

# Salesforce Lightning App Builder

## Web Content Accessibility Guidelines 2.0 Level A and AA Voluntary Product Accessibility Template<sup>®</sup> (VPAT) | April 2018

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This Voluntary Product Accessibility Template, or VPAT, is a tool that helps officials and decision-makers to evaluate Lightning App Builder Experience design conformance with the accessibility standards under Act World Wide Web Consortium's Web Content Accessibility Guidelines (WCAG 2.0) Level A and AA standards.

The scope of this VPAT includes all features of the Salesforce Lightning App Builder. Lightning App Builder features includes Lightning App Builder View, New Page, Open Page, Activation, App Manager, New Lightning App and Builder Take a tour. Salesforce Lightning Experience and Service Cloud features are captured in the different VPAT. For more information, please visit Salesforce Product Accessibility Status at [https://www.salesforce.com/company/legal/508\\_accessibility/](https://www.salesforce.com/company/legal/508_accessibility/).

**Vendor:** Salesforce

**Name of the Product:** Lightning App Builder

**Version:** Summer 2018

**Point of Contact Name/Email:** accessibility@salesforce.com

# Principle 1: Perceivable – information and user interface components must be presentable to users in ways they can perceive.

Standard	Description	Supporting Features	Comments
<i>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.</i>			
1.1.1	<p>Non-text Content: All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below (Level A).</p> <ul style="list-style-type: none"> <li>• Controls, Input: If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for controls and content that accepts user input.)</li> <li>• Time-Based Media: If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for the additional requirements for media.)</li> <li>• Test: If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content.</li> <li>• Sensory: If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.</li> <li>• CAPTCHA: If the purpose of non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities.</li> <li>• Decorative, Formatting, Invisible: If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.</li> </ul>	Supports	<p>The images displayed in the Lightning App Builder user interface have meaningful alternative (alt) text descriptions. Non-relevant or decorative images have null alt attributes or are inserted as a background image.</p> <p>Form buttons controls have descriptive values and form inputs have proper text labels.</p> <p>Lightning App Builder does not use CAPTCHA for any content access.</p>

<i>Guideline 1.2 Time-based Media: Provide alternatives for time-based media.</i>			
1.2.1	<p>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 (Level A):</p> <ul style="list-style-type: none"> <li>• Prerecorded Audio-only: An alternative for time-based media is provided that presents equivalent information for prerecorded audio-only content.</li> <li>• 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.</li> </ul>	Does not apply	Lightning App Builder features does not include any prerecorded Audio-only and Video-only media elements.
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. (Level A)	Does not apply	Lightning App Builder user interface and its features does not include any prerecorded Audio-only media elements to provide captions along with it.
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. (Level A)	Does not apply	Lightning App Builder user interface and its features does not include any audio descriptions or time-based media alternative for the pre-recorded video content.
1.2.4	Captions (Live): Captions are provided for all live audio content in synchronized media. (Level AA)	Does not apply	Lightning App Builder core features does not include any live audio content.
1.2.5	Audio Description (Prerecorded): Audio description is provided for all prerecorded video content in synchronized media. (Level AA)	Does not apply	Lightning App Builder user interface and its features does not include any audio descriptions or time-based media alternative for the pre-recorded video content.

<i>Guideline 1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure.</i>			
1.3.1	Info and Relationships: Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text. (Level A)	Supports with exceptions	<p>Lightning App Builder core user interface contains semantic markup (headings, lists, etc.) to designate headings and emphasized text.</p> <p>Headings and WAI-ARIA landmarks, identity, role, operation and state are used to help convey presentation and assistive technology. A descriptive text is used to indicate the various types of content and controls, and the relationships between them.</p> <p>The form label elements within the Lightning experience pages are properly associated and placed in-line for the form fields.</p> <p>Most of the data tables with column and/or row headers are properly identified (using the &lt;th&gt; element and scope attributes) within Lightning App Builder pages with the following exception:</p> <ul style="list-style-type: none"> <li>The first “Checkbox” column table header cells in the data list views within “Open Page, Select Apps, Select Record Types, Selected Profiles, Remove App Default Assignments and Care Gaps” pages are left blank and no information is provided for the Assistive Technology users.</li> </ul>
1.3.2	Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)	Supports	Lightning App Builder user interface is developed in meaningful and correct reading sequence order that can be programmatically determined. As an example, inputs and labels are contained within the same division element and are listed in sequence.
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. (Level A)	Supports	All instructions for operating within Lightning App Builder user interface content is provided in textual format. Instructions and operating content do not rely on shape, size or visual location and instructions do not rely solely upon sound.
<i>Guideline 1.4 Distinguishable: Make it easier for users to see and hear content including separating foreground from background.</i>			
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. (Level A)	Supports	Lightning App Builder does not use color alone to distinguish the importance of a visual element. Menus and tabs use highlighting to indicate current location. This information is also communicated by WAI-ARIA role and selected state.
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. (Level A)	Does not apply	Lightning App Builder pages do not include any audio sounds.

1.4.3	<p>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: (Level AA)</p> <ul style="list-style-type: none"> <li>• Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;</li> <li>• 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.</li> <li>• Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement.</li> </ul>	Supports with exceptions	<p>Lightning App Builder does not use color alone to distinguish the importance of a visual element. Menus and tabs use highlighting to indicate current location. This information is also communicated by WAI-ARIA role and selected state.</p> <p>Sufficient color contrast is provided for most of the elements between foreground and background text colors for easy and clear legibility for people with moderately low vision in Lightning App Builder user interface and controls with the following exceptions:</p> <ul style="list-style-type: none"> <li>• The color contrast failed the minimum requirement for the blue text within “Section” panel whenever focus is set on the individual panel using keyboard tabbing or mouse over.</li> <li>• The grey and blue links foreground text over grey background within “How the highlights panel work, Path Setup, and Record Details/Related List Quick Links” modal window and Select Items” page fails the minimum color contrast requirement.</li> <li>• “Instructions Text” grey foreground text over white background within all App Manager pages such as “Add Details and Branding, Utility Bar, Select Items, Navigation Items, Assign User to Profiles” page failed the minimum requirement for the.</li> </ul>
1.4.4	<p>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. (Level AA)</p>	Supports with exceptions	<p>Most of the text and images within Lightning App Builder can be resized with the browser zoom feature. Some of the pages or controls contain issues when a text size is zoomed at 200%. Text in the controls and pages work fine below 150% text increase.</p>
1.4.5	<p>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: (Level AA)</p> <ul style="list-style-type: none"> <li>• Customizable: The image of text can be visually customized to the user's requirements;</li> <li>• Essential: A particular presentation of text is essential to the information being conveyed.</li> </ul>	Does not apply	<p>Lightning App Builder does not contain images in lieu of text. All text content within lightning interface is included as pure text.</p>

## Principle 2: Operable - User interface components and navigation must be operable.

Standard	Description	Supporting Features	Comments
<i>Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard.</i>			
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. (Level A)	Supports with exceptions	<p>Most of the core features and controls in the Lightning App Builder user interface are reachable using the keyboard alone. They may be executed using the Tab key and other keys, as required by the criteria. However, there are some exceptions to this, including the following:</p> <ul style="list-style-type: none"> <li>• The “Close”, “Draggable” and “Eye” image icon links elements displayed on the center individual frames does not contains any assistive value for the screen readers to announce.</li> <li>• The remove links elements displayed on the “Section” panel for the Accordion/Tab components does not have any assistive value for the screen readers to announce.</li> <li>• The object list items displayed within “App Manager - Available and Selected” lists are not announced properly by screen readers whenever they are navigated using “Up and Down” arrow keystrokes. Once the focus is set on the list item, the screen reader does not announce the list item and goes blank.</li> <li>• The “Clear” search icon displayed in the App Manager Select Items and Assign to User Profiles” filter search box is not keyboard accessible whenever search is performed to filter the list and tab to the list element.</li> </ul>
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. (Level A)	Supports	Lightning App Builder controls and interactive elements that can be entered via the keyboard can also be escaped by pressing either the “Tab or Shift-Tab” keys or other standard exit methods supplied by the browser and/or assistive technology. Keyboard focus is not locked or trapped at any one particular page element.

*Guideline 2.2 Enough Time: Provide users enough time to read and use content.*

2.2.1	<p>Timing Adjustable: For each time limit that is set by the content, at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> <li>• Turn off: The user is allowed to turn off the time limit before encountering it; or</li> <li>• 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</li> <li>• 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</li> <li>• 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</li> <li>• Essential Exception: The time limit is essential and extending it would invalidate the activity; or</li> <li>• 20 Hour Exception: The time limit is longer than 20 hours.</li> </ul>	Supports	Users are alerted within Lightning App Builder with time response modal window and provided options to select additional time for continuing the login session. Besides this capability, there are no other features or functionality within Lightning App Builder that requires any time limits.
2.2.2	<p>Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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.</li> </ul>	Does not apply	Lightning App Builder interface does not include any moving, blinking, scrolling, or auto-updating information.

<i>Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures.</i>			
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. (Level A)	Does not apply	Lightning App Builder does not use flashes or flashing objects.
<i>Guideline 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are.</i>			
2.4.1	Bypass Blocks: A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. (Level A)	Supports	Lightning App Builder pages does not contain any “Skip to navigation” link at the top of every page to bypass top navigation but keyboard users are provided with different keystrokes such as “F6” to navigate between different sections of the page more efficiently. The pages are also provided with headings and ARIA landmarks to aid with rapid navigation to desired content.
2.4.2	Page Titled: Web pages have titles that describe topic or purpose. (Level A)	Supports	Lightning App Builder pages and modal windows are provided with meaningful and relevant page titles to a user's current location and page navigation within the application.
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. (Level A)	Supports	Lightning App Builder user interface and controls are navigated sequentially by tabbing through the various inputs & labels. The user controls receive keyboard focus in the same tab order in which they are presented visually.
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. (Level A)	Supports	All link elements within Lightning App Builder provide a purpose both through the link text itself and the title attribute, even when read out of context.
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. (Level AA)	Supports	Lightning App Builder interface and interaction within the application is extremely simple and user are provided with multiple keystrokes to perform action on the pages. It contains a landing app builder edit view page and contextual top navigation, from which the user can launch or locate to different section or pages they are seeking.
2.4.6	Headings and Labels: Headings and labels describe topic or purpose. (Level AA)	Supports with exceptions	All headings and labels within Lightning App Builder are descriptive for where the user is and what they are doing, with the following exception: <ul style="list-style-type: none"> <li>• The heading structure within “App Manager - Add Details and Branding” page is not logically nested.</li> </ul>
2.4.7	Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)	Supports	Focus indicator within Lightning App Builder core interface and controls are always visible and contrasts well with the surrounding content and background.



## Principle 3: Understandable - Information and the operation of user interface must be understandable.

Standard	Description	Supporting	Comments
<i>Guideline 3.1 Readable: Make text content readable and understandable.</i>			
3.1.1	Language of Page: The default human language of each Web page can be programmatically determined. (Level A)	Supports	The default language of page is specified or set on the html tag for all core pages in Lightning App Builder,
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. (Level AA)	Support	The human language information in the Lightning App Builder user interface uses HTML 5 language markup for the elements that are accessed directly by commonly available assistive technology.
<i>Guideline 3.2 Predictable: Make Web pages appear and operate in predictable ways.</i>			
3.2.1	On Focus: When any component receives focus, it does not initiate a change of context. (Level A)	Supports	There is no context change within Lightning App Builder user interface when a component receives focus
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. (Level A)	Supports	There is no context change upon changing any user interface component within Lightning App Builder.
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. (Level AA)	Supports	Lightning App Builder provides consistent and repeatable top menu navigation mechanism to assist users with assistive technologies.
3.2.4	Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)	Supports	Components and user interface controls are identified consistently for the same functionality across Lightning App Builder.

**Guideline 3.3 Input Assistance: Help users avoid and correct mistakes.**

3.3.1	<p>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. (Level A)</p>	Support with exceptions	<p>Users are visually notified whenever an input error is detected within Lightning App Builder data entry forms when a field that must be completed has not been completed.</p> <p>Proper information is provided in the form of text next to field level input elements to enable the users to identify which fields were omitted and needs to be completed with an exception:</p> <ul style="list-style-type: none"> <li>• Whenever form error is occurred on a “Create a new Lightning Page” modal window there is no message on the top of the form indicating regarding errors and screen readers does not announce the general alert message.</li> <li>• After saving the “Activation” changes, the alert toast message displayed next to the Activation button is not informed or announced by assistive technology that changes have being activated.</li> </ul>
3.3.2	<p>Labels or Instructions: Labels or instructions are provided when content requires user input. (Level A)</p>	Support with exceptions	<p>Most of the electronic form controls including input and buttons in the Lightning App Builder user interface can be operated and accessible by using assistive technology. The form label elements within the Health Cloud pages are properly associated and placed in-line for the form fields with the following exception:</p> <ul style="list-style-type: none"> <li>• The “Subtabs of” drop down menu available within “App Manager - Navigation Items” page are not properly associated with any form label.</li> </ul>
3.3.3	<p>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. (Level AA)</p>	Supports	<p>Whenever error is automatically detected within Lightning App Builder data entry forms, the error suggestions for corrections are identified and provided visually to the user at the top of the form.</p>
3.3.4	<p>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: (Level AA)</p> <ul style="list-style-type: none"> <li>• Reversible: Submissions are reversible.</li> <li>• Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.</li> <li>• Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.</li> </ul>	Supports	<p>A confirmation message or a page is provided to the user within Lightning App Builder workflow forms to before submitting the action, be it an insert, update or delete. Data entered by users are checked using validation methods to help users to confirm and correct data submissions.</p>

**Principle 4: Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.**

Standard	Description	Supporting Features	Comments
<i>Guideline 4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies.</i>			
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. (Level A)	Supports	<p>All pages and functionality in Lightning App Builder are written to HTML5 specifications. HTML elements used have complete start and end tags and are properly nested. Most of the elements IDs are identified uniquely.</p> <p>Note: Some of the form elements such as input text boxes and dropdowns across Lightning App Builder may contain empty ARIA attribute value such as <code>aria-describedby=""</code> which is included as part of the common platform controls.</p>
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. (Level A)	Supports	The name, role and value of most of the user interface elements in Lightning App Builder are available to assistive technologies via HTML or WAI-ARIA. All buttons are standard HTML form inputs.