WCAG 3 Explainer (DRAFT)

[Current Explainer](#)

Introduction

W3C Accessibility Guidelines (WCAG) 3.0 is a successor to Web Content Accessibility Guidelines 2.2 [WCAG22] and previous versions. It does not deprecate WCAG 2. It may incorporate content from User Agent Accessibility Guidelines 2.0 [UAAG20] and Authoring Tool Accessibility Guidelines 2.0 [ATAG20]. These versions provided a model that kept them relevant for over 10 years. Changing technology and changing needs of people with disabilities require a new model to address content accessibility more comprehensively.

This Explainer includes:

- Background information on the development of WCAG 3.0;
- Goals for WCAG 3.0;
- Current approach to creating WCAG 3.0;
- Current status;
- WCAG 3.0 proposed structure;
- Options being explored; and
- Current schedule.

Goals

The goal of WCAG is to provide information that can be used to improve the accessibility of products on a variety of platforms. WCAG 3.0 will use a model that allows it to:

- address more disability needs than WCAG 2,
- incorporate publishing requirements and emerging technologies such as web XR (augmented, virtual and mixed reality) and voice input,
- facilitate maintenance, so that the new model will be more enduring over time as technologies evolve, and
- include additional information about the ways web technologies need to work with authoring tools, user agents, and assistive technologies.

Additional goals for WCAG 3 are written in [Requirements for WCAG 3](#). These are based on the [Silver research](#), the results from the [Silver Design Sprint](#), and input from the Accessibility Guidelines Working Group, the Silver Task Force, and the Silver Community Group.

Goals for Inclusion

The creation process for the guidelines should:

- Actively recruit a diverse range of people with disabilities. Review and monitor whether people are included. Periodically evaluate inclusive features of available tooling and procedures.
- Facilitate global participation and feedback.

Editor's note

W3C strives to be as inclusive as possible, and has actively sought participation and input from a broad range of stakeholder groups. We recognize, however, that there is always room for improvement in practices to support inclusion and representation. As you evaluate this document, please consider whether there are ways the Working Group can better support your review, feedback, or inclusion within the process of creating this standard. We welcome feedback on this question as part of your comments

Out-of-Scope

Several items are out of scope for WCAG 3.0:

- Non-web technologies
- Normative requirements for platforms, operating systems, software in the web technology stack, etc.

WCAG 3 Background and Development History

WCAG 3.0 originally had a project name of "Silver", so the original groups working on it and much of the early design work carries that project name. The Silver Task Force of the Accessibility Guidelines Working Group (AG) and the W3C Silver Community group partnered to produce the needs, requirements, and structure for the new accessibility guidance. They worked on Silver from 2017-2023. During that time they delivered the following:

1. Developed a list of Web Content Accessibility Guidelines [stakeholders and their job stories](#)
2. Researched needs for a new major version of the Web Content Accessibility Guidelines; ([Silver Research Project](#))
3. Developed [problem statements and opportunities](#) to improve accessibility guidance;
4. Received [input from industry leaders](#) for directions to proceed to address the problem statements; The full [Final Report of the Silver Design Sprint](#) is incorrectly labeled as a draft. It contains all the information on the Design Sprint.
5. Drafted [Requirements for WCAG3](#);
6. Created and tested prototypes for aspects of the project; and
7. Created a [First Public Working Draft of WCAG3](#) and three updated [Working Drafts](#).

In 2021, the AG began partnering more closely with the Silver taskforce on WCAG 3. In 2023, the Silver taskforce closed and the work fully moved to the AG with assistance from the Silver community group. At this time the name Silver was retired in favor of the W3C Accessibility Guidelines 3.0 (WCAG). Since that time, the AG has delivered two working draft updates.

Current Process

The AG takes an iterative approach to creating WCAG 3. Each piece of content will evolve over time, increasing in maturity. As a result, the document is a work-in-progress.

Because different parts of the document have different maturity levels, each normative section includes a status that indicates:

- how far along in the development process this section is,
- how ready it is for experimental adoption, and
- what kind of feedback we are looking for.

The status indicators, from least to most mature, are:

- **Placeholder**: This content is temporary. It shows the type of content or section to expect. Placeholder text will be replaced. By default it is not included in the Editor's draft. No feedback is needed on placeholder content.
- **Exploratory**: The Working Group is exploring what direction to take with this section. This content is not refined; details and definitions may be missing. By default it is not included in the Editor's draft. We invite feedback on the proposed direction.
- **Developing**: There is rough agreement on what is needed for this section, although not all high-level concerns have been settled. Details are included, yet they are not all agreed on. We invite general feedback on how understandable, usable, and reasonable the section is generally.
- **Refining**: The Working Group has reached consensus on this section. It is ready for broad public review and experimental adoption. We seek feedback on feasibility and issues with implementations.
- **Mature**: The Working Group thinks this content is ready for the final standard. Feedback should be focused on edge case scenarios the Working Group might not have anticipated.

The working group aims to publish two new drafts each year, alternating focus between the guidelines and the conformance approach. Each draft will include targeted questions for the public to consider and respond to in order to advance the working draft. Content will evolve and there may be changes to layout and style that are not yet reflected in all parts of the present release and will be reflected in future releases.

5.1 WCAG 3 Structure

WCAG 3 includes both normative and informative guidance. This guidance is organized into:
- Guidelines

- ○ Outcomes
  - ■ How to Documents
    - ● Methods
- ○ Assertions
  - ■ How to Documents
    - ● Methods

Details on each are below.

By default, guidelines are organized by what is tested. WCAG 3 will provide a version, similar to the existing QuickRef, that incorporates tags to allow readers to reorganize and filter the content. For example, content will be tagged Perceivable, Operable, Understandable, and Robust so that readers can view WCAG 3 criteria in the same structure as WCAG 2.

Guidelines

Guidelines provide a high-level, plain-language version of the content for managers, policy makers, individuals who are new to accessibility, and other individuals who need to understand the concepts but not the technical details. They provide an easy-to-understand way of organizing and presenting the outcomes so that anyone can learn about and understand the concepts. Each guideline includes a unique, descriptive name along with a high-level plain-language summary.

Guidelines address functional needs on specific topics, such as contrast, forms, readability, and more. Guidelines are technology-agnostic. All outcomes and assertions that relate to a Guideline are listed together to encourage adoption of higher levels of accessibility.

Editor's note

Within the current draft, outcomes and assertions are organized within the Guideline as a decision tree to assist readers in determining which Outcomes and Assertions to use. The AG requests feedback on two early draft examples of this approach, Focus Appearance and Text Alternatives.

- ● Does grouping related Outcomes and Assertions make it easier to understand the Guidelines?
- ● How can this approach be improved?

Outcomes and Methods

Editor's note
As we continue developing outcomes and methods, we seek input on how well the approach to outcomes, assertions and tests defined here supports additional requirements not addressed in WCAG 2.2.
Next steps include:

- Get feedback from designers, developers, and other communities on wording choice,
- Finalize names and descriptions of scope and tests,
- Develop detailed examples of methods and tests,
- As we develop example outcomes and methods, further explore conditions and how multiple measurements might be used to meet an outcome.
- Address all GitHub issues under test types and terminology milestone.

End of note

Each guideline contains multiple outcomes. Outcomes reduce or eliminate barriers that people with disabilities experience. Outcomes are designed for use by developers, testers, and other technical specialists.

Outcomes are normative.

Outcomes are written as testable criteria and include information on how to score the outcome in an optional Conformance Claim. These verifiable statements allow testers to reliably determine if the content being evaluated satisfies the user needs identified in the Guideline.

Each outcome is associated with at least one Method. Methods are informative. Each method contains techniques for meeting the outcome, examples, resources, and sets of tests. Methods can apply to a specific technology, such as HTML, or can be more generic where the advice applies no matter what technology. For example, the methods supporting the Clear Language guideline.

Outcomes are written so that testers can determine the accessibility of technologies based solely on the outcome, even when methods do not yet exist for those technologies.

Testing outcomes

Types of tests

WCAG 3 includes two types of tests which are evaluated:

- **Quantifiable tests:** Tests where there is a high degree of consistency between test results from different testers. Examples include testing whether certain properties exist in the content or if they match a value specified by the requirement.
- **Qualitative tests:** Tests that rely on a qualitative evaluation based on existing criteria. Test results may vary between testers who understand the criteria. One example is evaluating the quality of alternative text used to meet a requirement for alternative text.

Most tests have prescribed ways to meet the test. In some cases, the ways to meet the test will change based on a specific condition being met. For example, different human languages have different readability metrics.

Tests may be objective or subjective. For example, from WCAG 2:

- Example for 1.1.1: <u>Image has non-empty accessible name</u>
- Example for 1.4.3: <u>Text has minimum contrast</u>

Both these tests are objectively verifiable. They are not subject to variation of results between different testers.

Alternatively, again from WCAG 2:

- Example for 1.1.1: <u>Image accessible name is descriptive</u>
- Example for 2.4.6: <u>Form field label is descriptive</u>

These tests include a subjective determination of whether they are adequately met.

Test scopes

Testing outcomes use items, views, task flow, and the product to define what is being tested.

Items are the smallest testable unit. They could be interactive components such as a drop down menu, a link, or a media player. They could also be units of content such as a phrase, a paragraph, a label or error message, an icon, or an image.

Views include all content visually and programmatically available without a significant change. Conceptually, views correspond to the definition of a web page as used in WCAG 2, but are not restricted to content meeting that definition. For example, a view could be considered a "screen" in a mobile app or a layer of web content, such as a modal dialog.

Task flows are a series views that support a specified user activity. A task flow may include a subset of items in a view or a group of views. Only the part of the views that support the user activity are included in a test of the task flow.

Examples of a task flow include:

- Logging into a web site and being verified as a user;
- Ordering an item, including the entire set of tasks from searching for the item, adding it to the shopping cart, paying for it, and receiving confirmation;
- Submitting tax information; and
- Chatting with other users in a virtual reality environment.

The product is the combination of all items, views, and task flows that comprise the web site, set of web pages, web app, etc.

Conditions

Some tests only apply in certain situations. Testing may occasionally require determining and referencing which specifications are being tested. Methods will note whether a test always applies or under what conditions a test applies. Both quantitative and qualitative tests can be conditional.

Example 3

Example conditions include:

- The language used may have different grammatical rules.
- An interface with multiple contrast modes may have different contrast requirements than an interface with only a default contrast mode.

Assertions and procedures

Editor's note

As we continue developing this content, we seek input on the following:
- Can assertions be used to record accessibility work that is not required in the guidelines? This could include advance work on guidance not yet added to the guidelines.
- What optional supporting documentation should organizations provide with an assertion?
- Is there a need for WCAG 3 to require proof of an assertion, and if so, what documentation should be required as proof?
- Should assertions be dated, expire, or be reviewed on a regular basis?
- Can steps in a procedure duplicate tests in other parts of the guidelines? If so, how should those be handled?
- Can assertions exist outside of conformance? For example, can they be used as an internal benchmark rather than for a claim of conformance?
- Can assertions be used at the most basic level of conformance? If so, how?
- How can small organizations use assertions without unrealistic burden?
- As written, outcomes and assertions are at the same level. Would moving assertions to the test level be more effective?
- AG is considering whether and how assertions can be applied to the Bronze level.
- AG is considering what will qualify as a procedure in WCAG 3. A procedure may be limited to guidance:
  - approved by AG and listed in WCAG,
  - that references publicly published guidance, or
  - that meets criteria specified in WCAG
- or it may be any process that an organization uses to improve accessibility. Comments or criticism of these alternatives is welcome.

End of note

Assertions

An assertion is a formal claim of fact, attributed to a person or organization. In WCAG 3, an assertion is an attributable and documented statement of fact regarding procedures practiced in the development and maintenance of the content or product to improve accessibility.

Using assertions

Assertions may supplement Outcomes to meet a Guideline. Not all Guidelines include Assertions. Those that do list the Assertions with the Outcomes. Organizations can make an assertion that they followed a procedure to claim conformance. Results when testing assertions are true/false - the organization making the assertion either provided the required documentation or it did not.

Procedures used in assertions may be implemented at the organization level, during design and development, or during testing.

Examples of procedures that may be used during implementation might include:

- Training,
- FTE (Full Time Equivalent) assignments,
- Skills testing,
- Coordination and documentation of accessibility processes, or
- Setting the priority for remediation.

Examples of procedures that may be used to evaluate accessibility might include:

- Usability testing,
- Heuristic evaluation, or
- Assistive technology testing.

Documenting assertions

Assertions must be documented as part of the conformance claim process. The required information may also be made available through the web site.

Assertions might include the following information:

- The statement being asserted,
- The date of the assertion,
- The date or date range the procedure was completed,
- The scope of the assertion,

- ● Contact information for the person or group making the assertion, and
- ● The outcome(s) or guideline(s) supported by the assertion.

Editor's note
An alternative to specifying assertions at the outcome or guideline level might be to require that the assertion apply to the scope of the conformance claim.
End of note

Supporting documentation for assertions

WCAG recommends maintaining additional information that an organization can use to improve or validate procedures and assertions. WCAG will not require organizations to provide supporting documentation to conform.

Testing assertions

The quality of an assertion can be tested based on how well the assertion meets the documentation requirements for assertions (See [Documenting Assertions](#)). Conforming to WCAG does not require testing supporting documentation; however, organizations may decide to adopt additional documentation requirements based on the procedure being asserted.

Conformance Models

Editor's note
We are proposing 1(2) model(s) within the current draft and request public comment on these models. Questions to consider include:
- ● Is the level of effort to meet this conformance model acceptable?
- ● How well does this conformance model reflect the actual accessibility of the content being assessed?
- ● How well does this conformance model ensure inclusion across different disabilities?
- ● What are the pros and cons of this conformance model?
End editor's note

WCAG 3.0 will use a different conformance model than WCAG 2.0 in order to meet its requirements. Developing and vetting the conformance model is a large portion of the work AG needs to complete over the next few years. Drafts will include maturity models for public review and comment. Key concepts we are exploring include conformance levels, issue severity, percentages, and levels of severity.

Conformance levels

WCAG 3 defines three levels of conformance: bronze, silver, and gold. While it is easy to replicate the WCAG 2 A, AA, AAA levels. by renaming the levels, there is an opportunity to improve accessibility for people with disabilities by using a more advanced approach.

Bronze is the minimum conformance level. Content that does not meet the requirements of the bronze level does not conform to WCAG 3. To reach Bronze level, the scope claimed in the conformance statement must pass a subset of outcomes and assertions. The subset will require enough outcomes and assertions to improve equity across functional needs.

Silver level incentivizes organizations to go further to improve accessibility. One possibility that we are examining is that Silver level points can accumulate even prior to completing bronze but are not usable until Bronze is achieved. The goal is to encourage organizations to go beyond the minimum, especially where organizations want to be recognized for their efforts to go beyond minimum accessibility.

Gold level identifies measures we want to include for those organizations that do achieve Silver so that some can stand out as exemplary, cutting edge, and role models. There are a number of ideas that will be developed further once more of the conformance structure is solidified.

Issue severity

Editor's note

Severity rating could contribute towards scoring and prioritization.

As we continue developing this content, we seek input on the following:

1. Is every issue critical to someone, making this concept invalid?
2. How best to assign severity, particularly if testers have different ideas on what is critical?
3. How do we incorporate context/process/task? Is that part of scoping, or issue severity? Both are important to the end result.
4. What to do with non-critical issues?
5. If included, how will situations where severity depends on context be handled?
6. Can the matrix inform designation of functional categories? For example, the Text Alternative Available outcome.
7. How will issue severity fit into levels? For example:
   ○ "Bronze" could be an absence of any critical or high issues;
   ○ "Silver" could be an absence of any critical, high, or medium issues.
8. How to account for cumulative issues becoming critical?
9. Would another approach be more effective, for example assigning critical issues after testing is complete based on task or type of task rather than by test?

Next steps include:

● Testing the assumption that some failures cause a greater impact to users than others or whether all guidelines and contexts are important to some individuals.
● Explore whether the concept of issue severity can be applied consistently and effectively.

End of note

Outcomes may allow for the concept of varying severity. High severity issues are those which prevent users from completing task flows.

Tests could include critical issues. Each test could have a category of severity, so some tests will be flagged as causing a critical issue.

Adjectival ratings

Adjectival Ratings allow test results to go beyond Pass or Fail to show progress towards a goal or exceeding a goal. Example of possible adjectival ratings are:

- Fail, Pass, Exceptional; or
- Fail, Progress, Pass, Better, Exceptional.

Outcomes or guidelines could be evaluated using adjectival ratings on both directly quantifiable outcomes and qualitative measures that are asserted. Outcomes might be assigned an adjectival rating based on methods used to meet the outcome and issue severity. Guidelines might be assigned an adjectival rating based on the outcomes and assertions completed under the guideline.

Percentages

Editor's note
We are exploring whether percentages could apply to Bronze but have not found a model to date where this works without adding complexity and time needed for testing.
As we continue developing this content, we seek input on the following:
- How can percentages be used in a way that is equitable across disabilities?
End of note

In this approach, percentage of outcomes and assertions passed or percentage passed at a certain adjectival rating might be used to conform to Silver and Gold levels.

Pre-assessment checks

Pre-Assessment checks are tests or criteria that implementers can use to determine if they are ready to assess conformance. The intent of specifying these would be to help implementers prepare for conformance testing, not to create a new level of conformance. Examples of pre-assessment checks might be:

- The video player used has the ability to display captions and support multiple audio tracks,
- All non-text elements on a page have an accessible name.

Schedule

AG is currently chartered through November 2025. The schedule through that time period is maintained at WCAG 3 Timeline.

AG will continue to iterate within a single normative document with informative supporting documentation. After exploring other options such as breaking the content's into modules, the group determined that the fastest way forward at this time is to continue creating a single document with varying levels of maturity. We will revisit whether mature content can be

published as informative modules as part of the next charter period, when content is more mature.

A final schedule will be delivered as part of this charter period. WCAG 3.0 will not be published until it covers at least as much as WCAG 2.2.

Terminology

Adequacy
Adequacy is a subtle metric, but important to WCAG 3 proposals. Adequacy describes if the formulas being used to process and score the accessibility testing results are using such a small interval that small changes in accessibility do not cause large changes in scoring. Benchmarking Web Accessibility Metrics, Vigo, Lopes, O Connor, Brajnik, Yesilada 2011.

Adjectival Ratings
A system to report evaluation results as a set of human-understandable adjectives.

Assertion
A formal claim of fact, attributed to a person or organization. An attributable and documented statement of fact regarding procedures practiced in the development and maintenance of the content or product to improve accessibility.

Automated evaluation
Evaluation conducted using software tools, typically evaluating code-level features and applying heuristics for other tests.

Automated testing is contrasted with other types of testing that involve human judgement or experience. Semi-automated evaluation allows machines to guide humans to areas that need inspection. The emerging field of testing conducted via machine learning is not included in this definition.

Best Practice
Methods which are not required and meet a higher requirement than methods required to conform to Bronze.

Complexity
Complexity refers to the resources required to accomplish the conformance testing. These could be crawler time, or time for human judgment testing. This would be a useful metric to have to answer the question of how much time WCAG 3 takes to test as compared to WCAG 2. Benchmarking Web Accessibility Metrics, Vigo, Lopes, O Connor, Brajnik, Yesilada 2011.

Conformance

Satisfying all the requirements of the guidelines. Conformance is an important part of following the guidelines even when not making a formal Conformance Claim.

See [Conformance](#).

Deprecate

To declare something outdated and in the process of being phased out, usually in favor of a specified replacement.

Deprecated documents are no longer recommended for use and may cease to exist in the future.

Equity

Equity is the outcome of processes and actions that ensure the spectrum of human reality obtains what is needed to participate, not solely access. As equity relates to WCAG it is about the impact the standards/guidelines have on people with disabilities, along with actually including people with disabilities in the work.

Evaluation

The process of examining content for conformance to these guidelines.

Different approaches to evaluation include automated evaluation, semi-automated evaluation, human evaluation, and user testing.

Functional need

A statement that describes a specific gap in one's ability, or a specific mismatch between ability and the designed environment or context.

Guideline

High-level, plain-language content used to organize outcomes.

Guidelines provide a high-level, plain-language version of the content for managers, policy makers, individuals who are new to accessibility, and other individuals who need to understand the concepts but not dive into the technical details. They provide an easy-to-understand way of organizing and presenting the outcomes so that non-experts can learn about and understand the concepts. Each guideline includes a unique, descriptive name along with a high-level plain-language summary. Guidelines address functional needs on specific topics, such as contrast, forms, readability, and more. Guidelines group related outcomes and are technology-independent.

Human evaluation

Evaluation conducted by a human, typically to apply human judgment to tests that cannot be fully automatically evaluated.

Human evaluation is contrasted with automated evaluation which is done entirely by machine, though it includes semi-automated evaluation which allows machines to guide humans to areas that need inspection. Human evaluation involves inspection of content features, by contrast with user testing which directly tests the experience of users with content.

Informative

Content provided for information purposes and not required for conformance.

Method

Detailed information, either technology-specific or technology-agnostic, on ways to meet the outcome as well as tests and scoring information.

Normative

Content whose instructions are required for conformance.

Outcome

Result of practices that reduce or eliminate barriers that people with disabilities experience.

See Outcomes.

Point of Regard

The position in rendered content that the user is presumed to be viewing. The dimensions of the point of regard can vary. For example,it can be a two-dimensional area (e.g. content rendered through a two-dimensional graphical viewport), or a point (e.g. a moment during an audio rendering or a cursor position in a graphical rendering), or a range of text (e.g. focused text), or a two-dimensional area (e.g. content rendered through a two-dimensional graphical viewport). The point of regard is almost always within the viewport, but it can exceed the spatial or temporal dimensions of the viewport (see the definition of rendered content for more information about viewport dimensions). The point of regard can also refer to a particular moment in time for content that changes over time (e.g. an audio-only presentation). User agents can determine the point of regard in a number of ways, including based on viewport position in content, keyboard focus, and selection.

Process

A sequence of steps that need to be completed to accomplish an activity / task from end-to-end.

Reliability

The reproducibility and consistency of scores i.e. the extent to which they are the same when evaluations of the same resources are carried out in different contexts (different tools, different people, different goals, different time). This would be particularly useful to ensure that similar results are achieved by different testers. It would also be useful to see if different testers would select the same path or off-path decisions. Representative sampling tests also fit in this category. Benchmarking Web Accessibility Metrics, Vigo, Lopes, O Connor, Brajnik, Yesilada 2011.

Semi-Automated Evaluation

Evaluation conducted using machines to guide humans to areas that need inspection.

Semi-automated evaluation involves components of automated evaluation and human evaluation.

Sensitivity

Sensitivity of a metric is related to the extent that changes in the output of the metric are quantitatively related to changes of the accessibility of the web site being analyzed. This metric is useful for determining if the conformance proposal captures the impact of the severity of accessibility barriers on the final score and if different disabilities are treated equally by the proposal. Benchmarking Web Accessibility Metrics, Vigo, Lopes, O Connor, Brajnik, Yesilada 2011.

Set of Tests

A group of tests that supports a method.

Test

Mechanism to evaluate implementation of a method.

Technique

Technology-specific approach to follow a method.

User need

The end goal a user has when starting a process through digital means.

User testing

Evaluation of content by observation of how users with specific functional needs are able to complete a process and how the content meets the relevant outcomes.

Validity

The extent to which the measurements obtained by a metric reflect the accessibility of the web site to which it is applied. Does the rating that a web site or digital product achieve in any conformance proposal actually reflect the rating that it should get? Benchmarking Web

Accessibility Metrics, Vigo, Lopes, O Connor, Brajnik, Yesilada 2011. Accessed on 29 July 2020

References