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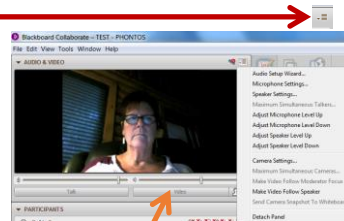
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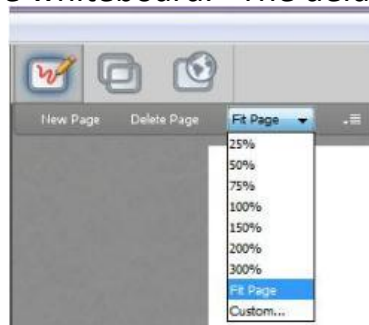


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Welcome

- Webinar series:
“Best Practices in Federal Section 508 Implementation”
 - This webinar is part of a series. Other presentations can be viewed at:
 - <http://www.adaconferences.org/CIOC/Archives/> and
 - <https://efedlink.org/allqual/resource-shared-webinars.cfm>
- A best practice is a policy, process, procedure or technique proven effective over time and repeatable by multiple agencies.
- A best practice is generalized so that diverse agencies may use it in their own organizations but specific enough to provide useful guidance and instruction.
- The CIO Council’s Accessibility Community of Practice has published a library of 508 Best Practices at www.Section508.gov

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Section 508 Best Practices Webinar upcoming DATES for 2017:

- Webinars dates will be bi-monthly during 2017.
January, March, May, July, September, November
- Next Webinar: July 25, 2017 –
- Topic: Revised Section 508 Chapter 4 Hardware
(including Mobile)
- Time: 1:00 to 2:30 p.m. ET

Past webinars are ARCHIVED:

- <http://www.adaconferences.org/CIOC/Archives>
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Old versus New: Original Section 508 Standards (2000) compared to the Revised Section 508 Standards

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May 30, 2017

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Agenda

Today's webinar is for the person who is very comfortable with the Original 508 Standards from 2000

- What is different?
- What are the new requirements?
- How will these changes impact current federal agency practices?

A note on "accessibility":

- Standards reflect established best practices
 - Proactive agencies will already be doing more
- Having updated standards is important
- We use the word "accessible" to mean "conforming to the standard"

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This Webinar is Third in a Series

Please see archives of previous webinars!

- We will be trying not to repeat material

For an introduction and overview of the Revised Standards:

- Section 508 Refresh — ICT Final Standards and Guidelines (2017)
 - <http://accessibilityonline.org/cioc-508/archives/110610>

For a discussion of the requirements from WCAG 2.0 that are new:

- WCAG 2.0 and the Revised Section 508 Standards
 - <http://accessibilityonline.org/cioc-508/archives/110612>

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What is Different?

What are the New Requirements?

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What is Different: Overview

Electronic and Information
Technology Accessibility
Standards, December 21, 2000

- Organized by subparts:
 - A — General
 - B — Technical Standards
 - 1194.21 through .26
 - C — FPC
 - D — Information, Documentation, and Support

Information and Communication
Technology (ICT) Standards and
Guidelines, January 18, 2017

- Organized by chapter:
 - Application & Administration
 - Scoping Requirements
 - FPC
 - Hardware
 - Software
 - Support Doc. and Services

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Revised Standards: New & Different

- Formatting is similar to industry consensus documents
 - We are not using the Federal Register style
 - Revised 508 Standards are Appendixes to 1194 CFR
 -
- Addressing two statutes: both 508 and 255
 - Similar to our approach with accessibility standards for facilities
 - One technical document, addressing both ADA and ABA
- Many technical requirements are in WCAG 2.0 and other IBR materials

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Original Subpart A – General

Compared to Revised Chapters 1 and 2

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What is Different: Original Subpart A vs. Revised Chap. 1 & 2

Subpart A — General

- 1194.1 Purpose
- 1194.2 Application
- 1194.3 General exceptions
- 1194.4 Definitions
- 1194.5 Equivalent facilitation

Chapters 1 and 2

- E101 General
 - E101.1 Purpose
- E201 Application
 - E201.1 Scope
- E202 General Exceptions
- E103 Definitions
- E101 General
 - E101.2 Equivalent Facilitation

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Purpose: Essentially Unchanged

From Original § 1194.1 Purpose:

The purpose of this part is to implement section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d)...

From Revised E101.1 Purpose:

- These Revised 508 Standards ... contain scoping and technical requirements for ICT to ensure accessibility and usability by individuals with disabilities.
- Compliance with these standards is mandatory for Federal agencies subject to Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d).

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508 is for Federal Employees

From Original § 1194.1 Purpose:
...Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities...

From Revised E203 Access to Functionality
E203.1 General:
A. That Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities; and

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508 is for the Public

From Original § 1194.1 Purpose:
That individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities...

From Revised E203 Access to Functionality
E203.1 General:
B. That members of the public with disabilities who are seeking information or data from a Federal agency have access to and use of information and data that is comparable to that provided to members of the public who are not individuals with disabilities.

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Application, Scoping, Undue Burden, Fundamental Alteration, and Best Meets

§ 1194.2 Application

- (a) Includes “unless an undue burden would be imposed”
- (b) Includes “that best meets the standards”

Not retained:

- (c) Applies to work done under contract

Chapter 2: Scoping Requirements

- E202 General Exceptions
 - E202.6 Undue Burden or Fundamental Alteration
 - E202.7 Best Meets

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Fundamental Alteration: Revised Standards Adds Detail

§ 1194.3 (e):

This part shall not be construed to require a fundamental alteration in the nature of a product or its components.

Revised Standards address Fundamental Alteration alongside Undue Burden

E202.6 Undue Burden or Fundamental Alteration

E202.6.2 Required Documentation

E202.6.3 Alternative Means

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Undue Burden: Essentially Unchanged

§ 1194.2 (a)

- 1) Requirement to provide “alternative means of access”
- 2) Requirement to provide supporting documentation

Requirement to consider agency resources:

- See definition for “Undue burden” in § 1194.4 Definitions

Chapter 2: Scoping Requirements

- E202.6.3 Alternative Means
- E202.6.2 Required Documentation
- E202.6.1 Basis for a Determination of Undue Burden

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Best Meets: Revised Standards Adds Detail

From § 1194.2 (b):

...If products are commercially available that meet some but not all of the standards, the agency must procure the product that best meets the standards.

E202.7 Best Meets.

Where ICT conforming to one or more requirements in the Revised 508 Standards is not commercially available, the agency shall procure the ICT that best meets the Revised 508 Standards consistent with the agency’s business needs.

- E202.7.1 Required Documentation
- E202.7.2 Alternative Means

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General Exceptions: Essentially Unchanged

§ 1194.3 General Exceptions

- (a) National security
- (b) Incidental to a contract
- (e) Fundamental alteration
- (f) Maintenance spaces

Not retained:

- (c) AT not required everywhere
- (d) Extra locations not required

E202 General Exceptions

- E202.3 National Security Systems
- E202.4 Federal Contracts
- E202.6 Undue Burden or Fundamental Alteration
- E202.5 ICT Functions Located in Maintenance or Monitoring Spaces

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Revised Standards: New General Exception

E202 General Exceptions

- E202.2 Legacy ICT
 - Any component or portion of existing ICT that complies with an earlier standard issued pursuant to Section 508 of the Rehabilitation Act of 1973, as amended (as republished in Appendix D), and that has not been altered on or after January 18, 2018, shall not be required to be modified to conform to the Revised 508 Standards.

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Revised Standards: More Definitions

§ 1194.4 Definitions

- 12 terms

Electronic and Information
Technology

E103 Definitions

- 35 terms

Information and Communication
Technology

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Original § 1194 Definitions: Electronic and Information Technology

- Includes information technology and any equipment or interconnected system or subsystem of equipment, that is used in the creation, conversion, or duplication of data or information.
- The term electronic and information technology includes, but is not limited to, telecommunications products (such as telephones), information kiosks and transaction machines, World Wide Web sites, multimedia, and office equipment such as copiers and fax machines...

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Definition of Electronic and Information Technology (continued)

- ...The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.
- For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology.

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Original § 1194 Definitions: Information Technology

- Any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.
- The term information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.

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Revised E103 Definitions: IT and ICT

- Information Technology. Shall have the same meaning as the term “information technology” set forth in 40 U.S.C. 11101(6).
- Information and Communication Technology (ICT)
- Information technology and other equipment, systems, technologies, or processes, for which the principal function is the creation, manipulation, storage, display, receipt, or transmission of electronic data and information, as well as any associated content.
- Examples of ICT include, but are not limited to: computers and peripheral equipment; information kiosks and transaction machines; telecommunications equipment; customer premises equipment; multifunction office machines; software; applications; Web sites; videos; and, electronic documents.

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From U.S. Code Title 40, Subtitle III, Chapter 111, § 11101 – Definitions

- 6) Information technology.—The term “information technology” —
- A. with respect to an executive agency means any equipment or interconnected system or subsystem of equipment, used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency, if the equipment is used by the executive agency directly or is used by a contractor under a contract with the executive agency that requires the use—
- i. of that equipment; or
 - ii. of that equipment to a significant extent in the performance of a service or the furnishing of a product; ...

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From 40 U.S. Code § 11101 – Definitions (continued)

- 6) Information technology.—The term “information technology” —
- A. ...
 - B. includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including support services), and related resources; but
 - C. does not include any equipment acquired by a federal contractor incidental to a federal contract.

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Equivalent Facilitation: Essentially Unchanged

Original § 1194.5 Equivalent Facilitation:

Nothing in this part is intended to prevent the use of designs or technologies as alternatives to those prescribed in this part provided they result in substantially equivalent or greater access to and use of a product for people with disabilities.

Revised E101.2 Equivalent Facilitation:

The use of an alternative design or technology that results in substantially equivalent or greater accessibility and usability by individuals with disabilities than would be provided by conformance to one or more of the requirements in Chapters 4 and 5 of the Revised 508 Standards is permitted...

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Original Subpart B – Technical Standards

Compared to Revised Chapters 4 and 5

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Original Subpart B – Technical Standards

- Approach is by product categories:
- § 1194.21 Software applications and operating systems
- § 1194.22 Web-based internet and
intranet information and applications
- § 1194.23 Telecommunications products
- § 1194.24 Video and multimedia products
- § 1194.25 Self contained, closed products
- § 1194.26 Desktop and portable computers

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Software Requirements: Closest Parallels

- § 1194.21 Software applications and operating systems
 - Twelve technical requirements, (a) through (l)
 - Four provisions refer to behavior of assistive technology
 - Not as objective and testable as is desirable
- Bulk of requirements are in Chapter 5: Software
 - 502.3.1 through 502.3.14 have a lot of overlap with § 1194.21 (a) through (m)
- Additional requirements found in scoping under E207.2
 - Requires WCAG 2.0 Level AA for user interface components
 - Exceptions and subprovisions provide details for applying WCAG 2.0 to software

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Software Requirements: New in Revised

- § 1194.21 Software applications and operating systems
 - Nothing specific for AT
 - Nothing specific for OS
- Lack of clarity with requirements for Web applications
 - Are Web applications software or just content?
 - Must Web applications be keyboard accessible?
- Exception for Assistive Technology
- 502.4 Platform Accessibility Features
 - Additional requirements just for OS
- Web applications use WCAG 2.0 Level AA
- New requirements in 504 Authoring Tools
- This is a complex chapter
 - We are planning a webinar just on Chapter 5

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Web Requirements: Closest Parallels

§ 1194.22 Web-based internet and intranet information and applications

Sixteen technical requirements, (a) through (p)

E205.2 Public Facing

Electronic content that is public facing shall conform to the accessibility requirements specified in E205.4.

E205.3 Agency Official Communication...

I. Intranet content designed as a Web page

E205.4 Accessibility Standard

Electronic content shall conform to Level A and Level AA Success Criteria and Conformance Requirements in WCAG 2.0 (incorporated by reference, see 702.10.1).

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New in Revised Standards: Delineation of Covered Electronic Content

- E205.2 Public Facing
 - Electronic content that is public facing shall conform...
- E205.3 Agency Official Communication
 - Content that is not public facing
 - Agency official communication in nine categories
- Exception for NARA records

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Requirements for Phones: Closest Parallels

§ 1194.23 Telecommunications products
Eleven technical requirements, (a) through (k)

Chapter 4: Hardware
412 ICT with Two-Way Voice Communication

Other requirements from Chapters 5 are also applicable

412.5 Real-Time Text Functionality. Reserved.

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Requirements for Operable Parts: Closest Parallels

§ 1194.23 (k)

- 1) Tactilely discernable without activation
- 2) Provides for use with limited manipulation
- 3) Any key repeat can be slow
- 4) Locking or toggle controls discernable through touch or sound

Chapter 4: Hardware

- 407.3 Input Controls
 - 407.3.1 Tactilely Discernible
- 407.6 Operation
- 407.4 Key Repeat
- 409 Status Indicators

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Video and Multimedia: Closest Parallels

§ 1194.24 Video and multimedia products

- Requires capability for decoding of closed captions
- Requires tuners to have “secondary audio program playback circuitry”

(c) Through (e) require multimedia to be captioned and audio described

Chapter 4: Hardware

- 413 Closed Caption Processing Technologies
- 414 Audio Description Processing Technologies

Requirements for captions and audio description are from IBR of WCAG 2.0 Level AA

Success Criteria 1.2.1, 1.2.2, 1.2.3, 1.2.4, and 1.2.5

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Video and Multimedia: New in Revised

§ 1194.24 Video and multimedia products

- Requires capability for decoding of closed captions
- Requires tuners to have “secondary audio program playback circuitry”

(c) Through (e) require multimedia to be captioned and audio described

Chapter 4: Hardware

415 User Controls for Captions and Audio Descriptions

Requires “operable parts” (e.g. physical buttons) for captioning and audio description when provided for volume and channel selection

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Self-contained, Closed: Closest Parallels

§ 1194.25 Self contained, closed products

Nine technical requirements, (a) through (j)

- (c) is a cross-reference to §1194.23 (k) (1) – (4)
- (j) is reach requirements

Chapter 4: Hardware

402 Closed Functionality

- General requirement is for “speech-output enabled”
- There are several exceptions

Other requirements from Chapters 5 are also applicable

- Height for unobstructed side approach reduced from 54" to 48"
- Added allowance for forward approach

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Personal Computers: Closest Parallels

§ 1194.26 Desktop and portable computers

- a) Cross-reference to § 1194.23 (k) (1) – (4)
- b) Requirement to not only use touch screen
- c) Requirement regarding use of biometrics
- d) Requirement to use industry standard ports

Chapter 4: Hardware

- See previous slide on .23(k)
 - 407.3.1, 407.6, 407.4, 409
- Difference:
 - 407.3 Input Controls has limited exception for personal devices
- 403 Biometrics
- 406 Standard Connections

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Original Subpart C – Functional Performance Criteria

Compared to Revised Chapter 3

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Original Subpart C – Excerpts: § 1194.31 Functional Performance Criteria

- a) ...does not require user vision ... or support for AT used by blind or visually impaired
- b) ...does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print, or support for AT...
- c) ...does not require user hearing ... or support for AT used by ... deaf or hard of hearing...
- d) ...where audio information is important ... enhanced audio...or support for AT...
- e) ...does not require user speech ... or support AT...
- f) ...does not require fine motor control or simultaneous actions and ... is operable with limited reach

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FPC: What are the Differences?

§ 1194.31 Functional Performance Criteria

- Six provisions
- The option for direct accessibility or to support assistive technology used by people with disabilities is in five of six FPC provisions

302 Functional Performance Criteria

- Nine subsections
- The option to support AT applies to the whole standard
 - See E203.1 General (under E203 Access to Functionality)
- PFC are phrased consistently

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FPC: What Was Added?

§ 1194.31 Functional Performance Criteria

Require usability:

- a) Without vision
- b) With limited vision
- c) Without hearing
- d) With limited hearing
- e) Without speech
- f) *Without fine motor or with limited reach and strength*

302.1 Without Vision

302.2 With Limited Vision

302.3 Without Perception of Color

303.4 Without Hearing

303.5 With Limited Hearing

303.6 Without Speech

303.7 With Limited Manipulation

303.8 With Limited Reach and Strength

303.9 With Limited Language, Cognitive, and Learning Abilities

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Original Subpart D – Information, Documentation, and Support

Compared to Revised Chapter 6

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Revised Chapter 6 Compared to Original § 1194.41

§ 1194.41 Information, documentation, and support

- a) Product support documentation must be available in alternative formats
- b) End-users must have access to accessibility and compatibility features
- c) Support services must accommodate communication needs

602 Support Documentation

- 602.2 Accessibility and Compatibility Features
- 602.3 Electronic Support Documentation
- 602.4 Alternate Formats for Non-Electronic Support Documentation

603 Support Services

- 603.2 Information on Accessibility and Compatibility Features
- 603.3 Accommodation of Communication Needs

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How will these changes impact current federal agency practices?

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Changes to Federal Agency Practices:

- Conformance to WCAG 2.0 Level AA for websites (public and internal)
- Conformance to WCAG 2.0 Level AA for documents that are covered content
- Agencies must update checklists and testing protocols
 - There are some ad hoc working groups
 - Industry working on updating the VPAT

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Where to Go for More Details?

- Final rule preamble
- Final Regulatory Impact Analysis
 - Table A-1. WCAG 2.0 Level A and Level AA Success Criteria
- NPRM Comparison Table of WCAG 2.0 to Existing 508 Standards
 - www.access-board.gov/wcag2-508

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.gov Resources

- www.Access-Board.gov – Section 508 Standards and Section 255 Guidelines, technical assistance:
 - ICT Final rule (2017)
 - Webinars – Section 508 Best Practices
 - More guidance material under development
- GSA Government-wide Section 508 Accessibility Program:
<http://section508.gov>
- Harmonized guidance from the Accessible Electronic Document Community of Practice (AED COP): <http://section508.gov/best-practices>

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*Revised Section 508 Chapter 4 Hardware
(including Mobile)*

July 25, 2017

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