# HHS.gov

U.S. Department of Health & Human Services

# Section 508 Guide Issue Management for the HHS Leaderboard

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# Introduction

The purpose of this document is to guide those given the role of issue manager through the production instance of the HHS 508 web crawler which generates a monthly leaderboard showing compliance scores of all public HHS controlled sites. To better enforce and monitor Section 508 guidelines, DCD procured a web crawler that targets known accessibility violations in public web sites.

# Leaderboard

HHS publishes a monthly leaderboard for transparency and accountability. There are 2 versions, a public and an Internal leaderboard. Both leaderboards are based on the scores in the web crawler.

#### **Public**

The public leaderboard is available at <u>https://www.hhs.gov/web/section-508/compliance-and-</u> <u>remediation/leaderboards/index.html</u>. The initial view is by Opdiv which is given an overall score based on the sites belonging to the OPdiv. There is one level down where all the sites under that Opdiv are displayed with an individual site score.

#### Internal

The internal leaderboard is available at <u>https://leaderboard.cloud.hhs.gov</u> and only accessible when on the HHS network. The main difference between the public and internal leaderboard is that for the internal version a read only version of the site report can be accessed.

## **Site Reports**

Each site on the leaderboard has a report which contains the score, pages that were scanned, and the accessibility issues found on those pages. All users will be given read only access to the reports via the internal leaderboard.

#### **Project Dashboard**

An initial project dashboard will display when accessing the report.

#### Score

Site scores are calculated based on the number of pages scanned, how many pages have programmatically determinable violations, and the severity of those violations. Any page that has at least 1 critical violation is essentially a fail. So for example if a scan has 100 pages, 50 are violation free and 50 have 1 critical violation, the score will be 50%. Note critical violations that are on a global template will have the most negative impact to the score.

Score	Issues Per Page	Total	Critical	Serious	O Moderate	Good
44%	3	<u>74</u>	<u>31</u>	<u>6</u>	<u>36</u>	1

#### **Pages Scanned**

Completed pages will give a list of all the pages scanned in the site. It is a good idea to check out the list of pages to ensure all pages in the site have been scanned and that there are no pages in the report that should not have been scanned. To view the pages that were evaluated in the scan, scroll down to the "Status of scanned pages" section and click the numbered link next to "Completed"

#### Status of scanned pages

#### Completed

Or simply select the Pages option from the main menu.

#### <u>737</u>

# 🗐 Pages

Initially, the items per page is set to 20, but that can be modified to view the full page listing which is recommended.

Total Num	ber: 3	85 / List	ting:	1-20
Items per page:	20	Page:	1	2

#### Issues

On the initial project dashboard, the issues that are affecting the score of the site are presented in a table. Each issue has the following:

- Grouping General Categorization of the issue (Tables, Forms, etc.)
- Standard How the issue traces back to Section 508
- Priority Impact rating from Critical to Minor on how important fixing is to an end user
- Description General description of the issue that contains an icon which has additional information in diagnosing the issue
- Clickable number of issues Number of instances in which the issue was found on the site. Clicking gives a view of only these issues
- Clickable number of pages Number of unique pages in which the issue was found on the site. Clicking gives a view of only the pages this issue was found on
- Percent of pages Percentage of pages on which this issue was found in the site

Automated is:	sues					
• Grouping	e Standard	• Priority	Description	• Issue s	• Pages	% of Pages
Color				99	5	
Color	Success Criterion 1.4.3 Contrast (Minimum)	Critical	Ensures the contrast between foreground and background colors meets WCAG 2 AA contrast ratio thresholds	99	5	796
Forms				Z	3	
Forms	Success Criterion 3.3.2 Labels or Instructions Success Criterion 1.3.1 Info and Relationships Paragraph N - Electronic forms	Critical	Ensures every form element has a label 0	6	3	496
Forms	Best Practice	O Critical	Ensures related <input type="radio"/> elements have a group and that the group designation is consistent 0	1	1	1%
Keyboard				14	14	
Keyboard	Success Criterion 2.4.1 Bypass Blocks Paragraph O - Repetitive navigation links	Critical	Ensures each page has at least one mechanism for a user to bypass navigation and jump straight to the content	14	14	19%

#### **Ruleset**

Issues flagged are based on a custom HHS ruleset which targets known accessibility violations on the section 508 guidelines prior to the January 2018 refresh. We are determining a timeframe for switching current sites to a WCAG 2.0 ruleset. Any sites added to the leaderboard after January 18, 2018 will use a WCAG 2.0 AA ruleset. In both cases, issues are given a severity of either Violation or Potential Issue. Ruleset details can be found at the end of this document.

#### Violation

A violation indicates an issue is present on the site that directly violates the applicable Section 508 guidelines for that site. Violations have a direct effect on the score based on the priority. By default, only the violations are shown on the Project Dashboard. Violations should be given priority when determining what to fix on the site.

#### **Potential Issue**

Potential issues indicate there is a possibility of a violation of the applicable Section 508 guidelines for the site. Potential issues do NOT impact the score of the site, however should be analyzed to ensure an actual violation does not exist. To view Potential issues, select "Show potential Issues". This will add the potential issues to the table.

Update now	Show potential issues	Export to excel	Share report
		·	

# **Analyzing Issues**

When analyzing a report, it is important to understand the issues being flagged so they can properly be reported to your development team for proper resolution.

#### Diagnosing

We recommend the following for diagnosing an issue:

- 1. Prioritize violations over potential violations on your site
- 2. Activate the "I" icon in the description for each unique issue

Ensure that active image alts are meaningful 0

3. Read the issue Help text and follow the link to Deque University

Issue Help	X
Active images (images inside anchor tags) must have a non-empty alt attribute	
View more information on Deque University	

4. Select the numbered link in the Issues Column

Description	↓ s
	<u>67</u>
Ensure that active image alts are meaningful 0	<u>45</u>

5. In the table, analyze the Element Source Code column with the full number of issues available. This will help determine if the issue is with an element that is on a single page, or multiple pages in the site. We recommend prioritizing issues that affect multiple pages.

<ing <="" alt="" td=""></ing>
<pre>src= /sites/default/themes/usability/css/images/methods_icon_i.png &gt;</pre>
<pre><img_alt="" "="" "<br="" src="/sites/default/themes/usability/css/images/guidelines_icon_1&lt;/pre&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;img alt=">src="/sites/default/themes/usability/css/images/methods_icon_1.png"&gt; /</img_alt=""></pre>
<pre><img_alt="" "="" "<br="" src="/sites/default/themes/usability/css/images/guidelines_icon_1&lt;/pre&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;img alt=">src="/sites/default/themes/usability/css/images/methods_icon_1.png"&gt;</img_alt=""></pre>
<img <br="" alt=""/> src="/sites/default/themes/usability/css/images/methods_icon_1.png">

6. For each unique piece of source code, click the text link in the description column

	Description				
	Ensure that active image alts are meaningful				
7.	Look at the additional information given				

Element:	<input/>
Selector:	1. #search
Element source code:	<input <br="" class="global-search" name="q" type="text"/> maxlength="256" autocomplete="off" placeholder="I'm looking for" value="" id="search" title="Search Text">

8. Navigate to the page

Page: https://www.usability.gov/

- 9. Confirm the issue with either manual inspection, code inspection, or use a page tool such as <u>WAVE</u> or <u>Axe</u>.
- 10. Document the issue and report to your development team for resolution.

# Exporting

Read only reports are only available on the HHS network, however, there are exporting options if you'd like to share with a contractor or if you'd like to filter out the information with Excel. Exporting is available on the following views:

Issues view



Note, filters on these pages can be used prior to exporting to narrow down the list as you see fit. To export:

1. Modify the filters at the top of the page to capture the data you want

URL contains		Tag Type		
Severity	All Violations 🔹	Status	All	
Label(s)	All	Assigned to	Anyone 🔻	
Page group	Entire project 🔹	Issue group	All	
Description	All			
Script	Any 🔻		Common only	
Priority	All	Remediation	Any 🔻	
Scope definition	Any 🔻			
			Search Clear	

2. Expand the dropdown and select "Select All"



3. Select 'Export to Excel' and select Apply



# **False Positives**

After analysis if you feel an issue is a false positive, email Scan Support with the information and it will be assessed. It will either be passed in the system, or you will be given additional information as to why the issue is valid.

# **Scan Support**

Our Scan Support team is here to help. By sending an email to <u>scansupport@hhs.gov</u>, you generate a ticket in our system which is triaged and given a priority level. In the subject, please include your Opdiv and the site the request is for. Please allow 3-5 days for a response. When to contact scan support and what to put in the subject:

- Setting up a new site <New Site Request>
- Refreshing an existing site and/or restructuring of offices/centers. <Site Refresh>
- Taking down/retiring a decommissioned site <Decommission>
- Suppressing a report due to redesign. Note that this can occur on a case-by-case basis.
   <Suppress>
- Adhoc report requests (for sites under development). This request is prioritized due to case-bycase basis. <Ad-Hoc>
- Passing of a false positive <False Positive>
- General trouble or inconsistencies with the report:
  - Access < Unable to Access>
  - Pages scanned <Pages Scanned Discrepancy>
  - Issues Flagged <Issues Flagged Discrepancy>
- Diagnosing an issue <Help with Issue Flagged>

# **Frequently Asked Questions**

- What sites are on the leaderboard?
  - o All public facing sites owned and maintained by HHS
- What is considered an acceptable score?
  - Sites should strive for 90 to 100%. Because HHS procured a new robust tool, initial scores are expected to be lower than previous scores on the leaderboard. However, site owners should actively work to fix violations and show monthly improvement.
- How can I improve my scores?
  - Scores can be improved by reporting issues flagged in the tool to be fixed by your development team. If properly fixed, when a site is rescanned, issues will disappear and scores should improve. Fixing template issues have the most positive impact.
- What is scanned in the site?
  - Web pages are scanned for certain 508 guidelines that can be programmatically evaluated by the tool.
- Is WCAG 2.0 included in the scan?
  - Not at this time. Because the Section 508 refresh includes a Safe Harbor clause, only section 508 guidelines are being scanned. Any new site that comes on the leaderboard after Jan 28, 2018 however, will have their score based on WCAG 2.0 AA.
- My site is 100%.... so it's compliant right?
  - Not necessarily. Issues flagged are broken into severities of Violations and Potential Violations. Only violations count against the score. You should review the potential violations flagged. You should also be aware that there are issues which can only be manually checked and be sure that your site is free from them.
- How often is a site scanned?
  - o Each site is scanned once a month automatically.
- What is Issue Management?
  - Issue management historically refers to analyzing the report and determining whether to flag for fixing, or passing as a false positive. The new tool aims to reduce this effort by targeting violations that can be reliably programmatically determined.
- What is the difference between an Adhoc scan request and a normal scan request?
  - We understand that some offices/centers are in the process of developing websites. As a courtesy, we can run an Adhoc scan that is completely independent and not represented on the Leaderboard.

# **Common False Positive Requests**

#### Ensures the first link on the page is a skip link

Per 508, all sites must have a way to bypass repetitive navigation. The most common technique is to have a skip navigation link. Two resources that explain the technique:

- https://www.w3.org/TR/2016/NOTE-WCAG20-TECHS-20161007/G1
- <u>https://webaim.org/techniques/skipnav/</u>

We have seen the following issues:

- 1. No skip link present
- 2. Skip link is present but is not the first focusable element
- 3. Skip link is present but does not become visible when it has focus
- 4. Skip link does not have a valid anchor

#### Proper Implementation and test

Site: <u>https://www.hhs.gov/</u>

Steps to test:

- 1. Load the page
- 2. Hit the Tab Key
- 3. Ensure that a Skip Navigation link appears (This ensures it appears and is the first focusable link)



- 4. Hit Enter
- 5. Hit Tab
- 6. Ensure the first focusable item in the main content receives focus



This rule has revealed a lot of skip nav issues, but also is proving to be one of our more prevalent false positives. If you believe your site has skip nav implemented properly, please email <u>scansupport@hhs.gov</u> and we can rerun your report omitting this rule.

# Ensures every form element has a label

Per 508, all forms must have appropriate labels. The most common technique is to have a label tag on a piece of text and associate to a form field. Two resources that explain the technique:

- https://www.w3.org/TR/2016/NOTE-WCAG20-TECHS-20161007/H44
- <u>https://webaim.org/techniques/forms/controls</u>

The biggest issue we've seen is when a label is indeed present, but the text is desired to not be visible on the page. Mostly seen with global search fields. For these, we've seen that Deque flags because the text is hidden in such a way that may be inaccessible.

#### Implementation flagged by Deque:

Element: Global search



**Element Source:** 

<label><span class="site-search-label">Search </span><input type="text" value="" name="site\_search\_keywords" onfocus="this.select()" class="input-text"></label>

Seems ok, so what's the issue?

In the CSS of the text, display:none was used to hide the text. Article on why that's an issue:

https://webaim.org/techniques/css/invisiblecontent/#techniques



.search-block label span, .search-block .site-whitespace {

display: none;

}

**Proper Implementation** 

Site: https://www.hhs.gov/

Element: Global search

l'm looki	ng for			P
				A-Z Index

**Element Source:** 

<label class="sr-only" for="global-search">Search</label>

<div class="auto-suggest">

<input type="text" name="q" class="global-search" maxlength="256" autocomplete="off" placeholder="I'm looking for..." value="" id="global-search" title="Search Text" tabindex="0">

<input type="submit" class="global-search-btn" name="HHS" id="HHS" alt="Search" value="Search" tabindex="0">

</div>

CSS of the Label uses absolute positioning:

https://webaim.org/techniques/css/invisiblecontent/#absolutepositioning

```
Styles EventListeners DOM Breakpoints Properties Acc
element.style {
}
.sr-only { bootstrap.css?oy2vno:1152
position: absolute;
width: 1px;
height: 1px;
padding:▶ 0;
margin:▶ -1px;
overflow:▶ hidden;
clip: rect(0, 0, 0, 0);
border:▶ 0;
}
```

.sr-only {

position: absolute;

width: 1px;

height: 1px;

padding: 0;

*margin: -1px;* 

overflow: hidden;

clip: rect(0, 0, 0, 0);

border: 0;}

# **Rulesets**

## WCAG 2.0

Sites new to the leaderboard as of January 18, 2018 will be scanned with the out of the box Deque ruleset. Currently for the leaderboard instance, we are on version 2.3.

#### Section 508

Most sites are on the 508 ruleset which is custom to HHS to minimize false positives. Note, this list does not include the PDF rules.

Description	Deque Help URL
Ensures <applet> elements have alternate text</applet>	https://dequeuniversity.com/rules/worldspace/2.3/applet
Ensures <applet> elements have a meaningful</applet>	https://dequeuniversity.com/rules/worldspace/2.3/applet-
alternate text (not ascii art)	<u>ascii-alt</u>
Ensures <area/> elements of image maps have	https://dequeuniversity.com/rules/worldspace/2.3/area-alt
alternate text	
Ensures <audio> elements have captions</audio>	https://dequeuniversity.com/rules/worldspace/2.3/audio-
	<u>caption</u>
Ensures <blink> elements are not used</blink>	https://dequeuniversity.com/rules/worldspace/2.3/blink
Ensures each page has at least one mechanism	https://dequeuniversity.com/rules/worldspace/2.3/bypass
for a user to bypass navigation and jump	
straight to the content	
Ensures the contrast between foreground and	https://dequeuniversity.com/rules/worldspace/2.3/color-
background colors meets WCAG 2 AA contrast	<u>contrast</u>
ratio thresholds	
Ensures <iframe> and <frame/> elements</iframe>	https://dequeuniversity.com/rules/worldspace/2.3/frame-
contain a non-empty title attribute	<u>title</u>
Ensures <iframe> and <frame/> elements</iframe>	https://dequeuniversity.com/rules/worldspace/2.3/frame-
contain a unique title attribute	<u>title-unique</u>
Informs users about hidden content.	https://dequeuniversity.com/rules/worldspace/2.3/hidden-
	<u>content</u>
Ensure that active image alts are meaningful	https://dequeuniversity.com/rules/worldspace/2.3/active-
	<u>image-alt</u>
Ensures <img/> elements have alternate text or	https://dequeuniversity.com/rules/worldspace/2.3/image-
a role of none or presentation	<u>alt</u>
Ensure that inactive images have an alt	https://dequeuniversity.com/rules/worldspace/2.3/inactive-
	<u>image-alt</u>
Ensures that the text equivalent for button	https://dequeuniversity.com/rules/worldspace/2.3/input-
exists and is not empty	<u>image-alt</u>
Ensures every form element has a label	https://dequeuniversity.com/rules/worldspace/2.3/label
Ensures presentational  elements do	https://dequeuniversity.com/rules/worldspace/2.3/layout-
not use , <caption> elements or the</caption>	<u>table</u>
summary attribute	

Description	Deque Help URL
Ensures <meta http-equiv="refresh"/> is not	https://dequeuniversity.com/rules/worldspace/2.3/meta-
used	<u>refresh</u>
<object> elements must have a text</object>	https://dequeuniversity.com/rules/worldspace/2.3/object-
alternative	<u>alt</u>
Ensures the scope attribute is used correctly	https://dequeuniversity.com/rules/worldspace/2.3/scope-
on tables	<u>attr-valid</u>
Ensures that server-side image maps are not	https://dequeuniversity.com/rules/worldspace/2.3/server-
used	<u>side-image-map</u>
Ensures the first link on the page is a skip link	https://dequeuniversity.com/rules/worldspace/2.3/skip-link
Ensure that tables with a caption use the	https://dequeuniversity.com/rules/worldspace/2.3/table-
<caption> element.</caption>	fake-caption
Identify tables that are neither marked as	https://dequeuniversity.com/rules/worldspace/2.3/td-has-
layout tables (missing role="presentation") nor	<u>header</u>
as data tables (missing headers/headers-id	
association)	
Ensure that each cell in a table using the	https://dequeuniversity.com/rules/worldspace/2.3/td-
headers refers to another cell in that table	<u>headers-attr</u>
Ensures <applet> elements have a meaningful</applet>	https://dequeuniversity.com/rules/worldspace/2.3/va-
alternate text	applet-alt-valid
Ensure that text equivalent cannot be ASCII art	https://dequeuniversity.com/rules/worldspace/2.3/va-area-
	<u>alt-ascii</u>
Ensure that the alt attribute on area elements	https://dequeuniversity.com/rules/worldspace/2.3/va-area-
has a meaningful value	<u>alt-valid</u>
Ensures <fieldset> elements have a non-empty</fieldset>	https://dequeuniversity.com/rules/worldspace/2.3/va-
<legend> as the first child</legend>	fieldset-valid-legend
Ensures images do not only have a title	https://dequeuniversity.com/rules/worldspace/2.3/va-
attribute	image-title-only
Ensure that the alt attribute on input elements	https://dequeuniversity.com/rules/worldspace/2.3/va-
of type="image" is not ASCII art	<u>input-img-alt-ascii</u>
Ensure that the alt attribute on input elements	https://dequeuniversity.com/rules/worldspace/2.3/va-
of type="image" has a meaningful value	<u>input-img-alt-valid</u>
Ensures image maps do not have duplicate alts	https://dequeuniversity.com/rules/worldspace/2.3/va-
	<u>unique-area-alt</u>
Ensures <video> elements have captions</video>	https://dequeuniversity.com/rules/worldspace/2.3/video-
	<u>caption</u>
Ensures <video> elements have audio</video>	https://dequeuniversity.com/rules/worldspace/2.3/video-
descriptions	description