



2nd Annual
MidPoint Community Meetup

Accessibility in Focus: Applying WCAG to Improve User Experience

Agenda

- Why accessibility is important
- WCAG and its principles
- MidPoint accessibility compliance
- Accessibility audit and findings
 - Visual and perception issues
 - Semantics and accessible names
 - Interaction issues
- Results and impacts



Why accessibility is important

- Accessibility improves usability for everyone
- Enables equal access to digital systems
- Supports different ways of interaction
- Helps in real-life situations
- Reduces compliance risks
- Leads to higher quality products



Introduction to WCAG

Web Content Accessibility Guidelines

Purpose

- Provide international standards for making web applications accessible.

Compliance Levels

- A (basic) | AA (recommended) | AAA (advanced)

Principles

- Perceivable, Operable, Understandable, Robust

WCAG principles

1. Perceivable

Users must be able to perceive content.

2. Operable

Users must be able to operate the interface.

3. Understandable

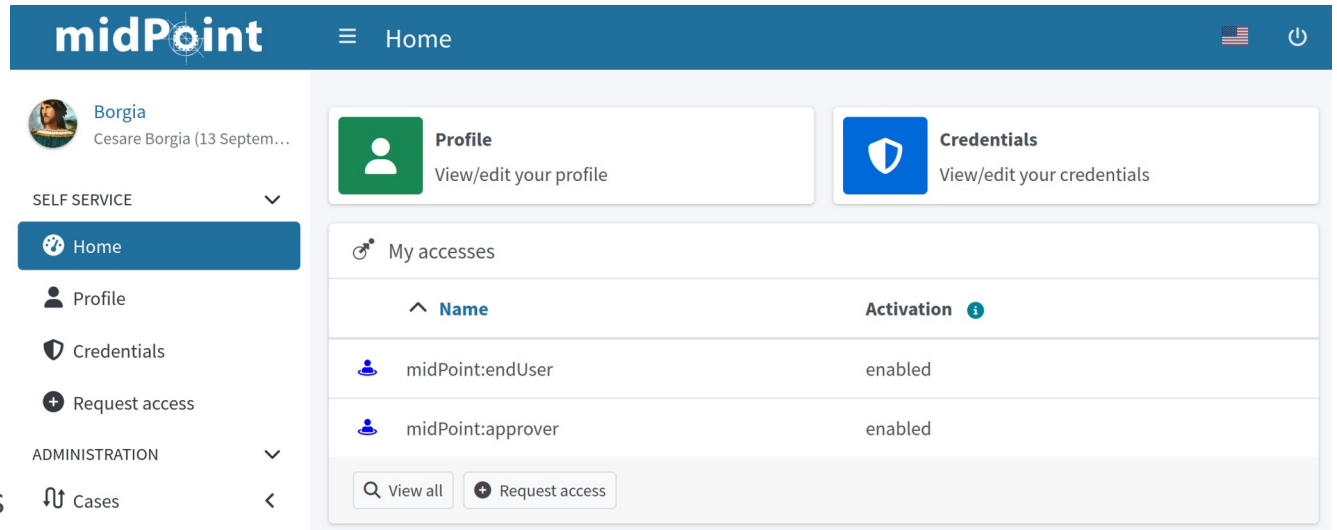
Users must be able to understand the interface.

4. Robust

Content must work with assistive technologies.

MidPoint accessibility compliance

- MidPoint goal
 - WCAG 2.2
 - Level AA compliance
- Accessibility validated
 - Internal testing
 - External accessibility reviews
 - Official VPAT accessibility report is available at <https://docs.evolveum.com/midpoint/compliance/wcag/wcag-vpat/>
 - If you encounter any accessibility barriers or require more information, please contact us at compliance@evolveum.com



The screenshot displays the MidPoint user interface. At the top, there is a blue header with the 'midPoint' logo, a 'Home' link, and a power icon. Below the header, the user's profile is shown with a profile picture and the name 'Borgia'. A 'SELF SERVICE' menu is visible, containing options for 'Home', 'Profile', 'Credentials', and 'Request access'. Below this is an 'ADMINISTRATION' section with a 'Cases' link. The main content area features two cards: 'Profile' (View/edit your profile) and 'Credentials' (View/edit your credentials). Below these is a 'My accesses' section with a table listing user roles and their activation status.

Name	Activation
midPoint:endUser	enabled
midPoint:approver	enabled

At the bottom of the 'My accesses' section, there are buttons for 'View all' and 'Request access'.

Accessibility audit and findings

Visual and perception issues

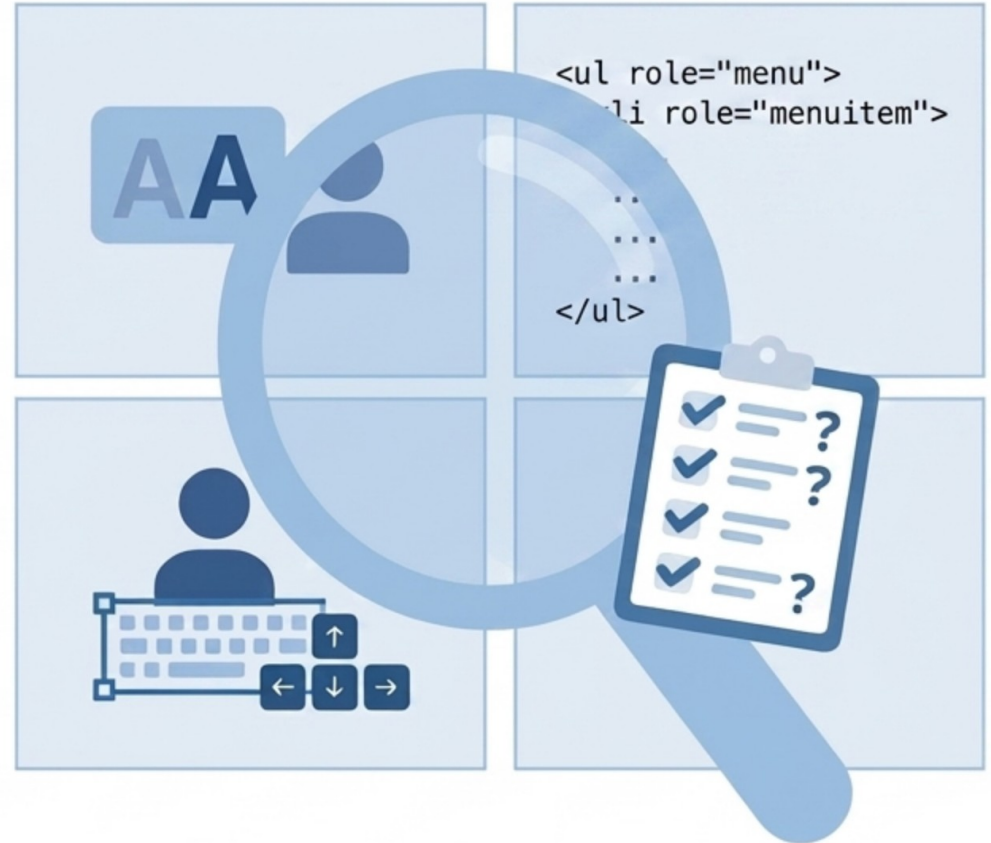
- Insufficient colour contrast
- Missing alternative text

Semantics and accessible names

- Missing or incorrect accessible names
- Incorrect ARIA structures

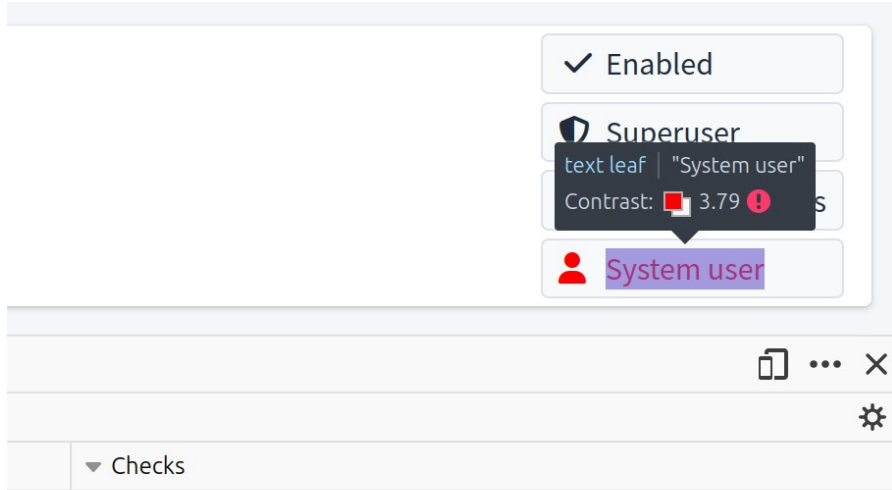
Interaction issues

- Keyboard navigation issues
- Focus management problems
- Form usability and labelling problems



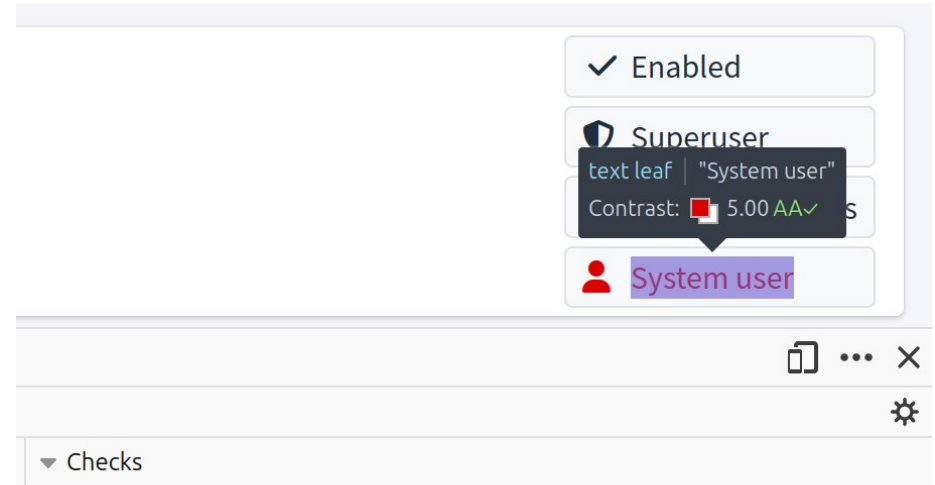
Colour contrast improvements

Before:



The screenshot shows a user interface with a 'System user' label highlighted in purple. A tooltip is visible over the label, displaying 'text leaf | "System user"' and 'Contrast: 3.79' with a red warning icon. The interface includes a 'Superuser' header, a 'System user' label, and a 'Checks' section at the bottom.

After:



The screenshot shows the same user interface as before, but with the 'System user' label highlighted in a darker purple. The tooltip now displays 'text leaf | "System user"' and 'Contrast: 5.00 AA' with a green checkmark. The 'Checks' section at the bottom also shows '5.00 AA' with a green checkmark.

Aria labels and accessible names

▼ Properties ↓ ↕

Name ⓘ

administrator



Full name ⓘ

midPoint Administrator



Given name ⓘ

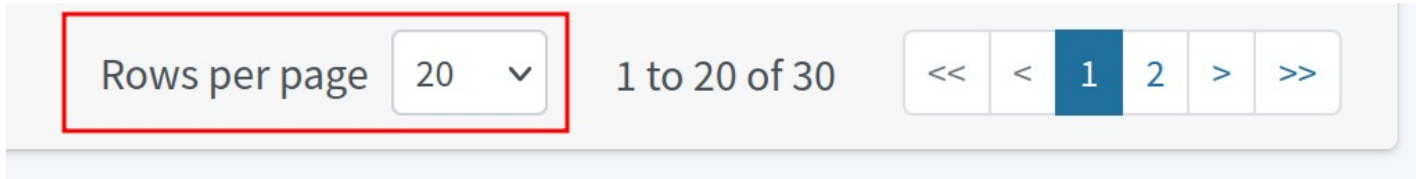
midPoint



```
<a aria-label="Delete value Full name">  
  <i class="fa fa-minus-circle"></i>  
</a>
```

Icon-only button with accessible name provided via aria-label

Aria labels and accessible names



Rows per page 20 ▾ 1 to 20 of 30 << < 1 2 > >>

```
<span id="sizeLabel">Rows per page</span>
```

```
<select aria-labelledby="sizeLabel">  
  <option>10</option>  
  <option selected>20</option>  
  <option>50</option>  
  <option>100</option>  
</select>
```

The select field gets its accessible name from the label via aria-labelledby

Correct heading hierarchy

Before:

The screenshot shows the midPoint user interface. On the left is a dark sidebar with a navigation menu. The 'Home' section is expanded, showing a list of items: '1 - Home', '3 - My accesses', '3 - My accesses', '3 - My requests', '3 - My requests', '3 - My accounts', '3 - My accounts', '3 - My work items', and '3 - My work items'. The '3 - My accesses' item is highlighted in red. The main content area has a blue header with the 'midPoint' logo and 'Home' text. Below the header, there is a user profile for 'Administrator' and a 'SELF SERVICE' dropdown menu with options: 'Home' (selected), 'Profile', 'Credentials', and 'Request access'. The main content area displays 'My accesses' with a table header: 'Name' and 'Activation'. The table contains one entry: 'Superuser' with 'enabled' activation. Below the table are 'View all' and 'Request access' buttons. At the bottom, there is a 'My requests' section.

After:

The screenshot shows the midPoint user interface after the heading hierarchy correction. The sidebar navigation menu is updated: '1 - Home' is expanded to show '2 - My accesses', '2 - My requests', '2 - My accounts', and '2 - My work items'. The main content area remains the same as in the 'Before' screenshot, showing the 'Administrator' profile, 'SELF SERVICE' menu, and 'My accesses' table with the 'Superuser' entry.

Navigation and interaction improvements

Implemented improvements

- Full TAB navigation support
- Arrow-key navigation in menus
- Keyboard interaction for dropdowns
- Better focus handling after exiting dialogs or popups
- Improved navigation in the Role catalog and forms
- ESC support for dialogs
- ENTER and SPACE support for controls

Focus visibility and focus management

Implemented improvements

- Made interaction popups focusable
- Added visible focus indicators
- Improved focus styling consistency
- Restored focus after modal interactions
- Improved focus order

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Very weak

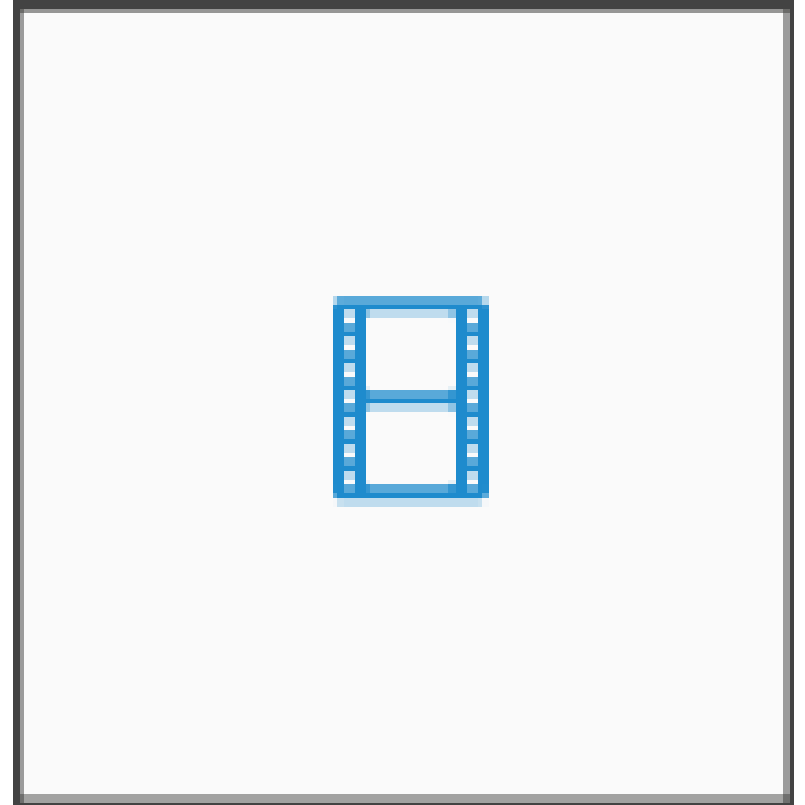
- ✗ Characters at least 8
- ✗ Unique characters at least 3
- ✓ Check expression
- ✓ Lowercase characters at least 1 i
- ✗ Uppercase characters at least 1 i
- ✗ Numeric characters at least 1 i
- ✓ Valid characters i

0123456789

Date picker improvements

Implemented improvements

- Full keyboard navigation (open + arrow key movement)
- ESC support to close the date picker
- Improved focus handling within the component
- Improved accessible labels for screen readers
- All controls properly defined as interactive elements



Results and impacts

- ✓ WCAG 2.2 Level AA compliance achieved
- ✓ Improved keyboard usability
- ✓ Better screen reader compatibility
- ✓ Improved navigation consistency
- ✓ Better readability and visual accessibility
- ✓ More inclusive user experience



Evolveum

Thank you for your attention

Feel free to ask your questions now!



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