

# W3C Web Content Accessibility Guidelines (WCAG) 2.1 Conformance Statement

Date of Report: March 30, 2021

Name of Product: Azure Multi-Factor Authentication

Description of Product: Azure Multi-factor authentication is a method of verifying who you are that requires the use of more than just a username and password. It provides a second layer of security to user sign-ins and transactions.

Platform: Web, Windows, Android, iOS

Product Build: Continuous release

Accessibility website: [Microsoft Accessibility](https://www.microsoft.com/accessibility)

For assistance with this report, please [email us](mailto:edad@microsoft.com?subject=Microsoft%20Accessibility%20Conformance%20Report).

## WCAG 2.1 Conformance Requirements

| **Criteria** |
| --- |
| [1. Conformance Level](https://www.w3.org/TR/WCAG21/#cc1) |
| [2. Full pages](https://www.w3.org/TR/WCAG21/#cc2) |
| [3. Complete processes](https://www.w3.org/TR/WCAG21/#cc3) |
| [4. Only Accessibility-Supported Ways of Using Technologies](https://www.w3.org/TR/WCAG21/#cc4) |
| [5. Non-Interference](https://www.w3.org/TR/WCAG21/#cc5) |

## Web Content Accessibility Guidelines (WCAG) 2.1

## Principle 1: Perceivable

Information and user interface components must be presentable to users in ways they can perceive.

### Guideline 1.1 Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **1.1.1 Non-text Content:** All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except in situations listed in [WCAG 2.1 1.1.1](https://www.w3.org/TR/WCAG21/#non-text-content). | Supported |  |

### Guideline 1.2 Time-based Media

Provide alternatives for time-based media.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **1.2.1 Audio-only and Video-only (Prerecorded):** For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such:  • Prerecorded Audio-only: An alternative for time-based media is provided that presents equivalent information for prerecorded audio-only content.  • Prerecorded Video-only**:** Either an alternative for time-based media or an audio track is provided that presents equivalent information for prerecorded video-only content. | Not Applicable |  |
| **1.2.2 Captions (Prerecorded):** Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such. | Not Applicable |  |
| **1.2.3 Audio Description or Media Alternative (Prerecorded):** An alternative for time-based media or audio description of the prerecorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labeled as such. | Not Applicable |  |
| **1.2.4 Captions (Live):** Captions are provided for all live audio content in synchronized media. | Not Applicable |  |
| **1.2.5 Audio Description (Prerecorded):** Audio description is provided for all prerecorded video content in synchronized media. | Not Applicable |  |

### Guideline 1.3 Adaptable

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

| **Criteria** | | **Supporting Feature** | **Remarks and Explanations** | |
| --- | --- | --- | --- | --- |
| **1.3.1 Info and Relationships:** Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. | | Supported With Exceptions | Narrator does not provide information during installer setup (2 issues total). These issues affect administrators, and do not affect end-users of the service. They are external to Azure MFA and come from a 3rd party component. | |
| **1.3.2 Meaningful Sequence:** When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. | | Supported |  | |
| **1.3.3 Sensory Characteristics:** Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. | | Supported |  | |
| **1.3.4 Orientation:** Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential. | Supported | | |  |
| **1.3.5 Identify Input Purpose:** The purpose of each input field collecting information about the user can be programmatically determined when:  • The input field serves a purpose identified in the Input Purposes for User Interface Components section; and  • The content is implemented using technologies with support for identifying the expected meaning for form input data. | Supported | | |  |

### Guideline 1.4 Distinguishable

Make it easier for users to see and hear content including separating foreground from background.

| **Criteria** | **Supporting Feature** | | **Remarks and Explanations** |
| --- | --- | --- | --- |
| **1.4.1 Use of Color:** Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. | | Supported |  | |
| **1.4.2 Audio Control:** If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. | | Not Applicable |  | |
| **1.4.3 Contrast (Minimum):** The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following:  • Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;  • Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement.  • Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement. | | Supported |  | |
| **1.4.4 Resize text:** Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. | | Supported |  | |
| **1.4.5 Images of Text:** If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following:  • Customizable: The image of text can be visually customized to the user's requirements;  • Essential: A particular presentation of text is essential to the information being conveyed. | | Supported |  | |
| **1.4.10 Reflow:** Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:  • Vertical scrolling content at a width equivalent to 320 CSS pixels;  • Horizontal scrolling content at a height equivalent to 256 CSS pixels;  Except for parts of the content which require two-dimensional layout for usage or meaning. | | Supported With Exceptions | Content not properly visible on one screen at 400% (1 issue total). This issue affects administrators, and does not affect end-users of the service. It is external to Azure MFA and comes from a 3rd party component. | |
| **1.4.11 Non-Text Contrast:** The visual presentation of the following have a contrast ratio of at least 3:1 against adjacent color(s):  **User Interface Components**  • Visual information used to indicate states and boundaries of user interface components, except for inactive components or where the appearance of the component is determined by the user agent and not modified by the author;  **Graphical Objects**  • Parts of graphics required to understand the content, except when a particular presentation of graphics is essential to the information being conveyed. | | Supported With Exceptions | Luminosity ratio less than required for one field border (1 issue total). This issue affects administrators, and does not affect end-users of the service. It is external to Azure MFA and comes from a 3rd party component. | |
| **1.4.12 Text Spacing:** In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all of the following and by changing no other style property:  • Line height (line spacing) to at least 1.5 times the font size;  • Spacing following paragraphs to at least 2 times the font size;  • Letter spacing (tracking) to at least 0.12 times the font size;  • Word spacing to at least 0.16 times the font size. | | Supported |  | |
| **1.4.13 Content on Hover or Focus:** Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:  **Dismissable**  A mechanism is available to dismiss the additional content without moving pointer hover or keyboard focus, unless the additional content communicates an input error or does not obscure or replace other content;  **Hoverable**  If pointer hover can trigger the additional content, then the pointer can be moved over the additional content without the additional content disappearing;  **Persistent**  The additional content remains visible until the hover or focus trigger is removed, the user dismisses it, or its information is no longer valid. | | Supported |  | |

## Principle 2: Operable

User interface components and navigation must be operable.

### Guideline 2.1 Keyboard Accessible

Make all functionality available from a keyboard.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **2.1.1 Keyboard:** All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. | Supported With Exceptions | One link in the NPS Extension installer (admin-facing only) and one button in the Azure MFA AD FS adapter are not keyboard accessible (2 issues total). Both are external to the Azure MFA service. |
| **2.1.2 No Keyboard Trap:** If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. | Supported |  |
| **2.1.4 Character Key Shortcuts:** If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:  **Turn off**  A mechanism is available to turn the shortcut off;  **Remap**  A mechanism is available to remap the shortcut to use one or more non-printable keyboard characters (e.g. Ctrl, Alt, etc).  **Active only on focus**  The keyboard shortcut for a user interface component is only active when that component has focus. | Supported |  |

### Guideline 2.2 Enough Time

Provide users enough time to read and use content.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **2.2.1 Timing Adjustable:** For each time limit that is set by the content, at least one of the following is true:  • Turn off: User is allowed to turn off time limit before encountering it; or  • Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or  • Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or  • Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or  • Essential Exception: The time limit is essential and extending it would invalidate the activity; or  • 20 Hour Exception: The time limit is longer than 20 hours. | Not Applicable |  |
| **2.2.2 Pause, Stop, Hide:** For moving, blinking, scrolling, or auto-updating information, all of the following are true:  • Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and  • Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential. | Not Applicable |  |

### Guideline 2.3 Seizures

Do not design content in a way that is known to cause seizures.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **2.3.1 Three Flashes or Below Threshold:** Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. | | Not Applicable |  |

### Guideline 2.4 Navigable

Provide ways to help users navigate, find content, and determine where they are.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **2.4.1 Bypass Blocks:** A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. | | Not Applicable |  |
| **2.4.2 Page Titled:** Web pages have titles that describe topic or purpose. | | Supported |  |
| **2.4.3 Focus Order:** If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. | | Supported |  |
| **2.4.4 Link Purpose (In Context):** The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. | | Supported |  |
| **2.4.5 Multiple Ways:** More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. | | Supported |  |
| **2.4.6 Headings and Labels:** Headings and labels describe topic or purpose. | | Supported With Exceptions | Two headings on the ADFS adapter sign-in screen have incorrect heading levels (1 issue total). External to the Azure MFA service. |
| **2.4.7 Focus Visible:** Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. | | Supported |  |

### Guideline 2.5 Input Modalities

Make it easier for users to operate functionality through various inputs beyond keyboard.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **2.5.1 Pointer Gestures:** All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential. | | Supported |  |
| **2.5.2 Pointer Cancellation:** For functionality that can be operated using a single pointer, at least one of the following is true:  **No Down-Event**  The down-event of the pointer is not used to execute any part of the function;  **Abort or Undo**  Completion of the function is on the up-event, and a mechanism is available to abort the function before completion or to undo the function after completion;  **Up Reversal**  The up-event reverses any outcome of the preceding down-event;  **Essential**  Completing the function on the down-event is essential. | | Supported |  |
| **2.5.3 Label in Name:** For user interface components with labels that include text or images of text, the name contains the text that is presented visually. | | Supported |  |
| **2.5.4 Motion Actuation:** Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:  **Supported Interface**  The motion is used to operate functionality through an accessibility supported interface;  **Essential**  The motion is essential for the function and doing so would invalidate the activity. | | Supported |  |

## Principle 3: Understandable

Information and the operation of user interface must be understandable.

### Guideline 3.1 Readable

Make text content readable and understandable.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **3.1.1 Language of Page**: The default human language of each Web page can be programmatically determined. | Supported |  |
| **3.1.2 Language of Parts:** The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. | Not Applicable |  |

### Guideline 3.2 Predictable

Make Web pages appear and operate in predictable ways.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **3.2.1 On Focus:** When any component receives focus, it does not initiate a change of context. | | Supported With Exceptions | Focus is hidden on two elements in the NPS extension installer (2 issues total). These issues affect administrators, and do not affect end-users of the service. They are external to Azure MFA and come from a 3rd party component. |
| **3.2.2 On Input:** Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component | | Supported |  |
| **3.2.3 Consistent Navigation:** Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. | | Supported |  |
| **3.2.4 Consistent Identification:** Components that have the same functionality within a set of Web pages are identified consistently. | | Supported |  |

### Guideline 3.3 Input Assistance

Help users avoid and correct mistakes.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **3.3.1 Error Identification:** If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. | | Supported With Exceptions | Error not identified in an empty input element in the NPS extension installer (1 issue total). This issue affects administrators, and does not affect end-users of the service. It is external to Azure MFA and comes from a 3rd party component. |
| **3.3.2 Labels or Instructions:** Labels or instructions are provided when content requires user input. | | Supported With Exceptions | Two elements in AD FS are not labeled (1 issue total). This issue is external to Azure MFA. |
| **3.3.3 Error Suggestion:** If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. | | Supported |  |
| **3.3.4 Error Prevention (Legal, Financial, Data):** For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true:  1. Reversible: Submissions are reversible.  2. Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.  3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission. | | Not Applicable |  |

## Principle 4: Robust

Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

### Guideline 4.1 Compatible

Maximize compatibility with current and future user agents, including assistive technologies.

| **Criteria** | **Supporting Feature** | **Remarks and Explanations** |
| --- | --- | --- |
| **4.1.1 Parsing:** In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. | Supported |  |
| **4.1.2 Name, Role, Value:** For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. | Supported With Exceptions | Names not defined (4 issues total: 3 for NPS extension installer, 1 for AD FS). They are external to Azure MFA. |
| **4.1.3 Status Messages:** In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus. | Supported |  |

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