

Date: October 8, 2014

Name of Product: BladeCenter Storage and IO Expansion Option 30R7563

VPAT Summary

Criteria	Status	Remarks and Explanations
Section 1194.21 Software Applications and Operating Systems	Supports	Refer to Section 1194.21 in VPAT Details section below.
Section 1194.22 Web-based Internet information & applications	Not applicable	Not applicable
Section 1194.23 Telecommunications Products	Supports	Refer to Section 1194.23 in VPAT Details section below.
Section 1194.24 Video and Multi-media Products	Not applicable	Not applicable
Section 1194.25 Self-Contained, Closed Products	Supports	Refer to Section 1194.25 in VPAT Details section below.
Section 1194.26 Desktop and Portable Computers	Supports	Refer to Section 1194.26 in VPAT Details section below.
Section 1194.31 Functional Performance	Not applicable	Not applicable
Section 1194.41 Information, Documentation, and Support	Supports	Refer to Section 1194.41 in VPAT Details section below.

VPAT Details

Section 1194.21 Software Applications and Operating Systems - Detail

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.	Supports: A keyboard can be used to achieve all tasks in the application, allowing blind and mobility-impaired users to access information without the use of the mouse.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller V8.40 - Keyboard equivalents are available for most actions through several avenues of access. Mnemonics are available for menus in the menu bar. The toolbar and other panels contain buttons for common functions which are readily focusable and triggered with the spacebar or enter key. Finally context sensitive popup menus traditionally activated via a right mouse click may also be activated by the enter key whenever such a component has the keyboard focus. These components exist most frequently in the system tree or Enterprise View Physical Devices panel, the Logical Devices panel and physical device panel. Selection of these components traditionally activated via a left mouse click may also be triggered with the spacebar. Further notes on keyboard equivalents are found in the ServeRAID Manager documentation.
(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.	Supports: Operating systems provide accessibility features that allow disabled users to customize their preferences. This application preserves those accessibility user preference settings. For example, if Sticky Keys option is selected by a mobility-impaired user, this option will continue to be activated when used with this application.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - There is no known interference between existing keyboard accessibility features built into the Microsoft Windows Operating System and accessibility features built into the ServeRAID Manager. - Testing with the following features worked correctly: -- StickyKeys enabled -- FilterKeys enabled -- ToggleKeys enabled -- MouseKeys enabled -- HighContrast enabled
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus	Supports: When using the application with a keyboard, users can tell where they are	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - The proper focus

Criteria	Supporting Features	Remarks and Explanations
changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	on the screen and the information is available to assistive technologies to communicate screen location to visually impaired users.	is set on screens.
(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.	Supports: This software application allows a screen reader to describe the user interface environment and controls to a blind user. For example, if you tab through a form and find a radio button, the user would be able to determine it is a radio button and the current selection status of the button.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - The Java Accessibility API is implemented and/or used for focusable custom and native swing components. When using Scout to look at the properties of items, Scout properly listed the Name, Description and Role of the items.
(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.	Supports: The meaning assigned to images used in the application is consistent and unique, minimizing confusion of the context of use for those images.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - The Java Accessibility API is implemented and/or used for focusable custom and native swing components. When using Scout to look at the properties of items, Scout properly listed the Name, Description and Role of the items.
(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.	Supports: Text information is accessible so assistive technologies can communicate content, attributes and caret location to blind users.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - The Java Accessibility API is implemented and/or used for focusable custom and native swing components.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports: System settings are inherited by the application so that customized preferences will not need to be continually reset. For example, color contrast settings enhanced for a low vision user would be preserved by the application.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - The ServeRAID Manager (SRM) supports WLF (Windows Look and Feel) through a command line executable. SRM does take on the high contrast settings of Windows when set. ServeRAID Manager takes on the attributes of the Large Fonts. This is when using the WLF SRM command. The application needs to be restarted if fonts are changed when the application is currently open.
(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 following components do not apply to this criterion: - ServeRAID-8k-I SAS Controller - Not applicable since the ServeRAID Manager does not rely on animation to perform its function or relay information.
(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.	Supports: Color is used only as an enhancement, and an alternate means to convey information or indicate an action is available to users with visual impairments.	The following components meet this criterion: - ServeRAID-8k-I SAS Controller - Color is not used as the only way to convey information or indicate an action.
(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 following components do not apply to this criterion: - ServeRAID-8k-I SAS Controller - Color customization is not support by ServeRAID Manager.
(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 following components do not apply to this criterion: - ServeRAID-8k-I SAS Controller - Timing dealing with timed responses or blinking text or components is not applicable since the ServeRAID Manager does not have timed responses and rarely uses blinking icons. The rare use of blinking icons blink within the acceptable blinking range. The splash screen is shown for a brief period of time but conveys no real information and a similar screen may be viewed for any amount of time under the Help -> About menu.

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.	Not applicable	The following components do not apply to this criterion: - ServeRAID-8k-l SAS Controller - There are no electronic forms in the ServeRAID Manager.

Section 1194.23 Telecommunications Products - Detail

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 voice response telecommunications systems shall be usable by TTY users with their TTYs.	Not applicable	
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunication 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 receiver 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	
(i) Interface 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.	Not applicable	
(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 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.	Not applicable	
(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.	Supports: Touch can be used to identify and distinguish controls and keys without activating them.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Hardware Disk Drive (HDD) release latches are easy to use with one hand and minimal dexterity.

Criteria	Supporting Features	Remarks and Explanations
		HDD latches and Blade latches are visibly and tactile discernible without causing activation.
(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2N) maximum	Supports: Controls and latches can be reached and operated using one hand and require minimal dexterity for ease of use by mobility impaired users.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Hardware Disk Drive (HDD) release latches are easy to use with one hand and minimal dexterity.
(k)(3) Products which have mechanically operated controls or keys shall comply with the following: 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 seconds per character.	Supports: An option to change keyboard repeat rate is provided so users can adjust the rate to accommodate their needs.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Hardware Disk Drive (HDD) release latches are easy to use with one hand and minimal dexterity. Keyboard repeat is operating system (OS) specific.
(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	Supports: The status of locking and toggle controls or keys can be seen as well as distinguished by touch and/or sound when activated.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Hardware Disk Drive (HDD) release latches are easy to use with one hand and minimal dexterity. There are no locking or toggle keys unique to this product.

Section 1194.25 Self-Contained, Closed Products - Detail

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.	Not applicable	
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	
(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).	Not applicable	
(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	
(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.	Not applicable	
(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.	Not applicable	
(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.	Supports: Color is used only as an enhancement, and an alternate means to convey information or indicate an action is available to users with visual impairments.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Location is used in addition to color to differentiate between Activity and Fault LEDs on 2.5 inch hotswap hard drives.
(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.	Not applicable	
(i) Products shall be designed to avoid causing the	Not applicable	

Criteria	Supporting Features	Remarks and Explanations
screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.		
<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>(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>(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>(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>	Not applicable	

Section 1194.26 Desktop and Portable Computers - Detail

Criteria	Supporting Features	Remarks and Explanations
(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	Supports: See 1194.23(k) 1 through 4.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Hardware Disk Drive (HDD) release latches are easy to use with one hand and minimal dexterity.
(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).	Not applicable	The following components do not apply to this criterion: - BladeCenter Storage and IO Expansion Option - No touch screens or touch-operated controls in the product.
(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	The following components do not apply to this criterion: - BladeCenter Storage and IO Expansion Option - There are no biometric identification in the product.
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.	Not applicable	The following components do not apply to this criterion: - BladeCenter Storage and IO Expansion Option - Ports are controlled at the BladeCenter chassis level.

Section 1194.41 Information, Documentation, and Support - Detail

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.	Supports: Product support documentation is provided in at least one accessible format.	The following components meet this criterion: - BladeCenter Storage and IO Expansion Option - Documentation is provided in PDF format.

Criteria	Supporting Features	Remarks and Explanations
		<p>- ServeRAID-8k-I SAS Controller - Documentation is provided in accessible PDF format. Can be downloaded on the web from the high level URL: http://www-1.ibm.com/support/docview.wss?rs=0&uid=psg1SERV-RAID&loc=en_US.</p>
<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>	<p>Supports: Documentation includes a description of accessibility and compatibility features that make it easier for people with disabilities to use the product. Those descriptions are available in alternate formats upon request.</p>	<p>The following components meet this criterion:</p> <ul style="list-style-type: none"> - BladeCenter Storage and IO Expansion Option - Accessibility features are included in documentation. - ServeRAID-8k-I SAS Controller
<p>(c) Support services for products shall accommodate the communication needs of end-users with disabilities.</p>	<p>Supports: In addition to standard IBM help desk and support Web sites, IBM has established a TTY telephone service for use by deaf or hard of hearing customers to access sales and support services.</p>	

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