

Touch•Inspire™ Voluntary Product Accessibility Template

The purpose of the Voluntary Product Accessibility Template, or VPAT, is to assist Federal contracting officials and other buyers in making preliminary assessments regarding the availability of commercial Electronic and Information Technology products and services with features that support accessibility.

The following VPAT is for Touch•Inspire, a portable touch-screen computer career exploration and inspiration system.

The first table of the Template provides a summary view of the section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. The first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional product remarks.

Date: June 1, 2006
 Name of Product: Touch•Inspire (Touch-screen career exploration system)
 Contact Information: Bullzi Network Inc • 283 Bartram Road, Riverside, IL 60546 • 708.442.6543 • www.bullzi.com

Voluntary Product Accessibility Template - Summary Table

Criteria	Supporting Features	Remarks and Explanations
Section 1194.21 Software Applications and Operating Systems	Please refer to the attached Mac OS X - VPAT.	For more information regarding Mac OS X accessibility features & peripherals visit – http://www.apple.com/accessibility
Section 1194.22 Web-based Internet Information and Applications	Not Applicable	
Section 1194.23 Telecommunications Products	Not Applicable	
Section 1194.24 Video and Multi-media Products	Please refer to the attached VPAT.	
Section 1194.25 Self-Contained, Closed Products	Please refer to the attached VPAT.	
Section 1194.26 Desktop and Portable Computers	Please refer to the attached VPAT.	
Section 1194.31 Functional Performance	Please refer to the attached VPAT; and the attached Mac OS X - VPAT.	

Section 1194.24 Video and Multi-media Products - Detail Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and Explanations
<p>a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.</p>	<p>Not Applicable: Touch•Inspire does not include an analog television display.</p>	
<p>(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.</p>	<p>Not Applicable: Touch•Inspire does not include television tuners or cards.</p>	
<p>(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.</p>	<p>Supported with exceptions: All Touch•Inspire job description videos include closed captioning that can be turned on and off. Touch•Inspire also includes various life skills videos that have been contributed by third parties that have not been closed captioned.</p>	<p>Updates will include additional closed captioned titles, as well as efforts to update content not currently closed captioned to include closed captioning.</p>
<p>(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.</p>	<p>Supports when combined with Compatible AT Touch•Inspire text job descriptions support speech output when combined with a compatible screen reader.</p>	<p>Updates will include efforts to provide audio descriptions of all text job descriptions, eventually eliminating the need for assistive technologies such as a compatible screen reader.</p>
<p>(e) Display or presentation of alternate text presentation or audio descriptions shall be userselectable unless permanent.</p>	<p>Not Applicable: All Touch•Inspire text and audio descriptions are permanent.</p>	

Section 1194.25 Self-Contained, Closed Products - Detail Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and Explanations
(a) Self-contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.	Supported: Touch•Inspire includes a five-wire, resistive touch screen that provides human touch input; including gloved-hand, mouthstick, headstick, or similar stylus device.	
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not Applicable: Touch•Inspire does not include any timed responses.	
(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with § 1194.23 (k) (1) through (4).	Supported: Though touch-screen accessible, Touch•Inspire retains all computer functionality, including keyboard and mouse support.	Please refer to the attached Mac OS X VPAT for additional information regarding input criteria.
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not Applicable: Touch•Inspire does not include or require any biometric forms of user identification.	
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.	Supported: Touch•Inspire provides ports for adding both headphones and additional speakers. Interrupt, pause, and restart are provided within the user interface, and volume is also adjustable from within the user interface or the keyboard.	
(f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.	Supported: Touch•Inspire provides full control over audio presentation; including support for private listening through headphones, or additional speakers and amplification for presentation in group settings. Volume is fully adjustable within the Touch•Inspire user interface or from volume keys on the included keyboard. Overall operating system volume is also provided within the Mac OS X operating system.	Please refer to the attached Mac OS X VPAT for additional information regarding audio criteria.
(g) 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: Touch•Inspire provides text description for all buttons and sections, as well as color coding.	Please refer to the attached Mac OS X VPAT for additional information regarding color coding criteria.

<p>(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.</p>	<p>Supported: Touch•Inspire permits the adjustment of color and contrast through the Mac OS X operating system, allowing a variety of customizable preferences.</p>	<p>Please refer to Criteria (g) of the attached Mac OS X VPAT for additional information regarding color and contrast settings.</p>
<p>(i) Products shall be designed to flicker with a frequency greater than 2 Hz and lower than 55 Hz.</p>	<p>Supported: Touch•Inspire or Mac OS X text or graphics do not flash or blink in this range.</p>	<p>Please refer to the attached Mac OS X VPAT for additional information.</p>
<p>(j) (1) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.</p>	<p>Not Applicable: Touch•Inspire is a portable system designed to be moved from location to location and adjustable to specific user requirements.</p>	
<p>(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.</p>	<p>Not Applicable: Touch•Inspire is a portable system designed to be moved from location to location and adjustable to specific user requirements.</p>	
<p>(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.</p>	<p>Not Applicable: Touch•Inspire is a portable system designed to be moved from location to location and adjustable to specific user requirements.</p>	
<p>(j)(3) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.</p>	<p>Not Applicable: Touch•Inspire is a portable system designed to be moved from location to location and adjustable to specific user requirements.</p>	

<p>(j)(4) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more than 24 inches behind the reference plane.</p>	<p>Not Applicable:</p> <p>Touch•Inspire is a portable system designed to be moved from location to location and adjustable to specific user requirements.</p>	
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Section 1194.26 Desktop and Portable Computers - Detail Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and Explanations
<p>(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4)</p>	<p>Supported:</p> <p>Touch•Inspire includes a fully functional keyboard and mouse.</p>	
<p>(b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).</p>	<p>Supported:</p> <p>Though touch-screen enabled, Touch•Inspire retains all computer functionality, including a fully functional keyboard and mouse.</p>	<p>Please refer to the attached Mac OS X VPAT for additional information regarding this criteria.</p>
<p>(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.</p>	<p>Not Applicable:</p> <p>Touch•Inspire does not include or require biometric forms of user identification.</p>	
<p>(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.</p>	<p>Supported:</p> <p>Touch•Inspire includes ports for standard USB, Firewire, audio in and out, Ethernet (RJ45) and Phone (RJ11).</p>	<p>Additional internal ports allow wireless networking and other upgrades.</p>

Section 1194.31 Functional Performance Criteria - Detail Voluntary Product Accessibility Template

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.	<p>Supported with exceptions:</p> <p>Touch•Inspire supports users by providing access to the Mac OS X Universal Access spoken interface. Further information regarding the spoken interface technology is available at http://www.apple.com/accessibility/spokeninterface</p>	<p>Exceptions:</p> <p>Please refer to the attached Mac OS X VPAT Criteria (a) for further information regarding the spoken interface.</p>
(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.	<p>Supported with exceptions:</p> <p>Touch•Inspire provides Universal Access Zoom, a built-in screen magnification feature of Mac OS X for operations that occur within the operating system of the computer. Please refer to the attached Mac OS X VPAT, Section 1194.31, Criteria (b) for a complete description of Universal Access Zoom and the Speak Text under mouse feature of Mac OS X.</p>	<p>Exceptions:</p> <p>The Touch•Inspire touch-screen interactive interface cannot take advantage of zooming as it is a Fundamental Alteration Exception. Adding this functionality would change the basic purpose and characteristics of the Touch•Inspire system at great expense.</p>
(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.	<p>Not Applicable:</p> <p>Audio is not required for the operation of Touch•Inspire.</p>	
(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.	<p>Not Applicable:</p> <p>Touch•Inspire provides speech functionality through the Mac OS X operating system, but it is not required to perform any actions.</p>	
(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.	<p>Supported:</p> <p>Touch•Inspire provides touch-screen human input; including gloved hand, mouthstick, headstick, or similar stylus devices. Also fully functional keyboard and mouse input that takes advantage of Mac OS X features that assist users who do not have fine motor control or can't perform simultaneous actions easily.</p>	<p>Please refer to the attached Mac OS X VPAT, Section 1194.31, Criteria (f) for a complete description of additional features to assist users within this criteria.</p>

Section 1194.41 Information, Documentation and Support - Detail Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and Explanations
(a) Product support documentation provided to endusers shall be made available in alternate formats upon request, at no additional charge.	<p>Supported:</p> <p>Touch•Inspiredocumentation and support is provided withing the touch-screen interactive interface, text files included in the Touch•Inspire Docs folder on the hard drive, printed materials that accompany each unit, on the Bullzi Network web site, email and phone.</p> <p>Additional support and documentation is provided through the Mac OS X help system on each computer and through various Mac OS X web sites: http://www.apple.com/support http://www.apple.com/macosx</p>	<p>Touch•Inspire support and documentation is available on line through our web site at: http://www.bullzi.com/support.php</p> <p>Touch•Inspire eMail Support at: support@bullzi.com</p>
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	<p>Supported:</p> <p>Bullzi Network Inc provides various Assistive Technologies as add-ons to the Touch•Inspire system. Descriptions and documentation can be found within the support section of the Touch•Inspire interface, the Touch•Inspire Docs folder on the hard drive, and through the Bullzi Network Inc web site.</p> <p>Additional descriptions and information is available within the Mac OS X help system and through Mac OS X web sites: http://www.apple.com/accessibility</p>	<p>Assistive Technology add-ons and descriptions are available on line at our web site – http://www.bullzi.com</p>
(c) Support services for products shall accommodate the communication needs of endusers with disabilities.	<p>Supported:</p> <p>Touch•Inspire support is provided through email, web, phone, and within the Touch•Inspire touch-screen interface and various support documents in the Touch•Inspire Docs folder on the hard drive.</p>	<p>http://www.bullzi.com/support.php</p> <p>support@bullzi.com</p> <p>Phone Support - 708.447.3456</p>

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The following Voluntary Product Accessibility information refers to the Mac OS X version 10.4 “Tiger” (Mac OS X) operating system. For more information on accessibility features in Mac OS X and to find out about available applications and peripheral devices visit Apple’s accessibility web site at <http://www.apple.com/accessibility>

**Summary Table
Voluntary Product Accessibility Template**

Criteria	Supporting Features	Remarks and explanations
Section 1194.21 Software Applications and Operating Systems	Please refer to the attached VPAT	
Section 1194.22 Web-based internet information and applications	Not Applicable	
Section 1194.23 Telecommunications Products	Not Applicable	
Section 1194.24 Video and Multi-media Products	Not Applicable	
Section 1194.25 Self-Contained, Closed Products	Not Applicable	
Section 1194.26 Desktop and Portable Computers	Not Applicable	
Section 1194.31 Functional Performance Criteria	Please refer to the attached VPAT	
Section 1194.41 Information, Documentation, and Support	Please refer to the attached VPAT	

**Section 1194.21 Software Applications and Operating Systems - Detail
Voluntary Product Accessibility Template**

Criteria	Supporting Features	Remarks and explanations
<p>(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.</p>	<p>Supported with exceptions:</p> <p>Mac OS X provides keyboard access to operating system interface elements using the keyboard cursor or VoiceOver (an integrated screen reader) cursor. Keyboard access to text boxes and lists is on by default. Keyboard access can be extended to include controls by pressing Control-F7 or clicking a radio button in the Keyboard preference panel. VoiceOver can be activated by pressing Command-F5 at any time and provides keyboard navigation and control of accessible applications.</p> <p>Mac OS X provides additional keyboard support features which are beneficial to some users:</p> <ul style="list-style-type: none"> • Sticky Keys, which is designed to allow a series of single key presses to be interpreted as a multiple keystroke combination. Sticky Keys is beneficial for people who have difficulty pressing multiple keys simultaneously. • Slow Keys, which is designed to put a delay between when a key is pressed and when it is accepted by the system. Slow Keys is beneficial for people who may press keys accidentally and often. Click key sounds are also available to provide additional feedback when a key is accepted. • Mouse Keys, which is designed to allow control of the mouse cursor from the keyboard. 	<p>Exceptions:</p> <p>These applications included with Mac OS X are partially keyboard accessible.</p> <ul style="list-style-type: none"> • Dashboard Widgets • ColorSync utility • Startup Disk (System Preferences) • iCal <p>The text of an item with keyboard focus is spoken when using VoiceOver, when the mouse is over them or when the text is selected and an appropriate key combination is pressed.</p>

	<ul style="list-style-type: none"> • Adjustable keyboard repeat delay, which is designed to prevent accidental entry of multiple single keystrokes. The setting is adjustable and can be set to not repeat. • Customizable keyboard commands which allow a user to assign a keyboard combination to any menu item that doesn't already have one assigned or change an existing combination, for a specific application or for the entire system. • Double click speed adjustment allows users to customize the finger speed required to double click the mouse. <p>Applications that adhere to the Mac OS X programming guidelines automatically inherit keyboard support.</p>	
<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</p>	<p>Supported:</p> <p>Mac OS X provides an accessibility API that enables applications to interact with assistive technologies without disrupting the system or each other. Details of the Accessibility API are available on the Apple Developer web site: http://developer.apple.com/documentation/Accessibility/Accessibility.html</p> <p>Applications developed using Mac OS X application development guidelines and using operating system provided services, inherit the accessibility functionality included in Mac OS X. Applications and devices written in this manner benefit from the various accessibility features included in Mac OS X and from those delivered by assistive technology developers.</p>	

<p>programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.</p>	<p>Mac OS X uses industry standard peripheral connection ports like USB and Firewire, and includes class device drivers that adhere to the HID specification so input devices developed to these specifications should work without the need for additional driver software.</p>	
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<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:</p> <p>Mac OS X exposes the location of the current keyboard and mouse focus to assistive technologies via the Accessibility API and also provides a visual indication of the focus on-screen. The mouse arrow can also be scaled independent of the screen resolution making it easier to locate and track.</p> <p>The VoiceOver cursor is also clearly defined and items within the VoiceOver cursor can be scaled to the size of the screen to make them and the VoiceOver cursor easier to see and follow. Using VoiceOver, a description of the elements on which these cursors are focused can be spoken.</p>	
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<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>The Mac OS X Accessibility API allows applications to provide information about the identity, operation, and state of elements in applications and in the operating system interface itself.</p> <p>Mac OS X interface elements, applications and utilities provide sufficient information via the Accessibility API, with some exceptions.</p> <p>Application developers can learn about how to ensure that their application correctly utilizes the Accessibility API at the Apple Developer Web site: http://developer.apple.com/documentation/Accessibility/Accessibility.html</p>	<p>Exceptions:</p> <p>The current value of some slider controls, such as the one in the 'Speech' preference panel, are not spoken when using the “speak text under the mouse after delay” feature.</p> <p>The following applications included with Mac OS X will speak only some text under the mouse.</p> <ul style="list-style-type: none"> • iTunes • iCal
<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>Images used in Mac OS X are used in a consistent manner.</p> <p>Apple's Human Interface Guidelines address this point to guide developers of Mac OS X applications.</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: Mac OS X provides information about text content, attributes, and text input caret via the Accessibility API.</p>	
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supported: Mac OS X supports several user preferences to customize the display attributes. These adjustments cannot be overridden by applications.</p> <ul style="list-style-type: none"> • Users can switch the display to White On Black from Black On White. • Users can switch the display from color to grayscale. • Users can enhance or reduce the contrast of the display using a slider. • Users can invert the light and dark colors displayed on the screen. • Users can also utilize the Zoom feature, a built-in screen magnifier, to magnify the appearance of the interface and text. (See section 1194.31(b) for more information about Zoom). 	<p>Remarks: All of these features are accessed through the Universal Access system preference and can be used together in different combinations to achieve the desired display effect.</p>

<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.</p>	<p>Supported: Animation for opening and closing applications and windows, and animated magnification of dock items can be disabled. The animated progress bar is usually accompanied by text describing the progress of the action.</p>	<p>Dashboard ripple effects and animations are cosmetic only.</p> <p>Cursor changes are spoken using VoiceOver.</p> <p>Exposé features visual effects but there are workarounds to achieve the same functions without using Exposé.</p>
<p>(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.</p>	<p>Supported: Mac OS X uses color in multiple ways to convey information but wherever color is used there is an alternative information display that does not rely on color. For example, colored controls are used in the title bar of each Mac OS X window that allow a user to close, minimize or maximize a window. While the color indicates each control's function, each control also has a rollover state that reveals a non-color indication of function.</p>	
<p>(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of</p>	<p>Supported with exceptions: Mac OS X screen contrast is adjustable by users in the Universal Access control panel.</p>	<p>Exceptions: Color settings for buttons, windows, and menus are limited to two colors.</p>

<p>producing a range of contrast levels shall be provided.</p>	<p>The setting for the text highlight color can be modified using a color palette of millions of colors.</p> <p>Users can create cascading style sheets that can be used to override colors defined by web developers to customize the appearance of web pages.</p>	
<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.</p>	<p>Supported:</p> <p>Text and interface elements in Mac OS X do not flash or blink in this range.</p>	
<p>(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.</p>	<p>Supported with exceptions:</p> <p>Mac OS X form elements provide information for assistive technologies via the Accessibility API.</p> <p>VoiceOver supports PDF and HTML forms using the Preview and Safari applications included with Mac OS X.</p>	

**Section 1194.31 Functional Performance Criteria - Detail
Voluntary Product Accessibility Template**

Criteria	Supporting Features	Remarks and explanations
<p>(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.</p>	<p>Supported with exceptions: Mac OS X supports users by providing the following features to operate the computer without vision:</p> <p>VoiceOver is a fully integrated, built-in, English speaking screen reader. It reads aloud the contents of documents like Web pages, Mail messages, and word processing files; provides a comprehensive audible description of the workspace and activities taking place on the computer; and provides keyboard commands that allow you to navigate, interact with, and control the Macintosh OS and applications. It is installed by default and requires no separate installation. It is activated by pressing Command-F5 at any time. The Mac OS X Tiger installation disk is also accessible using VoiceOver.</p> <p>Applications built using the Mac OS X development guidelines and the Mac OS X Accessibility APIs will work with VoiceOver.</p> <p>Keyboard support – Operating without vision can be accomplished using keyboard commands and/or spoken voice commands.</p>	<p>Remarks: Information about VoiceOver is available from http://www.apple.com/accessibility/VoiceOver.html.</p>

	<p>Apple Remote Desktop – Mac OS X includes the client software required to have an administrator or helper access a computer remotely over a network. It can be activated in the sharing system preference. This tool can be used to assist users in configuring their computers, or to teach a user how to perform an action. The Apple Remote Desktop software used by the administrator or helper is available separately.</p>	
<p>(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.</p>	<p>Supported: Mac OS X supports users who are visually impaired with VoiceOver, VoiceOver cursor zoom, a scalable mouse cursor, Zoom—a built-in screen magnification feature, and a “speak text under the mouse” feature.</p> <p>Universal Access Zoom view - With Zoom view users can magnify everything on screen making it larger and easier to see. Text and graphics are enlarged for easier reading and QuickTime video plays magnified without any performance degradation, a capability not available on any other operating system. The powerful Quartz rendering and compositing engine makes Zoom view possible, delivering magnification up to 40x, and sophisticated filtering and anti-aliasing to make text and graphics look good at larger sizes.</p> <p>Zoom includes a number of options like the ability to set maximum and minimum values for rapid zooming in and out, a preview rectangle that outlines the portion of the screen that will be magnified, and the ability to customize how the screen moves as you navigate with the mouse pointer.</p>	

	<p>Visually impaired users who wish to use the mouse can also use VoiceOver and the Speak Text Under The Mouse feature to hear a spoken description of information that is under the mouse pointer in addition to using the zoom feature.</p>	
<p>(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</p>	<p>Supported:</p> <p>Flash Screen - Mac OS X provides visual indication of alert sounds via the Flash Screen feature. When Mac OS X emits a sound to alert the user, it will also flash the screen once.</p> <p>iChat AV - iChat AV is included with Mac OS X and is the first desktop computer video conferencing solution with performance and clarity that allows users to communicate using sign language over the Internet. Using iChat AV, you can clearly see the finger and hand movements of the person with whom your communicating, giving you the technology to communicate from afar with the same range of emotion you use in person. For requirements, refer to http://www.apple.com/macosx/features/ichat/.</p> <p>QuickTime – QuickTime video or audio files can include an auxiliary text track for closed captioning.</p> <p>VoiceOver provides a unique “caption panel” that displays the text of what is being spoken by the synthesized VoiceOver voice. It can be used to enhance the Macintosh experience for those who prefer additional text description of activities taking place on their computer.</p>	

(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.	<p>Not Applicable: Audio is not required for operation of Mac OS X.</p>	
(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.	<p>Not Applicable Speech command and control is not required to use Mac OS X.</p> <p>Mac OS X includes built-in speech recognition functionality as a benefit to users who prefer to speak commands instead of, or in addition to, using the mouse or keyboard for command and control of their computer.</p>	<p>Remarks: Additional products are available for Macintosh that enable dictation (speech to text) and enhanced command and control using speech. For more information, refer to http://guide.apple.com.</p>
(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.	<p>Supported: Mac OS X provides the following features to assist users who do not have fine motor control or can't perform simultaneous actions easily:</p> <ul style="list-style-type: none"> • Sticky Keys, which is designed to allow a series of single key presses to be interpreted as a multiple keystroke combination. Sticky Keys is beneficial for people who have difficulty pressing multiple keys simultaneously. • Slow Keys, which is designed to put a delay between when a 	

	<p>key is pressed and when it is accepted by the system. Slow Keys is beneficial for people who may press keys accidentally and often. Click key sounds are also available to provide additional feedback when a key is accepted.</p> <ul style="list-style-type: none"> • Adjustable keyboard repeat delay, which is designed to prevent accidental entry of multiple single keystrokes. • Customizable keyboard commands allow a user to assign a keyboard combination to any menu item that doesn't already have one assigned or change an existing combination, for a specific application or for the entire system. • Double click speed adjustment allows users to customize the finger speed required to double click the mouse. • Speech commands are available for a limited set of actions. • Mac OS X supports many specialized input devices. For more information visit http://www.apple.com/accessibility/physical 	
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**Section 1194.41 Information, Documentation, and Support - Detail
Voluntary Product Accessibility Template**

<p>Section 1194.41 (a) Product Support Documentation</p>	<p>Supported:</p>	<p>Mac OS X documentation is available on line in HTML format, in the Apple Knowledge Base http://www.apple.com/support and in the Mac OS X product page at http://www.apple.com/macosex .</p> <p>Mac OS X online help also provides information on how to use various Universal Access features.</p>
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<p>Section 1194.41 (b) Accessibility and Compatibility Features</p>	<p>Supported: A VoiceOver Getting Started manual is available for download in PDF and MP3 formats at http://www.apple.com/accessibility/voiceover/manual.html</p>	<p>Mac OS X documentation is available on line in HTML format, in the Apple Knowledge Base http://www.apple.com/support and in the Mac OS X product page at http://www.apple.com/macosx .</p> <p>Mac OS X online help also provides information on how to use various Universal Access features.</p>
<p>1194.41 (c) Support Services</p>	<p>Supported:</p>	<p>Support via the Internet is available through the Apple Knowledge base at http://www.apple.com/support</p> <p>Apple can also assist customers using TDD.</p> <p>For additional information on the many service and support options offered by Apple visit www.apple.com/support.</p>

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Apple iMac G5 (17" and 20" Display)

Standards Subpart	Remarks
§ 1194.21 Software applications and operating systems.	The iMac comes with the Macintosh OS X operating system (the iMac tested was running OS X 10.3.5). Accessibility information for OS X is available at http://www.apple.com/accessibility/ .
§ 1194.22 Web-based intranet and internet information and applications.	Not applicable
§ 1194.23 Telecommunications products.	Please refer to the attached VPAT: Standard 1194.23(k) and its subparts apply to the iMac.
§ 1194.24 Video and multimedia products.	Please refer to the attached VPAT
§ 1194.25 Self contained, closed products.	Not Applicable: The iMac is not a self-contained, closed product.
§ 1194.26 Desktop and portable computers.	Please refer to the attached VPAT
§ 1194.31 Functional performance criteria.	Please refer to the attached VPAT and to the OS X VPAT at http://www.apple.com/accessibility/ .
§ 1194.41 Information, documentation, and support.	Please refer to the attached VPAT

Subpart B -- Technical Standards

§ 1194.23 Telecommunications products.

Criteria	Supporting Features	Remarks and explanations
(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	Not Applicable	
(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	Not Applicable	
(c) Voice mail, auto-attendant, and interactive	Not Applicable	

voice response telecommunications systems shall be usable by TTY users with their TTYs.		
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	Not Applicable	
(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	Not Applicable	
(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.	Not Applicable	
(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.	Not Applicable	
(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.	Not Applicable	

<p>(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.</p>	<p>Not Applicable</p>	
<p>(j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.</p>	<p>Not Applicable</p>	
<p>(k) Products which have mechanically operated controls or keys, shall comply with the following:</p>		
<p>(1) Controls and keys shall be tactilely discernible without activating the controls or keys.</p>	<p>Supported</p>	
<p>(2) Controls and keys shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2 N) maximum.</p>	<p>Supported</p>	
<p>(3) If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2</p>	<p>Supported</p>	<p>This delay is configurable with the OS X operating system.</p>

seconds per character.		
(4) The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	Supported with minor exception	Caps Lock is the only key with a visible locking indicator on the keyboard itself: it shows a light when caps lock is on, but this is not discernable by touch. When the OS' Sticky Keys feature is turned on, the locking status of the Shift, Control, Option and Apple keys is made visible on the screen.

§ 1194.24 Video and multimedia products.

Criteria	Supporting Features	Remarks and explanations
(a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives,	Not Applicable	

decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.		
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not Applicable	
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	Not Applicable	
(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	Not Applicable	
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	Not Applicable	

§ 1194.26 Desktop and portable computers.

Criteria	Supporting Features	Remarks and explanations
(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	Supported with minor exceptions	See 1194.23(k.1).
(b) If a product utilizes touchscreens or touch-	Not Applicable	

operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).		
(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not Applicable	
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.	Supported with minor exceptions	The iMac has no expansion slots. It has 10 connectors, located on the back of the unit, all of which are compliant with publicly available industry standards, including USB, FireWire (IEEE 1394), ADC, and mini audio. A blind user may have difficulty differentiating between the adjacently placed USB and FireWire connectors, as they are similar in size and shape. The audio-in and audio-out connectors are identical in size and shape and have no tactile differentiation.

Subpart C -- Functional Performance Criteria

§ 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	Operation and information retrieval are controlled via the operating system, and are documented in the OS X VPAT document at http://www.apple.com/accessibility/ . The iMac cannot be used by someone who relies solely on a screen reader because there is currently no screen reader available for Apple computers.

		Users who are visually impaired and capable of controlling a mouse can take advantage of the OS' accessibility enhancements (zoom, Spoken User Interface, etc.).
(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	Operation and information retrieval are controlled via the operating system, and are documented in the OS X VPAT document at http://www.apple.com/accessibility/
(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.	Supported	Operation and information retrieval are controlled via the operating system, and are documented in the OS X VPAT document at http://www.apple.com/accessibility/
(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.	Supported	Operation and information retrieval are controlled via the operating system, and are documented in the OS X VPAT document at http://www.apple.com/accessibility/
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for assistive	Supported	Speech is not required for operation or information retrieval.

technology used by people with disabilities shall be provided.		
(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	Operation and information retrieval are controlled via the operating system, and are documented in the OS X VPAT document at http://www.apple.com/accessibility/

Subpart D -- Information, Documentation, and Support

§ 1194.41 Information, documentation, and support.

Criteria	Supporting Features	Remarks and explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supported	Support documentation is available on the Web in HTML at http://www.apple.com/support/ .
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supported	Information about Apple product access features is available at http://www.apple.com/accessibility .
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supported	E-mail and phone support are available.