



# **How Continuous Accessibility can boost your accessibility maturity**

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Thanks for having me. I'm Andrew.



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# At the end of our time, you will understand...

1. ...what is an Accessibility Maturity Model and how they're helpful,
2. ...the concept of Continuous Accessibility and how it can improve outcomes, and
3. ...how Continuous Accessibility can contribute to advancing your organization's accessibility maturity.

# What is an Accessibility Maturity Model?



# An accessibility maturity model is...

- A tool
- Self-reported
- A process that provides insight into the effectiveness and repeatability of an organization's methods for achieving a range of accessibility-related outcomes

# Dimensions covered by the W3C model

- Communications
- Knowledge and Skills
- Support
- ICT (Information & Communication Technology) Development  
Life Cycle
- Personnel
- Procurement
- Culture

# How dimensions are assessed

“Each dimensional outcome has a range of suggested **proof points**, which includes any evidence or necessary measures that can be used to determine the maturity of each dimension. Progress towards achieving maturity is attained by creating the proof points described for each dimension.”

– [W3C](#)

# Example proof points

## **Procurement**

- Accessibility requirements and other information communicated to vendors

## **Personnel**

- Established goals for recruiting employees with disabilities



# Proof points under “ICT Development Life Cycle”

## **Development**

- Consistent approach to implementing accessibility features across products

## **Quality Review Through Release**

- Consistent approach to testing and releasing products
- Testing process includes automated accessibility testing
- Accessibility identified as product release gate

# What is Continuous Accessibility?



# Continuous Accessibility, defined

“Continuous Accessibility is defined as the approach to ensuring that code intended to be displayed in browsers can be continuously checked and monitored for digital accessibility requirements through a novel application of existing software engineering concepts and Web Content Accessibility Guidelines (WCAG).”

– [ContinuousAccessibility.com](https://ContinuousAccessibility.com)

# Why is Continuous Accessibility compelling?

**Attention decay.** The sooner after it's made that an engineer finds out their change broke something, the more likely they are to fix it.

This goes for any type of bug and helps explain why tests in **CI/CD** are so popular and valuable, because it means catching problems before they impact end users.

# Tools for ensuring digital accessibility quality

1. Linters – e.g., axe Accessibility Linter
2. Scanners – e.g., WAVE Testing Engine
3. End-to-end tests – e.g., Cypress + cypress-keyboard-plugin
4. Manual QA
5. Periodic audits
6. AI

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6. ~~AI~~ (j/k)

# Accessibility quality tools, grouped by when they typically happen

1. In dev
  - Linters
2. In CI/CD
  - Scanners
  - End-to-end tests
3. After dev
  - Manual QA
4. After deploy
  - Periodic audits

# No offense, humans, but Continuous Accessibility is about what the machines can do.

## 1. In dev

- Linters

## 2. In CI/CD

- Scanners
- End-to-end tests

## ~~3. After dev~~

- ~~○ Manual QA~~

## ~~4. After deploy~~

- ~~○ Periodic audits~~



# Pros & cons of linters & scanners

## 1. Pros

- Fast
- Cheap

## 2. Cons

- Limited context around user goals
- Fairly hard ceiling on the types of issues this approach can surface

# Pros & cons of end-to-end tests

## 1. Pros

- Fast-ish
- Cheap-ish
- Can be written to take context & user goals into account

## 2. Cons

- More expensive to run, so usually more limited in what gets covered
- Existing tools are not accessibility-first

# Linters & scanners pick the low-hanging fruit



Use linters & scanners! They're great for surfacing certain classes of accessibility bugs.

End-to-end tests excel at ensuring that a user flow can be completed from start to finish, like validating the tree from root to fruit.

# Pros & cons of end-to-end tests

## 1. Pros

- Fast-ish
- Cheap-ish
- Can be written to take context & user goals into account

## 2. Cons

- More expensive to run, so usually more limited in what gets covered
- Existing tools are not accessibility-first – *Assistiv Labs is fixing this!*

# Let's connect Maturity to Continuous Accessibility



# Proof points under ICT Development Life Cycle

## **Development**

- Consistent approach to implementing accessibility features across products

## **Quality Review Through Release**

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# Consistent approach to implementing accessibility features across products

Meeting this proof point should involve shifting well left of the development phase into UX research and UI design.

To the extent that automated tools (from linters through to end-to-end tests) can validate code *before* it's released, we can enforce a consistent baseline of functionality at all times, across a company's products.

# Consistent approach to testing and releasing products

Implementing continuous accessibility tooling should be considered essential (but not sufficient) for meeting this one.

I.e., manual validation by humans is still necessary for areas where the machines don't give us 100% confidence.





Testing process includes automated accessibility testing

Amen.

And, we need to expect more from the tools vendors provide.

# Accessibility identified as product release gate

Some of our customers are very sophisticated with respect to their product accessibility programs.

I don't know of a single one that would fail a build due to an automated accessibility test failing. *Yet.*



**Y'all increasing your accessibility maturity through Continuous Accessibility after this talk, probably**

# Questions for the group...

Answers 1km →



# Tools for ensuring digital accessibility quality

1. Has your company/organization worked towards an accessibility maturity assessment?
2. How do you measure progress against your accessibility goals?
3. Do you think about Continuous Accessibility in the course of your work?
4. In what ways do you leverage automation to achieve your accessibility goals?

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