

## A Farewell to Ellen Crowe



With very mixed feelings, we announce the departure of Ellen Crowe, Director, Section 508 E-learning and Mobile support. Ellen will be pursuing a new career path within the Department of Veterans Affairs. She has accepted a position as a Competency Manager with OI&T, Product Development,

Application Competency Division.

Over the past decade, Ellen has earned a well-deserved reputation for excellence in the National Section 508 arena. She began her 508 career in 2004 when she became a 508 functional analyst within the Veterans Health Administration (VHA). In that position Ellen worked with software development teams to ensure that software packages developed by VHA were Section 508 compliant. In addition to working with developers, Ellen also worked with focus groups and end users, providing training in the use of VHA software.

As her passion for accessible information and communication technologies (ICT) grew Ellen recognized the need for broader 508 support within VHA. In 2006 she became supervisor, management analyst for Section 508. Over the next year she put together a team of talented and passionate 508 analysts, eventually bringing four additional full-time employees into the office along with supportive contractual staff.

Over the next seven years Ellen guided the VHA Section 508 office to a position of respect within the federal government. Under her guidance the office developed a standardized process for 508 testing of ICT.

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Development teams have grown to appreciate the consistency of this standardized test process. Firmly believing in teaching development teams “how to fish,” Ellen launched her team into the creation of training materials. To date, these materials consist of Word, PDF, and PowerPoint tutorials. Complete training courses are available with topics ranging from “*What is Section 508 and Why Is It Important To You*” to “*Developing Section 508 Compliant HTML Content*”. The course on testing HTML content for Section 508 compliance has received endorsements from other agencies within the federal government. The Department of Homeland Security has made the course available to its personnel and others within the Federal Government.

Those who had the privilege of working with Ellen in the Section 508 arena will miss her expertise and passion. We wish her all the best in her new role in VA.

*Best wishes*

## Meet a Member of Our Staff : Terri Bean



Terri Bean began her VA career on April 1st, 1979 as a Stay-in-School Student. She became a computer specialist in 1983. She supported Networking teams for seven years, Office of the Inspector General for two years, and CyberSecurity for six and a half years. Terri joined VA Section 508 six years ago, and currently serves as the lead for the manual audit teams.

### ***What experiences from working in other VA IT offices are most applicable to your Section 508 work here at VA?***

My experience has always been to put the customer first. Office of Information & Technology (OI&T) doesn't usually meet the Veteran directly, but we do the work to enable the VA to reach the Veterans. Our customer is the one directly serving Veterans. If I can make my customer feel special, they'll turn around and provide that service back to our Veterans.

### ***How has 508 grown in your last six years here at VA?***

508 is evolving. People who are designing and developing technology across the VA are paying attention. I think it's because management has instituted controls to make 508 compliance a priority. It should've always been a priority since 1998 when it became law, but our management understands now the benefits of compliance. With that understanding, the 508 office is trusted to direct the customer toward compliance and we can model for them what compliance entails.

It'll only get better as 508 becomes part of business as usual for all of our technology.

### ***What can we do better to help increase that understanding?***

Tools and training - as people understand what 508 compliance requires, they'll understand it's not that difficult. We provide tools to help them take that understanding and put it into process and production, then 508 won't be any extra work. The 508 office already does that, but we should help everyone else in VA get there, too. We must be available, we must be friendly, and we should even hold peoples' hands. 508 is so important, and until people are comfortable with it we should lead the way and help them get there.

### ***Why is there discomfort around 508 compliance?***

People just don't know the 508 requirements. People like to think that 508 is only about serving people with disabilities, and if an individual is not personally affected by any obvious need then there's no reason to worry about it. But even if that were the case and 508 was only about serving a particular group impacted by a particular disability, people using Government technology should know that Veterans are returning from duty with physical and functional limitations. That's part of their sacrifice, and part of the reason why our work is so important. Anyone who is unclear about what 508 means to the VA and to our IT work in particular is able to take our service offerings specifically to reduce that discomfort. "Ask the 508 Office" is great. BYOD is great. And of course, the training is great. If you're in VACO you're welcome to come into the 508 office anytime. Our doors are open. And if you're nationwide, we'll meet you online. We're there for you, and there's nothing to be afraid of.



## Section 508 Conformance With Multiple Mobile Apps

One of the challenges that we often run into when testing Mobile Apps for Section 508 Conformance is the result of opportunities presented to users who access Apps that rely on secondary Apps to complete their functionality. To be sure, one of the exciting reasons to perform a variety of tasks on a mobile device is to quickly access and interact with information. Often, this information is at the fingertips of the user, but when various best practices are not adhered to, the entire process can break down for App providers and users with disabilities. Let's discuss two very important best practices that can easily be overlooked, but when properly implemented, can present tremendous multi-App advantages to users.

Here's an example. A user downloads a native iOS or Android App that is designed to provide a wealth of information that is dependent on what questions the user asks. They open the App and are presented with instructions for asking a series of questions. Once a question is asked, an instant message is submitted to the user's messaging App with the answer. The answer is short and concise, but provides a URL which takes them to a webpage that contains a long description of the information they are after with links to additional, more detailed information. So the user should be able to open the App, enter in their desired mobile number to receive a text response, and then be able to ask a variety of specific questions pertinent to the information that the App provides. Once the answer is received via the messaging App, they should be able to navigate to the text message, read it, and if they wish, select and activate the hyperlink within the text message which launches their mobile browser for additional information.

The first obstacle to overcome is the process used to find and identify the appropriate form control to access. In cases where text is to be entered, users of assistive technology will need to identify and interact with an edit field. Imagine relying on auditory cues to determine whether or not you might enter text, check a checkbox, or select a "submit" button to have given text submitted to a server that interacts with other mobile Apps, but not being able to determine whether or not you are in the proper area to begin to enter text. To implement this

correctly, please refer to our best practice to "ensure that elements are sufficiently described". So that assistive technology will provide sufficient information about a user interface element, including identity, operation, and state, as well as a clear and concise means of interacting with the given element. So, if an edit field is present, the user should be advised of this by the screen reader, and should be prompted to "double tap" the screen to begin entering text. The same holds true for other form controls such as buttons, checkboxes and radio buttons.

Now that the user is able to fill out this form, let's assume that they receive a text message that contains some text and a URL. It is essential that a screen reader user be able to locate this URL using the appropriate rotor command and screen gesture, and then double tap the URL to activate the link to open the browser and the respective webpage. To that end, it is imperative that the developer implement the best practice of "ensuring that the element role and state are correct". In this case, the element would be a link, and the mobile screen reader user must be advised that it is a link so that the rotor gesture works as expected and the user can double tap this URL to launch their mobile browser. If this practice is not implemented correctly, the user will not be able to access pertinent information located on the webpage.

To implement these best practices during the development process, first set descriptive text such as name, role, state, and value for all visual elements within an application. Both Android and iOS APIs provide guidance for incorporating these necessary strategies into the creation of your App. Lastly, by using standard components, you'll render correct accessible role and state information to mobile screen readers. By incorporating these best practices into the development of your App, you'll not only be creating a usable App from which many vision impaired Veterans and VA employees can benefit, but you'll be in compliance with § 508-1194.31 VA Testing Checklist - Web Functional Performance Criteria which states that "At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided." For more information about these, as well as other Mobile Best Practices or to submit your Mobile content for Section 508 testing, visit our [mobile applications webpage](#)\*

*\*Links designated with an asterisk are available to VA internal users only.*



## Making Your Words Stand Out – The Importance of Providing Distinct Color Contrast

**In order to make electronic information on websites, in documents or in mobile apps accessible to people with certain types of visual impairments, it is important to provide enough contrast between text and its background so that they can read it.**

The contrast ratios discussed in this article have been identified by the VA using baseline criteria accepted by several federal agencies, and are used during VA Section 508 compliance testing.

The minimum ratios for contrast are:

- A contrast ratio of 3:1 for text with a size of 18 points (14 points if bolded) or larger, or
- A contrast ratio of 4.5:1 for text with a size less than 18 points (or less than 14 points if bolded).

In some situations it may be impossible to determine the actual font size. In these cases the 4.5:1 ratio should be used to comply with Section 508.

Use a contrast checking tool during design and development to determine the contrast ratio for all text. Here are three examples of color contrast checkers you can use.

- [The Paciello Group Contrast Analyser](#)
- [SSB Bart Group Color Contrast Checker](#)
- [Tanaguru Contrast Finder](#)



### HTML

To test for sufficient color contrast of HTML content, follow these steps:

1. View text and images of text in your content and visually identify the ones that may have low background to foreground contrast.
2. Use a color contrast checker to obtain the foreground and background colors for the text and images of text you have identified.

Next, try to obtain the font size of text on the web page. This only works for text, not images of text.

1. Open the IE Web Developer Toolbar (press F12).
2. Choose Select Element by selecting the respective toolbar button or press Control+B.
3. Move the mouse pointer over the desired text element and click.
4. In the Styles pane display on the right side of the HTML view of the developer toolbar, examine the style properties for a font-size property.

Verify that text and images of text provide contrast ratios that meet the requirements listed above.

The page you are testing passes the test for proper contrast if the following VA-indicated criteria are met:

1. Text measuring 18 points (14 points if bolded) or larger has a contrast ratio of at least 3:1.
2. Text smaller than 18 points (14 points if bolded) has a contrast ratio of at least 4.5:1.

## PDF OR WORD

To test for sufficient color contrast in a PDF or Word document:

1. View text and images of text in your content and visually identify the ones that may have low background to foreground contrast.
2. Use a color contrast checker to obtain the foreground and background colors for the text and images of text you have identified.
3. Verify that text and images of text meet the contrast requirements listed above.

The page you are testing passes the test for proper contrast if the following criteria are met:

1. Text measuring 18 points (14 points if bolded) or larger has a contrast ratio of at least 3:1.
2. Text smaller than 18 points (14 points if bolded) has a contrast ratio of at least 4.5:1.

To test for sufficient color contrast in a mobile app, follow these steps:

1. View text and images of text in the app and visually inspect the ones that may have low background to foreground contrast.
2. While using a keyboard, tab to an actionable control (such as a button, link, etc.) to view the focus rectangle.
  - a. Take a screenshot of that screen and transfer it to a desktop or laptop computer.
  - b. Use a color contrast checker to obtain the foreground and background colors for text, images of text, and focus indicators of the screenshot.
  - c. Verify that text and images of text meet the contrast requirements listed above.

The page you are testing passes the test for proper contrast if the following VA-indicated criteria are met:

1. Text measuring 18 points (14 points if bolded) or larger has a contrast ratio of at least 3:1.
2. Text smaller than 18 points (14 points if bolded) has a contrast ratio of at least 4.5:1.

For more information on providing sufficient color contrast, or to find answers to other Section 508-related questions, please visit <http://www.section508.va.gov/support>.

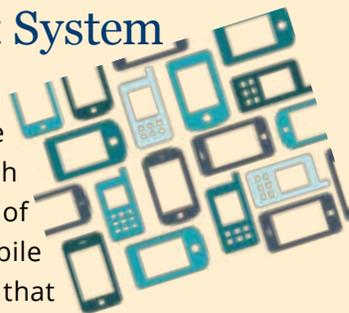
## New Section 508 Mobile Testing Course Available on the VA Talent Management System

Mobile technology has given us countless ways to manage information, interact with each other, and improve the quality of our lives. Manufacturers of mobile devices have created platforms that provide app developers the ability to offer new functionality and opportunities to VA employees and the Veterans we serve. But how can we be sure our mobile apps and content meet the Section 508 requirements that will make them more accessible to Veterans, employees and other members of the public with disabilities?

VA Section 508 is pleased to announce the launch of a new course: *"Testing Mobile Apps for Section 508 Compliance"*, ID # 3885576, which is now live on the VA's Talent Management System. Because Apple's iOS and Google's Android support accessibility on their devices, the course includes steps for testing apps for Section 508 compliance on iOS 7.1 and Android 4.4 (Kitkat). It provides a succinct overview of mobile technology, examples of the types of barriers people with disabilities may face when mobile content is not Section 508 compliant, and strategies to help project teams avoid or remediate potential Section 508 violations during the development process.

Topics include Navigation and Input, Focus, Images and User Interface Controls, Text Equivalents for Audio and Video, Color and Contrast, Flashing, Timeouts and Dynamic Content, Multimedia and Embedded Content, IOS Language and Headings, OS Accessibility Features and Interoperability.

This course contains valuable information for any project manager or member of a development team responsible for producing apps for the VA and its Veterans. To take the course, log onto the Talent Management System and search the catalog for ID #3885576; then add the course to your learning plan. If you have questions about this course, feel free to email us at [OIT508MobileTesting@va.gov](mailto:OIT508MobileTesting@va.gov)



## BYOM: Your Interactive Resource for Section 508 Conformance for All Things Mobile

Over the past two years we've seen an explosion in the development and deployment of Mobile content and Apps designed to create new options for Veterans and VA Employees. Tasks performed and information gathered from desktop PCs are now being complimented by alternative, portable means of interacting on tablets and mobile phones. To support mobile development in VA, the Section 508 Team is pleased to be offering a new service to Project Managers and Development Teams responsible for the creation and deployment of Mobile Web Content, iOS, Android, and Hybrid Apps. "Bring Your Own Mobile Content" is our latest initiative, designed to provide you the opportunity to engage our Office early in the development process. We'll show you how to develop content and/or Apps that take into consideration the Section 508 Mobile Best Practices that we use as a bench mark for testing for conformance on Mobile Devices. Simply give us access to either your Mobile Web content, or the App you are developing, we'll review it, and we'll provide feedback to you as to what steps you should take to minimize any Section 508 compliance issues we identify before submitting the content for formal certification. We'll be conducting these sessions via conference calls, where we can share computer screens with you when applicable.



We'll be formally offering this service twice per month, but can be available for more sessions as your needs and schedules dictate. Sessions will formally kick-off in January 2015. Check [the training page on our website\\*](#) for specific dates and to register for BYOM sessions. What we'll need from you is access to the content (including any login credentials) you wish to review with us, at least three business days prior to the session. You'll also need to set aside approximately one hour of time to spend with us so that we can adequately answer any questions that you might have, as well as provide any guidance to you regarding

any adjustments you may wish to make prior to formally submitting your content for Section 508 Testing. To request to participate in a BYOM Session, register via our [website training page\\*](#) or send an email to [OIT508MobileTesting@va.gov](mailto:OIT508MobileTesting@va.gov) with the subject line "BYOM

Request", and we'll get you scheduled

ASAP! It's our hope that these sessions can serve as a real-time educational resource for current mobile project teams to both minimize any remediation efforts during the formal Section 508 Testing Process while providing participants with a blueprint for future Mobile Development efforts where Section 508 Compliance is integrated into the team's project planning process, giving our disabled Veterans and employees equal access to the information they've come to expect from these Mobile Apps. We look forward to assisting you via this exciting new service in the new year!

*\*Links designated with an asterisk are available to VA internal users only.*

## Get Onboard!

It is now possible to be alerted when a new edition of the 508 XPress becomes available. Just visit [www.section508.va.gov/support/newsletter](http://www.section508.va.gov/support/newsletter) and activate the link to subscribe to our list.

Visit the VA Section 508 website to review Section 508 checklists; training materials for developing accessible content in Flash, HTML, Word, PDF and PowerPoint; register for courses and to locate additional resources.

Internet: [www.section508.va.gov](http://www.section508.va.gov)

Intranet: [vaww.section508.va.gov](http://vaww.section508.va.gov)\*

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