

VA



U.S. Department
of Veterans Affairs

Accessibility Compliance

Accessibility Beyond Compliance (ABC)

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Upcoming Learning Sessions

TBD 2020 Web Performance Impact on UX & Accessibility

Then, we'll evaluate how these learning sessions are going, to ensure this is a useful format.

[Previous ABC Learning Sessions](#) are available in the VA repo.

Agenda and intro

- Why are we having this talk
- Obligated versus what to “reach for”
- Avoiding ! launch blocker surprises
- Contractual obligations
- Resources

Accessibility Compliance

Why are we having this talk

Compliance confusion

- We have heard folks are confused about how accessibility specialists' feedback map to required compliance.
- Teams are unsure what issues are “launch blockers” versus what can wait until after a feature is launched, and why.
- We want to make sure everyone understands accessibility language like “508,” “ATO,” “compliance,” “severity levels,” and “WCAG.”
 - Compliance likely means different things to different people.
 - We want to create a common meaning for all VFS teams.

There's some ambiguity...

- Accessibility is worded differently in every contract.
- There is no boilerplate the VA uses to describe requirements.
- If it's available to you, it's worth looking into your contract to see what it says.
- Each requires meeting Section 508.

Our work is seen as a “good example”

The VA and the 508 office see our teams as “going above and beyond” and as good examples, which is why we don’t only tell you what you **must** do in reviews.

We set a standard for others to follow.

“Accessible”

Accessible doesn't mean it has to deliver the intended experience and content to assistive technologies.

It means anyone (with disabilities or not, screen reader or not), should be able to access it.

This is [Accessibility Beyond Compliance](#).

Accessibility Compliance




Obligated versus what to “reach for”

If everything's !important,
then nothing is.

Feedback framework

We have a structure to help understand what is contractually obligated versus what you can “reach for”: the Must/Should/Consider feedback framework.

Feedback framework

-  **Must** for if the feedback must be applied
-  **Should** if the feedback is best practice
-  **Consider** for suggestions/enhancements

– “Must” for if the feedback must be applied
! “Should” if the feedback is best practice
+ “Consider” for suggestions/enhancements

Must/Should/Consider started from this feedback framework



HT to Mickin for introducing it!

<https://medium.com/@jackiebo/do-try-consider-how-we-give-product-feedback-at-asana-db9bc754cc4a>

Combined with WCAG success criteria language

Web Accessibility Checklist

Based on WCAG 2.0 AA Requirements (marked with “must”) and best practices (marked with “should”)

Part 1: Semantic Structure

Topic	Accessibility Requirements	WCAG
Page title	The page MUST have a meaningful title (e.g. <title>About us</title>), even when included via iframe. <ul style="list-style-type: none">Unique information SHOULD go first (e.g. “Products Deque University”).Result pages SHOULD describe the result (e.g. “Error on form” or “Search results loaded”).Single-page applications and AJAX scripts SHOULD update the title when the URL changes or when the page content changes significantly.	2.4.2
Language	The page MUST specify the language (<html lang=“en”>).	3.1.1
	Changes in the language within the page MUST be specified (e.g. Hola).	3.1.2
Landmarks	Page SHOULD have accurate, logical landmark structure (e.g. <header>, <nav>, <main>, <footer>), so that screen reader users can navigate by landmark, and all content SHOULD be inside a landmark.	(2.4.6)
Headings	The page MUST have meaningful headings to label each major section , which SHOULD start with <h1> (at the beginning of the main content, or at the beginning of every section of aggregated content, or at the beginning of modal dialogs), and SHOULD NOT skip heading levels, to allow screen reader users to navigate the tree structure of the heading hierarchy.	2.4.6
Links and Navigation [See also Custom Widgets in Part 3 for dynamic menus (drop-down accordion, etc.)]	Links MUST have readable text Be especially careful with links that contain only images (which need alt text) and background images/icon fonts (which need text via aria-label on the link or text within the link, hidden via CSS).	2.4.9, 4.1.2
	The link text MUST make sense in context, and should make sense when taken out of context (problematic phrases include: “click here,” “more,” “read more,” etc.).	2.4.4, 2.4.9
	Linked content SHOULD be grouped in a single link where appropriate. For example: an icon and its adjacent text SHOULD NOT be two separate links if they go to the same location.	3.2.4
	Navigation features (e.g. main menu) MUST be placed in a consistent location across pages.	3.2.3
	Navigation features MUST be identified in a consistent way across pages.	3.2.4
	A “skip navigation” or “skip to main content” SHOULD be provided as the first link in the design , to allow sighted keyboard users to quickly arrive at the main content (Note: the link can be invisible until	2.4.5

Key words for use in Request for Comments (RFC) to indicate requirement levels, from Harvard University, provided by Deque

<https://tools.ietf.org/html/rfc2119>

[[Docs](#)] [[txt](#)] [[pdf](#)] [[draft-bradner-k...](#)] [[Tracker](#)] [[Diff1](#)] [[Diff2](#)] [[Errata](#)]
Updated by: [8174](#) BEST CURRENT PRACTICE
Network Working Group S. Bradner
Request for Comments: 2119 Harvard University
BCP: 14 March 1997
Category: Best Current Practice

Key words for use in RFCs to Indicate Requirement Levels

Status of this Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

Abstract

In many standards track documents several words are used to signify the requirements in the specification. These words are often capitalized. This document defines these words as they should be interpreted in IETF documents. Authors who follow these guidelines should incorporate this phrase near the beginning of their document:

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119](#).

Note that the force of these words is modified by the requirement level of the document in which they are used.

1. **MUST** This word, or the terms "REQUIRED" or "SHALL", mean that the definition is an absolute requirement of the specification.
2. **MUST NOT** This phrase, or the phrase "SHALL NOT", mean that the definition is an absolute prohibition of the specification.
3. **SHOULD** This word, or the adjective "RECOMMENDED", mean that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
4. **SHOULD NOT** This phrase, or the phrase "NOT RECOMMENDED" mean that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.

Accessibility Feedback Framework

Must required for compliance

Should best practice, industry recommendations,
and should be implemented for compliance

Consider suggestions, enhancements, inclusive design,
questions/items to consider

VA Accessibility Defect Severity Rubric

The framework aligns to the severity rubric. Each issue ticket has a label indicating the severity or impact of the issue that links to the rubric level documentation.

- Must: 508-defect-0, 1, 2
- Should: 508-defect-3, 4

Find the [rubric in the va.gov-team repo](#).

This appears at the top of each ticket, with the defect rating, linked to its defect description.

508-defect-1 ! Launchblocker

Feedback framework

- **!** Must for if the feedback must be applied
- **!** Should if the feedback is best practice
- **✓** Consider for suggestions/enhancements

Accessibility Defect Severity Rubric

This document will provide a common language for determining accessibility defect seriousness. It will capture the following things:

1. Defect severity
2. Timeline to fix the defect. Please note, 508-defect-0 and 508-defect-1 are launch blockers.
3. Potential users impacted by the defect

Table of Contents

- [Launch Blocking Issues](#)
 - [Defect 0: Potentially Harmful](#)
 - [Defect 1: Critical](#)
- [Post-launch Issues](#)
 - [Defect 2: Serious](#)
 - [Defect 3: Minor](#)
 - [Defect 4: Trivial](#)

Note:

508-defect-0 and 508-defect-1 issues are launch blockers.

Launch Blocking Issues

! Must be fixed before production launch.

508-defect-0 and 508-defect-1 issues have the potential to make an application unusable for a significant group of users.


508-defect-0

! Potentially Harmful. Must be fixed immediately.

These issues have the potential to cause life-threatening situations and should be remediated before work starts or continues on 508-defect-1 issues. Our audience has a higher incidence of traumatic brain injury (TBI) and post-traumatic stress disorder (PTSD), so we need to correct these issues immediately.

What does it look like in practice?

Feedback in comments and design reviews

 jenstrickland commented 6 days ago • edited ▾ Member + 😊 ...


Definitely a complex undertaking!

- **Should**
 - For individual's info — “Your first name”, and the rest — consider repeating whose info pattern throughout, i.e. “Veteran's first name” for cognitive ease, including for the Veteran.
- **Consider**
 - Thinking of the cognitive/emotional load of the former spouse info questions, I wonder about the possibility of allowing this to be completed in an unauthenticated state. This use case may need the save in progress functionality, or at least ability to save in an encrypted local storage session.
 - If the country/city/county is a free text field, is it possible to clean the data b4 it goes into the db? Ensure not ALL CAPS, for example, to future-proof data.
 - What does the workflow / screen look like if someone starts filling out the form, saves, and comes back? [I think I just saw this in the forms systems demo.]
 - Have concerns about the cognitive load of this strung-together approach. Possibility of individual links to separate workflows, collect each of them, and provide review at the end to collect into a single submission, to ease cognitive impact.

Note: I am trying a new framework for providing input (Feedback on this is welcome!):

- **Must** for if the feedback must be applied
- **Should** if the feedback is best practice
- **Consider** for suggestions/enhancements

Feedback in issue tickets

 jenstrickland commented 6 days ago

Feedback framework

- **!** Must for if the feedback must be applied
- **!** Should if the feedback is best practice
- **✓** Consider for suggestions/enhancements

Description

Heading levels **should** increase by one. The “On this page” component header

Feedback framework

```
- **MUST** for if the feedback must be applied
! **SHOULD** if the feedback is best practice
+ **CONSIDER** for suggestions/enhancements
```


Description

```
! Links **SHOULD** look and behave like links.
```

See screenshots below. While testing with screenreaders, the items listed under Ge

What does it look like in practice?

Feedback in pull request comments

 **1010CG Design Update** #12310
LinnJS wants to merge 23 commits into `master` from `LinnJS-design-v5`

src/applications/caregivers/components/AdditionalInfo/index.jsx


55 +

56 +


57 +

58 +

`className="va-button-link"`
`onClick={() => toggleModal(!isModalVisible)}`
`>`
`Learn more about what this means`

 **Mottie** 1 hour ago Member

I know this is in the design, but I don't think this text is good for accessibility. It's weird that it's a modal inside a dropdown. Has @jenstrickland seen this? ([design page](#)).

 **jenstrickland** now Member

Thanks, @Mottie, I have not seen this. @ala-yna @sshein @jonathanjnelson can you tell me more about the decisions here? I suspect there are objectives here I am unaware of.

- modal inside of a dropdown — will introduce usability and accessibility challenges, as well as complicate QA
- link reads "Learn more about what this means" (for WCAG, the link should read Learn more about Primary Family Caregivers)

Is this a remnant of the challenge between legalese and plain language? From a 508 lens, the content in the modal **should be** the content in the additional info show/hide, and the legalese (if required here) would be at the bottom of it. If a case needs to be made with stakeholders, here are a couple of references for reasoning:

- [W3C WCAG 2.4.4 Link Purpose](#)
- [18f Plain Language, when to use legal and technical terms](#)

I hope this helps, and if I'm missing context, I'm all 🤔💡.

Where appropriate, WCAG guidance links are provided.

Accessibility Compliance

Avoiding !launch blocker surprises

What can you can do to make sure there are no high severity compliance issues that you are unaware of until you're wanting to launch?

VSP Collaboration Cycle

The VSP Collaboration Cycle is intended to ensure teams building on VA.gov align with established standards, including accessibility.

Accessibility spot checks early on

Plan to collaborate with your accessibility specialist and perform accessibility spot checks throughout phases of your work. Issues can be identified and remediated during planning, research, design, as well as development.

- Measure accessibility, set KPIs
- Include people with disabilities in research
- Early design collaboration with your a11y specialist
- Consider a design-dev intent check in with your a11y specialist before starting a build (ping Jennifer for VSA or Trevor for other contracts)
- If you're interested in using screen readers to test your work, reach out to your accessibility specialist for support with NVDA and VoiceOver

VSP Collaboration Cycle

Accessibility is included in the following collaboration points:

- **Project Kickoff** — may provide accessibility and inclusive design considerations, or relevant previous work
- **Design Intent Collaboration** — review team's design intentions for potential accessibility issues or considerations
- **Usability Testing Prep** — review design and/or research plan materials for accessibility issues or considerations
- **Staging Review** — conduct a series of automated and manual accessibility audits to ensure compliance before launch
- **Full Accessibility and 508 Office Audit** — complete a full accessibility audit after launch, identify outstanding accessibility concerns, coordinate with VA 508 Office for feedback and approval

Accessibility Compliance

Contractual obligations

What is 508 Compliance?

Section 508, an amendment to the United States Workforce Rehabilitation Act of 1973, is a federal law mandating that all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities. Since June 2001 the law has required all content created using federal money to be 508 compliant.

This law requires that all website content be accessible to people with disabilities, including government hosted or contractor hosted websites and intranet sites, both public- and government-facing.

This applies to Web applications, Web pages, and all attached files on the Intranet and the Internet, including website content, emails, computer software, gaming systems, and PDF versions of traditionally printed assets. PDFs may require 508 remediation as they are not accessible by screen readers.

Section 508 uses WCAG standards

Pronounced “Wuh cag,” WCAG is a rule called the Web Content Accessibility Guidelines (WCAG) created by a group at the W3C. This ruleset explains how to make the web work better for people with disabilities.

In January 2017, Section 508 underwent a refresh that was many years in the making. A significant change is that the WCAG 2.0 Level A and AA guidelines are now incorporated by reference and required by Section 508. Prior to the refresh, Section 508 included its own list of requirements, which were a modified subset of WCAG 1.0 (not the current version of WCAG).

To be Section 508 compliant, WCAG 2.0, Level A and AA, is the standard.

We use a series of automated and manual success criteria for ensuring electronic content and web apps are accessible for the largest group of users.

WCAG 2.0, possibly soon to be 2.1?

Remember that previously mentioned “ambiguity”?

- Section 508 is based on **WCAG 2.0** success criteria.
- **WCAG 2.1** was released on June 5, 2018.
- Section 508 is rumoured to adopt WCAG 2.1 “soon,” although the Access Board indicated they may choose to wait for **WCAG 3.0** (Silver / Ag).
- We aim to future-proof in our work.
- Section 508 is based on WCAG 2.0, and was not created with mobile in mind, so the criteria is insufficient to address mobile design use cases.
- WCAG 2.1 prioritizes mobile success criteria, and improves the quality of mobile UX.

Usability overall ease of use

Product is highly usable and accessible:
business + user goals attained

Inclusive Design accessible for all — not just people w/ disabilities

Enhances UX through improved data access
and web performance: More users!

WCAG 2.1 adds mobile & cognition success criteria

More people can use on mobile;
improves comprehension through plain language & other s.c.

Section 508 = WCAG 2.0 success criteria for: blindness, deafness, and keyboard usage

Accessibility Guidelines Release Dates

WCAG 2.0 — 2008

Section 508 adopted WCAG 2.0 in 2017.

WCAG 2.1 — 2018

Adds considerations for mobile design
and cognitive considerations.

WCAG 3.0 — final expected 2022

Work began late 2016, Candidate
Recommendation (approved first draft)
expected late 2021, final guidelines
expected to launch in late 2022.

The Access Board has indicated they will wait
to update Section 508 when WCAG 3.0 (a.k.a.
Silver) is released.

Authority to Operate (ATO)

The DSVA ATO requires:

- All code which is committed and deployed passes a required set of integrated tests before the code is launched. The ATO lists Deque's axe integrated test as the preference, as it includes the 508 required rule set.
- The ATO acknowledges some issues are unable to be identified by automated tests alone; manual reviews using accessibility software are important to fully confirm the software is accessible.
- Digital Service will perform a series of manual checks that have been supplied by the 508 office using accessibility software.

Severity of issues

- If you have a 508-defect-0, 508-defect-1, 508-defect-2, or 508-defect-3 issues your product is not fully compliant.
- If you have 508-defect-4 issues, you have opportunities for improving the user experience and accessibility beyond compliance.

Find the rubric in the [va.gov-team repo](#).

Thank you!

Resources

Resources

- [WCAG Checklist available on the VA Github](#), to understand success criteria
- A customizable [How to Meet WCAG, Quick Reference](#) from the W3C is useful to understand how to meet the success criteria
- Resources in the [VA Accessibility repo](#), and your individual team's accessibility repo
- #vetsgov-accessibility Slack channel
- Elissa Olinsky's [Accessibility Beyond Compliance blogpost](#), also available in the [VSA accessibility repo](#)
- [Accessibility review tool for design and development](#) [Google Sheet]