



Date: **July 16, 2015**

Customer: **The University of Texas System**

Subject: Compliance with Section 508 Accessibility Standards, 36 CFR Part 1194 ("508 Standards")

Product: **SAS® Enterprise BI Server software for version 9.4 of the SAS® platform**

Contact: accessibility@sas.com

The information in this document is provided by SAS Institute Inc.

SAS® Enterprise BI Server software takes advantage of loading and storage technologies to form an integrated, enterprise-wide system that delivers the power of business intelligence to the desktop of every information consumer who needs it. It is based on an open standards architecture that provides report authoring, access and interaction through a set of targeted query, reporting and analytic tools that share metadata and security profiles.

The following components of SAS® Enterprise BI Server software have user interfaces:

Base SAS® software

SAS® Add-in for Microsoft® Office software

SAS® BI Dashboard software

SAS/GRAPH® software

SAS® Deployment Tester Client software

SAS® Information Delivery Portal software

SAS® Information Map Studio software

SAS® Integration Technologies software

SAS® Management Console software, with the Table Server, OLAP Server Monitor, Deployment Tester, ESRI Map Manager, and other plug-ins

SAS® OLAP Cube Studio software

SAS® Personal Login Manager

SAS® Web Report Studio software

Following an overall 1194.31 VPAT, the individual VPATs for these components are provided.

Note: The assistive technology support was evaluated with JAWS screen reader version 15.

NOTICE: This information is provided by SAS Institute to Customer for information purposes and may be changed by SAS Institute at any time without notice to Customer. SAS makes no representations of warranties concerning this information. SAS' only warranty or other obligations to Customer with respect to the Product shall be as set forth in the applicable licensing documents between SAS and the Customer. SAS and all other SAS Institute, Inc. product and service names are registered trademarks of SAS Institute, Inc. in the USA and other countries. ® indicates USA registration. Other brand and product names are registered trademarks or trademarks of their respective companies.

**Accessibility Compliance with Section 508, 36 CFR §1194.31
Functional Performance Criteria**

Criteria	Supporting Features	Remarks and explanations
(a) 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.	Supported with exceptions	Support for Assistive Technology used by people who are blind or visually impaired is provided in most cases. Exceptions are noted in 1194.21 (d) and (l) and 1194.22 (a) VPATs for individual products in this product suite.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supported	The software inherits users preferences for enlarged fonts or color contrast in most instances. It is also compatible with assistive technologies such as screen readers used by people who are visually impaired.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	Not applicable	User hearing is not required to use the software.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Not applicable	Beyond user-configured system events, the software does not use audio.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Not applicable	User speech is not required to use the software.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supported with exceptions	Support for operation not requiring fine motor control, such as that required by mouse interaction, is provided in most cases. Exceptions where keyboard operation is limited is noted for individual products in this suite in their respective 1194.21(a) VPATs.

1. Base® SAS software

Base SAS® software, Desktop Operating System, delivers a highly flexible and extensible fourth-generation programming language specially designed for data access, transformation and reporting. It includes a rich library of encapsulated programming procedures for data manipulation, information storage and retrieval, descriptive statistics and report writing.

The following components of Base SAS® software for version 9.44 of the SAS® platform Desktop Operating System have user interfaces:

- A. Display Manager System software
- B. Output Delivery System software
- C. Enhanced Editor software
- D. Enterprise Guide® software, version 6.1
- E. Universal Viewer software
- F. Package Reader software

These components are listed below with their respective 508 compliance statements.

A. SAS® Display Manager System software for the 9.4 platform

SAS® Display Manager System software (hereafter 'the software') allows for the editing and execution of SAS language code, displaying the results of the execution, navigating and managing SAS libraries, options, and launching SAS products.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software supports keyboard equivalents for all user actions. Users needing accessibility features are advised to run SAS using the following options: <ul style="list-style-type: none"> ▪ The –accessibility extended option will invoke any alternate interfaces the product provides for accessibility support. ▪ The -nomenuicons option will prevent menu items from using user-drawn icons, which cause problems in reading menus in some accessibility tools. ▪ Via keyboard alone, the user cannot access Colors and Attributes buttons at "sascolors" window.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
<p>(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.</p>	Supported	The software does not disrupt or disable the accessibility features of the operating system.
<p>(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.</p>	Supported	<p>Visual on-screen focus and tracking is provided throughout the software. Focus is exposed to assistive technology software. The Customize Tools dialog, found under the Tools->Customize selection from the main menu, presents several icon items in a command button form for easier tracking of focus and easier selection.</p> <p>Explorer window property dialogs, found by using F10 or the MB3 context menu, present tabbed dialogs in command button format as well.</p> <p>This improved accessible interface is provided through the use of the -accessibility extended option.</p>
<p>(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.</p>	Supported with a minor exception	<p>User interface object information is available to assistive technology throughout most of the software.</p> <p>To ensure that proper object information is being provided to any assistive technology software, it is best to use both the -accessibility extended and the -nomenuicons options.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> • JAWS reads the same label for each edit box, rather than reading the associated label. • Certain text in Import/Export windows cannot be read
<p>(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.</p>	Supported	Bitmap images are used in a consistent manner throughout the software.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	<p>The software supports system settings for high contrast. The software provides additional methods of color enhancement through the use of SASColor and the ability to set color choices in Preferences. Through SASColor, users can set color and attributes of window elements for customized visual display.</p> <p>The Enhanced Editor and Program Editor also provide the ability to set colors specifically for code editing through their Appearance Options dialogs.</p> <p>The software inherits system settings for fonts and color.</p> <p>The software inherits the operating system font settings within Treeviews, Listviews, Menus, and dialogs. (Note: User must reboot the system to apply changes to the system font settings.)</p> <p>The software provides the ability to completely customize fonts in the DMS environment through the use of the -sysguifont option to set control fonts and the -font option to set the font in text windows such as the Log, Output, and Program Editor windows.</p> <p>Note that the Enhanced Editor is not affected by the -sysguifont or -font options because it provides its own dialog for setting font and color.</p>
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software does not use animation to convey information to the user.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software uses color only as an enhancement of information. All user information is conveyed in a textual form.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	<p>The software provides a wide variety of color selections to the user for producing customized contrasts.</p> <p>The sascolor command provides color customization for specific elements in the SAS environment such as borders, commands, messages, background, etc.</p> <p>Color customization is provided specifically for code editing through the use of the Enhanced Editor or Program Editor Appearance options. Both editors have several predefined color schemes but also provide the user with the option of modifying them to create their own color schemes, naming them, and saving them for future use.</p>
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking objects or text in any user interface other than the operating system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not applicable	The software does not use electronic forms.

B. SAS® Output Delivery System HTML software for the 9.4 platform

SAS® Output Delivery System (ODS) software (hereafter 'the software') is a flexible component of Base SAS which allows users to customize, format, and direct SAS output to a variety of output destinations, including plain text, HTML, PDF, Postscript, RTF, XML, LaTeX.

Accessibility Compliance with Section 508, 36 CFR §1194.22 Web-based Internet Information and Applications – Detail		
Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supported	HTML generated by SAS® Output Delivery System (ODS) HTML software provides the required text equivalents for non-text elements including graph images. Users can take either the default or the user-specified description and use that string for the ALT tag value. The software offers a global option to produce accessible graphs. Pages containing such graphs include a link to generated text describing the graph and values shown. This is documented in a usage note, and will be surfaced to the user interface in later releases.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	The software does not include any multimedia presentation.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supported	The only information conveyed with color that is not also available without color is traffic lighting. Users control the use of color to convey traffic lighting using the STYLE statement with the FLYOVER attribute to assign a descriptive string to a table or to individual table cells.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Supported	Style sheets do not affect whether the HTML document is readable or not.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	The software does not include server-side image maps.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Supported	The software produces text-based versions automatically for images produced by client devices. Server-side image maps are not included. Client-side image maps are accessible automatically, supported through the use of javaimg and actximg devices, and the gif, png, and jpeg devices will also support accessible graphs, provided that users assign an Alt text (ALT= "some value") in a column in the dataset and reference it using the HTML= procedure option.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(g) Row and column headers shall be identified for data tables.	Supported	Enhancements to TAGSETS.PHTML (and TAGSETS.HTMLCSS and TAGSETS.HTML4 if needed) have been incorporated so that users using the ODS MARKUP destination with either HTML4 or HTMLCSS values will see row and column headers identified.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supported	Procedure code addresses associating data cells and header cells for data tables without requiring a tagset. For layout tables enhancements to TAGSETS.PHTML (and TAGSETS.HTMLCSS and TAGSETS.HTML4 if needed) have been incorporated so that users using the ODS MARKUP destination with either HTML4 or HTMLCSS values will produce html layout tables with summary= "PAGE LAYOUT". Regular data tables are addressed similarly so that the procedure's name and the output label are used for the SUMMARY tag value, or if the output label does not exist, the output name is used in its place.
(i) Frames shall be titled with text that facilitates frame identification and navigation.	Supported	Links have been incorporated in TAGSETS.PHTML (and TAGSETS.HTMLCSS and TAGSETS.HTML4 if needed) using the TITLE= option value from the contents, pages, or body file.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	The design of the software does not cause screens to flicker.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not applicable	The software has no instance where compliance cannot be otherwise achieved that would require text-only page equivalents.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supported	The following tagsets have incorporated <NOSCRIPT> </NOSCRIPT> tags: TAGSETS.HTML, TAGSETS.HTMLCSS and TAGSETS.HTML4. Users can modify this tagset to add appropriate strings when JAVASCRIPT is used.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).	Supported	Graphic ActiveX controls are in compliance with 1194.21 Criteria (a) through (l).

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not applicable	The software uses no electronic forms.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not applicable	The software uses no repetitive navigation links.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	The software requires no timed responses.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software supports keyboard equivalents for all user actions.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with a minor exception	The software does not disrupt or disable the accessibility features of the operating system. One minor exception : When in high contrast in an open context menu, the background surrounding the icon is a distorted color. It does not impact performance.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	The software provides a well-defined on-screen indication of the current focus.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	Sufficient information about the user interface is almost always available to the Assistive Technology. Exceptions: <ul style="list-style-type: none"> ▪ The icons to identify the type of output in the Results window do not have adequate labels for JAWS to identify them. ▪ The icons in the Template Contents List are not labeled so extraneous information is read by JAWS.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with a minor exception	The software does not override user selected contrast and color selections. However, as stated in Criterion (b), when in high contrast in an open context menu, the background surrounding the icon is a distorted color. It does not impact performance.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color coding is not used as the only means of conveying information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The product does not allow the user to adjust color and contrast settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	The software does not use electronic forms.

C. SAS® Enhanced Editor software for the 9.4 platform

SAS® Enhanced Editor (hereafter ‘the software’) is an ASCII editor that uses visual aides to help programmers write and debug SAS programs. It shares many features with the Program Editor and it is surfaced within the Display Manager interface.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with minor exceptions	The software supports keyboard equivalents for most user actions with these exceptions: <ul style="list-style-type: none"> ▪ Keyboard shortcuts do not behave as documented with Do/End pair especially when pair is used in macro. ▪ User is not able to bring up text editing criteria list using the keyboard.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable the accessibility features of the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	A well defined on-screen indication of current focus helps users navigate and debug the SAS code.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported	The software is exposed to Assistive technology. JAWS Screen reader is able to read the textual information.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the software.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text content, text input caret location.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	The software supports user selected contrast and color selections and other individual display attributes.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Software has features that require conveying the information, indicating an action, prompting a response or distinguishing a visual element by color coding. However system provides user to change the colors settings to get them distinguish while working.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	The software permits users to adjust color and contrast settings to accommodate personal preferences and visual needs.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	The software contains no blinking or flashing text aside from the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	With the exception of items listed in Criterion (a), people using Assistive Technology can access the information, field elements, and functionality required.

D. SAS® Enterprise Guide® software, version 6.1

SAS® Enterprise Guide® software, version 6.1 (hereafter 'the software') is a project-oriented Microsoft Windows® application that enables users to access data locally or on SAS servers, manage the data, perform basic reporting and summaries, perform basic and complex data analyses, utilize SAS graphics and export or publish results to SAS servers and other Windows or server-based applications.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	<p>Alternatives to some actions typically accessed via mouse, have keyboard accessible shortcuts; keyboard shortcuts are documented in the online help system.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> ▪ In the table creation interface of the Summary Tables task, the Preview area on the Tables tab of this task does not provide keyboard equivalents to the drag-and-drop positioning of elements. ▪ Page up/down keys do not cycle through tabs. ▪ Unable to select summary columns in query builder using keyboard. ▪ Several locations have duplicate access keys. ▪ Some access keys do not function as intended.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exceptions	<p>OS settings are inherited with some exceptions.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> • The application does not fully inherit High Contrast themes from the OS. • Scroll bars do not properly resize when text size is changed at the OS level.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
<p>(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.</p>	<p>Supported with a minor exceptions</p>	<p>The software provides support for assistive screen magnification utilities by 'moving' the system caret to allow the Assistive Technology to track the central point of focus within the user interface.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> • In some wizard controls, the order of focus is hard to follow or the indication of the location of focus is missing. • The Prompts window does not have correct tab order. • Focus is lost after tabbing through the random samples task.
<p>(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.</p>	<p>Supported with major exceptions</p>	<p>The software introduces a global option to generate text versions of graphs (accessible graphs). Users may specify that the code %GACCESSIBLE be run to produce accessible graphs.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> ▪ Interface elements in the Random Samples task are read incorrectly. ▪ Text and labels read incorrectly in the Map Chart task and the Property List control. ▪ Status bar messages are not read by the screen reader. ▪ Sometimes the screen reader will not read code in the editor portion of the application. ▪ Sometimes the screen reader will stop reading the application after the mouse cursor is moved.
<p>(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.</p>	<p>Supported</p>	<p>The images used by the software are the 'standardized' images for the represented action wherever such standard images exist. All non-standard images are used in a consistent manner throughout the product for the action represented.</p>
<p>(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.</p>	<p>Supported</p>	<p>The software uses standard Windows API and system functions to display text.</p>

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with major exceptions	Exception: <ul style="list-style-type: none"> • System and user defined color schemes and font settings are not fully inherited by the application. ▪ Several components from the application will not have the correct color or font settings.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Supported	A setting is provided within the product software, which replaces graphical animations with a text description of the information being conveyed by the animated.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software does not rely on color alone to convey information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	Predefined high contrast color schemes are provided among the software's sample color schemes. Users are able to further customize these schemes or develop their own should the need arise.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use blinking text or objects, other than system provided cursors/carets, anywhere within the user interface.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with a minor exceptions	The software allows people using Assistive Technologies to access the information, field elements, and functionality required for completion and submission of interactive dialogs. Exception: <ul style="list-style-type: none"> ▪ See exceptions noted with in Criteria (a) and (d).

E. SAS® Universal Viewer® for 9.4 software

The SAS® Universal Viewer (hereafter 'the software') is a .NET application for the Windows environment to view SAS data sets and other simple text-based files. You cannot edit SAS data sets with the SAS Universal Viewer, but you can sort and filter data sets. The SAS Universal Viewer enables you to view the contents of SAS data sets without invoking SAS and without installing SAS on your machine.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	Keyboard focus can become trapped in the text field. Some Access Keys are duplicated throughout the interface.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exceptions	With Windows High Contrast #2 built-in theme, on the Properties tab, the foreground text of the tabular list is not initially visible. The text is readily visible with High Contrast #1 or the White or Black built-in themes. The items not visible could potentially prevent a user from fully utilizing the application.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with minor exceptions	Keyboard focus can become trapped in the text field.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with minor exceptions	In most cases, the name, state, and function of interface elements is surfaced to assistive technologies with exception: <ul style="list-style-type: none"> Inactive buttons are not read by the screen reader.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	With Windows High Contrast #2 built-in theme, on the Properties tab, the foreground text of the tabular list is not initially visible. The text is readily visible with High Contrast #1 or the White or Black built-in themes.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to indicate meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The product itself offers no adjustments for color; it only inherits user settings from the operating system.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	People using assistive technologies can access the information, field elements, and functionality required to operate the software with exception: <ul style="list-style-type: none"> Inactive buttons are not read by the screen reader.

F. SAS® Package Reader for the 9.4 platform

The SAS® Package Reader (hereafter 'the software') is a desktop application that enables you to retrieve and view the contents of a SAS Package as an archive file without having to run SAS.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exception	The software supports keyboard equivalents for all user actions except that there is no way to rearrange columns in the table view using the keyboard only.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable the accessibility features of the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exceptions	Visual on-screen focus and tracking is provided throughout the product. Exceptions: <ul style="list-style-type: none"> ▪ Current focus is not shown in the main toolbar. ▪ Visual focus is not shown in the tree view or table view with first navigation.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	Assistive Technology is supported except in a few locations. For example, the status of "clear status" button is not exposed to the screen reader.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	When the user sets the operating system settings to high contrast, some attributes of that setting are not inherited.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software does not rely on color alone to convey information.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software offers no native methods to adjust color and contrast settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with exceptions	When navigating with a keyboard through the Browse window to choose a path, the focus disappears. The workaround is either to count the Tab presses and listen closely to the items or to type the path explicitly.

**Accessibility Compliance with Section 508, 36 CFR §1194.31
Functional Performance Criteria**

Criteria	Supporting Features	Remarks and explanations
(a) 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.	Supported with exceptions	Limitations in the keyboard accessibility of the software inhibit use of the software by people using assistive technology. See item 1194.21(a), (l) and 1194.22 (a-b), (e – k) for more information.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supported with exceptions	The software does not inherit most operating system display attributes, such as high contrast or large font themes. See item Check 1194.21 (b), (c), and 1194.22 (c).
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	Not applicable	User hearing is not required to use the software.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Not applicable	Beyond user-configured system events, the software does not use audio.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Not applicable	User speech is not required to use the software.

**Accessibility Compliance with Section 508, 36 CFR §1194.31
Functional Performance Criteria**

Criteria	Supporting Features	Remarks and explanations
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supported with exceptions	As described in 1194.21(a), device independence via keyboard operation, not requiring fine motor control. The software accommodates limited reach and strength via operation with Windows StickyKeys and FilterKeys enabled. As described in 1194.21(a) and/or (n) and/or (o) and/or (p)), some keyboard accessibility limitations exist. People with limited motor control, reach, or strength may find activating Windows MouseKeys helpful.

2. SAS® Add-in for Microsoft® Office software, version 5.1

The SAS® Add-in for Microsoft® Office version 5.1 software (hereafter 'the software') is a Component Object Model add-in that enables end users to transparently leverage the power of SAS data access, reporting, and analytics directly from Microsoft Office via integrated menus and toolbars.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software supports keyboard equivalents for all user actions.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable the accessibility features of the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	Visual on-screen focus and tracking is provided throughout the product. Focus is exposed to assistive technology software.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported	User interface object information is available to assistive technology throughout the software.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the software.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	The software does not override user selected contrast and color selections.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software does not use animation to convey information to the user.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used as a means of conveying information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	Any color customizations would be determined by Microsoft® Excel.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking objects or text in any user interface other than the operating system blinking cursor whose rate can be adjusted by the individual user.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not applicable	People using assistive technologies can access information, field elements, and functionality required to operate the user interface elements.

3. SAS® BI Dashboard software, version 4.4

The SAS® BI Dashboard (hereafter 'the software') allows users to monitor Key Performance Indicators that convey how well an organization is performing using graphics, text, and colors. Dashboards are created, maintained and viewed via an easy-to-use Web-based interface. All content is displayed in a role-based, secure, customizable and extensible environment. End users can customize how information is displayed on their personal dashboards.

Accessibility Compliance with Section 508, 36 CFR §1194.22 Web-based Internet Information and Applications		
Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supported with exceptions	Since this is a full Adobe Flash application, there is no alt text in the traditional sense. Significant portions of the Flash movie are readable with Assistive Technology; however, some exceptions exist. See Criterion (n) for details.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	The software contains no multimedia.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supported	While the software does include visual elements in which color conveys meaning, the meaning of the colors is reinforced by the text values adjacent to the elements. For example, a gauge element could include a percentage value in text form.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not applicable	Because the application is Flash based, disabling a style sheet has no effect.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	Software does not use server-side image maps.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Supported	When GIS data is used, the data underlying the image map is available in accessible text form if included in the layout by the Dashboard designer.
(g) Row and column headers shall be identified for data tables.	Supported with exception	Data is conveyed with gauges and indicators. The dashboard designer can expose the Query results used to generate the gauges and indicators. Exception: <ul style="list-style-type: none"> The Query results table does not differentiate row/column headers to the Assistive Technology.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications**

Criteria	Supporting Features	Remarks and explanations
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supported with exception	Data is conveyed with gauges and indicators. The dashboard designer can expose the Query results used to generate the gauges and indicators. Exception: <ul style="list-style-type: none"> • The Query results table does not differentiate row/column headers to the Assistive Technology.
(i) Frames shall be titled with text that facilitates frame identification and navigation.	Supported	The application contains different panes which behave similar to frames. These are labeled accordingly.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	Software uses no flashing or blinking elements beyond the system caret.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not supported	Data tables behind gauge values can be exposed, but they are still in Flash format.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supported with exception	The application contains no scripting elements beyond the Flash plugin. See Criterion (m) for details. Exception: <ul style="list-style-type: none"> • Most notably, graphic icons are read as unlabeled by a screen reader.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).	Supported	The Flash plugin is required to use the application. If the plugin is not installed, the user will be instructed on how to do so.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues	Supported with exceptions	Limitations in the keyboard accessibility of the software inhibit use of the software by people using Assistive Technology. Exceptions include: <ul style="list-style-type: none"> ▪ Text adjacent to form controls lack distinct label-to-control associations. ▪ Multiple, non-contiguous selection via keyboard alone is not supported in some combo box controls.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not supported	

Accessibility Compliance with Section 508, 36 CFR §1194.22 Web-based Internet Information and Applications		
Criteria	Supporting Features	Remarks and explanations
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not supported	Currently the application does not warn the user before automatically logging out.

Because BI Dashboard is a web-based application, this 1194.21 VPAT is provided, in addition to the 1194.22 Web VPAT.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	Limitations in the keyboard accessibility of the software inhibit use of the software by people using assistive technology. Some exceptions include: <ul style="list-style-type: none"> Multiple, non-contiguous selection via keyboard alone is not supported in some combo box controls. Tab order in some panels is not optimal.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exceptions	In some instances, color choices set by the user in the operating system are not fully inherited by the application.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exceptions	In some situations, visual focus is lost. By continuing to press the Tab key, the focus may be regained.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	While most interface elements are clearly identified, some lack explicit label associations, to identify element name and state to assistive technology.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	The software inherits most operating system display attributes, such as high contrast or large font themes. Some exceptions include the foreground color on buttons and the highlight color in some combo boxes.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to convey meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	The software includes a style sheet that defines colors and display attributes for elements. In the Information Delivery Portal, through which the software is surfaced, the user can select a web theme to customize the display.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with minor exceptions	Some interface elements lack explicit label-to-control associations to ensure functionality with assistive technology. SAS currently plans to address this in a future release of the software.

4. SAS/GRAPH® for version 9.4 of the SAS® platform

SAS/GRAPH software (hereafter 'the software') is the data visualization and graphics presentation component of the SAS System. Through the Output Display System (ODS) in Base SAS software, you can produce SAS graphs for display in an Internet browser. Web presentation methods include an ActiveX control (for Microsoft Windows platforms), Java applet, and also static graphs. When these methods are specified as device targets in the ODS statement, the GOPTION ACCESSIBLE parameter will produce accessible graphics. See the SAS Technical Support web site for information: <http://support.sas.com/rnd/datavisualization/access508/>.

With SAS 9.4, SAS/GRAPH® also includes the ODS Graphics Editor and ODS Graphics Designer components.

SAS/GRAPH® ActiveX Component

Accessibility Compliance with Section 508, 36 CFR §1194.22 Web-based Internet Information and Applications		
Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supported	If you specify ACCESSIBLE on the GOPTIONS statement when using ODS with the Java-based or ActiveX-based device drivers, The software generates descriptive text and data that is relevant to the graph, such as the summary statistics that are represented by a bar chart. A link is created, exposed to screen readers, which users can activate to display an accessible table of the data underlying the graphic.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	Software contains no multimedia.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supported	Graph legends and other options provide non-color-based, contextual cues.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Supported	Content is readable without an associated style sheet.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	Server-side image maps are not used.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Supported	Graphs produced with the drill-down option are client-site image maps.
(g) Row and column headers shall be identified for data tables.	Supported	Headers of data tables produced with the GOPTION ACCESSIBLE are identified.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications**

Criteria	Supporting Features	Remarks and explanations
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supported	Markup of underlying data tables properly associate data cells with their corresponding header cells.
(i) Frames shall be titled with text that facilitates frame identification and navigation	Not applicable	Frames are not used.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	The software uses no flashing or blinking elements beyond the system caret.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not applicable	Compliance is otherwise accomplished.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supported	JavaScript is used to activate the accessible graphs option, as described in criterion (a). If the user has disabled JavaScript, the link text is not visible but it is readable by a screen reader, and pressing Enter shows the accessible data table underlying the graphic.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).	Supported	The 1194.21 VPAT is provided for the SAS/GRAPH Java applet and ActiveX plug-in.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues	Not applicable	The software output uses no electronic forms.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not applicable	The software output uses no repetitive navigation links.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	The software output uses no timed responses.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software output can be navigated via keyboard, by scrolling the view in the Internet browser.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exception	The software output does not disrupt or disable activated accessibility features of other programs or the operating system, except that it does not inherit user settings for color and contrast, such as a high contrast operating system theme. See Criterion (j) for accommodations.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	When the software output contains hyperlinks, an on-screen focus indicator is present and programmatically exposed to Assistive Technologies.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	<p>When produced with the GOPTION ACCESSIBLE, text equivalents are provided in SAS graphs for users of assistive technology. See 1194.22, Criterion (a).</p> <p>Most interface elements, including menu bar options and short-cut keys, are read by a screen reader (JAWS 9 used for testing); however, not all elements are read. Some exceptions include:</p> <ul style="list-style-type: none"> ▪ Labels associated with the buttons ▪ Column headings in the list view in the Edit Data dialog <p>Where keyboard access is provided, element information is exposed to assistive technologies. Where keyboard access is limited, because focus cannot be moved via keyboard to those elements, their information is not read by the screen reader (no shortcuts available for the menus in graph toolbar). See Criterion (a) for areas where keyboard access is limited.</p>

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exception	When software output is displayed on a system where a user has modified system color and contrast setting, those custom selections are not inherited. However, the programmer who produces the graph can provide style options to accommodate accessibility needs. When high contrast mode is invoked with a black background, some icons may not display crisply.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to convey meaning. In graphs where color is the primary indicator of meaning, the programmer producing the graph can opt for line style changes to accommodate low vision or colorblind individuals.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	The programmer producing the software output has ample variety of color and contrast settings to accommodate low vision or colorblind individuals.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not applicable	The software uses no electronic forms.

SAS/GRAPH® ODS Graphics Editor

The SAS/GRAPH ODS Graphics Editor (hereafter 'the software') is a complementary tool in the ODS graphics system. It is an interactive graphical application used to edit and annotate ODS graphics that are created by a wide variety of SAS procedures. You can save the results as an image for inclusion in a report or as an SGE file that you can edit in the future.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	Exceptions include: <ul style="list-style-type: none"> • Graphs produced with the editor are not keyboard accessible • Properties of text on the graph cannot be edited via keyboard. • A mouse click on the graph is required to display the Plot Properties dialog.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable any of the keyboard accessibility features incorporated within the operating system
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exception	Exceptions include: <ul style="list-style-type: none"> • Toolbar buttons on the graph lack focus. • Drop downs lack visual indication of focus
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exception	Where keyboard access is limited, because focus cannot be moved via keyboard to those elements, their information is not read by the screen reader. See Criterion (a) for areas where keyboard access is limited. Additional exceptions include: <ul style="list-style-type: none"> • JAWS cannot differentiate the title or footnote inserted in the graph. • JAWS cannot read some objects in Plot properties dialog, Graph properties dialog, and Print setup dialog. • JAWS cannot read the text in the help about dialog. Note: Tested with JAWS version 14.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exception	Exception: Some toolbar buttons are not visible in high contrast #2 mode
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Supported	Software contains no animation
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to convey meaning
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	Graph properties and the styles as well as individual plot properties can be changed to ensure color contrast for a range of vision abilities
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	Software contains no electronic forms

SAS/GRAPH® ODS Graphics Designer

The SAS/Graph ODS Graphics Designer (hereafter 'the software') is an interactive GUI tool for creation of statistical graphs. Via an intuitive, Interactive interface, this tool allows users to create plots that are commonly used in various analytical applications. The tool is based on the Graph Template Language (GTL), the same system that is used by SAS analytical procedures and SAS/GRAPH SG procedures.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	Operation via keyboard is inhibited in several ways: <ul style="list-style-type: none"> ▪ Tab cannot access some controls in the graph properties dialog ▪ Pressing Alt+Spacebar activates system menu of the main application rather than active window ▪ No mnemonics are assigned for the menu items ▪ No keyboard support is provided to drag-and-drop in the graph ▪ Cannot delete shared variable
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable any of the keyboard accessibility features incorporated within the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Not supported	Pressing tab key does not change the visual focus indicator; however, the programmatic focus does change, as confirmed in the Java accessibility utilities -Focus cannot be seen on some drop downs

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exception	Where keyboard access is limited and focus cannot be moved via keyboard, element information is not read by the screen reader. See Criterion (a) for areas where keyboard access is limited. Additional exceptions include: <ul style="list-style-type: none"> ▪ Most labels in the style editor dialog are not read by JAWS. ▪ Labels for edit boxes and frames in preferences dialog are not read by JAWS. ▪ JAWS cannot read the text on the help about dialog. ▪ Incomplete and incorrect information read for radio buttons
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	When the operating system's high contrast #2 (large) color scheme is invoked: <ul style="list-style-type: none"> ▪ The icons on the buttons for minimize, maximize, and close on the child windows are not at all visible. ▪ The text on the menu bar and title bars of the dialogs is displayed in large font. All other text i.e. text on the graph, text on the preferences and style editor dialogs etc. is displayed in the normal font.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Supported	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to convey meaning.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	Graph properties and the styles as well as individual plot properties can be changed to ensure color contrast for a range of visual abilities.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software uses no flashing or blinking elements beyond the system caret
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not supported	As described in criteria (a), (c), and (d), exceptions with keyboard accessibility, visual focus, and exposure of interface element properties seriously inhibit use of the software by people using Assistive Technology.

5. SAS® Deployment Tester

SAS® Deployment Tester (hereafter 'the software') is a plug-in for the SAS® Management Console software. Deployment Tester provides a way for SAS to ship tests and allow customers to run those tests to validate and diagnose possible errors in their deployment.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	The software supports keyboard equivalents for most user actions with these exceptions : <ul style="list-style-type: none"> You cannot Tab from last the control in the frame to the next control neither with Ctrl+F6 nor Ctrl+Tab. You cannot activate links in the test results summary window via keyboard.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable the accessibility features of the operating system.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exceptions	A well defined on-screen indication of current focus is maintained except in the test results details panel.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	The software is exposed to Assistive Technology for most of the objects; however, JAWS is not able to read test results generated. In addition, size of text does not get magnified in test results.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently in the software.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text content, text input caret location.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	Software supports user selected contrast and color selections and other individual display attributes. However, when high contrast theme is applied, the test results does provide sufficient foreground to background contrast making it difficult to read the text.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Not applicable	Color alone is not used to indicate meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software itself offers no options to adjust color and contrast; rather, it inherits user settings from the operating system.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	The software contains no flashing or blinking text other than the system caret.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with exceptions	Except as indicated in criteria (a) and (d), the software is usable by people using Assistive Technology.

6. SAS® Information Delivery Portal software, version 4.4

The SAS® Information Delivery Portal software (hereafter 'the software') is a J2EE N-tier Web application that is deployed on industry-leading Java application servers across various operating systems. Because it is a Web-based application, both the 1194.22 and 1194.21 VPATs are completed.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supported	The software provides alt attribute descriptions for non-text elements in the SAS® 9.4 release.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	The software does not include multimedia presentations.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supported	Color alone is not used to convey information.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Supported	The software is readable without an associated style sheet.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	The software does not use server-side image maps.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not applicable	The software does not use client-side image maps.
(g) Row and column headers shall be identified for data tables.	Supported	Row and column headers for data tables are properly identified.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supported	Data table headers and cells are properly associated.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(i) Frames shall be titled with text that facilitates frame identification and navigation.	Supported	The software contains no frames.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking objects or text other than the operating system blinking cursor whose rate is adjusted by the individual user.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not applicable	Compliance is otherwise accomplished.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supported	The software uses JavaScript technology to load its dynamic content. This content has been tested using the JAWS screen reader and the information provided by the script was successfully read.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).	Not applicable	Although the software does not use applets, plug-ins or other applications to interpret page content, SAS® is providing an 1194.21 VPAT to describe the application functionality. Moreover, the portal supplies a graph applet for display of SAS® Output Delivery System output. For accessibility of that portion, see the SAS/GRAPH® VPAT.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	People using Assistive Technology can access the information, field elements, and functionality required to interact with the rich web interface.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Supported	A method is provided to enable users to skip the repeated navigation links in the banner portion. This link is read aloud by the JAWS screen reader and when tabbed to, shown in the status bar of the browser.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not supported	The software session times out after 30 minutes of inactivity; this time is configurable in web.xml. However, currently, in the event of an impending timeout, neither an alert nor means to extend the session is provided to the user. SAS® is considering ways to possibly address this in the future. However, SAS® makes no warranty in this regard.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software can be operated via keyboard alone.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable activated accessibility features of the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with minor exceptions	Exceptions: <ul style="list-style-type: none"> Visual focus and actual focus can vary when using JAWS screen reader. JAWS reads the item with focus, however, visual focus remains on first item in menu.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported	Sufficient information about the user interface elements and their state is communicated through the accessibility API to users of assistive technologies.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	If the user invokes the operating system high contrast theme, colors and font choices are inherited in most cases. Exception: <ul style="list-style-type: none"> • A few buttons, however, do not inherit the background color setting and may have insufficient color contrast for people with low vision to discern. These buttons do have alternative text readable by Assistive Technologies.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to indicate meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported	Currently, by default, the software offers a choice of two color themes with a range of color contrast levels. This is available in User Preferences.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	Sufficient information about user interface elements and their state is communicated through the accessibility API to users of assistive technology.

7. SAS® Information Map Studio software, version 4.31

The SAS® Information Map Studio software (hereafter 'the software') is a desktop application that enables information architects or query designers to build information maps that use metadata to enable business users to ask questions without having to know complex programming languages or have special training. It provides access to the data warehouse in terms business users understand, providing self-service business intelligence capabilities.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with minor exception	The software supports keyboard equivalents for all user actions with the exceptions : <ul style="list-style-type: none"> ▪ Application Key does not display shortcut menu for the selected object. ▪ Data Item Properties not fully navigable.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with minor exceptions	The software supports the accessibility features of the Windows XP operating system with the following exceptions : <ul style="list-style-type: none"> ▪ Area of active focus is not clear in data item properties when high contrast mode is used. ▪ All properties button contrast is insufficient in high contrast white.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with minor exception	The software supports a well-defined on-screen indication of the current focus with one minor exception. The Description box outline is missing in data item properties in high contrast.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	The software implements the Java Accessibility API with some exception in working with JAWS including: <ul style="list-style-type: none"> • Screenreader reads classification radio buttons in data item prop after other content. • Screenreader reads page setup tab contents without context. • Orientation section read incorrectly by jaws.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Bitmap images are used in a consistent manner throughout the software.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	The software inherits color and contrast settings of the operating system with some exceptions. <ul style="list-style-type: none"> ▪ List of values returned dialog box has appears to be grayed out/too hard to see. ▪ Area of active focus not clear in data item properties when high contrast mode is used.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software does not use animation to convey information to the user.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software does not rely on color alone to convey information in any of its interface. See Criterion (g) above.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software does not contain color customizations.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking text other than the configurable system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with minor exceptions	With the exception of items noted in Criteria (a) and (b), people using assistive technology can access the information, field elements, and functionality required to use the software.

8. SAS® Integration Technologies software

SAS® Integration Technologies software (hereafter 'the software') provides an intelligent application environment in which data from across numerous unrelated systems can be easily gathered, stored analyzed and distributed in a simple and timely manner. The software functions largely in the background; it is not expected that the majority of customers' end users would directly interface with it. Only customer support personnel are intended to directly interface with the software. The software has two graphical user interface components surfaced in the SAS® Management Console, the Foundation Services Plug-in and the Publishing Framework Plug-in.

The other graphical user interface components of SAS® 9.4 Integration Technologies software are:

- Integration Technologies Configuration - This is used to test and troubleshoot connections to SAS servers.
- SAS OLAP Data Provider - This Common Object Model (COM) component is used to integrate SAS OLAP Cubes into third-party applications such as Microsoft Excel.
- Integration Technologies Administrator – This Java application enables users with administrative privileges to create, modify, and delete objects on a LDAP server that define the metadata supporting SAS Integration Technologies. These objects include channels and subscribers (used by Subscription Manager), archives of published packages (deployed by the Publishing Framework), data sources (tables and libraries), and stored processes (SAS programs configured to be run by a client).
- Subscription Manager – This Java applet is used to subscribe to and unsubscribe from channels and to specify how information is delivered. Managing subscription services is like managing other resources such as e-mail alias lists or Internet list servers.

The VPAT presented below encompasses all of these components.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software allows for keyboard only navigation of all functions.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	Note: The opening dialog of the Configuration Wizard does not allow background color change. However, on High Contrast White, it still meets the necessary contrast criteria.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	The software provides a well-defined on-screen indication of focus.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with minor exceptions	<p>In the IT Administrator and Subscription Manager, labels for some control elements are not fully exposed to assistive technologies.</p> <p>In the SAS Integration Technologies Configuration-Bridge Parameters window, prompt text for some controls is read after the label and controls themselves.</p> <p>Some descriptive text in the dialog boxes of the Configuration Wizard is not available to JAWS. However, the same information can be accessed on the help dialog, which is accessible.</p>
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the software.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	Textual information is provided through operating system functions for displaying text.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	The software does not override user selected contrast settings. Note: As stated in criterion (b) the opening dialog of the Configuration Wizard does not allow background color change. However, on High Contrast White, it still meets the necessary contrast criteria.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to indicate meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	No color settings are offered within the applications.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	The software does not use flashing or blinking objects or text in any user interface other than the operating system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	As described in criterion (a), through its keyboard accessibility, the software enables people using assistive technology to access and operate the software.

9. SAS® Management Console software

SAS® Management Console software (hereafter 'the software') provides an enterprise class, single point of control for SAS administrative tasks. Using an extensible framework, any SAS product can extend the console to administer its applications. The information provided in this checklist pertains to the SAS® Management Console framework and its various plug-ins.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with minor exceptions	<p>The software supports keyboard equivalents for all user actions.</p> <p>Exceptions include:</p> <ul style="list-style-type: none"> • The F10 does not switch focus between sections. • A few access keys open the wrong function.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exceptions	When the Microsoft Windows desktop color scheme is set to high contrast, some panels in the console content area do not inherit the system foreground and background color settings.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exceptions	<p>Exceptions include:</p> <ul style="list-style-type: none"> • Empty tables do not show visual focus. • In the Configuration Manager plug-in, visual focus is lost when tabbing through the settings tab. • In Metadata Bridges, some edit fields show multiple instances of visual focus. • In the Metadata Investigator plug-in, in high contrast mode, visual focus indicator is absent.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
<p>(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.</p>	<p>Supported with exceptions</p>	<p>Exposure of element information to assistive technologies is not complete. When tested with Freedom Scientific's JAWS Screen Reader, most control names, states and image names were read properly.</p> <p>Exceptions include:</p> <ul style="list-style-type: none"> ▪ In the SPDS Plug-in: <ul style="list-style-type: none"> ▪ JAWS cannot identify embedded controls in the table control. ▪ JAWS reads some control labels incorrectly, such as some edit boxes and combo boxes. ▪ In the Metadata Investigator Plug-In: <ul style="list-style-type: none"> ○ JAWS cannot read the nodes in tree view, Description label, and the message displayed with the progress bar. <p>See attachment for instructions on how to configure the software so Assistive Technologies will interoperate with the application.</p>
<p>(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.</p>	<p>Supported</p>	<p>The software uses images consistently throughout its interface.</p>
<p>(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.</p>	<p>Supported</p>	<p>The software uses standard function calls when providing text.</p>
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supported with exceptions</p>	<p>As noted in Criterion (b), some panels in the content area do not inherit the system foreground and background color settings when the display is set to high contrast.</p> <p>Exceptions include:</p> <ul style="list-style-type: none"> • In the SPDS Plug-In: <ul style="list-style-type: none"> ▪ User cannot view expansion '+' icon in tree control. ▪ Checkbox controls have no visual focus indicator. ▪ Black text on the black (high contrast) background is unreadable. ▪ In the Metadata Investigator Plug-In: <ul style="list-style-type: none"> ○ In high contrast mode, font settings are not inherited. ○ On-screen indication of the current focus is not visible.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	The software does not use animation to convey information to the user.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported with minor exception	The software relies on color in one instance to indicate security inheritance.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software provides no additional color or contrast settings, beyond the platform and operating system settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking objects or text in any user interface other than the operating system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with exceptions	<p>People using Assistive Technology to use the software can access the information and functionality except as indicated in criteria (a), (c), and (d) above.</p> <p>Additional exceptions:</p> <ul style="list-style-type: none"> • Configuration Manager Plug-In: <ul style="list-style-type: none"> • Sometimes the software hangs up when switching between the Folders and Plugins tabs. • In some cases, maximizing then restoring the window will reactivate the software. • In Permissions Grant/Deny Areas, while navigating, checkboxes may check/uncheck at random, without providing state information to the Assistive Technology. • In some instances, the software does not pass form element information to JAWS. This occurs with drop-down menus and certain edit boxes.

10. SAS® OLAP Cube Studio software

SAS® OLAP Server software (hereafter 'the software') is a multidimensional data store that provides easy access to pre-summarized data generated from vast amounts of detailed raw data located in a variety of locations. SAS® OLAP Cube Studio software provides the user interface to the SAS® OLAP Server software, and its Section 508 conformance is described below.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and Explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	Some ALT key shortcuts are not functional. SAS currently plans to address this in a future release by migrating to a Java Eclipse-based technology.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported with exceptions	The Windows standard Application Key does not display the shortcut menu for the selected object. The keyboard equivalent for exposing the system menu is not the Windows standard Alt+spacebar. The system menu can be exposed using the following shortcut keys: <ul style="list-style-type: none"> ▪ Primary window - Shift+F10+spacebar ▪ Secondary window - Shift+F10+down key
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with minor exceptions	Semantic information about interface elements is available to assistive technologies in most cases. When creating a new cube in Cube Designer, if the OLAP Schema combo box has only a single item in the list view, then JAWS does not read the selected item. Test verification with Java utilities indicates that the value is indeed available to the assistive technology, but in the case of JAWS version 8, it is currently not read.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	When bitmap images are used, the meaning assigned to the images is consistent throughout the interface.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and Explanations
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard function calls when providing text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	When a High Contrast scheme is applied at the operating system level, color selections are inherited in most cases. However, in high contrast mode, users with low vision may have difficulty discerning when interface elements are in a disabled state. Font sizes are not universally inherited from the operating system settings. SAS currently plans to address this in a future release by migrating to the Java Eclipse-based technology.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software does not use color alone to indicate meaning.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software does not offer color customizations.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking text, objects or other elements that have a flash blink frequency greater than 2 Hz and lower than 55 Hz.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with exceptions	People using assistive technologies such as screen readers and screen magnifiers can access the information, field elements, and functionality required to use the software. SAS has validated this with JAWS v.8, ZoomText v9, and MAGic v10. With the screen magnifiers, focus indicators are not discernable in all instances. Some exceptions in the software with JAWS, as noted in Criterion (d).

11. SAS® Personal Login Manager

With the SAS® Personal Login Manager (hereafter 'the software'), you manage credentials for metadata repository logins.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported with exceptions	The software is executable from the keyboard except for the following: <ul style="list-style-type: none"> Unable to sort logins table using keyboard only
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable the accessibility features of the operating system.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported with exception	Focus is consistent throughout the application except for the following: <ul style="list-style-type: none"> Unable to place keyboard focus on toolbar
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	The software does support assistive technology except for the following: <ul style="list-style-type: none"> Screenreader unable to read column headers Screenreader unable to read toolbar icons
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.

Accessibility Compliance with Section 508, 36 CFR §1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks and explanations
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported	When the user sets the operating system settings to high contrast, attributes of that setting are inherited.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	The software does not rely on color alone to convey information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	The software offers no native methods to adjust color and contrast settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	Forms and field elements are supported by assistive technology.

12. SAS® Web Report Studio software

SAS® Web Report Studio software (hereafter 'the software') is an easy-to-use query and reporting application specifically designed for general business users who want to view, author and share reports on the Web.

Accessibility Compliance with Section 508, 36 CFR §1194.22 Web-based Internet Information and Applications – Detail		
Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supported	The software provides text equivalents for images.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	The software does not use multimedia presentations.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supported	Color alone is not used to convey information.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Supported	Documents are readable without a style sheet. When a blank cascading style sheet is applied at the browser-level to override the application setting, the software is still readable.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	The software does not use server side image maps.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Supported with exceptions	Client-side image maps in the software identify map regions using html <AREA> tags that include ALT text to describe the regions. However, with version 4.3 of the software and version 11 of Freedom Scientific's JAWS screen reader, the screen reader does not read the alternative text provided from the content of these image maps.
(g) Row and column headers shall be identified for data tables.	Supported	Row and column headers are identified for data tables.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supported	Markup of data tables in the software includes sectional dividers (THEAD and TBODY tags) as well as distinct tags (TH and TD) to distinguish between table header cells and table data cells. Testing with version 11 Freedom Scientific's JAWS screen reader in table reading mode confirms that table heading associations to data cells are recognized and read properly.
(i) Frames shall be titled with text that facilitates frame identification and navigation	Supported	The software uses inline frames (iframes), which should be transparent and do not support intra-frame navigation, as with traditional frames. These iframes include a TITLE attribute. Testing with Freedom Scientific's JAWS screen reader in text-reading mode confirms that inline frames are not read as "untitled."
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supported	The software does not use flashing or blinking objects or text in any user interface other than the operating system blinking cursor whose rate can be adjusted by the individual user.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not applicable	Equivalent functionality and information are otherwise accomplished.

**Accessibility Compliance with Section 508, 36 CFR §1194.22
Web-based Internet Information and Applications – Detail**

Criteria	Supporting Features	Remarks and explanations
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supported	When event handlers result in some substantial information or function, such as displaying a pull-down menu, a redundant input mechanism has been provided. The software requires that Java scripting be enabled. If Java script is disabled, the software displays a message accessible to assistive technologies stating this requirement.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21 (a) through (l).	Supported	The software requires a mapping for PDF files, but not a specific plug-in. The software is itself an application; therefore, 1194.21 (a) through (l) are also answered.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues	Supported with exceptions	All <FORM> elements in the software use explicit labeling to connect form elements to their associated labels and support device-independent operation. Exceptions: <ul style="list-style-type: none"> ▪ When running the software with the JAWS screen reader and when action menus are displayed via keyboard from a report view, the arrow keys cannot be used to move selection in the menu. A workaround is to use JAWS PC Cursor reading mode or to disable the Virtual PC cursor JAWS option when navigating a menu. This issue will be included in future documentation. ▪ There are several locations where JAWS reads extraneous information instead of the correct text/object. ▪ The select data window is not read by screenreader
(o) A method shall be provided that permits users to skip repetitive navigation links.	Supported	The software provides a link enabling users to skip over repetitive navigation links and to the main content. In addition, access keys are provided for direct navigation to specific areas within the application window.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Supported	Pages in the software, a web client, inherit a required timed response from the servlet container, which can be configured at the mid-tier. For security protection, if no activity occurs after the configured time, the application times out.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supported	The software can be navigated and operated via keyboard.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supported	The software does not disrupt or disable activated accessibility features of the operating system or other programs.
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supported	Visual focus is maintained in the software.
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	JAWS is unable to read certain parts of the software, including: <ul style="list-style-type: none"> ▪ System retrieving information page. ▪ Image maps used as graphs. ▪ The select data window.
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	Images are used consistently throughout the interface.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	The software uses standard operating system functions for displaying text.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with minor exceptions	Some elements do not correctly inherit High Contrast settings when invoked from the operating system theme.

**Accessibility Compliance with Section 508, 36 CFR §1194.21
Software Applications and Operating Systems**

Criteria	Supporting Features	Remarks and explanations
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	Software contains no animation.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	Color alone is not used to convey information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supported with exceptions	The software does allow user to choose from preset color profiles. A high contrast profile is available from SAS Technical Support.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	Software uses no flashing or blinking elements beyond the system caret.
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported with minor exceptions	People using Assistive Technologies are able to complete forms. Coding information is read in some areas, obscuring element/object information, depending on the screen reader verbosity settings.

Attachment related to 1194.21(d) for SAS® Information Map Studio, SAS® Management Console, and SAS® OLAP Cube Studio software:

For Window-based assistive technologies to interoperate with SAS Java desktop applications the Java Access Bridge (JAB) is required. According to Oracle at <http://www.oracle.com/technetwork/java/javase/tech/index-jsp-136191.html> :

"Java Access Bridge is a technology that exposes the Java Accessibility API in a Microsoft Windows DLL, enabling Java applications and applets that implement the Java Accessibility API to be visible to assistive technologies on Microsoft Windows systems. Java Accessibility API is part of Java Accessibility Utilities, which is a set of utility classes that help assistive technologies provide access to GUI toolkits that implement the Java Accessibility API."

Customizations to the standard install procedure are required to facilitate access to the JAB. This setup assumes that Java is already installed on the machine. A known risk is that SAS applications can get polluted by jar files that may be installed in the jre/lib/ext directory. To solve this problem, SAS implemented a custom class loader to replace the system class loader. The custom class loader loads only approved extensions that SAS configures based on the JRE the vendor provides. A consequence of hiding the existing directory is that it disables installed accessibility-related applications. The steps below describe the method to enable the launcher to recognize required JAB jar files.

1. Download the Java Access Bridge (<http://www.oracle.com/technetwork/java/javase/tech/index-jsp-136191.html>). The download process locates the jre\lib\ext subdirectory under the directory where the JDK is installed. The installation program copies the following files into that directory: jaccess.jar and access-bridge.jar. The JAB download also creates a jre\lib\accessibility.properties file containing the following line used by JVM on starting:

```
assistive_technologies=com.sun.java.accessibility.AccessBridge.
```

2. Install the SAS® software.
3. In each of the SAS client application directories, edit the file that contains the approved extensions called; sas.java.ext.config. Add the two Java Access Bridge jars.
access-bridge.jar
jaccess-1_4.jar

To test this, download a demo copy of the Freedom Scientific JAWS screen reader (most widely used screen reader) from <ftp://ftp.freedomscientific.com/users/hj/private/WebFiles/JAWS/J12.0.1170-32bit.exe> . The evaluation version operates for 40 minutes before requiring a reboot.