



Web Accessibility  
initiative

# HOW W3C'S WCAG 2.0 CAN HELP PUBLISHERS MEET US SECTION 508 AND THE ADA

Accessibility Executive Breakfast  
Weill Music Room, Carnegie Hall  
New York, New York, June 6, 2016

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One billion  
people are  
living with a  
significant  
disability.

*World Health Organization  
June 2011*

**WORLD REPORT  
ON DISABILITY**



World Health  
Organization



THE WORLD BANK

# UN Convention on Rights of Persons with Disabilities



*Article 9(1)(b)* Enable persons with disabilities to live independently and participate fully in all aspects of life... **including information and communications;**

*Article 21(a, c, e)* The right to freedom of expression and opinion... on an equal basis with others... **including information in accessible formats and technologies.**

## In the United States...



*US Section 508* Refreshing Section 508 to align more closely with W3C WCAG 2.0

*ADA* Also exploring alignment with W3C WCAG 2.0

Web accessibility crosses many functional areas

vision

hearing

motor

speech

cognitive

neurological

multiple disabilities

aging-related conditions

*You can use  
Web accessibility principles to help  
make any digital technology  
accessible, including digital  
publishing*

# The World Wide Web Consortium



- ✓ Develops standards for the Web
- ✓ Is an international, vendor-neutral community
- ✓ Encompasses an expanding range of technology
- ✓ Hosted by MIT's CSAIL; ERCIM; Keio; Beihang

# Open Web Platform (OWP)

- ✓ centered on HTML 5
- ✓ provides an interactive and intelligent platform for all technologies converging onto the Web
- ✓ enables mobile, TV and video, **publishing**, Web of Things, automotive, commerce, data integration, software distribution, more
- ✓ provides integrated accessibility support on all Web-enabled devices



The Open Web Platform supports many new industries coming onto the Web



*World Wide Web Consortium (W3C) and  
International Digital Publishing Forum (IDPF)  
Explore Plans to Combine (May 10, 2016)*



# Web Accessibility Initiative

- Supports W3C's Web for All mission
  - addresses cross-disability & aging needs
  - addresses cross-technology accessibility
- Develops accessibility specifications and guidelines
  - guidelines used in many countries
  - reviews W3C specifications for accessibility
- Develops education and outreach resources
- Hosts a community discussion on accessibility

# Web Accessibility Initiative (WAI)



# WAI Guidelines

- Updating WCAG 2.0
  - ❑ developing normative extensions to WCAG 2.0
  - ❑ may roll into a WCAG 2.1
- Completed ATAG 2.0 and UAAG 2.0 in 2015
- Exploring needs for combined WAI guidelines in future
  - ❑ possible WAI 3.0 also combining authoring and user agent accessibility guidance

*WCAG 2.0 is an international standard, with many supporting resources*

# WCAG 2.0 Layered Design

Principles



Guidelines



Success criteria (normative)



Techniques, Examples, Benefits (informative)



Quick Reference, Educational Materials, Training

# Supporting educational resources for WCAG 2.0

- Implementation techniques (updated frequently)
- Tutorials and demonstrations
- Quick reference for developers
- Accessible UI components
- Tips for getting started with web accessibility
- Perspectives videos
- Planning and managing web accessibility
- Customizable business case
- Planning modular online curriculum
- Scores of additional resources...



# WCAG 2.0 at a Glance (summary)

## Perceivable

- ✓ Provide [text alternatives](#) for non-text content.
- ✓ Provide [captions and other alternatives](#) for multimedia.
- ✓ Create content that can be [presented in different ways](#), including by assistive technologies, without losing meaning.
- ✓ Make it easier for users to [see and hear content](#).

## Operable

- ✓ Make all functionality available from a [keyboard](#).
- ✓ Give users [enough time](#) to read and use content.
- ✓ Do not use content that causes [seizures](#).
- ✓ Help users [navigate and find content](#).

## Understandable

- ✓ Make text [readable and understandable](#).
- ✓ Make content appear and operate in [predictable](#) ways.
- ✓ Help users [avoid and correct mistakes](#).

## Robust

- ✓ Maximize [compatibility](#) with current and future user tools.

*WAI is currently exploring  
conformance accessibility testing  
approaches*

# Current status of WCAG2 testing

## Human Expert Tests

- Qualitative
- Requires human judgement

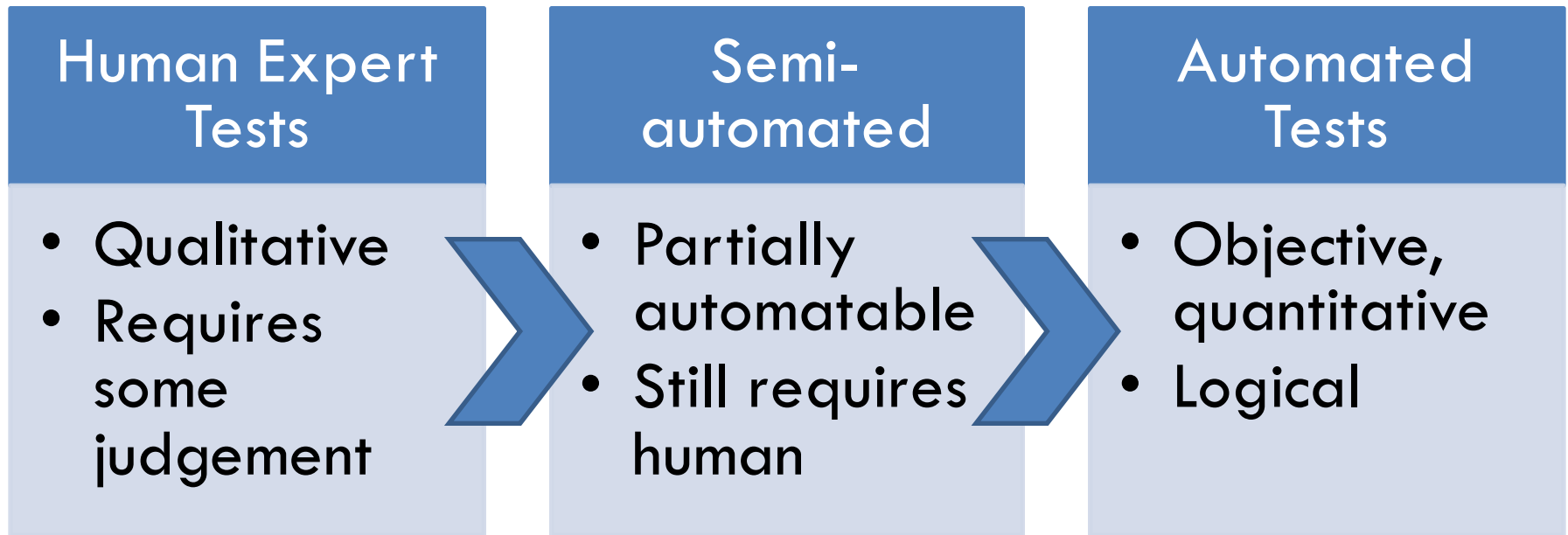
## Semi-automated

- Partially automatable
- Still requires human

## Automated Tests

- Objective, quantitative
- Logical

# Can increase automation over time



# Digital Publishing Accessibility TF & IG

## ➤ Collaboration with IDPF

- ❑ ePUB3 is closely harmonized with W3C standards, and WAI standards and guidelines
- ❑ A cooperative effort developing techniques for publishers and content developers
- ❑ Strong communities of accessibility experts in WAI and in IDPF
- ❑ ARIA extensions for digital publishing accessibility
- ❑ Digital Publishing and Accessibility in W3C Documents
- ❑ Collaboration opportunities in the areas of testing and training

*Additional areas of accessible  
development to get involved in...*

# “Hot Topic” Task Forces

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- Mobile accessibility Task Force
- Cognitive and Learning Disabilities Task Force
- Low Vision Task Force

# Accessible Platform Architectures

- Accessible Platform Architectures (APA) WG
  - ✓ reviews all W3C specifications while in development
  - ✓ identifies potential accessibility barriers
    - ✓ or opportunities
  - ✓ addresses barriers in coordination with other W3C working groups at the design stage



# Accessible Rich Internet Applications

- ✓ Provides expanded capabilities for accessibility of dynamic, interactive web content and applications
- ✓ Currently developing ARIA 1.1 and ARIA 2.0

# Finding Resources: [www.w3.org/WAI](http://www.w3.org/WAI)

- Getting started
- Designing for Inclusion
- Guidelines and Techniques
- Planning and Implementing
- Evaluating Accessibility
- Presentations and Tutorials
- *Getting Involved with W3C and WAI*
  - ❑ Membership, Sponsors, Participants



*Thank You*

National Institute for Disability, Independent Living and Rehabilitation Research, US  
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Adobe Systems – Deque Systems – Educational Testing Services – HP Enterprise – HP  
Inc – IBM Corporation