

Welcome to the Section 508 Best Practices Webinar Series

A collaborative program between the
*Accessibility Committee of the CIO Council, The U.S. Access Board and
eFedLink/ODEP*

**The Session is Scheduled to begin at 1:00pm Eastern Time
We will be testing sound quality periodically**

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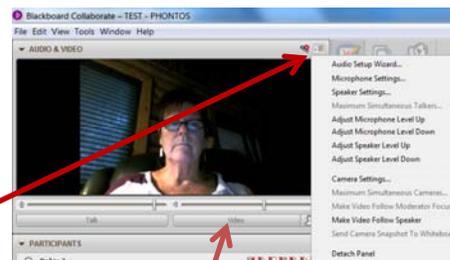
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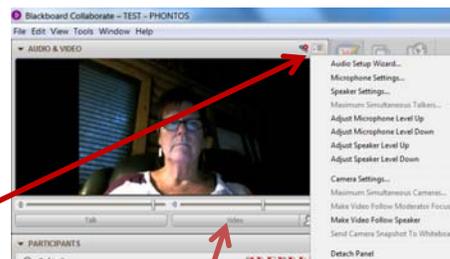
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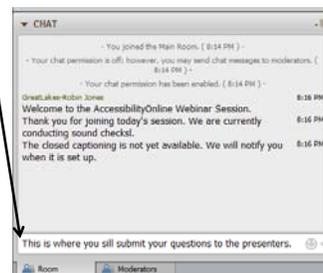
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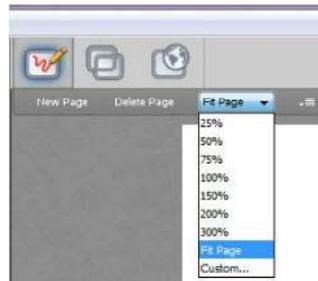
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Validating Section 508 Compliance in the Procurement and Development Processes – The DHS “Trusted Tester” Program

Moderator: Timothy Creagan, Senior Accessibility Specialist
U.S. Access Board

Presenters:
William Peterson, Executive Director, Office of Accessible Systems & Technology,
Department of Homeland Security

Kathy Eng, DHS Team Lead for Testing, Office of Accessible Systems & Technology,
Department of Homeland Security

November 21, 2013

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Agenda

- ▶ Webinar Logistics
- ▶ Welcome & Introduction
- ▶ DHS “Trusted Tester” Program

- ▶ Q & A

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This webinar is sponsored by:

 **eFedLink**

A Community of Practice to Advance Federal
Employment for Persons with Disabilities

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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:
 - <https://efedlink.org/allqual/resource-shared-webinars.cfm> and <http://www.adaconferences.org/CIOC/Archives/>
- ▶ 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 Committee has published a library of 508 Best Practices at www.Section508.gov

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Section 508 Best Practices Webinar upcoming DATES for 2014:

- ▶ Webinars dates will be bi-monthly during 2014.
January, March, May, July, September, December
- ▶ Next Webinar: January 28, 2013 – Topic: TBD
Time: 1:00 to 2:30 p.m. ET
- ▶ Future webinar dates and topics are forthcoming

Past webinars: ARCHIVED:

- <http://www.adaconferences.org/CIOC/Archives>
- <https://efedlink.org/allqual/collaborate-webex-archive.cfm>

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Section 508 Best Practices Webinar series 2013

- ▶ More information, ask the Education Subcommittee co-chairs:
 - Tim Creagan – creagan@access-board.gov
 - Deborah Kaplan – deborah.kaplan@SSA.gov

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Presenters

Presenters:

- ▶ William Peterson, Executive Director, Office of Accessible Systems & Technology, Department of Homeland Security
- ▶ Kathy Eng, DHS Team Lead for Testing, Office of Accessible Systems & Technology, Department of Homeland Security

Moderator:

- ▶ Timothy Creagan, Senior Accessibility Specialist, U.S. Access Board

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DHS Section 508 Application Testing Process & Trusted Tester Training

DHS Perspective – Today

- ▶ 18 major Components
- ▶ Roughly 250,000 employees
- ▶ Countless contractors
- ▶ Roughly \$6.5 billion/year in IT investments
- ▶ Eight contracting organizations
 - w/ decentralized procurement authority
- ▶ Fourteen CIO's (1 plus 13)
 - Each controls their own budget

DHS Components with CIOs

- ▶ DHS Headquarters (HQ)
- ▶ Customs and Border Protection (CBP)
- ▶ Immigration and Customs Enforcement (ICE)
- ▶ Federal Emergency Management Agency (FEMA)
- ▶ Transportation Security Administration (TSA)
- ▶ Citizenship & Immigration Services (CIS)
- ▶ U.S. Secret Service (USSS)
- ▶ U.S. Coast Guard (USCG)
- ▶ Federal Law Enforcement Training Center (FLETC)
- ▶ National Protection & Programs Directorate (NPPD)
- ▶ Office of Intelligence & Analysis (I&A)
- ▶ Directorate for Science and Technology (S&T)
- ▶ Domestic Nuclear Detection Office (DNDO)
- ▶ Office of Inspector General (OIG)

Office of Accessible Systems & Technology (OAST)

- ▶ One of six primary offices within OCIO
- ▶ Uniquely positioned
 - Report directly to DHS CIO and indirectly to the Officer for Civil Rights & Civil Liberties (CRCL)
- ▶ Responsible for Department-wide implementation of Section 508
 - ▶ Liaise with 14 Component-level Section 508 Coordinators each having a dotted line report to OAST
- ▶ Currently employ a mix of 22 Federal and contract staff

DHS Accessibility Help Desk

- ▶ Serves as single point of contact for disability-related issues
- ▶ Processed approximately 3,000 tickets/year
 - Technical assistance
 - Application reviews
 - Acquisition reviews
 - Document reviews
 - IT requests
 - Reasonable accommodation requests
- ▶ Utilizes multi-tier approach
- ▶ Liaise with IT help desks and IT technicians

OAST

- ▶ Accessibility Compliance Management System
 - Fully accessible enterprise management system
 - 16 databases; 26 preformatted reports; 6 repositories
 - Used by OAST staff, coordinators, and testers
 - Backbone of the DHS Accessibility Help Desk
 - Used to populate Component Dashboard

No Two Agencies Implement Section 508 the
Same Way!!!!

Big Problem!!

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We set out to standardize our approach to 508
within DHS

Policies
Governance
Testing

Testing

DHS Testing Principles

- ▶ 508 standards-based testing – **not AT**
- ▶ Reliable test results
 - Document procedures
 - Easy to use testing tools
 - Minimize subjective outcomes
 - Document results
- ▶ Repeatable by other testers

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Why a Standards-based Approach

- ▶ Assistive Technologies vary a lot
 - Many change versions regularly
- ▶ Coding to a specific AT device is only as good as the version it's coded to
- ▶ Sophisticated AT devices like JAWS try to get it right
 - Just because an application works with JAWS does not mean it is 508 compliant
 - It may not work with other assistive technologies
- ▶ If an application is 508 compliant but does not work with JAWS or other AT devices, the problem lies with the AT, not the application

CODE TO THE STANDARDS!

Testing Class Evolution

- ▶ 2008 – Hands-On Classes
 - 1 class for Web and 1 for Application testing
- ▶ 2009 – Two Day Class
 - Updated test process
 - Practice testing with instructors
- ▶ 2011 – Trusted Tester Training
 - 3 days (added a day for Web & SW stds)
 - 4 days (added a day for Exam)

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What is a Trusted Tester?

A Trusted Tester follows the DHS Section 508 Compliance Application Test Process, uses approved test tools, and evaluates software and web applications for compliance with Section 508 standards.

Trusted Tester is a person certified to independently provide accurate Section 508 compliance test results for software and Web applications by passing the DHS Trusted Tester Certification exam.

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T3 Stats – Jan 2011 to Feb 2013

Exam Score	Exam Result	Statistics
Above 90%	Trusted Tester certification	111
70% to 89%	Passed the exam but must submit reports for review to OAST; promoted to Trusted Tester.	67

- 178 Trusted Testers
- 27 classes
- Average Exam score: 76%

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Harmonized Test Approach

- ▶ DHS and SSA collaboration
- ▶ Current and emerging requirements
 - Section 508 standards (SW, Web, MM, FPC)
 - WCAG 2.0 (some)
- ▶ Identifies methods for compliance testing
- ▶ 28 Baseline tests
 - Listed in no particular order
 - Baseline tests are not a test process
- ▶ Vetted by Best Practices Subcommittee

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*“Harmonized Processes for Section 508
Testing: Baseline Tests for Software & Web
Accessibility”*

DHS & SSA - 2013

Harmonized Testing

- ▶ “Federal agencies are encouraged to adopt the baseline to establish a consistent, shared, government-wide test approach.”
- ▶ “A unified approach for 508 testing will provide consistency across government and confidence in test results shared between agencies.”

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DHS Section 508 Test Process for Applications v3.2

- ▶ Based upon the Harmonized Test Approach
- ▶ Pre-requisite – Standards course (passing grade 80%)
- ▶ 5 day course
 - Testing instruction
 - Hands on use of tools
 - Reporting
 - Lots of practice and examples
- ▶ Exam day follows

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Trusted Tester Certification

- ▶ Exam
 - 90%+, Trusted Tester
 - 80–89%, Can retake the exam twice
 - Below 80%, Must retake full class
 - Limits
 - Class: 2 classes in 1 year
 - Exam: 4 Exam tries in 1 year

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Trusted Tester Results (v3.2)

- ▶ May to Sept 2013 (6 classes)
 - 22 Trusted Testers (3 outside DHS)
 - 69 exam attempts
 - 32% certification average

Testing Tools

Web Testing Tools

- ▶ Internet Explorer 9^{ke3}
- ▶ Web Accessibility Toolbar 2012^{ke2}
 - September 2012 release^{ke1}
 - <http://paciello.com/resources/wat/ie>
- ▶ ARIA Markup favelet
 - <http://jimthatcher.com/favelets/>
- ▶ Frames favelet
 - <http://jimthatcher.com/favelets>

Slide 40

- ke1** **Update**
katherine.eng, 2/5/2013
- ke2** **updated**
katherine.eng, 2/5/2013
- ke3** **updated**
katherine.eng, 2/6/2013

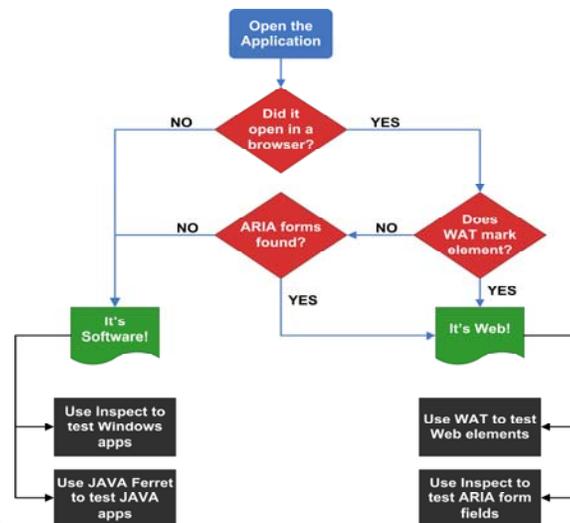
Software Testing Tools

- ▶ Microsoft Inspect
 - Version 7.1
 - UI Automation (Windows 7)
- ▶ JAVA Ferret
 - JAVA Accessibility Bridge
- ▶ Helpful for testing SW standards
 - (D) name, role, state
 - (F) value
 - (L) form labels

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ke7

Which Testing Tool should I use?



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ke7

Updated

katherine.eng, 2/12/2013

Reporting

Report Test Results

- ▶ Accurate report of non-compliance
- ▶ Cite examples/locations of issues
- ▶ Supporting screenshots with descriptions
- ▶ Results uploaded into repository
- ▶ Reports may be viewed by many
 - Program managers
 - Vendor/developers
 - Section 508 coordinator
 - OAST
- ▶ Actual discussion of report may occur months after testing has completed
- ▶ Include Baseline results

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Slide 44

ke6

added

katherine.eng, 2/12/2013

ke5

Impact Guide 5.0

Disabilities impacted by each SW, Web, Multimedia, FPC standard

1194.21 Software Standards	Test Results	Blind	Low Vision	Deaf/ Hard of Hearing	Mobility	*Other
a. Keyboard access	nc	x			x	
b. OS accessibility settings			x	x	x	
c. On screen focus		x	x		x	
d. Sufficient information for user interface elements		x			x	
e. Bit map image consistency						x
f. Textual information through operating system functions		x				
g. User color and contrast settings			x			
h. Animation alternative		x	x			
i. Color dependency		x	x			x
j. Color selection variety			x			x
k. Flashing elements						x
l. Label form fields		x				
Disabilities Impacted by all 508 Software Failures		x			x	

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Testing & Governance DHS

ke5

Updated

katherine.eng, 2/12/2013

Testing & Governance

Helping people make the right decisions at the right time

Testing results are used to:

- document known application defects
- submit product defects to vendors
- allow Section 508 Coordinators to make Compliance Determinations based upon test results
- plan for remediation
- develop accommodation plans

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Testing & Governance

- ▶ Compliance Determination
 - Document Section 508 Coordinator's decision
 - Approve/Deny/Conditionally Approve
 - Enables change control governance
 - Supported by Test results and/or VPATs
 - Supported by Market Research
 - Supported by acceptable remediation plans

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Why Trusted Testers

Certified Trusted Testers

- ▶ Adopting a unified test approach makes good business sense
 - Unify standards-based testing procedures across government
 - Test results are reliable/repeatable
 - Minimize subjectivity
 - Trust each other's results
 - Reduce redundant testing
 - Benefits vendors – they would know during development how their products will be tested for 508 compliance – verses the mixed messages they get today

Next Steps

- ▶ Developing online Trusted Tester Certification course – March 2014
 - Available on Defense Acquisition University site
 - Open to those outside DHS firewalls
- ▶ Looking to develop application test repository outside DHS to catalog Trusted Tester test results
- ▶ Working to develop a Community of Practice for Trusted testers
- ▶ Looking for agencies willing to adopt the unified testing approach



For More Information

For Questions on the DHS Trusted Tester Program:

DHS Accessibility Help Desk

202-447-0440 (voice)

202-447-0582 (fax)

202-447-5857 (TTY)

accessibility@hq.dhs.gov