

Avaya IP Office 11.0 Telecommunication Functions in Branch Deployments

Voluntary Product Accessibility Template (VPAT)

This document describes the Avaya IP Office configuration in which it is used as the telephony server for a branch office, referred to in Avaya documentation as a distributed enterprise branch deployment. The statements in this document apply only to solutions configured in the following manner:

1. Requirements 1194.23(c) and 1194.23(d) are satisfied when the IP Office is configured to use the IP Office Voicemail Pro™ messaging system or the Avaya Modular Messaging system, and when TTY messaging is enabled on the configured messaging system.
2. Requirements 1194.23(e), 1194.23(k)(1), and 1194.23(k)(4) are satisfied when the end-user is provided with (a) a desktop PC that is running either Windows 7 (32-bit / 64-bit) or Windows 8 (32-bit / 64-bit) , (b) the ability to connect the PC, via a LAN, to the IP Office, (c) Avaya “one-X Portal for IP Office, Call Assistant” software, and (d) an Avaya telephone that is compatible with the IP Office and with the IP Office Call Assistant software.

IP Office 11 can also support centralized users in the branch office, using certain types of SIP phones. These centralized SIP phones are normally registered to the Avaya Aura® Session Manager at the enterprise center, and they fail over and register with the branch IP Office only in case of loss of IP connectivity between the branch and the central location. In deployments that include centralized users, IP Office can be configured to support also local IP Office users in the same branch office, which is referred to as mixed enterprise branch deployment. It is recommended that branch users with visual impairments, as well as branch users of TTY equipment, be deployed as IP Office users and not as centralized users.

Support Levels

Support Level	Description
Supports	Avaya IP Office 11 fully meets the letter and intent of the criterion.
Supports with Exceptions/Minor Exceptions	Avaya IP Office 11 does not fully meet the letter and intent of the criterion, but provides some level of access relative to the criterion.
Supports through Equivalent Facilitation	Avaya IP Office 11 provides an alternate way to meet the intent of the criterion.
Supports when combined with Compatible Assistive Technology	Avaya IP Office 11 fully meets the letter and intent of the criterion when used in combination with compatible assistive technology.
Does Not Support	Avaya IP Office 11 does not meet the letter or intent of the criterion.
Not Applicable	The criterion does not apply.
Not Applicable – Fundamental Alteration Exception Applies	A fundamental alteration of Avaya IP Office 11 is required to meet the criterion.

Compliance Summary

Criteria	Support Levels
Section 1194.21 Software Applications and Operating Systems	Not applicable
Section 1194.22 Web-based Intranet and Internet Information and Applications	Not applicable
Section 1194.23 Telecommunications Products	Supports
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	Supports
Section 1194.41 Information, Documentation and Support	Supports

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
<p>1194.23(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>	Supports	<p>Most TTYs that permit electronic, non-acoustic connections to the telephone network do so through RJ-11 tip/ring lines of the sort found on residential analog telephone equipment. Avaya IP Office 11 supports devices that connect in this manner. With regard to the intermixing of voice and TTY use, Avaya IP Office 11 may be used in conjunction with any standard "VCO-capable" TTY device, such as the Avaya Model 8840.</p>
<p>1194.23(b) Telecommunications products, which include voice communication functionality, shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.</p>	Supports	<p>IP Office 11 supports all of the non-proprietary analog TTY protocols that are commonly used in the US.</p> <p>If communication between the IP Office branch and the PSTN is done through a centralized trunk gateway via the enterprise WAN, then the system must be configured to utilize G.711 audio encoding and the underlying network must provide a packet loss rate less than 0.12%. If the WAN does not provide that then it is recommended that the system be configured such that TTY calls to/from branch users use local IP Office trunks and not centralized trunks across the enterprise WAN.</p> <ul style="list-style-type: none"> - For incoming TTY calls, this requires the branch TTY number to be routed by the PSTN to the branch local trunk, even if branch audio telephony numbers are routed by the PSTN to centralized enterprise trunks. - For outgoing TTY calls, this requires the IP Office to be configured such that TTY calls made by users in the branch are routed through local IP Office PSTN trunks.

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
<p>1194.23(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.</p>	<p>Supports</p>	<p>The IP Office 11 in 'Distributed enterprise branch deployments' may be configured with the Avaya VoiceMail Pro messaging adjunct or may be configured to use a central Avaya Modular Messaging system via SIP. Mixed enterprise branch deployments that include Centralized users in the branch support Modular Messaging but do not support voice mail on VoiceMail Pro. If use of a central Modular Messaging is configured, communication between the branch IP Office and the Modular Messaging system is done via the enterprise WAN. For TTY support the system must be configured to utilize G.711 audio encoding and the underlying network must provide a packet loss rate less than 0.12%.</p> <p>Both the IP Office VoiceMail Pro TTY user interface and the Modular Messaging TTY user interface are based on that of Avaya's Intuity AUDIX messaging system, winner of the Access Innovation Award from the Association of Access Engineering Specialists. They are operable with TTYs in a pure TTY mode or in a mixed TTY-and-voice mode, such as VCO (Voice Carry Over). Full TTY compatibility is provided for all telephone-access functions, including the subscriber user interface, call-answer user interface, and auto-attendant functions.</p> <p>For additional information, please refer to the VoiceMail Pro Voluntary Product Accessibility Template (VPAT).</p> <p>NOTE: In most cases, auto-attendant scripts are implemented by the managers of the systems, rather than by Avaya. For this reason, in many auto-attendant applications, it will be the purchaser's responsibility to ensure conformance with this accessibility standard.</p>

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
<p>1194.23(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>Supports</p>	<p>The IP Office 11 in Branch Deployments may be configured with the Avaya VoiceMail Pro messaging adjunct or with the Avaya Modular Messaging system.</p> <p>If IP Office VoiceMail Pro does not receive a response within 60 seconds after presenting a menu, it tells the user how to request help and how to request more time, and then warns the user that an entry must be made soon or the call will be disconnected. If there is an additional 60 seconds of inactivity after this warning, the system will say “goodbye” and disconnect. (The “wait” command initiates a timer that allows the user to take up to three minutes to make another entry.)</p> <p>The user interface operates in the same manner in Avaya Modular Messaging systems, except that the time-out interval can be changed to something other than 60 seconds by the system administrator.</p> <p>NOTE: In most cases, auto-attendant scripts are implemented by the managers of the systems, rather than by Avaya. The script-building tools that are included with IP Office VoiceMail Pro support the ability to implement time-out behaviors that comply with this requirement.</p>
<p>1194.23(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>For users of TTYs: Supports</p> <p>For users who cannot see displays: Supports when used in conjunction with Avaya “one-X Portal for IP Office, Call Assistant” software.</p>	<p>When TTY devices that have a caller ID function are connected electronically to an Avaya IP Office 11 system, caller ID information is displayed properly. When TTY devices are used in conjunction with Avaya telephones (e.g., via an acoustic coupler or a direct electronic connection via an adapter that connects to the phone’s handset jack), the phones themselves display the information.</p> <p>For users who cannot see displays, Avaya one-X Portal for IP Office Call Assistant software can present caller identification and similar telecommunications functions by voice through the user’s PC speakers.</p> <p>Please refer to the Call Assistant Voluntary Product Accessibility Template (VPAT) for a description of these and other capabilities provided in support of users with visual impairments.</p>

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
1194.23(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.	Supports	<p>Many (but not all) Avaya digital and IP telephones that are commonly used with Avaya IP Office 10.1 systems may be equipped with optional Avaya variable amplified handsets that provide a gain adjustable up to a minimum of 20 dB, with an intermediate step of 12 dB.</p> <p>Please refer to the Voluntary Product Accessibility Template (VPAT) for the telephone being considered, to ensure that the phone satisfies this requirement.</p>
1194.23(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.	Supports	<p>When used in conjunction with Avaya digital and IP telephones that permit remote-control of their volume settings, Avaya IP Office 10.0 has a per-extension configuration option to reset the volume of these phones to their default value at the end of every call.</p> <p>Please note also that the optional Avaya Model S1-K5 and S1-K6 variable amplified handsets have a user-selectable mode that causes the handset to reset automatically to the default level when the call is completed.</p>
1194.23(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	This requirement applies to transducer-equipped devices that are co-located with the users, such as telephone handsets. All Avaya desktop telephones are supplied with handsets that satisfy the FCC Part 68 requirements for hearing aid compatibility.
1194.23(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.	Not applicable	This requirement applies to endpoint devices that are co-located with the users, such as telephones and PC-based soft phones. There is no aspect of the Avaya IP Office 11 system that would interfere with the ability of an endpoint device to satisfy this requirement. All Avaya desktop telephones satisfy this requirement.

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
<p>1194.23(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>	Supports	<p>All in-band signals that can be transported reliably by the standard Public Switched Telephone Network are transmitted reliably within Avaya IP Office 11 telephone systems. When used in conjunction with Avaya TDM-based telephony endpoints, such as the Avaya Model 8840 TTY, no special modification or administrative settings are required.</p> <p>Note: For some IP-connected devices or services, it may be necessary for the Avaya IP Office 10.1 system administrator to specify that certain protocols be used, e.g., G.711 audio encoding.</p>
<p>1194.23(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>	Not applicable	<p>This requirement applies to endpoint devices that are co-located with the users, such as telephones and PC-based soft phones.</p> <p>Note: Many digital and IP desktop telephones have “soft key” or touch screen controls that do not satisfy this requirement. Avaya one-X Portal for IP Office Call Assistant software allows most functions on compatible phones to be accessed via user-specified keys on the user’s computer keyboard. Please refer to the Call Assistant Voluntary Product Accessibility Template (VPAT) for a description of these and other capabilities provided in support of users with visual impairments.</p>
<p>1194.23(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>	Not applicable	<p>This requirement applies to endpoint devices that are co-located with the users, such as telephones and PC-based soft phones.</p>
<p>1194.23(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>	Not applicable	<p>This requirement applies to endpoint devices that are co-located with the users, such as telephones and PC-based soft phones.</p>

§ 1194.23 Telecommunications Products

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
<p>1194.23(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</p>	<p>This requirement applies to endpoint devices that are co-located with the users, such as telephones and PC-based soft phones.</p> <p>The status of all locking or toggle controls or keys is visually discernible on all Avaya telephones and PC-based soft phones that are recommended for use with IP Office.</p> <p>The status of all locking or toggle controls or keys is discernible by sound (specifically, by voice output through the user's PC speakers) when the telephone is used in conjunction with Avaya one-X Portal for IP Office Call Assistant software. Please refer to the Call Assistant Voluntary Product Accessibility Template (VPAT) for a description of these and other capabilities provided in support of users with visual impairments.</p>

§ 1194.31 Functional Performance Criteria

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
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.	Supports	Features that facilitate use by people who are blind or visually impaired are described in the sections that address paragraphs 1194.23(e), 1194.23(k)(1), and 1194.23(k)(4).
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.	Supports	The alpha-numeric displays on the Avaya telephones that are recommended for use with Avaya IP Office 11 conform to all aspects of this recommendation.
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	Features that support TTY compatibility are described in the sections that address paragraphs 1194.23(a), 1194.23(b), 1194.23(c), 1194.23(e), and 1194.23(j). Features that provide enhanced audio are described in the sections that address paragraphs 1194.23(f) and 1194.23(g). Support for assistive hearing devices is described in the sections that address paragraphs 1194.23(h) and 1194.23(i).
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	Features that provide enhanced audio are described in the sections that address paragraphs 1194.23(f) and 1194.23(g). Support for assistive hearing devices is described in the sections that address paragraphs 1194.23(h) and 1194.23(i).
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	No IP Office functions are operable solely by user speech. For communication purposes, features that support TTY compatibility are described in the sections that address paragraphs 1194.23(a), 1194.23(b), 1194.23(c), 1194.23(e), and 1194.23(j).
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.	Supports	The operational characteristics of all controls in the Avaya telephones commonly used with Avaya IP Office 11 are within the limits specified by paragraph 1194.23(k)(2).

§ 1194.41 Information, Documentation and Support

<i>Criteria</i>	<i>Support Levels</i>	<i>Remarks and Explanations</i>
1194.41(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supports	Will provide 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	Will provide upon request.
1194.41(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Contact Avaya Support for accessibility-related issues.

© 2018 Avaya Inc.

All rights reserved. Except as specifically stated, none of the material may be copied, reproduced, distributed, republished, downloaded, displayed, posted, or transmitted in any form without authorized, prior written permission from Avaya Inc. Permission is granted for you to make a single copy of Avaya Inc. "Section 508" documents, solely for informational and non-commercial use within your organization, provided that you keep intact all copyright and other proprietary notices. No other use of the information provided is authorized.

This market information is provided, pursuant to FAR Part 39.2, to be used by Requiring Officers. It is not intended to represent a certification for compliance. Any statement of compliance or conformance indicated on this document is an indication that the product shall be capable, at the time of its delivery, when used in accordance with Avaya's associated documents, and other written information provided to the government, of providing comparable access to individuals with disabilities consistent with the designated provision of the Standards, provided that any assistive technologies used with the product properly interoperates with it and other assistive technologies.

Updated April 16, 2018