

How to audit Drupal Sites

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github.com/fluxsauce - drupal.org/u/fluxsauce

What is an audit?



- Official inspection of accounts
- Validate the good things
- Highlight areas of improvement

Why audit sites?



- Learn about contents and structure
- Ensure optimal configuration
- Discover areas of improvement

Every site is unique, but...



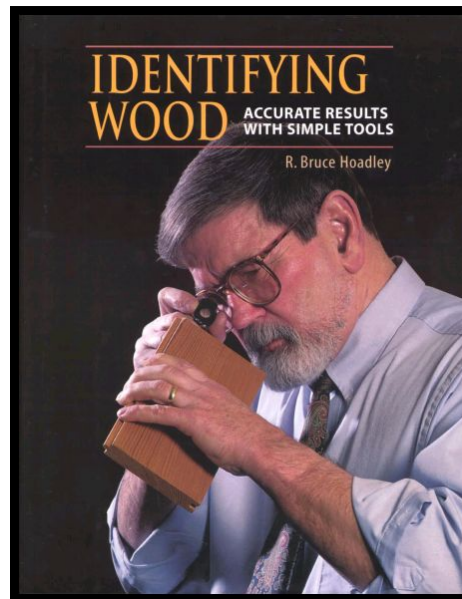
- Built with the same framework
- Similar architectural requirements
- One size fits most

Effective auditing



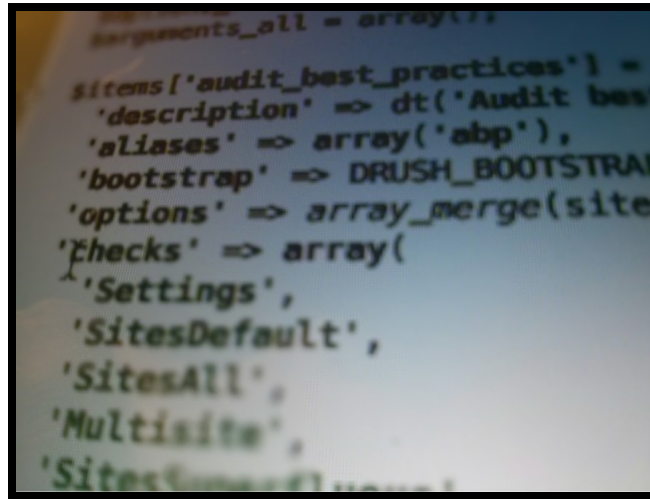
- Consistent
- Quantifiable
- Contextually aware
- Easy to understand
- Actionable recommendations

Auditing Tools



Yup, it's wood.

Site Audit



```
arguments_all = array();

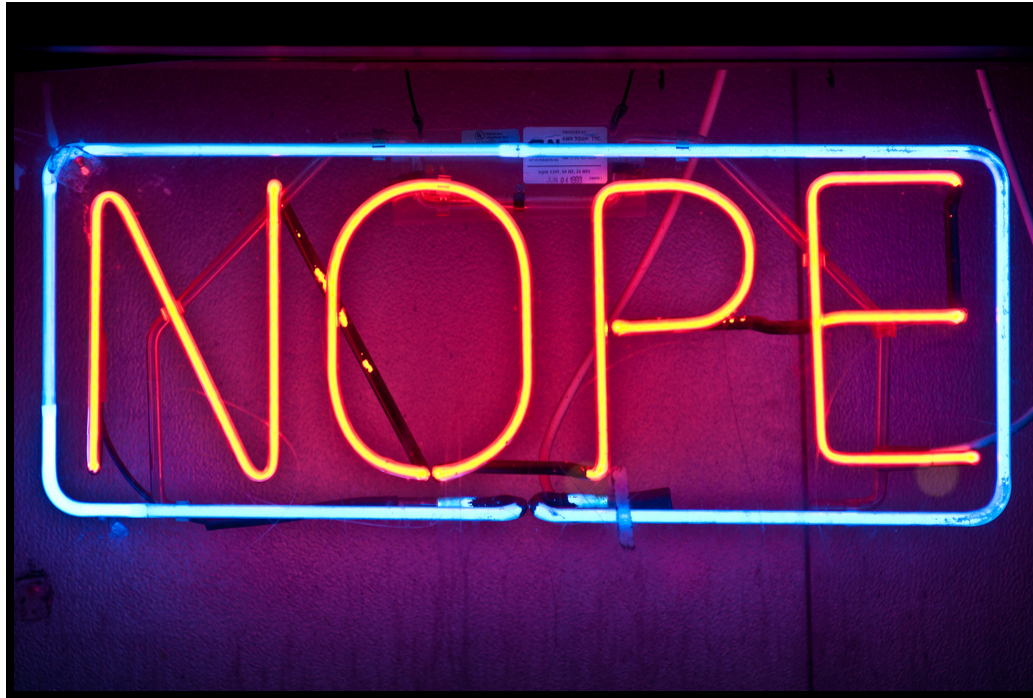
sites['audit_best_practices'] =
  'description' => dt('Audit best
  'aliases' => array('abp'),
  'bootstrap' => DRUSH_BOOTSTRAP
  'options' => array_merge(site
  'checks' => array(
    'Settings',
    'SitesDefault',
    'SitesAll',
    'Multisite',
    'SitesSummary'
```

- drupal.org/project/site_audit
- Drupal 7 and 8 site analyzer
- Drush command on target platform
- Powers [Launch Check](#) on Pantheon

What does Site Audit report?

- Best Practices
- Block
- Cache
- Codebase
- Content
- Cron
- Database
- Extensions
- Front End
- Security
- System Status
- Users
- Views
- Watchdog

What doesn't Site Audit analyze?



- Usability and site experience
- Aesthetics
- Semantic content

Read the Full Manual

```
drush help --filter=site_audit
```

```
Tools for auditing a Drupal site: (site_audit)
audit_all (aa)           Executes every Site Audit Report
audit_best_practices (abp) Audit best practices used.
audit_block (ab)         Audit Block.
audit_cache (ac)         Audit Drupal's caching settings.
audit_codebase (acb)     Audit the codebase.
audit_content (acn)      Audit content.
audit_cron (acr)         Audit cron.
```

Audit Cache

`drush audit_cache`

Drupal's caching settings: 17%

Anonymous caching

Anonymous page caching is not enabled!

[error]

Go to `/admin/config/development/performance` and check "Cache pages for anonymous users".

Expiration of cached pages

Expiration of cached pages not set!

[error]

Go to `/admin/config/development/performance` and set "Expiration of cached pages" to 15 min or above.

Cached page compression

Cached pages are not compressed!

[error]

Go to `/admin/config/development/performance` and check "Compress cached pages".

Show detailed results

```
drush ac --detail
```

Drupal's caching settings: 17%

Anonymous caching: Verify Drupal's anonymous page caching is enabled.

Anonymous page caching is not enabled!

Go to `/admin/config/development/performance` and check "Cache pages for anonymous users".

Minimum cache lifetime: Verify that Drupal's minimum cache lifetime is set to never expire.

Minimum cache lifetime is set to none.

Expiration of cached pages: Verify that Drupal's cached pages last for at least 15 minutes.

Expiration of cached pages not set!

Go to `/admin/config/development/performance` and set "Expiration of cached pages" to 15 min or above.

Cached page compression: Verify that Drupal is set to compress cached pages.

Cached pages are not compressed!

Go to `/admin/config/development/performance` and check "Compress cached pages".

JSON output

`drush audit_cron --json`

```
{
  "checks": {
    "SiteAuditCheckCronEnabled": {
      "action": "Please visit /admin/config/system/cron and set the cron frequency to something other than Never.",
      "description": "Check to see if cron is scheduled to run.",
      "label": "Enabled",
      "result": "You have disabled cron, which will prevent routine system tasks from executing.",
      "score": 0
    },
    "SiteAuditCheckCronLast": {
      "action": null,
      "description": "Time Cron last executed",
      "label": "Last run",
      "result": "Cron last ran at Thu, 09 Jan 2014 21:47:36 +0000 (9 months 4 days ago)",
      "score": -1
    },
    "SiteAuditCheckCronRunning": {
      "action": null,
      "description": "Check to see if cron is actively running.",
      "label": "Running",
      "result": "Cron is not currently running.",
      "score": -1
    }
  },
  "label": "Cron",
  "percent": 0
}
```

HTML output

```
drush audit_best_practices --html --detail
```

Best practices 100%

Well done! No action required.

Multi-site - Detect multi-site configurations.

The following multi-site configuration(s) were detected: drupal-7-multisite.local

sites/default/settings.php - Check if the configuration file exists.

settings.php exists and is not a symbolic link.

sites/default - Check if it exists and isn't symbolic

Audit All

```
drush aa --skip=insights --html --bootstrap
```

Summary

Best practices (100%) Block (50%) Drupal's caching settings (17%) Codebase (Info) Content (60%) Cron (100%) Database (100%)
Extensions (78%) Security (100%) Status (94%) Users (100%) Views (75%) Watchdog database logs (100%)

Best practices 100%

Well done! No action required.

[Back to top](#)

Block 50%

Caching

Block caching is not enabled!

Go to </admin/config/development/performance> and check "Cache blocks".

Extending Site Audit

- Modules can implement both Checks and Reports
- Documentation in README.md
- [Drupal.org Issue Queue](#)
- [GitHub Pull Requests](#)

Share your Checks and Reports!



Site Audit Drupal Console Support!

8.x-3.x-dev - work in progress...

[ERROR] Expiration of cached pages: Verify that Drupal's cached pages last for at least 15 minutes.

Expiration of cached pages not set!

Go to `/admin/config/development/performance` and set "Expiration of cached pages" to 15 min or above.

[OK] Aggregate and compress CSS files in Drupal: Verify that Drupal is aggregating and compressing CSS.

CSS aggregation and compression is enabled.

[ERROR] Aggregate JavaScript files in Drupal: Verify that Drupal is aggregating JavaScript.

JavaScript aggregation is not enabled!

Go to `/admin/config/development/performance` and check "Aggregate JavaScript files".

Tools with Site Audit support



Unused Modules

Fully disabled			Also enabled
PROJECT	PROJECT HAS ENABLED MODULES	PROJECT PATH	
acquia_agent	No	sites/all/modules/contrib/acquia_connector/acquia_agent	
acquia_search	No	sites/all/modules/contrib/acquia_connector/acquia_search	
acquia_spi	No	sites/all/modules/contrib/acquia_connector/acquia_spi	
admin_icons	No	sites/all/modules/contrib/admin_icons	

- drupal.org/project/unused_modules
- Lists projects that can be safely deleted
- Ignores disabled child modules

Security Review

Untrusted roles do not have administrative or trusted Drupal permissions.

✖ Base URL is not set in settings.php.

✖ Errors are written to the screen.

PHP files in the Drupal files directory cannot be executed.

Dangerous tags were not found in any submitted content (fields).

Drupal installation files and directories (except required) are not writable by the server.

- drupal.org/project/security_review
- Checks site and hosting configuration, site content

Hacked!

Drupal core	
Drupal 6.14 0 files changed, 0 files deleted View details of changes Includes: <i>Block, Color, Comment, Database logging, Filter, Garland, Help, Menu, Node, System, Taxonomy, Update status, User</i>	Unchanged ✓
Modules	
Administration menu 6.x-1.5 0 files changed, 0 files deleted View details of changes Includes: <i>Administration menu</i>	Unchanged ✓
Devel 6.x-1.18 3 files changed, 0 files deleted View details of changes Includes: <i>Devel, Devel generate</i>	Changed! ✗

- drupal.org/project/hacked
- Compares contrib with versions on drupal.org

Sensitive Data

```
$ drush asd
Sensitive data: 50%
  Entity fields
    Fields that may contain U.S. social [warning]
security card numbers: field_ssn; Fields
that may contain credit card numbers:
field_credit_card
  Webform components
    Components that may contain U.S. [warning]
social security card numbers: ssn;
Components that may contain credit card
numbers: cc_number
```

- drupal.org/project/sensitive_data
- search content for sensitive information, like credit card or ID numbers

Cache Audit

panels					
Panel	Pane	Region	Cache	Lifetime	Granularity
Summit	node:body	center			<not set>
Summit	events_view-panel_pane_3	links			<not set>
Summit	node:field_event_date_and_time	main_			<not set>
Summit	node:field_event_agenda	main_			<not set>
Summit	node:field_sponsor_logo	main_			<not set>
Summit	node:field_sponsor_logo	main_			<not set>
Summit	node:field_sponsor_logo	main_			<not set>
Panel	events_view-panel_pane_2	middle			<not set>
Panel	custom	middle			<not set>
Panel	attendees-panel_pane_2	middle			<not set>

- drupal.org/project/cacheaudit
- Caching settings of Drupal core, Block, Views, Panels
- Panels is unique (not in Site Audit)

PHP_CodeSniffer / Coder

- github.com/squizlabs/PHP_CodeSniffer
- drupal.org/project/coder
 - Use Drupal 8 version to analyze code on both 7 and 8
- Drupal and DrupalPractice sniffs
- Detect deviations from [Drupal Coding Standards](#)

PAReview.sh

- [DrupalPractice](#) has found some issues with your code, but could be false positives.

```
FILE: /var/www/drupal-7-pareview/pareview_temp/Check/Cron/Running.php
```

```
-----  
FOUND 0 ERRORS AND 1 WARNING AFFECTING 1 LINE
```

```
-----  
64 | WARNING | Unused global variable $conf.  
-----
```

```
FILE: ...ar/www/drupal-7-pareview/pareview_temp/Check/Extensions/Duplicate.php
```

```
-----  
FOUND 0 ERRORS AND 1 WARNING AFFECTING 1 LINE
```

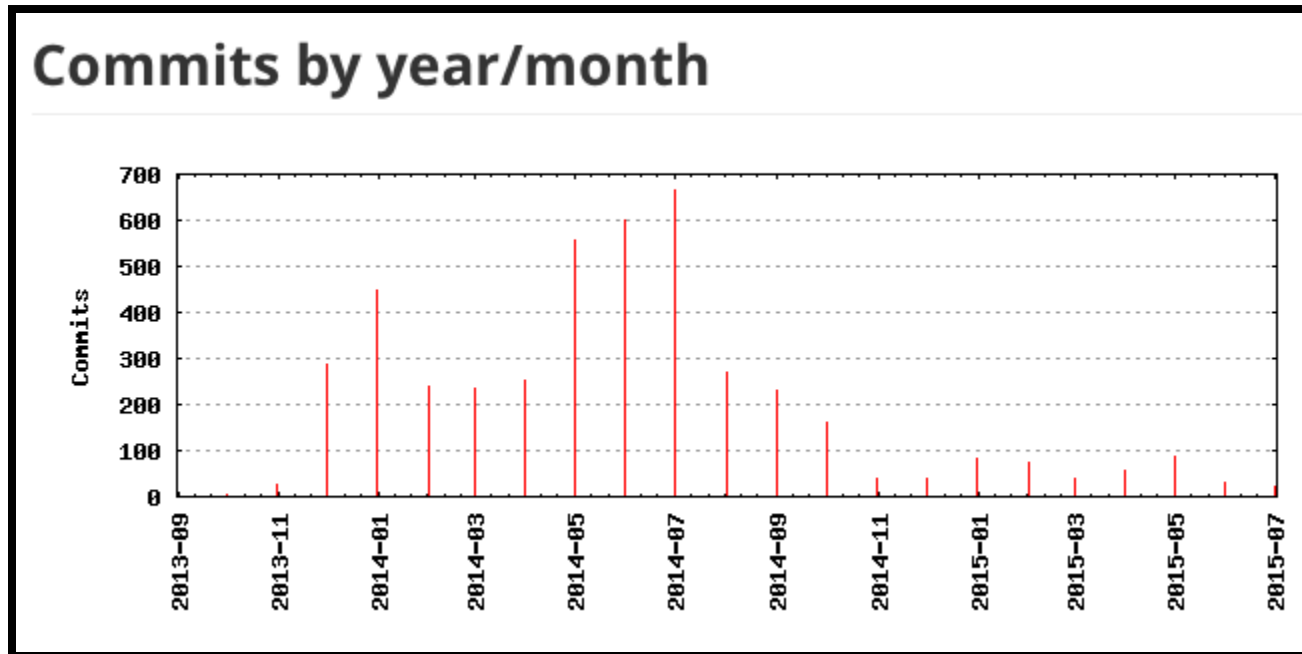
```
-----  
143 | WARNING | Unused variable $index.  
-----
```

- [pareview.sh](#)
- Automated reviews of drupal.org projects

PHP Tools

- PHP Copy/Paste Detector - github.com/sebastianbergmann/phpcpd
- PHP Mess Detector - phpmd.org
 - Possible bugs, suboptimal or unused code, overcomplicated expressions
- PHP LOC - github.com/sebastianbergmann/phploc
 - Measures size and structure

Git Tools



- GitStats - github.com/hoxu/gitstats
- gitinspector - github.com/ejwa/gitinspector

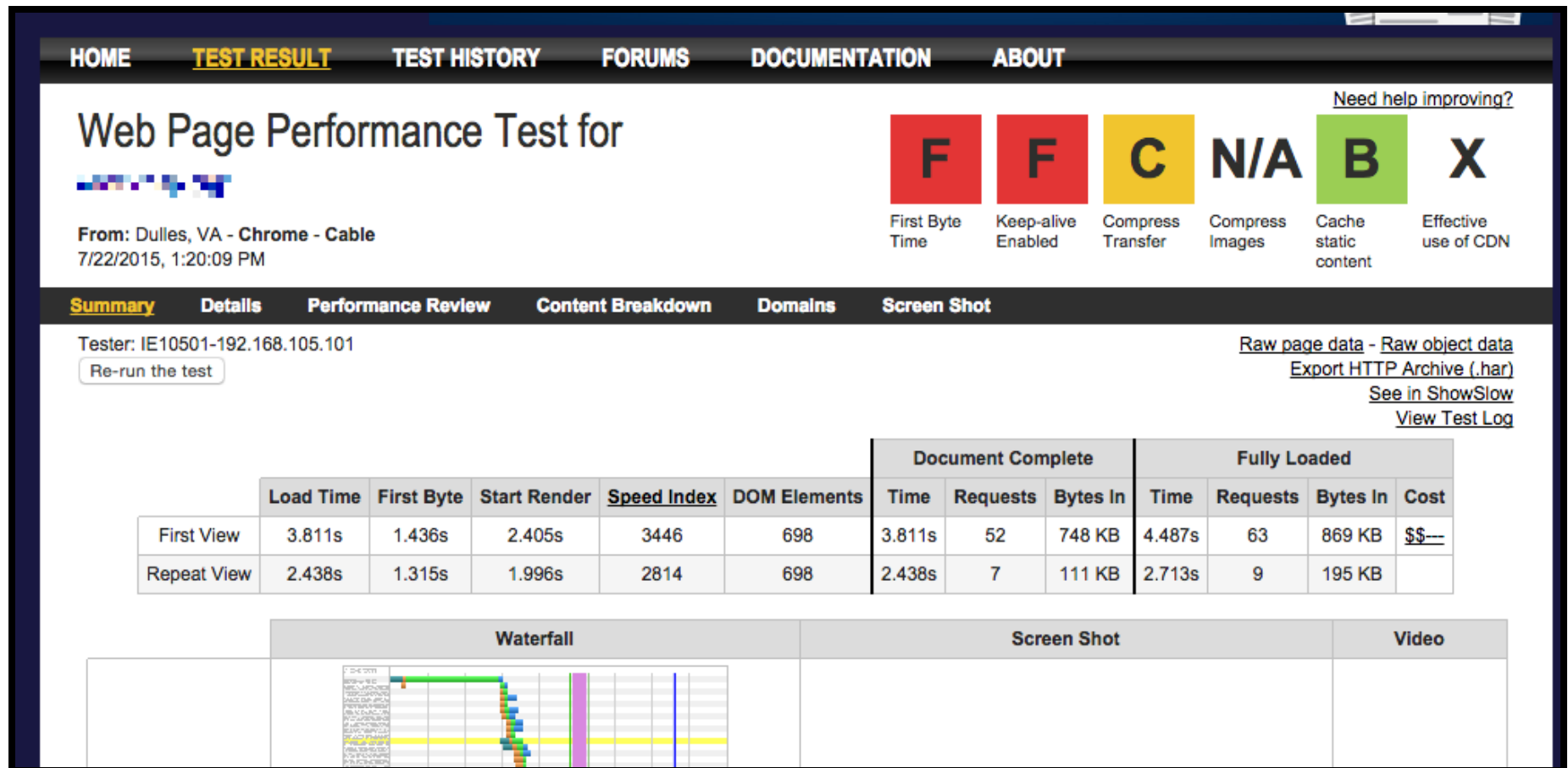
JavaScript Tools

- ESLint - eslint.org
 - Pluggable linting utility for JavaScript and JSX
 - Official configuration in Drupal 8 [core/.eslintrc](#)
- JSCS - jscs.info
 - JavaScript Code Style
- JSHint - jshint.com
 - Detect errors, potential problems

Hosted Utilities



WebPageTest.org



- webpagetest.org

Google PageSpeed Insights

The screenshot shows the Google PageSpeed Insights interface. At the top, there are two tabs: 'Mobile' (selected) and 'Desktop'. Below the tabs, the score is displayed as '39 / 100' in a red box, followed by 'Suggestions Summary'. A red icon with an exclamation mark indicates 'Should Fix:'. The first suggestion is 'Eliminate render-blocking JavaScript and CSS in above-the-fold content', with a link 'Show how to fix'. Below this, a section titled 'Leverage browser caching' explains that setting an expiry date or a maximum age in the HTTP headers for static resources instructs the browser to load previously downloaded resources from local disk rather than over the network. It then lists two cacheable resources: 'http://csm2waycm-atl.netmng.com/cm/' and 'http://imagec17.247realmedia.com/...keoverCompanionNetworkROS.jpg/1440617857', both with the note '(expiration not specified)'.

Mobile Desktop

39 / 100 Suggestions Summary

! Should Fix:

Eliminate render-blocking JavaScript and CSS in above-the-fold content

► [Show how to fix](#)

Leverage browser caching

Setting an expiry date or a maximum age in the HTTP headers for static resources instructs the browser to load previously downloaded resources from local disk rather than over the network.

Leverage browser caching for the following cacheable resources:

http://csm2waycm-atl.netmng.com/cm/ (expiration not specified)

http://imagec17.247realmedia.com/...keoverCompanionNetworkROS.jpg/1440617857 (expiration not specified)

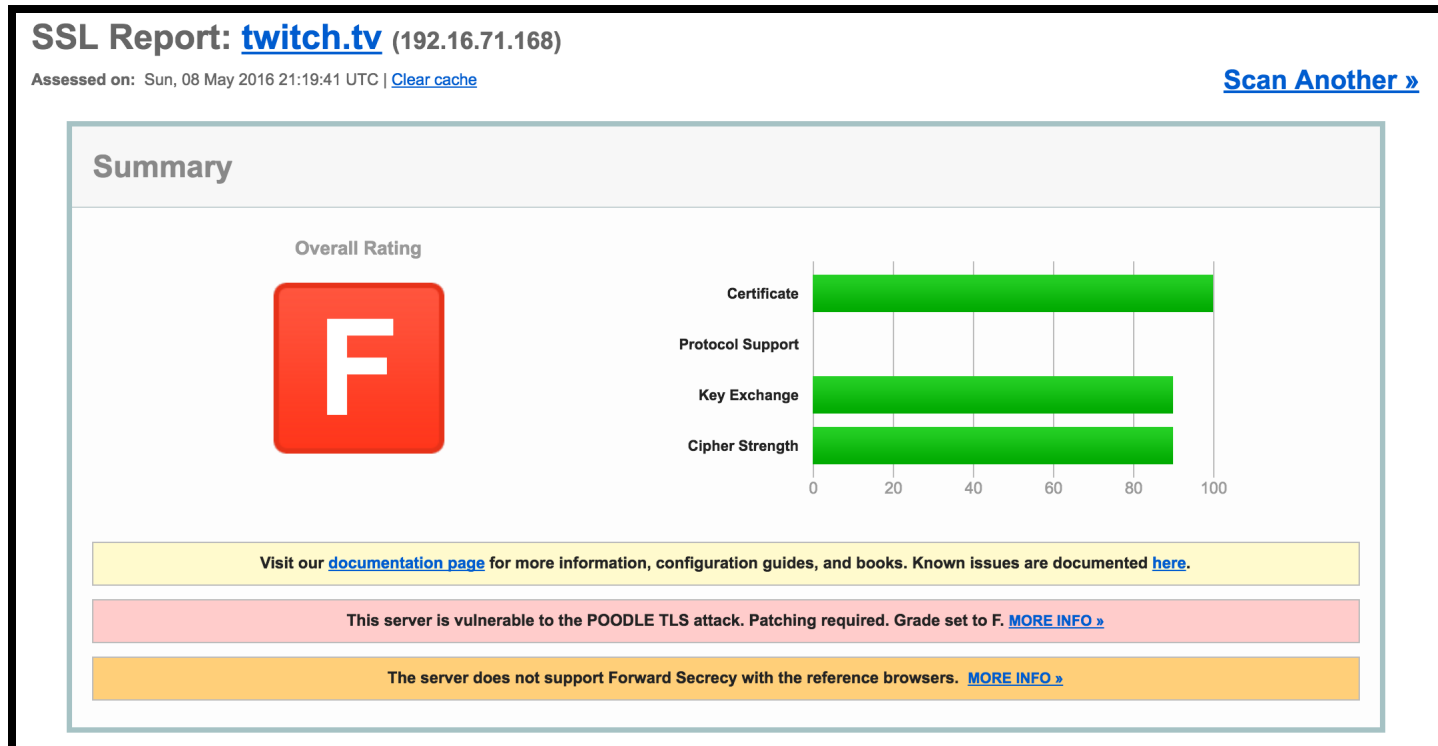
- developers.google.com/speed/pagespeed/insights

WAVE Web Accessibility Tool



- wave.webaim.org
- Analyzes web pages for accessibility
- Actionable recommendations on how to fix problems

Qualys SSL Server Test



- ssllabs.com/ssltest
- Analyzes SSL configuration

Delivering an audit



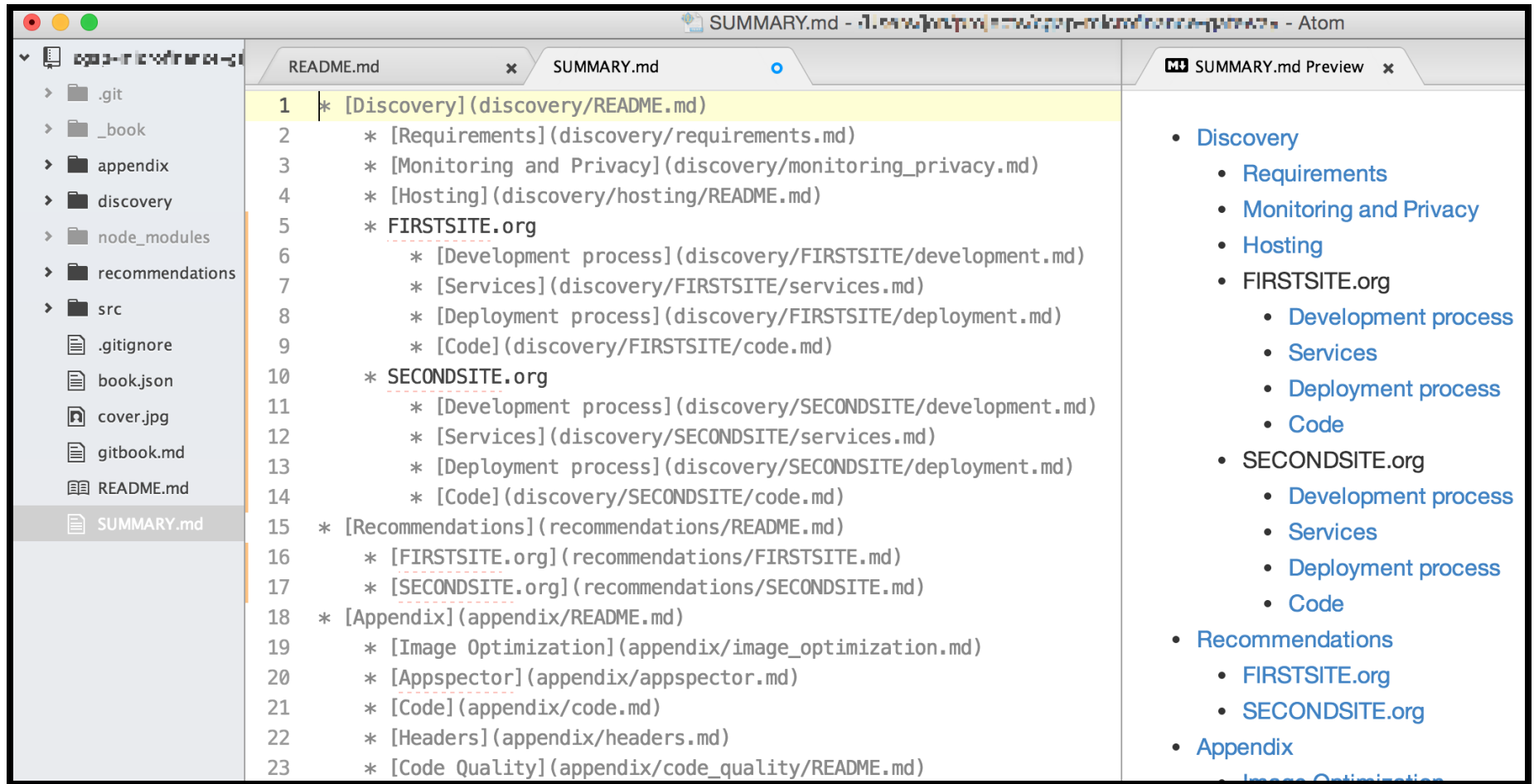
Report Structure

- Overview of scope, requirements
- Actionable recommendations
- Appendix
 - How to install and use tools
 - Raw results

GitBook for publishing reports

- github.com/GitbookIO/gitbook
- Book format and toolchain using Git and Markdown
- Command-line, uses Node.JS
- Outputs HTML, PDF, ebooks, and more
- Incredibly useful for large structured reports

Editing GitBook structure



The screenshot shows the Atom editor interface with the SUMMARY.md file open. The left sidebar displays the file explorer, showing the project structure. The main editor area shows the content of SUMMARY.md, which is a table of contents for the book. The right sidebar shows a preview of the rendered GitBook structure, displaying a hierarchical list of chapters and sections.

Summary of SUMMARY.md content:


- * [Discovery](discovery/README.md)
 - * [Requirements](discovery/requirements.md)
 - * [Monitoring and Privacy](discovery/monitoring_privacy.md)
 - * [Hosting](discovery/hosting/README.md)
 - * FIRSTSITE.org
 - * [Development process](discovery/FIRSTSITE/development.md)
 - * [Services](discovery/FIRSTSITE/services.md)
 - * [Deployment process](discovery/FIRSTSITE/deployment.md)
 - * [Code](discovery/FIRSTSITE/code.md)
 - * SECONDSITE.org
 - * [Development process](discovery/SECONDSITE/development.md)
 - * [Services](discovery/SECONDSITE/services.md)
 - * [Deployment process](discovery/SECONDSITE/deployment.md)
 - * [Code](discovery/SECONDSITE/code.md)
- * [Recommendations](recommendations/README.md)
 - * [FIRSTSITE.org](recommendations/FIRSTSITE.md)
 - * [SECONDSITE.org](recommendations/SECONDSITE.md)
- * [Appendix](appendix/README.md)
 - * [Image Optimization](appendix/image_optimization.md)
 - * [Appspector](appendix/appspector.md)
 - * [Code](appendix/code.md)
 - * [Headers](appendix/headers.md)
 - * [Code Quality](appendix/code_quality/README.md)




Summary of Preview content:





- Discovery
 - Requirements
 - Monitoring and Privacy
 - Hosting
 - FIRSTSITE.org
 - Development process
 - Services
 - Deployment process
 - Code
 - SECONDSITE.org
 - Development process
 - Services
 - Deployment process
 - Code
- Recommendations
 - FIRSTSITE.org
 - SECONDSITE.org
- Appendix
 - Image Optimization

GitBook HTML Format




[Introduction](#) ✓

- 1. Discovery
 - 1.1. Requirements
 - 1.2. Monitoring and Privacy
 - 1.3. Hosting
 - 1.4. 
 - 1.4.1. Development process
 - 1.4.2. Services
 - 1.4.3. Deployment process
 - 1.4.4. Code





Introduction

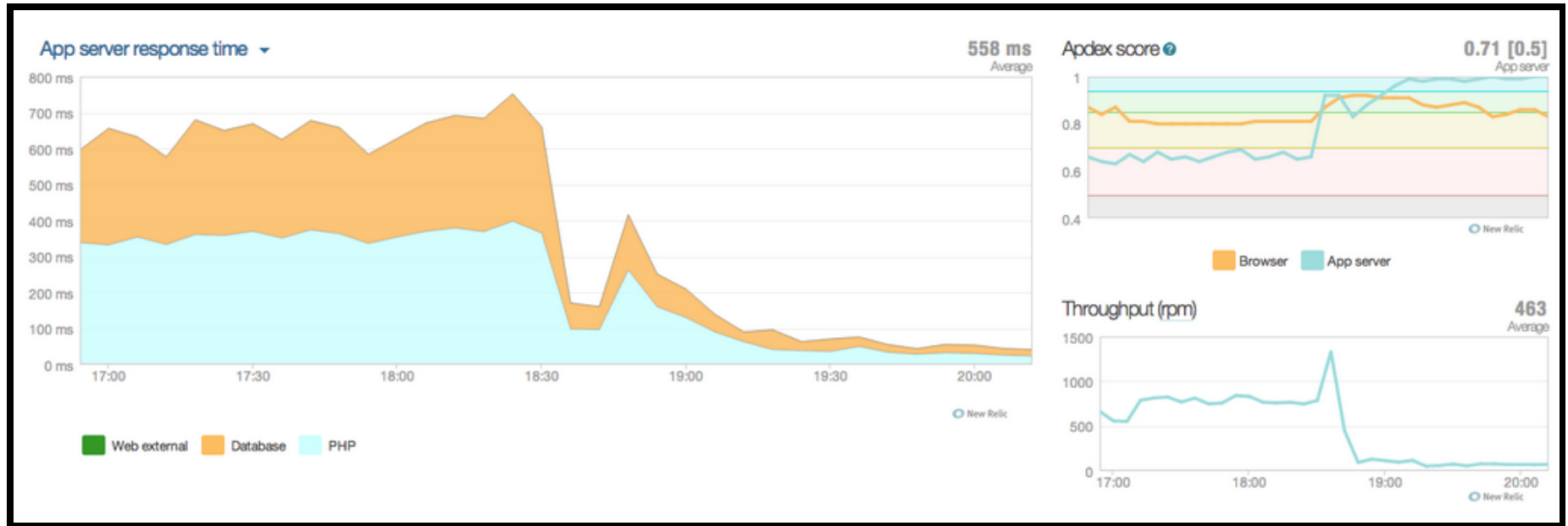
This project is an opportunity 
 to catch up and exceed with performance on the web. Other digital programs related to  will be looking at how this project is handled, so it's a trailblazing program that could be used as a guide and roadmap to performance improvement.

In the initial part of the project, Four Kitchens will audit the sites' web performance and implement a technical review of the current web infrastructure. After that, the vendor will provide recommendations for a high performance website redesign of the

Site Audit co-maintainer wanted.



Interested? Submit an issue.



Good configuration matters.

Thank you! Feedback: goo.gl/8cg3Cn

