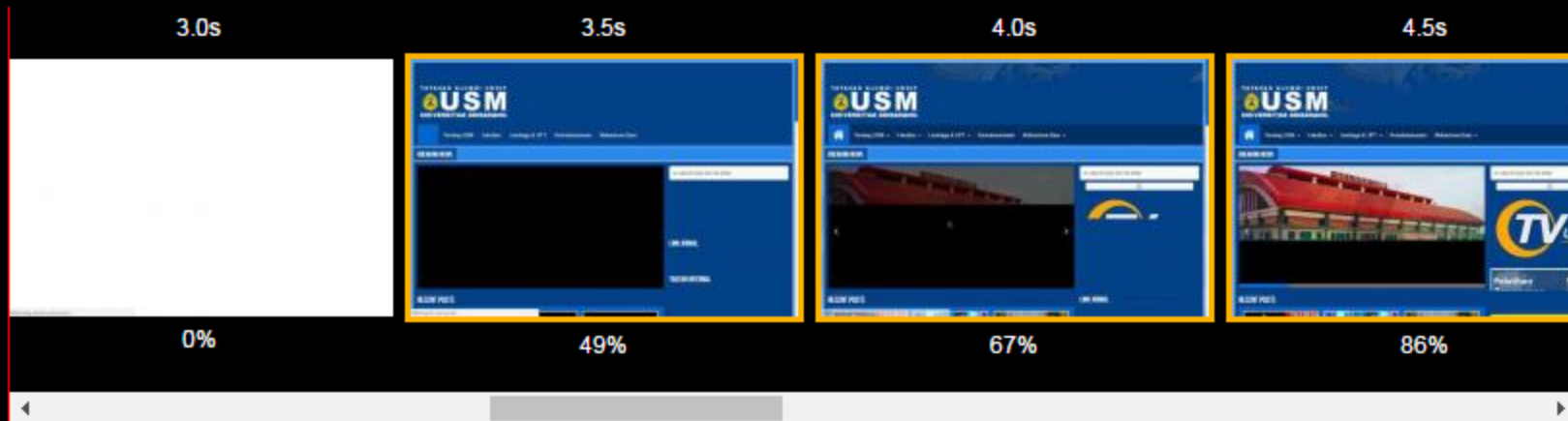
Domain	Bytes ▾
usm.ac.id	3.994.757
fonts.gstatic.com	44.726
www.usm.ac.id	8.029
fonts.googleapis.com	873

Test Result (1)

HOME **TEST RESULT** TEST HISTORY FORUMS DOCUMENTATION ABOUT

Tested From: Dulles, VA - Chrome - Cable

1: usm.ac.id/
(Edit)



Export filmstrip as an image...

☒ Slow Motion

Create Video

Advanced customization options...

Thumbnail Size

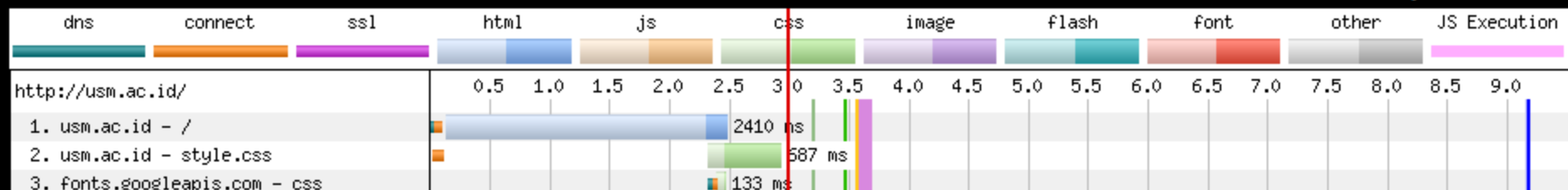
- ☐ Small
- ☐ Medium
- ☐ Large

Thumbnail Interval

- ☐ 0.1 sec
- ☐ 0.5 sec
- ☐ 1 sec
- ☐ 5 sec

Comparison End Point

- ☐ Visually Complete
- ☐ Last Change
- ☐ Document Complete
- ☐ Fully Loaded



Test Result (2)

[HOME](#)
[TEST RESULT](#)
[TEST HISTORY](#)
[FORUMS](#)
[DOCUMENTATION](#)
[ABOUT](#)

Tested From: Dulles, VA - Chrome - Cable

☒ Slow Motion

Create Video

Advanced customization options...

Export filmstrip as an image...

Thumbnail Size

Thumbnail Interval

Comparison End Point

● Small

- Medium

☒ Large

● 0.1 sec

0.5 sec

● 1 sec

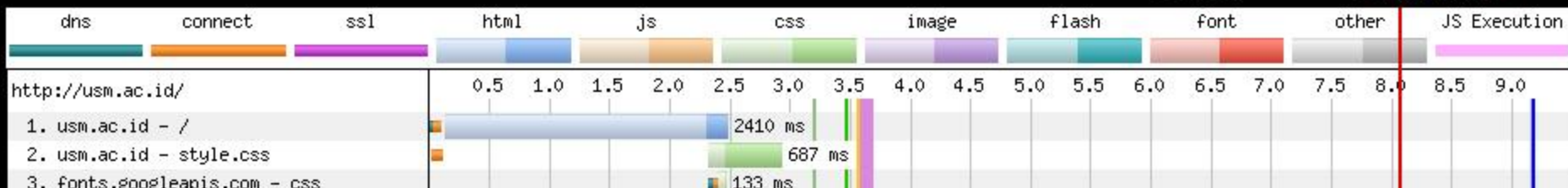
- 5 sec

- Visually Complete

● **Last Change**

● Document Complete

- Fully Loaded



Lakukan Pengujian Ulang

- ❑ Ubah Test Location menjadi Asia (Singapore EC2)
- ❑ Start Test

Test a website's performance

Analytical Review

Visual Comparison

Traceroute

START TEST

Provided by



Test Location

Singapore - EC2 (Chrome,IE 11,Firefox)

Select from Map

Browser

Chrome

Advanced Settings ▶

1 run, Cable connection, results are public

Test Location diubah Menjadi Asia

- Lokasi Indonesia berdekatan dengan Singapura sehingga kemungkinan hasil testnya berbeda dengan yang sebelumnya.
- Silakan anda amati hasilnya, apakah ada perbedaan??
- Uji coba juga apabila test locationnya anda ubah menjadi benua lain atau negara lain.

Buat Laporan Testing 2

- Silakan lakukan pengujian lagi untuk CROSS BROWSERS COMPATIBILITY, LINKS VALIDATING dan WEBSITE PERFORMANCE.
- Website yang diuji minimal 3.