**Date:** March 16, 2010 **Name of Product:** Cisco Digital Media System, version 5.2 **Contact for more Information:** Tim Cuddy, tcuddy@cisco.com

The following testing was done on a Windows XP with Internet Explorer 7.0, Microsoft XP Screen Magnifier, Microsoft XP Accessibility Options.

This is a very large project, with tens of dozens of web pages to go through. Therefore we did several ‘spot checks’ and found enough issues to warrant stopping the testing. Because of this, we did NOT test all the available web pages, nor did we use Freedom Scientific’s JAWs screen reader, v 7.0, or Microsoft XP On-screen Keyboard.

Cisco Digital Media System includes four product lines that span the entire digital media value chain:

1. Creation with Cisco Digital Media Encoders: The Cisco Digital Media Encoder 2000 is a studio-level appliance with multiple channel support, ideal for users who require a variety of encoding formats and functions, and high-bandwidth encoding. The Cisco Digital Media Encoder 1000 is a portable encoder that can be used wirelessly for single-channel encoding and can extend Webcasting "outside the studio". Both encoders support live and on-demand encoding in many formats. (THIS was not evaluated at this time, just the GUI interface)
2. Management with Cisco Digital Media Manager: The Cisco Digital Media Manager manages and publishes digital media for digital signage and desktop video. It provides tools for users to add and archive media, assign metadata and keywords, preview content and manage workflow, schedule instant and future deployments, and create playlists. The Cisco Digital Media Manager also includes functions to remotely manage Cisco Digital Media Encoders. The Cisco Digital Media Manager integrates with Cisco Application Networking Services technologies, including Cisco Application and Content Networking System (ACNS) and wide-area content engines, for optimal digital media delivery across the network.
3. Publishing to the Cisco Digital Media Player: From the Cisco Digital Media Manager, users can easily and flexibly publish centralized content to networked Cisco Digital Media Players. The Cisco Digital Media Player handles display and playback of content-including high-definition live broadcasts and on-demand video, flash animations, text tickers, and other Web content-across on-premise digital signage displays.
4. The Cisco Show and Share allows desktop users to quickly browse, search, and view digital media interactively. It features a customizable program guide and search functions, personalized play lists and featured lineups, advanced player controls, full-screen playback, and a usage reporting tool. It supports established video formats including Windows Media, Real, Flash, and MPEG/H.264.

 Show and Share provides a basic, server-based editor that provides the ability to trim and split videos, add chapters and slide graphics, and select the thumbnail image.

### Summary Table - Voluntary Product Accessibility Template

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| **Criteria**  | **Supporting Features** | **Remarks and Explanations** |
| Section 1194.21 Software Applications and Operating Systems  | Included | Cisco Show and Share – a flash based product. |
| Section 1194.22 Web-based internet information and applications  | Included | Cisco Digital Media Manager Web-based admin interface. |
| W3C Web Content Accessibility Guidelines version 2.0 | Included | Web-based Administration and User Pages |
| Section 1194.23 Telecommunications Products  | Not Applicable |  |
| Section 1194.24 Video and Multi-media Products  | Included | Cisco Show and Share support for video closed/open captioning |
| Section 1194.25 Self-Contained, Closed Products  | Not Applicable |  |
| Section 1194.26 Desktop and Portable Computers  | Not Applicable |  |
| Section 1194.31 Functional Performance Criteria  | Included |  |
| Section 1194.41 Information, Documentation and Support - Detail | Included |  |

The following hardware appliances are considered exempt from Section 508 because of the 1194.3(f) Back Office Exemption Clause. Products located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment are not required to be compliant with section 508. The follow physical hardware product is considered back office equipment.

1. Cisco Digital Media Encoders (2200 & 1100) - <http://www.cisco.com/en/US/products/ps7065/index.html>
2. Cisco Digital Media Player - <http://www.cisco.com/en/US/products/ps7220/index.html>

However, the software used to administer these hardware products is not exempt from Section 508. The remote configuration and management is done through Cisco Digital Media Manager, see statements in 1194.22 of this document.

### Section 1194.21: Software Applications and Operating Systems – Detail

The Cisco Show and Share allows desktop users to quickly browse, search, and view digital media interactively. It features a customizable program guide and search functions, personalized play lists and featured lineups, advanced player controls, full-screen playback, and a usage reporting tool. It supports established video formats including Windows Media, Real, Flash, and MPEG/H.264.

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| **508 Clause** | **Criteria**  | **Supporting Features** | **Remarks and Explanations** |
| 1194.21(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. | Does Not Support | Flex implementation does not allow keyboard navigation objects in the GUI. |
| 1194.21(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 | Edit form elements support FilterKeys. StickyKeys and ToggleKeys do not apply to the functions in the GUI, i.e. no simultaneous key presses or toggling functionality with in product. |
| 1194.21(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. | Does Not Support |  |
| 1194.21(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. | Does Not Support |  |
| 1194.21(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. | Does Not Support |  |
| 1194.21(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. | Does Not Support |  |
| 1194.21(g) | Applications shall not override user selected contrast and color selections and other individual display attributes. | Does Not Support | Product GUI does not inherit the OS settings. |
| 1194.21(h) | When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user. | Supports with exceptions | Product has a ticker tape that is displayed at the bottom on the open windows. But it is optional and can be turned off. There is not a non-animated alternative to this content. There are additional flashing/blinking objects, e.g. a Loading Data… notification in the Playlists Tab, that is in less that 1% screen size of the GUI. |
| 1194.21(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 |  |
| 1194.21(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 |  |
| 1194.21(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. | Supports with exceptions | Product has a ticker tape that is displayed at the bottom on the open windows that flashes. This ticker tape is a status indicator. |
| 1194.21(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. | Does Not Support |  |

### Section 1194.22 Web-based internet information and applications – Detail

### Digital Media Manager Administrative Interface Version 5.2

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| **508 Clause** | **Criteria** | **Status** | **Remarks and Explanations** |
| 1194.22(a) | A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content). | Does Not Support |  |
| 1194.22(b) | Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation. | Supports  | Supports text information based on chapter breaks, CC if the video is uploaded with it, and text transcripts. |
| 1194.22(c) | Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup. | Does not Support |  The pages do NOT follow preset colors for text, backgrounds, etc if defined in IE7. |
| 1194.22(d) | Documents shall be organized so they are readable without requiring an associated style sheet. | Does Not Support | Product relies on CSS for layout, if turned off the product is not usable. However, a user can utilize~~s~~ the following IE Explorer Accessibility Options to increase the text size and color:Ignore font styles and sizes on Web Pages. |
| 1194.22(e) | Redundant text links shall be provided for each active region of a server-side image map. | Not Applicable |   |
| 1194.22(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 |   |
| 1194.22(g) | Row and column headers shall be identified for data tables. | Supports with Exceptions | Data tables utilize the <th> tag for column headers. Summary table tags are not used to define data tables. |
| 1194.22(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. | Does not support | DMM has tables that can’t be accessed from keyboard.  |
| 1194.22(i) | Frames shall be titled with text that facilitates frame identification and navigation. | Not Applicable |   |
| 1194.22(j) | Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz. | Not Applicable |   |
| 1194.22(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. | Does Not Support |   |
| 1194.22(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. | Does Not Support | Product utilizes JavaScript modules for Navigation and Content. The implementation of these modules is not accessible to assistive technology and keyboard only navigation. |
| 1194.22(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). | Supports with Exceptions | IE 7 needed Flash plug-in in Video (Show & Share), no information or link was provided Windows Media and Adobe Flash are required. |
| 1194.22(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. |  Does Not Support |  See 1194.22(l) |
| 1194.22(o) | A method shall be provided that permits users to skip repetitive navigation links. | Does Not Support |   |
| 1194.22(p) | When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required. | Not Applicable |   |

### W3C WCAG 2.0 Level 1 Checkpoints – Detail

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| **Checkpoint** | **Description** | **Status** | **Comments** |
| 1.1.1 | Non text content | Fail | Several (most?) images lack the ‘ALT’ description tags, as do tables. |
| 1.2.1 | Audio-only and Video-only (Prerecorded) | Supports | Video content uploaded can have a CC (encoded in WMV format) transcript, or chapter breaks with text annotations can be inserted into the video from the editor. |
| 1.2.2 | Captions (Prerecorded) | Supports with exceptions | Cisco Show and Share provides CC capabilities but requires Windows Media 11 plug in for both Internet Explorer and Firefox. This requirement is not shown on the screen when you try to play a video. |
| 1.2.3 | Audio Description or Media Alternative (Prerecorded) | Not Applicable |  |
| 1.3.1 | Info and Relationships | Fail |  |
| 1.3.2 | Meaningful Sequence | Pass | I did not find unordered lists, or out of sequence tabs, but we only did a spot check of a few pages. |
| 1.3.3 | Sensory Characteristics | Fail | In the video editing portion, there are an entire set of buttons that ‘appear’ when you hover over the area with a mouse. |
| 1.4.1 | Use of Color |  |  |
| 1.4.2 | Audio Control | Pass | Embedded video player has ‘mute’ function |
| 1.4.3 | Contrast | Fail | Application does not inherit OS high contrast modes. Nor does turning off CSS work. |
| 2.1.1 | Keyboard | Fail | There are several places where you cannot navigate with the keyboard |
| 2.1.2 | No Keyboard Trap | Fail | It looks like the Flex plug in and possible Shockwave will trap keyboard input so you cannot tab or cursor OUT of the plug ins. |
| 2.2.1 | Timing Adjustable | Pass | I did not find any timeouts during testing |
| 2.2.2 | Pause, Stop, Hide | Fail | Hidden keys in the video editing portion |
| 2.3.1 | Three Flashes or Below Threshold | Pass | I did not find any flashing in any of the spot checked screens |
| 2.4.1 | Bypass Blocks | Pass |  |
| 2.4.2 | Page Titled | Pass | All pages checked contained the Title attribute |
| 2.4.3 | Focus Order | Fail | Since keyboard navigation is not fully supported, tab or cursor movement order could not be determined. |
| 2.4.4 | Link Purpose (In Context) | Fail | Several links checked did not have descriptions associated with them |
| 3.1.1 | Language of Page | Fail | Some pages did not have the language attribute |
| 3.2.1 | On Focus | Fail | Video listings pop up ‘hidden’ buttons when mouse over. |
| 3.2.2 | On Input | Pass w/ Exceptions | Note: Video Upload page… keyboard navigation cannot be used for ‘Add Optional Files’ tab |
| 3.3.1 | Error Identification | Pass |  |
| 3.3.2 | Labels or Instructions | Fail | Video upload page: When you ‘tab’ between Title, Description, etc… Jaws says ‘Tab’, with no information relating to which ENTRY field you are in.Also, required items are represented in a red \*, with no text for Jaws to say “required field” |
| 4.1.1 | Parsing | Fail | ??? |
| 4.1.2 | Name, Role, Value | Fail | Most all programmatically interface options are not accessible |

### Section 1194.24: Video and Multi-media Products – Detail

### Cisco Show and Share, Version 5.2

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| **508 Clause** | **Criteria** | **Supporting Features** | **Remarks and Explanations** |
| 1194.24(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 |   |
| 1194.24(b) | Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry. |  Not Applicable |   |
| 1194.24(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. | Support with Exceptions and dependent of Agency’s content | The Cisco Video Player does not support Closed Captioned video, but does support Open Captioned video. |
| 1194.24(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 |   |
| 1194.24(e) | Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent. |  Not Applicable |   |

### Section 1194.31: Functional Performance Criteria – Detail

### Cisco Video Portal, version 5.2 and Digital Media Manager Administrative Interface, version 5.2

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| **508 Clause** | **Criteria** | **Supporting Features** | **Remarks and Explanations** |
| 1194.31(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. | Does Not Support |  |
| 1194.31(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. | Does Not Support |  |
| 1194.31(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 |  |
| 1194.31(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. | Supports |  |
| 1194.31(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 |  |
| 1194.31(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. | Does Not Support |  |

### Section 1194.41: Information, Documentation and Support

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| **508 Clause** | **Criteria** | **Supporting Features** | **Remarks and Explanations** |
| 1194.41(a) | Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge |  Supports | Accessible documentation is available through Cisco Technical Assistance Center (TAC) upon request. |
| 1194.41(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. |  Supports | Accessible documentation is available through Cisco Technical Assistance Center (TAC) upon request. |
| 1194.41(c) | Support services for products shall accommodate the communication needs of end-users with disabilities. |  Supports | Cisco conforms through equal facilitation.  Customers may reach Cisco Technical Assistance Center (TAC) via Phone, Email or Web Form.   All cases open through email or web are opened as Priority 3 cases.   All Priority 1 or Priority 2 case can only be opened via the telephone.  TTY users must call the Text Relay Service (TRS) by dialing 711 and have the TRS agent contact Cisco TAC via voice. |