Trusted Tester Process

Update Guide (4.0)

May 2017

Contents

Purpose of this document

This document provides a summary of the changes to the Trusted Tester Process from version 3.4.1 (TT3) to version 4.0 (TT4). Trusted Testers who will be using the 4.0 testing process (TT4) are expected to be familiar with these changes. Using TT4 is required if testing using OSes or Browsers that are new to TT4, i.e. Windows 8.1, Windows 10, Firefox, or Chrome.

Impact on Trusted Tester Certification

Trusted Tester v4.0 is a significant update from v3.4.1, however, for the v3 certified Trusted Tester operationally it is not significant enough to require recertification. For this reason we are not requiring additional training or recertification for existing or new Trusted Testers. Trusted Tester v5 will support the updated Section 508 standards and recertification may be required at that time.

Summary of Changes

This section summarizes the changes between TT4 and the previous version of the test process.

Location	Test IDs affected	Change
Section 1: Introduction and Rationale for Tests	Headings: 9.2A, B Markup: 1.2, 2.1, 2.2, 2.5, 10, 12	1. Issues that are Not Covered in this Test Process: Updated to reflect that the following examples **should** be considered compliance failures, as they impact accessibility: a. Use of heading tags for style instead of structure b. Contradictory information provided by different markup methods
Section 2: Platforms		1. Windows XP is no longer supported 2. The following OS's are now supported: a. Windows 8.1 b. Windows 10
Section 2: Browsers		1. The following browsers are no longer supported: a. IE8 b. IE9 2. The following browsers are now supported: a. IE11 b. Chrome (49.0.2623.87 or later) c. Firefox (45.0.2 or later) 3. There is a new section on Browsers with this guidance: Browsers (and browser versions) provide varying levels of support for certain code techniques. Browser differences may cause test results to vary for an application. Test results for the test environment should be reported (NC| C |NA) as instructed in each baseline test. It may be necessary to test an

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	Keyboard issues in some browsers: 1.1A, B, I	application in multiple test environments in performing root cause analysis of issues. 4. Browser Recommendation: due to differences in browser technology, IE11 is the most accessible test environment for Web applications that contain Flash and/or embedded Java elements. a. Due to Chrome's and Firefox's diminishing levels of support for Flash and Java, these browsers may not fully reveal the coded accessibility properties for these content types. b. Flash and embedded Java content create keyboard traps in Firefox and Chrome. c. Firefox has limited support for Flash and Java. d. Chrome has limited support for Flash, and no support for Java. e. Testing may still be performed in Chrome and Firefox to determine results in that specific browser. However, to determine the compliance of the coded content, Web applications that contain Flash or/and Java components should be tested entirely in IE11. f. Testing of applications that do not contain Flash or Java components can be performed in any of the approved test environments. g. Test results for the test environment should be reported as observed. h. It may be necessary to test in multiple environments for root cause analysis and/or remediation. 5. Configuration instructions for IE's compatibility mode have been updated. 6. Configuration instructions for Chrome's accessibility mode have been added.
Section 2: Testing Tools		1. Installation and settings instructions have been moved to a separate document, the Trusted Tester Test Environment Installation and Configuration Guide (https://www.dhs.gov/dhs-section-508-compliance-testing-tools). 2. Testing tools a. WAT 2015 is approved for testing use. b. The Colour Contrast Analyzer is listed as a standalone tool for use with WAF (see below).

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		c. Web Accessibility Favelets (WAF) is a new tool, a set of open-source JavaScript favelets that can be installed in IE11, Chrome, or Firefox. i. WAF was developed to replicate WAT operation and functionality as closely as possible. ii. Alternative instructions are provided for WAF where there is a significant difference from WAT in terms of testing or interpreting results. iii. The functions of the WAF favelets were named according to their corresponding functions in WAT, minus the menu hierarchy. For example, where the WAT instruction is Use the WAT (Doc Info – Show Titles, Images - Show Images) to examine … If using WAF, interpret these instructions as Use the WAF (Show Titles, Show Images) to examine … iv. Once installed, the tester can organize the favelets by any preference (e.g. in alphabetical order, in subfolders, in testing order, etc.). v. WAF (Toggle CSS) only disables CSS for one page. Additionally, refresh the page to reactivate the CSS for the page instead of reselecting the WAF (Toggle CSS) favelet. vi. Unlike WAT, WAF does not include a function to check color contrast. The standalone version of the Colour Contrast Analyzer should be installed with WAF. d. Jim Thatcher's ARIA favelet is now used for ARIA testing, instead of Inspect. (Included in WAF.)
1.2.1: SW Interactive elements	1.2.1A, C, D	1. Clarification: include required field indicators as one of the instructions and cues to check for 2. If an element is not keyboard accessible, use the mouse to inspect it (i.e. when using Inspect or Ferret)

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1.2.2: Web forms	HTML Markup: 1.2.2A, B ARIA: 1.2.2A, D, E, F	1. HTML5: determine whether the web page is coded in HTML5, as the naming rules are different from HTML 4.01. a. Inspect the code and look for the doctype. If it is <!doctype html> the page is in HTML5. b. In HTML5, the rules for ID validity are different from HTML 4.01. c. In HTML4.01, i. A valid ID must start with a letter (starting with numbers is prohibited). ii. After the first letter any combination of letters (a to z, A to Z), digits (0 to 9), hyphens (-), underscores (_), colons (:) and periods (.) is allowed. d. In HTML5, a valid ID i. Must be unique on the page ii. Cannot be the empty string (“”) iii. Cannot contain spaces 2. ARIA forms: use the ARIA favelet to determine whether ARIA is used on the page. If so, use the favelet markup to determine compliance (instead of using Inspect). a. Execute the ARIA Favelet to determine if ARIA form attributes are on the page. If so, use the favelet markup to check that the ARIA attributes and IDs correctly identify the labels for form elements. b. If any fields are marked with ‘required=true’, verify that these are correct (in accordance with visual cues). c. Clarified that required fields may be indicated by asterisks or other symbols. i. Clarified that if associating “required” indications with the input components via use of label, the indication must be within the label. d. Removed instructions for using Inspect to check ARIA elements. e. Removed instructions for IE8. 3. Multiple form controls with same visual label: a. Clarified that unique identifiers are needed for each unique purpose. If the

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		purpose of two or more controls is exactly the same, the identifiers could be the same as well (non-unique). b. Clarified example of “Add” buttons next to items in a list. The buttons should identify the specific item that would be added when the button is activated.
2.2 Web Images		1. Removed test for font-based graphics as not enough instructions were provided as to how to detect these graphics.
3.2 Color Contrast	3.2A	1. Clarified that the 4.5:1 contrast ratio is a minimum, i.e. the ratio must be 4.5:1 or more. 2. Excluded “incidental text” from this requirement, i.e. text that is: a. Part of logos or brand names b. Part of an inactive user interface component c. Pure decoration d. Not visible to anyone e. Part of a picture that contains significant other visual content. 3. Noted that the either the standalone version of CCA or the one installed with WAT could used. 4. Failure condition 3.2A: clarified that these tests apply only to meaningful text, i.e. text other than “incidental text” per above.
7 Timeouts	7A, B, C	1. Reminder that web applications with Flash or embedded Java content must be tested in IE11.
8 SW Built-in Accessibility Features	General: 7A Sticky Keys: 7A, E	1. Reminder that web applications with Flash or embedded Java content must be tested in IE11. 2. Reminder that Windows 8.1 and 10 are now supported. 3. Updated instructions to use [Windows key + U] keyboard shortcut for opening Ease of Access center for more consistency. a. Sticky Keys: To avoid accidentally disabling Sticky Keys during testing: Press [Windows key + U] to open the Windows Ease of Access Center. Select ‘Make the keyboard easier to use’ and ‘Set up Sticky Keys.’ Under Options, uncheck 'Turn off Sticky Keys when two keys are pressed at

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	Sound Sentry: 7A, F Fonts: 7A, C	once', and under Feedback, check ‘Play a sound when modifier keys are pressed’. Select ‘Apply’ or ‘OK’. b. Sound Sentry: Press [Windows key + U] to open the Windows Ease of Access center. Select ‘Use text or visual alternatives for sounds’, then 'Turn on visual notification for sounds (Sound Sentry)’. Select ‘Flash active window’ and ‘Apply’ changes. Press the Shift key and the active window should flash. c. Font size: Press [Windows key + U] to open the Windows Ease of Access center. Select ‘Make the computer easier to see'. Select 'Change the size of text and icons'. i. Windows 7: Select 'Set custom text size (DPI)' (in the left navigation) and set to 200%. Log out and back in if prompted. ii. Windows 8.1/10: In the ‘Change only the text size’ section, select Menu, then select a font size twice the current size. Do the same for title bars, message boxes, icons, tooltips, and palette titles. Log out and back in if prompted. 4. Checking text size increase: clarification that, in addition to scrolling, enlarging the viewing area may be necessary and is acceptable. 5. Sound Sentry: instructions updated to work in all supported Windows versions. a. Instead of entering [Control+g} in a command window, open Notepad and type [Control+L] to cause a beep. 6. Windows XP accessibility settings instructions were removed.
10 Data Tables	10A, C	1. Scope=rowgroup and colgroup are acceptable. 2. If header/id is used, the IDs must be valid HTML. See validation rules for HTML 4.01 and HTML5 in the change summary for 1.2.2 above. 3. If HTML5 is used, TH SCOPE is supported, but not TD SCOPE. Check to see which version of HTML is being used per instructions in the change summary for 1.2.2.

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12 Web Frames		1. Clarified that the note about testing content within a frame and possible use of the Navigate to Frames function applies to WAT only (not WAF). 2. Added notes for WAF testing of frames: a. As favelets operate in a more limited context than a toolbar, WAF may not have access to cross-domain content. For example, if an iframe references content from a different domain, WAF will not mark up that content. In these cases, try to navigate to the source of the content and run the relevant tests there. b. On framed pages with dynamically-generated content, WAF may list a different set of frames than WAT. If you need to load the content of the some frames separately for testing purposes and are unable to do so using the list returned by WAF, try using WAT's Navigate to Frames function in IE11.
13 Web: Repetitive Content and Links	Methods: 13A	1. Intro paragraph: added "methods such as" to clarify that internal links are just one example of how skip functions may be provided.
	Chrome: 13A	2. Note added: F6 does not navigate frames in Chrome, which does not have a standard frame navigation keystroke.
		3. Removed instructions for Windows XP (use of Named Anchors Bookmarklet).
	Target location: 13B	4. If the Skip Link tool does not show skip targets in the expected locations, determine the skip target location with the subsequent steps in the testing process (refresh the page, tab to the skip function, activate it using Enter key).
	Skip links/targets: 13A, B	5. If no skip links or targets are revealed, TAB toward the repetitive blocks of content/navigation links to find a skip function. (The skip function may only reveal with keyboard focus so do not rely solely on a visual check.)
	Skip function: 13A, B, C	6. Checking where the focus moves after activating the skip function: The focus should move beyond the identified repetitive content to an interactive element (often a link), if there is one. If there is not an interactive element that receives focus, confirm that the target of the skip link is correct. Activate the skip function again. If the target is beyond the visible

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	Results: 13A, B	part of the page, the page will scroll to display the target onscreen. If the page did not scroll, reduce the height of the browser window so that the expected target location is below the visible part of the page, and try again. 7. Results: a. Test A, Compliant: added “for this test step” to “Skip navigation function does not need to work for this test step.” b. Test B, Does Not Apply: added “or there is no skip target” to “[DNA] if there is no repetitive content or there is no skip target.” c. Test B, Not Compliant: changed from “[NC] if there is no skip target for a skip link” to “[NC] if the skip target is not located after the repetitive content.” d. Test B, Compliant: changed from “[C] if there is a skip target for all skip links” to “[C] if the skip target is located after the repetitive content.”

Changes to the reporting spreadsheet

This section applies if you are using the OAST-provided reporting spreadsheet for your test reporting. Due to some of the updates described above, a new version of the reporting spreadsheet was created. Here are the updates:

1. Test Process Used (required): a new field where you can specify whether the test process used was TT3 or TT4.
    a. The selections are: TT3 or TT4.
    b. Other field selections will vary depending on this selection. For example, if you select TT3, you will not be able to select Chrome or Firefox in the Browser field.
    c. Spreadsheet: Changing or re-selecting this field will clear other fields as described below.
2. Web app w/ Flash (required for TT4): a new (required) field for TT4 where you can specify whether the web application tested contains embedded Flash elements.
    a. This field is for TT4 only.
    b. This field makes the reader aware of potential differences in accessibility and/or user experience due to varying support for Flash in Chrome and Firefox.
    c. The selections are: N/A, Unknown, Yes, No.
    d. Spreadsheet: if you change the Test Process Used to other than TT4, or re-select TT4, this field will be cleared.

3. Web app w/ Java (required for TT4): a new field for TT4 where you can specify whether the web application tested contains embedded Java elements.
    a. This field is for TT4 only.
    b. This field makes the reader aware of potential differences in accessibility and/or user experience due to varying support for Java in Chrome and Firefox.
    c. The selections are: N/A, Unknown, Yes, No.
    d. Spreadsheet: if you change the Test Process Used to other than TT4, or re-select TT4, this field will be cleared.
4. Operating System (required): the selections now depend on the value of Test Process used.
    a. For TT3, the selections are: Windows XP, Windows 7
    b. For TT4, the selections are: Windows 7, Windows 8.1, Windows 10
    c. Spreadsheet: if you change the Test Process Used to other than TT4, or re-select TT4, this field will be cleared.
5. Browser: the selections now depend on the value of Test Process used.
    a. For TT3, the selections are: N/A, Internet Explorer 8, Internet Explorer 9, Internet Explorer 11
    b. For TT4, the selections are: N/A, Internet Explorer 11, Chrome, Firefox
    c. Spreadsheet: if you change the Test Process Used to other than TT4, or re-select TT4, this field will be cleared.
6. Browser Version: a new text field for specifying the full version number of the browser. In the generated Word report, this value will be appended to the Browser field. Include the full version number, e.g. “11.002.1.4 A” etc.

Version History

5/24/2017

Initial version.