

Historical Page Load Time Monitoring Using WebPageTest and Drupal

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Why is Page Load Time Important?

Because people are impatient.

Why is Page Load Time Important?

Akamai State of Online Retail Performance Report

In 2017, Akamai released these findings in their State of Online Retail Performance report:

- "A 100-millisecond delay in website load time can hurt conversion rates by 7 percent"
- "A two-second delay in web page load time increase bounce rates by 103 percent"
- "53 percent of mobile site visitors will leave a page that takes longer than three seconds to load"

SOURCE: Akamai Online Retail Performance Report: Milliseconds Are Critical

<https://www.akamai.com/uk/en/about/news/press/2017-press/akamai-releases-spring-2017-state-of-online-retail-performance-report.jsp>

Why is Page Load Time Important?

Google's Industry Benchmarks for Mobile Site Performance

Around the same time, Google provided new industry benchmarks for mobile site performance:

from Find Out How You Stack Up to New Industry Benchmarks for Mobile Page Speed



As page load time goes from:

1s to 3s the probability of bounce **increases 32%**

1s to 5s the probability of bounce **increases 90%**

1s to 6s the probability of bounce **increases 106%**

1s to 10s the probability of bounce **increases 123%**

Source: Google/SOASTA Research, 2017.

think with Google

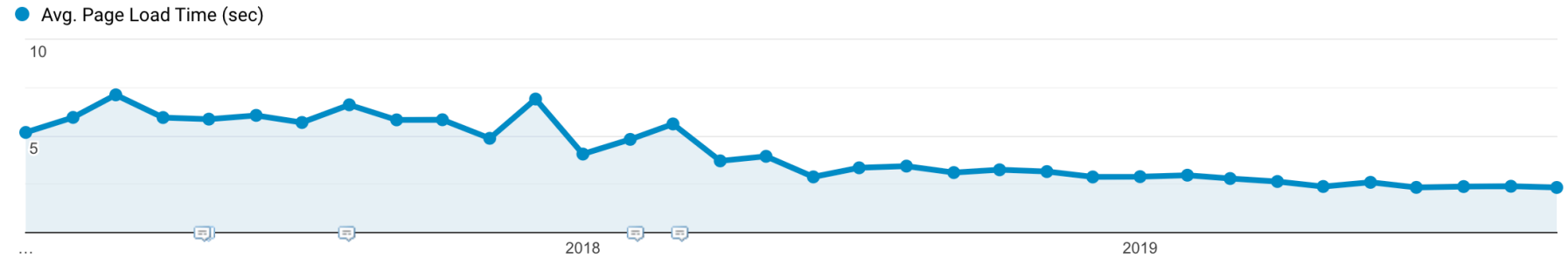
thinkwithgoogle.com

SOURCE: thinkwithgoogle.com - Find out how you stack up to new industry benchmarks for mobile page speed
<https://www.thinkwithgoogle.com/marketing-resources/data-measurement/mobile-page-speed-new-industry-benchmarks/>

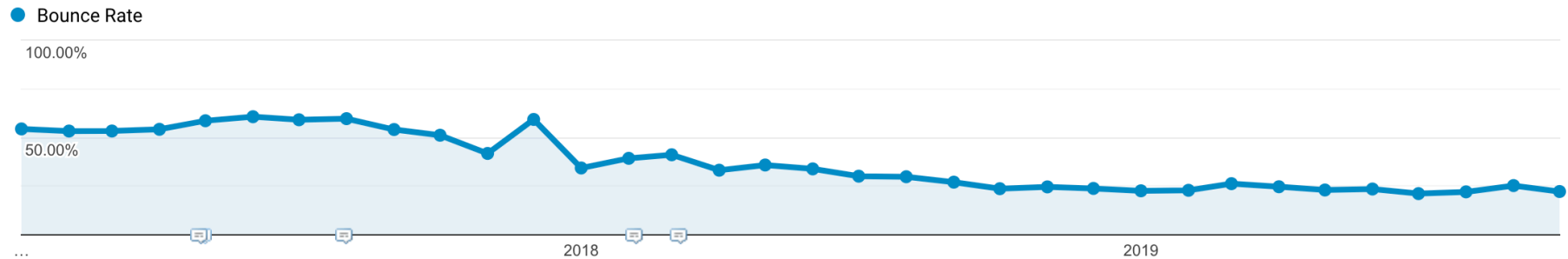
Why is Page Load Time Important?

Real user data for
Rackspace.com

- Average Page Load Time since January 1, 2017



- Average Bounce Rate from September 1, 2016 through October 18, 2019



How to Measure Page Load Time

How to Measure Page Load Time

Important Terms and Metrics*

*as defined by WebPageTest

- **Metrics**

- **Time to First Byte (TTFB)** – When very first byte received by the client.
- **Start Render/First Paint** – When anything is first rendered on the screen. (not necessarily content)
- **First Contentful Paint** – When content is first rendered on the screen.
- **Load Time** – When document complete event is triggered (i.e. DOM Ready).
- **Fully Loaded** – Last network activity within 2 seconds of document complete.
- **Speed Index** – How quickly page rendered user-visible content.
- **DOM Elements** – Count of total DOM elements at the end of the test.

- **Views**

- **First View** – All metrics are captured on a browser with cleared cookies/cache. Simulates a first-time visitor.
- **Repeat View** – All metrics are captured again without clearing cookies/cache. Simulates a returning visitor.

SOURCE: WebPageTest Documentation – Metrics

<https://sites.google.com/a/webpagetest.org/docs/using-webpagetest/metrics>

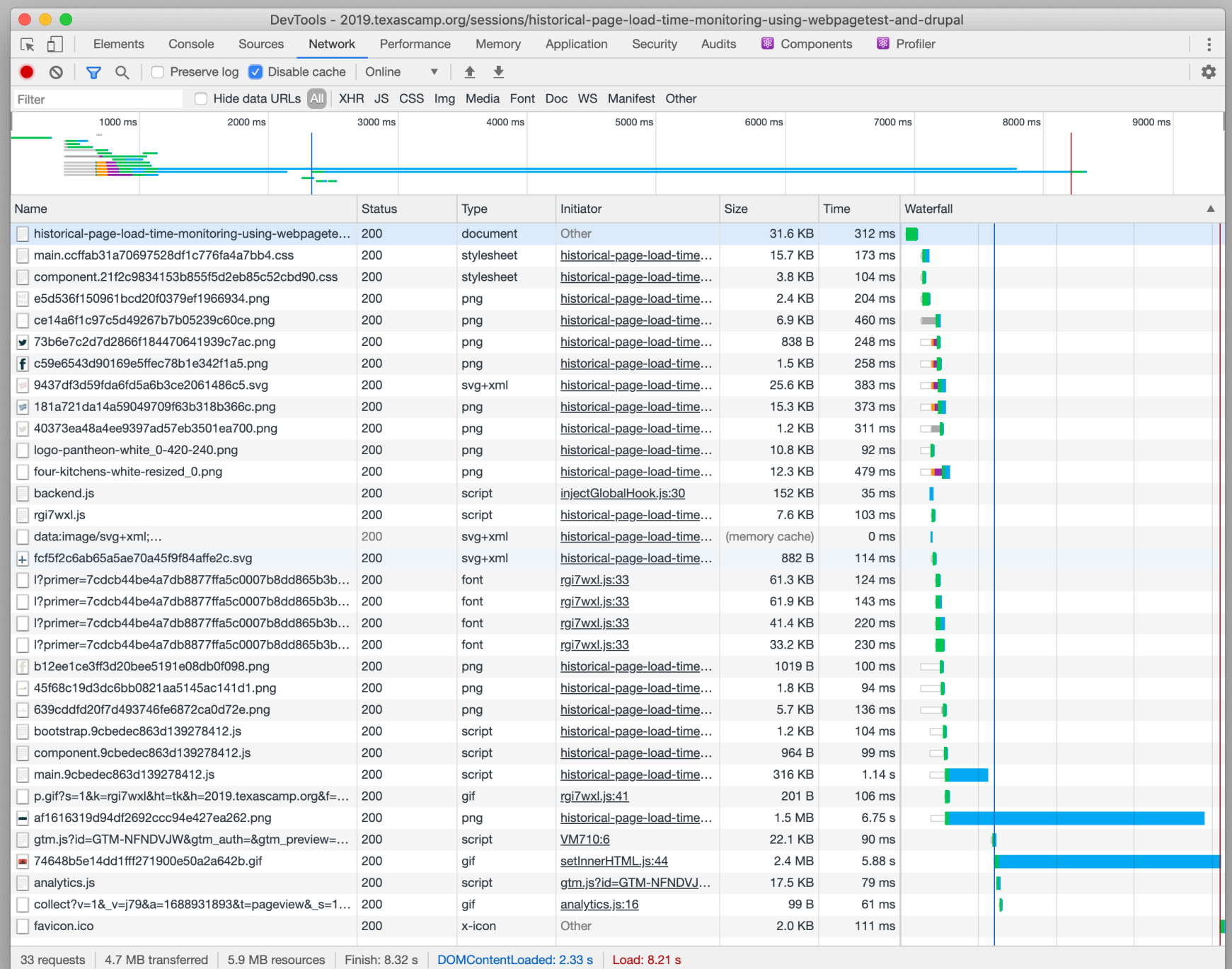
How to Measure Page Load Time

Tools and Resources

- There are many tools out there for measuring page load times. We will focus on:
 - **Google Chrome Developer Tools:**
<https://developers.google.com/web/tools/chrome-devtools/network>
 - **WebPageTest.org:**
<https://webpagetest.org/>
- Additional tools worth exploring:
 - **Google PageSpeed Insights:**
<https://developers.google.com/speed/pagespeed/insights/>
 - **Google Mobile Speed Report:**
<https://www.thinkwithgoogle.com/feature/testmysite/>
 - **GTmetrix:**
<https://gtmetrix.com>

How to Measure Page Load Time

Google Chrome Developer Tools



How to Measure Page Load Time

WebPageTest (WPT) Sample Overview



Web Page Performance Test for <https://2019.texascamp.org/sessions/historical-page-load-time-monitoring-using-webpagetest-and-drupal>

From: Dulles, VA - Chrome - Cable
10/15/2019, 3:40:37 PM

A

First Byte Time

B

Keep-alive Enabled

A

Compress Transfer

A

Compress Images

B

Cache static content

X

Effective use of CDN

- Summary
- Details
- Performance Review
- Content Breakdown
- Domains
- Processing Breakdown
- Screenshot
- Image Analysis
- Request Map

Tester: VM02-07-172.16.20.224

First View only

Test runs: 3

Re-run the test

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

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

[View Test Log](#)

Performance Results (Median Run)

	Load Time	First Byte	Start Render	First Contentful Paint	Speed Index	Last Painted Hero	First CPU Idle	Document Complete			Fully Loaded			
								Time	Requests	Bytes In	Time	Requests	Bytes In	Cost
First View (Run 2)	8.664s	0.342s	0.700s	0.658s	1.010s	4.100s	2.306s	8.664s	30	4,614 KB	8.849s	31	4,616 KB	\$\$\$\$\$

Plot Full Results

Test Results

Run 1:

First View (8.611s)

[Timeline \(view\)](#)

[Processing Breakdown](#)

[Trace \(view\)](#)

Waterfall

Screenshot

Video

[Filmstrip View](#)

[Watch Video](#)

Run 2:

First View (8.664s)

[Timeline \(view\)](#)

[Processing Breakdown](#)

[Trace \(view\)](#)

Waterfall

Screenshot

Video

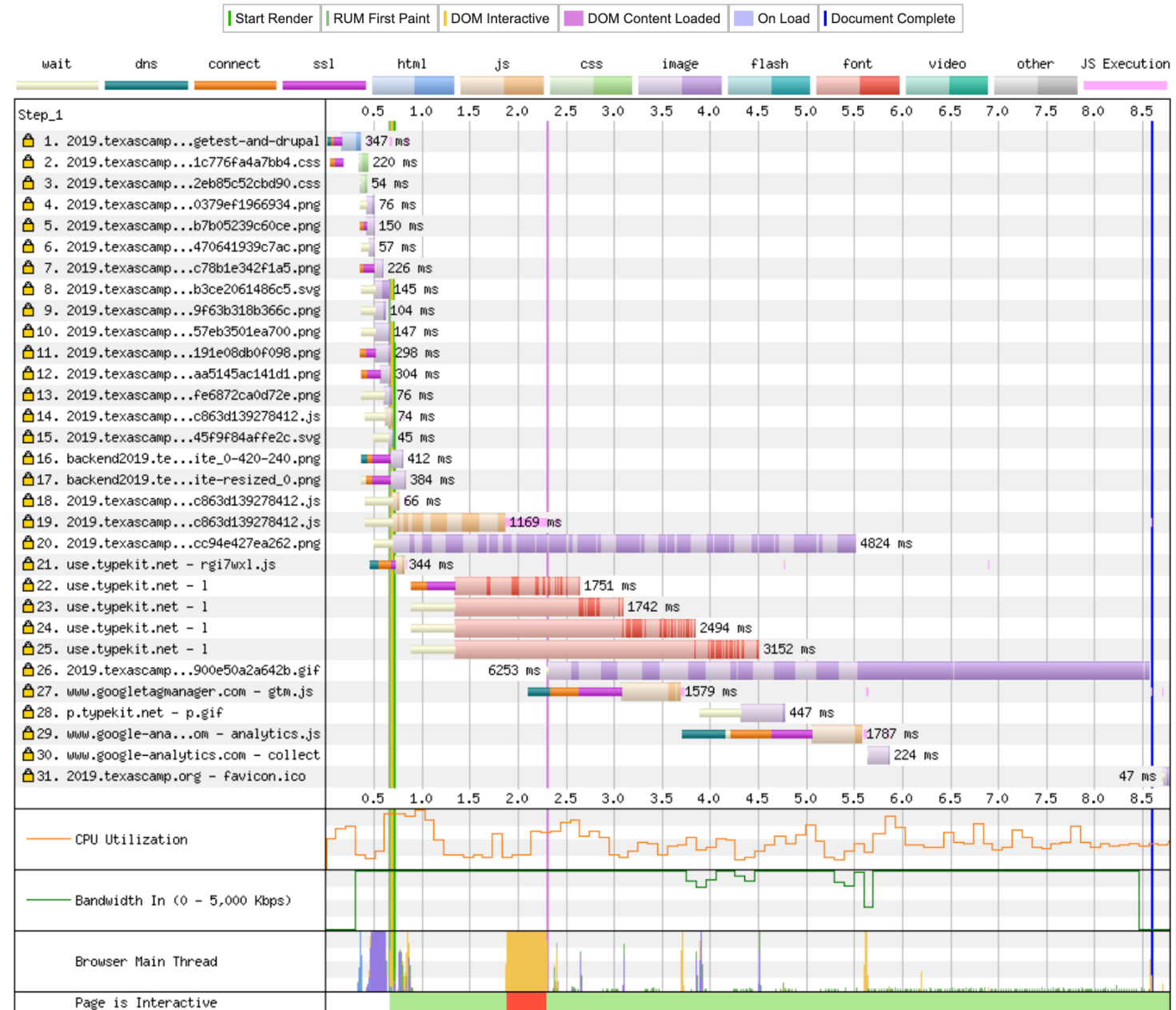
[Filmstrip View](#)

[Watch Video](#)

How to Measure Page Load Time

WebPageTest (WPT) Sample Waterfall View

Waterfall View



How to Measure Page Load Time

WebPageTest (WPT) Sample Request Details

Request Details

Before Start Render	Before On Load	After On Load
---------------------	----------------	---------------

Request Details												
#	Resource	Content Type	Request Start	DNS Lookup	Initial Connection	SSL Negotiation	Time to First Byte	Content Download	Bytes Downloaded	Certificates	Error/Status Code	IP
1	https://2019.texasca...bpagetest-and-drupal	text/html	0.163 s	28 ms	35 ms	87 ms	151 ms	46 ms	30.4 KB	-	200	34.237.122.21
2	https://2019.texasca...8df1c776fa4a7bb4.css	text/css	0.347 s	-	36 ms	95 ms	41 ms	48 ms	15.2 KB	-	200	34.237.122.21
3	https://2019.texasca...f5d2eb85c52cbd90.css	text/css	0.362 s	-	-	-	48 ms	6 ms	3.4 KB	-	200	34.237.122.21
4	https://2019.texasca...20f0379ef1966934.png	image/png	0.422 s	-	-	-	63 ms	13 ms	2.1 KB	-	200	34.237.122.21
5	https://2019.texasca...267b7b05239c60ce.png	image/png	0.427 s	-	34 ms	41 ms	71 ms	4 ms	6.5 KB	-	200	34.237.122.21
6	https://2019.texasca...184470641939c7ac.png	image/png	0.444 s	-	-	-	56 ms	1 ms	0.5 KB	-	200	34.237.122.21
7	https://2019.texasca...ffec78b1e342f1a5.png	image/png	0.507 s	-	31 ms	114 ms	78 ms	3 ms	1.1 KB	-	200	34.237.122.21
8	https://2019.texasca...5a6b3ce2061486c5.svg	image/svg+xml	0.507 s	-	-	-	81 ms	64 ms	25.2 KB	-	200	34.237.122.21
9	https://2019.texasca...9709f63b318b366c.png	image/png	0.509 s	-	-	-	99 ms	5 ms	14.9 KB	-	200	34.237.122.21
10	https://2019.texasca...7ad57eb3501ea700.png	image/png	0.51 s	-	-	-	144 ms	3 ms	0.8 KB	-	200	34.237.122.21
11	https://2019.texasca...ee5191e08db0f098.png	image/png	0.511 s	-	50 ms	96 ms	147 ms	5 ms	0.7 KB	-	200	34.237.122.21
12	https://2019.texasca...821aa5145ac141d1.png	image/png	0.569 s	-	53 ms	151 ms	95 ms	5 ms	1.5 KB	-	200	34.237.122.21
13	https://2019.texasca...746fe6872ca0d72e.png	image/png	0.605 s	-	-	-	68 ms	8 ms	5.4 KB	-	200	34.237.122.21
14	https://2019.texasca...edec863d139278412.js	application/javascript	0.617 s	-	-	-	57 ms	17 ms	0.8 KB	-	200	34.237.122.21
15	https://2019.texasca...70a45f9f84affe2c.svg	image/svg+xml	0.654 s	-	-	-	43 ms	2 ms	0.5 KB	-	200	34.237.122.21
16	https://backend2019....-white_0-420-240.png	image/png	0.682 s	48 ms	51 ms	196 ms	114 ms	3 ms	10.3 KB	-	200	34.237.122.21
17	https://backend2019....-white-resized_0.png	image/png	0.683 s	-	51 ms	196 ms	134 ms	3 ms	11.9 KB	-	200	34.237.122.21
18	https://2019.texasca...edec863d139278412.js	application/javascript	0.688 s	-	-	-	58 ms	8 ms	0.5 KB	-	200	34.237.122.21
19	https://2019.texasca...edec863d139278412.js	application/javascript	0.688 s	-	-	-	60 ms	1109 ms	315.7 KB	-	200	34.237.122.21
20	https://2019.texasca...92ccc94e427ea262.png	image/png	0.689 s	-	-	-	183 ms	4641 ms	1,506.2 KB	-	200	34.237.122.21
21	https://use.typekit.net/rqj7wxi.js	text/javascript	0.724 s	74 ms	125 ms	58 ms	75 ms	12 ms	7.4 KB	-	200	104.111.222.25
22	https://use.typekit...2257a9191&fvd=n4&v=3	application/font-woff2	1.343 s	-	156 ms	302 ms	330 ms	963 ms	61.0 KB	-	200	104.111.222.25
23	https://use.typekit...2257a9191&fvd=n4&v=3	application/font-woff2	1.343 s	-	-	-	1293 ms	449 ms	33.0 KB	-	200	104.111.222.25
24	https://use.typekit...2257a9191&fvd=n4&v=3	application/font-woff2	1.343 s	-	-	-	1743 ms	751 ms	61.6 KB	-	200	104.111.222.25
25	https://use.typekit...2257a9191&fvd=n4&v=3	application/font-woff2	1.343 s	-	-	-	2496 ms	656 ms	41.1 KB	-	200	104.111.222.25
26	https://2019.texasca...271900e50a2a642b.gif	image/gif	2.312 s	-	-	-	248 ms	6005 ms	2,416.6 KB	-	200	34.237.122.21
27	m cookies win=x">https://www.googlea...w=>m cookies win=x	application/javascript	3.073 s	211 ms	308 ms	446 ms	493 ms	121 ms	22.0 KB	-	200	172.217.11.8
28	https://p.typekit.ne...e=js&=1570590574677	image/gif	4.323 s	-	-	-	433 ms	14 ms	0.0 KB	-	200	104.111.222.25
29	https://www.google-a...ics.com/analytics.js	text/javascript	5.051 s	432 ms	412 ms	422 ms	457 ms	64 ms	17.4 KB	-	200	172.217.15.110
30	https://www.google-a...NFNDVJW&z=1459257082	image/gif	5.633 s	-	-	-	220 ms	4 ms	0.0 KB	-	200	172.217.15.110
31	https://2019.texascamp.org/favicon.ico	image/x-icon	8.718 s	-	-	-	44 ms	3 ms	1.6 KB	-	200	34.237.122.21

How Does Drupal Come Into Play?

How Does Drupal Come Into Play?

Introducing the Performance Budget Module

Performance Budget

[View](#) [Version control](#) [Automated testing](#)

By [bighappyface](#) on 8 February 2017, updated 8 June 2017



This project is not covered by Drupal's [security advisory policy](#).

Web page performance is as important as ever and, using best-of-breed tooling, performance budgets can be defined and automated to help us keep things the best that they can be.

Key Features

- Multiple budgets
- Plugin design to facilitate adding providers
- Stored results broken out by budget dimension
- Customizable schedule for budget analysis

8.x-1.0 goals


- High test coverage / Dominant unit tests
- Budget Entity, List, and CRUD
- Cron integration for budget analysis schedules
- Pass/Fail alerts
- Pass/Fail thresholds (may be plugin specific)
- Budget enable/disable
- WebPageTest plugin (High Priority)
- Google PageSpeed Insights plugin (Medium Priority)

Supporting organizations:

[Rackspace Hosting](#)

Project information

Module categories: [Performance and Scalability](#)

 364 downloads



This project is not covered by the [security advisory policy](#).
Use at your own risk! It may have publicly disclosed vulnerabilities.

Downloads

8.x-1.0-alpha6 released 11 September 2019

↓ [tar.gz \(1000.98 KB\)](#) | [zip \(1.02 MB\)](#)

Development version: [8.x-1.x-dev](#) updated 11 Sep 2019 at 21:53 UTC

Testing result: **PHP 7.2 & MySQL 5.5, D8.8 31 pass** [all results](#)

[View all releases](#)



3

Maintainers for Performance Budget

[WidgetsBurritos](#) – 14 commits
last: 4 weeks ago, first: 2 months ago

[bighappyface](#) – 6 commits
last: 2 years ago, first: 2 years ago

[View all committers](#)

[View commits](#)

Issues for Performance Budget

To avoid duplicates, please search before submitting a new issue.

Search

[Advanced search](#)

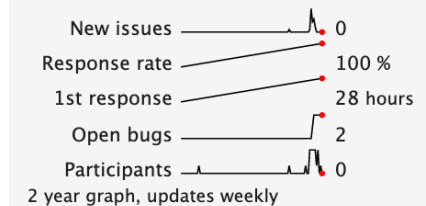
All issues

[9 open, 24 total](#)

Bug report

[2 open, 5 total](#)

Statistics



Documentation

No documentation guides

Resources

[Read license](#)

[View project translations](#)

How Does Drupal Come Into Play?

About the Performance Budget Module

- Alpha release module for Drupal 8 (Drupal 9 support is on the roadmap)
- Provides historical performance trending capabilities
- Built on the web page archive (WPA) ecosystem
 - https://www.drupal.org/project/web_page_archive
 - Originally a screenshot archiving tool (built on Headless Chrome/PhantomJS)
 - Crawls a list of URLs or XML sitemaps
 - Runs automatically on a custom recurring schedule
 - We later added other functionality (e.g. HTML capturing and visual regression)
 - Became generic capture & compare system
- Early in WPA development cycle we had idea for performance budget module
 - Built WebPageTest capture utility
- Project fell off our radar for almost 2 years
 - Picked back up again to fix D9 deprecation issues
- Then we realized we were sitting on 2 years of performance data. We became curious!

Stop talking already
and show us!

Looking Ahead

Goals of the performance budget module

1. Threshold Monitoring (i.e. actual performance budgeting)
https://www.drupal.org/project/performance_budget/issues/3074048
2. Plugin-based notification system (e.g. email, slack)
https://www.drupal.org/project/web_page_archive/issues/3074051
3. Support private WPT instances
https://www.drupal.org/project/performance_budget/issues/3086671
4. Advanced data normalization
https://www.drupal.org/project/performance_budget/issues/3088194
5. Google PageSpeed Insights support
https://www.drupal.org/project/performance_budget/issues/3088196
6. Plus several other bug fixes, feature improvements and lots of documentation.

Getting Started

Getting Started

Request an API Key from WebPageTest.org

Request API Key

Akamai is providing resources for automated testing through the public WebPagetest instance.

This form allows you to request an API key to use for limited automation of WebPagetest testing. The API key is provisioned for up to 200 "page loads" per day. Each run, first or repeat view counts as a page load (10 runs, first and repeat view would be 20 page loads). That should be sufficient for most low-volume use cases and for building a proof-of-concept for larger testing. If you need to do more testing than that allows then you should consider a private instance. There are pre-packaged AMIs available on EC2 for running a full WebPagetest instance.

Registering for multiple keys, using disposable email addresses or anything else that looks like suspicious activity may result in the keys being cancelled or, in more extreme cases, all testing of the URLs your are trying to test or the networks you are testing from may be blocked across all of WebPageTest.

The API keys are limited to testing from a subset of locations (EC2 regions and the Dulles Chrome, Firefox, IE 9 and Mobile agents). The EC2 locations will offer consistent performance from location to location and can be scaled as necessary to meet demand. If you need to automate testing from other locations then email me directly (pmeenan@webpagetest.org).

The results for tests run with the API keys will be available for 30 days from when the test was run.

Once you fill out the details below, you will receive an email with information on how to retrieve your API key.

Email Address (Required):


Name:

Company:

Web Site:

To help prevent bots, please complete the captcha:

☐ I'm not a robot


reCAPTCHA
[Privacy](#) - [Terms](#)

☐ Allow Akamai to contact me periodically with offers

Sponsored by:



Terms of Service

It is important to note that the service is offered on a best-effort basis and there are no guarantees on anything (including but not limited to the availability of the service, the performance of the test agents and the availability of test results). If we detect what appears to be malicious use of the service we reserve the right to block access as

Getting Started

Install the modules
inside Drupal

```
$ composer require drupal/performance_budget
```

```
$ drush pm:enable -y performance_budget
```

Getting Started

Setup a new web page archive capture job

- Navigate to /admin/config/system/web-page-archive

HomeManageShortcutsadmin

ContentStructureAppearanceExtendConfigurationPeopleReportsHelp

Configuration ☆

Home » Administration

Hide descriptions

PEOPLE

Account settings
Configure default user account settings, including fields, registration requirements, and email messages.

CONTENT AUTHORIZING

Text formats and editors
Select and configure text editors, and how content is filtered when displayed.

SYSTEM

Basic site settings
Change site name, email address, slogan, default front page, and error pages.

Cron
Manage automatic site maintenance tasks.

Web page archive
Settings for Web Page Archives

- Click “+ Add Archive”

HomeManageShortcutsadmin

ContentStructureAppearanceExtendConfigurationPeopleReportsHelp

Web Page Archive ☆

Web Page Archive

Compare Runs

Previous Run Comparisons

Settings

Web Page Test KPI Groups

Prepare uninstall

Home » Administration » Configuration » System

+ Add Archive

WEB PAGE ARCHIVE ENTITY	MACHINE NAME	RUNS	SCHEDULE	OPERATIONS
There are no web page archive entities yet.				

Getting Started

Create a new WPA capture job

- Fill out the job details and click “Create new archive”
(NOTE: Only automatic jobs work currently – [Drupal.org Issue #3088126](#))

[Home](#) [Manage](#) [Shortcuts](#) [admin](#)

[Content](#) [Structure](#) [Appearance](#) [Extend](#) [Configuration](#) [People](#) [Reports](#) [Help](#)

Add Archive ☆

[Home](#) » [Administration](#) » [Configuration](#) » [System](#) » [Web Page Archive](#)

Label *
 Machine name: my_wpt_test [\[Edit\]](#)
Label for the Web page archive entity.

Run capture job automatically.

Crontab schedule (relative to PHP's default timezone)

Crontab format (see <https://crontab.guru/>)

Timeout (ms)

Amount of time to wait between captures, in milliseconds.

Capture Type

Honor robots.txt restrictions.

If checked, capture utility will respect robots.txt crawling rules.

Browser user agent

Specify the browser user agent. e.g. "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_5) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/59.0.3071.115 Safari/537.36"

Data retention type

Determines the data retention policy for a job.
Warning: Changing this on existing jobs may result in data loss.

URLs to Capture *

A list of urls to capture.

Create new archive

Getting Started

Configure the WPT Capture Utility

- Under “Capture Utility” at the bottom, select “Web page test capture utility”

[Show row weights](#)

CAPTURE UTILITY	OPERATIONS
<div><div>⌵</div><div>Select a new capture utility</div><div>✓ Web page test capture utility</div></div> <div>Add</div>	

[Update archive](#) [Delete](#)

- Add API key and specify the “Standard Page Load KPIs” KPI group, and leave the chart.js settings as-is.

Home Manage Shortcuts admin

Content Structure Appearance Extend Configuration People Reports Help

Add Web page test capture utility ☆

[Home](#) » [Administration](#) » [Configuration](#) » [System](#) » [Web Page Archive](#)

✓ Saved the My WPT Test Web page archive entity.

webpagetest.org API Key *

.....

Enter your webpagetest.org API Key. <http://www.webpagetest.org/getkey.php>

KPI Groups *

Standard Page Load KPIs (standard_page_load_kpis)

Select which KPI groups to apply to this job. [Create a new KPI group.](#)

```
{
  title: {
    display: true,
    text: Drupal.t('@group): @url', {'@group': group, '@url': url}),
  },
}
```

Use this field to define the chart options as a javascript object. You are allowed to use existing javascript functions, such as `Drupal.t()`, the `url` variables is available to represent the captured URL, and the `group` variable is available to represent the KPI group. See [Chart.js documentation](#) for more information about available options.

Getting Started

Trigger job on webpagetest.org and retrieve the results

- Run cron once to queue on the job (Note: ignore the “Failed to process” error)

```
[davi0040@local:[...ers/davi0040/tmp/pbdemo]$ drush cron
[notice] Starting execution of comment_cron().
[notice] Starting execution of dblog_cron(), execution of comment_cron() took 7.2ms.
[notice] Starting execution of field_cron(), execution of dblog_cron() took 0.42ms.
[notice] Starting execution of file_cron(), execution of field_cron() took 0.98ms.
[notice] Starting execution of history_cron(), execution of file_cron() took 33.78ms.
[notice] Starting execution of node_cron(), execution of history_cron() took 0.93ms.
[notice] Starting execution of search_cron(), execution of node_cron() took 10.22ms.
[notice] Starting execution of system_cron(), execution of search_cron() took 12.89ms.
[notice] Starting execution of update_cron(), execution of system_cron() took 7.77ms.
[notice] Starting execution of web_page_archive_cron(), execution of update_cron() took 979.61ms.
[notice] Deleted directory: public://web-page-archive/pb_wpt_capture/wpt_test
[notice] Execution of web_page_archive_cron() took 955.73ms.
[notice] Cron run completed.
[error] Message: Failed to process 0 URLs.
[notice] Message: The capture has been completed.
```

```
[davi0040@local:[...ers/davi0040/tmp/pbdemo]$ echo $?
0
```

- Wait ~5 minutes for webpagetest.org to finish processing and run cron again

```
[davi0040@local:[...ers/davi0040/tmp/pbdemo]$ drush cron
[notice] Starting execution of comment_cron().
[notice] Starting execution of dblog_cron(), execution of comment_cron() took 3.78ms.
[notice] Starting execution of field_cron(), execution of dblog_cron() took 0.56ms.
[notice] Starting execution of file_cron(), execution of field_cron() took 0.78ms.
[notice] Starting execution of history_cron(), execution of file_cron() took 14.76ms.
[notice] Starting execution of node_cron(), execution of history_cron() took 0.44ms.
[notice] Starting execution of search_cron(), execution of node_cron() took 5.86ms.
[notice] Starting execution of system_cron(), execution of search_cron() took 6.77ms.
[notice] Starting execution of update_cron(), execution of system_cron() took 6.99ms.
[notice] Starting execution of web_page_archive_cron(), execution of update_cron() took 13.91ms.
[notice] Execution of web_page_archive_cron() took 10471.26ms.
[notice] Cron run completed.
[notice] Message: Processed 1 URLs.
[notice] Message: The capture has been completed.
```


Getting Started

View Run Results

- Return to main WPA page and click “View Run History” next to your job

Back to site Manage Shortcuts admin

Content Structure Appearance Extend Configuration People Reports Help

Web Page Archive ☆

Web Page Archive Compare Runs Previous Run Comparisons Settings Web Page Test KPI Groups Prepare uninstall

Home » Administration » Configuration » System

+ Add Archive

WEB PAGE ARCHIVE ENTITY	MACHINE NAME	RUNS	SCHEDULE	OPERATIONS
My WPT Test	my_wpt_test	1 run	Next run: 2019-10-16 @ 4:05am UTC	View Run History

- Click “View Details” see details about the particular run

Back to site Manage Shortcuts admin

Content Structure Appearance Extend Configuration People Reports Help

My WPT Test ☆

Home » Administration » Configuration » System » Web Page Archive

+ View Historical Report

Capture utilities Sort by Order Items per page

- Any - Revision create time Desc 10

Apply

CREATED	CAPTURE UTILITIES	ITEMS CAPTURED	CAPTURE SIZE (BYTES)	OPERATIONS
Tue, 10/15/2019 - 21:36	Web page test capture utility	1	455.5 KB	View Details

Getting Started

Report Summary

- View report summary or click “View Detailed Report” for more information

The screenshot shows a web application interface for 'My WPT Test'. At the top is a navigation bar with links: 'Back to site', 'Manage', 'Shortcuts', and a user profile 'admin'. Below this is a secondary navigation bar with icons and labels for 'Content', 'Structure', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. The main content area has a header 'My WPT Test' with a star icon. Below the header is a breadcrumb trail: 'Home » Administration » Configuration » System » Web Page Archive'. It then says 'Displaying 1 – 1 of 1'. There are several filter and sorting controls: 'Operator' (set to 'Contains'), 'Filter by URL' (empty text box), 'Sort by' (set to 'Capture URL'), 'Order' (set to 'Asc'), and 'Items per page' (set to '20'). An 'Apply' button is below these controls. The report data shows the URL 'https://2019.texascamp.org' and the source 'From: Dulles, VA – Chrome – Cable'. Under the heading 'Standard Page Load KPIs', it lists 'Average/First View' metrics: 'Load Time: 8.664s', 'Fully Loaded: 8.845s', 'TTFB: 0.456s', and 'Start Render: 0.8s'. At the bottom is a 'View Detailed Report' button.

Back to site Manage Shortcuts admin Edit

Content Structure Appearance Extend Configuration People Reports Help

My WPT Test ☆

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Displaying 1 – 1 of 1

Operator Filter by URL Sort by Order Items per page

Contains Capture URL Asc 20

Apply

https://2019.texascamp.org

From:
Dulles, VA – Chrome – Cable

Standard Page Load KPIs

Average/First View:

- Load Time: 8.664s
- Fully Loaded: 8.845s
- TTFB: 0.456s
- Start Render: 0.8s

View Detailed Report

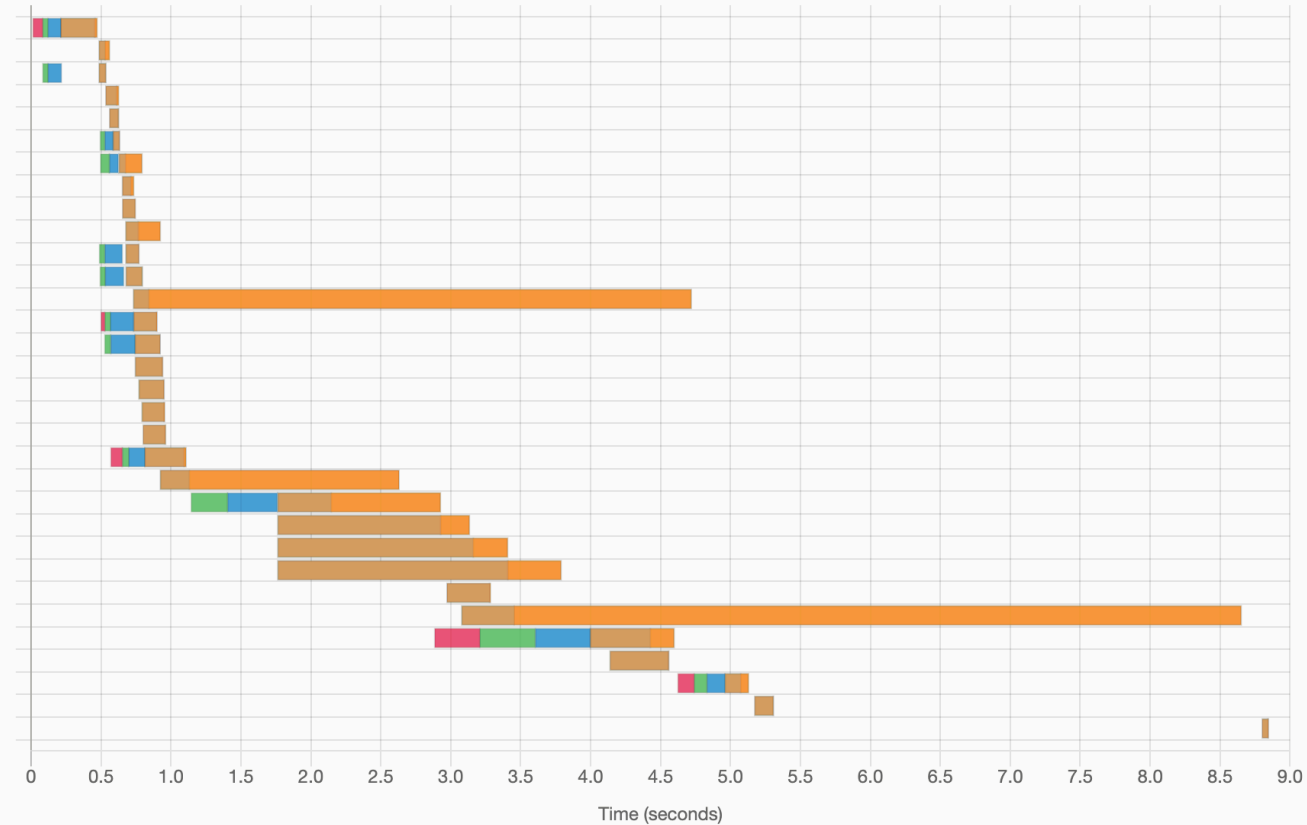
Getting Started

Detailed Report

- Expand and Collapse various sections to investigate further.



▼ FIRST VIEW – GANTT CHART



► FIRST VIEW – REQUESTS

► REPEAT VIEW – GANTT CHART

Getting Started

Navigate to the Historical Report

- Rerun cron a few more times to generate additional results then return to the run history page, and click “+ View Historical Report”

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My WPT Test ☆

[Home](#) » [Administration](#) » [Configuration](#) » [System](#) » [Web Page Archive](#)

[+ View Historical Report](#)

Capture utilities

- Any -

Sort by

Revision create time

Order

Desc

Items per page

10

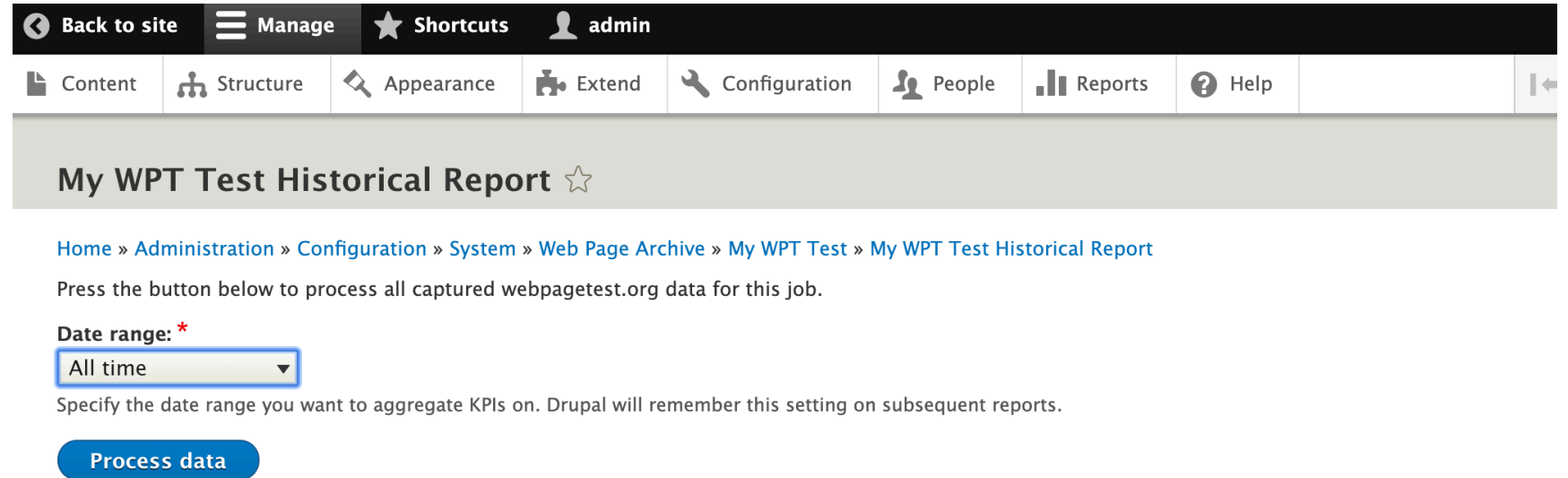
Apply

CREATED	CAPTURE UTILITIES	ITEMS CAPTURED	CAPTURE SIZE (BYTES)	OPERATIONS
Wed, 10/16/2019 – 01:16	Web page test capture utility	1	449.53 KB	View Details ▼
Tue, 10/15/2019 – 21:36	Web page test capture utility	1	455.5 KB	View Details ▼

Getting Started

Generate the initial historical report

- If it's your first time viewing it, you will need to generate a historical report by specifying a date range (this can be changed later)



The screenshot shows the Drupal administration interface. At the top is a dark navigation bar with links: 'Back to site', 'Manage', 'Shortcuts', and a user profile 'admin'. Below this is a lighter navigation bar with tabs: 'Content', 'Structure', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. The main content area has a header 'My WPT Test Historical Report' with a star icon. Below the header is a breadcrumb trail: 'Home » Administration » Configuration » System » Web Page Archive » My WPT Test » My WPT Test Historical Report'. A text instruction says: 'Press the button below to process all captured webpagetest.org data for this job.' Below this is a 'Date range:' label with a red asterisk, followed by a dropdown menu currently set to 'All time'. A note below the dropdown says: 'Specify the date range you want to aggregate KPIs on. Drupal will remember this setting on subsequent reports.' At the bottom is a blue button labeled 'Process data'.

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Content Structure Appearance Extend Configuration People Reports Help

My WPT Test Historical Report ☆

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Press the button below to process all captured webpagetest.org data for this job.

Date range: *

All time ▼

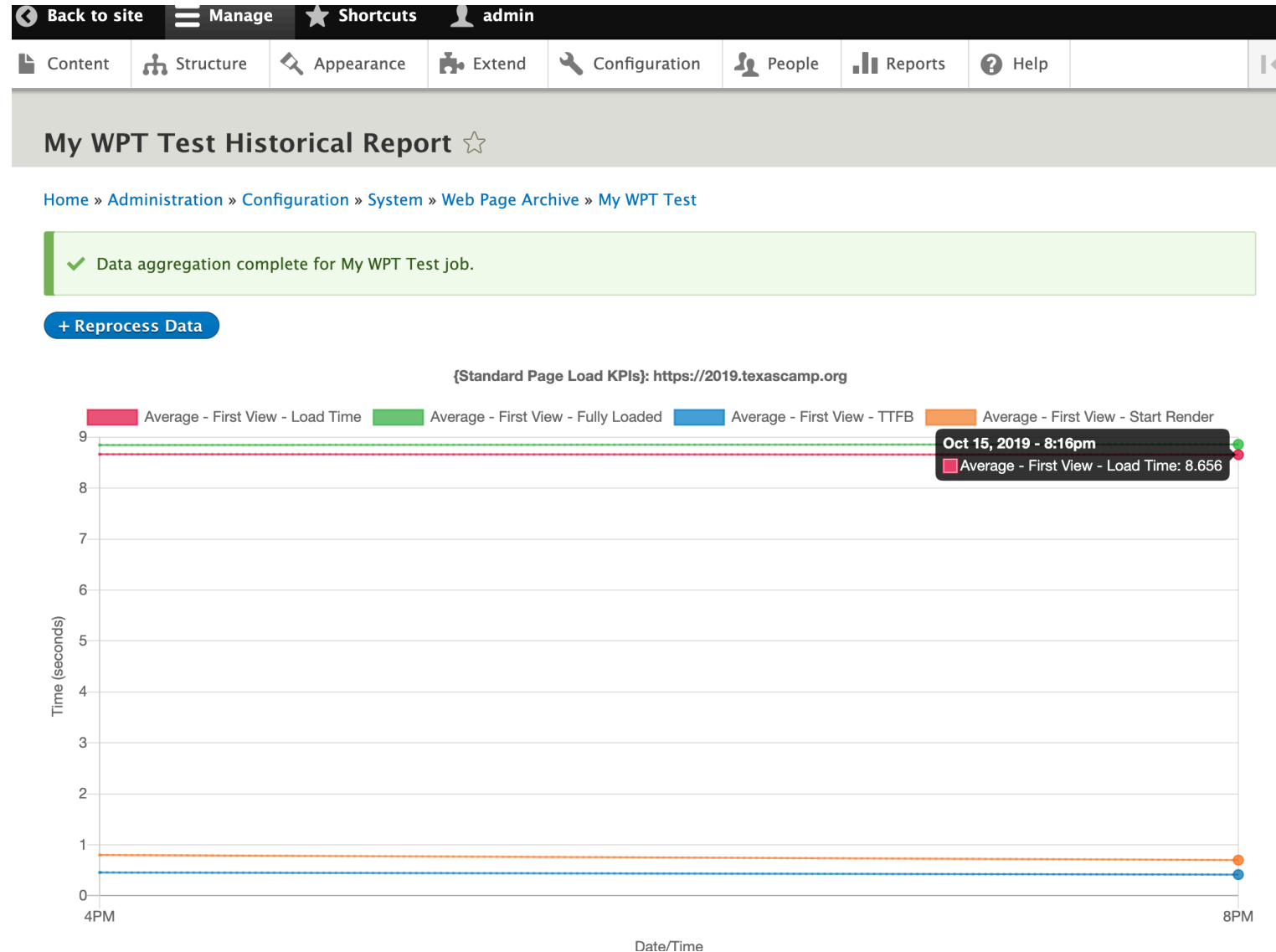
Specify the date range you want to aggregate KPIs on. Drupal will remember this setting on subsequent reports.

Process data

Getting Started

Use the historical report charts

- Move your cursor over the chart to identify individual run information and click if you want to see more detailed run results.



Getting Started

Use the historical report request summary

- Additionally, you can expand and collapse request summary data, which is grouped by hostname.

▼ FIRST VIEW – REQUEST SUMMARY

REQUESTED URL	FIRST TIME CAPTURED	LAST TIME CAPTURED	TOTAL REQUESTS MADE	AVERAGE LOAD TIME
https://www.googletagmanager.com	10/15/2019 – 21:36	10/16/2019 – 01:16	2	1.515s
https://use.typekit.net	10/15/2019 – 21:36	10/16/2019 – 01:16	10	1.380s
https://2019.texascamp.org	10/15/2019 – 21:36	10/16/2019 – 01:16	42	0.680s
https://backend2019.texascamp.org	10/15/2019 – 21:36	10/16/2019 – 01:16	4	0.519s
https://p.typekit.net	10/15/2019 – 21:36	10/16/2019 – 01:16	2	0.354s
https://www.google-analytics.com	10/15/2019 – 21:36	10/16/2019 – 01:16	4	0.342s

▼ REPEAT VIEW – REQUEST SUMMARY

REQUESTED URL	FIRST TIME CAPTURED	LAST TIME CAPTURED	TOTAL REQUESTS MADE	AVERAGE LOAD TIME
https://2019.texascamp.org	10/15/2019 – 21:36	10/16/2019 – 01:16	2	0.351s
https://p.typekit.net	10/15/2019 – 21:36	10/16/2019 – 01:16	2	0.167s
https://www.google-analytics.com	10/15/2019 – 21:36	10/16/2019 – 01:16	3	0.112s

Help Wanted

Help Wanted

Ways you can help

1. Test the module
2. Report bugs
3. Become a case study
4. Work on issues
5. Write documentation
6. Review the code
 - Performance reviews
 - Security reviews
 - Drupal best practice reviews
7. Drupal 9 preparations and testing

Resources

List of helpful resources related to this training

- **Learning resources**

- Akamai Online Retail Performance Report: Milliseconds Are Critical
<https://www.akamai.com/uk/en/about/news/press/2017-press/akamai-releases-spring-2017-state-of-online-retail-performance-report.jsp>
- thinkwithgoogle.com - Find out how you stack up to new industry benchmarks for mobile page speed
<https://www.thinkwithgoogle.com/marketing-resources/data-measurement/mobile-page-speed-new-industry-benchmarks/>
- WebPageTest Documentation – Metrics
<https://sites.google.com/a/webpagetest.org/docs/using-webpagetest/metrics>

- **Performance Tools**

- Google Chrome Developer Tools – <https://developers.google.com/web/tools/chrome-devtools/network>
- WebPageTest.org – <https://webpagetest.org/>
- Google PageSpeed Insights – <https://developers.google.com/speed/pagespeed/insights/>
- Google Mobile Speed Report – <https://www.thinkwithgoogle.com/feature/testmysite/>
- Gtmetrix – <https://gtmetrix.com>

- **Drupal Modules**

- Performance Budget – https://www.drupal.org/project/performance_budget
- Web Page Archive – https://www.drupal.org/project/web_page_archive
- Resource Hints – https://www.drupal.org/project/resource_hints

Thank You

https://www.drupal.org/project/performance_budget

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