

DAVID CAHALANE

# Breaking the Barrier to Enterprise Adoption

Why Accessibility Matters

# Who Am I?

- KDE contributor since 2018
- Cloud & Infrastructure Engineer at Bixal
- Contractor for the US Federal Government
- DevOps and infrastructure operations

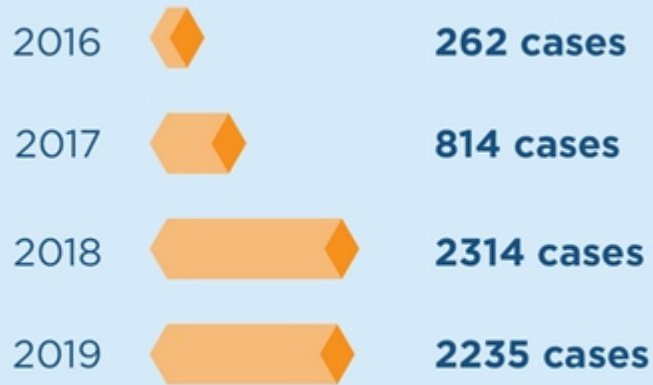


# What is Accessibility?

Making a digital product usable for the maximum number of people, regardless of physical or cognitive ability.

## Why Accessibility for KDE?

### ADA lawsuits due to inaccessible software



## Overlap with Organizational Goals

- Increases professionalism in both organizational standards and product delivery.
- Fundamental to human-centered design.

## Ensures Legality

- Public institutions demand high standards for accessibility.
- Corporations won't gamble on an inaccessible product that could get them sued or cause loss of business.

## Pathway to Proven Growth Strategy

- Some of KDE's biggest successes hinge on partnerships with schools and government.
- Brazil, 2008
- Valencia, 2005
- Kerala, 2019

Compliance with Accessibility law is essential to further such opportunities in additional countries.

## Web Content Accessibility Guidelines (WCAG)

W3C® Web Accessibility  
Initiative WAI

# WCAG3

W3C Accessibility  
Guidelines 3



## W3C Standard

- Governed by the World Wide Web Consortium

## Test against specific criteria

- WCAG rating on a scale of A to AAA based on coverage of numerous criteria.
- Most laws target AA rating.

## Principles

- **Perceivable**: Content can be assessed with an alternate sense. Captions, alt text, etc.
- **Operable**: People are able to use the product. Keyboard navigation, motion can be paused, etc.
- **Understandable**: UI consistency, element labels, etc.
- **Robust**: Compatibility with users and current technologies.



USA

## Section 508 (1998)

- WCAG 2.0 is law
- Government services only
- Applies to public websites, software, and hardware.

## Americans with Disabilities Act (1990)

- Protects the rights of disabled people in society.
- Employees have legal right to accommodation.
- Applies to both private and public sectors.



EUROPEAN  
UNION

## EN 301 549 (2014)

- WCAG 2.1 compliant
- Applies to hardware, software, websites, and mobile apps
- Large majority of public websites are not in compliance as of 2019.



GERMANY

## BITV (2002)

- Barrierefreie-Informationstechnik-Verordnung
- WCAG 2.1 since 2019
- Applies to public websites and mobile apps

## Disability Equality Act (2002)

- Behindertengleichstellungsgesetz (BGG)
- Similar to the ADA
- Broader in scope
- Ensures the rights of disabled people in work and society.





SPAIN

## Law 34 of 2002

- “De servicios de la sociedad de la información y de comercio electrónico” (LSSICE)
- Standard UNE 139803
- WCAG 2.0 since 2012
- Applies to public sector websites



BELGIUM

## Law of 19 July 2018

- WCAG 2.1 compliant
- Applies to public websites and mobile apps
- Must list and cite all WCAG criteria which are not fully met

# VPAT and ACR

## Accessibility Conformance Report (ACR)

- Required by US Government agencies before buying software.
- Easiest way is to submit a Voluntary Product Accessibility Template (VPAT).

Three columns of VPAT® WCAG table

Crietria	Conformance Level	Remarks and Explanations
<a href="#">1.1.1 Non-text Content</a> (Level A) Also applies to: Revised Section 508 <ul style="list-style-type: none"><li>• 501 (Web)(Software)</li><li>• 504.2 (Authoring Tool)</li><li>• 602.3 (Support Docs)</li></ul>	Web: Electronic Docs: Software: Closed: Authoring Tool:	Web: Electronic Docs: Software: Closed: Authoring Tool:

## VPAT

- Extremely thorough accessibility checklist
- Vendor's self-assessment and remarks on WCAG criteria
- Functionally similar to Belgian requirement
- Compatible with Section 508, WCAG, and EN 301 549.

## KDE Applications

- LabPlot
- GCompris
- Okular

# Accessibility History in Plasma 5

```
31 PlasmaExtras.ScrollArea {
32     anchors.fill: parent
33     focus: true
34
35     ListView {
36         id: kickoffListView
37         Accessible.role: Accessible.List
38         interactive: contentHeight > height
39         boundsBehavior: Flickable.StopAtBounds
40         currentIndex: -1
41         keyNavigationWraps: true
42         highlight: KickoffHighlight {}
43         highlightMoveDuration : 0
44         highlightResizeDuration: 0
45
46         Keys.onEnterPressed: currentItem.activate();
47         Keys.onReturnPressed: currentItem.activate();
48         Keys.onMenuPressed: currentItem.openActionMenu();
49
50         delegate: KickoffItem {}
```

## Not accessible at launch

- Plasma 5 launched with inadequate accessibility.
- Extremely difficult to use for several years.

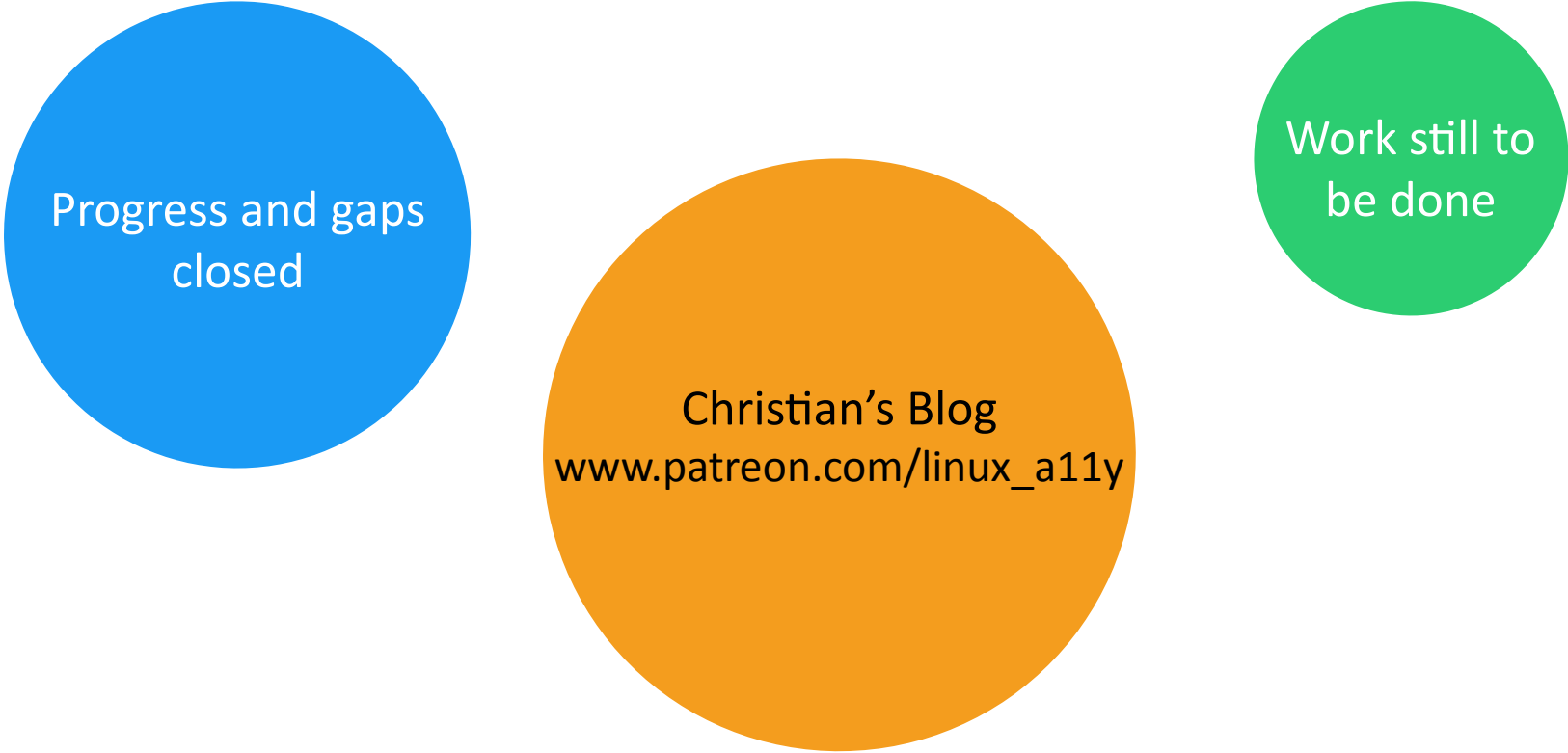
## Labeling

- Primary task of Plasma Accessibility team was adding focus, keyboard actions, and accessibility labels to objects.
- Slow and tedious work on huge codebase.

## Accessibility goal proposal, 2019

- Aimed to raise awareness and set goals
- Accessibility added to HIG shortly after

# Christian's Retrospective



Progress and gaps  
closed

Christian's Blog  
[www.patreon.com/linux\\_a11y](https://www.patreon.com/linux_a11y)

Work still to  
be done

The background is a solid blue color with a series of white, wavy, concentric lines that create a sense of depth and movement, resembling a stylized landscape or a topographical map.

Thank you!