

Section 508 Standards and Guidelines

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Section 508 Standards and Guidelines

Introduction

Recognizing the potentially serious impact that lack of accessibility presents to millions of Americans, Congress in 1998 amended the Rehabilitation Act requiring Federal agencies to make their electronic and information technology accessible to people with disabilities. The law applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology.

In response to Section 508, the W3C's Web Accessibility Initiative (WAI) created a set of guidelines for creating accessible Web sites. Additionally, the Access Board provides standards to measure a technology's compliance with Section 508. Vignette has taken these standards and guidelines into consideration for current and future support of Section 508. As these standards and guidelines continue to evolve over time, we will strive to ensure that our products are consistent with developing government regulations and ongoing accessibility recommendations.

We recognize the importance of accessibility, not only as it pertains to our government and educational customers, but also to any customer who wishes to make their technology and electronic information accessible to everyone. We are committed to the ongoing improvement of our products and depth of support for these guidelines and standards.

This paper provides information about Vignette's compliance with accessibility requirements, specific accessible features, and guidance on creating and deploying accessible sites.

Underlying Browser Functionality

One of the ways Vignette extends our accessible feature set is by taking advantage of the underlying browser functionality. Vignette supports both Internet Explorer 5 and Netscape 7.

Internet Explorer

When you view any Vignette product through Microsoft® Internet Explorer 5, you have the following accessible features:

- **Fewer keystrokes.** Microsoft IntelliSense® technology is designed to save time and keystrokes. People who have difficulty typing or who use external input devices may find the following IntelliSense features useful:
 - **Auto complete.** When you start to enter a Web site address in the Address bar, a list of possible matches appears in a drop-down list. Also, you don't have to re-enter commonly used information such as your name, address and password because AutoComplete recalls previously entered data and fills in the rest after the first few letters have been entered. AutoComplete also works in forms on Web sites.
 - **Auto correct.** Automatically corrects typos.
 - **Auto search.** Improves the search process for more efficient searching.
 - **Offline browsing.** You can save the page on your computer and view it later offline.
- **Sorting history list.** The sorting functionality of the History bar in Internet Explorer 5 allows you to easily retrace your path through the Web, viewing a list of pages by date or in order of most visited to least visited.
- **Flexible display of HTML.** Adjust fonts, font sizes, and color for text, backgrounds, and links for better visibility.
- **Keyboard navigation.** Move to any focusable object including links, form control and embedded objects by



pressing the TAB key. Press CTRL+TAB to move between frames.

- **Support for user style sheets.** Customize the display of Web pages by setting preferences for Cascading Style Sheets. This advanced feature allows you to specify colors, fonts and other style information.
- **Support for assistive technology.** Internet Explorer 5 works in conjunction with screen readers so that descriptive ALT text is displayed for images. System caret support allows aids to follow the selected link or control.
- **Working with Windows.** Internet Explorer 5 responds to Windows High Contrast mode by turning off the background image, doubling the font size, and overriding fonts and colors specified by the Web page author.
- **Improved support for Microsoft Active Accessibility.** Internet Explorer 5 features improved support for Microsoft Active Accessibility®, a technology developed by Microsoft that allows assistive technology to communicate with the operating system and applications through a common interface. Although this technology isn't visible to the end user, developers of assistive technology use Active Accessibility to make aids such as screen readers, screen magnifiers, and speech input tools work better with the operating system and applications. This information, including step-by-step application accessibility enablement instructions are available online at the Microsoft Accessibility Web site at <http://www.microsoft.com/enable/default.htm>.

Netscape

Netscape Communications has added industry-standard accessibility support to Netscape 7.02. These new developments are part of America Online and Netscape's ongoing commitment to deliver an Internet experience that is accessible, friendly and easy to use for all consumers. When you view any Vignette product through Netscape 7.0.2, you have the following accessible features:

- **Fewer keystrokes.** Netscape allows you to use the keyboard instead of the mouse to perform many commands. Using the keyboard to perform a command can often save time, and those with physical, vision and hearing challenges can also take advantage of shortcuts to help them use Netscape.

- **Productivity features.** The built-in support includes accessibility enhancements for productivity features such as tabbed browsing, My Sidebar, Web browsing, an HTML editor, e-mail client, address book and instant messaging software.

- **Improved support for Microsoft Active Accessibility.** Netscape 7.0.2 features improved support for Microsoft Active Accessibility® as well as support for Microsoft Windows Display Settings featuring the same fonts and colors as Windows programs when the classic skin is used.

- **Support for W3C standards.** Netscape 7.0.2 supports HTML, CSS, DOM and MathML and XML. This includes read access to DOM.

- **Appearance.** Netscape 7.0.2 introduces a convenient zooming technology, which allows users to zoom to any desired level. Netscape 7.0.2 also give users control over HTML layout including preferences for user style sheets and appearance.

- **“Browse with caret” mode.** This new feature allows consumers to select text using the keyboard.

Overall Accessibility Features

Vignette products support the following accessibility requirements:

- **Keyboard functions.** Vignette products enable the keyboard features of the underlying browser.
- **Focus.** Vignette products use the underlying browser capabilities to help enable focus.
- **Text equivalents.** Text descriptions are provided for most graphic images.
- **Fonts.** Users can increase font size for better visibility.
- **Colors.** Users can alter the color contrast for better visibility without losing or changing any functionality. Additionally, our products do not rely on color alone to convey information.

Furthermore, Vignette products are designed to not interfere with the accessibility features of other products, operating systems or browsers. We have been careful to not use or remove the following for better accessibility:

- **Animation.** In general, Vignette products do not use animation. In the case where VAP uses an animated, “In Progress” icon, the graphic is accompanied by alt text and

on-screen text.

- **Multimedia.** No multimedia presentations are used.
- **Server-side image maps.** No server-side image maps are used.
- **Client-side image maps.** No client-side image maps are used.
- **Screen flicker.** Vignette products do not cause a screen to flicker.
- **Flashing or blinking text.** In general, Vignette products do not use flashing or blinking text. In the case of the VAP animated “In progress” icon, the frequency is within the limits established by WAI.
- **Applets and plug-ins.** In general, Vignette products do not use applets or plug-ins. Where applets or plus-ins are used, the product links to the appropriate place to download the technology.
- **Hearing.** Vignette products do not require hearing.
- **Speech.** Vignette products do not require speech.
- **Motor control.** Vignette products do not require fine motor control or the use of significant strength or reach.

In addition to the above general accessibility features, our Portal, Builder and Content Management products offer specific features for greater access and usability.

Portal Accessibility Features

Vignette Application Portal (VAP) is an adaptable, scalable open portal solution that enables organizations to rapidly build and deliver highly customizable applications. VAP 4.1 SP 2 has several specific features that help make end user sites accessible, including:

- **Main content anchor tag.** Each grid contains the anchor “mainContent” that makes it easier for screen readers to skip repetitive navigation links. In the style that you specify for site controls, branding, or navigation (e.g. the style entitled “Default Site Controls”) simply provide a link entitled “Skip Navigation Links” that jumps to the “#mainContent” anchor tag. Example: `Skip Navigation Links`.
- **Secondary pages.** Secondary pages are accessible to

people with disabilities.

- The following modules are accessible to people with disabilities:
 - **Bookmark.** Create default and/or required links with user friendly names and their corresponding URLs.
 - **Site List.** Displays all sites that exist on the server or select sites that the end users are permitted to access.
 - **Suggestion Box.** Allows named and anonymous users to submit recommendations to a common repository.
 - **Survey.** Allows permitted end users to answer open surveys configured by administrators.
 - **Text Pad.** Allows formatted text and optionally HTML to be displayed to and potentially personalized by end users.
 - **Story Publisher.** Displays links to documents or renders documents in the main view based on content selection rules.
 - **Web Connector.** Enables you to integrate external Web pages, applications or elements into EFS portal pages.
- **Fonts and Colors.** Users can increase font size for better visibility and alter the color contrast for better visibility without losing or changing functionality.

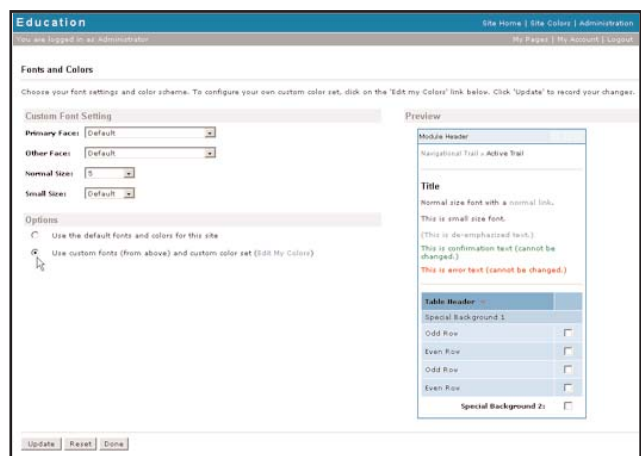


Figure 1
VAP fonts and colors page where users can change their font size and color.

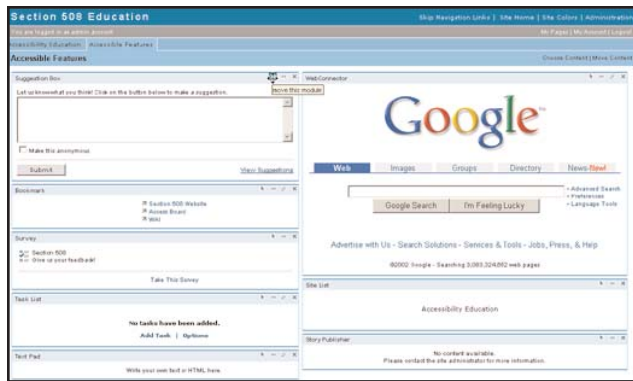


Figure 2

VAP portal with accessible modules, Skip Navigation and Alt Text.

Builder Accessibility Features

Vignette Application Builder (VAB) enables quick creation, assembly and customization of applications, empowering organizations to respond rapidly to changing business needs. All VAB 4.0 end user views are accessible. This means that any standard module, form or report created with VAB is accessible. If you customize a VAB application, then you will need to ensure that the custom features you create are accessible. VAB also explicitly defines keyboard support.

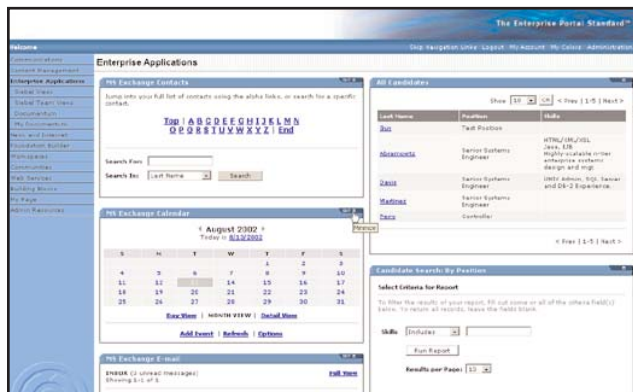


Figure 3

VAP site view with VAB forms and reports and VAP exchange modules.

Content Management Accessibility Features

Vignette Content Management (VCM) manages content, sites, content types and objects, and the deployment and delivery of content. VCM 7.01 has several specific features that help make end user sites accessible, including:

- **Form rendering JSP for the content type.** VCM provides facilities for specification of a JSP for forms rendering against the content type definition in the Content Type Modeler (CTM). CTM currently provides fields for specifying an alternate forms renderer for the content type, supporting the ability to specify a forms renderer that will produce a version of the content entry form that's device-compliant or supports accessibility.
- **Content Object Renderer.** Content Type Modeler provides facilities for specification of a rendering template for display of a content object in a presentation application, or in content preview scenarios. This facility supports specification of a template that produces a device-compliant rendering of the content object or a rendering that supports accessibility standards.

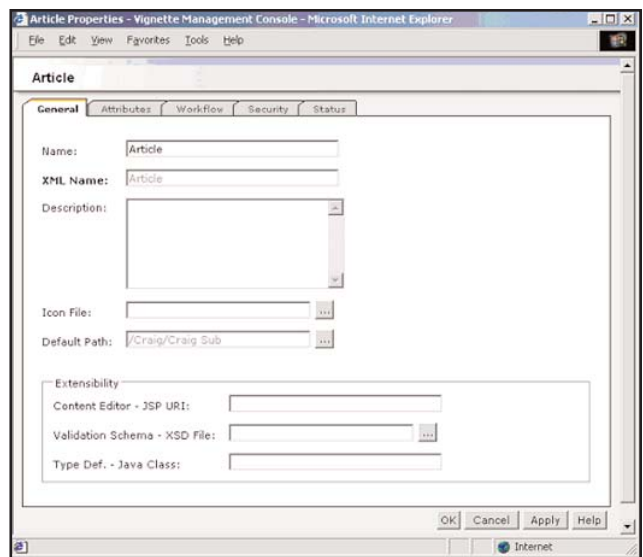


Figure 4

CTM interface indicating specification of alternate JSP for forms rendering.

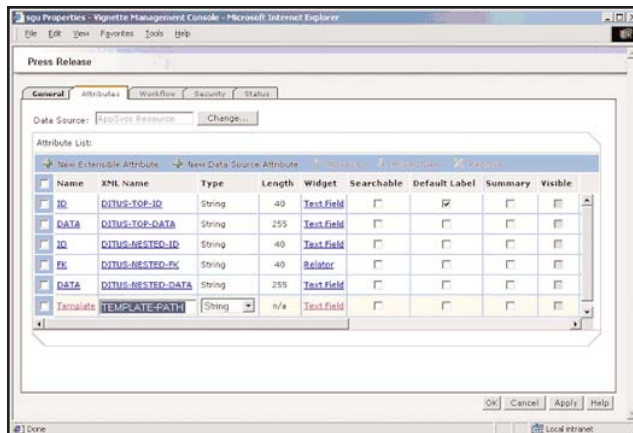


Figure 5
CTM interface indicating specification of content object renderer to be used in presentation applications and preview scenarios.

Testing and Validating Sites

A number of tools are available to help automate testing and validating sites, some of which will generate recommendations for fixing any non-compliant code in the pages. Both public domain and commercial software analysis applications are available for this purpose. References to several of these products are provided below (please note that these are informational only and are not an endorsement of any specific product):

- Bobby (free downloadable version available) at <http://bobby.cast.org/html/en/index.jsp>
- InSight/InFocus 508 at <http://www.ssbtechnologies.com/products/InFocus.php>
- PageScreamer 2.0 at <http://www.crunchy.com/tools/pagescreamer.html>
- Diamond by 508Compliant at <http://www.508compliant.com/tools.htm>
- ACC Verify at <http://www.hissoftware.com/access/Index.html>
- 508 Accessibility Suite for Dreamweaver and UltraDev at <http://dynamic.macromedia.com/bin/MM/exchange/main.jsp?product=dreamweaver>

- Estrada 508 Accessibility Tools at <http://www.estrada-onstage.com/e/e.asp?durki=492>
- WAVE Accessibility Checker at http://www.temple.edu/inst_disabilities/piat/wave/
- WC3 collection of Evaluation, Repair, and Transform Tools at <http://www.w3.org/WAI/ER/existingtools.html>
- WC3 HTML Validation Service at <http://validator.w3.org/>
- A-Prompt Toolkit at <http://aprompt.snow.utoronto.ca/>
- Usable.net at <http://www.usablenet.com/>
- Vischeck (for color blindness) at <http://vischeck.com/vischeck/>

Conclusion

Vignette is dedicated to creating products and solutions that support our customers in designing and deploying accessible technologies. We are committed to helping our customers construct and deploy sites that allow anyone who requires special assistance to have access to the content, services and applications that surface in the portal. We are committed to the ongoing improvement of our products to meet the needs of any customer deploying accessible sites.

References and Resources

- Web Accessibility Initiative (WAI) at <http://www.w3.org/WAI/>
- Access Board at <http://www.access-board.gov/sec508/guide/index.htm>
- Dept. of Justice Americans with Disabilities Act (ADA) Homepage at <http://www.usdoj.gov/crt/ada/adahom1.htm>
- Section 508 Home Page at <http://www.section508.gov/>
- Microsoft Accessibility Website at <http://www.microsoft.com/enable/default.htm>.
- Netscape's accessibility work is part of the Mozilla open source project and more information is available at <http://www.mozilla.org/projects/ui/accessibility>.



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