

The web should be fast.

Executive Summary



Performance Report for: https://siteground.com/

Report generated: Tue, Aug 28, 2018, 1:15 PM -0500 Test Server Region: ■ Dallas, USA Using: Ochrome (Desktop) 62.0.3202.94, PageSpeed 1.15gt1, YSlow 3.1.8

PageSpeed Score C(73%) ◆	YSlow Score		Fully Loaded Time	Total Page Size	3 ^	Req 34	uests 4 🔺
op 5 Priority Issue	es						
Enable gzip compression		F ((0)	AVG SCORE: 86%	SERVER		HIGH
Leverage browser caching		F (35) 🗸	AVG SCORE: 60%	SERVER		HIGH
Serve scaled images		F ((48)	AVG SCORE: 74%	IMAGES		HIGH
Optimize images		В ((83)	AVG SCORE: 71%	IMAGES		HIGH
Optimize the order of styles	and scripts	В ((83)	AVG SCORE: 94%	CSS/JS		HIGH

How does this affect me?

Studies show that users leave a site if it hasn't loaded in 4 seconds; keep your users happy and engaged by providing a fast performing website.

As if you didn't need more incentive, **Google has announced that they** are using page speed in their ranking algorithm.

About GTmetrix

We can help you develop a faster, more efficient, and all-around improved website experience for your users. We use Google PageSpeed and Yahoo! YSlow to grade your site's performance and provide actionable recommendations to fix these issues.

About the Developer



GTmetrix is developed by the good folks at **GT.net**, a Vancouver-based performance hosting company with over 22 years experience in web technology.

https://gt.net/

What do these grades mean?

This report is an analysis of your site with Google and Yahoo!'s metrics for how to best develop a site for optimized speed. The **grades you see represent** how well the scanned URL adheres to those rules.

Lower grades (C or lower) mean that the page can stand to be faster using better practices and optimizing your settings.

What's in this report?

This report covers basic to technical analyses on your page. It is categorized under many headings:

- Executive: Overall score information and Priority Issues
- History: Graphed history of past performance
- Waterfall: Graph of your site's loading timeline
- Technical: In-depth PageSpeed & YSlow information

These will provide you with a snapshot of your performance.



History

History

Page load times



Page sizes and request counts



PageSpeed and YSlow scores





Waterfall Chart

The waterfall chart displays the loading behaviour of your site in your selected browser. It can be used to discover simple issues such as 404's or more complex issues such as external resources blocking page rendering.

🖃 S	iteGround: Web Hosti	ing Serv	vices Crafte	d with Care!						
H	GET siteground.cor	301	siteground.	178 B	141.3ms					
Ξ	GET www.sitegrour	200	siteground.	42.5 KB		694.5ms				
Ξ	GET css?family=So	200	fonts.goog	1.7 KB		121.8ms				
H	GET 3bd9a12-9780	200	damt7w3yc	94.3 KB		280r	ns			
B	GET 19f486d-0c67!	200	du3vkre908	136.4 KB		33	31ms			
Ξ	GET startmegacha	200	siteground.	1012 B		43.4ms				
Ξ	GET 7dd3359b07ac	200	siteground.	39 KB		30)1.8ms			
H	GET syed.jpg	200	siteground.	67.2 KB			339.5ms			
Ξ	GET norcross.jpg	200	siteground.	2.5 KB			374.7ms			
H	GET d4a326b9f8e4	200	siteground.	36 KB			375.8ms			
H	GET 3ea09f6583a2	200	siteground.	38.8 KB			407.7ms			
Ξ	GET 45d000068e3(200	siteground.	33.9 KB			411.2ms			
Ξ	GET 42ed5092d93	200	siteground.	37.4 KB			411.2ms			
Ξ	GET matt.gif	200	siteground.	5.1 KB			411.2ms			
H	GET gtm.js?id=GTN	200	googletagn	31.4 KB			188.5 ns			
H	GET KFOmCnqEu92	200	fonts.gstat	15 KB			15.1ms			
E	GET KFOlCnqEu92Fi	200	fonts.gstat	15.1 KB			21.1ms			
H	GET mem8YaGs12	200	fonts.gstat	13.7 KB			21.5ms			
3	GET KFOlCnqEu92Fi	200	fonts.gstat	15.2 KB			19.8ms			_
	GET content_bg-22	200	damt7w3yc	993 B			53.3ms			
H	GET home-bg-221	200	damt7w3yc	204.6 KB			118.1m	;		_
H	GET ieVi2ZhZI2eCN	200	fonts.gstat	14.9 KB			14.7ms			
H	GET mem5YaGs12	200	fonts.gstat	14.2 KB			20.4ms			_
H	GET JTURjIg1_i6t8	200	fonts.gstat	18.5 KB			17.3ms			
H	GET JTUSjIg1_i6t8	200	fonts.gstat	18.2 KB			20.9ms			
9	GET mem5YaGs12	200	fonts.gstat	14.4 KB			19.2ms			
	GET support-bg-22	200	damt7w3yc	75.3 KB			95.7ms			-
	POST ajax?object=	200	siteground.	2.2 KB					6	53.3ms
	GET 9c0c6e65-1c6	200	cdn.cookiel	14.5 KB					76.2ms	
	GET favicon.ico?v=	200	siteground.	4 KB					39.7ms	_
	GET guery.min.js	200	ajax.googk	32.7 KB					82.3ms	_
	GET Optanon.css	200	can.cookiel	6.7 KB					ZUMS	2)7 1
	GET flogg foots:	200 OK	geolocatior	33 B						2:/.1ms
	GET Trags-tooter_D	200	udmt/w3y(3.5 KB					2 17- (
	34 Requests			1 MD					Z.175 (ONIOa	u. 1.005)



Page Load Timings

RUM Speed Index: 1,444

Redirect	Connect	Backend	TTFB
143ms	25ms	O.6s	0.8s
DOM int.	DOM loaded	First paint	Contentful paint
1.4s	1.4s (80ms)	1.4s	1.4s
Onload 1.7s (Oms)			

Redirect duration

terfall Chart ?			Redire	ect Duration
uTube				
GET youtube.com	301 Move	youtube.com	0	638ms
GET www.youtube.com	301 Move	youtube.com	0	635ms
GET www First 200 OK	200 OK	youtube.com	52.6 KB	2.0
GET scheduler.js	200 OK	youtube.com	2 KB	222ms
GET www-pageframe-vfI7RQ	200 OK	youtube.com	8.7 KB	833m:
GET www-guide-vfl2WSEld.c	200 OK	youtube.com	3 K.B	857m:
GET www-core-vflkD-QiW.cs	200 OK	youtube.com	43.8 KB	599ms
GET www-home-c4-vfIIV na		voutube.com	25 KB	782ms

This is the time spent redirecting URLs before the final HTML page is loaded. Common redirects include:

- Redirect from a non-www to www (eg. example.com to www.example.com)
- Redirect to a secure URL (eg. http:// to https://)
- Redirect to set cookies
- Redirect to a mobile version of the site

Some sites may even perform a chain of multiple redirects (eg. non-www to www, then to a secure URL). This timing is the total of all this time that's spent redirecting, or 0 if no redirects occurred.

In the Waterfall Chart, Redirect duration consists of the time from the beginning of the test until just before we start the request of the final HTML page (when we receive the first 200 OK response).

During this time, the browser screen is blank! Ensure that this duration is kept to short by minimizing your redirects.

Connection duration

hart ?			Connect Duration	
te	\sim			
ample.com (200 OK	example.com	9.7 KB	477ms
mize_c72e561d5	200 OK	example.com	80.4 KB	
ily=PT+Sans Fir	st 200 O	K onts.googleap	871 B	119ms
ily=Open+Sans:	200	fonts.googleap	1.1 KB	118ms
ily=Crete+Roun		fonts.googleap	442 B	139ms
ily=Raleway:400		fonts.googleap	1.1 KB	116ms
ample.com	200 OK	example.com	259 B	
s?ver=1.12.4		example.com	33 KB	

Once any redirects have completed, Connection duration is measured. This is the time spent connecting to the server to make the request to the page.

Technically speaking, this duration is a combination of the blocked time, DNS time, connect time and sending time of the request (rather than *just* connect time). We've combined those components into a single Connection duration to simplify things (as most of these times are usually small).

In the Waterfall Chart, Connection duration consists of everything up to and including the "Sending" time in the final HTML page request (the first 200 OK response).

During this time, the browser screen is still blank! Various causes could contribute to this, including a slow/problematic connection between the test server and site or slow response times from the site.

Backend duration

Once the connection is complete and the request is made, the server needs to generate a response for the page. The time it takes to generate the response is known as the Backend duration.

, IOI C				
te	_			-
ample.com	200 OK	example.com	9.7 KB	477ms
mize_c72e561d5	200 OK	example.com	80.4 KB	
ily=PT+Sans Fi	rst 200 O	K onts.googleap	871 B	119ms
ily=Open+Sans:	200	fonts.googleap	1.1 KB	118ms
ily=Crete+Roun		fonts.googleap	442 B	139ms
ily=Raleway:400		fonts.googleap	1.1 KB	116ms
ample.com	200 OK	example.com	259 B	
s?ver=1.12.4	200 OK	example.com	33 KB	

In the Waterfall Chart, Backend duration consists of purple waiting time in the page request.

There are a number of reasons why Backend duration could be slow. We cover this is our "<u>Why is my</u> page slow" article.

Time to First Byte (TTFB)



Page Load Timings

terfall Chart ?				TTFB	
uTube					
GET youtube.com	301 Move	youtube.com	0	638ms	
GET www.youtube.com	301 Move	youtube.com	0	635	ms
GET www First 200 OK	200 OK	youtube.com	52.6 KB		
GET scheduler.js	200 OK	youtube.com	2 KB		222ms
GET www-pageframe-vfI7RQ	200 OK	youtube.com	8.7 KB		833ms
GET www-guide-vfl2WSEld.c	200 OK	youtube.com	3 KB		857m:
GET www-core-vflkD-QiW.cs	200 OK	youtube.com	43.8 KB		599ms
GET www-home-c4-vfllV_na		youtube.com	25 KB		782ms

DOM interactive time

			DOM Interactive
e.com	0	638ms	
e.com	0	635ms	
e.com	52.6 KB	2.09s	
e.com	2 K.B	222ms	
e.com	8.7 KB	833ms	
e.com	3 KB	857ms	
e.com	43.8 KB	599ms	
e.com	25 KB	782ms	

Time to First Byte (TTFB) is the total amount of time spent to receive the first byte of the response once it has been requested. It is the sum of "Redirect duration" + "Connection duration" + "Backend duration". This metric is one of the key indicators of web performance.

In the Waterfall Chart, it is calculated at the start of the test until just before receiving on the page request and represented by the orange line.

Some ways to improve the TTFB include: optimizing application code, implementing caching, finetuning your web server configuration, or upgrading server hardware.

DOM interactive time is the point at which the browser has finished loading and parsing HTML, and the DOM (Document Object Model) has been built. The DOM is how the browser internally structures the HTML so that it can render it.

DOM interactive time isn't marked in the Waterfall Chart as it's usually very close in timing to DOM content loaded.

DOM content loaded time

			DOM Loaded
e.com	0	638ms	· · ·
e.com	0	635ms	
e.com	52.6 KB	2.09s	
e.com	2 KB	222ms	
e.com	8.7 KB	833ms	
e.com	3 KB	857ms	
e.com	43.8 KB	599ms	
e.com	25 KB	782ms	

DOM content loaded time (DOM loaded or DOM ready for short) is the point at which the DOM is ready (ie. DOM interactive) and there are no stylesheets blocking JavaScript execution.

If there are no stylesheets blocking JavaScript execution and there is no parser blocking JavaScript, then this will be the same as DOM interactive time.

In the Waterfall Chart, it is represented by the blue line.

event. Many JavaScript frameworks use this event as a starting point to begin execution of their code.

Since this event is often used by JavaScript as the starting point and delays in this event mean delays in rendering, it's important to make sure that style and script order is optimized and that parsing of JavaScript is deferred.

First paint time

		First Pa	int
e.com	0	638ms	
e.com	0	635ms	
e.com	52.6 KB	2.09s	
e.com	2 KB	222ms	
e.com	8.7 KB	833ms	
e.com	3 KB	857ms	
e.com	43.8 KB	599ms	
e.com	25 KB	782ms	

First paint time is the first point at which the browser does any sort of rendering on the page. Depending on the structure of the page, this first paint could just be displaying the background colour (including white), or it could be a majority of the page being rendered.

In the Waterfall Chart, it is represented by the green line.

This timing is of significance because until this point, the browser will have only shown a blank page and this change gives the user an indication that the page is loading. However, we don't know how much of the page was rendered with this paint, so having a early first paint doesn't necessarily

indicate a fast loading page.

If the browser does not perform a paint (ie. the html results in an blank page), then the paint timings may be missing.

First contentful paint time

		Conte	ntful Paint
e.com	0	635ms	
e.com	52.6 KB	2.09s	
e.com	2 K.B	222ms	
e.com	8.7 KB	833ms	1
e.com	3 K.B	857ms	
e.com	43.8 KB	599ms	
e.com	25 KB	782ms	

First Contentful Paint is triggered when any *content* is painted - i.e. something defined in the DOM (Document Object Model). This could be text, an image or canvas render.

This timing aims to be more representative of your user's experience, as it flags when actual content has been loaded in the page, and not just any change - but it may often be the same time as First Paint.

Because the focus is on content, the idea is that this metric gives you an idea of when your user receives consumable information (text, visuals, etc) - much more useful for performance assessment



than when a background has changed or a style has been applied.

If the browser does not perform a paint (ie. the html results in an blank page), then the paint timings may be missing.

Onload time

			On	load
e.com	0	638ms		
e.com	0	635ms		
e.com	52.6 KB	2.09s		
.com	2 KB	222ms		
.com	8.7 KB	833ms		
.com	3 KB	857ms		
.com	43.8 KB	599ms		
	25 K.B.	782ms		

Onload time occurs when the processing of the page is complete and all the resources on the page (images, CSS, etc.) have finished downloading. This is also the same time that DOM complete occurs and the JavaScript window.onload event fires.

Note that there may be JavaScript that initiates subsequent requests for more resources, hence the reason why Fully loaded timing is preferred.

In the Waterfall Chart, it is represented by the red line.

The time in brackets is the time spent executing JavaScript triggered by the Onload event.

Note that Onload time was the previous default for when to stop the test prior to Feburary 8th, 2017.



PageSpeed Recommendations

RECOMMENDATION	GRADE	RELATIVE	TYPE	PRIORITY
Enable gzip compression	F (0)	VG SCORE: 86%	SERVER	HIGH
Leverage browser caching	F (35)	VG SCORE: 60%	SERVER	HIGH
Serve scaled images	F (48)	VG SCORE: 74%	IMAGES	HIGH
Optimize images	B (83)	AVG SCORE: 71%	IMAGES	HIGH
Optimize the order of styles and scripts	B (83)	VG SCORE: 94%	CSS/JS	HIGH
Defer parsing of JavaScript	B (89)	AVG SCORE: 71%	JS	HIGH
Specify a cache validator	A (98)	♦ AVG SCORE: 94%	SERVER	HIGH
Specify image dimensions	A (99)	♦ AVG SCORE: 98%	IMAGES	MEDIUM
Minify JavaScript	A (99)	AVG SCORE: 89%	JS	HIGH
Minify HTML	A (99)	♦ AVG SCORE: 98%	CONTENT	LOW
Minify CSS	A (99)	♦ AVG SCORE: 95%	CSS	HIGH
Avoid bad requests	A (100)	♦ AVG SCORE: 98%	CONTENT	HIGH
Avoid landing page redirects	A (100)	♦ AVG SCORE: 98%	SERVER	HIGH
Enable Keep-Alive	A (100)	♦ AVG SCORE: 97%	SERVER	HIGH
Inline small CSS	A (100)	♦ AVG SCORE: 96%	CSS	HIGH
Inline small JavaScript	A (100)	♦ AVG SCORE: 95%	JS	HIGH
Minimize redirects	A (100)	AVG SCORE: 88%	CONTENT	HIGH
Minimize request size	A (100)	♦ AVG SCORE: 96%	CONTENT	HIGH
Put CSS in the document head	A (100)	AVG SCORE: 100%	CSS	HIGH
Serve resources from a consistent URL	A (100)	AVG SCORE: 89%	CONTENT	HIGH
Specify a Vary: Accept-Encoding header	A (98)	♦ AVG SCORE: 96%	SERVER	LOW
Combine images using CSS sprites	A (100)	AVG SCORE: 90%	IMAGES	HIGH
Avoid CSS @import	A (100)	♦ AVG SCORE: 98%	CSS	MEDIUM
Prefer asynchronous resources	A (100)	♦ AVG SCORE: 100%	JS	MEDIUM
Specify a character set early	A (100)	♦ AVG SCORE: 100%	CONTENT	MEDIUM
Avoid a character set in the meta tag	A (100)	♦ AVG SCORE: 100%	CONTENT	LOW
Remove query strings from static resources	A (100)	AVG SCORE: 88%	CONTENT	LOW



YSlow Recommendations

YSlow Recommendations

RECOMMENDATION	GRADE	RELATIVE	TYPE	PRIORITY
Add Expires headers	F (0)	VG SCORE: 25%	SERVER	HIGH
Use a Content Delivery Network (CDN)	F (10)	VG SCORE: 23%	SERVER	MEDIUM
Compress components with gzip	D (67)	VG SCORE: 87%	SERVER	HIGH
Use cookie-free domains	E (55)	♦ AVG SCORE: 50%	COOKIE	LOW
Minify JavaScript and CSS	C (70)	♦ AVG SCORE: 72%	CSS/JS	MEDIUM
Reduce DNS lookups	C (75)	AVG SCORE: 68%	CONTENT	LOW
Avoid URL redirects	A (90)	♦ AVG SCORE: 87%	CONTENT	MEDIUM
Reduce cookie size	B (89)	VG SCORE: 100%	COOKIE	LOW
Make fewer HTTP requests	A (100)	AVG SCORE: 33%	CONTENT	HIGH
Make AJAX cacheable	A (100)	♦ AVG SCORE: 100%	JS	MEDIUM
Remove duplicate JavaScript and CSS	A (100)	♦ AVG SCORE: 100%	CSS/JS	MEDIUM
Avoid AlphalmageLoader filter	A (100)	🔶 AVG SCORE: 99%	CSS	MEDIUM
Avoid HTTP 404 (Not Found) error	A (100)	♦ AVG SCORE: 98%	CONTENT	MEDIUM
Reduce the number of DOM elements	A (100)	AVG SCORE: 92%	CONTENT	LOW
Use GET for AJAX requests	A (100)	♦ AVG SCORE: 100%	JS	LOW
Avoid CSS expressions	A (100)	♦ AVG SCORE: 98%	CSS	LOW
Make favicon small and cacheable	A (100)	AVG SCORE: 100%	IMAGES	LOW
Configure entity tags (ETags)	A (100)	AVG SCORE: 91%	SERVER	LOW
Make JavaScript and CSS external	(n/a)		CSS/JS	MEDIUM