



Voluntary Product Accessibility Template

Date: 12 March 2014

Product Name: F5 BIG-IP Family (LTM/APM/ASM/WAM/GTM)

Product Version Number: 10.2.x and 11.x

Vendor Company Name: F5 Networks

Vendor Contact Name: Dan Gilbert

Vendor Contact Telephone: 206-272-6497

APPENDIX A: Suggested Language Guide

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Section 1194.21 Software Applications and Operating Systems - Detail

Voluntary Product Accessibility Template

<i>Criteria</i>	Level of Support & 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 through Equivalent Facilitation. BIG-IP hardware/software allows for access via a command-line interface (CLI), enabling full textual operation of the device.	The HTTP-based management interface does not provide full keyboard support for some interface elements. The CLI is available as an alternative and does not require a mouse or other pointing device.
(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. BIG-IP does not interfere with documented accessibility features of the operating systems used to access the management interfaces or other products that follow industry standards	
(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.	Supports. The current focus is identified visually through the display and audibly through speech output. Assistive technology can track the focus as it changes.	
(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 through Equivalent Facilitation. BIG-IP hardware/software allows for access via a command-line interface (CLI), enabling full textual operation of the device.	The HTTP-based management interface does not provide full keyboard support for some interface elements. The CLI is available as an alternative and does not require a mouse or other pointing device.

<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>Supports. Images used to identify programmatic elements have consistent meaning throughout the graphical user 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>Supports. BIG-IP displays its textual information via HTTP browser and Secure Shell (SSH) interfaces.</p>	
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supports. Management interfaces of BIG-IP do not interfere with user-specified preferences on the client device used to access them.</p>	<p>BIG-IP uses HTTP and SSH (secure shell) to provide communication channels for management information. It is up to the client device to provide the final rendering of this information based on the preferences of the user.</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 through Equivalent Facilitation. BIG-IP has an animated dashboard feature which is entirely optional. The user can review all information without using the dashboard through the CLI.</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 through Equivalent Facilitation. BIG-IP provides redundant cues when color is used to convey information.</p>	<p>Text labels are used to indicate meaning of visual elements.</p>
<p>(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.</p>	<p>Not Applicable.</p>	<p>All contrast controls are adjusted at the level of the device accessing BIG-IP's management interfaces.</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>Supports. BIG-IP does not use elements that blink or flash greater than 2Hz or less than 55Hz.</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>Supports through Equivalent Facilitation.</p>	<p>Client assistive technology can access the information and functions required for completion and submission of electronic forms. Users can use TAB to move between form elements. Due to the</p>

		number of elements on each page, it would be better to use the CLI in a situation when full keyboard control is required.
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Section 1194.22 Web-based Internet/Intranet information and applications - Detail

Voluntary Product Accessibility Template

<i>Criteria</i>	Level of Support & 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).	Supports. BIG-IP's user interface provides alternate text for any graphical element that is not accompanied by text in the display.	
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not Applicable. BIG-IP does not have any 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.	Supports. The UI can be displayed without color.	In this situation, it would be preferable for the user to access the BIG-IP device via the CLI, due to the way the HTTP page is rendered without color.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not Supported.	The hardware device does not store any information in the form of documents or files beyond those files required for operating the device.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not Applicable. BIG-IP's graphical interface does not use image maps for information selection/specification.	
(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. BIG-IP's graphical interface does not use image maps for information selection/specification.	
(g) Row and column headers shall be identified for data tables.	Not Supported.	This functionality is not currently implemented in a consistent manner across the UI.
(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.	Not Supported.	This functionality is not currently implemented in a consistent manner across the UI.
(i) Frames shall be titled with text	Not Supported.	This functionality is not currently

that facilitates frame identification and navigation		implemented in a consistent manner across the UI.
(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. BIG-IP's management interfaces do not cause screen flickers between 2 and 55 Hz when displaying information.	
(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 at this time	There are no files stores on this hardware device that are not core to the functioning of the hardware device itself. These files are proprietary in nature and involve the configuration of the device. There are no web pages to render in a text-only format that are part of this hardware device.
(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.	Supports.	BIG-IP's management interfaces can be read by Assistive Technology, both in and out of the HTTP browser context.
(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 UI for BIG-IP does not require an applet for routine maintenance and configuration. If the dashboard must be used, then there is a Java plugin required and that is handled through the browser's update mechanism.
(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.	Supports.	BIG-IP's management interfaces can be read by Assistive Technology, both in and out of the HTTP browser context.
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not Supported.	There is no navigation associated with this hardware device aside from that provided in the configuration software. There are no repetitive navigation links in this configuration software.
(p) When a timed response is	Not Applicable.	BIG-IP's management interfaces

<p>required, the user shall be alerted and given sufficient time to indicate more time is required.</p>		<p>do not have any time-bound data entry requirements</p>
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**Section 1194.23 Telecommunications Products - Detail
Voluntary Product Accessibility Template**

<i>Criteria</i>	Level of Support & Supporting Features	Remarks and explanations
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	

<p>(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<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>Supports. BIG-IP adheres to current electromagnetic interference (EMI) standards as set forth by Underwriters Laboratories (UL) and other certifying bodies.</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</p>	<p>Supports. BIG-IP adheres to the IEEE 802.3 standards for information transmission over Ethernet infrastructure. Management interfaces use open standards such as HTTP/HTTPS, secure shell (SSH), and RS-232 (front panel serial port, where fitted) for information transmission/access.</p>	

<p>delivery.</p>		
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	
<p>(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.</p>	<p>Not Applicable. BIG-IP is not a telecommunications device.</p>	

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

<i>Criteria</i>	Level of Support & 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, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.	Not Applicable. BIG-IP is not multimedia device.	
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not Applicable. BIG-IP is not multimedia device.	
(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	Not Applicable. BIG-IP is not multimedia device.	

<p>the content, shall be open or closed captioned.</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>Not Applicable. BIG-IP is not multimedia device.</p>	
<p>(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.</p>	<p>Not Applicable. BIG-IP is not multimedia device and the presentation of alternate audio descriptions is controlled on the client device accessing the management interfaces.</p>	

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

<i>Criteria</i>	Level of Support & 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.	

<p>(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.</p>	<p>Not Applicable.</p>	
<p>(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.</p>	<p>Not Applicable.</p>	
<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>Not Applicable.</p>	
<p>(i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.</p>	<p>Supports. See Section 1194.21.</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.</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.</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.</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>	

Section 1194.26 Desktop and Portable Computers		
<i>Criteria</i>	Level of Support & Supporting Features	Remarks and explanations
(a) All mechanically operated controls and keys shall comply with 1194.23 (k) (1) through (4).	Not Applicable.	
(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.	
(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	Supports. All user-accessible/usable ports comply with the appropriate industry standards.	

Section 1194.31 Functional Performance Criteria – Detail Voluntary Product Accessibility Template

<i>Criteria</i>	Level of Support & 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.	Supports through Equivalent Facilitation. BIG-IP does not require vision for operation or information retrieval and/or support for assistive technology is provided.	
(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.	Supports. BIG-IP does not require visual acuity greater than 20/70 for operation or information retrieval. Support for assistive technology is provided.	
(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	Supports. BIG-IP does not require user hearing for operation or information retrieval.	
(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. BIG-IP does not require audio information or feedback for proper operation.	
(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.	Supports. BIG-IP does not require user speech for operation or information retrieval.	

<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>	<p>Supports through Equivalent Facilitation. BIG-IP does not require fine motor control or simultaneous actions. The product is operable with limited reach and strength.</p>	<p>BIG-IP provides a command-line interface which can provide equivalent functions to those available through the graphical interface.</p>
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**Section 1194.41 Information, Documentation and Support – Detail
Voluntary Product Accessibility Template**

<i>Criteria</i>	Level of Support & Supporting Features	Remarks and explanations
<p>(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge</p>	<p>Supports. End-user documentation is available electronically in formats that can be used by screen-readers or printed by Braille embossers</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>Not Supported. F5 currently does not have an externally consumable description of the accessibility and compatibility features of its products.</p>	
<p>(c) Support services for products shall accommodate the communication needs of end-users with disabilities.</p>	<p>Supports. As above, end user documentation is available electronically in accessible formats. The Customer Support centers are able to receive calls via TTY service for those who are hearing or speech impaired.</p>	

APPENDIX A (of the DoS GPAT Checklist)

Suggested Language for Filling out the GPAT

In order to simplify the task of conducting market research assessments for procurement officials or customers, ITIC (Information Technology Industry Council) has developed suggested language for use when filling out a V PAT/G PAT. You may choose to employ all or some of the language below. Once you determine what language you intend to use, we recommend that use is consistent throughout all of your GPATs.

Supporting Features (Column 2 on G PAT)

Supports

Use this language when you determine the product fully meets the letter and intent of the Criteria.

Supports with Exceptions

Use this language when you determine the product does not fully meet the letter and intent of the Criteria, but provides some level of access relative to the Criteria.

Supports through Equivalent Facilitation

Use this language when you have identified an alternate way to meet the intent of the Criteria or when the product does not fully meet the intent of the Criteria.

Supports when combined with Compatible AT

Use this language when you determine the product fully meets the letter and intent of the Criteria when used in combination with Compatible AT. For example, many software programs can provide speech output when combined with a compatible screen reader (commonly used assistive technology for people who are blind).

Does not Support

Use this language when you determine the product does not meet the letter or intent of the Criteria.

Not Applicable

Use this language when you determine that the Criteria do not apply to the specific product.

Not Applicable - Fundamental Alteration Exception Applies

Use this language when you determine a Fundamental Alteration of the product would be required to meet the Criteria (see the access board standards for the definition of "fundamental alteration").

IMPACT Outreach Center

IRM Program for Accessible Computer/Communication Technology (IMPACT)

(IRM/BPC/BC/SAS)

2121 Virginia Ave, N.W. (SA-3), Suite 4170

Washington, DC 20520

Email: SECTION508@state.gov

Voice: (202) 663-0221

TTY: (202) 663-0084

Internet: <http://www.state.gov/m/irm/impact/index.htm>

Intranet: <http://impact.state.gov>

**** ITIC V PAT Best Practices (<http://www.itic.org/reports/508/Sec508.html>)**