Planning for and Administering Avaya Workplace Client for Android, iOS, Mac, and Windows

October 2, 2020

Notices

You may, at your own risk, assemble a MyDocs collection solely for your own internal business purposes, which constitutes a modification to the original published version of the publications. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of publications. You agree to defend, indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, your modifications, additions or deletions to the publications.

A single topic or a collection of topics may come from multiple Avaya publications. All of the content in your collection is subject to the legal notices and disclaimers in the publications from which you assembled the collection. For information on licenses and license types, trademarks, and regulatory statements, see the original publications from which you copied the topics in your collection.

Except where expressly stated by Avaya otherwise, no use should be made of materials provided by Avaya on this site. All content on this site and the publications provided by Avaya including the selection, arrangement and design of the content is owned by Avaya and/or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. Avaya owns all right, title and interest to any modifications, additions or deletions to the content in the Avaya publications.

Legal

Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

“Documentation” means information published in varying mediums which may include product information, operating instructions and performance specifications that are generally made available to users of products. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of Documentation unless such modifications, additions, or deletions were performed by or on the express behalf of Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or Documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya’s standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: https://support.avaya.com/helpcenter/getGenericDetails?detailId=C20091120112456651010 under the link “Warranty & Product Lifecycle” or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

“Hosted Service” means an Avaya hosted service subscription that You acquire from either Avaya or an authorized Avaya Channel Partner (as applicable) and which is described further in Hosted SAS or other service description documentation regarding the applicable hosted service. If You purchase a Hosted Service subscription, the foregoing limited warranty may not apply but You may be entitled to support services in connection with the Hosted Service as described further in your service description documents for the applicable Hosted Service. Contact Avaya or Avaya Channel Partner (as applicable) for more information.

Hosted Service

THE FOLLOWING APPLIES ONLY IF YOU PURCHASE AN AVAYA HOSTED SERVICE SUBSCRIPTION FROM AVAYA OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE AVAYA WEBSITE, HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO UNDER THE LINK "Avaya Terms of Use for Hosted Services" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, AND ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES THE HOSTED SERVICE. BY ACCESSING OR USING THE HOSTED SERVICE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE DOING SO (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS OF USE. IF YOU ARE ACCEPTING THE TERMS OF USE ON BEHALF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE TERMS OF USE. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU DO NOT WISH TO ACCEPT THESE TERMS OF USE, YOU MUST NOT ACCESS OR USE THE HOSTED SERVICE OR AUTHORIZE ANYONE TO ACCESS OR USE THE HOSTED SERVICE.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, HTTPS://SUPPORT.AVAYA.COM/LICENSEINFO, UNDER THE LINK "AVAYA SOFTWARE LICENSE TERMS (Avaya Products)" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License as set forth below in the Designated System(s) License (DS) section as applicable. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. "Software" means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a set of Designated Processors that hosts (physically or virtually) a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

License types

Designated System(s) License (DS). End User may install and use each copy or an Instance of the Software only: 1) on a number of Designated Processors up to the number indicated in the order; or 2) up to the number of Instances of the Software as indicated in the order, Documentation, or as authorized by Avaya in writing. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Concurrent User License (CU). End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time as indicated in the order, Documentation, or as authorized by Avaya in writing. A “Unit” means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server or an Instance of the Software.

Named User License (NU). End User may: (i) install and use each copy or Instance of the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use each copy or Instance of the Software on a Server so long as only authorized Named Users access and use the Software as indicated in the order, Documentation, or as authorized by Avaya in writing. “Named User”, means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya’s sole discretion, a “Named User” may be, without limitation, designated by name, corporate function (e.g., webmaster or helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software.

Shrinkwrap License (SR). End User may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as “shrinkwrap” or “clickthrough” license accompanying or applicable to the Software (“Shrinkwrap License”) as indicated in the order, Documentation, or as authorized by Avaya in writing.

Heritage Nortel Software

“Heritage Nortel Software” means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software is the software contained within the list of Heritage Nortel Products located at https://support.avaya.com/LicenseInfo under the link “Heritage Nortel Products” or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

Virtualization

The following applies if the product is deployed on a virtual machine. Each product has its own ordering code and license types. Unless otherwise stated, each Instance of a product must be separately licensed and ordered. For example, if the end user customer or Avaya Channel Partner would like to install two Instances of the same type of products, then two products of that type must be ordered.

Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya's website at: https://support.avaya.com/Copyright or such successor site as designated by Avaya. The open source software license terms provided as Third Party Terms are consistent with the license rights granted in these Software License Terms, and may contain additional rights benefiting You, such as modification and distribution of the open source software. The Third Party Terms shall take precedence over these Software License Terms, solely with respect to the applicable Third Party Components to the extent that these Software License Terms impose greater restrictions on You than the applicable Third Party Terms.

The following applies only if the H.264 (AVC) codec is distributed with the product. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM.

Service Provider

THE FOLLOWING APPLIES TO AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS OR SERVICES. THE PRODUCT OR HOSTED SERVICE MAY USE THIRD PARTY COMPONENTS SUBJECT TO THIRD PARTY TERMS AND REQUIRE A SERVICE PROVIDER TO BE INDEPENDENTLY LICENSED DIRECTLY FROM THE THIRD PARTY SUPPLIER. AN AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS MUST BE AUTHORIZED IN WRITING BY AVAYA AND IF THOSE HOSTED PRODUCTS USE OR EMBED CERTAIN THIRD PARTY SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE OR CODECS, THE AVAYA CHANNEL PARTNER IS REQUIRED TO INDEPENDENTLY OBTAIN ANY APPLICABLE LICENSE AGREEMENTS, AT THE AVAYA CHANNEL PARTNER'S EXPENSE, DIRECTLY FROM THE APPLICABLE THIRD PARTY SUPPLIER.

WITH RESPECT TO CODECS, IF THE AVAYA CHANNEL PARTNER IS HOSTING ANY PRODUCTS THAT USE OR EMBED THE H.264 CODEC OR H.265 CODEC, THE AVAYA CHANNEL PARTNER ACKNOWLEDGES AND AGREES THE AVAYA CHANNEL PARTNER IS RESPONSIBLE FOR ANY AND ALL RELATED FEES AND/OR ROYALTIES. THE H.264 (AVC) CODEC IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO: (I) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (II) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION FOR H.264 (AVC) AND H.265 (HEVC) CODECS MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM.

Compliance with Laws

You acknowledge and agree that it is Your responsibility for complying with any applicable laws and regulations, including, but not limited to laws and regulations related to call recording, data privacy, intellectual property, trade secret, fraud, and music performance rights, in the country or territory where the Avaya product is used.

Preventing Toll Fraud

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Toll Fraud intervention

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: https://support.avaya.com or such successor site as designated by Avaya.

Security Vulnerabilities

Information about Avaya's security support policies can be found in the Security Policies and Support section of https://support.avaya.com/security.

Suspected Avaya product security vulnerabilities are handled per the Avaya Product Security Support Flow (https://support.avaya.com/css/P8/documents/100161515).

Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: https://support.avaya.com, or such successor site as designated by Avaya.

Contact Avaya Support

See the Avaya Support website: https://support.avaya.com for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: https://support.avaya.com (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, its licensors, its suppliers, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Introduction

Purpose

This document provides planning and administration information for Avaya Workplace Client. It also describes additional setup options for Avaya Workplace Client on desktop platforms. Administrators must complete the tasks before end users can use Avaya Workplace Client.

This document includes Avaya Aura® content for Avaya Workplace Client. IP Office content for Avaya Workplace Client is covered in IP Office documentation.

Prerequisites

Before using this document, ensure that you have the following knowledge and skills:

- Know how to install and configure the Avaya products for your deployment. For example:
    - Avaya Aura® products
    - Avaya Session Border Controller for Enterprise
    - Avaya Equinox® Media Server
    - Avaya Multimedia Messaging

  This document includes configuration requirements specific to Avaya Workplace Client, but not general deployment instructions for all products.
- For automatic configuration, ensure that you know how to create a settings file in the settings.txt format.
- Ensure that you are familiar with the process for finding and obtaining Avaya and third-party security certificates. This document provides guidelines for certificates, but does not provide specific instructions for every certificate type that you might need.
- Ensure that you know how to open ports and firewalls. You must also be familiar with the Avaya Workplace Client Port Matrix document at https://downloads.avaya.com/css/P8/documents/101065872.

Avaya Workplace Client overview

Avaya Workplace Client is a soft phone application that provides access to Unified Communications (UC) and Over the Top (OTT) services. You can access Avaya Workplace Client on the following platforms:

- Mobile:
  - Android: From a mobile phone, tablet, or an Avaya Vantage™ device
  - iOS: From an iPad, iPhone, or iPod Touch
- Desktop:
  - Mac
  - Windows
  - Chrome: From a Google Chromebook

Based on your feature requirement, you can deploy Avaya Workplace Client in several ways. In the basic deployment type, you can have only voice calling. You can then include additional features such as directory search, contact management, presence, instant messaging, and conferencing.

With Avaya Workplace Client, you can use the following functionalities:

- Make point-to-point audio and video calls.
- Answer calls, send all calls to voice mail, and forward calls
- Extend calls to your mobile phone if EC500 is configured
- Log in to your extension and join calls with multiple devices if Multiple Device Access (MDA) is configured.
- Listen to your voice mail messages.
- View your call history.
- Access your Avaya Aura® and local contacts.
- Perform an enterprise-wide search using Avaya Aura® Device Services, Client Enablement Services, Avaya Cloud Services, ActiveSync on mobile platforms and Avaya Aura® Device Services, LDAP, or Avaya Cloud Services on desktop platforms.
- Manage your presence status and presence status message.
- Send instant messages.
- Capture photo, audio, and video files, and send generic file attachments in an IM conversation.
- Join and host conference calls with moderator controls.
- Use point-to-point and conference call control functionality. You can also add participants to a conference.
- Share a screen portion, the entire display screen, an application, or a whiteboard while on a conference call on desktop platforms.
- View a portion of the screen, the entire display screen, an application, or a whiteboard shared by another conference participant on mobile and desktop platforms.

Note:

Some Avaya Workplace Client features must be configured for your enterprise before you can use them.

Agent overview

To use the Contact Center agent capabilities with Avaya Workplace Client, you must log in to the Customer Service mode. In the Customer Service mode, you can do the following using Avaya Workplace Client on mobile platforms:

- Answer an incoming agent call when you are in the Available state. Your agent state changes to On A Call.
- Decline an incoming call when you are in the Available state. Your agent state changes to Not Ready, that is, AUX, and you do not receive any further agent calls until you manually change your state to Available. However, you continue to receive Unified Communications calls.
- Configure your agent states: Available, Not Ready, or After Call Work (ACW).
- Enable the Auto In or Manual In work mode.
- Update your skill set.
- View your call history.

Solution architecture

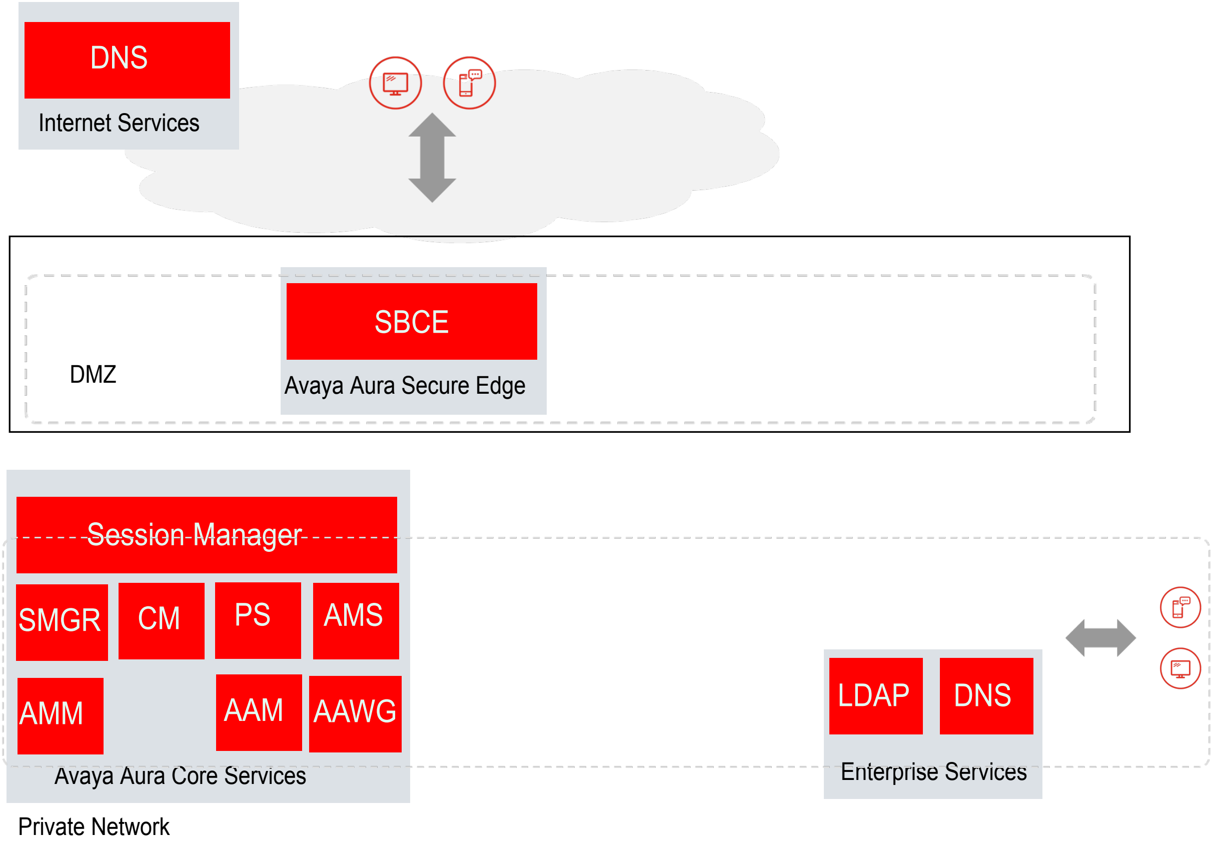
SIP Voice, Remote Worker, and Messaging

The following images provide a high-level architecture of the Avaya Workplace Client solution based on the functionality that is provided.

In the Split-Horizon Domain Name System (DNS) scenario:

- When remote, the external DNS service maps a single fully qualified domain name (FQDN) to the SBCE IP address.
- When on-premise, the internal DNS service maps the same FQDN to the Session Manager IP address.

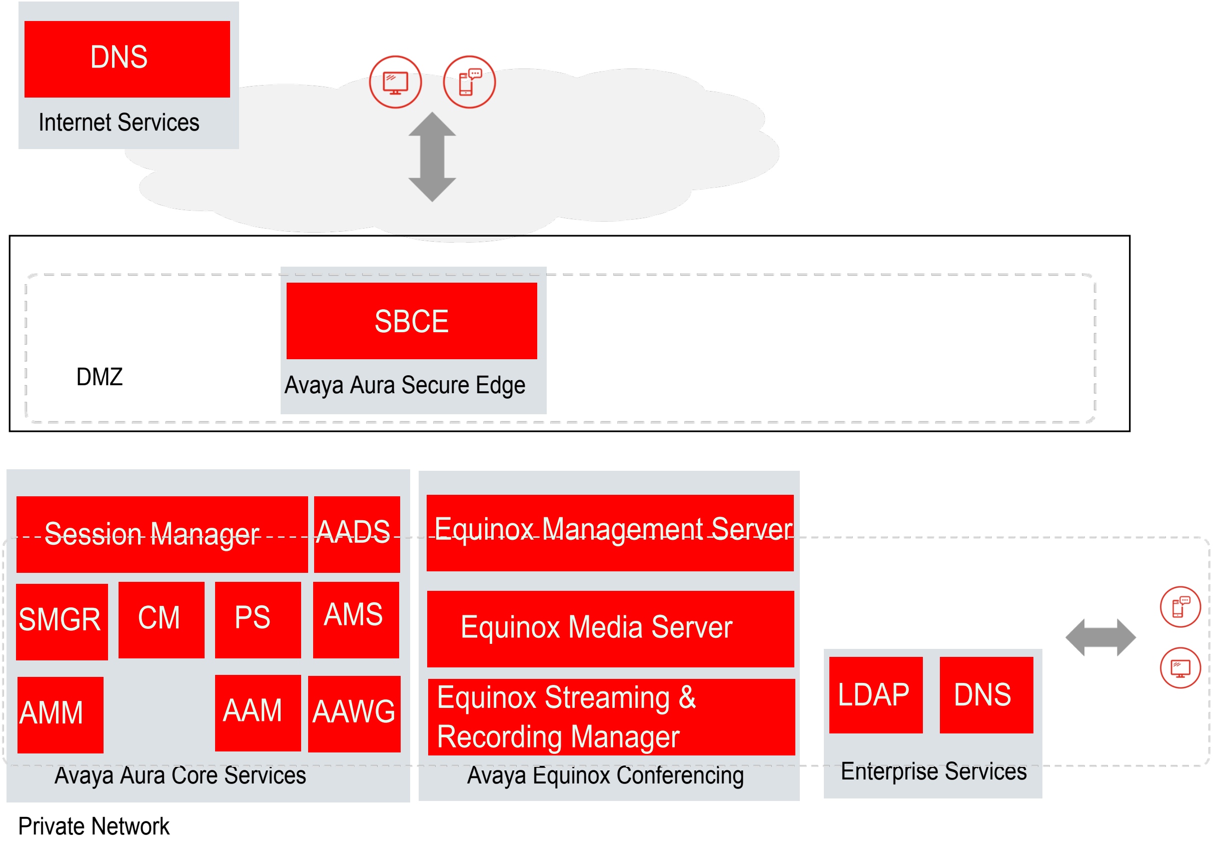
If Avaya Workplace Client connects remotely through SBCE and directly to Session Manager when on-premise, the same port must function as the internal port on Session Manager and the external port on SBCE.



Acronym	Full name
SBCE	Avaya Session Border Controller for Enterprise
AADS	Avaya Aura® Device Services
SMGR	Avaya Aura® System Manager
CM	Avaya Aura® Communication Manager
PS	Avaya Aura® Presence Services
AMS	Avaya Aura® Media Server
AMM	Avaya Multimedia Messaging
AAM	Avaya Aura® Messaging
AAWG	Avaya Aura® Web Gateway
CES	Client Enablement Services

Protocol	Private net destination	Service
SIP-TLS	Session Border Controller and Session Manager	SIP Signalling
SRTP	Point-to-point, Media Servers, and Gateways	Audio/Video Media
HTTPS	Session Manager	PPM
HTTPS	Utility Server or other Web Server	Automatic configuration
HTTPS	Avaya Multimedia Messaging	Instant Messaging
DNS	Internal/External DNS	Automatic configuration service discovery resolution of internal and external services

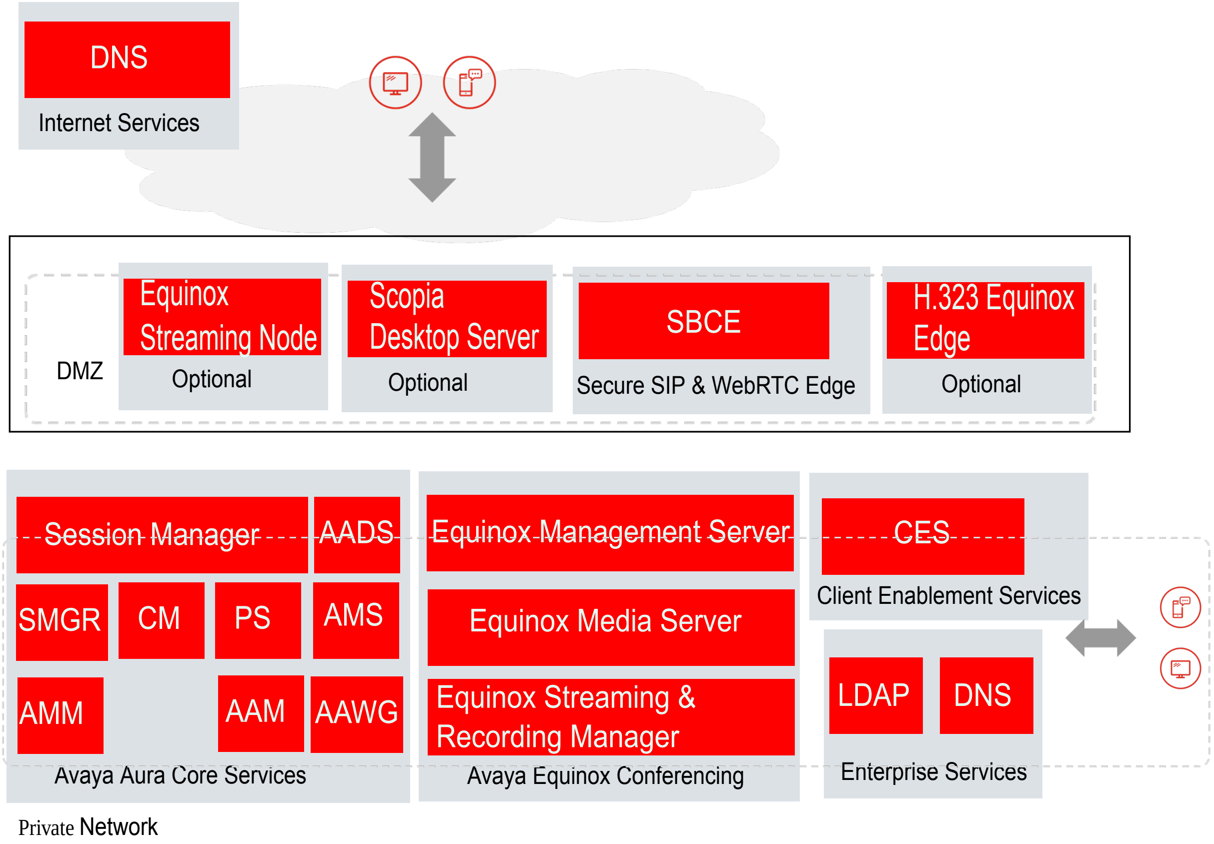
SIP Voice, Remote Worker, Messaging, Conferencing, and Device Services



Protocol	Private net destination	Service
SIP-TLS	Session Border Controller and Session Manager	SIP Signalling

Protocol	Private net destination	Service
SRTP	Point-to-point, Media Servers, and Gateways	Audio/Video Media
HTTPS	Session Manager	PPM
HTTPS	Avaya Aura® Device Services	Automatic configuration, Auto-update, Directory Service, and Contact Service
HTTPS	Avaya Multimedia Messaging	Instant Messaging
HTTPS	WCS	Web Collab
DNS	Internal/External DNS	Automatic configuration service discovery

SIP Voice, Remote Worker, Messaging, Conferencing, Device Services, and Client Enablement Services



Protocol	Private net destination	Service
SIP-TLS	Session Border Controller and Session Manager	SIP Signalling
SRTP	Point-to-point, Media Servers, and Gateways	Audio/Video Media
HTTPS	Session Manager	PPM
HTTPS	Avaya Aura® Device Services	Automatic configuration, Auto-update, Directory Service, and Contact Service
HTTPS	Avaya Multimedia Messaging	Instant Messaging
HTTPS	WCS	Web Collab
DNS	Internal/External DNS	Automatic configuration service discovery
CES	Client Enablement Services	Call logs, voice mail, and call-back

Deployment options

Based on your feature requirement, you can deploy Avaya Workplace Client in several ways. In the basic deployment type, you can have only voice calling. You can then include additional features such as directory search, contact management, presence, instant messaging, and conferencing.

Deployment type	Function
Basic UC deployment	Use this deployment option to perform voice calling in your enterprise. The Avaya Aura® environment includes Communication Manager, Session Manager, and System Manager.

Deployment type	Function
UC deployment without conferencing	Use this deployment option to access UC functionality without conferencing in your enterprise. The Avaya Aura® environment includes Session Manager, Communication Manager, System Manager, and Presence Services. Avaya Aura® environment provides UC services such as voice and video calls, and presence. You can optionally integrate Avaya Workplace Client with the following components: • Avaya Multimedia Messaging: For instant messages • Avaya Session Border Controller for Enterprise • Client Enablement Services: Only on mobile clients
Unified Communications (UC) deployment Also known as the Team Engagement (TE) deployment	Use this deployment option to access complete UC functionality in your enterprise. The Avaya Aura® environment includes Session Manager, Communication Manager, System Manager, Presence Services, and Avaya Aura® Device Services. Avaya Aura® environment provides UC services to an enterprise. The UC services include voice and video calls, audio and video conferences, directory search, contact management, and presence. You can optionally integrate Avaya Workplace Client with the following components: • Avaya Equinox® Conferencing Release 9.0 or later • Avaya Multimedia Messaging: For instant messages • Avaya Spaces: For instant messages and meetings • Avaya Session Border Controller for Enterprise • Unified Portal • Avaya Aura® Web Gateway • Client Enablement Services: Only on mobile clients

Deployment type	Function
Over the Top (OTT) deployment Also known as the Meet-Me deployment	Use this deployment option to access only the conferencing functionality in your enterprise. You can deploy Avaya Equinox® Conferencing Release 9.0 or later in an environment with a non-Avaya voice solution, such as Cisco CUCM or Siemens. You can assign some users a virtual room for audio, video, and data conferencing. In an OTT deployment, clients join the conference by using HTTP-based protocols, not SIP. For OTT deployments that use third-party SIP servers, Avaya Workplace Client signs in to Avaya Equinox® Management or LDAP directory for user validation and authentication. You can optionally integrate Avaya Workplace Client with the following components: • Avaya Spaces • Avaya Session Border Controller for Enterprise • Unified Portal • Avaya Aura® Web Gateway

User types

User type	Definition
Basic UC with voice only	These users use Avaya Workplace Client for voice calls.
UC without conferencing	These users use Avaya Workplace Client as a primary UC client for voice and video calls, instant messaging, and presence.
UC	These users use Avaya Workplace Client as a primary UC client for voice and video calls, audio and video conferences, directory search, contact management, instant messaging, and presence. A UC user can be a host or guest at any conference.

User type	Definition
OTT Named or OTT Signed in	These users do not use Avaya Workplace Client as a primary UC client but need to host conferences with audio and video and present content. These users have a virtual room and associated features such as recording resources. In an OTT deployment, clients join the conference by using HTTP-based protocols, not SIP.
OTT Guest	These users do not use Avaya Workplace Client as a primary UC client but need to join conferences with audio and video as guests. These users might need to present by using screen sharing. In an OTT deployment, clients join the conference by using HTTP-based protocols, not SIP.
Outbound Guest	An outbound guest is a user of the Avaya UC or OTT deployment who joins an Avaya Workplace Client conference hosted by an external party. For example, an Avaya Workplace Client user of XYZ Corp joins an Avaya Equinox® Conferencing 9.0 conference hosted by a user at ABC Corp.
Inbound Guest	An inbound guest is a user from an external company, such as a partner, supplier, customer, or a prospect who joins a conference hosted by a user of the Avaya UC or OTT deployment.

Components overview

During the planning phase, you must configure Avaya Workplace Client components and their associated security certificates in your network. The required components vary depending on the deployment type and the functionality that you choose to configure. For information about the available UI functionality and advanced functionality options, see the “Planning for deployment” chapter in this document.

For more information about interoperability with other components, see http://support.avaya.com/CompatibilityMatrix/Index.aspx.

Solution component to feature map

The components you require depend on the feature set you need. For new deployments and the best experience for any implementation, you must include the Avaya Aura® core components including Avaya Aura® Presence Services and Avaya Aura® Device Services.

The following table provides a mapping of solution components to Avaya Workplace Client features:

Solution component	Feature
Core Avaya Aura® components including: • Avaya Aura® System Manager • Avaya Aura® Session Manager • Avaya Aura® Communication Manager	• Audio and video calling • Voice and advanced voice features • 6-party adhoc audio conference • Multiple Device Access • Centralized Workplace Contacts for Mac and Windows • Centralized call logs
Avaya Aura® Presence Services	• Persistent multimedia messaging • Presence • Instant messaging and presence federation • Microsoft Exchange and Office 365 Calendar integration
Avaya Aura® Device Services	• Directory search and advanced search • Contact favorites and contact grouping • Centralized Workplace Contacts for Android, iOS, Mac, and Windows • Advanced automatic configuration • Unified Login with enterprise credentials • Automatic update of Mac and Windows clients • OAuth or SAML authentication and SSO
Avaya Aura® Web Gateway	VoIP Push Notifications for iOS
Avaya Session Border Controller for Enterprise (SBCE)	Remote worker support without VPN
Avaya IX Meetings	On-premise or private cloud audio, video, or web conferencing
Microsoft Exchange or Office 365	Top of Mind calendar support

Solution component	Feature
Avaya Cloud Services	- Avaya Spaces Direct Messaging - Open Avaya Spaces dashboard - Alternative service discovery option for automatic configuration

Components needed for UC deployments

Component	Platform	Function
Core Avaya Aura® components	All Avaya Workplace Client platforms	Configure the following components in your network: - Avaya Aura® System Manager - Avaya Aura® Session Manager - Avaya Aura® Communication Manager Use these components to perform voice calling in your enterprise.
Avaya Aura® Device Services	All Avaya Workplace Client platforms	This component provides a common place in the Avaya Aura® architecture for client and endpoint devices to store and retrieve contact data. Contact data includes enterprise contacts and Avaya Aura® PPM contacts. Users can view contact data on any of their devices. Contact groups are only available with Avaya Aura® Device Services Release 7.1.6 and later. Avaya Aura® Device Services is also used for the automatic configuration of Avaya Workplace Client. **Note:** Call logs are not a part of Avaya Aura® Device Services. This component is mandatory for Avaya Equinox® Conferencing.

Component	Platform	Function
Avaya Aura® Web Gateway	All Avaya Workplace Client platforms	This component acts as a gateway to Avaya Aura® clients and applications utilizing WebRTC signaling and media. This component also provides the telephony and messaging events for the VoIP push notification solution. This component is mandatory for Avaya Equinox® Conferencing and is highly recommended for VoIP push notifications on iOS clients.
Avaya Equinox® Conferencing	All Avaya Workplace Client platforms	Use this component to access advanced conferencing functionality, such as audio and video conferencing, and web collaboration. ✱ **Note:** For basic conferencing functionality, you only need Avaya Aura® Communication Manager.
Avaya Aura® Presence Services and Avaya Multimedia Messaging	All Avaya Workplace Client platforms	Use these components for the presence and instant messaging functionalities. • Avaya Aura® Presence Services provides presence functionality. • Avaya Multimedia Messaging provides IM functionality.Avaya Multimedia Messaging provides access to additional capabilities, such as: • Sending attachments over IM • Capturing video and audio from Avaya Workplace Client ✱ **Note:** Presence Services Release 8.0.1 integrates Avaya Multimedia Messaging with the current Presence Services platform creating one streamlined solution for the users. With IM and rich presence functionalities, Presence Services is a powerful communication tool.
Avaya Spaces	All Avaya Workplace Client platforms	Use this component with Avaya Workplace Client : • To exchange instant messages with other users using Avaya Spaces Direct Messaging. • To join a Spaces meeting. • To open your Spaces dashboard.

Component	Platform	Function
Avaya Session Border Controller for Enterprise (SBCE)	All Avaya Workplace Client platforms	Use this component if your enterprise requires support for remote workers. Besides configuring SBCE, you must also perform other tasks for remote workers to use all Avaya Workplace Client functionalities.
Client Enablement Services	Avaya Workplace Client for Android and iOS platform	Use Client Enablement Services to access the visual voice mail service. New customers can use most of the Avaya Workplace Client functionality without using Client Enablement Services. Avaya Workplace Client on Avaya Vantage™ does not support Client Enablement Services. **Note:** If you enable the Offline Call Journaling feature on Avaya Aura® Communication Manager, the user cannot view the Client Enablement Services logs, including voice mail.
Unified Portal	All Avaya Workplace Client platforms	Use this component to manage your meetings. You can plan meetings, customize meeting properties, and send meeting details to participants.

Components needed for Over the Top deployments

Component	Platform	Function
Avaya Equinox® Conferencing	All Avaya Workplace Client platforms	Use this component to access audio and video conferencing, and web collaboration.
Avaya Aura® Web Gateway	All Avaya Workplace Client platforms	This component acts as a gateway to Avaya Aura® clients and applications utilizing WebRTC signaling and media.

Component	Platform	Function
Avaya Session Border Controller for Enterprise (SBCE)	All Avaya Workplace Client platforms	Use this component if your enterprise requires support for remote workers. Besides configuring SBCE, you must also perform other tasks for remote workers to use all Avaya Workplace Client functionalities.
Unified Portal	All Avaya Workplace Client platforms	Use this component to manage your meetings. You can plan meetings, customize meeting properties, and send meeting details to participants.
Avaya Equinox® Media Server	All Avaya Workplace Client platforms	This component provides HD video transcoding Multipoint Control Unit (MCU) and high-scale audio engine derived from Avaya Media Server and Web Collaboration Engine. Besides the traditional Scopia MCU functionalities, Avaya Equinox® Media Server includes WebRTC and Web Collaboration features in the same virtualized application.
Avaya Spaces	All Avaya Workplace Client platforms	Use this component with Avaya Workplace Client : • To exchange instant messages with other users using Avaya Spaces Direct Messaging. • To join a Spaces meeting. • To open your Spaces dashboard.

End-user components

Component	Platform	Description
Avaya Workplace Client interface for your device	You can use Avaya Workplace Client with the following operating systems: • Android • iOS • Mac • Windows	After planning and configuring Avaya Workplace Client, end users can install and use the Avaya Workplace Client interface. If you configure MDA, end users can use Avaya Workplace Client on different devices simultaneously.
Deskphone (optional)	You can use this component with: • Desk Phone mode on an Avaya Workplace Client on desktop platforms. • Dual registration on all platforms. You can use an H. 323 phone with Avaya Workplace Client. • MDA in My Computer mode on an Avaya Workplace Client on desktop platforms.	With Desk Phone mode, you can optionally use an Avaya Workplace Client on desktop platforms to control your SIP deskphone. The list of SIP proxy controllers on the deskphone and Avaya Workplace Client on desktop platforms must match. Desk Phone mode requires MDA and TLS. You can use the following deskphone models in the Desk Phone mode with SIP software release 7.0 or later versions: • 9601 • 9608 • 9608G • 9611G • 9621G • 9641G • 9641GS • H175 • J100 Series (J129, J139, J159, J169, J179, and J189) For the complete list of supported deskphone models, see http://support.avaya.com/CompatibilityMatrix/Index.aspx. If you configure dual registration, users can use an H.323 deskphone with any Avaya Workplace Client for making and receiving calls. Dual Registration functionality works similar to MDA functionality. Dual Registration and Desk Phone mode are different features.

Component	Platform	Description
Avaya Workplace VDI (optional)	You can use this component with Desk Phone mode on Avaya Workplace Client for Windows. You must deploy Avaya Workplace Client for Windows in a virtual environment.	Avaya Workplace VDI is a Virtual Desktop Infrastructure (VDI) soft client that enhances the audio and video quality of calls by processing the audio and video locally on your VDI endpoint. A VDI endpoint might be a thin client or a Windows-based personal computer. The controlling client, such as Avaya Workplace Client for Windows, is deployed on virtual desktops running in the data center and provides the user interface for unified communications.

System requirements and interoperability

For the latest and most accurate compatibility information for Avaya Workplace Client, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Ensure that your mobile device or desktop system includes the latest OS updates. Your system must have the latest vendor supplied drivers, specifically for:

- Headsets
- Cameras
- Display adapters

Updating Windows display adapter drivers

About this task

Use this procedure on Windows 10 computers. If you are using a computer with a different Windows OS, the procedure varies slightly.

Procedure

1. Open Windows Control Panel.
2. Select Device Manager.
3. Expand Display adapters.
4. For each display adapter, right-click the adapter name and select Update Driver Software.

5. Select Search automatically for updated driver software.
6. **Optional:** If updated drivers are available, select Search for updated drivers on Windows update.

Planning for deployment

Deployment process

You need to perform the following steps to deploy Avaya Workplace Client:

1. Obtain components and licenses for the planning phase.
2. Choose configuration options for the planning phase.
3. Complete configuration and setup tasks for the planning phase.
4. Install the client.End users can install Avaya Workplace Client on mobile and desktop platforms. You can install Avaya Workplace Client on desktop platforms using a command line option. If the enterprise is using a Mobile Device Management (MDM) system with the mobile devices enrolled in it, you can push the application installs to the Android and iOS devices.
5. Configure client settings manually or with automatic configuration.

After you complete the planning, installation, and configuration, end users can use Avaya Workplace Client. For setup and usage information for end users, see *Using Avaya Workplace Client for Android, iOS, Mac, and Windows*.

Checklist for Unified Communications deployment

Use this checklist if you are deploying Avaya Workplace Client in a UC environment.

Task	**Description**	**Reference**	✔
Obtain and install the required components.	Determine which components are appropriate for your enterprise. The components that you must install and configure vary depending on the functionality you choose.	For a list of supported components, see Components needed for UC deployments.	

Task	Description	Reference	✔
Obtain the required licenses.	Determine which licenses are appropriate for your enterprise. Suite licenses include all the required licenses. The licenses you need vary depending on the functionality that you plan to use.	For more information about license options, see Licensing requirements.	
Prepare the site.	Understand the following: • Network considerations and diagnostics for Avaya Workplace Client • Supported codecs and DSCP configuration • Wi-Fi best practices Configure the Wi-Fi infrastructure and learn about changes in the device functionality based on access point changes.	For more information, see the following topics in the chapter on Site preparation: • Network considerations and diagnostics • Supported codecs • DSCP values • Configuring DSCP values on the network • Wi-Fi best practices	
Understand the security and certificate requirements.	Understand the following: • Security requirements for Avaya Workplace Client • Password storage encryption methods • Security recommendations for desktop and mobile platforms • Client identity and server certificates • Guidelines to determine whether you need certificates • Procedures for obtaining Avaya product certificates • Guidelines and implications to support antivirus and malware scanning software • Supported cipher suites and limitations of blacklisting cipher suites	For more information, see the following topics in the chapter on Security and certificate configuration: • Security requirements • Password storage • Desktop platform security recommendations • Mobile device security recommendations • Client identity certificates • Server certificates • Guidelines to determine whether you need certificates • Obtaining the Avaya SIP Product CA certificate • Obtaining the Avaya Aura System Manager CA certificate • Antivirus and malware scanning support • Supported cipher suites • Limitations of blacklisting cipher suites	

Task	Description	Reference	✔
Set up and configure core Avaya Aura® components.	Configure the core Avaya Aura® components. Review the checklist, which outlines the high-level setup and configuration tasks for core Avaya Aura® components.	For more information, see Checklist for configuring Unified Communications infrastructure.	
Configure Avaya Aura® Device Services.	This component provides a common place in the Avaya Aura® architecture for client and endpoint devices to store and retrieve contact data that users want to view. Contact groups are only available with Avaya Aura® Device Services Release 7.1.6 and later. You can use Avaya Aura® Device Services for automatic configuration of Avaya Workplace Client.	For more information, see the chapter on Avaya Aura Device Services configuration.	
Set up and configure Avaya Workplace Client functionality.	Determine which Avaya Workplace Client functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Review the checklist, which outlines the high-level setup and configuration tasks for Avaya Workplace Client functionality.	For more information, see Checklist for configuring Avaya Workplace Client functionality for Unified Communications.	
Set up and configure Avaya Equinox® Conferencing functionality.	Determine which Avaya Equinox® Conferencing functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Review the checklist, which outlines the high-level setup and configuration tasks for Avaya Equinox® Conferencing functionality.	For more information, see Checklist for configuring Avaya Equinox Conferencing functionality.	
Set up and configure remote worker functionality.	The remote worker functionality enables users that are not connected to the enterprise network to access Avaya Workplace Client. Determine which remote worker functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Use the worksheet to determine how to provide the remote workers with access to available functionality.	For more information, see Remote worker configuration worksheet.	

Task	Description	Reference	✔
Install the client.	If you use the command line and silent installation options on desktop platforms, then end users do not need to install Avaya Workplace Client manually. If the enterprise is using a Mobile Device Management (MDM) system with the mobile devices enrolled in it, you can push the application installation to the Android and iOS devices. MDM is a deployment of a combination of on-device applications and configurations, corporate policies and certificates, and backend infrastructure. Use MDM to simplify and enhance the IT management of end user devices.	For additional setup options on desktop platforms, see the chapter on Additional setup options for Avaya Workplace Client for Windows and Mac platforms.	
Set up automatic configuration.	Set up automatic configuration so that users do not have to manually configure Avaya Workplace Client.	For more information, see Automatic configuration.	
Set up Avaya Workplace Client add-in for Microsoft Outlook	Avaya Workplace Client provides an Outlook add-in for desktop platforms. The add-in enables you to: • Add meeting details to an appointment. • Start and join conferences from your calendar. • Start a call from within Outlook to a contact by using Avaya Workplace Client for Windows.	For more information, see the chapter on Avaya Workplace Client add-in for Microsoft Outlook.	

Checklist for Over the Top deployment

Use this checklist if you are deploying Avaya Workplace Client in an OTT environment. If you do not have Avaya Aura®, you must use this deployment option.

Task	Description	Reference	✔
Obtain and install the required components.	Determine which components are appropriate for your enterprise. The components that you must install and configure vary depending on the functionality you choose.	For a list of supported components, see Components needed for Over the Top deployments.	

Task	Description	Reference	✔
Obtain the required licenses.	Determine which licenses are appropriate for your enterprise. Suite licenses include all the required licenses. The licenses you need vary depending on the functionality that you plan to use.	For more information about license options, see Licensing requirements.	
Prepare the site.	Understand the following: • Network considerations and diagnostics for Avaya Workplace Client • Supported codecs and DSCP configuration • Wi-Fi best practices Configure the Wi-Fi infrastructure and learn about changes in the device functionality based on access point changes.	For more information, see the following topics in the chapter on Site preparation: • Network considerations and diagnostics • Supported codecs • DSCP values • Configuring DSCP values on the network • Wi-Fi best practices	
Understand the security and certificate requirements.	Understand the following: • Security requirements for Avaya Workplace Client • Password storage encryption methods • Security recommendations for desktop and mobile platforms • Client identity and server certificates • Guidelines to determine whether you need certificates • Procedures for obtaining Avaya product certificates • Guidelines and implications to support antivirus and malware scanning software • Supported cipher suites and limitations of blacklisting cipher suites	For more information, see the following topics in the chapter on Security and certificate configuration: • Security requirements • Password storage • Desktop platform security recommendations • Mobile device security recommendations • Client identity certificates • Server certificates • Guidelines to determine whether you need certificates • Obtaining the Avaya SIP Product CA certificate • Obtaining the Avaya Aura System Manager CA certificate • Antivirus and malware scanning support • Supported cipher suites • Limitations of blacklisting cipher suites	

Task	Description	Reference	✔
Set up and configure Avaya Workplace Client functionality.	Determine which Avaya Workplace Client functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Review the chapter, which includes the configuration information for Avaya Workplace Client settings in an OTT deployment.	For more information, see Configuration for Over the Top deployments.	
Set up and configure Avaya Equinox® Conferencing functionality.	Determine which Avaya Equinox® Conferencing functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Review the checklist, which outlines the high-level setup and configuration tasks for Avaya Equinox® Conferencing functionality.	For more information, see Checklist for configuring Avaya Equinox Conferencing functionality.	
Set up and configure remote worker functionality.	The remote worker functionality enables users that are not connected to the enterprise network to access Avaya Workplace Client. Determine which remote worker functionality is appropriate for your enterprise. Configure the functionality according to your requirement. Use the worksheet to determine how to provide the remote workers with access to available functionality.	For more information, see Remote worker configuration worksheet.	
Install the client.	If you use the command line and silent installation options on desktop platforms, then end users do not need to install Avaya Workplace Client manually. If the enterprise is using a Mobile Device Management (MDM) system with the mobile devices enrolled in it, you can push the application installation to the Android and iOS devices. MDM is a deployment of a combination of on-device applications and configurations, corporate policies and certificates, and backend infrastructure. Use MDM to simplify and enhance the IT management of end user devices.	For additional setup options on desktop platforms, see the chapter on Additional setup options for Avaya Workplace Client for Windows and Mac platforms.	

Configuration options

Avaya Workplace Client is a SIP-based solution that requires setup and preconfiguration. You must set up your network infrastructure, deploy certificates, and complete required security configuration before users can install and use Avaya Workplace Client. You must perform additional configuration so that users can access:

- Functionality in the Avaya Workplace Client UI.
- Advanced functionality that is not visible in the UI, including MDA, dual registration, Session Manager failover, and remote access.

Integration options

You can integrate Avaya Workplace Client with other components. This might change the UI functionality that is available and the type of configuration you must perform on Avaya Workplace Client. The user needs to log in to these components on Avaya Workplace Client to access the functionality. The following table lists the components with which Avaya Workplace Client can integrate:

Component	Description	Configuration information
Avaya Multimedia Messaging and Avaya Spaces	You require Avaya Multimedia Messaging or Avaya Spaces for IM on Avaya Workplace Client. Avaya Multimedia Messaging and Avaya Spaces also provide additional functionality, such as the capability to: • Attach files. • Capture photo, audio, and video on Avaya Workplace Client.	For information about deploying and administering Avaya Multimedia Messaging, see *Deploying Avaya Multimedia Messaging*.
Client Enablement Services	Client Enablement Services is supported on Avaya Workplace Client for Android and iOS. It provides additional UI functionality. **Important:** Existing customers can continue to use Client Enablement Services. New customers can use almost all Avaya Workplace Client functionality without Client Enablement Services. **Note:** Avaya Workplace Client on Avaya Vantage™ does not support Client Enablement Services.	For information about deploying and administering Client Enablement Services, see: • *Implementing Avaya one-X® Client Enablement Services* • *Administering Avaya one-X® Client Enablement Services*

Component	Description	Configuration information
Avaya Aura® Device Services	For users with multiple devices or endpoints, Avaya Aura® Device Services provides a common user experience.	For information about deploying and administering Avaya Aura® Device Services, see: • *Deploying Avaya Aura® Device Services* • *Administering Avaya Aura® Device Services*

Interface functionality configuration

The following table provides configuration information about the Avaya Workplace Client UI functionality. Choose the UI functionality that you need for your enterprise.

Functionality	Description	Configuration notes
Audio and video telephony	Avaya Workplace Client supports audio and video calls. Secure Real-Time Transport Protocol (SRTP) supports both audio and video with Avaya Aura® dependencies. **Note:** Avaya Workplace Client does not support audio or video with Polycom SRTP devices.	• Ensure that your network meets the required audio and video quality of service (QoS) requirements. • Configure the required Avaya Aura® Communication Manager and Avaya Aura® Session Manager parameters. • Obtain video licenses.

Functionality	Description	Configuration notes
EC500	EC500 is a Communication Manager feature with which you can: • Join and answer calls from your mobile device. • Send calls to your mobile device. EC500 call suppression When EC500 call suppression is configured, users of dual-mode client applications, such as Avaya Workplace Client, receive only a single incoming call on their mobile device. The incoming call could be either VoIP or cellular. EC500 FNE auto-dialer When EC500 FNE auto-dialer is configured, you can access the following capabilities: • Make outgoing calls through Avaya Aura® Communication Manager. • Access simultaneous ringing on your deskphone and mobile device. • Join active calls. • Send all calls to your voice mail. • Extend calls. • Forward calls. • Enable or disable EC500 on the UI as needed. • Access EC500 station security codes.	Complete the required configuration in Avaya Aura® Communication Manager, including setting up feature name extensions (FNEs). You must also enable the Extend Call feature in Avaya Aura® Session Manager to use EC500 call suppression. The user must configure the Extend Call button for EC500 call suppression to work properly.
Conferencing and desktop sharing	Avaya Equinox® Conferencing supports conference calls and desktop sharing.	• Install and configure Avaya Equinox® Conferencing. • Obtain the required Avaya Equinox® Conferencing licenses.

Functionality	Description	Configuration notes
Contact management and enterprise search	You can manage local contacts, Avaya Aura® contacts, and Client Enablement Services contacts with Avaya Workplace Client.You can also perform searches for enterprise users that are not on your local contact list. **Note:** Client Enablement Services is only supported on mobile platforms. If Avaya Spaces is configured, you can search for enterprise contacts from the Avaya Spaces directory if Avaya Aura® Device Services is disabled.	• Configure LDAP for enterprise search on desktop platforms. Ensure that you are using a supported LDAP directory. **Note:** Mobile clients do not support direct LDAP search. • For remote workers, you must also configure LDAP on SBCE. • Configure Client Enablement Services for enterprise search on mobile platforms. • Configure Avaya Spaces for enterprise search.
Presence and instant messaging (IM)	With Avaya Workplace Client, you can view the presence status of other users and change your own presence status. You can additionally set your status message. You require Avaya Multimedia Messaging or Avaya Spaces Direct Messaging for IM on Avaya Workplace Client.	• Install and configure Avaya Aura® Presence Services. You must also configure Avaya Aura® Session Manager to support Avaya Aura® Presence Services. • Install and configure Avaya Multimedia Messaging. • Obtain the required licenses. To access certain Avaya Multimedia Messaging capabilities, users require enhanced Avaya Multimedia Messaging licenses.

Advanced functionality configuration

The following table provides information about advanced functionality that is not configurable in the Avaya Workplace Client UI. Choose the advanced configuration options that you need for your enterprise.

Functionality	Description	Configuration notes
Enable dual registration.	To log in and join calls with an H.323 device and your SIP-based Avaya Workplace Client at the same time. In many enterprises, deskphones use H.323 signalling.	Enable dual registration by using the non-SIP user communication profile in Avaya Aura® System Manager. For more information about configuring the Allow H.323 and SIP Endpoint Dual Registration field, see *Administering Avaya Aura® System Manager*. Alternatively, you can configure additional fields in Avaya Aura® Communication Manager. For more information, see *Administering Avaya Aura® Communication Manager*.
Enable Multiple Device Access (MDA).	To log in, join, and answer calls with multiple SIP devices at the same time.	Configure additional fields in Avaya Aura® System Manager.
Enable Bridge Line Appearance (BLA)	To make, answer, and bridge onto calls to or from the telephone number of another user.	Configure additional fields in Avaya Aura® Communication Manager. For more information, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
Enable survivability or Avaya Aura® Session Manager failover.	To continue to use Avaya Workplace Client if the primary Session Manager fails.	• You must have a primary and secondary Session Manager server. • Ensure each Session Manager server is configured in Avaya Aura® System Manager.
Set up remote workers.	To use Avaya Workplace Client from home or from a location outside the enterprise network. Avaya Workplace Client uses SBCE for remote worker functionality.	• Install and configure SBCE. You might also need to complete additional configuration on other components for remote workers to access all Avaya Workplace Client functionality. • Provision DNS entries for Avaya Aura® Session Manager, Presence Services, and the LDAP enterprise search server. • Resolve to the internal service IP address for internal DNS clients. • Resolve to the external service SBCE IP address for external DNS clients.

Functionality	Description	Configuration notes
Set up automatic configuration.	To automatically populate the Avaya Workplace Client settings. After installing Avaya Workplace Client, users must select whether to automatically configure settings by using a web address or an email address. You must provide this information to users before installation. If automatic configuration is not enabled, users must configure their client settings manually.	Set up the following: • Settings file. The parameters you must add to the settings file depend on the functionality you have configured. • DNS server. Alternatively, you can configure Avaya Aura® Device Services as the source of the settings file. **Note:** By default, Avaya Workplace Client sends anonymous usage information to the Google Analytics service. Use the ANALYTICSENABLED configuration parameter in the automatic configuration file to change the parameter value if required.
Configure Avaya Workplace Client for Windows to work in a Citrix, XenApp, or VMWare environment.	To access and use Avaya Workplace Client for Windows in a Citrix, XenApp, or VMWare environment. This is an optional feature. This option is not supported with Avaya Workplace Client on other platforms. In a Citrix environment, Avaya Workplace Client for Windows works in the Desk Phone mode.	Set up this option using a command line.

Planning tools and utilities

Tool or Utility	Description
Avaya PLDS	Register for Avaya Product Licensing and Delivery System (PLDS) to obtain Avaya software and licenses. You can register for Avaya PLDS at http://plds.avaya.com/.

Tool or Utility	Description
Avaya Aura® server	Deploy planning components, such as Avaya Aura® solution components, on a physical or virtualized server.

Licensing requirements

Suite user licenses include all the required licenses. You need licenses depending on the functionality and services that you want to access through Avaya Workplace Client.

- EC500 features require EC500 licenses. This is included in Core and Power Suite.
- VoIP features require Mobile SIP licenses. This is included in Core and Power Suite.
- Avaya Multimedia Messaging features require Avaya Multimedia Messaging licenses.
- All video communications, including point-to-point video and video conferencing, require Communication Manager licenses. For only video conferencing, you need Avaya Equinox® Conferencing licenses. Point-to-point video is included in Core and Power Suite. For UC and conferencing deployments, you need Avaya UC licenses.
- Client Enablement Services features require Client Enablement Services licenses. This is included in Core and Power Suite.
- Presence features require Presence Services licenses. This is included in Core and Power Suite.
- Remote worker features require Session Border Controller licenses. If Client Enablement Services is also required, you need Session Border Controller and Client Enablement Services licenses.
- Avaya Spaces features require Avaya Spaces licenses. License types include Essential, Business, and Power.
- Avaya Workplace VDI features require Avaya Workplace VDI licenses. For each Avaya Workplace VDI client, you need a separate license.

Best practices

Avaya recommends that you implement the following tasks so that Avaya Workplace Client users have the best end-user experience:

Task	Notes
Use SIP instead of H.323 for all the user devices.	Avaya Workplace Client is a SIP client. Avaya recommends the use of SIP so that users can use the advanced functionality that Avaya Workplace Client provides. If H.323 is needed, users can perform dual-registration using a SIP endpoint.
Enable Multiple Device Access (MDA).	Deskphones and multiple clients can log in simultaneously. For more information about MDA configuration, see Avaya Workplace Client settings in Avaya Aura Session Manager.
Use TLS for all connections.	Avaya recommends the use of TLS to provide security for all network connections. For example, TLS is a must for presence, MDA, and Desk Phone mode.
Configure settings for privacy and security.	If you configure the Exclusion feature on Communication Manager, users can maintain privacy of conversations and ensure that unwanted parties cannot join the call. In the Manual Exclusion mode, the user presses the Exclusion button to activate and deactivate Exclusion. For more information, see *Using Avaya Workplace Client for Android, iOS, Mac, and Windows* Automatic exclusion is a feature with which a user of a SIP or H.323 endpoint can prevent others with MDA of the same extension from bridging onto an existing call. For more information, see Avaya Workplace Client settings in Avaya Aura Communication Manager. You can also enable the barge-in tone for a user extension on Communication Manager to warn users if someone else joins the call.

Task	Notes
Enable automatic discovery of the automatic configuration URL using: • DNS-based discovery of the settings file for all platforms • Avaya accounts-based method • A parameter during installation for Mac or Windows if using an automated software distribution system and silent install	For more information, see the chapters on Automatic configuration and Additional setup options for Avaya Workplace Client for Windows and Mac platforms.
Use split-horizon DNS FQDN addresses.	Purpose is to send the Workplace traffic to the SBC when remote for security purposes, but not through the SBC when inside the enterprise network for performance and scaling purposes. For more information, see Solution architecture, Remote worker and cloud access configuration, and Remote worker configuration worksheet.
Use split-tunneling configuration when a VPN is in use.	Purpose is to send the Workplace traffic to the SBC when remote, even if the user is logged into VPN for other data security purposes. It is to keep the Workplace traffic outside the VPN to improve the network quality and the networking experience.
Use private trust store and automatic configuration to distribute certificates.	Useful if using certificates that are not issued by a CA with a certificate already in the device OS. For more information, see Certificate distribution.
Use Avaya Aura® Device Services to provide single credential sign-in.	Useful as it removes the need for the user to enter phone credentials. For more information, see Avaya Aura Device Services parameters

Task	Notes
Use enterprise credentials for authentication.	Based on your environment, you can use Avaya Authorization Service or unified login or Integrated Windows Authentication (IWA). Avaya Authorization Service is an authorization mechanism that enables users to authenticate using a combination of enterprise credentials and other factors that the enterprise has chosen, including enterprise Single Sign-On (SSO) and multi-factor authentication. Unified login is a feature with which users can use the same set of credentials for accessing two or more services in Avaya Workplace Client. You can use unified login with your enterprise credentials from Active Directory or LDAP. Avaya recommends the use of unified login for all services to avoid potential issues with credentials management. **Note:** If a server tends to report false failures for password authentication, Avaya recommends that you do not configure that server with Unified Login. You can then easily differentiate between these types of failures from Unified Login failures. For more information, see Unified Login parameters. If you want to remove the authentication step for the client, use Integrated Windows Authentication (IWA).
On mobile platforms, only configure the telephony methods that you require.	Useful as it simplifies the configuration as much as possible.
Use E.164 dial plans.	Avaya recommends the use of E.164 dial plans for new deployments. For more information about Avaya Workplace Client dial plans, see *Avaya Workplace Client Overview and Specification for Android, iOS, Mac, and Windows*.

Task	Notes
Use SIP Endpoint Managed Transfer (SEMT) if you have Avaya Workplace Client users with Avaya Equinox® Conferencing virtual rooms.	SEMT is a feature that changes how 96x1-SIP endpoints perform transfers and is controlled by a Communication Manager system parameter. When enabled, the endpoints can in some cases negotiate a new direct connection that removes Avaya Breeze® platform from the signaling path. Some deployment configurations are not compatible with enabling SEMT, such as Avaya Aura® Contact Center and Avaya Aura® Call Center Elite. If SEMT is disabled, Avaya recommends that you do not set the meeting server address for Avaya Workplace Client. In this case, users can join and host Meet-Me conferences. However, all ad-hoc audio conferences are limited to Communication Manager-based audio conferencing.

Site preparation

This chapter includes information on the:

- Network considerations and diagnostics for Avaya Workplace Client
- Supported codecs and DSCP configuration
- Wi-Fi best practicesConfigure the Wi-Fi infrastructure and learn about changes in the device functionality based on access point changes.

Network considerations and diagnostics

Network diagnostics

Media quality on a consumer device is affected by many factors. For example, by the network in which the device is deployed and the Avaya Aura® system configuration deployed. The way in which the device is connected to the wireless network also has an impact.

The Avaya Workplace Client video encoders adjust to fit within the bandwidth envelope that the network provides. However, the available bandwidth affects the resulting video quality. With increased bandwidth, the video quality improves.

You can view the audio and video statistics for the current call session and use them to determine the network conditions affecting the session.

Network transition

You cannot transition from a non-corporate network to a corporate network and vice-versa. Example of non-corporate network include external Wi-Fi, home Wi-Fi, LTE, and WWAN. Such transition requires addition or removal of Avaya Session Border Controller for Enterprise from signaling path, which is not supported by current signaling.

Packet loss

Packet loss characteristics affect the occurrence of visual and audible artifacts. For example, a burst of lost packets affects the media quality differently than an even distribution of lost packets. As you approach 1% packet loss, you might see visual artifacts, such as broken images, or hear audible artifacts. As you approach 2 to 3% packet loss, you might encounter consistent visual and audible artifacts.

Jitter

Jitter is caused when the packets that make up a media stream are not delivered at regular intervals to the endpoint. For the most part, buffering cancels the effects of jitter. However, buffering causes delays. Delay or latency has a noticeable effect on lip synchronization between the audio and video feed for the user. Lip synchronization issues occur when the delay exceeds 100 ms. Network and network engineering issues can influence this statistic.

Avaya Aura® configuration

The Avaya Aura® solution enables you to configure the maximum bandwidth permitted on a per-user basis. Network engineers must also confirm that the appropriate classes of service for the network are defined and that the correct DSCP mark is set for media in the Avaya Aura® configuration.

Note:

Ensure that Avaya Workplace Client is not connected to Session Manager through Network Address Translation (NAT). This often causes connection problems with SIP signaling. The client is connected, but does not operate correctly. To address problems with NAT, you can use a VPN client or SBCE for remote endpoint deployments.

Virtual Private Networks

Virtual private networks (VPN) provide a significant challenge to high-quality video because, as a security measure, the VPN assigns video packets the same priority as to all other packets. This method prevents malicious users from differentiating certain classes of traffic that could lead to targeted attacks on clients. VPNs effectively negate network engineering for differentiated service and also introduce additional delay. This can be problematic for media packets that depend on timely receipt of all video packets.

Troubleshooting logs

When troubleshooting issues, it might become necessary to report logs to your support organization. Logging for Avaya Workplace Client includes media quality statistics that record information about network performance. These logs can assist support teams in diagnosing media issues due to network performance.

To enable these logs, users must set Enable Diagnostics in the Settings dialog box.

Supported codecs

For information about bandwidth requirements for different codecs, see “Codec Selection” in *Avaya IP Voice Quality Network Requirements*.

Audio codecs

Codec	Supported on Avaya Workplace Client on mobile platforms	Supported on Avaya Workplace Client on desktop platforms
Opus narrowband and wideband	Yes	Yes
G.722	Yes	Yes

Codec	Supported on Avaya Workplace Client on mobile platforms	Supported on Avaya Workplace Client on desktop platforms
G.711 A-law (PCM-A)	Yes	Yes
G.711 U-law (PCM-U)	Yes	Yes
G.726	Yes	Yes
G.729A	Yes	Yes
G.729B (G.729A with annex B silence suppression)	Yes	Yes

Video codecs

Avaya Workplace Client on desktop platforms support H.264 Advanced Video Coding (AVC) and H.264 Scalable Video Coding (SVC). Avaya Workplace Client on mobile platforms support basic H.264 and H.264 AVC.

If Avaya Equinox® Conferencing is used by OTT guest and signed users on mobile and desktop platforms, H.264 SVC is supported.

DSCP values

Differentiated Services Code Point (DSCP) is a field in an IP packet that you can use to assign different levels of service to network traffic.

By default, the Avaya QoS service, that is, DSCP driver, is not installed. If you do not install the Avaya QoS service by using the silent install parameter, then the Microsoft QWAVE API is used.

To set the DSCP value, follow the instructions on Microsoft QoS policy. For example, for Windows 2012, see https://docs.microsoft.com/en-us/windows-server/administration/server-manager/install-or-uninstall-roles-role-services-or-features.

Attributes	Audio policy	Video policy	Signaling policy
Application name	AvayaWorkplace.exe	AvayaWorkplace.exe	AvayaWorkplace.exe
Protocol	UDP	UDP	TCP

Attributes	Audio policy	Video policy	Signaling policy
Port number or range	Corresponding port number or range from the SIP profile on Avaya Aura® Communication Manager.	Corresponding port number or range from the SIP profile on Avaya Aura® Communication Manager.	• 5060 for SIP • 5061 for secure SIP **Note:** Do not use TCP port number 5060 on Avaya Workplace Client for Android as the client displays an error with this configuration.
DSCP value (recommended defaults)	46	34	24

If the customer wants to use the Avaya Aura® settings or set audio and video separately, then you must install the DSCP driver by using the silent install parameter. This method takes precedence over the Microsoft APIs, which have the limitation that they can only set audio and video with the same value.

The DSCP configuration on System Manager is done in the Device Settings Groups section.

Configuring DSCP values on the network

About this task

To set DSCP values on the network, you must identify the different streams from Avaya Workplace Client:

- Media streams: When using the Avaya QoS service, you can assign different DSCP values to audio and video streams.For example, audio media streams marked as Expedited Forwarding (EF), that is, DSCP 46 and video media streams marked as Class 4 Assured Forwarding (AF41), that is, DSCP 34.
- Signaling streams: You can mark signaling traffic between the client and servers.For example, signaling packets as Class Selector 3 (CS3), that is, DSCP 24.

The DSCP values mentioned here are recommended defaults. You can set different DSCP values as required.

Before you begin

- Install all planning components.
- Configure Avaya Aura® System Manager.

Procedure

1. Log in to Avaya Aura® System Manager.
2. Click Elements > Session Manager.
3. In the navigation pane, click Device and Location Configuration > Device Settings Groups.
4. On the Device Settings Groups page:
    1. Choose the appropriate group.

       The group might be a default group, a terminal group, or a location group.

    2. Click Edit.
    3. Click the right-arrow for DIFFSERV/QOS Parameters.
    4. Configure the PHB values.
    5. Click Save.
5. In the navigation pane, click Device and Location Configuration > Location Settings.
6. On the Location Settings page, for each location, choose the device settings group that you modified in the Device Setting Group field.
7. Click Save.

Wi-Fi best practices

While calculating the bandwidth that you require for your enterprise connection, consider the codec to use in each call scenario based on your deployment configuration. When you use Avaya Workplace Client as a VoIP client on a Wi-Fi network, various factors ensure best performance, security, and reliability.

Before operational deployment, test Avaya Workplace Client within your environment to ensure that the function and performance capabilities meet your requirements. Due to the variability of Wi-Fi and Cellular 3G or 4G data connections, the stability and voice quality of Avaya Workplace Client can vary.

To ensure that Avaya Workplace Client calls are preserved while moving from WLAN to 4G/LTE data, use the Session Border Controller address on mobile platforms for Session Manager address. Do not use split-horizon DNS.

Configuring the Wi-Fi infrastructure

About this task

Use this procedure to learn and set up the guidelines about the parameters of the Wi-Fi network and supporting infrastructure, which you can use to optimize performance and security.

Procedure

- For a home Wi-Fi router, use the latest firmware for the device in accordance with the instructions of the manufacturer.
- For an enterprise-class Wi-Fi security switch, ensure that the switch uses the latest software release.
- If you change the configuration, you must remove the Wi-Fi settings from your network for any device that connects to your Wi-Fi router.

  When you remove the Wi-Fi settings, you prevent the device from trying to connect to your network with the old configuration. After you apply the new settings, you can reconnect the device to your network.

- For applications that use a Wi-Fi security switch or router:

  1. Establish a VLAN for traffic use on your new Service Set Identifier (SSID).
  2. Configure the new VLAN with dedicated bandwidth control on Session Manager.
  3. Configure the switch or router so that all inbound traffic to the new SSID gets higher traffic priority.

  Note:

  This feature might be unavailable on some Wi-Fi switches or routers.

- Disable hidden networks.

  Hidden networks do not broadcast the SSID. Your device might not be able to easily detect the hidden network, resulting in increased connection time and reduced reliability of automatic connections.

- If you experience delays or packet loss, disable TSPEC.

  TSPEC is an 802.11 Traffic Specification configuration. Certain devices might be adversely affected when TSPEC is enabled on the wireless network.

- Set your security mode as follows:

  1. Set security to the WPA2 mode, known as AES.

     AES is the strongest form of security that Wi-Fi products offer.

  2. When you enable WPA2, choose a strong password based on your enterprise guidelines.

- If your device does not support WPA2, choose one of the following:

  - WPA/WPA2 mode, known as the WPA mixed mode. In the WPA mixed mode, new devices use the stronger WPA2 AES encryption, while older devices connect to the old WPA TKIP-level encryption.

  - WPA TKIP mode if your Wi-Fi router does not support the WPA/WPA2 mode.
- Disable 40 MHz in the 2.4 GHz settings on the Wi-Fi router to reduce interference issues.
- Disable lower speeds, such as, 1, 2, and 5.5 Mbps, and do the following:

  1. Change 6 Mbps to `Mandatory` and the beacon rate to `6` Mbps.
  2. Set multicast to `Automatic`.
  3. Set all other rates to `Supported`. This setting might be unavailable on a home Wi-Fi router.

Access point changes

When you travel with a device, the device might try connecting to access points (APs) that are part of a different subnetwork or SSID. In this case, the device functions differently depending on whether the user is on a call.

Areas with weak signals cause voice quality issues and, at times, dropped calls. A signal strength and bandwidth that support degraded data transmission might cause VoIP calls to drop or be of poor quality.

Do a proper site survey and ensure that the concentration of APs in high traffic areas is sufficient for the expected number of calls made from devices in these areas. A Wi-Fi network that works for dedicated handsets does not imply that the Wi-Fi network is suitable for VoIP phones or other smart phones.

Many combinations of subnetworks and SSIDs require manual intervention. You must use a single SSID for devices throughout the enterprise and a single subnetwork for a geographic location. If you are using a device from the home network through VPN, you might have to manually select the correct SSID after you return to your workplace. Manual selection might be necessary as the device does not always connect to the last SSID that was in use at a location.

Condition	1	2	3	4	5
SSID	Same	Different	Same	Different	Same Separate WLAN
Subnetwork	Same	Same	Different	Different	Same Separate WLAN
Call Maintenance	Yes	No	No	No	No
Automatic client registration	—	Yes	No	Yes	Yes
Manual client registration	—	—	N/A	—	—
Client restart	No	No	Yes	No	No
Manually select the SSID	No	Yes, applies to a new SSID that was previously not associated.	No	Yes, applies to a new SSID that was previously not associated.	No

Condition	1	2	3	4	5
Renew the DHCP	No	No	Yes	No	No

Note:

For Condition 5, the APs are not part of the same security switched network.

Security and certificate configuration

This chapter includes information about the following:

- Security requirements for Avaya Workplace Client
- Password storage encryption methods
- Security recommendations for desktop and mobile platforms
- Client identity and server certificatesRead the guidelines to determine whether you need certificates.
- Procedures for obtaining Avaya product certificates
- Guidelines and implications to support antivirus and malware scanning software
- Supported cipher suites and limitations of blacklisting cipher suites

The default security settings of Avaya Workplace Client allow it to connect to many existing systems. You must configure the following security setting on desktop platforms, `SET REVOCATIONCHECKENABLED 1`.

Older server versions, or newer server versions with certificates that are maintained across server upgrades, might conflict with the following security settings:

- `SET TLSSRVRID 1`
- `SET TLS_VERSION 1`

For more information on these settings, see the chapter on Automatic configuration.

Security requirements

Avaya recommends the use of TLS v1.2 to provide security for all network connections. TLS server certificates must have:

- Minimum key length of 2048
- Minimum certificate signature algorithm of SHA-2. However, do not select SHA-2 CBC.
- Maximum validity period of 2 years

TLS server certificates must present the DNS name of the server in the Subject Alternative Name extension of the certificate. Also, TLS server certificates must contain an ExtendedKeyUsage (EKU) extension containing the id-kp-serverAuth OID.

The CA used to sign these certificates can be a public CA if the certificate contains only domain names already owned by the organization and no IP addresses.

Users of Avaya Workplace Client can securely connect to network resources when using a secure server certificate obtained from a certificate authority.

To maintain a secure environment for Avaya Workplace Client, administrators of all related components must do the following:

- Use role assignments and assign security groups for operations.
- For accountability, ensure that each user has a unique login ID. Instruct users not to share the user login ID and password.
- Periodically review and update the list of administered users, roles, and permissions.
- Review administration and audit logs regularly to ensure that the system is operating correctly.
- Review security logs and alarms regularly to monitor possible security events.

Configuring the Listen ports for endpoint connection

About this task

Avaya recommends the use of TLS for all connections with Avaya Workplace Client. If you must use TCP for SIP connections, this cannot be configured by using the SIP server address in the client settings.

Avaya Workplace Client gives priority to TLS after it is received from PPM. For the client to use TCP, you must configure the Listen port for endpoint connection for all Session Manager and PPM servers to TCP and remove TLS from it.

Procedure

1. On the home page of the System Manager Web Console, in Elements, click Routing > SIP Entities.
2. Select the SIP entity that you want to modify.
3. Click Edit.
4. In Listen Ports, do the following:
   - Clear the check box for Endpoint on TLS protocol.
   - Select the check box for Endpoint on TCP protocol.
5. Click Commit.

Password storage

Disabling password storage requires passwords to be retained only in the application memory. Enabling password storage allows passwords to be stored securely and loaded into memory for the duration that the password is required.

Android

Login credentials are encrypted and stored in the private internal storage of the application. To ensure protection of user data on Android, Avaya recommends that Avaya Workplace Client users implement a device passcode and enable full-disk encryption.

On first startup, the application generates a 256-bit symmetric key for AES that uses Java's SecureRandom class. This key is stored in a Java keystore file in the per-application private storage provided by the OS. Passwords are encrypted using this secret key with the `AES/ECB/PKCS5Padding` cipher. The results are encoded in Base64 and stored as key or value pairs with the standard Android Preferences API.

iOS

Passwords are encrypted using the iOS keychain. For details about the encryption, see Apple's security documentation - *iOS Security*.

Mac

For details about the macOS keychain that corresponds to the version of macOS used in your deployment, see Apple's documentation.

Windows

Windows Crypto API is used to store passwords by using RC4 (128-bit). RC4 is an algorithm for encrypting data streams.

Desktop platform security recommendations

For the desktop platforms, Avaya recommends that you follow the deployment guidance provided by Apple and Microsoft for the Mac OS and Windows platforms.

To secure the desktop environment where Avaya Workplace Client will be used, you must:

- Keep OS components up-to-date.
- Use full disk encryption.
- Use anti-virus, anti-phishing, and other security tools.

Mobile device security recommendations

Use Avaya Workplace Client on standard-issue hardware running original versions of vendor-approved software. To ensure protection of user data, you must secure devices using a passcode. Enable full-disk encryption on Android. Full disk encryption is the default behavior on Android devices with OS 8 and later and iOS devices.

For more information about the built-in security features of:

- iOS, see iOS Security.
- Android, see Android Security Overview.

Jailbroken or Rooted devices

The Avaya Workplace Client applications implement techniques for detecting jailbroken or rooted devices. If Client Enablement Services is in use, you can disable use of the application on a device that was detected as compromised. However, jailbreak or rooting technology evolves quickly and Avaya cannot guarantee that the techniques will effectively detect all compromised devices. Jailbreaking or rooting a device compromises the built-in security mechanisms, and no guarantees of security can be made if the user has compromised the device.

Use of Enterprise Mobility Management Solutions

Avaya Workplace Client is supported when run as an unmodified application on mobile devices. Application wrapping is not supported and might impact correct operation.

Avaya does not distribute mobile applications outside of the official vendor application stores such as the Google Play Store and Apple iTunes App Store.

You can use Enterprise Mobility Management Solutions to enhance security by enforcing policies such as:

- The requirement of a device passcode. You can specify a minimum length for the passcode.
- Full-disk encryption on Android.
- Use of a per-app VPN tunnel if the recommended approach of using Avaya Session Border Controller for Enterprise is not used.

Server identity validation

Avaya Workplace Client includes server identity validation on all secure connections.

If you use the client to connect to a service, Avaya Workplace Client performs host name verification to ensure communication with the correct server. With HTTPS connections, you must ensure that the certificate on the server has a Common Name or Subject Alternative Name that matches the FQDN or IP address.

For the VoIP service, the client logic varies slightly. Avaya Workplace Client can communicate with multiple Session Manager servers. If the Session Manager server certificate has the appropriate information about the SIP domain, Avaya Workplace Client accepts the server identity validation.

If Avaya Workplace Client detects a host name validation failure, the logs include the security certificate or host name validation details. Host name validation failure is fatal, and the user cannot continue with the login process if both the following conditions are met:

- If the server is signed by a CA certificate that is not the Avaya SIP Product Certificate Authority.
- If you set the TLSSRVRID parameter to a value of 1.

The user can continue with the login process only if the default value of the TLSSRVRID parameter, which is 0, is retained.

Note:

If you set the TLSSRVRID parameter to a value of 1, Avaya Workplace Client for iOS shuts down automatically when it detects this value from the settings file. The user must manually start the application and proceed with automatic configuration.

Remote Wipe overview — Avaya Workplace Client for Android and iOS

For lost or stolen mobile devices, the Client Enablement Services administration website provides the Lost or Stolen Device check box. When you select this check box, the Client Enablement Services server notifies the application to:

- Remove all locally stored data. For example, downloaded voice mails if downloading is permitted by the Client Enablement Services voice mail policy.
- Clear the account information.
- Force the user to log in again to gain access to the application.

The user is then unable to use the application on any mobile device until you clear the Lost or Stolen Device check box.

Port configuration

For information about the ports and protocols that Avaya Workplace Client uses, see the Avaya Workplace Client Port Matrix document at https://downloads.avaya.com/css/P8/documents/101065872.

Client identity certificates

You can use client identity certificates to provide an identity of the client to the server. Each client has its own unique identity certificate issued by the Certification Authority or Registration Authority. Avaya Workplace Client can get the certificates issued in one of the following ways:

- Through Simple Certificate Enrollment Protocol (SCEP) servers, such as Network Device Enrollment Service (NDES) in Active Directory Certificate Services (AD CS).Avaya Workplace Client for Android and iOS support the SCEP method of installing client identity certificates.
- By manual installation: Users must provide the necessary certificate file by using out-of-band mechanism.Avaya Workplace Client for Mac and Windows support the manual method of installing client identity certificates.
- By a URL installation: The settings file contains the PKCS12URL location from where the user can download the certificate.Avaya Workplace Client for Android and iOS support the URL method of installing client identity certificates.

If SCEP and PKCS12URL are available, PKCS12URL is used to install the client identity certificate.

On Avaya Workplace Client for Windows, you can use the existing method, such as group policy, to install the client identity certificate on the OS.

The server receives the client certificate through TLS mutual authentication and the certificate is verified. For more information, see *Administering Avaya Aura® Session Manager*.

You can use a blank string to remove the installed certificates. For example, `SET PKCS12URL ""`.

Server certificates

You must determine whether the following servers in your infrastructure use certificates signed by a certificate authority that the operating system of the device trusts:

- Avaya Aura® Device Services
- Avaya Aura® Presence Services
- Avaya Aura® Session Manager
- Avaya Aura® Web Gateway

- Avaya Session Border Controller for Enterprise
- Avaya Cloud Services
- Avaya Equinox® Conferencing
- Avaya Multimedia Messaging
- Exchange Calendar, Office 365, or Exchange Online
- Web server, which you use to host the settings file for automatic configuration
- LDAP
- Client Enablement Services for Avaya Workplace Client for Android and iOS. Avaya Workplace Client on Avaya Vantage™ does not support Client Enablement Services.

  If you deploy Avaya Workplace Client with Client Enablement Services and plan to use System Manager signed certificates for the client facing interface on Client Enablement Services, Avaya recommends that you upgrade Client Enablement Services to 6.2.3 or later. This is to make use of the script enhancements in Client Enablement Services 6.2.3 that make the process of managing these certificates on Client Enablement Services simpler.

Avaya Workplace Client validates the server identity certificate during the TLS connection establishment process. For every TLS connection, basic checks for trust chain validation and expiry are performed. If Avaya Workplace Client cannot establish a TLS connection because of an inability of the device to validate the certificate, Avaya Workplace Client displays an error message.

Intermediate certificates

If you installed the intermediate and root certificates in the system keychain on iOS, iOS recognizes the root certificates, but not the intermediate certificates. This causes a server trust evaluation failure when the user tries to configure Avaya Workplace Client by using the automatic configuration web address.

To resolve the intermediate certificates issue, Apple recommends that you provide intermediate certificates along with server certificates. This is so that the entire certificate chain leads to the root certificate.

For Avaya SBCE, you must combine both the intermediate and root certificate files into a single certificate file. To combine the files, add the contents of each certificate file one after the other, with the root certificate at the end. For more information, see *Administering Avaya Session Border Controller for Enterprise*.

Third-party certificates

You can deploy third-party certificates in the network to enhance the security of the enterprise. For instructions about installing third-party certificates, see *Application Notes for Supporting Third-Party Certificates in Avaya Aura® System Manager*. For information about managing certificates in Avaya Aura® System Manager, see *Administering Avaya Aura® System Manager*.

Guidelines to determine whether you need certificates

Use the following guidelines to determine whether you need to install certificates. For more information, see *Updating server certificates to improve end-user security and client user experience*.

If your servers use:

- A commercial certificate and the CA certificates are already available on the device OS, you can continue to use Avaya Workplace Client.
- An enterprise server certificate and if you already deployed the matching CA certificate to devices, you can continue to use Avaya Workplace Client.

Split-Horizon Domain Name System (DNS) scenario

For the TLS handshake between Avaya Workplace Client and Avaya SBCE, Avaya SBCE shares a server certificate. This certificate has a subject alternate name with FQDN that resolves to the B1 IP address, where B1 is the external interface. For mutual authentication between Avaya Workplace Client and Avaya SBCE, the subject alternate name must be blank in the certificate that Avaya Workplace Client shares. For more information, see *Administering Avaya Session Border Controller for Enterprise*.

Certificate distribution

Avaya recommends the use of automatic configuration to distribute the CA certificates needed for Avaya Workplace Client.

The Avaya Aura® Device Services or automatic configuration server certificate must be available in the platform trust store. Avaya Workplace Client can then connect to Avaya Aura® Device Services or the automatic configuration server to get the rest of the certificates.

The application-controlled trust store is also known as the private trust store. The OS trust store is also known as the platform trust store. Certificates distributed using the configuration file are stored in the private trust store of the application, and not the trust store of the device.

Private trust store

The CA certificates can be hosted on the automatic configuration server to be distributed to Avaya Workplace Client. Certificates distributed using the configuration file are stored in the private trust store of the application, and not the trust store of the device. The application-controlled trust store is also known as the private trust store.

Use the private trust store to have a better control over the usage of these certificates without affecting the security policy on the whole platform.

- The private trust store is secure and isolated.Certificates contained in the private trust store are unavailable in the device trust store. You can lock down the private trust store.
- If the private trust store exists, Avaya Workplace Client uses the certificates in the private trust store for all operations.Hence, even if the certificates are locally available in the operating system, Avaya Workplace Client does not use these local certificates.
- You can add server certificates to the private trust store only by using automatic configuration.You cannot add server certificates to the private trust store by using the user interface or application settings.
- The automatic configuration process downloads certificates specified in the TRUSTCERTS settings parameter.
- The certificate for the automatic configuration URL must exist on both the device and in the TRUSTCERTS parameter. The certificate is needed to connect to the automatic configuration URL. If the private trust store does not include this certificate, connection to the automatic configuration URL is denied.
- You can use the TRUST_STORE setting to combine the private and platform trust stores.
- The private trust store is deleted during application reset and uninstallation.

Obtaining Avaya product certificates

Obtaining the Avaya SIP Product CA certificate

Procedure

1. On System Manager Web Console, in the Services area, click inventory > Manage Elements.

   The system displays the Manage Elements screen.

2. Choose the Session Manager instance from the list.
3. In the More Actions field, click Configure Trusted Certificates.

   The system displays the Trusted Certificates screen.

4. Choose an Avaya SIP Product CA certificate from the list.

   For example, trust-cert.pem.

5. Click Export.
6. Save the file to a location on your system.
7. **Optional:** For Avaya Workplace Client for Android and Windows, change the certificate extension from PEM to CRT.

   Avaya Workplace Client for iOS and Mac recognize a certificate file with the PEM extension.

8. Perform one of the following:

   - Upload the CA Certificate to a website and send your users the link.
   - Send the CA certificate through email as an attachment.

Obtaining the Avaya Aura System Manager CA certificate

About this task

If you have a server with a certificate issued by Avaya Aura® System Manager, you must distribute the Avaya Aura® System Manager CA certificate to the user's device using this procedure.

Procedure

1. On System Manager Web Console, in the Services area, click Security > Certificates > Authority.
2. Click Download pem file.
3. Save the file to a location on your system.
4. **Optional:** For Avaya Workplace Client for Android and Windows, change the certificate extension from PEM to CRT.

   Avaya Workplace Client for iOS and Mac recognize a certificate file with the PEM extension.

5. Perform one of the following:

   - Upload the CA Certificate to a website and send your users the link.
   - Send the CA certificate through email as an attachment.

Antivirus and malware scanning support

Avaya products cannot certify all third-party applications, because their versions, deployment options, and other factors create many variations and complex interactions. Use the following guidelines to support antivirus and malware scanning software on Avaya Workplace Client:

- Test Avaya Workplace Client prior to deployment. You must be able to install and start Avaya Workplace Client on a minimal machine, and be able to perform the following functions:
    - Avaya Workplace Client conference call, with video, and sharing as a presenter
    - Avaya Workplace Client conference call, with video, and sharing as a viewer
    - Messaging with Avaya Multimedia Messaging and Spaces
- In applications such as McAfee Endpoint Security, features like Adaptive Threat Protection can cause problems with video calls as these features scan all traffic flowing in and out of the desktop device. You must exclude Avaya Workplace Client based on the executable path to the program.
- Whitelist the client process name to ensure that real-time access scans are not scanning diagnostic log files as they are written. In some cases, such scanning can cause high CPU usage and application performance problems.
- Ensure that there are no TCP/UDP port conflicts and other protocol conflicts.
- Ensure that adequate hardware is available to meet the requirements of both the Avaya applications and third-party applications. For Windows, you need:
    - Minimum 1.6 GHz 32-bit or 64-bit CPUTest Avaya Workplace Client on minimum CPU hardware. Scanning software must only use 5% or less of the CPU capacity while scanning and less than 5% when not scanning.
    - Minimum 2 GB of RAM
    - 100 MB of dedicated video RAM
    - 1.5 GB of free hard disk space
    - Keyboard
    - Mouse or other compatible pointing device
    - Video adapter and monitor with 1024 x 768 or higher resolution
    - Headset for This Computer mode
    - HD camera up to 720p that supports 30fps video when connected to a USB 2.0 or higher port
- Ensure that you monitor the performance of the OS and applications, including the following symptoms of performance degradation:
    - Missed or excessive alarms
    - Dropped remote access sessions
    - Slow user interface response

- During the course of an Avaya support engagement, you might need to uninstall third-party software if it is contributing to or causing an issue.

Supported cipher suites

Cipher suite is a set of algorithms that help secure a network connection that uses TLS.

Avaya Workplace Client supports the following cipher suites:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
- TLS_DH_DSS_WITH_AES_256_GCM_SHA384
- TLS_DHE_DSS_WITH_AES_256_GCM_SHA384
- TLS_DH_RSA_WITH_AES_256_GCM_SHA384
- TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- TLS_DHE_DSS_WITH_AES_256_CBC_SHA256
- TLS_DH_RSA_WITH_AES_256_CBC_SHA256
- TLS_DH_DSS_WITH_AES_256_CBC_SHA256
- TLS_ECDH_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDH_ECDSA_WITH_AES_256_GCM_SHA384
- TLS_ECDH_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDH_ECDSA_WITH_AES_256_CBC_SHA384
- TLS_RSA_WITH_AES_256_GCM_SHA384
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
- TLS_DH_DSS_WITH_AES_128_GCM_SHA256
- TLS_DHE_DSS_WITH_AES_128_GCM_SHA256
- TLS_DH_RSA_WITH_AES_128_GCM_SHA256

- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_DSS_WITH_AES_128_CBC_SHA256
- TLS_DH_RSA_WITH_AES_128_CBC_SHA256
- TLS_DH_DSS_WITH_AES_128_CBC_SHA256
- TLS_ECDH_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDH_ECDSA_WITH_AES_128_GCM_SHA256
- TLS_ECDH_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDH_ECDSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA
- TLS_RSA_WITH_AES_256_CBC_SHA

Limitations of blacklisting cipher suites

- If you blacklist all the supported ciphers using the CIPHER_SUITE_BLACKLIST parameter, the cipher list to be published in SSL handshake remains empty. In such cases:
  - On iOS, Android, and Mac, the SSL library populates the default cipher suite list in SSL handshake depending on the TLS version. So, the SSL connection succeeds.
  - On Windows, the SSL library does not add anything to the default list. Hence, the SSL connection fails due to handshake failure.
- On Avaya Workplace Client for iOS and Mac, you cannot use the cipher list to configure the connections set up using NSURLSession. The platform publishes the default cipher list based on the TLS version. Services include OAuth, Exchange Web Services, PPM, and the connection failed over from WebSocket to HTTP for messaging.
- You cannot configure Avaya Workplace Client for Windows with cipher suites for OAuth and Exchange Web Services because .Net framework’s ServicePointManager class does not expose any API to configure cipher suites.
- You cannot configure Avaya Workplace Client in the Guest mode with blacklisted ciphers because guest users do not have access to download the blacklisted cipher suites.

Configuration for Unified Communications deployments

This chapter describes:

- The configuration of Avaya Workplace Client settings in the core Avaya Aura® components.
- Session Manager failover.
- Functionality that is available on the Avaya Workplace Client interface.
- Some advanced functionality options, including MDA and dual registration.Other advanced configuration options, such as remote worker and automatic configuration, are described in the following chapters.

Infrastructure configuration

Infrastructure configuration prerequisites

Before configuring the Avaya Workplace Client functionality, you must:

- Choose the UI and advanced functionality to configure for your enterprise.
- Install all planning components.
- Configure Avaya Aura® System Manager as a centralized management system for all Avaya Aura® components and servers.

Checklist for configuring Unified Communications infrastructure

The following checklist outlines the high-level setup and configuration tasks for core Avaya Aura® components in a Unified Communications deployment. Configure the core Avaya Aura® components according to your requirement.

Component	Reference	✔
Avaya Aura® Communication Manager	• Avaya Workplace Client settings in Avaya Aura Communication Manager • Call appearances configuration • Alternate Route Timer configuration	
Avaya Aura® Session Manager	• Avaya Workplace Client settings in Avaya Aura Session Manager • Session Manager survivability	
Avaya Aura® System Manager	• Configuring simultaneous registration in Avaya Aura System Manager • Enabling VoIP Monitoring in Avaya Aura System Manager	

Avaya Workplace Client settings in Avaya Aura Communication Manager

Use the Avaya Aura® System Manager administration interface to change the Avaya Aura® Communication Manager settings.

Task or feature	Configuration
Configure endpoints	At least, enable the following: • IP SoftPhone. • IP Video SoftPhone.

Task or feature	Configuration
For the Communication Manager signaling group associated with Avaya Aura® Session Manager	Set the following in IP network regions: • Transport Method to `tls`. • Enforce SIPS URI for SRTP to `y`. • Direct IP-IP Audio Connections to `y`. • Initial IP-IP Direct Media to `y`. With direct media enabled, there is no mechanism to provide a ring back to the other phone device. Avaya designed this functionality to support early media call flows. • DTMF over IP to `rtp-payload` to enable Communication Manager to send DTMF tones by using RFC 2833. Avaya Workplace Client does not support sending tones by using in-band or out-of-band DTMF.
Trunk signaling with the PRI line	In Trunk parameters, set Disconnect Supervision - Out to `y`. This setting is required for point-to-point call transfers in Avaya Workplace Client.
Secure calls	Do the following: • In System parameters - features, set Initial INVITE with SDP for secure calls? to `y`. • In System parameters - IP options, set Override ip-codec-set for SIP direct-media connections to `n`. • In System parameters - customer options, set Media Encryption Over IP? to `y`.
Media encryption	In the IP codec set, Media encryption area, set the following: • 1 to `1-srtp-aescm128-hmac80`. • 2 to `2-srtp-aescm128-hmac32`. • 9 to `none`. • 10 to `10-srtp-aescm256-hmac80`. • 11 to `11-srtp-aescm256-hmac32`.
H.323 and SIP dual registration	Set the following: • Configure off-pbx-telephone station-mapping. • On the Stations With Off-Pbx Telephone Integration screen, add an `OPS` entry.When adding the Off-Premises Station (OPS) entry, set the Call Limit field to at least one more than the number of appearances assigned to the extension. For more information, see *Avaya Aura® Communication Manager Feature Description and Implementation*. • For conferencing users, set Fast Connect on Origination in Configuration set to `n`.You can do this by using the change off-pbx-telephone configuration-set n command, where “n” is the configuration set number.

Task or feature	Configuration
Call Pickup	Do the following: • Ensure that the no-ring parameter is disabled. • To enable call pickup alerting, on the Feature-Related System Parameters screen, set the Call Pickup Alerting field to `y`. • To enable the enhanced call pickup alerting capability, on the Feature-Related System Parameters screen, set the Enhanced Call Pickup Alerting field to `y`. The system displays the Enhanced Call Pickup Delay Timer (sec.) Display and Audible Notification fields only if you set the Enhanced Call Pickup Alerting field to y. To administer the alerting options for a button, set the button assignment by using the `change station n` command. • To enable audible indication of incoming calls to a member of the call pickup group, on page 2 of the Class of Restriction screen, set the Block Enhanced Call Pickup Alerting field to `n`.
Automatic Callback	Do the following: • Assign an FAC for Automatic Callback. • Enable Automatic Callback With Called Party Queuing. • Set the no-answer timeout interval for Automatic Callback. • Set the Queue length for Ringback Queuing. • Enable CCBS. For more information, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
Call Park	If a user parks a call and does not disconnect after hearing the confirmation tone, the user stays connected to other parties on the call. To automatically disconnect the call, set the Drop Parking User From The Call After Timeout field on the Feature-Related System Parameters screen to `y`. The system then drops the parked call after the default time limit of 5 seconds if the user does not disconnect the call. You cannot change the default time limit. For more information about Call Park administration, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
Enable EC500	For Client Enablement Services, if EC500 is disabled, call suppression does not work. Hence, you must enable the EC500 button.
Configure third party call control (3PCC)	For information about 3PCC administration, see *Avaya Aura® Communication Manager Feature Description and Implementation*.

Task or feature	Configuration
Configure FNEs and FNUs	For more information, see *Administering Avaya Aura® Communication Manager*.
Assign and configure a station security code	
Configure SRTP support settings	
Configure the barge-in tone alert for a user extension	
Exclusion	Do the following: • On the Feature-Related System Parameters screen, set the value of the Automatic Exclusion by COS field to `y`. • For automatic exclusion, on the Class of Service screen, set the value of the Automatic Exclusion field of the COS group to `y`. For non-automatic exclusion, set the value to `n`. For more information about Exclusion administration, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
Offline Call Journaling	Log in to the System Manager administration interface and enable User Management > Communication Profile > Call History.

Call appearances configuration

To support adhoc conferencing with Avaya Equinox® Conferencing, if you are using Communication Manager Release:

- Earlier than 8.1.1, you need to configure eight call appearances for Avaya Workplace Client.
- 8.1.1 or later, you need to configure a minimum of three call appearances for Avaya Workplace Client.

Note:

The content in this topic is applicable if you are using a release earlier than Communication Manager 8.1.1.

If you are adding Avaya Workplace Client to an existing deployment and:

- If you do not have Avaya Equinox® Conferencing, there is no need for eight call appearances.
- If you have disabled SIP Endpoint Managed Transfer (SEMT) as Avaya Aura® Contact Center or Avaya Aura® Call Center Elite are in the same deployment, then there is no need for eight call appearances. In these deployments,

adhoc conferences use the more basic Communication Manager adhoc call. This eliminates the need for the extra three temporary appearances during the creation of an adhoc conference.

If you are doing a new deployment, configure everyone with eight appearances.

Avaya recommends that the configuration must be such that you put the:

- Primary appearances on the main button list in System Manager
- Additional appearances at the end of the feature button or button configurations area

This configuration ensures that the interface on phones such as the 9640 phones is optimized to show the main appearances and other frequently used buttons such as Send All Calls and EC500 on the main screen.

Use case for eight call appearances

- User might have at most three or four calls, where one is active and the rest are held.
- Last line appearance is usually reserved for outgoing emergency calls.
- To create an adhoc conference call with Avaya Equinox® Conferencing by merging two calls together, you need five line appearances:
    - Two for the point-to-point calls that you are trying to merge
    - One for the conference call to conference bridge
    - Two for the transfer operation

Alternate Route Timer configuration

The Alternate Route Timer parameter on Communication Manager is configurable because:

- Different customers have different needs about how long they want to wait before trying to find a different network route.
- The configuration allows Avaya to cater to different types of networks, which can have a different response time.

You must configure the timer value such that it:

- Allows for the network delay
- Ensures that Communication Manager does not wait for too long for a response from the far-end

If the cellular network has delays, you can increase the time-out value from 6-7 seconds to suit your network. You can configure this value on page 1 of the Signaling Group page using the Alternate Route Timer (sec) parameter.

Avaya Workplace Client settings in Avaya Aura Session Manager

You can use the Avaya Aura® System Manager administration interface to change the Avaya Aura® Session Manager settings for each Avaya Workplace Client extension. You can also add or change user profiles with Avaya Aura® Session Manager.

Task or feature	Configuration
For each extension.	Set an Avaya SIP communication address. If you have E.164 numbers in your enterprise directory, set an Avaya E.164 communication address for each extension.
Select the originating and terminating feature server name.	Set Origination Application Sequence and Termination Application Sequence to the Communication Manager server.
Choose the appropriate template option for your enterprise.	Do the following: • For a SIP implementation, choose a 96x1 SIP template. • For a setup that involves SIP and H.323 dual registration, choose a 96x1 H.323 template. When you select a template, the system populates the corresponding set types. Avaya recommends the use of SIP so that users can use the advanced functionality that Avaya Workplace Client provides.
For simultaneous device registration and Multiple Device Access (MDA).	Do the following: • In Max. Simultaneous Devices, enter the maximum number of devices that can be logged in simultaneously.For example, if you set Max. Simultaneous Devices to `3`, only 3 devices can log in at a time. • Select the Block New Registration When Maximum Registrations Active? check box.When you select this check box, if the user tries to log in with a device after reaching the maximum limit, the system denies access to the new device.
Configure the extend call feature.	Assign the extnd-call feature option to users. You must configure the extend call feature for EC500 call suppression to remain active.

Task or feature	Configuration
Support direct media and enhance SIP SRTP in Communication Manager.	Enable capability negotiation within a media rule.

Session Manager survivability

The following registration options are available for Session Manager:

- Non-redundant configuration: Registration to only one Session Manager server. With this configuration, survivability or failover is unavailable.
- Simultaneous registration: Registration to multiple Session Manager servers as a redundancy mechanism.
- Simultaneous registration with branch failover: Registration to multiple Session Manager servers with potential failover to a Session Manager in a Branch environment.

Survivability or failover is possible when multiple Session Manager severs are registered in Avaya Aura® System Manager. When you have more than one Session Manager server, the first server must be registered as the primary server, and the additional servers must be registered as secondary or survivability servers.

If Avaya Workplace Client cannot connect to the primary Session Manager, Avaya Workplace Client automatically fails over to the secondary Session Manager without user intervention. This is to ensure service continuity for Avaya Workplace Client users. If failover occurs while a user is on an active call, Avaya Workplace Client preserves the call, but the user cannot resume the held call.

Configuring simultaneous registration in Avaya Aura System Manager

About this task

Use this procedure to configure the primary and secondary Session Manager servers in Avaya Aura® System Manager. This will provide failover or survivability for Avaya Workplace Client users.

Before you begin

Deploy multiple Session Manager servers.

Procedure

1. Log in to Avaya Aura® System Manager with your administrator credentials.
2. Navigate to Users > User Management > Manage Users > User Communication Profile > Session Manager Profile.
3. From the drop-down menu, choose the appropriate primary Session Manager.
4. From the drop-down menus, choose the secondary Session Manager, and if required, a survivability server.

   Avaya Workplace Client registers and receives the list of primary, secondary, and Branch Session Manager servers through Personal Profile Manager (PPM).

Enabling VoIP Monitoring in Avaya Aura System Manager

Procedure

1. Log in to Avaya Aura® System Manager.
2. Click Elements > Session Manager.
3. In the navigation pane, click Device and Location Configuration > Device Settings Groups.
4. Choose the appropriate group.

   The group might be a default group, a terminal group, or a location group.

5. Click Edit.
6. Set the VoIP Monitoring (VMON) Manager settings.
7. Commit the changes.

   Within two or three minutes, System Manager sends SIP NOTIFYs to the SIP phones based on either Terminal Group, Location Group, or to everyone if you configured the Default Group VMON settings.

   The SIP phones then perform a PPM `getAllEndpointConfiguration` request, and then PPM returns the new VMON settings in the `getAllEndpointConfigurationResponse`.

Avaya Workplace Client receives the Endpoint Configuration Response over HTTP and if the VMON settings are present in the response then VMON is enabled on Avaya Workplace Client.

Functionality configuration

Client and server requirements

Component	Requirement
Supported clients	• Avaya Workplace Client on mobile platforms • Avaya Workplace Client on desktop platforms • Avaya Workplace Client conference portal
Supported servers	• Avaya Aura® Session Manager • Avaya Aura® System Manager • Avaya Aura® Device Services • Avaya Aura® Communication Manager • Avaya Multimedia Messaging • Avaya Aura® Presence Services • Avaya Aura® Media Server • Avaya Session Border Controller for Enterprise • Avaya Equinox® Conferencing • Unified Portal • Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Client configuration

DNS auto discovery

DNS auto discovery is mandatory to support Avaya Workplace Client in the UC deployment.

Automatic configuration settings

The automatic configuration parameters included in the following table are necessary to support Avaya Workplace Client in the UC deployment. The table includes the recommended values. For complete information about these parameters, see the chapter on Automatic configuration.

Automatic configuration parameter	Recommended value	Notes
CONFERENCE_FQDN_SIP_DIAL_LIST	Enter a list of all internal FQDNS, the Avaya Workplace Client conference portal FQDN and Scopia Desktop Server portal FQDN, that can be reached through direct SIP dialing. For example, "scopia.slav.com,alphaportal.slav.com,aacmeeting.slav.com".	If the virtual room number range is not routable within Avaya Aura®, then do not put the portal server FQDN into this automatic configuration setting. Avaya Workplace Client uses this setting to determine whether to use SIP or HTTP to join a meeting.
UNIFIEDPORTALENABLED	1	You must enable this parameter for all users who can sign in to the Avaya Workplace Client conference portal.

Automatic configuration parameter	Recommended value	Notes
CONFERENCE_PORTAL_URI	Enter the unified portal home URL. For example, "https://alphaconfportal.slav.com:8443/portal".	You need this parameter to support the Scopia Desktop Conference (SDC) replacement features.
UNIFIED_PORTAL_SSO	1	Clients can use the enterprise user name and password to sign in to the Avaya Workplace Client conference portal.
ENABLE_MEDIA_HTTP_TUNNEL	1	This parameter enables the HTTP Tunneling feature in the foreign Avaya Workplace Client conference calls.
BFCP_TRANSPORT	0	Binary Floor Control Protocol (BFCP) is a protocol which is used to control the access to the media resources in a conference.
BFCP_UDP_MINIMUM_PORT	5204	—
BFCP_UDP_MAXIMUM_PORT	5224	—
MEDIAENCRYPTION	10,1,2,9	This parameter enables the best effort SRTP with AES 128. You can also enable AES 256 by using the values 10 and 11.

Automatic configuration parameter	Recommended value	Notes
ENCRYPT_SRTCP	0	You must disable this parameter unless SRTCP is supported by all endpoints and servers in Avaya Aura®.
ENABLE_OPUS	1	—
OPUS_PAYLOAD_TYPE	116	—
RTP_PORT_LOW	5004	You must change this parameter value depending on the firewall port ranges.
RTP_PORT_RANGE	200	—
VIDEO_MAX_BANDWIDTH_ANY_NETWORK	1280	—
VIDEO_MAX_BANDWIDTH_CELLULAR_DATA	512	—
APPCAST_ENABLED	1	—
APPCAST_URL	Enter the Avaya Aura® Device Services Web Deployment Sparkle URL. For example, "https://ucserver.slav.com/webdeployment/sparkle/avaya-communicator".	—
APPCAST_CHECK_INTERVAL	1	—
ACSENABLED	1	Avaya Aura® Device Services contact service is mandatory to support the terminal search feature in SDC replacement clients.
ACSSRVR	Enter the Avaya Aura® Device Services contact service FQDN.	—
ACSPORT	Enter the Avaya Aura® Device Services contact service port number.	—
ACSSECURE	1	—

Automatic configuration parameter	Recommended value	Notes
SETTINGS_FILE_URL	Enter the Avaya Aura® Device Services contact service URL. For example, "https://ucserver.slav.com/autoconfiguration/settings.txt".	—
CONTACT_MATCHING_SEARCH_LOCATION	1	—
EWSENABLED	1	EWS is mandatory to support the Top of Mind feature in SDC replacement clients.
EWSSSO	1	Clients can use the enterprise user name and password to authenticate with EWS.
EWSSERVERADDRESS	Enter the EWS server address.	—
EWSDOMAIN	Enter the EWS server FQDN.	—
TRUSTCERTS	""	You must enable the private trust store depending on the security requirements.
TRUST_STORE	1	This parameter value must be set to 1. Else, Avaya Workplace Client might not be able to join a foreign enterprise Avaya Workplace Client meeting as a guest user. ⚠ **CAUTION:** If required by your security policy, you can set the value to 0. However, you cannot join a foreign conference by using Avaya Workplace Client.

Automatic configuration parameter	Recommended value	Notes
CONFERENCE_FACTORY_URI	This parameter value must match the Avaya Equinox® Management's advanced parameter setting vnex.vcms.core.conference.factoryURI For example, 816543@avayamcs.com.	You must enable this parameter for all users who can sign in to the Avaya Workplace Client conference portal.

Server configuration

Server external access

The following table includes the list of servers that can be accessed externally through Avaya Session Border Controller for Enterprise or Third-Party Reverse Proxy:

Server	TLS traffic	Internal Avaya Aura® users	External guest users	Server certificates signed by third-party CA	Mutual authentication on the server for internal traffic	Mutual authentication on SBC or Reverse Proxy for external traffic
Session Manager	SIP and HTTPS (for PPM)	Yes	No	Optional	Optional	Optional
Avaya Multimedia Messaging	HTTPS	Yes	No	Optional	Optional	Optional
Avaya Aura® Device Services	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled
Avaya Aura® Web Gateway or Unified Portal	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled
Equinox Conference Control	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled
WCS	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled

Split Horizon DNS

Avaya recommends the use of split horizon DNS so that the same FQDN is used for any server by both the internal and external clients. The benefits are:

- Administration of the overall system is simplified.
- Single settings file can serve both the internal and external clients.
- Hair-pinning of WCS and Equinox Conference Control traffic by the internal Avaya Workplace Client native clients through SBC is removed.

Server certificate and mutual authentication

Servers that need to support guest access require third-party, CA-signed certificates. This includes Avaya Aura® Web Gateway, Equinox Conference Control, WCS, and Avaya Aura® Device Services. Disable mutual authentication on SBC for external access to these servers.

Do not use an IP address in the CN/SAN field of the certificates.

Avaya Aura® Device Services configuration

- Use the Automatic Configuration service to support Avaya Workplace Client used by the Avaya Aura® users.
- Configure the Contact Server to link with Avaya Equinox® Management for searching the Avaya Equinox® Management terminals.
- Enable the Picture Service to support the client contact pictures.
- Enable the Web Deployment service to support the Avaya Workplace Client software updates.The Sparkle service is used only by the Avaya Aura® users. However, the client software download service is used by both Avaya Aura® and guest users.

Avaya Aura® Web Gateway configuration

Unified Portal setting	Recommended value	Notes
Conference Clients	"Equinox Desktop Client, Equinox Mobile Client, and Web Client"	This parameter enables the portal to open Avaya Workplace Client with a higher priority than the Web Client.
Avaya Equinox Client Aura Domain	Enter the Avaya Aura® SIP domain. For example, avayamcs.com.	

Note:

Do not change the default values of the other unified portal settings.

Avaya Equinox® Management extension mapping

When a user dials into an Avaya Workplace Client meeting through SIP, Avaya Equinox® Management attempts to map the caller ID of the user to the stored Avaya Equinox® Management users. If a match is found, Avaya Equinox® Management considers the user as an Avaya Equinox® Management internal user, not a guest user. If the matched user is the owner of a virtual room, Avaya Equinox® Management bypasses the virtual room PIN and moderator PIN, and assigns the moderator role to the user.

Checklist for configuring Avaya Workplace Client functionality for Unified Communications

The following checklist outlines the high-level setup and configuration tasks for Avaya Workplace Client functionality in a Unified Communications deployment. Configure the functionality according to your requirement.

Functionality	Reference	✔
Client and server configuration	• Client and server requirements • Client configuration • Server configuration	
Alphanumeric dialing	• Telephony • Alphanumeric dialing • Routing server configuration • Setting up an alphanumeric SIP handle on Avaya Aura	
EC500	Extend and send calls to your mobile device with EC500	
Avaya Equinox® Conferencing	Checklist for configuring Avaya Equinox Conferencing functionality	
Avaya Aura® Communication Manager conferencing	Adhoc conferencing by using Avaya Aura Communication Manager	
Call journaling	Call journaling	
Multiple Device Access and dual registration	Multiple Device Access and dual registration	

Functionality	Reference	✔
Bridged Line Appearance	• Bridged Line Appearance overview • Interactions for Bridged Line Appearance • Administering Bridged Line Appearance	
Hunt Groups	• Hunt Groups overview • Setting up hunt groups and assigning stations as members • Provisioning the Hunt Group Busy feature button on the station	
Team Button	• Team Button overview • Adding the team button to the monitoring station • Administering the team button functionality • Administering the team button override functionality • Administering abbreviated or delayed transition interval • Viewing the system capacity for team button	
Presence and instant messaging	• Presence and instant messaging • Configuring Avaya Aura Session Manager to support Avaya Aura Presence Services • Configuring Avaya Aura Session Border Controller to support Avaya Aura Presence Services • Do Not Disturb status • Presence interaction with Client Enablement Services • Presence scenarios with Client Enablement Services • Presence Access Control List • Managing the presence access control policy	
Contacts and enterprise search	• Contacts and enterprise search • Supported LDAP directories for Avaya Workplace Client	

Functionality	Reference	✔
Google Chrome browser extension for Windows	• Google Chrome browser extension • Enabling the Google Chrome browser extension for Avaya Workplace Client for Windows • Uninstalling the Google Chrome browser extension from Avaya Workplace Client for Windows • Blocking websites to stop highlighting telephone numbers • Unblocking websites using the group policy	
IPv6 and ANAT configuration	• IPv6 and ANAT configuration • Configuring Avaya Aura Communication Manager to support IPv6 and ANAT • Configuring Avaya Aura Session Manager to support IPv6 and ANAT • Configuring Avaya Aura Session Border Controller to support IPv6 and ANAT	
SSO with OAuth and SAML	SSO with OAuth and SAML	

Telephony

Use the standard Avaya Aura® Communication Manager and Avaya Aura® Session Manager configuration to enable audio and video calls in Avaya Workplace Client. You do not need to configure any other components, but you must obtain licenses for video.

Note:

The phone number that you dial must have a minimum of 10 digits.

Emergency calls

Do not use Avaya Workplace Client on Android or iOS to make emergency calls as you cannot rely on the use of the mobile device for location information. Avaya recommends that you check the product documentation that accompanies your mobile device to learn about the emergency calling features available on your device.

Important:

You can use Avaya Workplace Client on Avaya Vantage™ to make emergency calls. For more information, see Emergency calls.

Alphanumeric dialing

Alphanumeric dialing is a feature that users can use to make and receive an audio or video call by using the alphanumeric Uniform Resource Identifier (URI). For example, users can use the alphanumeric URI to call an external user, such as a Skype for Business user, by using 123john@telenor.com.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Session Border Controller for Enterprise

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Server configuration

You must set up:

- A routing server.
- An alphanumeric SIP handle on Avaya Aura®.

Routing server configuration

- Communication Manager supports alphanumeric dialing inside the same enterprise domain.Hence, you do not need to perform any additional configuration.
- For alphanumeric dialing outside the same enterprise domain, you must configure a routing server.This server must recognize the internal URI address and know how to reach the target server. For example, internal URI

address is of Avaya and target server is a Skype for Business server. For additional information, see *Administering Avaya Aura® Communication Manager*.

Setting up an alphanumeric SIP handle on Avaya Aura

About this task

Use this procedure to associate a user with a URI address.

Procedure

1. Log in to Avaya Aura® System Manager with your administrator credentials.
2. Go to User Management > Manage Users.
3. Select the user that you want to configure, and click Edit.
4. In the Communication Address area, click New.
5. In the Type field, click Avaya SIP.
6. In Fully Qualified Address, type an address and select a domain.

   For example, address is `aquadros` and domain is `ndtv.com`.

7. Click Commit & Continue.
8. Go to the CM Endpoint Profile area.
9. In the SIP URI field, click the SIP handle that you created in Step 6.
10. Click Commit.

Extend and send calls to your mobile device with EC500

EC500 is a Communication Manager feature with which you can:

- Join and answer calls from your mobile device.
- Send calls to your mobile device.

You can enable multiple EC500 functionality options. The following table summarizes the EC500 options and the configuration required for each option:

EC500 options	Description	Configuration notes
Standard EC500	This option enables you to join and answer calls from your mobile device using Avaya Workplace Client.	Enable EC500 in Avaya Aura® Communication Manager.
EC500 FNE auto-dialer	This option enables the following capabilities in Avaya Workplace Client: • Make outgoing calls through Avaya Aura® Communication Manager. • Access simultaneous ringing on your deskphone and mobile device. • Join active calls. • Send all calls to your voice mail. • Extend calls. • Forward calls. • Enable or disable EC500 on the UI as needed. • Access EC500 station security codes.	Configure FNEs in Avaya Aura® Communication Manager. **Note:** While configuring the Call Forwarding feature in Communication Manager, you must keep the extension field empty. The user must provide the extension from Avaya Workplace Client after logging in.
EC500 call suppression	This option enables Avaya Workplace Client users to receive a single incoming call on their mobile phone. Users receive an alert either by a VoIP call or a cellular call, but not both.	Configure Extend Call in Avaya Aura® Session Manager by assigning the extnd-call option to users.

Conferencing

Avaya Equinox® Conferencing provides audio and video conference functionality to Avaya Workplace Client.

If Avaya Workplace Client does not include the settings for Conference Factory URI and the user merges two calls, Avaya Workplace Client creates a Communication Manager adhoc conference call.

Adhoc conferencing by using Avaya Aura Communication Manager

Users can create a Communication Manager conference by using the user interface of a single active call. In the previous release, users had to make two separate calls to create a Communication Manager conference.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Session Border Controller for Enterprise

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

Do not configure the CONFERENCE_FACTORY_URI parameter.

Avaya Workplace Client setting

Users must ensure that the adhoc conference address is empty in the Avaya Workplace Client settings: Settings > Services > Phone Service > Adhoc Conference Address.

Call journaling

Users can use this feature for a consistent view of call logs that are generated whether a device is logged in or not.

Call logs display calls missed or placed from other clients when the client is not logged in. This improves user experience and consistency across all platforms.

Note:

Call history records might change over time due to call history re-synchronizing with the network. Network call logs vary from local call logs as a result of network manipulation of dialed digits that occurs during normal call processing.

Supported clients

- Avaya Workplace Client on mobile platforms

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Session Border Controller for Enterprise

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

You must enable the ENABLE_PPM_CALL_JOURNALING parameter.

Server configuration

You must enable Call Journaling in Session Manager Profile for each user.

In the Avaya Aura® System Manager web interface, the Enable Centralized Call History setting is available in Session Manager Profile > Call History Settings.

Multiple Device Access and dual registration

Avaya Workplace Client supports Multiple Device Access (MDA) to provide the capability to:

- Log on to the same extension from multiple devices.
- Answer a call from multiple devices.
- Join a call from other logged in devices.
- Simultaneously ring all logged in devices when you receive a call on your extension.

For information about the MDA and dual registration configuration options in Session Manager, see Avaya Workplace Client settings in Avaya Aura Session Manager.

Maximum registration configuration

When the user reaches the maximum simultaneous device limit, the Avaya Aura® configuration determines whether the first or the last logged in device is denied access.

Block New Registration When Maximum Registrations Active is an Avaya Aura® feature. If you select this check box, the system denies any new request to register after the number of registration requests exceed the administered limit. The system also sends a warning message and stops the SIP service to the endpoint.

Avaya Workplace Client supports this feature with Session Manager 6.3.3, that is, Avaya Aura® 6.2 FP2 SP1 or later. If you are using Avaya Workplace Client with an earlier version of Session Manager, you must clear the Block New Registration When Maximum Registrations Active? check box.

Limitations

- MDA works with endpoints connected through TLS or TCP. However, if a user logs into an extension with a TCP device, an incoming secure call does not ring the TCP device. Also, the user cannot bridge onto a secure call from that device. This same limitation applies to devices that register through TCP without MDA.
- Some MDA limitations exist for IM and Presence between Avaya Workplace Client and other applications. For more information, see Multiple Device Access White Paper.
- For more information about MDA end user limitations, see *Using Avaya Workplace Client for Android, iOS, Mac, and Windows*.

Bridged Line Appearance overview

Use the Bridged Line Appearance (BLA) feature to give single-line and multi-appearance telephones an appearance of another telephone number. With BLA, you can make, answer, and bridge onto calls to or from the telephone number of another user.

The terms primary number, primary telephone, and primary station all mean the same thing.

The primary number is the extension that you want other extensions to bridge onto. For example, you want extension A as the primary number to also have call appearances on extensions B, C, and D.

A typical use case for the BLA feature is a boss and secretary scenario. In this scenario, the primary number is of the boss and call appearances of the primary number are configured on the extension of the secretary. When someone calls the boss, either the boss or secretary can answer the call. If the call is answered first by the secretary, the boss can bridge onto the call.

If a call is made to the extension of the secretary, the boss cannot see this call or bridge onto it.

To make a call using the BLA extension, you must first select the primary extension appearance and then dial on behalf of the primary extension.

When you receive a call on the primary extension, the call rings on the primary extension and the secondary extension. In this case, the secondary extension displays that the call is for the primary extension. The user of the secondary extension can select and answer this call. After the call is answered, the secondary extension displays that the active answered call is for the primary extension. On the primary extension, Avaya Workplace Client displays a bridge appearance to bridge onto the call answered on the secondary extension.

Interactions for Bridged Line Appearance

This section provides information about how the Bridged Line Appearance (BLA) feature interacts with other features on the system. Use this information to ensure that you receive the maximum benefits of BLA in any feature configuration. For more information, see *Avaya Aura® Communication Manager Feature Description and Implementation*.

Note:

Enhanced conferencing using Avaya Equinox® Conferencing is not supported with BLA. If a BLA watcher wants to be a participant in an enhanced conference, the BLA watcher must join the enhanced conference directly.

Automatic Callback

Automatic Callback calls cannot originate from a BLA. However, when Automatic Callback is activated from the primary telephone, the callback call rings on all bridged appearances of the extension and the primary telephone.

Call Forwarding All Calls, Call Forward Busy, and No Answer

Call Forwarding can be activated or canceled for the primary extension from any BLA of that extension using a feature access code. When activated, calls to the primary extension do not terminate at the BLAs, but go to the designated forwarding destination.

Call Park

When a call is parked from a BLA, it is parked on the primary extension associated with the BLA.

Call Pickup

Calls that are made to a primary telephone can only be answered by pickup group members of the primary number. This refers to calls with alerting at bridged appearances of the primary telephone.

- The Temporary Bridged Appearance on Call Pickup? field on the Feature-Related System Parameters screen is set to `n`: In this case, the primary appearance and all bridged appearances of the call are dropped after Call Pickup is used to answer the call.
- The Temporary Bridged Appearance on Call Pickup? field on the Feature-Related System Parameters screen is set to `y`: In this case, the primary and bridged call appearance lamps stay lit after Call Pickup is used to answer the call.

- The primary telephone and the BLA are not in the same pickup group: In this case, members in the same pickup group as the BLA telephone cannot answer a call that is made to the primary telephone.

  Note:

  The primary telephone and the BLA cannot be in the same pickup group. This is not a supported configuration.

  When you dial the Call Pickup FAC on a BLA, the system interprets the action as an attempt to answer a call from the call pickup group of the primary telephone. When operating this way, the covering user can act as the primary user and provide the same call pickup coverage if required. Covering user is the user associated with the extension number that is configured to have call appearances of the primary number.

Send All Calls

Single-line device: When a single-line device is administered as a BLA, you cannot start Send All Calls for the extension of the device. You do not have a Send All Calls button, and the call appearance is associated with another extension, that is, the primary extension. When you dial an FAC, Send All Calls is activated for the extension associated with the call appearance.

Multi-appearance telephones: If you have BLAs, you can activate or deactivate Send All Calls for a primary telephone from the bridged appearance.

Administering Bridged Line Appearance

Procedure

- On Communication Manager:
  - To prohibit bridging onto Data Privacy calls, on the Feature-Related System Parameters screen, type `y` in the Prohibit Bridging Onto Calls with Data Privacy field.
  - To skip a coverage point, on the Coverage Path screen, type `n` in the Terminate to Coverage Pts. with Bridged Appearance field.
  - On the Station screen, create a bridged line appearance on a single-line telephone or a multiappearance telephone.
  - Enable bridged call alerting on the extension.The bridged appearance rings when a call arrives at the primary telephone. If you have enabled per-button ring control for the extension, then you must set each button to have y for the ring parameter.

    For more information, see *Avaya Aura® Communication Manager Feature Description and Implementation*.
- On System Manager, use the System Manager web console.

For more information, see *Administering Avaya Aura® System Manager*.

Hunt Groups overview

You can use the Hunt Groups feature to set up a group of extensions that can handle multiple calls to a telephone number. Additionally, you can choose the call distribution method to route calls. For each call to the number, the system hunts for an available extension in the hunt group, and connects the call to that extension.

A hunt group is especially useful when you expect a high number of calls to a particular telephone number.

A hunt group might consist of people who are trained to handle calls on specific topics. For example, the group might be a:

- Benefits department within a company
- Service department for products that a company sells
- Travel reservations service
- Pool of attendants

Setting up hunt groups and assigning stations as members

About this task

Use this procedure to set up hunt groups on Avaya Aura® System Manager and assign the stations as members to the hunt group.

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Groups > Hunt Group.
2. Select a Communication Manager instance from the Communication Manager list.
3. Click Show List.
4. To create a new hunt group, in the Hunt Group List area, click New.
5. Type the hunt group number as a qualifier, and click Add.
6. On the New Hunt Group page, type the details in the Group Name and the Group Extension fields.
7. Select the ACD check box.
8. Click Next Page until you reach the Group Member Assignments screen.

9. Enter the group member assignments by assigning the stations to the hunt group.
10. To apply the configuration changes, click Enter.

Provisioning the Hunt Group Busy feature button on the station

Procedure

1. On the System Manager web console, click Users > User Management > Manage Users.
2. Select the user for which you want to provision the Hunt Group Busy feature button.
3. Go to the Communication Profile tab, and click Endpoint Editor > Button Assignment > Feature Buttons.
4. In Button Feature, select hntpos-bsy.
5. In the Grp field, type the group number.
6. Click Done.
7. To apply the changes, click Commit.

Team Button overview

Avaya Workplace Client on mobile platforms and Avaya Workplace Client for Windows support the Team Button feature. With this feature, at the monitoring station, you can do the following:

- View the state of a monitored station.
- View all calls that ring on the monitored station and selectively answer any.
- Speed dial, that is, place a call, to the monitored station.
- Blind transfer any call to the monitored station.
- Configure the audible ringing and visual alert notification.

Monitoring Station

The station which is used to monitor the state of another station. This is the station that displays the Team Button.

Monitored Station

The station whose state is being monitored.

Adding the team button to the monitoring station

Procedure

1. On the System Manager web console, click Users > User Management > Manage Users.
2. Search for the station to which you want to add the team button.
3. Select the user profile of the monitoring station, and click Edit.
4. In the User Profile edit page, go to the CM Endpoint Profile area.
5. Click Endpoint Editor > Button Assignment > Feature Buttons.
6. In the Button Feature field, select team.
7. In the Ext field, type the extension of the monitored station.
8. In the Ring field, type one of the following ring types:

   - n: No ringing
   - r: Continuous ringing
   - d: Delayed ringing
   - a: Abbreviated (single) ringing
   - i: Intercom ringing
9. Click Done.
10. To apply the changes, click Commit.

Administering the team button functionality

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.
2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `change cor <COR of station>`.
4. Click Send.

5. Click Next Page until you reach Page 3.
6. **Optional:** To enable audible ringing, set Team Btn Silent if Active to `n`.
7. **Optional:** To enable priority ringing, set Priority Ring to `y`.
8. **Optional:** To display the monitored station name instead of the number, set Team Btn Display Name to `y`.
9. **Optional:** To enable pick up of a call by going off-hook, set Pick Up by Going Off Hook to `y`.
10. To apply the configuration changes, click Enter.

Administering the team button override functionality

About this task

This team button functionality is controlled by Class of Restriction (COR) settings and a setting on the monitoring station.

Note:
Avaya Workplace Client does not support blind transfer by using the team button override functionality.

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.
2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `change cor <COR of station>`.
4. Click Send.
5. Click Next Page until you reach Page 3.
6. **Optional:** For the monitoring station, to override Send All Calls and Call Forwarding by using the team button, set SAC/CF Override by Team Btn to `y`.
7. **Optional:** For the monitored station, set SAC/CF Override Protection for Team Btn to `n`.

   This setting affects all monitored stations that use the same COR. If you set the value in this field to `y`, the system enables override protection. Also, the monitoring station cannot override call redirection set at the monitored station.
8. To apply the configuration changes, click Enter.
9. In the Command field, type `change <monitoring station>`.
10. Click Send.
11. Click Next Page until you reach Page 3.
12. In the SAC/CF Override field, select one of the following:

- n(o): Cannot override rerouting. The station cannot override rerouting.

- y(es): Can override rerouting.The station can override the rerouting that the monitored station has set only if one incoming call appearance is free. If a free call appearance is unavailable, the call fails and the user of the monitoring station hears a busy tone.
- a(sk): Questions whether the user wants to override rerouting.When the user of the station decides whether rerouting must take place or not, Avaya Workplace Client sends a message to the station.

13. To apply the configuration changes, click Enter.

Administering abbreviated or delayed transition interval

About this task

Use this procedure to administer the abbreviated or delayed transition interval.

- Abbreviated ringing: Ringing continues for the number of cycles that you specify in the field and then changes to silent alerting.
- Delayed ringing: Visual alerting continues for the number of cycles that you specify in the field and then changes to ringing.

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.
2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `change system-parameters features`.
4. Click Send.
5. In the Auto Abbreviated/Delayed Transition Interval (rings) field, type the number of rings before the system performs an automatic abbreviated transition or delayed transition for a call.

   You can type a number from 1 to 16. Each ring is equal to a 5 second delay.

6. To apply the configuration changes, click Enter.

Viewing the system capacity for team button

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.

2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `display capacity`.
4. Click Send.
5. Click Next Page until you can view the Team button / Monitored stations field.

   The system displays the used, available, and system limit for team buttons.

Presence and instant messaging

All Avaya Workplace Client platforms require Avaya Aura® Presence Services to provide the Presence functionality. With the Presence feature, you can change your availability and see the availability of other users. Avaya Workplace Client on mobile platforms support direct presence and are not dependent on Client Enablement Services for presence when logged in to VoIP.

You can exchange instant messages with other users by using both Avaya Multimedia Messaging and Spaces Direct Messaging. Avaya Multimedia Messaging is used as the default over Spaces Direct Messaging. The messaging platform can be chosen on a per conversation basis.

Note:

Avaya Workplace Client does not provide the IM functionality with Avaya Aura® Presence Services.

The IM features that users can access when Avaya Workplace Client is configured to use Avaya Multimedia Messaging vary depending on whether they have enhanced Avaya Multimedia Messaging user privileges.

You can hold a Spaces Direct Messaging conversation only with members of Spaces. You cannot invite non-members to join you on Spaces using Avaya Workplace Client.

Avaya Workplace Client supports IM exchange with XMPP federated contacts. With XMPP federation, users in one enterprise domain can exchange IMs with users in external domains. Avaya Multimedia Messaging supports federation with Microsoft Lync, Openfire, and Cisco Jabber.

Configuring Avaya Aura Session Manager to support Avaya Aura Presence Services

About this task

Avaya Aura® Session Manager must be configured to support the Presence Services server that you are using. For more information, see *Administering Avaya Aura® Session Manager*.

Note:

For Presence Services 7.0 and later versions, this configuration is not required.

Procedure

1. Administer the DNS server that Session Manager uses to resolve the FQDN of the Presence Services server.
2. Administer the Local Host Name Resolution (LHNR) on Session Manager with an entry that represents the FQDN of the Presence Services server.
3. Administer a Regular Expression SRE route on Session Manager that points to the Presence Services server.

   The pattern you must use is `.*@ps-fqdn`.

Configuring Avaya Aura Session Border Controller to support Avaya Aura Presence Services

About this task

If you are deploying Avaya Workplace Client with Presence for remote workers, you must configure the Avaya Aura® Session Border Controller Personal Profile Manager (PPM) profile mapping correctly to support Presence.

Procedure

In PPM Services > Mapping Profiles, configure the FQDN or IP address of the Presence server.

Do Not Disturb status

In Avaya Aura® Presence Services Feature Pack 4 and later, you can enable the mod_dnd parameter. When you set this parameter, users continue to receive IMs when their presence status is set to Do Not Disturb, but notifications are suppressed.

When the mod_dnd parameter is enabled, users can still start IM conversations and receive immediate responses.

Note:

Avaya Workplace Client on mobile platforms using only Client Enablement Services for presence do not support the Do Not Disturb (DND) status. DND users continue to receive audio and visual notifications for new messages.

Presence interaction with Client Enablement Services

When Avaya Workplace Client on mobile platforms are integrated only with Client Enablement Services, the Client Enablement Services server delivers the presence information to the Avaya Workplace Client on mobile platforms. For guidance on using presence Access Control List (ACL) requests with Client Enablement Services, see the Client Enablement Services product documentation.

Limitations

- Client Enablement Services supports only a single Presence Server.
- Avaya Workplace Client on mobile platforms using only Client Enablement Services for presence do not support the Do Not Disturb (DND) status. DND users continue to receive audio and visual notifications for new messages.
- If the enterprise directory that you are using with Client Enablement Services is Microsoft Active Directory Application Mode (ADAM), then Client Enablement Services does not support presence.
- In a multidomain configuration, you can only configure presence for users in one domain.
- If the user selects the Automatic option for presence, Avaya Workplace Client does not influence presence in any way. If the user is logged in to Avaya Workplace Client, the user might still appear offline if other devices are offline.

Presence scenarios with Client Enablement Services

The following pertain to a single Client Enablement Services client when the user's presence status is updated automatically:

- If Client Enablement Services is deployed without Application Enablement Services (AES), then the presence status of the user is always Offline.
- If Client Enablement Services is deployed with AES, then the presence status of the user is Available unless the user is on a call. In this case, the status is Busy.

Note:

You can configure AES collector timers that automatically set the presence of a user to Unavailable or Out of Office after a period of time after the last call was made. This feature is available in Avaya Aura® FP3 and later.

Users can also update their presence status manually.

If the Client Enablement Services user has more than one client that supports presence, such as Avaya one-X® Communicator and Avaya Workplace Client, then self-presence is subject to the aggregation rules on Presence Services. Without AES, Client Enablement Services does not publish presence.

The following table summarizes Client Enablement Services configuration options and the corresponding presence status:

AES configured	User client configuration	Automatic	Result
No	Single client: Client Enablement Services	Yes	The presence status is always Offline.
No	Single client: Client Enablement Services	No: User sets presence manually.	The presence status is what the user sets manually.
No	Multiple clients: Client Enablement Services and other presence-enabled clients, such as Avaya Workplace Client	Yes	The presence status is what the other client, such as Avaya Workplace Client, publishes.
No	Multiple clients: Client Enablement Services and other presence-enabled clients, such as Avaya Workplace Client	User sets presence manually on Client Enablement Services.	Client Enablement Services pushes the manual presence update to Presence Services. Presence Services then updates the self-presence status of the user. The presence status is what the user sets manually.
Yes	Single client: Client Enablement Services	Yes	The presence status is always Available. If the user is on a call, the presence status is Busy. **Note:** This result is true and valid until Avaya Aura® FP3, at which point if Client Enablement Services is the only client, then the presence status is always Offline. If the user is on a call, the presence status is Busy.

AES configured	User client configuration	Automatic	Result
Yes	Single client: Client Enablement Services	No: User sets presence manually.	The presence status is what the user sets manually.
Yes	Multiple clients: Client Enablement Services and other presence-enabled clients, such as Avaya Workplace Client	Yes	The resultant presence state between AES and the other presence-enabled client is determined by the Presence Services aggregation logic. For example, AES publishes the presence status as Available and Avaya Workplace Client logs out and goes offline. Then the presence status of the user is always Available. **Note:** This result is true and valid until Avaya Aura® FP3. Else, for Avaya Aura® FP3, AES publishes the presence status as Available if an H.323 device is registered. Otherwise, AES publishes the presence status as Offline.
Yes	Multiple clients: Client Enablement Services and other presence-enabled clients, such as Avaya Workplace Client	User sets presence manually on Client Enablement Services.	Client Enablement Services pushes the manual presence update to Presence Services. Presence Services then updates the self-presence state of the user. The presence status is what the user sets manually.

Presence Access Control List

With the Presence Access Control List feature, users can control who can see the user’s presence.

Supported clients

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Session Border Controller for Enterprise

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Avaya Workplace Client setting

In Avaya Workplace Client settings, the user can click Services > Presence Followers and configure the presence followers.

Managing the presence access control policy

About this task

Use this procedure to define rules for accessing the presence information by one or more watchers.

Procedure

1. On System Manager, click Elements > Avaya Breeze™ > Configuration > Attributes.
2. Click the Service Profiles tab.
3. In the Profile field, click the presence service profile that you want to configure.
4. In the Service field, click Presence Services.
5. In the Access Control area, for Access Control Policy:
    1. Select the Override Default check box.
    2. In the Effective Value field, type Confirm.
6. Click Commit.

    Avaya Workplace Client prompts the user for each request to track the user’s presence. The user can allow or deny the request to track the presence.

Contacts and enterprise search

Users can use Avaya Workplace Client to search for and connect with other users in their enterprise. You can configure Avaya Aura® Device Services to manage common contacts and enterprise search. Common Avaya Aura® Device Services configuration ensures that the experience across clients is consistent.

Note:

If you search for an enterprise contact that has a German umlaut character in the name, Avaya Workplace Client does not provide the presence status for that contact.

Avaya Workplace Client can connect directly to LDAP to manage enterprise search, or it can connect indirectly through another service. For example, existing Avaya Workplace Client deployments on mobile platforms might be configured to use Avaya one-X® Client Enablement Services.

When users search for a contact, Avaya Workplace Client performs a search for that contact in the various directories according to the following priority:

- Avaya Aura® Device Services
- Client Enablement Services or LDAP
- Avaya Cloud Services
- Local

Note:

Configure the enterprise policy to enable Avaya Workplace Client to access local contacts from Microsoft Outlook. Check with your IT team if you need to update the Outlook security registry. For more information, see Microsoft Support.

Supported LDAP directories for Avaya Workplace Client

LDAPv3 support

Avaya Workplace Client can connect directly to LDAP to manage enterprise search or it can connect indirectly through another service. For example, existing Avaya Workplace Client deployments on mobile platforms might be configured to use Avaya one-X® Client Enablement Services. In this case, LDAP integration is done through Client Enablement Services.

The preferred option is to connect to LDAP using Avaya Aura® Device Services. For more information, see *Deploying Avaya Aura® Device Services* and *Administering Avaya Aura® Device Services*.

Only desktop clients have direct connectivity to LDAP and they support Avaya Aura® Device Services. Mobile clients connect with LDAP using Avaya Aura® Device Services or Client Enablement Services. On mobile platforms, users can perform an LDAP search using Microsoft ActiveSync if you provision the same.

Note:

On Avaya Workplace Client for iOS, to use a Gmail account for an LDAP search using Microsoft ActiveSync, you must provision the Gmail account as Exchange account type. If you add another Exchange account with Gmail, Avaya Workplace Client can search contacts from both the Exchange and Gmail accounts.

This section describes LDAP support for Avaya Workplace Client that connect to an LDAP directory directly.

Avaya Workplace Client supports LDAPv3, which includes standard LDAP and secure LDAP, with Microsoft Active Directory. Avaya Workplace Client on desktop platforms also support Novell eDirectory and IBM® Lotus Domino. For more information about supported directory versions for each Avaya Workplace Client, go to https://secureservices.avaya.com/compatibility-matrix/menus/product.xhtml and select the appropriate Avaya Workplace Client.

Note:

The default directory type used by Avaya Workplace Client on desktop platforms is Microsoft Active Directory. If you want to use any other directory type, you must set the DIRTYPE parameter using the automatic configuration file. For information about the automatic configuration options, see the chapter on Automatic configuration.

You can set up the LDAP server using an FQDN or an IP address.

Search attributes

During an LDAP search, Avaya Workplace Client searches the following attributes:

- cn: Common name, that is, First name plus Last name
- sn: Last name
- givenName: First name
- displayName: Display name

If Avaya Aura® Device Services is enabled, Avaya Workplace Client searches the following attributes:

- displayName
- Alias
- FirstName
- LastName
- number
- handle: email or im handle

The search results also return the thumbnailPhoto and jpegPhoto attributes of the contact. Thumbnail photo is in JPEG format.

After the search, Avaya Workplace Client constructs the name using the sn and givenName attributes.

If Avaya Aura® Device Services is enabled and the user performs an advanced search, Avaya Workplace Client searches the following LDAP attributes:

- givenName
- sn
- displayName

- l: Location
- department: Department name

If the user populates the Name field, Avaya Workplace Client automatically searches for givenName, sn, and displayName using the same algorithm that is used in unified search. You cannot search for only givenName or sn, etc.

If a user adds a contact who is already an enterprise contact as an Avaya Workplace Client contact, the system overwrites the name with the localized display name on Avaya Aura® System Manager. If a user adds the contact from an enterprise search, the system uses the mail attribute to determine whether the contact is combined or aggregated with a local contact. The enterprise contact photo takes precedence over the local contact photo.

Note:

For Avaya Aura® Device Services deployment, self-contact resolution is available. However, for PPM and LDAP deployments, self-contact resolution is unavailable.

Google Chrome browser extension

Use the Chrome Web Store to distribute the Google Chrome extension. This involves some changes in the way that the users get it.

- After users install Avaya Workplace Client for Windows, users do not need to install the Chrome extension manually because Avaya Workplace Client for Windows installs the extension automatically.
- After users uninstall Avaya Workplace Client for Windows, users do not need to uninstall the Chrome extension manually because Avaya Workplace Client for Windows uninstalls the extension automatically.
- Avaya Workplace Client for Windows flags the installation of the extension as a third-party installation. If users remove the Chrome extension manually from the Chrome UI, the local block list includes the Chrome extension, which prevents new installations by third parties.
  - Hence, when the user subsequently installs Avaya Workplace Client for Windows, the Chrome extension is not installed.
  - If the user wants to use the extension again, the user must manually install the Avaya Browser Extension from the Chrome Web Store. This action removes the extension from the block list allowing installations from third parties.
- Use the following procedures to install and uninstall the Chrome extension only on Chrome browser version 75 and earlier.

Note:

Chrome on Mac OS does not support the browser extension.

Enabling the Google Chrome browser extension for Avaya Workplace Client for Windows

About this task

Google indicates that you must install browser extensions by using the enterprise policy. Use this procedure to enable the Google Chrome browser extension for Avaya Workplace Client for Windows.

For information about using the on-premise tools to set Google Chrome policies in an enterprise, see https://support.google.com/chrome/a/answer/187202?hl=en.

Before you begin

Install Avaya Workplace Client for Windows.

Procedure

1. To download the Chrome policy templates for Windows and to install them, configure the registry values by using the enterprise policy:
    1. Open your Group Policy Management console.
    2. Go to User Configuration\Administrative Templates\Google\Google Chrome\Extensions.
    3. Go to the Configure the list of force-installed apps and extensions setting.
    4. Set the value to:

       ```
       ildhoddlaaaneelljhohbndmjbjbfgcl;file:///C:/Program%20Files%20(x86)/
       Avaya/Avaya%20IX%20Workplace/fTarget/accs_crx_update_manifest.xml
       ```

    5. Save the changes.
    6. Go to the Configure extension, app, and user script install sources setting.
    7. Set the value to:

       ```
       file:///C:/Program%20Files%20(x86)/Avaya/Avaya%20IX%20Workplace/fTarget/*
       ```

    8. Save the changes.
2. Apply group policy for the users.
3. Restart the Google Chrome browser.
4. Open Google Chrome and enter `chrome://extensions` in the address bar.

The system displays the Avaya Workplace Client for Windows add-in for the Chrome browser, which works properly on Google Chrome.

Uninstalling the Google Chrome browser extension from Avaya Workplace Client for Windows

Before you begin

Exit the Google Chrome browser.

Procedure

1. Delete the group policy:
    1. Open your Group Policy Management console.
    2. Go to User Configuration\Administrative Templates\Google\Google Chrome\Extensions.
    3. Go to the Configure the list of force-installed apps and extensions setting.
    4. Delete:

       ```
       ildhoddlaaaneelljhohbndmjbjbfgcl;file:///C:/Program%20Files%20(x86)/
       Avaya/Avaya%20IX%20Workplace/fTarget/accs_crx_update_manifest.xml
       ```

    5. Save the changes.
    6. Go to the Configure extension, app, and user script install sources setting.
    7. Delete:

       ```
       file:///C:/Program%20Files%20(x86)/Avaya/Avaya%20IX%20Workplace/fTarget/*
       ```

    8. Save the changes.
2. Apply group policy for the users.
3. Restart the Google Chrome browser.
4. Open Google Chrome and enter `chrome://extensions` in the address bar.

The system does not display the Avaya Workplace Client for Windows add-in for the Chrome browser.

Blocking websites to stop highlighting telephone numbers

About this task

You can block a website using a group policy. The Administrator has disabled the following site(s) list in the Browser Add-in General tab displays blocked websites with a red icon. Collaboration Services does not highlight telephone numbers on blocked websites.

Procedure

1. In the Windows registry, update the group policy as follows:
   - For 64–bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\AVAYA\Collaboration\BlockedHost
   - For 32–bit: HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\Collaboration\BlockedHost
2. Create a new value name with the `REG_SZ` type.
3. In Value name, type the site address.
4. In Value data, type `Blocked`.

Unblocking websites using the group policy

About this task

Using the group policy, you can unblock websites. Collaboration Services highlights telephone numbers on websites that are unblocked.

Procedure

1. In the Windows registry, update the group policy as follows:
   - For 64–bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\AVAYA\Collaboration\BlockedHost
   - For 32–bit: HKEY_LOCAL_MACHINE\SOFTWARE\Avaya\Collaboration\BlockedHost

2. Remove the site address (value name) that you want to unblock.

IPv6 and ANAT configuration

To enable dual stack network on Wi-Fi, the router must support IPv6 advertisement.

You must configure the following parameters so that Avaya Workplace Client can support IPv6 and Alternative Network Address Type (ANAT) in a dual stack environment:

- SIGNALING_ADDR_MODE
- MEDIA_ADDR_MODE
- SIP_CONTROLLER_LIST

ANAT mechanism helps to achieve media level interworking between IPv4 and IPv6.

Parameter name	Required for non-ANAT deployment	Required for ANAT deployment	Allowed values
SIGNALING_ADDR_MODE	Yes	Yes	4 or 6
MEDIA_ADDR_MODE	No	Yes	4 or 6 - Disables ANAT capability 46 or 64 - Enables ANAT capability
SIP_CONTROLLER_LIST	Yes	Yes	Examples: • "proxy1:5555;transport=tls,proxy2:5556;transport=tls" • "135.20.247.77:5555;transport=tls, 135.20.247.87:5556;transport=tls" • "[2007:7::5054:ff:fe35:c6e]:5060;transport=tcp, [2007:7::5054:ff:fe80:d4b0]:5060;transport=tcp"

Note:

To enable dual stack network deployments on clients, you must configure SIP_CONTROLLER_LIST with FQDN, which must resolve to both IPv4 and IPv6 address.

Configure the following values on Avaya Workplace Client:

Network	SIGNALING_ADDR_MODE	MEDIA_ADDR_MODE
Single stack client	4	4
	6	6

Network	SIGNALING_ADDR_MODE	MEDIA_ADDR_MODE
Dual stack client	4	4
	6	6
	4	46
	6	64

Note:

The MEDIA_ADDR_MODE value in the automatic configuration file must match the configuration of media address mode on System Manager. This setting is available in Device Group settings.

Configuring Avaya Aura Communication Manager to support IPv6 and ANAT

About this task

For complete information about how to perform these steps, see Avaya Aura® Communication Manager documentation.

Procedure

- If you are using vCenter to deploy Communication Manager OVA, then configure IPv6 Address, Prefix, and Gateway details during deployment of ovf.

  After Communication Manager is up, use ifconfig to verify whether eth0 has IPv6 address.

- If you are using the vSphere client/ESXi web page to deploy Communication Manager, then you must configure the IPv6 address on Communication Manager from the Communication Manager SMI page.

  1. Configure Communication Manager IPv4 address on the first boot of Communication Manager after deployment.
  2. Log in to the Communication Manager SMI page using IPv4 address.
  3. Navigate to Administration > Server (Maintenance) > Server Configuration > Network Configuration.
  4. In the IPv6 is currently field, click Enabled.

     This enables the text boxes where you can configure the IPv6 address details.

  5. Configure IPv6 Address, Prefix, and Gateway for eth0 and eth1(simplex)/eth2(duplex) if OOB is enabled, and click Change.

If required, restart Communication Manager.

6. Reboot Communication Manager from the OS level.
7. After Communication Manager is up, use ifconfig to verify whether eth0 has IPv6 address.

- Go to the Communication Manager SAT interface and do the following:

    1. Run the add ip-int procr command to deploy a new instance of Communication Manager or run the change ip-int procr command to enable IPv6 on existing Communication Manager.
    2. Go to page #2 and configure Enable Interface? to Y.
    3. Submit the form.

- Enable ANAT on system-parameters ip-options and ip-network-region forms.
- Configure IPv4 and IPv6 in the ip-codec-set form.
- Configure IPv4 and IPv6 IPs to media resource for Media Gateway and Avaya Media Server.
- Ping the IPv6 address of Communication Manager by using the ping6 command from another IPv6 enabled system to verify that Communication Manager is accessible on the network.
- Add the IPv6 address of Communication Manager in SIP entity and select the IP tolerance flag.

Configuring Avaya Aura Session Manager to support IPv6 and ANAT

About this task

For complete information about how to perform these steps, see *Administering Avaya Aura® Session Manager*.

Procedure

1. On the System Manager web console, in Elements, click Routing > SIP Entities.
2. Click the Session Manager SIP entity for which you need to configure the IPv6 address.
3. Configure the following:

    1. IP Address Family to Both if configuring dual stack, or select IPv6 for v6 only entity.
    2. Configure a valid IPv6 address.

        This IPv6 address is the asset IP of Session Manager.

    3. Click Commit.

4. Ping the IPv6 address of Session Manager by using the ping6 command from another IPv6 enabled system to verify that Session Manager is accessible on the network.
5. Configure the SIP entity link between Communication Manager and Session Manager, select the IP address family as IPv6.
6. To make calls in a dual stack network, enable ANAT on system-parameters ip-options and ip-network-region forms and configure IPv4 and IPv6 in the ip-codec-set form.
7. To get media channels on the IPv6 network, configure IPv6 IP for Media Gateway and Avaya Media Server.
    1. Create Avaya Media Server SIP sig group with IPv6 IP.
    2. Configure IPv4 and IPv6 IP for Media Gateway Controller (MGC) on Media Gateway.

Configuring Avaya Aura Session Border Controller to support IPv6 and ANAT

About this task

For complete information about how to perform these steps, see *Administering Avaya Session Border Controller for Enterprise*.

Note:

Media unanchoring is not supported with IPv6. Media unanchoring is used to enhance bandwidth usage for endpoints within the same subnetwork and to allow direct media to flow between these endpoints.

Procedure

- Provision the IPv6 address in the signaling address interface.
- Ensure that the media interface has primary and secondary interface publishing both IPv4 and IPv6 addresses.
- Enable the Tolerant field in the server flow.
- To enable ANAT for media rules, on the Media Rules screen, in the Advanced tab, select the ANAT Enabled check box.
- Configure the following in the Endpoint flow screen:
    - On the Add Subscriber Flow Profile screen, in the Secondary Media Interface field, click the secondary media interface option to be used for this Server End Point Flow.
    - On the Add Server Flow screen, specify Media Interface and Secondary Media Interface.Media Interface is a drop-down menu from which you select the media interface to be used for this Server End Point Flow. Select the internal or external media interface depending upon the direction of the flow of traffic.

Secondary Media Interface is a drop-down menu from which you select the secondary media interface to be used for this Server End Point Flow.

SSO with OAuth and SAML

Avaya Workplace Client supports SSO with Open Authorization (OAuth) and Security Assertion Mark-up Language (SAML).

Note:

Avaya Workplace Client on Avaya Vantage™ does not support SSO with OAuth and SAML.

Use this feature to integrate Avaya Workplace Client SSO with a supported enterprise Identity Provider (IDP) solution for authentication including multi-factor authentication. Services included with the solution are Avaya Aura® Device Services Release 8.0 and later and the Avaya Multimedia Messaging service on Avaya Aura® Presence Services Release 8.1 and later.

A user can log in using OAuth and SAML and have an SSO experience for:

- Voice service. Avaya Aura® Device Services provides the SIPSHA1 token.
- Services provided by Avaya Aura® Device Services including automatic configuration, contacts, and enterprise search.
- Presence using SIP.
- Avaya Multimedia Messaging service on Avaya Aura® Presence Services.
- Avaya Aura® Web Gateway for Apple Push Notifications on iOS clients.
- Exchange Web Services.

The following services do not use the OAuth and SAML login flows. These are planned to be added in a future release:

- Avaya Equinox® Conferencing
- SCEP certificate installation

The following services continue to use the existing authentication methods with individual sign-on or unified login with a shared Avaya Workplace Client credential:

- Client Enablement Services
- Standalone Avaya Multimedia Messaging

Avaya Spaces login continues to use the Avaya Cloud Accounts login. Further integration is planned for a future release.

You can configure the following parameters for SSO with OAuth:

- AUTOCONFIG_USESSO
- ESMSSO
- ACSSSO
- EWSSSO
- AVAYA_AUTHORIZATION_REALM

For more information on these parameters, see the chapter on Automatic configuration.

If the Avaya Aura® Device Services server is provisioned to support Avaya Authorization Service (KeyCloak) and Avaya Breeze Authorization Service, then you must provision the AVAYA_AUTHORIZATION_REALM property for Avaya Workplace Client, which is configured to use Avaya Authorization Service.

The realm that you provision in the AVAYA_AUTHORIZATION_REALM property must match the realm that is provisioned on the resource server. Examples of resource servers include Avaya Aura® Device Services, Avaya Multimedia Messaging service on Avaya Aura® Presence Services, and Avaya Aura® Web Gateway. Avaya Workplace Client supports a single realm for all UC Application Resource servers. The default realm on Avaya Aura® Device Services is SolutionRealm. Failure to provision the AVAYA_AUTHORIZATION_REALM property might result in inconsistent loss of service for Avaya Workplace Client.

For more information about OAuth with Avaya Aura® Device Services, see the “OAuth2 management with the Keycloak administration portal” chapter in the *Administering Avaya Aura® Device Services* document.

Configuration for Over the Top deployments

This chapter describes the configuration of Avaya Workplace Client settings in an Over the Top (OTT) deployment.

If you do not have Avaya Aura® in your configuration, OTT deployment is mandatory to use Avaya Workplace Client.

Complete client and server configuration before configuring the appropriate functionality.

Client and server configuration

Client and server requirements

Component	Requirement
Supported clients	• Avaya Workplace Client on mobile platforms • Avaya Workplace Client on desktop platforms • Avaya Workplace Client conference portal
Supported servers	• Avaya Session Border Controller for Enterprise • Avaya Equinox® Conferencing • Unified Portal • Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Client configuration

DNS auto discovery

DNS auto discovery is mandatory to support Avaya Workplace Client in the OTT deployment.

Automatic configuration settings

The automatic configuration parameters included in the following table are provided by the Portal auto configure service to support Avaya Workplace Client in the OTT deployment. The table includes the recommended values. For complete information about these parameters, see the chapter on Automatic configuration.

Automatic configuration parameter	Recommended value	Notes
UNIFIED_PORTAL_SSO	1	Clients can use the enterprise user name and password to sign in to the Avaya Workplace Client conference portal.
SUPPORTWINDOWSAUTHENTICATION	0	The Portal only supports Kerberos, not NTLM. Therefore, ensure that you do not enable this parameter if NTLM is used.
BFCP_UDP_MINIMUM_PORT	5204	—
BFCP_UDP_MAXIMUM_PORT	5224	—
RTP_PORT_LOW	5004	Change this parameter value depending on the firewall port ranges.
RTP_PORT_RANGE	200	—
APPCAST_CHECK_INTERVAL	1	—
EWSENABLED	1	EWS is mandatory to support the Top of Mind feature in SDC replacement clients.
EWSSSO	1	Clients can use the enterprise user name and password to authenticate with EWS.
EWSSERVERADDRESS	Enter the EWS server address.	—

Automatic configuration parameter	Recommended value	Notes
EWSDOMAIN	Enter the EWS server FQDN.	—

Server configuration

Server external access

The following table includes the list of servers that can be accessed externally through Avaya Session Border Controller for Enterprise or Third-Party Reverse Proxy:

Server	TLS traffic	Internal Avaya Aura® users	External guest users	Server certificates signed by third-party CA	Mutual authentication on the server for internal traffic	Mutual authentication on SBC or Reverse Proxy for external traffic
Avaya Aura® Web Gateway or Unified Portal	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled
Equinox Conference Control	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled
WCS	HTTPS	Yes	Yes	Mandatory	Disabled	Disabled

Split Horizon DNS

Avaya recommends the use of split horizon DNS so that the same FQDN is used for any server by both the internal and external clients. The benefits are:

- Administration of the overall system is simplified.
- Single settings file can serve both the internal and external clients.
- Hair-pinning of WCS and Equinox Conference Control traffic by the internal Avaya Workplace Client native clients through SBC is removed.

Server certificate and mutual authentication

Servers that need to support guest access require third-party, CA-signed certificates. This includes Avaya Aura® Web Gateway, Equinox Conference Control, and WCS. Disable mutual authentication on SBC for external access to these servers.

Do not use IP address in the CN/SAN field of the certificates.

User Portal and Web Gateway settings on Avaya Equinox® Management

Avaya recommends that you retain the default value of Client Ranking as Equinox Desktop Client, Equinox Mobile Client, and Web Client. This enables the portal to open Avaya Workplace Client with a higher priority than the Web Client.

Contacts and enterprise search functionality configuration

Users can use Avaya Workplace Client to search for and connect with other users in their enterprise. Avaya Workplace Client can connect directly to LDAP to manage enterprise search.

If Avaya Spaces is configured, users can search for enterprise contacts from the Avaya Spaces directory as Avaya Aura® Device Services is disabled in OTT deployments.

Supported LDAP directories for Avaya Workplace Client

LDAPv3 support

Only desktop clients have direct connectivity to LDAP. On mobile platforms, users can perform an LDAP search by using Microsoft ActiveSync if it is provisioned.

Note:

On Avaya Workplace Client for iOS, to use a Gmail account for an LDAP search using Microsoft ActiveSync, you must provision the Gmail account as Exchange account type. If you add another Exchange account with Gmail, Avaya Workplace Client can search contacts from both the Exchange and Gmail accounts.

This section describes LDAP support for Avaya Workplace Client that connect to an LDAP directory directly.

Avaya Workplace Client supports LDAPv3, which includes standard LDAP and secure LDAP, with Microsoft Active Directory. Avaya Workplace Client on desktop platforms also support Novell eDirectory and IBM® Lotus Domino. For more information about supported directory versions for each Avaya Workplace Client, go to https://

secureservices.avaya.com/compatibility-matrix/menus/product.xhtml and select the appropriate Avaya Workplace Client.

Note:

The default directory type used by Avaya Workplace Client on desktop platforms is Microsoft Active Directory. If you want to use any other directory type, you must set the DIRTYPE parameter using the automatic configuration file. For information about the automatic configuration options, see the chapter on Automatic configuration.

You can set up the LDAP server by using an FQDN or an IP address.

Search attributes

During an LDAP search, Avaya Workplace Client searches the following attributes:

- cn: Common name, that is, First name plus Last name
- sn: Last name
- givenName: First name
- displayName: Display name

The search results also return the thumbnailPhoto and jpegPhoto attributes of the contact. The thumbnail photo is in the JPEG format.

After the search, Avaya Workplace Client constructs the name by using the sn and givenName attributes.

If a user adds a contact who is already an enterprise contact as an Avaya Workplace Client contact, the system overwrites the name with the localized display name on Avaya Aura® System Manager. If a user adds the contact from an enterprise search, the system uses the mail attribute to determine whether the contact is combined or aggregated with a local contact. The enterprise contact photo takes precedence over the local contact photo.

Avaya Equinox Conferencing functionality configuration

Use the procedures in this chapter to configure the Avaya Equinox® Conferencing functionality. All functionality is applicable to both UC and OTT deployments, unless explicitly specified.

Checklist for configuring Avaya Equinox Conferencing functionality

The following checklist outlines the high-level setup and configuration tasks for Avaya Equinox® Conferencing functionality. Configure the functionality according to your requirement.

Functionality	Reference	✔
Custom branding logo	• Custom branding logo • Configuring the Avaya Equinox Management server for custom branding logo	
Adhoc conferencing	• Adhoc conferencing by using Avaya Workplace Client • Configuring the Avaya Equinox Management server for adhoc conferencing • Configuring the Avaya Equinox Management server for limiting the sharing capability	
Conference access controls	Conference access controls using Avaya Workplace Client	
Slider	• Slider in Avaya Equinox Conferencing • Configuring the Avaya Equinox Management server for the Slider functionality	
Multi-stream switching	• Multi-stream switching with Avaya Equinox Conferencing • Configuring the Avaya Equinox Management server for Multi-stream switching	
Dial-in information	Avaya Equinox Conferencing dial-in information	

Functionality	Reference	✔
Dial-out information	- Avaya Equinox Conferencing dial-out information - Configuring the Avaya Equinox Management server for the Avaya Equinox Conferencing dial-out information	
Avaya Mobile Link	- Avaya Mobile Link - Configuring the XT endpoint for Avaya Mobile Link	
HTTP tunneling	- HTTP tunneling - Configuring initial settings on Avaya SBCE - Creating a new policy group with video enabled - Creating a load monitoring profile on Avaya SBCE - Managing server flow configuration on Avaya SBCE - Configuring Avaya Session Border Controller for Enterprise in Avaya Aura Web Gateway - Avaya SBCE connectivity status indicators - Configuring Avaya Session Border Controller for Enterprise in Avaya Equinox Management - External access configuration - Configuring Avaya Aura Web Gateway for external users access - Configuring TLS for Avaya SBCE by using System Manager - Configuring reverse proxy on Avaya SBCE	
HTTP proxy configuration	HTTP proxy configuration	

Custom branding logo

When joining the Avaya Workplace Client meeting, Avaya Workplace Client can display the custom branding logo in the splash screen only when the logo is configured in Avaya Equinox® Management.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Configuring the Avaya Equinox Management server for custom branding logo

Procedure

In Settings > Advanced > Branding, upload the custom logo image as part of the ACBranding.zip file.

Adhoc conferencing by using Avaya Workplace Client

Users can create an Avaya Workplace Client adhoc conference by using Avaya Equinox® Conferencing in the following ways:

- Merge two point-to-point (P2P) calls.A P2P call refers to a communications connection between two communication endpoints.
- Add a new participant to an existing P2P call.
- Create a conversation by dialing the numbers of multiple participants at the same time.
- Start sharing while on a P2P call on desktop platforms.
- Escalate a multi-party chat to an audio or video conference call.

Note:
You cannot use Avaya Workplace Client to make adhoc conference calls in an OTT deployment.

Supported clients

- Avaya Workplace Client on mobile platforms

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Avaya Workplace Client setting

The adhoc conference address in Avaya Workplace Client at Services > Phone Service > Adhoc Conference Address must match the Avaya Equinox® Management server's Conference Factory URI for SIP Adhoc Conferencing value. For example, 816543@avayamcs.com.

Automatic configuration settings

You must include the adhoc conference URL in the CONFERENCE_FACTORY_URI parameter.

Configuring the Avaya Equinox Management server for adhoc conferencing

Procedure

- In Settings > Meetings > Policies > Conference Factory URI for SIP Adhoc Conferencing, set a value for the factoryURI property.

  For example, `816543@avayamcs.com`.

- In Advanced Parameters, set a value for the vnex.vcms.core.conference.defaultDomain property.

  For example, `avayamcs.com`.

- In Advanced Parameters, set the value for the vnex.vcms.core.conference.enableDialoutAsSIP property as `true`.
- **Optional:** If multiple Outbound SIP servers are defined in the Avaya Equinox® Management server, you can specify one server by going to Settings > Meetings > Policies > Default SIP Domain.

The default value is the domain of the first SIP server configured in Avaya Equinox® Management. You can change the value to whichever SIP server you want to use for outbound calls.

Configuring the Avaya Equinox Management server for limiting the sharing capability

About this task

Use this procedure to configure the sharing capability for Avaya Equinox® Conferencing users.

Note:

This feature is supported only on OTT deployments.

Procedure

1. Go to Settings > Users > Policies > User Policies.
2. In the Enable sharing for area, select one of the following:
    - Everyone: All users can share content.
    - Moderator and registered users: Only the moderator and registered users can share content.
    - Moderator only: Only the moderator can share content.
3. Save the changes.

Conference access controls using Avaya Workplace Client

To access a conference, users can enter the meeting PIN and use the Knock on Door feature through the UCCP connection.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Slider in Avaya Equinox Conferencing

Use this feature to view the presentation content that was presented previously during the meeting. The Slider feature provides navigation keys at the top of the screen, above the presentation content.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms
- Avaya Workplace Client conference portal

Supported servers

- Avaya Equinox® Conferencing
- UCCS

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Configuring the Avaya Equinox Management server for the Slider functionality

Procedure

In Settings > Meetings > Meeting Types, configure the Enable Slider check box.

Multi-stream switching with Avaya Equinox Conferencing

Avaya Workplace Client on desktop platforms support Multi-stream switching (MSS) when the user is connected to an Avaya Equinox® Conferencing-based meeting if Avaya Workplace Client is configured for switching. Avaya Workplace Client can render up to four streams of video based on screen real-estate, connection quality, and decoding capability of the underlying device.

Supported clients

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway
- Avaya Aura® Session Manager
- Avaya Aura® Communication Manager
- Avaya Session Border Controller for Enterprise

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

ENABLE_MSS_VIDEO

By default, this parameter is enabled. For Unified Communications deployments, you can disable this feature.

Note:

In Unified Communications deployments, if you enable BFCP in Avaya Workplace Client to work with third-party video systems, you must disable MSS in Avaya Workplace Client. This is due to an Avaya Aura® limitation.

VIDEO_MAX_BANDWIDTH_ANY_NETWORK

In Unified Communications deployments, you must set the Avaya Workplace Client video bandwidth by using this parameter. This value must not exceed the video bandwidth in both the Session Manager location bandwidth and the Communication Manager network region bandwidth.

For example, you set the following:

- Communication Manager network region bandwidth to `y`
- Session Manager location bandwidth to `z`
- VIDEO_MAX_BANDWIDTH_ANY_NETWORK to `x`

In this case, you need to ensure that `x=<y-64` and `x=<z-64`, where 64 is the audio bandwidth. To support the MSS functionality, Avaya recommends that you set y=z.

Relationship between VIDEO_MAX_BANDWIDTH_ANY_NETWORK and maximum number of received video streams supported

VIDEO_MAX_BANDWIDTH_ANY_NETWORK	Maximum number of received video streams supported
>=512	4
>=384	3
>=256	2
>=128	1

Recommended VIDEO_MAX_BANDWIDTH_ANY_NETWORK value

To support the four receiving video streams with 360p each, Avaya recommends the following bandwidth values:

Component	Setting	Value
Avaya Workplace Client	VIDEO_MAX_BANDWIDTH_ANY_NETWORK	1280
Communication Manager	Network region bandwidth per call	1344
Session Manager	Location bandwidth per call	1344

Unified Portal configuration

Users can set their virtual room meeting type to MSS from the Avaya Equinox® Conferencing user portal if you have defined the MSS meeting type.

Configuring the Avaya Equinox Management server for Multi-stream switching

Procedure

1. To configure the MSS meeting type, go to Settings > Meetings > Meeting Types.
2. To assign a virtual meeting room type to MSS, go to Users > Users from Active Directory > All > Virtual Room.

Avaya Equinox Conferencing dial-in information

Users can get the conference dial-in information during a meeting, for example, in the presentation-only mode.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms
- Avaya Workplace Client conference portal

Supported servers

- Avaya Session Border Controller for Enterprise
- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Avaya Equinox® Management server configuration

Configure the Meeting Invitations in simple HTML without buttons and tables so that the Avaya Equinox® Management server can convert HTML into text version correctly for Avaya Workplace Client dial-in display.

On Avaya Equinox® Management server, configure the Location field by going to Settings > Meetings > Invitations. You can use one of the following options:

- If you did not configure the PSTN dial-in variables and do not want to include any preferred PSTN dial-in number in the Location field, set location in different languages to https://PortalFQDN/portal/tenants/default/?ID=[E164].
- If you configure the PSTN dial-in variables and want to include any preferred PSTN dial-in number in the Location field, set location in different languages to https://PortalFQDN/portal/tenants/default/?ID=[E164] || [DIAL-IN-LABEL]: [DIAL-IN-STRING].

You must configure the invitation template in HTML and TXT format.

Example of an invitation template in HTML format

Note:

Use hyperlink for URL and phone numbers.

```
You have been invited to an Avaya Workplace Meeting: [VIRTUAL_ROOM_NAME]

Conference information
Meeting ID: [MEETING_ID][PIN_START]
Meeting PIN: [PIN][PIN_END]

Join by Video Conference System
Dial the Meeting ID[PIN_START] followed by the Meeting PIN[PIN_END]

Join by Phone
Use one of the numbers below and if prompted enter the Meeting ID[PIN_START
] and PIN[PIN_END]
New York: +1-212-555-5000
London: +44-020-7946-0500
```

Example of an invitation template in TXT format

```
Join the Meeting
```

```
[DESKTOP_MOBILE_ACCESS_LINK]

 Meeting ID: [MEETING_ID][PIN_START]
 Meeting PIN: [PIN][PIN_END]

Join by Phone

Use one of the numbers below and if prompted enter the Meeting ID[PIN_START
] and PIN[PIN_END]

 New York: +1-212-555-5000
 London: +44-020-7946-0500
```

Avaya Equinox Conferencing dial-out information

Users can dial out of a conference in the following use cases:

- Join a meeting in presentation-only mode by using a call back number.
- Add a participant during the meeting by using a call back number. Only a moderator can do this.

The call back number can be an E.164 number, a terminal number, or a room system IP address.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms
- Avaya Workplace Client conference portal

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Configuring the Avaya Equinox Management server for the Avaya Equinox Conferencing dial-out information

Procedure

- Configure the vnex.vcms.core.conference.defaultDomain parameter.
    - UC deployment: If the dial out calls need to be routed through Avaya Aura®, you can set the parameter to the Avaya Aura® SIP domain.
    - OTT deployment: If you are using the SIP server to dial out, you can set the parameter to the SIP server domain.
- Configure the vnex.vcms.core.conference.enableDialoutAsSIP parameter.
    - UC deployment: If the dial out calls need to be routed through Avaya Aura®, you can set the parameter to True.
    - OTT deployment: If you are using the SIP server to dial out, you can set the parameter to True.
    - OTT deployment: If you are using the H.323 gateway to dial out, you can set the parameter to False.

  To dial out, Avaya Equinox® Management must include minimum one configured outbound SIP server. The domain of the first outbound SIP server is the default domain.
- If not configured, you can configure a policy for outbound SIP messaging in Settings > Meetings > Policies and select one of the SIP servers.

    The default is the first SIP server.

Avaya Mobile Link

Users connected on a video conference can use Avaya Mobile Link to transfer the video conference onto an XT Series endpoint. Users can transfer the video conference without connecting the mobile or desktop device to the endpoint with a cable. The XT Series endpoint is used for audio, video, and presentation of the meeting. Avaya Equinox® Conferencing continues to run on the device in the Companion mode to support moderation and chat. Companion mode includes everything except the audio and video capture and rendering features.

With Avaya Mobile Link, users can enjoy the XT Series endpoint's crystal-clear audio, HD camera, and large display during a video conference.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms
- XT system

Supported servers

- Avaya Session Border Controller for Enterprise
- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Avaya Equinox® Management server configuration

If you are connected to the Avaya Workplace Client 9.0.2 meetings, Avaya Workplace Client can only initiate Mobile Link with XT endpoints that are managed by the same Avaya Equinox® Management server. The XT endpoints can register as SIP or H.323. The following XT endpoints cannot connect with Mobile Link:

- Non-managed or non-registered XT endpoints
- Remote XT endpoints: A guest to the meeting from a remote organization cannot pair with the local XT because that XT is remote to the Avaya Equinox® Management server.

All supported XT endpoints must be in the same network as the Avaya Equinox® Management server without going through any proxy. If Avaya SBCE instances are deployed with Avaya Equinox® Conferencing, ensure that the following Avaya Equinox® Management advanced settings are set as:

- com.radvision.airpair.forceuseproxyIP=true
- com.radvision.airpair.proxyIP=x.x.x.xwhere x.x.x.x is the Avaya Equinox® Management server's IP address.

Configuring the XT endpoint for Avaya Mobile Link

About this task

Use this procedure to configure the SIP or H.323 registered XT endpoint for Avaya Mobile Link.

Procedure

1. Open the Avaya Equinox® Management administrator portal.
2. Click the Endpoints tab.
3. Choose the endpoint that you want to configure.
4. Click the Advanced Configuration tab.
5. In the Remote Access area, in the Mode field, click one of the following:
    - Enable - No PIN: Users can automatically access the endpoint remotely without a PIN.
    - Enable - Ask PIN (Manual Pairing): Users must enter a PIN only while accessing the endpoint manually.
    - Enable - Ask PIN (Always): Users must enter a PIN while accessing the endpoint remotely.
6. Click Apply.

HTTP tunneling

Use the HTTP tunneling feature to set up a media connection over TLS for users calling from external networks through Avaya SBCE. A firewall exists in between that blocks UDP(RTP) ports.

If a guest user tries to join a remote conference in the UC deployment, HTTP-UA is used and HTTP tunneling is supported through Avaya SBCE. If the Avaya Workplace Client conference is in the OTT deployment, then signed-in or guest users join the meeting through Avaya SBCE, which uses HTTP-UA and supports HTTP tunneling.

Note:

- Media interworking is not supported for HTTP tunneled calls.
- BFCP is not supported in HTTP tunneling. However, BFCP is supported in the HTTP-UA non-tunneled case.

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Session Border Controller for Enterprise
- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

You must enable the HTTP tunneling feature by using the ENABLE_MEDIA_HTTP_TUNNEL parameter. If the UDP ports are blocked by external firewalls and a user joins the meeting through Avaya SBCE where HTTP media tunneling is enabled, the media in the conference call uses TLS.

Configuring initial settings on Avaya SBCE

About this task

Use this procedure to perform the initial configuration on Avaya SBCE. On Avaya Aura® Web Gateway, you must also enable remote access and perform reverse proxy configuration as described in the sections under External access configuration.

Before you begin

Get Avaya SBCE Release 7.2. Apply the Release 7.2 patch for Media Tunneling for the solution to work correctly.

Procedure

1. Log in to the Avaya Session Border Controller for Enterprise web administration portal: `https://<Management_Interface>/sbc/`.
2. Go to Device Specific Settings > Network Management > Network and ensure that the following interfaces are set to minimum:
   - M1: Management interface, which is configured as part of the installation process
   - A1: Internal interface
   - B1: External interface with at least two associated IP addresses
3. Configure certificates for the following nodes:
   1. Avaya Equinox® Management: Use the Avaya Equinox® Management FQDN signed with the same CA as Avaya Equinox® Management.
   2. Avaya Aura® Web Gateway: Use the global FQDN signed with the same CA as Avaya Aura® Web Gateway.
4. Enable the Media Tunneling feature for tunneling support:
   1. Go to Device Specific Settings > Advanced Options > Feature Control.
   2. Select Media Tunneling.
   3. Click Save.

5. Create the signaling interface:

    1. Go to Device Specific Settings > Signaling Interface and then click Add.
    2. Specify a name for the signaling interface.
    3. Set the IP address to the internal interface (A1).
    4. Set the TCP port to 5060.
    5. Leave the UDP port blank.
    6. Set the TLS port to 5061.
    7. For the TLS profile, select any server profile that you added before.

6. Create the TLS server profile for the external media interface if the Media Tunneling feature is required:

    1. Go to TLS Management > Server Profiles.
    2. Specify a profile name.
    3. In Certificate, select any existing certificate.
    4. Set Peer Verification to Optional.
    5. Do not select anything for Peer Certificate Authorities or Peer Certificate Revocation Lists.
    6. Set Verification Depth to 1.
    7. Retain the default values in the other settings.
    8. Click Next and then click Finish.

7. Configure the external media interface:

    1. Go to Device Specific Settings > Media Interface and then click Add.
    2. Specify a name for the media interface.
    3. Specify the B1 IP address that does not match with the IP address used to redirect requests to Avaya Aura® Web Gateway in the reverse proxy settings.

        This IP address cannot be used for any other interface that uses port 443. It will be used for HTTP tunneling.

    4. Specify the TLS server profile for the media interface if the Media Tunneling feature is required.

        For self-signed certificates on the client, you must use the TLS server profile created for the external media interface.

    5. **Optional:** In Avaya SBCE 7.2.1 and later, in the Buffer Size field, select the buffer size from the list that includes values from 400 to 1000 in KB.

        Avaya SBCE stores the specified size of video frames on its network buffer. For example, if you set the value as 400 KB, then Avaya SBCE stores approximately 6 seconds of video in a congested network. Avaya SBCE drops all video frames beyond this buffer size.

        Note:

The Buffer Size field is visible only if you enable the Media Tunneling feature.

6. Retain the default values in the other settings.

8. Configure the internal media interface:

    1. Go to Device Specific Settings > Media Interface and then click Add.
    2. Specify a name for the media interface.
    3. Specify the A1 IP address.
    4. Retain the default values in the other settings.

Next Steps

If you require video, or a BFCP or FEC connection for calls, create a policy group with video enabled. Else, configure load monitoring.

Creating a new policy group with video enabled

Procedure

1. To enable video:

    1. On the Avaya Session Border Controller for Enterprise web administration portal, go to the Domain Policies > Application Rules page.
    2. Clone the existing application rule or add a new rule.
    3. Enable In/Out Audio/Video application types, and specify maximum concurrent sessions and maximum sessions for each endpoint.

2. To configure media encryption and enable BFCP or FEC:

    1. Go to Domain Policies > Media Rules.
    2. Clone the existing media rule or add a new media rule.
    3. On the Encryption tab, in Miscellaneous, set the Capability Negotiation flag.
    4. Switch to the Advanced tab and set the BFCP Enabled and FECC Enabled flags.

3. Go to Domain Policies > End Point Policy Group.

    1. Clone the existing policy group or add a new policy group.

2. Specify the created application rule and media rule for the policy group.

Creating a load monitoring profile on Avaya SBCE

About this task

Use this procedure to configure load monitoring on Avaya SBCE.

Before you begin

Configure the initial settings.

Procedure

1. On the Avaya Session Border Controller for Enterprise web administration portal, go to Device Specific Settings > Advanced Options > Load Monitoring.
2. Click Add and do the following:

    1. Set Load Balancer Type to INTERNAL.
    2. Set Load Balancer IP to the IP of the Avaya Aura® Web Gateway server.

        In case of cluster configuration, add load monitoring profile for each cluster node.

    3. Set Load Balancer Port to 80 for TCP or 443 for TLS.
    4. **Optional:** If you are using TLS, in TLS Profile, select an Avaya Aura® Web Gateway profile.
    5. In Listen IP, enter the internal interface (A1) address.
    6. Click Finish.

Next Steps

Configure server flows on Avaya SBCE.

Managing server flow configuration on Avaya SBCE

About this task

Use this procedure to manage the server flow for the Avaya Aura® Web Gateway and Avaya Equinox® Management servers.

Procedure

1. On the Avaya Session Border Controller for Enterprise web administration portal, go to Global Profiles > Server Configuration.
2. Click Add and do the following:

    1. Set Server Type to Trunk Server.
    2. **Optional:** In TLS Client Profile, select the previously created Avaya Aura® Web Gateway client profile if the TLS port is specified.
    3. Add the Avaya Aura® Web Gateway FQDN with the port and protocol specified: TCP or TLS.

        All cluster nodes must be added.

    4. Retain the default values in the other settings.

3. To complete the Avaya Equinox® Management server configuration, do the following:

    1. Set Server Type to Trunk Server.
    2. **Optional:** In TLS Client Profile, select the previously created Avaya Equinox® Management client profile if the TLS port is specified.
    3. Add the Avaya Equinox® Management FQDN with the port and protocol specified: TCP or TLS.
    4. Retain the default values in the other settings.

4. Go to Device Specific Settings > End Point Flows > Server Flows.
5. To add a flow for the Avaya Aura® Web Gateway server, do the following:

    1. In Server Configuration, select the configuration for the Avaya Aura® Web Gateway server.
    2. Set Received Interface to the internal interface (A1).
    3. Set Signaling Interface to the internal interface (A1).
    4. Set Media Interface to the external interface (B1).
    5. Select the appropriate End Point Policy Group.
    6. Retain the default values in the other settings.

6. To add a flow for the Avaya Equinox® Management server, do the following:

    1. In Server Configuration, select the Avaya Equinox® Management configuration.
    2. Set Received Interface to the internal interface (A1).
    3. Set Signaling Interface to the internal interface (A1).
    4. Set Media Interface to the internal interface (A1).
    5. Select the appropriate End Point Policy Group.
    6. Retain the default values in the other settings.

7. Click Finish.

Configuring Avaya Session Border Controller for Enterprise in Avaya Aura Web Gateway

About this task

Use this procedure only in UC deployments of Avaya Workplace Client.

Procedure

1. On the Avaya Aura® Web Gateway administration portal, go to External Access > Session Border Controller.
2. Click Add to add a new Avaya SBCE.
3. Complete the following settings:
    1. In SIP Address, type the address of the internal interface specified for signaling on Avaya SBCE (A1).
    2. In SIP Port, type `5060` if you are using TCP or `5061` if you are using TLS.
    3. In SIP Protocol, select TCP or TLS.
    4. In HTTP Address, type the internal address specified for the load monitoring entry (A1).
    5. In HTTP Port, type `80` if you are using the HTTP protocol or `443` if you are using the HTTPS protocol.
    6. In HTTP Protocol, select http or https.
    7. In Location, specify the location of the Avaya SBCE server.

        If SBCs are placed in different location, you must check the location priority configuration on the Location page.

        You need to specify the location for only one node, which is then propagated to all other nodes in the cluster.
4. Click Save.

Avaya SBCE connectivity status indicators

After you add an Avaya SBCE on the Avaya Aura® Web Gateway web administration portal, the connectivity status for that Avaya SBCE is also displayed. The following table describes the status indicators:

Status indicator	Description
✓	The server is available and can be used for calls. When you hover over this indicator, additional details, such as audio and video session and Avaya SBCE bandwidth, are displayed.
⚠	The server is overloaded and calls cannot be made.
✖	Load monitoring cannot be retrieved for the server.
●	The server status has not been fetched.

Configuring Avaya Session Border Controller for Enterprise in Avaya Equinox Management

About this task

Use this procedure only in OTT deployments of Avaya Workplace Client.

Procedure

1. Access the Avaya Equinox® Management administrator portal.
2. Go to Devices > Devices by Type > ASBCE .
3. Click Add.
4. Type the details in the following fields:
    - Name
    - IP Address
    - Location
5. Click OK.
6. In the Name column, click the link of the ASBCE for which you want to configure the following additional settings:
    - local SIP IP: The address of the internal interface specified for Signaling Interface on Avaya SBCE (A1).
    - SIP protocol: The SIP server protocol, either TCP or TLS.
    - SIP port: The port number of the SIP server, either 5060 or 5061.
    - local HTTP IP: The internal address specified for the Load Monitoring entry (A1).
    - HTTP protocol: The HTTP server protocol, either HTTP or HTTPS.
    - HTTP port: The port number of the HTTP server, either 80 or 443.

7. Click OK.

External access configuration

This section describes the configuration required to access Avaya Aura® Web Gateway from outside the enterprise network through Avaya Session Border Controller for Enterprise (Avaya SBCE), which is located at the edge of the enterprise network.

Important:

Ensure that the front-end port for remote access has been enabled and set as required.

Configuring Avaya Aura Web Gateway for external users access

Procedure

1. Run the following command to open the Configuration utility:

```
app configure
```

2. Go to Front-end host, System Manager and Certificate Configuration and set Override port for remote access as `y`.
3. Configure Front-end port for remote access as a new unassigned port.

   For example, 8444.

4. On the Avaya Aura® Web Gateway administration portal, add the Avaya SBCE STUN/TURN Media Relay IP/FQDN and port on the Server Connections > STUN Servers page.

External B1 interface or Firewall NAT'd address. For example, address:192.168.109.31 port:3478 by default on Avaya SBCE.

Configuring TLS for Avaya SBCE by using System Manager

Procedure

1. Log in to the System Manager web console and click Services > Security.
2. In the left navigation pane, click Certificates > Authority > CA Functions > CA Structure & CRLs.
3. Click Download PEM file and get the CRL.
4. Check whether Certificate Profile (SSLServerCertificateProfile) has the following features set:

- Key Usage: Digital Signature and Key encipherment
- Extended Key Usage: Server Authentication and Client Authentication

5. Click RA Functions > Add End Entity.
6. Type the user name and password, and enter relevant information in the following fields:

- CN: FQDN of the server that must provide TLS support
- DNS name
- Certificate Profile: Appropriate key features (SSLServerCertificateProfile)
- Token: P12 file

7. Click Add.
8. In the left navigation pane, click Public Web.
9. On the public EJBCA page, do the following:

    1. Click Enroll > Create Keystore.
    2. On the Keystore Enrollment page, type the user name and password entered while adding the end entity.

10. **Optional:** Click Certificate Chain and save the .crt file.
11. Set the key length to 4096 bits and click Enroll.
12. Save the keystore (.p12) file.
13. Copy the keystore (.p12), trusted chain (.crt), and CRL files to the /home/ipcs/ directory on Avaya SBCE.
14. **Optional:** Run the following as required:

- To extract the certificate from the keystore file: openssl pkcs12 -in filename.p12 -out filename.crt -nokeys -clcerts

- To extract the key from the keystore file: openssl pkcs12 -in filename.p12 -out filename.key -clcerts
- To convert .crt into the PEM format: openssl x509 -inform der -in filename.cer -out filename.pem
- To convert .crl into the PEM format: openssl crl -inform der -in filename.crl -out filename.pem

15. Log in to the Avaya SBCE EMS web interface with administrator credentials.
16. In the left navigation pane, click TLS Management > Certificates, and do the following:
    1. Click Install.
    2. In the Type field, select Certificate.
    3. In the Name field, type the name of the certificate file.
    4. Select the System Manager PEM file and click Upload.
17. **Optional:** Do the following:
    1. Click Install.
    2. In the Type field, select Certificate Revocation List.
    3. In the Name field, type the name of the certificate file.
    4. Select the System Manager CRL PEM file and click Upload.
18. Do the following:
    1. Click Install.
    2. In the Type field, select Certificate.
    3. In the Name field, type the name of the certificate file.
    4. Select the .crt file as certificate.
    5. Select the Avaya SBCE PEM file as Trusted Chain.
    6. Select the .key file as .key (Upload Key File).
    7. Click Upload.
19. Repeat for all required certificates.
20. Go to directory /usr/local/ipcs/cert/key, and type `enc_key filenamepassphrase`.
21. Restart the Avaya SBCE server.
22. Create a client profile by using the added certificates:
    1. In the left navigation pane, click TLS Management > Client Profiles.
    2. Click Add.
    3. Specify the profile name.

       For example, AAWG Client TLS.
    4. Select the uploaded certificate from Certificate List.
    5. In Peer Certificate Authorities, select the CA certificate.
    6. **Optional:** In Peer Certificate Revocation Lists, select CRL.

7. Set Verification Depth to `1`.
8. Retain the default values in the other settings.
9. Click Next and then Finish.

23. Create a server profile by using the added certificates:

    1. In the left navigation pane, click TLS Management > Server Profiles.
    2. Click Add.
    3. Specify the profile name.

       For example, AAWG Server TLS.

    4. Select the uploaded certificate from Certificate List.
    5. Set Peer Verification to None.
    6. Retain the default values in the other settings.
    7. Click Next and then Finish.

Configuring reverse proxy on Avaya SBCE

Procedure

1. Log in to the EMS web interface with administrator credentials.
2. In the left navigation pane, click Device Specific Settings > DMZ Services > Relay Services.
3. In the Reverse Proxy tab, click Add.
4. On the Add Reverse Proxy Profile page, do the following:

    1. In the Service Name field, type the reverse proxy profile name.
    2. Select the Enabled check box.
    3. In the Listen IP field, click the external Avaya SBCE IP address.
    4. In the Listen Port field, type 443.
    5. In the Listen Protocol field, click HTTPS and select the Avaya Aura® Web Gateway Server TLS profile.
    6. In the Server Protocol field, click HTTPS and select the Avaya Aura® Web Gateway Client TLS profile.
    7. In the Connect IP field, click the internal IP address.
    8. In the Server Addresses field, type the Avaya Aura® Web Gateway FQDN with the remote port number, 8444.

       Note:

       Avaya Aura® Web Gateway FQDN for external user must refer to Avaya SBCE in the DNS.

9. Click Finish.

HTTP proxy configuration

Supported clients

- Avaya Workplace Client on mobile platforms
- Avaya Workplace Client on desktop platforms

Supported servers

Avaya Equinox® Conferencing

Supported proxy authentication types

- HTTP basic authentication
- HTTP digest authentication

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

You can configure the HTTP_PROXY_CSDK_ENABLE parameter to configure the HTTP proxy settings. This parameter indicates whether Avaya Workplace Client uses the HTTP proxy configured in the OS.

Note:

Avaya has rebranded the domains used by Avaya Spaces from `zang.io` to `avayacloud.com`. If you are using Avaya Spaces and have configured the HTTP_PROXY_CSDK_ENABLE parameter with value 1 or 2, you need to configure the VPN gateway for `avayacloud.com` similar to `zang.io`.

If you enable the HTTP proxy, the HTTP Proxy Fallback feature is automatically enabled. Avaya Workplace Client retries the HTTP connection without proxy when receiving certain proxy-related errors. Errors might be related to:

- Proxy configuration
- Configured proxy being unreachable
- Proxy authentication type not supported
- Destination server being unreachable when going through proxy

Device OS proxy configurations

Not all HTTP connections in Avaya Workplace Client go through the HTTP proxy. The following table displays the HTTP connections that you must configure to bypass the HTTP proxy.

Important:

Customers must put all enterprise internal servers' IP address or host name into the device's HTTP proxy exception list settings. Else, Avaya Workplace Client might fail to make HTTP connections through the proxy to the internal servers.

HTTP service connections	Destination servers inside enterprise networks	Destination servers in the public internet	The HTTP proxy exception list configured to include the internal enterprise server's IP address or host name
PPM	Avaya Aura® Session Manager	Not Applicable	Not Applicable Avaya Workplace Client bypasses the HTTP proxy for this connection.
Avaya Aura® Device Services contact service	Avaya Aura® Device Services contact service	Not Applicable	Yes
IP Office presence and directory	IP Office premise	IP Office Cloud	Yes
File download	Avaya Aura® Device Services web deployment service Until server IP Office premise	IP Office Cloud Avaya Equinox® Meetings Online	Yes
Sparkle	Avaya Aura® Device Services web deployment service	Avaya Equinox® Meetings Online	Yes
Avaya Multimedia Messaging	Avaya Multimedia Messaging	Not Applicable	
Avaya Aura® Web Gateway	Premise Avaya Equinox® Conferencing	Avaya Equinox® Meetings Online	Yes
Unified Portal	Premise Avaya Equinox® Conferencing	Avaya Equinox® Meetings Online	Yes
Install Manager	Premise Avaya Equinox® Conferencing	Avaya Equinox® Meetings Online	Yes

HTTP service connections	Destination servers inside enterprise networks	Destination servers in the public internet	The HTTP proxy exception list configured to include the internal enterprise server’s IP address or host name
WCS	Premise Avaya Equinox® Conferencing	Avaya Equinox® Meetings Online	Yes
UCCS	Premise Avaya Equinox® Conferencing	Avaya Equinox® Meetings Online	Yes
Avaya Spaces	Not Applicable	Avaya Spaces	Not Applicable Avaya Spaces servers are always in the public internet.
Google Analytics	Not Applicable	Google	Not Applicable Avaya Workplace Client bypasses the HTTP proxy for this connection.
EWS	Premise Exchange	Office 365	Yes

Avaya Aura Device Services configuration

This chapter includes Avaya Aura® Device Services configuration information for Avaya Workplace Client. For complete information about the implementation of this configuration, see *Deploying Avaya Aura® Device Services* and *Administering Avaya Aura® Device Services*.

- Use the Automatic Configuration service to support Avaya Workplace Client used by the Avaya Aura® users.
- Configure the Contact server to link with Avaya Equinox® Management for searching the Avaya Equinox® Management terminals.
- Enable the Picture service to support the client contact pictures.
- Enable the Web Deployment service to support the Avaya Workplace Client software updates.The Sparkle service is used only by the Avaya Aura® users. However, the client software download service is used by both Avaya Aura® and guest users.

Avaya Aura Device Services overview

Avaya Aura® Device Services is co-resident with Session Manager, but it is delivered as a separate OVA. Avaya Aura® Device Services provides the following services to Avaya Workplace Client:

- Contact: This service provides users the ability to:
  - Add, update, and delete a contact.
  - Perform an enterprise search for contacts.Avaya Aura® Device Services supports directory searches of up to 300 contacts. The search results displays 50 contacts.
  - Set and retrieve information, such as, preferred names or pictures.
  - Search and retrieve information about Avaya Scopia® users and terminals. This feature is applicable only when the address of Avaya Equinox® Management is configured on Avaya Aura® Device Services.
  - Perform an advanced search.Users can search the contacts by name, location, and department.
  - Group their Workplace Contacts to better organize them.Users can then initiate calls and instant messages to the groups. For example, users might have separate groups for their project team, subordinate team members, and response teams. Contact groups are available across multiple devices.

  To use the Contact service, a user must be provisioned on the LDAP server. Avaya Aura® Device Services contact service is mandatory to support the terminal search feature in SDC replacement clients.
- Notification: This service provides a common infrastructure that a client or endpoint can subscribe to and receive events from a number of service resources by using a single connection.
- Dynamic Configuration: This service provides discovery of configuration settings to UC clients. You can customize these settings on a global, group, individual, or platform basis. The Dynamic Configuration service uses the automatic configuration feature of Avaya Workplace Client to facilitate the configuration details to the UC clients.

This helps the user to avoid manual configuration of their client. To log in to the client, users must provide their email address or Windows user ID, and their enterprise credentials.

- Web Deployment: This service publishes and deploys UC client updates to end user devices. The Web Deployment service is supported on Avaya Workplace Client on desktop platforms.

Dynamic Configuration service

With the Dynamic Configuration service, the system can dynamically retrieve and deploy the device configuration settings to Avaya Workplace Client.

Dynamic Configuration provides a centralized place to administer user, group, platform, global, and exception settings. You can configure the Device Configuration settings on Avaya Workplace Client by using one of the following methods:

- DNS-based auto discovery.
- Web address: On Avaya Workplace Client, type the automatic configuration or device configuration URL.For example: `https://<IP address>:443/acs/resources/configurations`

Avaya Aura® Device Services auto discovers the following settings from Avaya Equinox® Management during the Avaya Workplace Client deployment:

- CONFERENCE_FACTORY_URI
- CONFERENCE_PORTAL_URI
- UNIFIEDPORTALENABLED

You can override the values for these settings from the Avaya Aura® Device Services web administration portal with any fixed user, group, or platform value. For more information about using the Avaya Aura® Device Services web administration portal, see *Administering Avaya Aura® Device Services*.

Web Deployment service

Using the Web Deployment service, you can provide appcast for clients. Currently, you can create appcast only for Avaya Workplace Client on desktop platforms. On the Web Deployment page, you can add, edit, or delete an appcast item from the appcast table that is at the bottom of the page.

The Web Deployment service supports the upload and download of the client installer that has software update files. The system creates the upload folder automatically at the time of deployment or upgrade. You can also store any files that are necessary for the customer to download. The customer can download the necessary files from https://<aads_server_address>:8445/acs/resources/webdeployment/downloads/<file_name_with_extension>. The upload service operates from the directory /opt/Avaya/DeviceServices/ClientInstallers/.

Example of the:

- Upload URL: `<https://IP address>:8445/admin/upload`
- Download URL: `<https://IP address>:8445/acs/resources/downloads/>`.

Settings for receiving the updates from a client installer

The Dynamic Configuration service has the following settings for the Web Deployment service:

- APPCAST_ENABLED
- APPCAST_CHECK_INTERVAL
- APPCAST_URL

If the value of the APPCAST_ENABLED settings is set to true, Avaya Workplace Client for Windows or Mac receives the APPCAST_URL setting from the Dynamic Configuration service response for the Web Deployment service.

The APPCAST_URL must be set to https://<IP address of the AADS Server>:<443>/acs/resources/webdeployment

Configuring software update deployment

About this task

Use this procedure to upload and download the client installer for web deployment.

For Avaya Workplace Client for Windows, you can upload .exe or .msi installation files. For Avaya Workplace Client for Mac, you can upload .dmg installation files, which are packaged in a .zip archive.

Before you begin

Download Avaya Workplace Client for Mac or Avaya Workplace Client for Windows installation files from the Avaya Support website.

Procedure

1. **Optional:** If you are uploading Avaya Workplace Client for Mac, pack the Avaya Workplace-<version>.dmg and Avaya Workplace Sparkle Update-<version>.dmg files into a .zip archive with no intermediate directories.

   If the .zip archive contains intermediate directories, re-pack the archive so that it only contains the .dmg files in the root directory

2. Log on to the Avaya Aura® Device Services web administration portal.

3. In the navigation pane, click Web Deployment > Deployment.

   The system displays the Software Update Deployment page.

4. In the Title field, type the name of the updates or appcast for the client installer.
5. In the Description field, type a description of the client installer updates.
6. In the Version field, type the version detail of the Avaya Workplace Client release.
7. In the OS field, click one of the platforms of the Avaya Workplace Client release:

   - windows
   - macOS

8. Do one of the following:

   - If you are uploading an Avaya Workplace Client for Mac installer, which requires a specific macOS version, in the Min OS version field, provide the minimum macOS version that is supported by the client.
   - If you are uploading an Avaya Workplace Client for Mac installer, which does not require a specific macOS version, leave the Min OS version field blank.
   - If you are uploading an Avaya Workplace Client for Windows installer, leave the Min OS version field blank.

9. In the File field, click Choose File and select one of the following files to upload:

   - For Avaya Workplace Client for Windows, select the .exe or .msi installation file.
   - For Avaya Workplace Client for Mac, select the .zip archive containing the .dmg installation files

   The maximum upload size for the client installer is 500 MB. The upload service accepts alphanumeric characters, white spaces, dots, minus, and square brackets.

   After you upload the file, the system auto populates the Size (in bytes) and MD5 Hash fields.

10. In the Upload URL(s) field, click one of the following, and then click Upload:

    - Default: To upload the client installer to the Avaya Aura® Device Services server. This is the default option. You cannot edit the value of the default URL.
    - Custom: To provide a URL of a different server for uploading the client installer.

    The system displays a pop-up to specify the user credentials to upload the client installer and a confirmation dialog box to indicate the upload status.

11. In the Download URL(s) field, click one of the following:

    - Default: To download the client installer from the Avaya Aura® Device Services server to the clients. This is the default option. You cannot edit the value of the default URL.
    - Custom: To provide a URL of a different server for downloading the client installer.

    To download the client installer, you must enter the credentials for client authentication.

12. Click Save.

The system populates the data in the table at the bottom of the page with the details of Title, Description, Version, Publish Date, OS, Downloads, Updates, and Download URL.

13. **Optional:** To edit or delete a specified setting, double-click an entry.

Avaya Aura Device Services remote access configuration

You can configure Avaya Aura® Device Services to be accessible to remote workers who use Avaya Workplace Client from outside the enterprise network. The following configuration methods are available:

- Virtual Private Network (VPN)
- Avaya Session Border Controller for Enterprise
- Application Delivery Controllers, formerly named Reverse Proxies

The following section contains an example for configuring the remote access feature by using Avaya Session Border Controller for Enterprise.

Configuring remote access

About this task

You can use Avaya SBCE for relaying HTTP and HTTPS traffic between Avaya Aura® Device Services and related application clients, such as Avaya Workplace Client. For more information about relay services configuration in Avaya SBCE, see *Administering Avaya Session Border Controller for Enterprise*.

Before you begin

- Configure one of the following to use the remote worker functionality:
    - Implement Split-Horizon DNS: Avaya recommends the use of this configuration to optimize traffic. Clients can then connect to Session Manager directly on the internal network and only use Avaya SBCE when on an external network.
    - Use Public cloud model: All FQDNs or URLs must point to the reverse proxy or Avaya SBCE. This configuration is used for cloud deployments and also for on premise deployments. By using this configuration, calls are preserved during any network transition from Wi-Fi to cellular data when the client IP address changes during an active call.
    - Implement for internal access only and all remote devices must use VPN: This configuration is used when a security policy is in place so that all traffic must be either internal or using VPN. The VPN solution that is deployed must have sufficient bandwidth and latency to support the expected volume of VoIP calls.

- Set the Override port for reverse proxy setting from the Front-end host, System Manager and Certificate Configuration menu to `y` (yes) if a reverse proxy or relay is configured to listen on a port other than the default port 443. You must also set a value for the Front-end port for reverse proxy parameter.
- Configure an external IP address for Avaya SBCE to ensure HTTPS traffic relay for Avaya Aura® Device Services.

Procedure

1. In Avaya SBCE, go to Device Specific Settings > Relay Services.
2. In the Remote Configuration field, configure the parameters with the following values:
   - Remote Domain: The Avaya Aura® Device Services server domain.
   - Remote IP: The IP address of the Avaya Aura® Device Services server.
   - Remote Port: The Front-end port for reverse proxy parameter configured during the Avaya Aura® Device Services server installation. The default value is 443.
   - Remote Transport: TCP.
3. In the Device Configuration field, configure the parameters with the following values:
   - Published Domain: The Avaya Aura® Device Services server domain.
   - Listen IP: The External Avaya SBCE IP address created for the Avaya Aura® Device Services relay.
   - Listen Port: 443.
   - Connect IP: The internal Avaya SBCE IP address.
   - Listen Transport: TCP.

Remote worker and cloud access configuration

The remote worker functionality enables users that are not connected directly to the enterprise network to use Avaya Workplace Client. You can also enable users to remotely access servers configured with Avaya Workplace Client, such as Presence Services, Avaya Aura® Device Services, or Avaya Multimedia Messaging.

In the Cloud Access model, all users might not be directly connected to the network that is hosting the services and will access those services through a Session Border Controller in the same manner as remote workers.

To use the remote worker functionality, you must configure one of the following:

- Implement Split-Horizon DNS. Avaya recommends the use of this configuration. This configuration optimizes traffic so that clients connect to Session Manager directly on the internal network and only use Avaya Session Border Controller for Enterprise (SBCE) when external.
- Use Cloud Access model. All FQDNs or URLs must point to the reverse proxy or SBCE. This configuration is used for cloud deployments and also for on-premise deployments. By using this configuration, calls are preserved during any network transition from Wi-Fi to cellular data when the client IP address can change during an active call.
- Implement for internal access only and all remote devices must use VPN. This configuration is used when a security policy is in place so that all traffic must be either internal or through VPN. The VPN solution that is deployed must have sufficient bandwidth and latency to support the expected volume of VoIP calls.

SBCE provides the following functionality to Avaya Workplace Client. Depending on your requirements, you might use one or more functionality.

- SIP-TLS to Avaya Aura® Session Manager and Avaya Aura® Presence Services for Presence functionality
- HTTPS relay to Avaya Multimedia Messaging for instant messaging functionality
- HTTPS to Avaya Equinox® Conferencing web collaboration for conferencing functionality
- PPM over HTTPS to Avaya Aura® Session Manager
- Automatic configuration using Avaya Aura® Device Services or any other web server
- LDAPS to LDAP server for desktop clients if Avaya Aura® Device Services is not in use

Remote worker configuration worksheet

Use the following worksheet to determine how to provide remote workers access to available functionality:

Functionality available	Configuration requirement	Document references
Basic VoIP service	Set up an SBCE device.	*Administering Avaya Session Border Controller for Enterprise*

Functionality available	Configuration requirement	Document references
LDAP functionality	Ensure that all required ports are configured in SBCE.	“Port assignments” in *Avaya Session Border Controller for Enterprise Overview and Specification*
Instant Messaging functionality	Relay HTTP and HTTPS traffic between Avaya Workplace Client and the Avaya Multimedia Messaging server.	• For more information about relay services configuration on SBCE, see *Administering Avaya Session Border Controller for Enterprise* • For general configuration information about remote worker functionality in Avaya Multimedia Messaging, see *Deploying Avaya Multimedia Messaging*
Presence functionality	Create a Presence server profile in SBCE.	*Administering Avaya Session Border Controller for Enterprise*
Conferencing functionality	Set up Avaya Equinox® Conferencing.	See the chapters on Configuration for Unified Communications deployments and Configuration for Over the Top deployments.

SBCE deployment scenarios for failover

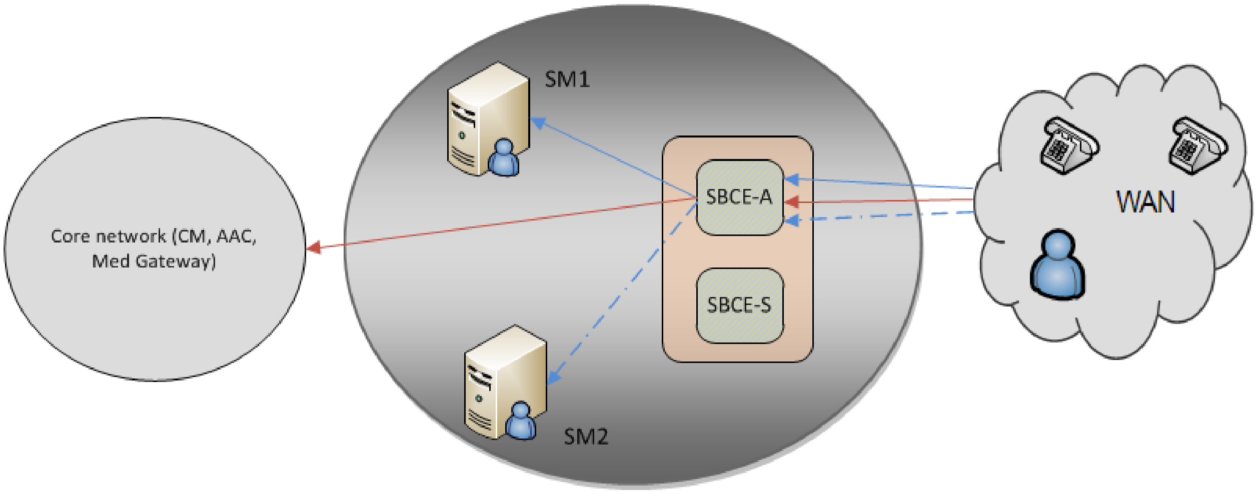
SBCE high availability

Enterprises might deploy Avaya Session Border Controller for Enterprise (SBCE) in high availability (HA) mode to ensure media preservation in the event of failover of the Session Border Controller server. The SBCE HA pairs are deployed within the enterprise in a parallel mode configuration. The active SBCE (SBCE-A) is the primary SBC server through which all signaling packets are routed. The interface ports on the standby SBCE (SBCE-S) do not process any traffic. When a failure is detected on SBCE-A by the Avaya Element Management System (EMS), the SBCE-A network interface ports are automatically disabled and the network interface ports of SBCE-S are enabled. Failure detection and operational transfer occur without dropping packets or adding any significant amount of latency into the data paths.

Multiple Session Manager servers with SBCE in high availability mode

If multiple Session Manager servers are present, failover is supported by a single SBCE deployed in HA mode. SBCE-A maintains connectivity to all endpoints registered on multiple Session Manager servers. In the event of a failover of SBCE-A, SBCE-S ensures that all media sessions of active calls are preserved appropriately.

Figure 1. Deployment model: Single SBCE in high availability mode



In the deployment model, the bounding box represents the SBCE high availability solution. SBCE-A and SBCE-S are distinct hardware devices.

- Signaling traffic from the endpoints:
  - When the server connectivity is lost owing to a link failure on SBCE-A, the endpoint fails over to SBCE-S.
  - In the event of a network failure, for example, because of a router malfunction, the endpoints lose the service.
  - The trigger initiated at the endpoint to detect the unreachable SBCE is the same as the trigger detecting the unreachable Session Manager, when it is not routed through SBCE.
- Media traffic:
  - In case of a link failure on SBCE-A, the endpoint fails over to SBCE-S, and all media sessions of active calls are preserved over SBCE-S.
  - In case of a network failure between the endpoints and SBCE-A, all media sessions of active calls are lost.
- Signaling traffic from the endpoints:
  - When SBCE-A is not functional, the endpoint fails over to SBCE-S.
  - The endpoints receive a link bounce signal and attempt to register onto SBCE-S. This is followed by new subscriptions if the primary Session Manager is still serviceable on SBCE-S and a successful verification process is initiated in all future failover events.
  - The trigger initiated at the endpoint to detect the unreachable SBCE is the same as the trigger detecting the unreachable Session Manager, when it is not routed through SBCE.
- Media traffic:
  - Media sessions of active calls are preserved over SBCE-S.
  - All SIP dialogs are preserved and any subsequent SIP traffic is routed through SBCE-S. However, any transactions in progress fails.

- In the case of a socket error between SBCE-A and the primary Session Manager, all socket connections from the endpoints to SBCE-A are ended.
- In case of SIP failure detection, the OPTIONS message towards the primary Session Manager fails, and SBCE-A determines that the primary Session Manager is not functional.
- A loss of connectivity causes the endpoints to start a check and failover to the backup Session Manager if available and reachable.

Sending DTMF tones with Avaya Workplace Client

About this task

Use this procedure to configure SBCE if you have remote users using Avaya Workplace Client.

Avaya Workplace Client does not support in-band or out-of-band DTMF tones. If you want to send DTMF tones with RFC 2833, you must configure SBCE to use RTP-Payload.

If you use the default SBCE configuration, the system passes DTMF unchanged from Avaya Workplace Client.

Before you begin

Install and configure SBCE.

Procedure

1. In SBCE, go to Domain Policies > Session Polices > Codec Prioritization.
2. Select the Codec Prioritization and Allow Preferred Codecs Only check boxes.
3. Add Dynamic (120) to the preferred codec list.

   Dynamic (120) for RFC 2833 is a DTMF payload type.

Agent functionality configuration

You must perform the following tasks to integrate the Agent functionality with Avaya Workplace Client:

- For all SIP extensions, on page 1 of the Station screen, set Type to `9641SIPCC`.
- For all SIP extensions, configure the Agent Login, Auto In, Manual In, After Call Work, Not Ready that is AUX, Change Skill, and Call Work Code buttons.
- Add the add-rem-sk button for the user extension so that the user can add or remove any available skills when needed.
- Enable the Add/Remove Agent Skills field on the Class of Restriction page that is assigned to the station with agent ID.
- Configure the hunt groups and agent skills, and assign users to each hunt group or skill. Avaya Workplace Client then routes calls to users depending on the skill set.
- Configure the Allow Agent to Activate Call Forward field on the Class of Restriction page so that the user can activate call forwarding when needed.
- Configure the agent specific parameters in the automatic configuration file.

Agent settings parameters

Description	Client UI setting name
AGENT_ENABLED	
The parameter that indicates whether agent login is enabled for the user. The options are: • 0: Indicates that agent login is disabled for the user. 0 is the default value. • 1: Indicates that agent login is enabled for the user.	Settings > Services > Customer Service > Customer Service
AGENT_AVAILABILITY_AUTO	

Description	Client UI setting name
The parameter that indicates whether the user goes into the Auto In or Manual In work mode after the user taps Available. The options are: • 0: Indicates that the user goes into the Manual In work mode after the user taps Available. 0 is the default value. • 1: Indicates that the user goes into the Auto In work mode after the user taps Available.	Not Available
AGENT_LOGIN_ID	
The parameter that indicates the ID for the agent login. The default value is blank. If you are using Avaya Aura® Device Services, this parameter is populated automatically.	Settings > Accounts > Customer Service > User name
AGENT_PASSWORD	
The parameter that indicates the password for the agent login. The default value is blank. If you enable agent login and set the agent login ID and password, the user can directly log in to UC and CC.	Settings > Accounts > Customer Service > Password
LOGOUT_REASON_CODES	
The parameter that indicates the list of reason codes to log the user out. The syntax for this parameter is: `SET LOGOUT_REASON_CODES "0:Label0,1:Label1,2:Label2,3:Label3.."` For example, `SET LOGOUT_REASON_CODES "0:Manual Logout,1:End Of Day,2:Out Of Office,3:Vacation"`. The default value is blank. You need to configure the logout reason code labels on Avaya Aura® Device Services. The list of reason code labels is synchronous with the reason codes configured on Communication Manager. On Communication Manager, digits are used to indicate the reason code. You need to map the digits on Communication Manager with the specific logout reason code label. You can view the reason codes on Communication Manager using the display reason-code-names command.	Presence status indicator > Customer Service > Reason codes
AGENT_WORK_CODE	

Description	Client UI setting name
The parameter that indicates the list of work codes available for a user. The syntax for this parameter is: `SET AGENT_WORK_CODE "0:Label0,1:Label1,2:Label2,3:Label3.."` For example, `SET AGENT_WORK_CODE "0:Offer Sent,1:Follow up with Call back,2:Offer Document preparation,3:Discuss Discount"`. The default value is blank. You need to configure the work code labels on Avaya Aura® Device Services. The list of work code labels is synchronous with the work codes configured on Communication Manager. On Communication Manager, digits are used to indicate the work code. You need to map the digits on Communication Manager with the specific work code label.	Agent bar (●) > ⌄ > Work codes
AUX_REASON_CODES	
The parameter that indicates the list of reason codes to change the work mode to AUX. The syntax for this parameter is: `SET AUX_REASON_CODES "0:Label0,1:Label1,2:Label2,3:Label3.."` For example, `SET AUX_REASON_CODES "0:General Break,1:Coffee Break,2:Tea Break,3:Snack Break,4:Lunch code,5:Meeting"`. The default value is blank. You need to configure the reason code labels on Avaya Aura® Device Services. The list of reason code labels is synchronous with the auxiliary reason codes configured on Communication Manager. On Communication Manager, digits are used to indicate the reason code. You need to map the digits on Communication Manager with the specific reason code label. You can view the reason codes on Communication Manager using the display reason-code-names command.	Agent bar (⊖) > ⌄ > Reason codes
AGENT_SKILLS	

Description	Client UI setting name
The parameter that indicates the list of agent skills available for a user. The syntax for this parameter is: `SET AGENT_SKILLS "1:Label1,2:Label2,3:Label3.."` For example, `SET AGENT_SKILLS "1:Painting,2:Maintenance, 3:Electronics"`. The default value is blank. You need to configure the skill labels on Avaya Aura® Device Services. The list of skill labels is synchronous with the skills configured on Communication Manager. On Communication Manager, digits are used to indicate the skills. You need to map the digits on Communication Manager with the specific skill label.	🎧 > My Skills

AUX and logout reason codes

Avaya Workplace Client retrieves the AUX and logout reason codes from Avaya Aura® Device Services. If Avaya Aura® Device Services is available and reason codes are available, Avaya Workplace Client displays these reason codes.

Communication Manager feature buttons include the backup list of AUX reason codes. If reason codes are unavailable on Avaya Aura® Device Services, Avaya Workplace Client checks if you have configured the feature buttons with AUX reason codes on Communication Manager. If Avaya Workplace Client finds the feature buttons in the user's station, Avaya Workplace Client displays these AUX reason codes.

Configuring an agent hunt group for Avaya Workplace Client

About this task

Configure agent hunt groups so that Avaya Workplace Client can route calls to users. You can add multiple hunt groups.

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.
2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `add hunt-group next` or `add hunt-group n`.

n is the hunt group number.

4. Click Send.
5. Click Next Page.
6. On page 1 of the Hunt Group screen, do the following:
    1. In the Group Number field, enter the number of the hunt group.
    2. In the Group Name field, enter the name of the hunt group.
    3. In the Group Extension field, enter the extension number for this hunt group.
    4. In the ACD field, type `y`.
    5. In the Queue field, type `y`.
    6. In the Vector field, type `y`.
7. Click Next Page.
8. On page 2 of the Hunt Group screen, do the following:
    1. In the Skill field, type `y`.
    2. In the Timed ACW Interval field, type the number of seconds for which the Avaya Workplace Client users remain in the ACW state after completing a call.
9. Click Next Page.
10. On page 3 of the Hunt Group screen, do the following:
    1. In the Redirect on No Answer (rings) field, type the number of rings for which Avaya Workplace Client must wait before redirecting the call.
    2. In the Redirect on No Answer to VDN field, type the required value.
    3. In the Redirect on IP/OPTIM Failure to VDN field, type the duration for which Communication Manager must wait for a SIP 18x provisional response before canceling the call for Avaya Workplace Client.
11. To apply the configuration changes, click Enter.

Configuring the agent login state

About this task

Use this procedure to configure the agent login state for Avaya Workplace Client.

If you set the value in the Work Mode On Login field to:

- Auto In or Manual In, after the user logs out and logs in to Avaya Workplace Client, the agent state changes to Available irrespective of the agent state before exit.

- AUX, after the user logs out and logs in to Avaya Workplace Client, the agent state changes to AUX irrespective of the agent state before exit.

  If the user logs in and sets any agent state, on forceful shutdown and restart of Avaya Workplace Client, the user logs in successfully with the same agent state before forceful shutdown.

  On Avaya Workplace Client for iOS, if the user logs in and sets any agent state when Push Notification:

- Is active, on forceful shutdown and restart of Avaya Workplace Client, the user logs in successfully with the agent state that you configure in the Work Mode On Login field.
- Is inactive, on forceful shutdown and restart of Avaya Workplace Client, the user logs in successfully with the same agent state before forceful shutdown.

Procedure

1. On the System Manager web console, in Elements, click Communication Manager > Element Cut-Through.
2. On the Element Cut-Through page, click a Communication Manager instance.
3. In the Command field, type `change system-parameters features`.
4. Click Send.
5. Click Next Page until you reach page 11.
6. In the Work Mode On Login field, set the agent login state.

   You can set Auto In, Manual In, or AUX.

7. To apply the configuration changes, click Enter.

Call redirection

If the user does not answer an agent call and if you have configured Redirect on no Answer (RONA), then Avaya Workplace Client redirects the call depending on the configuration.

If Avaya Workplace Client loses network connectivity and if you have configured Redirect On OPTIM Failure (ROOF), then Avaya Workplace Client redirects the call depending on the configuration.

Avaya Workplace Client redirects the call after specified rings or connectivity loss to one of the following based on your RONA and ROOF configuration:

- Configured Vector Directory Number (VDN)
- Other available agents in the hunt group
- Coverage pathAvaya Workplace Client redirects the Direct Agent Calls (DAC) calls to voice mail but does not redirect the Automatic Call Distribution (ACD) calls to voice mail.

If Avaya Workplace Client invokes RONA or regains connectivity, your current agent state changes to Not Ready and you do not receive any further agent calls.

Automatic configuration

The automatic configuration process automatically configures Avaya Workplace Client settings when users open the client for the first time after installation. If you do not enable automatic configuration, users must configure Avaya Workplace Client settings manually after installing the client. To avoid errors when configuring settings, Avaya recommends that you enable automatic configuration.

Users can configure the Avaya Workplace Client settings automatically by using their email address or the automatic configuration web address.

If the user types the email address and the DNS check:

- Is successful, the automatic configuration file is downloaded. If you have provisioned more than one environment, the user must choose an environment before the automatic configuration file is downloaded.
- Fails, the email address is automatically searched in the following accounts and in the following priority:

  1. Avaya Spaces
  2. Avaya Equinox® Meetings Online

By using Avaya Spaces or Avaya Equinox® Meetings Online, if the automatic configuration file is:

- Found in the URL, the automatic configuration file is downloaded.
- Not found in the URL, the user must enter a web address or manually configure the application.If the automatic configuration file is found in the web address, the automatic configuration file is downloaded.

In both instances, if you have provisioned more than one environment, the user must choose an environment before the automatic configuration file is downloaded.

If the automatic configuration file that is downloaded does not include the user’s credentials for the various services, the user must manually enter their credentials to log in to each service.

The user might be able to view further screens related to Avaya Cloud accounts depending on whether:

- The Avaya Cloud account exists for Spaces and Messaging.
- You have enabled the Avaya Cloud account setting for the user’s account.

The user can additionally configure the account to use the Avaya Equinox® Meetings Online service.

For installation of Avaya Workplace Client on Avaya Vantage™ and the applicable Avaya Workplace Client parameters on Avaya Vantage™, see Avaya Workplace Client on Avaya Vantage.

For information about automatic configuration by using Avaya Aura® Device Services, see *Administering Avaya Aura® Device Services*.

Note:

While uploading a specific build version, you must mention the full version name of Avaya Workplace Client in Web Deployment of Avaya Aura® Device Services.

MDM for automatic configuration

You can use any Mobile Device Management (MDM) tool to deploy Avaya Workplace Client for iOS 3.12 automatically into the user devices. You can then use the MDM tool to configure the application Key-Value pairs to configure the client automatically. Use the AUTO_CONFIG_URL parameter to specify the URL to access Avaya Aura® Device Services automatic configuration.

Automatic configuration setup options

Users can automatically configure Avaya Workplace Client by using a settings file that you store on a central server or a settings service that you provide. You can provide the settings file URL to your users or set up DNS records for your domain. Additionally, for Mac and Windows, you can trigger automatic configuration by configuring the address of the configuration file during installation. The settings file URL or DNS records that you create must be secure.

- If you use DNS, users must enter an email address in Avaya Workplace Client to activate automatic configuration.
- If you use a settings file URL, you must send the URL to your users. Users must enter the URL in Avaya Workplace Client to activate automatic configuration.

Note:

Mac OS requires the use of a web proxy for DNS-based Service Discovery.

Settings file

To enable automatic configuration, you must create a settings file.

When you create a settings file, remember the following points:

- You can create the settings file in any of the following file formats:

  - 46xxsettings.txt
  - aura7cm01
  - aura7cm01.txt
- You can store all settings on the same file for endpoints such as 46xx and Avaya Workplace Client.
- You must include only numbers in the FNE values and ensure that the values are in the E.164 international format. For example, `+<country code><national number>`.Avaya Workplace Client does not apply any dialing rule translation to these numbers. Use the E.164 international format to ensure that the number can be dialed from any location or network used by the device.
- You can use a blank string to clear the existing value for a setting.For example, `SET SIPUSERNAME ""`. You can use a blank string only for non-User preference parameters and PREF_MUTE_MIC_WHEN_JOINING_MEETING and PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING parameters.
- To use the default values for a parameter, you can exclude the parameter from the settings file. If you changed the default value for a parameter and now want to use the default value:
  - On desktop clients, you can exclude the parameter from the settings file.
  - On mobile clients, you must explicitly set the parameter in the settings file.
- You must configure only a single dial plan in each settings file. If your users have different dial plans, create a separate settings file for each dial plan settings for each user. Ensure that the medium that you use to deliver the link to each user, for example, email, contains a link to the appropriate settings file for the region.
- You must not add line breaks in the setting code for each parameter. Avaya Workplace Client cannot parse settings file parameters with line breaks.
- You can lock down the Avaya Workplace Client settings, specifically the login parameters, as part of the configuration by using the LOCKED_PREFERENCES parameter.

Settings file parameters

The tables in the following sections describe the parameters supported on each Avaya Workplace Client.

In your settings file, you can use one of the following formatting options for a parameter and its associated values:

- `SET PARAMETER 1,2,3`
- `SET PARAMETER "1,2,3"`

In these examples, each number is a value that must be set for a parameter.

⚠ **Tip:**

When you are updating the settings file, you can use a blank string to clear the existing value of a parameter. For example, `SET PARAMETER ""`.

If the same parameter is present multiple times in the settings file, Avaya Workplace Client uses the last instance of the parameter value.

If you disable a particular parameter that has a corresponding UI element, Avaya Workplace Client removes the unused feature from the UI. For example:

- To remove IM, `SET ESMENABLED 0`.
- To remove the calendar, `SET CALENDAR_INTEGRATION_ENABLED 0`.
- To remove the Workplace Meetings panel from the Top of Mind screen, `SET SHOW_EQUINOX_MEETING_PANEL_IN_TOM 0`.
- To disable Avaya Spaces integration, `SET ENABLE_AVAYA_ CLOUD_ACCOUNTS 0`.
- To disable video, `SET ENABLE_VIDEO 0`.

For more information on enabling or disabling a feature, refer to the parameters in the following sections.

Checklist of settings file parameters

The following checklist outlines the settings file parameters for Avaya Workplace Client. Configure the parameters according to your requirement.

Parameters	**Reference**	✔
System	System parameters	
SIP	SIP parameters	
Unified Login	Unified Login parameters	
Automatic configuration	Automatic configuration parameters	
Conferencing	Conferencing parameters	
Automatic software updates	Automatic software updates parameters	
Avaya Multimedia Messaging	Avaya Multimedia Messaging parameters	
Avaya Aura® Device Services	Avaya Aura Device Services parameters	
Client Enablement Services	Client Enablement Services parameters	

Parameters	Reference	✔
Desktop	Desktop parameters	
EC500	EC500 parameters	
Dialing rules	Dialing rule parameters	
Presence	Presence parameters	
Exchange Web Services	Exchange Web Services parameters	
LDAP	LDAP parameters	
Media	Media parameters	
Video	Video parameters	
Voice mail	Voice mail parameter	
Avaya Cloud	Avaya Cloud parameters	
Administration	Administration parameters	
Security settings	Security settings parameters	
User policy	User policy settings parameters	
User preferences	User preference parameters	

System parameters

Description	Client UI setting name	Avaya Workplace Client platform support
MODEL		

Description	Client UI setting name	Avaya Workplace Client platform support
A string of maximum 10 characters that identifies the endpoint platform and version. This value is built into the application as an identifier for the endpoint or release to allow the value to be used in conditional statements. The platform names are abbreviated. For example, for release 3.12: • aca.3.12 is the value for Avaya Workplace Client for Android. • aci.3.12 is the value for Avaya Workplace Client for iOS. • acm.3.12 is the value for Avaya Workplace Client for Mac. • acw.3.12 is the value for Avaya Workplace Client for Windows.	Not Applicable	Supported on all platforms.
MODEL4		
A string of maximum 4 characters that identifies the endpoint platform. This value is built into the application as an identifier for the endpoint or release to allow the value to be used in conditional statements. For example: • aca is the value for Avaya Workplace Client for Android. • aci is the value for Avaya Workplace Client for iOS. • acm is the value for Avaya Workplace Client for Mac. • acw is the value for Avaya Workplace Client for Windows.	Not Applicable	Supported on all platforms.

SIP parameters

Description	Client UI setting name	Avaya Workplace Client platform support
SIPENABLED		
This parameter indicates whether the SIP service is enabled. The options are: - 0: Indicates disabled. This is the default value. - 1: Indicates enabled.	Settings > Services > Phone Service > Phone Service	Supported on all platforms.
SIP_CONTROLLER_LIST		
This parameter consolidates SIP controller parameters for an IP address, port, and transport protocol into a single configuration parameter. The parameter setting must be a list of SIP controller designators, separated by commas without any intervening spaces. Each controller designator must have the following format: `host[:port][;transport=xxx]`. For example, `proxy1:5061;transport=tls,proxy2:5061;transport=tls`. ✱ **Note:** - The host value can be an FQDN or an IP address. - If you use this parameter with LOCKED_PREFERENCES and OBSCURE_PREFERENCES parameters, all three associated UI fields are locked. The SIP fields are Server Address, Server Port, and Use TLS.	- Settings > Services > Phone Service > Server Address - Settings > Services > Phone Service > Server Port - Settings > Services > Phone Service > Use TLS	Supported on all platforms.
SIPDOMAIN		
The SIP domain name.	Settings > Services > Phone Service > Domain	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
SIMULTANEOUS_REGISTRATIONS		
This parameter indicates the resiliency policy for the SIP server. This parameter has been introduced to support IP Office and Avaya Spaces. If you do not specify a value for this parameter, Avaya Workplace Client supports unlimited simultaneous logins to align with Avaya Aura®. Avaya Workplace Client ensures that each SIP registration group contains at maximum the value of the SIMULTANEOUS_REGISTRATIONS property. This parameter name is a standard property name used by deskphones.	Not Applicable	Supported on all platforms.
SIPSSO		
This parameter determines whether to use unified login for the SIP service. If you use Avaya Aura® Device Services, you must set this parameter to 0. This is because Avaya Aura® Device Services provides SIPUSERNAME and SIPHA1 parameter values to Avaya Workplace Client, which uses them to log in to Session Manager. The user does not need to enter any SIP extension and password. The options are: • 0: Indicates disabled. This is the default value, which is needed for Avaya Aura® and IP Office deployments. • 1: Indicates enabled. • 2: Indicates support for SSO with Avaya Spaces for IP Office deployment.	Not Applicable	Supported on all platforms.
SIPUSERNAME		
The SIP account name.	Settings > Accounts > Phone Service > Extension	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
SIPPASSWORD		
The SIP account password.	Settings > Accounts > Phone Service > Password	Supported on all platforms.
ENABLE_MDA_JOIN		
This parameter is used to enable MDA Join if you are using a version of Communication Manager later than 6.3. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled. On Communication Manager 6.3 and earlier, Communication Manager gets reset if a user attempts to bridge into an active call from their MDA extension. Therefore, the remote line appearance Join button is disabled by default.	Not Applicable	Supported on all platforms.
ENFORCE_SIPS_URI		
This parameter is used to enable SIPS in URI. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value.	Not Applicable	Supported on all platforms.
ENABLE_PUBLISH_MAC_ADDRESS		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter is used to publish the Ethernet MAC address of the device for E911 solution purposes. The options are: • 0: Indicates that the SIP instance ID does not include the Ethernet MAC address information. This is the default value. • 1: Indicates that the SIP instance ID includes the Ethernet MAC address of the device in all SIP messages including the SIP INVITE messages for emergency calls in logged-out mode.	Not Applicable	Supported on Avaya Workplace Client for Android, Mac, and Windows.
ENABLE_PPM		
This parameter is used to enable PPM. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value.	Not Applicable	Supported on all platforms.
ENABLE_PPM_CALL_JOURNALING		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether Session Manager stores the history of the 100 most recent calls for each user. This is irrespective of whether the endpoint registers to Session Manager. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value for Android, Mac, and Windows. • 2: Indicates enabled. This is the default value for iOS. If you set this value, call journaling for iOS is enabled if you do not log in to Client Enablement Services or PPM call logs are available and enabled. If the user logs in to Avaya Workplace Client on an endpoint, the endpoint downloads the latest 100 call history records from Session Manager. Subsequently, the endpoint maintains its local call history, while Session Manager continues to maintain its call history independently. With this feature, active synchronization of call history between Session Manager and the endpoints is minimal after the initial login or download. However, when a user attempts to delete a call history from an endpoint, the endpoint sends a PPM request to delete the corresponding call history from the central repository of Session Manager. Call history download is initiated by the client when the client: • Recovers from a network outage or outage due to a network change. • Registers with Session Manager.	Not Applicable	Supported on all platforms.
SHOW_TEAM_BUTTON_VISUAL_ALERT		
This parameter controls the Team Button visual alert notification at the monitoring station. The options are: • 0: Indicates that a visual alert notification is not displayed at the monitoring station. • 1: Indicates that a visual alert notification is displayed at the monitoring station. This is the default value. If you configure the parameter value as `0`, Avaya Workplace Client disables the Team Button toggle switch at the monitoring station.	Not Applicable	Supported on Avaya Workplace Client for Android, iOS, and Windows.

Description	Client UI setting name	Avaya Workplace Client platform support
SHOW_TEAM_BUTTON_CALLER_ID		
This parameter controls the display of the caller ID on the Team Button call pick up alert at the monitoring station. The options are: • 0: Indicates that the caller ID is not displayed on the Team Button call pick up alert at the monitoring station. • 1: Indicates that the caller ID is displayed on the Team Button call pick up alert at the monitoring station. This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Android, iOS, and Windows.
SIGNALING_ADDR_MODE		
This parameter is used by SIP signaling on dual-mode SIP endpoints to select the preferred SIP controller IP addresses from SIP_CONTROLLER_LIST. Dual-mode SIP endpoints are endpoints that are configured with both IPv4 and IPv6 addresses. The options are: • 4: The phone preferably registers to SIP controllers by using the IPv4 address. This is the default value. • 6: The phone preferably registers to SIP controllers by using the IPv6 address.	Not Applicable	Supported on all platforms.

Unified Login parameters

Description	Client UI setting name	Avaya Workplace Client platform support
SSOENABLED		
This parameter indicates whether Unified Login is enabled. The options are: • 0: Indicates disabled. Avaya Workplace Client does not display Unified Login as an authentication mechanism for any service. • 1: Indicates enabled. This is the default value. Avaya Workplace Client displays Unified Login as an authentication mechanism for each service.	Not Applicable	Supported on all platforms.
SSOUSERID		
The unified login user ID.	Settings > Accounts > Workplace > Username	Supported on all platforms.
SSOPASSWORD		
The unified login password.	Settings > Accounts > Workplace > Password	Supported on all platforms.

Use of Unified Login

Unified Login is an Avaya term to describe the design approach used by Avaya Workplace Client end points to present a simplified user interface for management of credentials. These credentials are needed for the back-end services used by the client applications.

Service	Default mapping	Override parameter
SIP	Avaya Aura® credentials	SIPSSO
Avaya Multimedia Messaging	Enterprise credentials	ESMSSO
Avaya Aura® Device Services	Enterprise credentials	ACSSSO
Client Enablement Services	Enterprise credentials	CESSSO
Exchange Web Services	Enterprise credentials	EWSSSO
LDAP	Enterprise credentials	DIRSSO

Using the SSO option, administrators and users can override the use of the common credentials on a per service basis. For example, in Avaya, a user might use "petertan" as the user name for CES and AMM. However, the user must use "global\petertan" for LDAP. In this case, the user can use the Unified Login feature for all services except LDAP. For LDAP, the user must set SSO to off so that the user can manually enter the credentials in the format required to use this service.

Automatic configuration parameters

Description	Client UI setting name	Avaya Workplace Client platform support
AUTOCONFIG_USESSO		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether the application uses the unified login or Avaya Authorization Service credentials during the retrieval of the 46xxsettings file. Otherwise, the automatic configuration credentials are unique. The options are: • 0: Indicates that the automatic configuration credentials are unique. • 1: Indicates that the automatic configuration credentials are the same as the unified login credentials. This is the default value. • 3: Indicates that the automatic configuration credentials are same as the Avaya Authorization Service credentials.	Not Applicable	Supported on all platforms.
SETTINGS_CHECK_INTERVAL		
The interval used to define how often endpoints will check for settings file changes. The value range for this parameter is 0 to 30 days. Avaya recommends that you set this value to more than zero for your deployment. • A value of 0 indicates that configuration updates are not performed. • A value of 1 indicates daily. This is the default value. • A value of 7 indicates weekly.	Not Applicable	Supported on all platforms.
SETTINGS_FILE_URL		

Description	Client UI setting name	Avaya Workplace Client platform support
The URL to move settings files from one server to another. This URL is used during the next check interval if defined. For example, `SET SETTINGS_FILE_URL "https://acquirerofexample.com/mysettingsfile.txt"`.	Not Applicable	Supported on all platforms.

Conferencing parameters

Description	Client UI setting name	Avaya Workplace Client platform support
CONFERENCE_FACTORY_URI		
The URL that defines the adhoc conference resource to be used by the endpoint. This is an optional parameter. Hence, the value can be nil. • Avaya Equinox® Conferencing: This parameter is the advanced parameter vnex.vcms.core.conference.factoryURI provisioned in Avaya Equinox® Management. • Avaya Aura® Conferencing: This parameter is the adhoc URI entered in the provisioning client. If this parameter is not provisioned, Communication Manager adhoc conferencing is used. For example, `SET CONFERENCE_FACTORY_URI +15552220881@yourenterprise.com`. **Note:** If you are using Avaya Workplace VDI in the Desk Phone mode on the Windows platform, this parameter value must be nil or you must not specify this parameter in the configuration file. This is because Avaya Workplace VDI does not support advanced adhoc conferencing.	Settings > Services > Phone Service > Adhoc Conference Address	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
CONFERENCE_ACCESS_NUMBER		
The primary conference access number. This parameter populates the meeting invitation dial-in number for participants. • Avaya Equinox® Conferencing: This parameter is the Auto-Attendant number found on the Avaya Equinox® Management settings pane. This parameter is required only for Avaya Equinox® Conferencing 9.0.1 and earlier versions. • Avaya Aura® Conferencing: This parameter is the Service URI in the provisioning client. The conference access numbers are found in My Meeting Resources on the Avaya Aura® Conferencing portal. For example, `SET CONFERENCE_ACCESS_NUMBER +15552221000`.	On desktop clients: Settings > Services > My Meeting Room > Conference Access Number	Supported on all platforms.
ADDITIONAL_CONFERENCE_ACCESS_NUMBER_LIST		
The additional PSTN conference access numbers. This parameter provides alternate dial-in numbers in the meeting invite. Available on Avaya Equinox® Conferencing and Avaya Aura® Conferencing. For example, `SET ADDITIONAL_CONFERENCE_ACCESS_NUMBER_LIST Label1:Number1,Label2:Number2,...,LabelN:NumberN`.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows
UNIFIEDPORTALENABLED		
This parameter determines whether the Avaya Equinox® Conferencing meeting account is enabled for a user. This parameter is mandatory for MeetMe conferences. The options are: • 0: Indicates that the Avaya Equinox® Conferencing meeting account is disabled. This is the default value. • 1: Indicates that the Avaya Equinox® Conferencing meeting account is enabled.	Settings > Services > My Meeting Room > My Meeting Room	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
CONFERENCE_PORTAL_URI		
The Conference Portal address for the user. This parameter is used to: • Populate the meeting invitation location field with the URL for participants to join the meeting. • Connect to the portal to retrieve the meeting invitation template. Available on Avaya Equinox® Conferencing and Avaya Aura® Conferencing. This parameter is mandatory for MeetMe conferences. For example, `SET CONFERENCE_PORTAL_URI https://meetings.avaya.com/portal/tenants/9022/?ID=90319870153431`. In this release, you can use a short URL without the tenant information to join a meeting. For example, `https://meetings.avaya.com/portal/?ID=90319870153431`.	Settings > Services > My Meeting Room > Meeting Address	Supported on all platforms.
UNIFIED_PORTAL_SSO		
This parameter indicates the authentication mechanism that Unified Portal uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that Unified Portal uses unified login. This is the default value.	Settings > Services > Sign In Service > My Meeting Room	Supported on all platforms.
UNIFIED_PORTAL_USERNAME		
The Unified Portal user name.	Settings > Accounts > My Meeting Room > Username	Supported on all platforms.
UNIFIED_PORTAL_PASSWORD		

Description	Client UI setting name	Avaya Workplace Client platform support
The Unified Portal password.	Settings > Accounts > My Meeting Room > Password	Supported on all platforms.
CONFERENCE_MODERATOR_CODE		
The conference moderator code. Use this parameter to start your own meetings. Users can click to join their own bridge by using a UC client. Only available in Avaya Aura® Conferencing. You can find the moderator code in My Meeting Resources on the Avaya Aura® Conferencing portal. For example, `SET CONFERENCE_MODERATOR_CODE 683044`.	Settings > Services > My Meeting Room > Moderator Code	Supported on all platforms.
CONFERENCE_PARTICIPANT_CODE		
The conference participant code. This parameter populates the meeting template with the code for participants to join meetings. Users can share their participant code with other users in Calendar invites by using the Share My Bridge feature. Only available in Avaya Aura® Conferencing. You can find the participant code in My Meeting Resources on the Avaya Aura® Conferencing portal. For example, `SET CONFERENCE_PARTICIPANT_CODE 03974587`.	Settings > Services > My Meeting Room > Participant Code	Supported on all platforms.
CONFERENCE_PARTICIPANT_URL		

Description	Client UI setting name	Avaya Workplace Client platform support
The conference participant URL. This parameter populates the meeting template and the location field with the URL to join the meeting. This parameter is applicable only to Avaya Aura® Conferencing.	On desktop clients: Settings > Services > My Meeting Room > Participant URL	Supported on Avaya Workplace Client for Mac and Windows
CONFERENCE_VIRTUAL_ROOM		
The Scopia Virtual Room ID of the virtual room owner. When Avaya Aura® Device Services is integrated with Avaya Equinox® Management, the Virtual Room of the user is provided as configuration data. Only available in Avaya Equinox® Conferencing. You can find the Virtual Room number in the user settings on Avaya Workplace Client conference portal. This property is provided in Avaya Workplace Client to facilitate the user to provision the value into the Avaya Workplace Client add-in for Microsoft Outlook. For example, `SET CONFERENCE_VIRTUAL_ROOM +171115552224545`.	Not Applicable	Supported on all platforms.
CONFERENCE_FQDN_SIP_DIAL_LIST		
A list of Scopia conference bridges that can support SIP Enhanced Conference Experience. Top-of-Mind requires this automatic configuration setting to have all the Scopia or Avaya Workplace Client portal domains that you use so that Top-of-Mind click to call can work. For example, `SET CONFERENCE_FQDN_SIP_DIAL_LIST Scopia.slav.com,Alphascopia.slav.com,lab.slav.com,scopia.partner.com`.	Not Applicable	Supported on all platforms.
UCCPENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter controls the UCCP Conferencing protocol in the client. Only available in Avaya Equinox® Conferencing. This parameter is mandatory for MeetMe conferences. The options are: • 0: Indicates that the UCCP Conferencing protocol is disabled in the client. SIP CCMP is used for conferencing. • 1: Indicates that the UCCP Conferencing protocol is enabled in the client. This is the default value. You must enable this parameter only: • When the Equinox Conference Control element is accessible for Avaya Workplace Client. • In enterprise networks that support WebSockets. For example, `SET UCCPENABLED 1`.	Not Applicable	Supported on all platforms.
SHOW_EQUINOX_MEETING_PANEL_IN_TOM		
This parameter determines whether Avaya Workplace Client displays the Workplace Meetings panel on the Top of Mind screen. This parameter is applicable if you are using only Avaya Equinox® Conferencing. You must disable this parameter if you are using only Avaya Aura® Conferencing. The options are: • 0: Indicates that Avaya Workplace Client does not display the Workplace Meetings panel on the Top of Mind screen. • 1: Indicates that Avaya Workplace Client displays the Workplace Meetings panel on the Top of Mind screen. This is the default value.	Select the Top of Mind filter, and in the Workplace Meetings area, select Hide.	Supported on all platforms.
RECEIVE_ONLY_SHARING_ENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether the collaboration is receive only. The options are: • 0: Indicates that the collaboration is both send and receive. This is the default value. • 1: Indicates that the collaboration is receive only.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows
PREF_MUTE_MIC_WHEN_JOINING_MEETING		
This parameter indicates the microphone setting when the user joins a meeting. The options are: • 0: Indicates disabled. The microphone is unmuted when the user joins a meeting. • 1: Indicates enabled. The microphone is muted when the user joins a meeting. This is the default value.	Settings > User Preferences > Audio / Video > Mute my Microphone when Joining Meeting	Supported on all platforms.
PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the camera setting when the user joins a meeting. The options are: • 0: Indicates disabled. The camera is unblocked when the user joins a meeting. This is the default value for desktop clients. • 1: Indicates enabled. The camera is blocked when the user joins a meeting. This is the default value for mobile clients.	Settings > User Preferences > Audio / Video > Block my Camera when Joining Meeting	Supported on all platforms.

Automatic software updates parameters

Description	Client UI setting name	Avaya Workplace Client platform support
APPCAST_ENABLED		
This parameter indicates whether the service is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
APPCAST_URL		
The URL that defines the appcast feed used by the endpoints.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

Description	Client UI setting name	Avaya Workplace Client platform support
APPCAST_CHECK_INTERVAL		
The interval at which endpoints check for software updates. The value range for this parameter is 0 to 30 days. The default is 1 day. The value 0 indicates that automatic checking is disabled.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

Avaya Multimedia Messaging parameters

Use the following automatic configuration parameters if you configured Avaya Workplace Client to interwork with Avaya Multimedia Messaging:

Description	Client UI setting name	Avaya Workplace Client platform support
ESMENABLED		
This parameter indicates whether Avaya Multimedia Messaging is enabled. The options are: • 0: Indicates that Avaya Multimedia Messaging is disabled. This is the default value. • 1: Indicates that Avaya Multimedia Messaging is enabled.	Settings > Services > Multimedia Messaging > Multimedia Messaging	Supported on all platforms.
ESMSSO		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the authentication mechanism that the Avaya Multimedia Messaging service uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that Avaya Multimedia Messaging uses unified login. This is the default value. • 3: Indicates that Avaya Multimedia Messaging uses Avaya Authorization Service.	Settings > Services > Sign In Service > Multimedia Messaging	Supported on all platforms.
ESMUSERNAME		
The Avaya Multimedia Messaging account user name.	Settings > Accounts > Multimedia Messaging > Username	Supported on all platforms.
ESMPASSWORD		
The Avaya Multimedia Messaging account password.	Settings > Accounts > Multimedia Messaging > Password	Supported on all platforms.
ESMSRVR		
The IP address or fully qualified domain name of the Avaya Multimedia Messaging server.	Settings > Services > Multimedia Messaging > Server Address	Supported on all platforms.
ESMPORT		
The port of the Avaya Multimedia Messaging server. The default value is 8443.	Settings > Services > Multimedia Messaging > Server Port	Supported on all platforms.
ESMSECURE		
This parameter indicates whether TLS is being used. The options are: • 0: Indicates that TLS is not used. • 1: Indicates that TLS is used. This is the default value.	Not Applicable	Supported on all platforms.
ESMREFRESH		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the Avaya Multimedia Messaging refresh interval in minutes. Valid values are 0, 10, 30, and 60. The default value is 0, which indicates continuous mode. **Note:** The manual mode option is no longer supported.	Settings > Services > Multimedia Messaging > Polling Interval	Supported on all platforms.
ESMHIDEONDISCONNECT		
This parameter is used to hide Avaya Multimedia Messaging conversations and message details in the Messages screen and Messaging area of the Top Of Mind screen when not connected to Avaya Multimedia Messaging. The options are: • 0: Indicates disabled. Avaya Multimedia Messaging conversations and message details are visible when not connected to Avaya Multimedia Messaging. This is the default value. • 1: Indicates enabled. Avaya Multimedia Messaging conversations and message details are hidden when not connected to Avaya Multimedia Messaging.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
ESMSENDREADRECEIPTS		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter is used to enable or disable the use of read receipts for all users. The options are: • 0: Indicates that read receipts are disabled. • 1: Indicates that read receipts are enabled. This is the default value. If you set a value for this parameter, the: • User preference is overwritten. • Send read receipts option is hidden.	Settings > User Preferences > Messaging > Send read receipts	Supported on all platforms.

Avaya Aura Device Services parameters

Use the following automatic configuration parameters if you configured Avaya Workplace Client to interwork with Avaya Aura® Device Services:

Description	Client UI setting name	Avaya Workplace Client platform support
ACSENABLED		
This parameter indicates whether Avaya Aura® Device Services is enabled. The options are: • 0: Indicates that Avaya Aura® Device Services is disabled. This is the default value. • 1: Indicates that Avaya Aura® Device Services is enabled.	Settings > Services > Device Services > Device Services	Supported on all platforms.
ACSSRVR		
The Avaya Aura® Device Services IP address or FQDN.	Settings > Services > Device Services > Server Address	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
ACSPORT		
The Avaya Aura® Device Services port. The default value is 443.	Settings > Services > Device Services > Server Port	Supported on all platforms.
ACSSECURE		
This parameter indicates whether TLS is being used. The options are: • 0: Indicates that TLS is not used. • 1: Indicates that TLS is used. This is the default value.	Not Applicable	Supported on all platforms.
ACSSSO		
This parameter indicates that the authentication mechanism that Avaya Aura® Device Services uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that Avaya Aura® Device Services uses unified login. This is the default value. • 3: Indicates that Avaya Aura® Device Services uses Avaya Authorization Service.	Settings > Services > Sign In Service > Device Services	Supported on all platforms.
ACSUSERNAME		
The Avaya Aura® Device Services user name.	Settings > Accounts > Device Services > Username	Supported on all platforms.
ACSPASSWORD		
The Avaya Aura® Device Services password.	Settings > Accounts > Device Services > Password	Supported on all platforms.
CONTACT_MATCHING_SEARCH_LOCATION		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter determines whether Avaya Workplace Client performs contact resolution using the local contact cache or by searching Avaya Aura® Device Services or both. The options are: • 1: All. This is the default value. • 2: Local. • 3: Avaya Aura® Device Services.	Not Applicable	Supported on all platforms.
AVAYA_AUTHORIZATION_REALM		
This parameter identifies the OAuth realm for UC Services integrating with Avaya Authorization Service (Keycloak). By default, the value for this parameter is blank. If the realm cannot be discovered dynamically, but you want to update the configuration with the ACSSSO parameter from 1 to 3, then you must do the following: • `SET ACSSSO 3`. • `SET AVAYA_AUTHORIZATION_REALM {SolutionRealm}`. • Refresh the configuration file.	Not Applicable	Supported on all platforms.

Client Enablement Services parameters

Use the following parameters if Avaya Workplace Client for Android and iOS are configured to interwork with Client Enablement Services. Client Enablement Services is not supported on Avaya Workplace Client for Mac and Windows.

Note:

Avaya Workplace Client on Avaya Vantage™ does not support Client Enablement Services.

Description	Client UI setting name	Avaya Workplace Client platform support
CESENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether Client Enablement Services is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > Services > Client Enablement (CES): • On Avaya Workplace Client for Android: CES • On Avaya Workplace Client for iOS: Client Enablement Services	Supported on Avaya Workplace Client for Android and iOS.
CESSSO		
This parameter indicates the authentication mechanism that Client Enablement Services uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that Client Enablement Services uses unified login. This is the default value.	Settings > Services > Sign In Service > Client Enablement (CES)	Supported on Avaya Workplace Client for Android and iOS.
CESUSERNAME		
The Client Enablement Services account name.	Settings > Accounts > Client Enablement Services > Username	Supported on Avaya Workplace Client for Android and iOS.
CESPASSWORD		
The Client Enablement Services account password.	Settings > Accounts > Client Enablement Services > Password	Supported on Avaya Workplace Client for Android and iOS.
CESSRVR		
The IP address or fully qualified domain name of the Client Enablement Services server.	Settings > Services > Client Enablement (CES) > Server Address	Supported on Avaya Workplace Client for Android and iOS.
CESPORT		
The Client Enablement Services server port. The default value is 7777.	Settings > Services > Client Enablement (CES) > Server Port	Supported on Avaya Workplace Client for Android and iOS.
CESSECURE		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether TLS is being used. The options are: • 0: Indicates that TLS is not used. • 1: Indicates that TLS is used. This is the default value. **Note:** Avaya Workplace Client only supports TLS connections to Client Enablement Services. The user cannot change this value from the Settings menu in the application.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
CESVMPIN		
The voice mail PIN required for visual voice mail.	Settings > Services > Voicemail > PIN	Supported on Avaya Workplace Client for Android and iOS.

Desktop parameters

Description	Client UI setting name	Avaya Workplace Client platform support
DESKTOP_HTTP_APPLICATION_INTEGRATION		

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
This parameter controls Desktop HTTP Application Integration. The options are: • 0: Indicates that Desktop HTTP Application Integration is disabled. • 1: Indicates that Desktop HTTP Application Integration is enabled. This is the default value. The External Application API controls features such as Headset API integration with Plantronics Hub and Jabra Direct. It does not control Avaya Workplace Client native (Out-of-the-box) support for Plantronics headsets.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
ENABLE_OUTLOOK_ADDON		
This parameter controls the Outlook add-in functionality. The options are: • 0: Indicates that the Outlook add-in functionality is disabled. • 1: Indicates that the Outlook add-in functionality is enabled. This is the default value in the UC and OTT signed-in user modes.	Settings > Desktop Integration > Outlook Add-in > Enable Outlook Add-In	Supported on Avaya Workplace Client for Mac and Windows.
OUTLOOK_CALL_CONTACT		
This parameter controls the Outlook add-in Call Contact functionality by deployment or user preference. The options are: • 0: Indicates that the Outlook add-in Call Contact functionality is disabled. • 1: Indicates that the Outlook add-in Call Contact functionality is enabled. This is the default value.	Settings > Desktop Integration > Outlook Add-in > Allow calls from Outlook contacts	Supported on Avaya Workplace Client for Windows.
OUTLOOK_ADDON_HOST_URI		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the HTTP location of the JavaScript Outlook add-in.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
ENABLE_BROWSER_EXTENSION		
This parameter controls the browser extension functionality. The options are: • 0: Indicates that the browser extension functionality is disabled. This is the default value in the UC and OTT signed-in user modes. • 1: Indicates that the browser extension functionality is enabled.	Settings > Desktop Integration > Browser Add-in > Enable Browser Add-In	Supported on Avaya Workplace Client for Windows.
ENABLE_PLT_OOB_HEADSET_CALL_CONTROL		
This parameter controls the Out of Box PLT headset integration. The options are: • 0: Indicates that the Out of Box PLT headset integration is disabled. • 1: Indicates that the Out of Box PLT headset integration is enabled. This is the default value. Customers might use multiple softclients. To minimize application integration issues with other desktop applications, you can disable this parameter.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

EC500 parameters

Description	Client UI setting name	Avaya Workplace Client platform support
EC500ENABLED		
This parameter indicates whether EC500 is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > Services > EC500 Calling > EC500 Calling	Supported on Avaya Workplace Client for Android and iOS.
EC500VOICEMAILNUMBER		
The voice mail system access number. Endpoints can retrieve this value from multiple sources. A summary of this logic is: • With SIP, the number comes from the PPM protocol, which pulls the configuration from Avaya Aura®. • With Client Enablement Services, the number comes from the Client Enablement Services server. • In other situations, the number comes from this parameter.	Settings > Services > Voicemail > PIN	Supported on Avaya Workplace Client for Android and iOS.
FNUIDLEAPPEARANCESELECT		
The number to dial for the Idle Appearance Select feature. This number is used to identify an idle line on your extension when you make a call.	Settings > Services > EC500 Calling > Idle Appearance Select	Supported on Avaya Workplace Client for Android and iOS.
FNUSIMRINGENABLE or FNUOFFPBXCALLENABLE		

Description	Client UI setting name	Avaya Workplace Client platform support
The number to dial for enabling Off-PBX calls. This number is used to enable your mobile phone to ring when you receive a call on your deskphone.	Settings > Services > EC500 Calling > Off PBX Call Enable	Supported on Avaya Workplace Client for Android and iOS.
FNUSIMRINGDISABLE or FNUOFFPBXCALLDISABLE		
The number to dial for disabling Off-PBX calls. This number is used to disable your mobile phone from ringing when you receive a call on your deskphone.	Settings > Services > EC500 Calling > Off PBX Call Disable	Supported on Avaya Workplace Client for Android and iOS.
FNUCFWDENABLE or FNUCFWDALL		
The number to dial for enabling call forwarding for all calls.	Settings > Services > EC500 Calling > Call Forward All Enable	Supported on Avaya Workplace Client for Android and iOS.
FNUCFWDDISABLE or FNUCFWDCANCEL		
The number to dial for canceling call forwarding.	Settings > Services > EC500 Calling > Call Forward All Disable	Supported on Avaya Workplace Client for Android and iOS.
FNUACTIVEAPPEARANCESELECT		
The number to dial for the Active Appearance Select feature. This number is used to join an active call on your deskphone using your mobile phone.	Settings > Services > EC500 Calling > Active Appearance Select	Supported on Avaya Workplace Client for Android and iOS.
FNUSACENABLE		

Description	Client UI setting name	Avaya Workplace Client platform support
The number to dial for enabling the Send All Calls feature. This number is used to send all calls to a predefined number set on the server.	Settings > Services > EC500 Calling > Send All Calls Enable	Supported on Avaya Workplace Client for Android and iOS.
FNUSACCANCEL		
The number to dial for disabling the Send All Calls feature. This number is used to disable the sending of all calls to a predefined number set on the server.	Settings > Services > EC500 Calling > Send All Calls Disable	Supported on Avaya Workplace Client for Android and iOS.
FNE_SETUP_DELAY		
This parameter indicates the delay in seconds between the EC500 call being placed and the transmission of the digits for EC500. The default value is 3 seconds. The purpose of this setting is to address call setup delays with specific regions and trunk providers.	Settings > Advanced > FNE Setup Delay	Supported on Avaya Workplace Client for Android and iOS.
STATION_SECURITY_ENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether EC500 station security is enabled. The station security code reduces the risk of toll fraud. The options are: • 0: Indicates that EC500 station security is disabled. This is the default value. • 1: Indicates that EC500 station security is enabled.	Settings > Services > EC500 Calling > Station Security	Supported on Avaya Workplace Client for Android and iOS.

Dialing rule parameters

Description	Client UI setting name	Avaya Workplace Client platform support
ENHDIALSTAT		
This parameter indicates whether dialing rules are enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > Advanced > Dialing Rules > Dialing Rules	Supported on all platforms.
PHNOL		
The number to dial to access an external line.	Settings > Advanced > Dialing Rules > Number to dial to access an outside line	Supported on all platforms.

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
PHNCC		
The country code.	Settings > Advanced > Dialing Rules > Your country code	Supported on all platforms.
SP_AC or DIALPLANAREACODE		
The area or city code.	Settings > Advanced > Dialing Rules > Your area/city code	Supported on all platforms.
PHNPBXMAINPREFIX or DIALPLANPBXPREFIX		
The PBX main prefix.	Settings > Advanced > Dialing Rules > PBX main prefix	Supported on all platforms.
PHNLD		
The number to dial for long distance calls.	Settings > Advanced > Dialing Rules > Number to dial for long distance calls	Supported on all platforms.
PHNIC		
The number to dial for international calls.	Settings > Advanced > Dialing Rules > Number to dial for international calls	Supported on all platforms.
PHNDPLENGTH		

Description	Client UI setting name	Avaya Workplace Client platform support
The internal extension length.	Settings > Advanced > Dialing Rules > Length of internal extensions	Supported on all platforms.
DIALPLANEXTENSIONLENGTHLIST		
A list of PHNDPLENGTH values separated by commas. This parameter takes precedence over PHNDPLENGTH.	Settings > Advanced > Dialing Rules > Length of internal extensions	Supported on all platforms.
PHNLDLENGTH		
The length of national phone numbers.	Settings > Advanced > Dialing Rules > Length of national phone numbers	Supported on all platforms.
DIALPLANNATIONALPHONENUMLENGTHLIST		
A list of PHNLDLENGTH values separated by commas. This parameter takes precedence over PHNLDLENGTH.	Settings > Advanced > Dialing Rules > Length of national phone numbers	Supported on all platforms.
PHNREMOVEAREACODE or DIALPLANLOCALCALLPREFIX		

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
This parameter indicates whether the area code must be removed for local calls. The options are: • 0: Indicates disabled. Area code is not removed for local calls. This is the default value. • 1: Indicates enabled. Area code is removed for local calls.	Settings > Advanced > Dialing Rules > Remove area/city code for local calls	Supported on all platforms.
AUTOAPPLY_ARS_TO_SHORTNUMBERS		
This parameter disables the dialing rule logic that automatically appends the ARS code to numbers that are shorter than the shortest extension length. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value.	Not applicable	Supported on all platforms.
APPLY_DIALINGRULES_TO_PLUS_NUMBERS		
This parameter is used to replace the plus sign (+) with dial plan digits. When possible, configure the plus (+) dialing option in Session Manager instead of enabling this parameter. The options are: • 0: Indicates false. This is the default value. • 1: Indicates true.	Settings > Advanced > Dialing Rules > Apply dialing rules to '+' numbers	Supported on all platforms.
ELD_SYSNUM		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether to apply the enhanced dialing rules logic to Autodial and Busy indicators. The options are: • 0: Indicates disabled. Avaya Workplace Client does not apply the enhanced dialing rules logic to Autodials and Busy indicators. • 1: Indicates enabled. Avaya Workplace Client applies the enhanced dialing rules logic to Autodials and Busy indicators. This is the default value. **Note:** Avaya Workplace Client applies the enhanced dialing rules logic only if dialing rules are enabled, that is, the ENHDIALSTAT parameter value is 1 and the ELD_SYSNUM parameter value is 1.	Not applicable	Supported on Avaya Workplace Client for Mac and Windows.

Presence parameters

Description	Client UI setting name	Avaya Workplace Client platform support
DND_SAC_LINK		
This parameter activates the Send All Calls feature when the user sets the presence status to Do Not Disturb. The options are: • 0: Indicates that the Send All Calls feature is not activated. This is the default value. • 1: Indicates that the Send All Calls feature is activated.	Settings > User Preferences > General > Activate SAC When DND Is Set	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
WINDOWS_IMPROVIDER		
This parameter indicates whether Avaya Workplace Client is the IM provider for Windows clients. The options are: • 0: Indicates that Avaya Workplace Client is not the IM provider for Windows clients. This is the default value. • 1: Indicates that Avaya Workplace Client is the IM provider for Windows clients. The IM provider enables Microsoft Outlook, SharePoint, and other applications to: • Use Avaya Workplace Client for any initiated IM or a call from a contact card. • Display presence of Avaya Workplace Client contacts.	Settings > Desktop Integration > IM Provider > Set as default IM Provider	Supported on Avaya Workplace Client for Windows.
WINDOWS_IMPROVIDER_RESOLVE_CONTACT_EXTERNAL		
This parameter controls the Enhanced IM Provider feature. The options are: • 0: Indicates that the Enhanced IM Provider feature is disabled. This is the default value. If disabled, presence in Microsoft Outlook, SharePoint, and other applications is only shown for Avaya Workplace Client contacts. • 1: Indicates that the Enhanced IM Provider feature is enabled. Users can see presence of all users, including non-local and non-merged users. If enabled, this parameter enables presence in Microsoft Outlook, SharePoint, and other applications if presence can be resolved for that user.	Not Applicable	Supported on Avaya Workplace Client for Windows.
OBSCURE_PRESENCE_STATES		
This parameter is used to hide one or more presence states from the presence chooser in Avaya Workplace Client. For example, `SET OBSCURE_PRESENCE_STATES "automatic,available,busy,away,donotdisturb,outofoffice,offline"` The default value is an empty string. If you hide all presence states, Avaya Workplace Client disables the presence chooser and the default presence state is Automatic.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
AUTO_AWAY_TIME		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the idle time in minutes after which the presence status of the user automatically changes to Away. The value is normalized to 0, 5, 10, 15, 30, 60, 90, or 120. The value 0 disables the feature. The default value is 10. **Note:** The value 5 is supported only on desktop clients.	Settings > User Preferences > General > Auto Set to Away	Supported on all platforms.

Exchange Web Services parameters

Use the following parameters if Avaya Workplace Client is configured to interwork with Exchange Web Services (EWS):

Description	Client UI setting name	Avaya Workplace Client platform support
EWSENABLED		
This parameter indicates whether EWS is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > Services > Exchange Calendar > Exchange Calendar	Supported on all platforms.
EWSSSO		
This parameter indicates the authentication mechanism that EWS uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that EWS uses unified login. This is the default value. • 4: Indicates that EWS uses Microsoft Modern Authentication.	Settings > Services > Sign In Service > Exchange Calendar	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
EWSSERVERADDRESS		
This parameter indicates the server address that can be used to connect to EWS directly. For example, usmail.slav.com. If you configure this parameter, Avaya Workplace Client tries to establish a connection to EWS directly using the server address and avoids the Auto Discover process.	Settings > Services > Exchange Calendar > Server Address	Supported on all platforms.
EWSDOMAIN		
The Exchange server domain. For example, avaya.com. The Auto Discover process uses EWSDOMAIN to find an EWS endpoint.	Settings > Services > Exchange Calendar > Domain	Supported on all platforms.
EWSUSERNAME		
The Exchange account user name. This parameter must have the user name portion of a user's Exchange email address. For example, for an Exchange email address username@avaya.com, EWSUSERNAME = username. • If EWS uses unified login, this parameter is ignored and SSOUSERID is used. • If EWS does not use unified login, this parameter is used. • If EWS does not use unified login and this parameter is not specified in the automatic configuration file, the user can view the EWS user name setting in the Automatic configuration wizard.	Settings > Accounts > Exchange Calendar > Username	Supported on all platforms.
EWSPASSWORD		
The EWS account password. • If EWS uses unified login, this parameter is ignored and SSOPASSWORD is used. • If EWS does not use unified login, this parameter is used. • If EWS does not use unified login and this parameter is not specified in the automatic configuration file, the user can view the EWS password setting in the Automatic configuration wizard.	Settings > Accounts > Exchange Calendar > Password	Supported on all platforms.
CALENDAR_INTEGRATION_ENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether you want to integrate calendar with Avaya Workplace Client. The options are: • 0: Indicates that you do not want to enable calendar integration with Avaya Workplace Client. You must use this value if you want to completely disable EWS and Microsoft Outlook services. • 1: Indicates that you want to enable calendar integration with Avaya Workplace Client. This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Windows.

LDAP parameters

Description	Client UI setting name	Avaya Workplace Client platform support
DIRENABLED		
This parameter indicates whether LDAP is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > Services > Enterprise Directory > Enterprise Directory	Supported on Avaya Workplace Client for Mac and Windows.
DIRSSO		
This parameter indicates the authentication mechanism that LDAP uses. The options are: • 0: Indicates that you need to manually enter the credentials. • 1: Indicates that LDAP uses unified login. This is the default value.	Settings > Services > Sign In Service > Enterprise Directory	Supported on Avaya Workplace Client for Mac and Windows.
DIRSRVR		

Description	Client UI setting name	Avaya Workplace Client platform support
The IP address or fully qualified domain name of the LDAP server.	Settings > Services > Enterprise Directory > Server Address	Supported on Avaya Workplace Client for Mac and Windows.
DIRSRVRPRT		
The port number of the LDAP server. The default value is 636.	Settings > Services > Enterprise Directory > Server Port	Supported on Avaya Workplace Client for Mac and Windows.
DIRUSERNAME		
The LDAP authentication user name.	Settings > Accounts > Enterprise Directory > Username	Supported on Avaya Workplace Client for Mac and Windows.
DIRPASSWORD		
The LDAP authentication password.	Settings > Accounts > Enterprise Directory > Password	Supported on Avaya Workplace Client for Mac and Windows.
DIRTOPDN		
The LDAP search base. For example, `OU=Global Users,DC=global,DC=avaya,DC=com`.	Settings > Services > Enterprise Directory > LDAP Search Base	Supported on Avaya Workplace Client for Mac and Windows.
DIRSECURE		
This parameter indicates whether to use TLS or TCP for LDAP. The options are: • 0: Indicates TCP. • 1: Indicates TLS. This is the default value.	Settings > Services > Enterprise Directory > Use TLS	Supported on Avaya Workplace Client for Mac and Windows.

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
DIRIMATTRIBUTE		
This parameter value is processed as an instant messaging address. The client provides access to the enterprise directory search using a direct LDAP connection. While processing the results, the client can process the attribute, such as telephoneNumber, specified in this parameter as an instant messaging address. For example, telephoneNumber, as often the administrator provisions users with Presence Server instant messaging addresses that correspond to the telephone number of the user. The default value is mail. **Note:** If LDAP search is used, then the user’s LDAP profile must have the same attribute configured which is specified in this parameter.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIRUSEIMDOMAIN		
This parameter indicates whether the client must perform a mapping to the IM domain. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value. In this parameter, the telephone number of the user is mapped into the IM domain. Example: 16135551212 becomes `16135551212@presence.example.com` if the IM domain is presence.example.com. This parameter is also used if an email address field is used. For example, alice@example.com becomes `alice@presence.example.com`. This parameter is only enabled in single domain deployments. You must not use domain mapping if any form of messaging federation is in place. Instead, ensure that the correct IM address is stored in an LDAP attribute.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIRTYPE		

Description	Client UI setting name	Avaya Workplace Client platform support
The type of LDAP directory to which the endpoint connects. Valid values are: • ACTIVEDIRECTORY: This is the default value. • DOMINO • NOVELL	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIRSCOPE		
This parameter defines the scope of the LDAP search. Valid values are: • LDAP_SCOPE_BASE • LDAP_SCOPE_ONELEVEL • LDAP_SCOPE_SUBTREE: This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIRTIMEOUT		
The search time-out interval in seconds. The range is 10 to 200, and the default value is 100.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIRMAXENTRIES		
The maximum number of matching entries to display. The range is 10 to 100, and the default value is 50.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
DIR_CONTACT_RESOLUTION_ENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter enables quick search contact resolution by using the LDAP provider. The options are: • 0: Indicates disabled. • 1: Indicates enabled. This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

Media parameters

Description	Client UI setting name	Avaya Workplace Client platform support
DTMF_PAYLOAD_TYPE		
This parameter specifies the RTP payload type for RFC 2833 signaling. Valid values are 96 through 127. The default value is 120.	Not Applicable	Supported on all platforms.
RTP_PORT_LOW		
This parameter specifies the lower limit of the UDP port range to be used by RTP/RTCP or SRTP/SRTCP connections. Valid values are 1024 through 65503. The default value is 5004.	Not Applicable	Supported on all platforms.
RTP_PORT_RANGE		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter specifies the range or number of UDP ports available for RTP/ RTCP or SRTP/SRTCP connections. This value is added to RTP_PORT_LOW to determine the upper limit of the UDP port range. Valid values are 32 through 64511. If you configure a value less than 32, the value changes automatically to 32. The default value is 200.	Not Applicable	Supported on all platforms.
ECHO_CANCELLATION		
The echo cancellation algorithm. Echo cancellation is a process that removes echo from a voice communication to improve voice quality on a telephone call. The supported values are: • aec: This is the default value. • aecm • off	Not Applicable	Supported on Avaya Workplace Client for Android.
ENABLE_OPUS		
This parameter controls the Opus codec capability. The supported values are: • 0: The parameter is disabled. • 1: ENABLE_OPUS_WIDEBAND_20K. This is the default value. • 2: ENABLE_OPUS_NARROWBAND_16K. • 3: ENABLE_OPUS_NARROWBAND_12K.	Not Applicable	Supported on all platforms.
OPUS_PAYLOAD_TYPE		
This parameter specifies the RTP dynamic payload type used for the Opus codec. This parameter is used when the media offer is sent to the farend in an INVITE or 200 OK when INVITE with no SDP is received. Valid values are 96 through 127. The default value is 116.	Not Applicable	Supported on all platforms.
DSCPAUD		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the DSCP marking for audio frames that the endpoint generates. This parameter is used only in OTT deployments. In TE deployments, DSCP values are obtained from PPM as Avaya Aura® is available. Valid values are 0 through 63. The default value is 46.	Not Applicable	Supported on all platforms.
DSCPSIG		
This parameter indicates the DSCP marking for signaling frames that the endpoint generates. This parameter is used only in OTT deployments. In TE deployments, DSCP values are obtained from PPM as Avaya Aura® is available. Valid values are 0 through 63. The default value is 24.	Not Applicable	Supported on all platforms.
DSCPVID		
This parameter indicates the DSCP marking for video frames that the endpoint generates. This parameter is used only in OTT deployments. In TE deployments, DSCP values are obtained from PPM as Avaya Aura® is available. Valid values are 0 through 63. The default value is 34.	Not Applicable	Supported on all platforms.
MEDIAENCRYPTION		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter specifies the media encryption ciphers. The default value is 10,1,2,9. Value: • 1: Indicates aescm128-hmac80 • 2: Indicates aescm128-hmac32 • 9: Indicates none • 10: Indicates aescm256-hmac80 • 11: Indicates aescm256-hmac32 Avaya Workplace Client supports any combinations of 1, 2, 10, 11, and 9, such as 1,9 or 2,9 or 1,2,9 or 10,9 or 11,9 or 10,11,9 or 1,2,10,11,9. The ordering of these digits does not affect the functionality of Avaya Workplace Client. To support the Best Effort SRTP negotiation, the parameter must contain 9 and at least one other value of 1, 2, 10, and 11. If the parameter does not contain 9, Avaya Workplace Client automatically adds 9. For interoperability with Avaya Aura®: • For the Avaya Aura® 6.x environment, the recommended value for this parameter is 1,9. • For the Avaya Aura® 7.x environment, the recommended value for this parameter is 10,1,9.	Not Applicable	Supported on all platforms.
ENCRYPT_SRTCP		
This parameter is used to enable the SRTCP encryption. The options are: • 0: Indicates that the SRTCP encryption is disabled. This is the default value. • 1: Indicates that the SRTCP encryption is enabled.	Not Applicable	Supported on all platforms.
ENABLE_MEDIA_HTTP_TUNNEL		
This parameter is used to enable the Media HTTP Tunneling feature. The options are: • 0: Indicates that the Media HTTP Tunneling feature is disabled. • 1: Indicates that the Media HTTP Tunneling feature is enabled. This is the default value. This parameter is applicable only to Avaya Equinox® Conferencing.	Not Applicable	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
MEDIA_ADDR_MODE		
This parameter specifies the preference of the SDP media group lines and the SDP answer/offer format. The options are: • 4: IPv4. This is the default value. • 6: IPv6. • 46: Prefer IPv4 over IPv6 media. This value is used only when the client is in a dual stack network. • 64: Prefer IPv6 over IPv4 media. This value is used only when the client is in a dual stack network.	Not Applicable	Supported on all platforms.
MEDIA_ADDR_MODE_HTTP		
This parameter specifies the preference of the IP address offered in the SDP media line for HTTP calls. This parameter is used only by dual stack clients which are configured with both IPv4 and IPv6 addresses. The options are: • 4: Prefer IPv4 in outgoing call SDP. This is the default value. • 6: Prefer IPv6 in outgoing call SDP.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.

Video parameters

Description	Client UI setting name	Avaya Workplace Client platform support
ENABLE_VIDEO		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether the video is enabled. The options are: • 0: Indicates that the video is disabled. • 1: Indicates that the video is enabled. This is the default value.	Settings > User Preferences > Audio / Video > Video Calling	Supported on all platforms.
VIDEO_MAX_BANDWIDTH_ANY_NETWORK		
This parameter indicates the video bandwidth on any network. The supported values in kilobits per second (kbps) are: • 0: The value to indicate that the video is blocked. • 128 • 256 • 384 • 512: The default value for mobile clients. • 768 • 1024: The default value for MacOS clients. • 1280: The default value for Windows clients. • 1792 You can also specify a custom value between 0 to 10000.	Not Applicable	Supported on all platforms.
VIDEO_MAX_BANDWIDTH_CELLULAR_DATA		
This parameter indicates the video bandwidth on the cellular data network. The supported values are the same as that for VIDEO_MAX_BANDWIDTH_ANY_NETWORK. The default value is 512 kbps to limit video resolution.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
VIDEO_MAX_RESOLUTION		

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
This parameter indicates the maximum video resolution that Avaya Workplace Client can receive. The supported values are: • 0 = MAX_AUTO. This is the default value. • 1 = MAX_1080P • 2 = MAX_720P • 3 = MAX_480P • 4 = MAX_360P • 5 = MAX_240P • 6 = MAX_180P	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
VIDEO_CAPTURE_RESOLUTION		
This parameter indicates the maximum video resolution that Avaya Workplace Client uses to send a video to the network. The supported values are: • 0 = Max. This is the default value. • 1 = 1080p • 2 = 720p • 3= 540p • 4= 360p • 5 = 270p • 6 = Min	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
BFCP_TRANSPORT		

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
If enabled, this parameter indicates non-power suite users can use BFCP to share screen on the point-to-point video call between two clients on desktop platforms. Users can also share screens on point-to-point video calls between the Avaya Workplace Client on desktop platforms and a video room system, such as an XT Series endpoint. The options are: • 0: Indicates that BFCP is disabled. This is the default value for Avaya Workplace Client in the UC mode. Also, this is the default value if you are using Avaya Aura® Device Services. **Note:** BFCP is not supported in ANAT deployments. Hence, you must disable BFCP in any ANAT environment. • 1: Indicates UDP only. This is the default value for Avaya Workplace Client in the OTT mode.	Not Applicable	Supported on all platforms.
BFCP_UDP_MINIMUM_PORT		
This parameter specifies the lower limit of the UDP port range to be used by the BFCP signaling channel. The value range is 1024 through 65503. The default value is 5204. Usually, the BFCP minimum port value equals the RTP UDP port maximum value + 1.	Not Applicable	Supported on all platforms.
BFCP_UDP_MAXIMUM_PORT		
This parameter specifies the upper limit of the UDP port range to be used by the BFCP signaling channel. The value range is 1024 through 65503. The default value is 5224.	Not Applicable	Supported on all platforms.
ENABLE_MSS_VIDEO		
This parameter controls the Multi-Stream Switching (MSS) video feature. The options are: • 0: Indicates that the MSS video feature is disabled. • 1: Indicates that the video feature is enabled for MSS v1. This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows
FORWARD_ERROR_CORRECTION		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter is used to configure the Forward Error Correction (FEC) for video streams. • 0: Indicates that FEC is disabled. • 1: Indicates that Standard RFC5109 FEC is used as a redundant encoding. This value is reserved for a future release. • 2: Indicates that Standard RFC5109 FEC is used as a separate stream. This value is reserved for a future release. • 3: Indicates that Scopia Proprietary FEC is used in Session Description Protocol (SDP) negotiation. Scopia FEC is used to maintain video quality during Avaya Workplace Client meetings in network-packet lost conditions. This is the default value.	Not Applicable	Supported on all platforms.

Voice mail parameter

Description	Client UI setting name	Avaya Workplace Client platform support
PSTN_VM_NUM		
The voice mail access number. For example, `SET PSTN_VM_NUM "VM.user@domain"`.	Not Applicable	Supported on all platforms. This parameter is applicable only to IP Office.

Avaya Cloud parameters

Description	Client UI setting name	Avaya Workplace Client platform support
ENABLE_AVAYA_CLOUD_ACCOUNTS		
This parameter controls the Avaya Spaces integration. The options are: • 0: Indicates that the Avaya Spaces integration is disabled. Avaya Workplace Client does not display the Spaces area in the Workplace Meetings panel on the Top of Mind screen. • 1: Indicates that the Avaya Spaces integration is enabled. This is the default value.	Settings > Services > Avaya Cloud Services > Avaya Cloud Services	Supported on all platforms.
AVAYA_CLOUD_ACCOUNTS_URI		
This parameter changes the Avaya Cloud accounts service address. The options are: • 1: The default value is accounts.avayacloud.com. • 2: You can change the address to any URI string for testing. For example, onexampletesting.example.com or onexamplestaging.example.com.	Not Applicable	Supported on all platforms.
AVAYA_CLOUD_SPACES_URI		
This parameter is used to change the Avaya Spaces service address. The options are: • 1: The default value is spaces.avayacloud.com. • 2: You can change the address to any URI string for testing. For example, logontesting.example.com or logonstaging.example.com.	Not Applicable	Supported on all platforms.
AVAYA_CLOUD_SPACES_API_URI		
This parameter is used to change the Avaya Spaces API address. The options are: • 1: The default value is spacesapis.avayacloud.com. • 2: You can change the address to any URI string for testing. For example, logontestingapis.example.com or logonstagingapis.example.com.	Not Applicable	Supported on all platforms.
ENABLE_EQUINOX_MEETING_ACCOUNT_DISCOVERY		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter controls whether Avaya Workplace Client auto discovers the Avaya Equinox® Meetings Online account. The options are: • 0: Indicates that Avaya Workplace Client does not auto discover the Avaya Equinox® Meetings Online account. • 1: Indicates that Avaya Workplace Client auto discovers the Avaya Equinox® Meetings Online account. This is the default value.	Not Applicable	Supported on all platforms.
EQUINOX_MEETING_ACCOUNT_DISCOVERY_URL		
This parameter is used to change the Avaya Equinox® Meetings Online account auto discovery address. The options are: • 1: The default value is https://meetings.avaya.com/acs/resources/. • 2: You can change the address to any URI string for testing. For example, https://meetingsstg.avaya.com/acs/resources/.	Not Applicable	Supported on all platforms.
ENABLE_EWS_ACCOUNT_DISCOVERY		
This parameter controls whether Avaya Workplace Client auto discovers the Exchange Web Services (EWS) account. The options are: • 0: Indicates that Avaya Workplace Client does not auto discover the EWS account. • 1: Indicates that Avaya Workplace Client auto discovers the EWS account. This is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
ENABLE_GOTO_MEETING_PORTAL		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter controls whether the Top of Mind screen displays the Go to My Meeting Portal option in Avaya Workplace Client. The options are: • 0: Indicates that the Top of Mind screen does not display the Go to My Meeting Portal option in Avaya Workplace Client. • 1: Indicates that the Top of Mind screen displays the Go to My Meeting Portal option in Avaya Workplace Client. This is the default value for Android, Avaya Vantage™ K165 device, and Avaya Vantage™ K175 device. **Note:** On the Avaya Vantage™ K155 device, the Top of Mind screen does not display the Go to My Meeting Portal option in Avaya Workplace Client regardless of the value that you set for this parameter.	Not Applicable	Supported on Avaya Workplace Client for Android.

Avaya Cloud account management in UC or OTT deployments

Avaya Cloud account rules:

- Only the same email address with the domain matching the company's domain can be invited to be an employee.
- A company can have multiple domains. Each domain must be unique across the whole system.
- If a user signs up to Avaya Cloud with Google+, this user can add the company email address into the Avaya Spaces profile. Avaya Spaces auto-links this user with the company ID that has the company domain matching the user's company email domain.
- If a user signs up to Avaya Cloud with the company email address, this user can add the Gmail email address into the Avaya Spaces profile. The user can then use Google+ to log in to Avaya Cloud.

Administration parameters

Description	Client UI setting name	Avaya Workplace Client platform support
SUPPORTEMAIL		
This parameter indicates the default email address to send diagnostic logs.	On Avaya Workplace Client for Android: Settings > Support > Report a Problem > Support Email Address	Supported on all platforms.
SUPPORTURL		
This parameter indicates the default URL to get support.	Not Applicable	Supported on all platforms.
SUPPORTEMAIL_REPORT_ATTACHMENT_SIZE		
This parameter is used to override the default log file size. The default value is 10.	Not Applicable	Supported on Avaya Workplace Client for Windows.
LOG_VERBOSITY		
This parameter indicates whether verbose logging is enabled in the local client. The options are: • 0: Indicates disabled. 0 is the default value for Avaya Workplace Client on Avaya Vantage™. • 1: Indicates enabled. 1 is the default value on Avaya Workplace Client.	Settings > Support > Enable Diagnostics	Supported on all platforms.
UC_DATA_PRIVACY_URL		
This parameter indicates the URL to view the data privacy statement. If you do not specify the URL, Avaya Workplace Client does not display the Data Privacy link. Customers might use the Data Privacy setting to link to their Consent Management mechanism indirectly.	Settings > Support > Legal > Data Privacy	Supported on all platforms.

Description	**Client UI setting name**	**Avaya Workplace Client platform support**
ANALYTICSENABLED		
This parameter indicates whether you can collect data on behalf of your users. The options are: • 0: Indicates disabled. • 1: Indicates enabled. 1 is the default value.	Settings > Support > Quality Improvement	Supported on all platforms.
ISO_SYSTEM_LANGUAGE		
This parameter indicates the preferred language for call signaling. If supported, the default language is set to the language of the operating system. Otherwise, the default language is set to en_US.	Not Applicable	Supported on Avaya Workplace Client for Mac.
CELLULAR_DIRECT_ENABLED		
This parameter indicates whether the Cellular Direct feature is enabled. The options are: • 0: Indicates disabled. 0 is the default value. • 1: Indicates enabled. Avaya Workplace Client starts a call by using the cellular network if the following conditions are met: • The value of this parameter is set to 1. • The dialed number matches any number specified in the CELLULAR_DIRECT_NUMBER_LIST parameter. For example, if you set the value of this parameter to 1 and if the user dials 911, which is specified in CELLULAR_DIRECT_NUMBER_LIST, Avaya Workplace Client starts the call by using the cellular network.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
CELLULAR_DIRECT_NUMBER_LIST		

Description	Client UI setting name	Avaya Workplace Client platform support
A multivalue parameter that contains the list of phone numbers sent directly to the native phone client on iOS or Android. The numbers can contain any digits or characters that can be dialed from the client UI or the native dialer, including: • Special characters, such as plus (+), asterisk (*), and hash (#). • Any alphanumeric character, such as A-Z, a-z, or 0-9. **Note:** iOS does not support numbers containing an asterisk (*) or a hash (#).	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
HTTP_PROXY_CSDK_ENABLE		
This parameter indicates whether Avaya Workplace Client uses the HTTP proxy that is configured in the OS. The options are: • 0: Indicates that Avaya Workplace Client does not use the HTTP proxy. • 1: Indicates that Avaya Workplace Client uses the HTTP proxy configured in the OS. It does not perform a STUN check for HTTPUA calls before enforcing HTTP tunneling in the media engine. • 2: Indicates that Avaya Workplace Client uses the HTTP proxy configured in the OS. It performs a STUN check for HTTPUA calls before enforcing HTTP tunneling in the media engine. 2 is the default value.	Not Applicable	Supported on all platforms.
TELEPHONY_PUSH_NOTIFICATION_SERVICE_URL		
This parameter indicates the FQDN or resource URL of the Avaya Aura® Web Gateway server that provides the telephony events for the Push Notification solution. The accepted value formats are: • https://server-fqdn: Client SDK appends /csa/resources/tenants/default to the FQDN to create a resource URL that the SDK can use to request push service activation or deactivation. • server-fqdn: Client SDK prepends https:// and appends /csa/resources/tenants/default to the FQDN to create a resource URL that the SDK can use to request push service activation or deactivation. • https://<fqdn>/csa/resources/tenants/default: Client SDK uses the URL as is, with no modification. • Empty: Push Notification for telephony events is not supported.	Not Applicable	Supported on Avaya Workplace Client for iOS.

Description	Client UI setting name	Avaya Workplace Client platform support
TELEPHONY_PUSH_NOTIFICATION_ENABLED		
This parameter indicates the policy for enabling the Telephony Push Notification service on Client SDK. • 0: Indicates that the policy for enabling the Telephony Push Notification service on Client SDK is disabled. Client SDK sets the VoIP flag for the used sockets in the background. The iOS system accepts this marking when Client SDK is used with Avaya Workplace Client for iOS. 0 is the default value. • 1: Indicates that the policy for enabling the Telephony Push Notification service on Client SDK is enabled. Client SDK does not set the VoIP flag on its sockets. It relies on the Apple Push Notification service to provide telephony and other events towards the client application.	Not Applicable	Supported on Avaya Workplace Client for iOS.
ESM_PUSH_NOTIFICATION_ENABLED		
This parameter indicates the policy for enabling the Avaya Multimedia Messaging Push Notification service on Client SDK. • 0: Indicates that the policy for enabling the Avaya Multimedia Messaging Push Notification service on Client SDK is disabled. Client SDK sets the VoIP flag for the Avaya Multimedia Messaging sockets in the background. The iOS system accepts this marking when Client SDK is used with Avaya Workplace Client for iOS. 0 is the default value. • 1: Indicates that the policy for enabling the Avaya Multimedia Messaging Push Notification service on Client SDK is enabled. Client SDK does not set the VoIP flag on its Avaya Multimedia Messaging sockets. It relies on the Apple Push Notification service to provide Avaya Multimedia Messaging events towards the client application.	Not Applicable	Supported on Avaya Workplace Client for iOS.
PRESENT_USER_NAME_ONLY		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether Avaya Workplace Client displays the user name portion of a numeric display name. This parameter does not apply to alphanumeric user names. The options are: • 0: Indicates that Avaya Workplace Client does not display the user name portion of a numeric display name. 0 is the default value. • 1: Indicates that Avaya Workplace Client displays the user name portion of a numeric display name. If you enable this parameter, Avaya Workplace Client displays 17805551234@pstn.yourcompany.com as 17805551234. This property is applicable to improve the user experience when services are configured using the Avaya SIP End-to-End V2 spec.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
OTHER_PHONE_MODE_ENABLED		
This parameter indicates whether the Other Phone mode is available for the user. The options are: • 0: Indicates that the Other Phone mode is unavailable for the user. • 1: Indicates that the Other Phone mode is available for the user. 1 is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
AUDIO_DEVICE_CALL_CONTROL_ENABLED		
This parameter indicates whether call control is enabled for Avaya headsets. The options are: • 0: Indicates that call control is disabled for Avaya headsets. 1: Indicates that call control is enabled for Avaya headsets. 1 is the default value.	Not Applicable	Supported on Avaya Workplace Client for Android, Mac, and Windows.
SUPPORTEMAIL_ENCRYPTED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether the logs are encrypted before the user sends the logs by email to Avaya support. The options are: • 0: Indicates that the logs are not encrypted. 0 is the default value. • 1: Indicates that the logs are encrypted.	Not Applicable	Supported on all platforms.
SUPPORTEMAIL_ENCRYPTIONPASSPHRASE		
This parameter indicates the encryption passphrase when the logs are encrypted. • If you provide the encryption passphrase, Avaya Workplace Client similarly encrypts all support logs. • If you do not provide the encryption passphrase, Avaya Workplace Client prompts the user to provide a custom passphrase to encrypt the logs.	Not Applicable	Supported on all platforms.
ENABLE_IN_APP_RATING		
This parameter indicates whether the user can view the option to rate the application. The options are: • 0: Indicates that the user cannot view the option to rate the application. • 1: Indicates that the user can view the option to rate the application. 1 is the default value.	Settings > Support > Rate this app	Supported on Avaya Workplace Client for Android and iOS.
ATTACHMENT_FILETYPE_BLACKLIST		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the list of file extensions that the user cannot download in messaging attachments so that the client does not download common malware. The default value is empty. If you keep the default value or do not specify this parameter in the automatic configuration file, Avaya Workplace Client does not allow the user to download messaging attachments with the following file extensions: `".exe", ".ade", ".adp", ".app", ".asp", ".bas", ".bat", ".cer", ".chm", ".cmd", ".com", ".cpl", ".crt", ".csh", ".fxp", ".grp", ".hlp", ".hta", ".inf", ".ins", ".isp", ".its", ".js", ".jse", ".ksh", ".lnk", ".mad", ".maf", ".mag", ".mam", ".maq", ".mar", ".mas", ".mat", ".mau", ".mav", ".maw", ".mda", ".mdb", ".mde", ".mdt", ".mdw", ".mdz", ".msc", ".msi", ".msp", ".mst", ".ocx", ".ops", ".pcd", ".pif", ".pl", ".pnp", ".prf", ".prg", ".pst", ".reg", ".scf", ".scr", ".sct", ".shb", ".shs", ".tmp", ".url", ".vb", ".vbe", ".vbs", ".vsd", ".vsmacros", ".vss", ".vst", ".vsw", ".ws", ".wsc", ".wsf", ".wsh"` If you specify a value for this parameter, Avaya Workplace Client does not allow the user to download messaging attachments with the extensions that you specify along with the default list of file extensions. For example, `SET ATTACHMENT_FILETYPE_BLACKLIST "docx,zip,txt"`.	Not Applicable	Supported on all platforms.
EXACT_SIP_DOMAIN_COMPARISON		
This parameter indicates whether the algorithms are checked for exact or weak matching. The options are: • 0: Indicates that the algorithms are not checked for exact or weak matching. • 1: Indicates that the algorithms are checked for exact or weak matching. 1 is the default value.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

Description	Client UI setting name	Avaya Workplace Client platform support
ACTIVATE_DESKPHONE_MODE_ON_STARTUP		
This parameter indicates whether the user can log in to the Desk Phone mode after a new installation if the user is already logged in to the deskphone with the same extension. Also, on System Manager, you must set Max. Simultaneous Devices to 1, that is, MDA=1. The options are: • 0: Indicates that the user can log in to the This Computer mode after a new installation. 0 is the default value. • 1: Indicates that the user can log in to the Desk Phone mode after a new installation without using the This Computer mode.	Not Applicable	Supported on Avaya Workplace Client for Windows.

Security settings parameters

Description	Client UI setting name	Avaya Workplace Client platform support
REVOCATIONCHECKENABLED		
This parameter indicates whether certificate revocation is checked. Supported values are: • 0: Disabled. • 1: Best effort.This is the default value for checking certificate revocation. The revocation checking failures in this type of checking, such as no response and no revocation authority, are not fatal. • 2: Mandatory.Certificate revocation is checked. Revocation checking failures in this type of checking are fatal.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.
TLSSRVRID		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter defines the actions to be taken when the server identity validation fails. Supported values are: • 0: Allow the connection to continue. This is the default value. • 1: Abort the connection. This parameter applies to all protocols for all configured services on the endpoint. **Note:** If you correct the Subject Alternative Name value in the System Manager certificate after a server identity validation failure, you must inform the user to log in again to Avaya Workplace Client.	Not Applicable	Supported on all platforms.
SUPPORTWINDOWSAUTHENTICATION		
This parameter indicates whether Windows Authentication is used when challenged for authentication using Microsoft Negotiate or NTLM on a device that is logged in to the domain. Supported values are: • 0: Disabled. This is the default value. • 1: Enabled. The following services support the use of this parameter: • Avaya Aura® Device Services. • Avaya Multimedia Messaging or Presence Multimedia Messaging. • Unified Portal. • Exchange Web Services (EWS) using on-premise Exchange. This service does not work with Office 365 EWS. • LDAP, when Avaya Aura® Device Services are not used. To set up IWA in both FIPS and non-FIPS environments, see Avaya Aura® Device Services documentation.	Not Applicable	Supported on Avaya Workplace Client for Windows.
PKCS12URL		
This parameter indicates the URL to be used to download a PKCS #12 file containing a client identity certificate and its private key. Avaya Aura® Device Services validates the entry for standard URL format.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
PKCS12PASSWORD		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the password for the PKCS#12 certificate that you specified in PKCS12URL. This parameter is optional. You must use this parameter only in cases where you want to ensure that access to the settings file is protected appropriately. If the password is absent, but is required to install the certificate, the user is prompted in the application to enter the PKCS12PASSWORD as required.	Certificate Password	Supported on Avaya Workplace Client for Android and iOS.
MYCERTURL		
This parameter indicates the URL of the SCEP server from which the client must obtain an identity certificate. This is needed if the client does not already have an identity certificate from that SCEP server. The default value is an empty string, which means that the client does not attempt to retrieve an identity certificate using SCEP.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
MYCERTCN		
This parameter indicates the Common Name (CN) that is used in the subject of an SCEP certificate request. If you keep this parameter value blank, Avaya Workplace Client prompts the user to enter a value before starting SCEP enrollment.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
SCEPPASSWORD		
This parameter indicates the password to be included in the challengePassword attribute of an SCEP certificate request. If you keep this parameter value blank, Avaya Workplace Client prompts the user to enter a value before starting SCEP enrollment.	Password	Supported on Avaya Workplace Client for Android and iOS.
SCEP_USESSO		
This parameter indicates whether SCEP uses unified login. The options are: • 0: Indicates that SCEP does not use unified login. This is the default value. • 1: Indicates that SCEP uses unified login.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
MYCERTDN		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the part of the certificate subject that is common to all clients. The value must begin with a forward slash "/" and might include the OU, O, L, ST, and C values. The default value is an empty string. Use a forward-slash character "/" as a separator between components because commas do not work with some servers. If the value includes spaces, ensure that you enter the entire value. For example, `SET MYCERTDN /C=US/ST=NJ/L=MyTown/O=MyCompany`.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
MYCERTCAID		
If the server hosts multiple certificate authorities, this parameter indicates an identifier for the CA certificate with which the certificate request must be signed. The default value is CAIdentifier.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
MYCERTKEYLEN		
This parameter indicates the bit length of the public and private keys generated for the SCEP certificate request. The value range is 1024 through 2048. The default value is 2048.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
MYCERTRENEW		
This parameter indicates the validity interval percentage, of the identity certificate, after which you must begin the renewal procedure. The value range is 1 through 99. The default value is 90. When the client certificate passes this interval, a visual warning is presented to the user stating that the certificate will expire shortly and must be renewed.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
TLS_VERSION		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the minimum version of the TLS protocol, which is supported by clients. The options are: • 0: Indicates that TLS 1.0 is used as the minimum version of the TLS protocol. This is the default value.Default value in SDK, supports TLS 1.0, 1.1, and 1.2. • 1: Indicates that TLS 1.2 is used as the minimum version of the TLS protocol.If you want to enforce TLS 1.2, you must set the following configurations, as locked or obscured: • APPCAST_ENABLED = 0 • DIRENABLED = 0 **Note:** Sparkle library does not support setting the minimum version of the TLS protocol. Hence, this parameter value is ignored for Sparkle. For example, if you set the value for this parameter as 1 and the Sparkle back-end software does not support 1.2, the upgrade process continues regardless of the parameter value.	Not Applicable	Supported on all platforms.
CIPHER_SUITE_BLACKLIST		
This parameter indicates the list of blacklisted ciphers that will not be included during the TLS connection negotiation. For example, `SET CIPHER_SUITE_BLACKLIST "TLS_RSA_WITH_AES_128_GCM_SHA256,TLS_ECDH_ECDSA_WITH_AES_128_GCM_SHA256"`.	Not Applicable	Supported on all platforms.
CERTIFICATE_MIN_RSA_KEY_LENGTH		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the minimum RSA key length to be used for validating the certificate received from the server during the TLS handshake. If the value that you configure for this parameter is greater than the server certificate's key length, then Client SDK rejects the server certificate. The default key length is 1024. **Note:** If the previous parameter value is greater than the server certificate's key length and now you configure the parameter value to be less than the certificate key length, Avaya Workplace Client continues to remain in the failed state. The impact is significant when the misconfiguration applies to Avaya Aura® Device Services or the configuration server. You must correct the configuration on Avaya Aura® Device Services or the configuration server. Users can then reset the client and configure the client with the new automatic configuration file.	Not Applicable	Supported on all platforms.

User policy settings parameters

Description	Client UI setting name	Avaya Workplace Client platform support
LOCKED_PREFERENCES		
The list of locked preferences. For example, `SET LOCKED_PREFERENCES "CESSRVR","CESPORT","CESENABLED"`. The user cannot modify the values of the locked preferences in the client as locked preferences appear as read-only. To reset locked preferences, use `SET LOCKED_PREFERENCES ""`. The name of a setting must be the same across all clients. The default value is Not locked.	Not Applicable	Supported on all platforms.
OBSCURE_PREFERENCES		

Description	Client UI setting name	Avaya Workplace Client platform support
The list of obscured preferences. The default value is Not obscured. If you specify any parameters in this attribute, Avaya Workplace Client makes the value read-only. Also, the data itself is hidden from end-users.	Not Applicable	Supported on all platforms.
VOIPCALLINGENABLED		
This parameter indicates whether Wi-Fi or cellular data is used to make calls. The supported values are: • 0: Never. • 1: Prefer Wi-Fi. This is the default value. • 2: Wi-Fi only. • 3: Prefer cellular data.	Settings > User Preferences > Audio / Video > Use VoIP for calls	Supported on Avaya Workplace Client for Android and iOS.
TRUSTCERTS		
The list of URLs, absolute or relative, to CA certificates that will be stored in the private trust store and used to validate certificates of various servers. Set a blank value to clear the private trust store and go back to the platform trust store. Certificates stored in binary DER form, commonly known as .cer, .crt, or .der files, and Base64-encoded DER form, commonly known as .pem files, are supported.	Not Applicable	Supported on all platforms.
TRUST_STORE		
This parameter is used to enable the trust stores in the server certificate chain validation. The options are: • 0: Indicates that only private trust store is used for all CSDK HTTPS and TLS connections. • 1: Indicates that both platform and private trust stores are used for all CSDK HTTPS and TLS connections. This is the default value. **Note:** If you disable the private trust store in the TRUSTCERTS setting, then all HTTPS and TLS connections use the platform trust store and this setting does not apply.	Not Applicable	Supported on all platforms.

Description	Client UI setting name	Avaya Workplace Client platform support
DISABLE_PASSWORD_STORAGE		
This parameter stops the client from storing passwords locally. The options are: • 0: Indicates False. This is the default value. • 1: Indicates True. When this parameter is enabled, the client can continue to cache the credentials in RAM only. The client does not store passwords in persistent storage. This implies that each time the client starts, users are prompted to enter their password. The Push Notification solution from Avaya requires the DISABLE_PASSWORD_STORAGE parameter to be set to 0. If the Avaya Workplace Client user needs to provide a password prior to answering the call, the probability of the user successfully logging in is relatively low before the: • Call is routed. • Call originator cancels the call.	Not Applicable	Supported on all platforms.
FORCE_LOGOUT_AFTER		
This parameter represents the number of days before the client automatically logs out. It forces users to enter their credentials to log in again. The range is from 0 to 365 days. The options are: • 0: Indicates that the parameter is disabled. This is the default value. • 1 to 365: Indicates the number of days before the client automatically logs out.	Not Applicable	Supported on Avaya Workplace Client for Android and iOS.
DISABLE_COOKIE_STORAGE		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether browser cookies are persisted into the platform cookie store. The options are: • 0: Indicates False. Browser cookies are persisted in the cookie management of the platform, accessible to other application browsers. • 1: Indicates True. Browser cookies are not persisted beyond the life cycle of the application process. This is the default value. For OAuth and SSO deployments, you can disable this parameter to improve the user login experience, enabling users to only log in once to each IDP. For shared workstations, that is, different client account and same shared OS account, you can enable this parameter to force sign-in of different client users for each client login.	Not Applicable	Supported on Avaya Workplace Client for Mac and Windows.

VoIP calls

The administrator can configure the following values for the VOIPCALLINGENABLED attribute in the settings file:

- 0: Never
- 1: Prefer Wi-Fi
- 2: Wi-Fi only
- 3: Prefer cellular data

Avaya Workplace Client maintains an internal variable to represent user preferences for the Use VoIP for calls setting:

- 0: Never
- 1: Prefer Wi-Fi
- 2: Wi-Fi only
- 3: Prefer cellular data

The Avaya Workplace Client logic depends on both the administrative setting in the settings file and the user preference in Avaya Workplace Client.

Variable	Use VoIP for calls = Never	Use VoIP for calls = Prefer Wi-Fi	Use VoIP for calls = Wi-Fi only	Use VoIP for calls = Prefer cellular data
VOIPCALLINGENABLED = 0	Avaya Workplace Client displays this option as selected by the administrator. The user cannot edit the setting.	The user cannot select this option.	The user cannot select this option.	The user cannot select this option.
VOIPCALLINGENABLED = 1	The user can select this option. The Avaya Workplace Client logic depends on the user setting.	Avaya Workplace Client displays this option as selected by the administrator. The user can select this option. The Avaya Workplace Client logic depends on the user setting.	The user can select this option. The Avaya Workplace Client logic depends on the user setting.	The user cannot select this option.
VOIPCALLINGENABLED = 2	The user can select this option. The Avaya Workplace Client logic depends on the user setting.	The user cannot select this option.	Avaya Workplace Client displays this option as selected by the administrator. The user can select this option. The Avaya Workplace Client logic depends on the user setting.	The user cannot select this option.
VOIPCALLINGENABLED = 3	The user can select this option. The Avaya Workplace Client logic depends on the user setting.	The user cannot select this option.	The user cannot select this option.	Avaya Workplace Client displays this option as selected by the administrator. The user can select this option. The Avaya Workplace Client logic depends on the user setting.

The Wi-Fi network’s DNS resolves the domain name when both Wi-Fi and mobile data are enabled on the OS. To resolve the connection to the Avaya SBCE IP addresses, you must correctly map the domain names on the DNS server. If the DNS mapping is incorrect, Avaya Workplace Client cannot register to Avaya SBCE with the Prefer cellular data option.

On Avaya Workplace Client for iOS, consider a situation where you configure the VOIPCALLINGENABLED parameter with the value 3 and the user selects the Prefer cellular data option. In this case, if the user selects Wi-Fi when the mobile data, 3G, or 4G is enabled, only the SIP traffic uses mobile data, 3G, or 4G. The other Avaya Workplace Client for iOS traffic, which is HTTPS, uses Wi-Fi only, including PPM. Enterprises must configure their Wi-Fi networks to allow the ports and traffic to register to Avaya SBCE.

On Avaya Workplace Client for Android, if the user selects the Prefer cellular data option, both SIP and HTTPS traffic use mobile data, 3G, or 4G.

User preference parameters

After a fresh installation of Avaya Workplace Client, you can configure the parameters in the following table using automatic configuration only once. After the user configures the settings corresponding to these parameters in Avaya Workplace Client, you cannot change the values using automatic configuration except for the PREF_MUTE_MIC_WHEN_JOINING_MEETING and PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING parameters.

To change the value of the PREF_MUTE_MIC_WHEN_JOINING_MEETING and PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING parameters, do the following:

1. Lock or obscure the setting by using the LOCKED_PREFERENCES or OBSCURE_PREFERENCES parameter, and then set the default value to an empty string.
2. Wait for the user to log in to the client, and then implement the settings change.
3. Set the desired property value in the settings service or 46xx settings file.

Description	Client UI setting name	Avaya Workplace Client platform support
ADDRESS_VALIDATION		
This parameter indicates whether messaging address validation is enabled. The options are: • 0: Indicates disabled. This is the default value. • 1: Indicates enabled.	Settings > User Preferences > Contacts > Messaging Address Validation	Supported on all platforms.
PHONE_NUMBER_PRIORITY		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates the default phone number priority. The value is a list of comma-separated strings, which are listed from left to right to indicate the order in which the phone numbers will be used. If the PHONE_NUMBER_PRIORITY parameter is not defined, then the default order is used, that is, Work, Mobile, Home.	Not Applicable	Supported on all platforms.
NAME_SORT_ORDER		
This parameter indicates how names are sorted in the UI. The value is a comma-separated list of the following strings: • last • first By default, names are sorted according to last name.	Settings > User Preferences > Contacts > Name Sort Preferences	Supported on Avaya Workplace Client for Android and Windows.
NAME_DISPLAY_ORDER		
This parameter indicates how names are displayed in the UI. The value is a comma-separated list of the following strings: • last • first By default, the first name is displayed first.	Settings > User Preferences > Contacts > Name Display Preferences	Supported on Avaya Workplace Client for Android and Windows.
HOMESCREENLAYOUT		
This parameter indicates which Home screen layout to show. The options are: • 0: Displays Top of Mind. This is the default value. The user can change the preference on the mobile device. • 1: Displays the Top of Mind layout on the mobile device. • 2: Displays the Top of Mind Lite layout on the mobile device. This is the dialpad view. You can lock options 1 and 2 to prevent the user from changing them.	On the home screen, select the Top of Mind filter, and then select the Top of Mind switch.	Supported on Avaya Workplace Client for Android and iOS.
APPLICATION_AUTO_START		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether to start the client automatically. The options are: • 0: No. This is the default value for Android mobile clients. • 1: Yes. This is the default value for desktop clients. **Note:** Depending on the Android version, the user might need to unlock the device after a reboot to receive calls and messages.	Settings > User Preferences > General > Auto Start/Login	Supported on Avaya Workplace Client for Android, Mac, and Windows.
APPLICATION_CLOSE_WINDOW		
This parameter indicates how the client functions when the user clicks X in the main application window. The supported options are: • 0: Minimize the client to the task bar or dock bar. This is the default value. • 1: Minimize the client to the notification area. • 2: Exit the client.	Settings > User Preferences > Display > Main Window X Preferences	Supported on Avaya Workplace Client for Mac and Windows.
ENABLE_SPELL_CHECK		
This parameter indicates whether spell check is enabled. The options are: • 0: Indicates that spell check is disabled. • 1: Indicates that spell check is enabled. This is the default value.	Settings > User Preferences > Messaging > Spell check enabled	Supported on Avaya Workplace Client for Windows.
HIDDEN_MODE_ENABLED		

Description	Client UI setting name	Avaya Workplace Client platform support
This parameter indicates whether the hidden mode is enabled. The options are: • 0: Indicates that the hidden mode is disabled. This is the default value. • 1: Indicates that the hidden mode is enabled.	Settings > User Preferences > Display > Hidden Mode	Supported on Avaya Workplace Client for Windows.

Settings file template for Avaya Workplace Client

In the settings file, you can:

- Clear the existing value for a setting in the client by using a blank string.For example, `SET SIPUSERNAME ""`. You can use a blank string only for non-User preference parameters and PREF_MUTE_MIC_WHEN_JOINING_MEETING and PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING parameters.
- Exclude a parameter if you want to use the default value for the parameter in the client. For example, to use the default value for the AUTO_AWAY_TIME parameter, use `##SET AUTO_AWAY_TIME`.

Note:

Ensure that the setting for each parameter does not include line breaks. Avaya Workplace Client cannot parse settings file parameters with line breaks.

The following example shows the settings in the Avaya settings text file format, that is, 46xxsettings.txt.

```
SET SIPUSERNAME ""
SET SIPPASSWORD ""
SET UNIFIED_PORTAL_USERNAME ""
SET UNIFIED_PORTAL_PASSWORD ""
SET CESUSERNAME ""
SET CESPASSWORD ""
SET EWSUSERNAME ""
SET EWSPASSWORD ""
SET ESMUSERNAME ""
SET ESMPASSWORD ""
SET ACSUSERNAME ""
SET ACSPASSWORD ""
SET SUPPORTEMAIL support@slav.com
SET SUPPORTURL ""
SET SUPPORTEMAIL_REPORT_ATTACHMENT_SIZE "10"
SET LOG_VERBOSITY "1"
SET SUPPORTEMAIL_ENCRYPTED "0"
SET SUPPORTEMAIL_ENCRYPTIONPASSPHRASE ""
SET UC_DATA_PRIVACY_URL ""
SET ENABLE_IN_APP_RATING "1"
SET ATTACHMENT_FILETYPE_BLACKLIST ""
SET EXACT_SIP_DOMAIN_COMPARISON "1"
SET ACTIVATE_DESKPHONE_MODE_ON_STARTUP "0"

##Enable Unified Login
SET SSOENABLED "1"
SET UNIFIED_PORTAL_SSO "1"
SET ESMSSO "1"
SET CESSSO "1"
SET EWSSSO "1"
SET SSOUSERID ""
SET SSOPASSWORD ""

SET AUTOCONFIG_USESSO "1"
SET SETTINGS_CHECK_INTERVAL "1"
SET SETTINGS_FILE_URL ""

SET LOCKED_PREFERENCES ""
SET OBSCURE_PREFERENCES ""
SET VOIPCALLINGENABLED "1"
SET TRUSTCERTS "ca-chain.cert.crt","ca.cert.crt","SMGR22New2.crt","SMGR76Ne
w2.crt","AvayaITrootCA.crt","zsclaler1.cer","svucanfs.slav.com.crt","trust-
cert.cer"
SET TRUST_STORE "1"
SET DISABLE_PASSWORD_STORAGE "0"
SET FORCE_LOGOUT_AFTER "0"
SET DISABLE_COOKIE_STORAGE "1"
SET REVOCATIONCHECKENABLED "1"
SET TLSSRVRID "0"
SET SUPPORTWINDOWSAUTHENTICATION "0"
SET PKCS12URL ""
SET PKCS12PASSWORD ""
SET MYCERTURL ""
SET MYCERTCN ""
SET SCEPPASSWORD ""
SET SCEP_USESSO "0"
SET MYCERTDN ""
SET MYCERTCAID "CAIdentifier"
SET MYCERTKEYLEN "2048"
SET MYCERTRENEW "90"
SET TLS_VERSION "0"
SET CIPHER_SUITE_BLACKLIST ""
SET CERTIFICATE_MIN_RSA_KEY_LENGTH "1024"

SET ADDRESS_VALIDATION "0"
SET PHONE_NUMBER_PRIORITY ""
SET NAME_SORT_ORDER ""
SET NAME_DISPLAY_ORDER ""
SET HOMESCREENLAYOUT "0"
SET APPLICATION_AUTO_START "0"
SET APPLICATION_CLOSE_WINDOW "2"
SET ENABLE_SPELL_CHECK "1"
SET HIDDEN_MODE_ENABLED "0"

##LDAP search
SET DIRENABLED "0"
SET DIRSSO "1"
SET DIRSRVR "<IP Address> or <FQDN>"
SET DIRSRVRPRT "636"
SET DIRUSERNAME "svucacl\administrator"
SET DIRPASSWORD "Admin123"
SET DIRTOPDN "cn=users,dc=svucacl,dc=com"
SET DIRSECURE "1"
SET DIRIMATTRIBUTE "mail"
SET DIRUSEIMDOMAIN "1"
SET DIRTYPE "ACTIVEDIRECTORY"
SET DIRSCOPE "LDAP_SCOPE_SUBTREE"
SET DIRTIMEOUT "100"
SET DIRMAXENTRIES "50"
SET DIR_CONTACT_RESOLUTION_ENABLED "1"

SET EC500ENABLED "0"
SET EC500VOICEMAILNUMBER ""
SET FNUSACCANCEL "02066070504"
SET FNUSACENABLE "02066070505"
SET FNUIDLEAPPEARANCESELECT "02066070506"
SET FNUSIMRINGENABLE "02066070507"
SET FNUSIMRINGDISABLE "02066070508"
SET FNUCFWDENABLE "02066070509"
SET FNUCFWDDISABLE "02002066070511"
SET FNUACTIVEAPPEARANCESELECT "02066070512"
SET STATION_SECURITY_ENABLED "0"

SET DIALPLANLOCALCALLPREFIX "0"
SET PHNLDLENGTH "10"
SET ENHDIALSTAT "0"
SET PHNOL "9"
SET PHNCC "91"
SET DIALPLANAREACODE "20"
SET PHNPBXMAINPREFIX "6607"
SET PHNLD "0"
SET PHNIC "00"
SET PHNDPLENGTH "8"
SET DIALPLANEXTENSIONLENGTHLIST ""
SET DIALPLANNATIONALPHONENUMLENGTHLIST ""
SET AUTOAPPLY_ARS_TO_SHORTNUMBERS "1"
SET APPLY_DIALINGRULES_TO_PLUS_NUMBERS "0"
SET ELD_SYSNUM "1"

SET ECHO_CANCELLATION "aec"

SET DND_SAC_LINK "0"
SET WINDOWS_IMPROVIDER "0"
SET WINDOWS_IMPROVIDER_RESOLVE_CONTACT_EXTERNAL "0"
SET OBSCURE_PRESENCE_STATES ""
SET AUTO_AWAY_TIME "10"

SET ANALYTICSENABLED "1"
SET ISO_SYSTEM_LANGUAGE ""

SET DTMF_PAYLOAD_TYPE "120"
SET RTP_PORT_LOW "5004"
SET RTP_PORT_RANGE "40"
SET ENABLE_OPUS "1"
SET OPUS_PAYLOAD_TYPE "116"
SET DSCPAUD "46"
SET DSCPSIG "24"
SET DSCPVID "34"
SET MEDIAENCRYPTION "10,1,2,9"
SET ENCRYPT_SRTCP "0"
SET ENABLE_MEDIA_HTTP_TUNNEL "1"
SET MEDIA_ADDR_MODE "4"
SET MEDIA_ADDR_MODE_HTTP "4"

SET ENABLE_VIDEO "1"
SET VIDEO_MAX_BANDWIDTH_ANY_NETWORK "512"
SET VIDEO_MAX_BANDWIDTH_CELLULAR_DATA "512"
SET VIDEO_MAX_RESOLUTION "0"
SET VIDEO_CAPTURE_RESOLUTION "0"
SET BFCP_TRANSPORT "0"
SET BFCP_UDP_MINIMUM_PORT "5204"
SET BFCP_UDP_MAXIMUM_PORT "5224"
SET ENABLE_MSS_VIDEO "1"
SET FORWARD_ERROR_CORRECTION "3"

SET ENABLE_AVAYA_CLOUD_ACCOUNTS "1"
SET AVAYA_CLOUD_ACCOUNTS_URI "accounts.avayacloud.com"
SET AVAYA_CLOUD_SPACES_URI "spaces.avayacloud.com"
SET AVAYA_CLOUD_SPACES_API_URI "spacesapis.avayacloud.com"
SET ENABLE_EQUINOX_MEETING_ACCOUNT_DISCOVERY "1"
SET EQUINOX_MEETING_ACCOUNT_DISCOVERY_URL "https://meetings.avaya.com/acs/resources/"
SET ENABLE_EWS_ACCOUNT_DISCOVERY "1"
SET ENABLE_GOTO_MEETING_PORTAL "1"

SET SIPENABLED "1"
SET SIP_CONTROLLER_LIST "svsm01.slav.com:5061;transport=tls","svsm02.slav.com:5061;transport=tls"
SET SIPDOMAIN "svucacl.com"
SET SIMULTANEOUS_REGISTRATIONS ""
SET SIPSSO "0"
SET ENABLE_MDA_JOIN "0"
SET ENFORCE_SIPS_URI "1"
SET ENABLE_PUBLISH_MAC_ADDRESS "0"
SET ENABLE_PPM "1"
SET ENABLE_PPM_CALL_JOURNALING "1"
SET SHOW_TEAM_BUTTON_VISUAL_ALERT "1"
SET SHOW_TEAM_BUTTON_CALLER_ID "1"
SET SIGNALING_ADDR_MODE "4"
SET EWSENABLED "0"
SET EWSSERVERADDRESS "usmail.slav.com"
SET EWSDOMAIN "slav.com"
SET CALENDAR_INTEGRATION_ENABLED "1"

SET CESENABLED "0"
SET CESSRVR "<IP Address> or <FQDN>"
SET CESPORT "7777"
SET CESSECURE "1"
SET CESVMPIN ""

SET DESKTOP_HTTP_APPLICATION_INTEGRATION "1"
SET ENABLE_OUTLOOK_ADDON "1"
SET OUTLOOK_CALL_CONTACT "1"
SET OUTLOOK_ADDON_HOST_URI ""
SET ENABLE_BROWSER_EXTENSION "0"
SET ENABLE_PLT_OOB_HEADSET_CALL_CONTROL "1"

##AMM setting details
SET ESMENABLED "1"
SET ESMSRVR "<IP Address> or <FQDN>"
SET ESMPORT "8443"
SET ESMSECURE "1"
SET ESMREFRESH "0"
SET ESMHIDEONDISCONNECT "0"
SET ESMSENDREADRECEIPTS "1"

##AADS setting details
SET ACSENABLED "0"
SET ACSSRVR "10.133.67.10"
SET ACSPORT "443"
SET ACSSECURE "1"
SET ACSSSO "1"
SET CONTACT_MATCHING_SEARCH_LOCATION "1"
SET AVAYA_AUTHORIZATION_REALM ""

SET CONFERENCE_FACTORY_URI "66078889@slav.com"
SET CONFERENCE_ACCESS_NUMBER ""
SET ADDITIONAL_CONFERENCE_ACCESS_NUMBER_LIST ""
SET UNIFIEDPORTALENABLED "0"
SET CONFERENCE_PORTAL_URI "https://<IP Address> or <FQDN>:8043/aacpa/"
SET CONFERENCE_MODERATOR_CODE "20111"
SET CONFERENCE_PARTICIPANT_CODE "2011"
SET CONFERENCE_PARTICIPANT_URL ""
SET CONFERENCE_VIRTUAL_ROOM ""
SET CONFERENCE_FQDN_SIP_DIAL_LIST "alphascopia.slav.com,scopia.slav.com,alp
haconfportal.slav.com"
SET UCCPENABLED "0"
SET SHOW_EQUINOX_MEETING_PANEL_IN_TOM "1"
SET RECEIVE_ONLY_SHARING_ENABLED "0"
SET PREF_MUTE_MIC_WHEN_JOINING_MEETING "1"
SET PREF_BLOCK_CAMERA_WHEN_JOINING_MEETING "1"

SET APPCAST_ENABLED "0"
SET APPCAST_URL ""
SET APPCAST_CHECK_INTERVAL "1"

SET FNE_SETUP_DELAY "3"
SET CELLULAR_DIRECT_ENABLED "0"
SET CELLULAR_DIRECT_NUMBER_LIST "03","94","193","93","92","91","444444","26
811","+91{}12'3'45","\12345/","[12345]","?12345?%","03","01","+91 98-60-406
784","6886432@slav.com","sip:6886432@slav.com","23456","*9860406784","116",
"999","112","666","987654","45042","000#"
SET HTTP_PROXY_CSDK_ENABLE "2"
SET TELEPHONY_PUSH_NOTIFICATION_SERVICE_URL "https://<AAWG FQDN>:Port"
SET TELEPHONY_PUSH_NOTIFICATION_ENABLED "0"
SET ESM_PUSH_NOTIFICATION_ENABLED "0"
SET PRESENT_USER_NAME_ONLY "0"
SET OTHER_PHONE_MODE_ENABLED "1"
SET AUDIO_DEVICE_CALL_CONTROL_ENABLED "1"
```

Setting up the DNS server

About this task

You only require a DNS setup if the user uses an email address for automatic configuration. You do not need a DNS setup if the user uses a standard web address.

Create records on the DNS server of the enterprise to link your DNS server to the settings file. Use split-horizon DNS and the same FQDN for Session Border Controller and Session Manager if you want to prevent users from re-configuring their clients when working outside of the enterprise network.

Note:

You might need to discuss with your DNS provider if your level of service is sufficient to provide support for DNS Service Discovery (DNS-SD). For more information, see DNS-Based Service Discovery. Avaya Workplace Client uses DNS PTR records consistent with the DNS-SD RFC, which in some cases might require an additional level of service from your DNS provider.

Before you begin

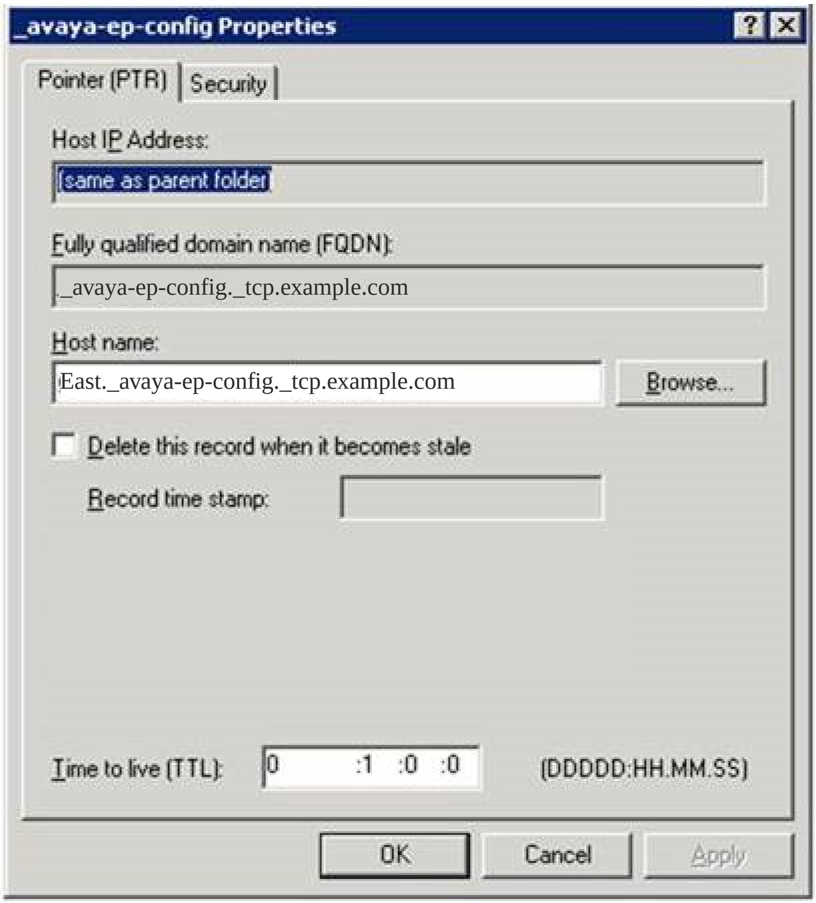
- Create the settings file.
- Configure a web server and save the settings file to that web server. You must know the URL of the file on the web server.
- Set the following information based on your DNS server policy:
    - SRV and TXT record time-to-live period in seconds. For example, 300. During this time, the client or intermediate servers might cache the retrieved record. Usually, the SRV and TXT record time-to-live periods share the same value.
    - Web server port number. You can enter 0 to keep the default port number for the protocol.
    - SRV record priority. For example, 0.
    - SRV record weight. For example, 0.

Procedure

1. Create a PTR record that links the descriptive name of your settings file to the domain of the enterprise.
    1. Ensure that you name the PTR record as `_avaya-ep-config._tcp.<domain>`.
    2. Use the descriptive name for the settings file as the target of the PTR record: `<Descriptive name>._avaya-ep-config._tcp.<domain>`.

The following is an example of a PTR record: `_avaya-ep-config._tcp.example.com. IN PTR East._avaya-ep-config._tcp.example.com`.

In case of Microsoft DNS Manager, the following is an example of a PTR record:



Host IP Address: [same as parent folder]

Fully qualified domain name (FQDN): _avaya-ep-config._tcp.example.com

Host name: East._avaya-ep-config._tcp.example.com

☐ Delete this record when it becomes stale

Record time stamp:

Time to live (TTL): 0 :1 :0 :0 (DDDDD:HH.MM.SS)

Tip:

In the left pane of Microsoft DNS Manager, you must create the PTR, SRV, and TXT records at the _avaya-ep-config level. If the _avaya-ep-config level does not exist, you must manually create it. Right-click _avaya-ep-config and then click Other New Records, select the resource record type, and then click Create Record.

2. Create an SRV record linking the descriptive name of your settings file to the web server where the file resides.

   If the URL to the settings file is `https://server.example.com/East_settings.txt`, then the server name is `server.example.com`.

   An SRV record also includes the following information:

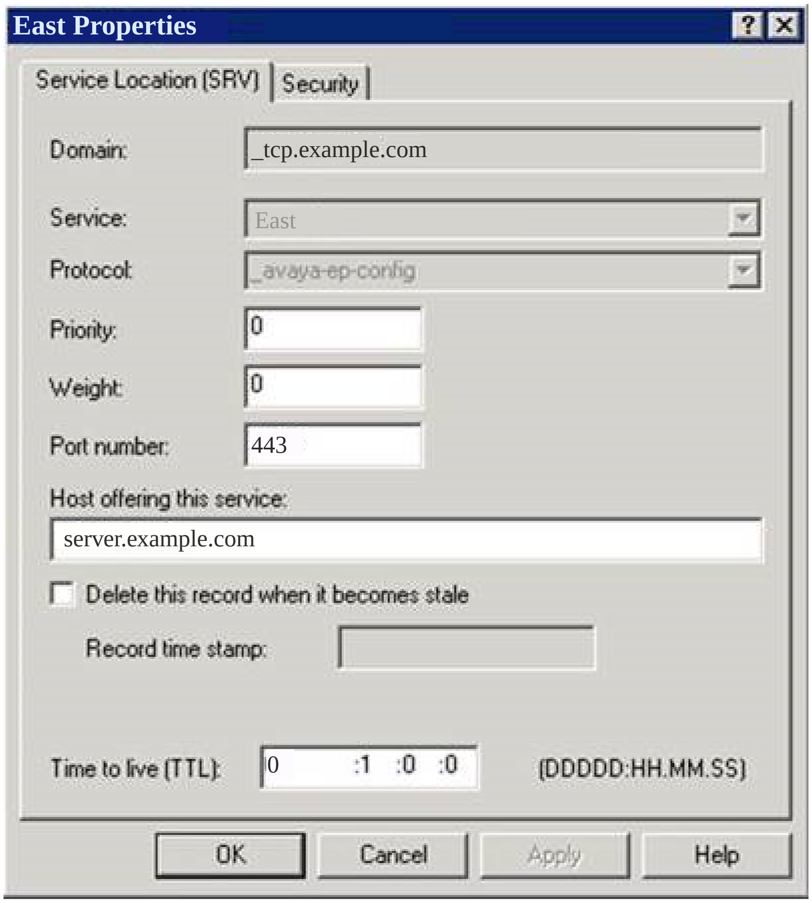
   - SRV time-to-live period in seconds during which the client or intermediate servers might cache the retrieved record.

The following is an example of an SRV record: `East._avaya-ep-config._tcp.example.com. 300 IN SRV 0 0 443 server.example.com.`

In this example:

- 300 is the time-to-live period
- The first zero is the priority, the second zero is the weight, and 443 is the port number.

In case of Microsoft DNS Manager, the following is an example of an SRV record:



Domain: _tcp.example.com

Service: East

Protocol: _avaya-ep-config

Priority: 0

Weight: 0

Port number: 443

Host offering this service: server.example.com

□ Delete this record when it becomes stale

Record time stamp:

Time to live (TTL): 0 :1 :0 :0 (DDDDD:HH.MM.SS)

3. Create a TXT record linking the descriptive name of your settings file to the remaining URL information.

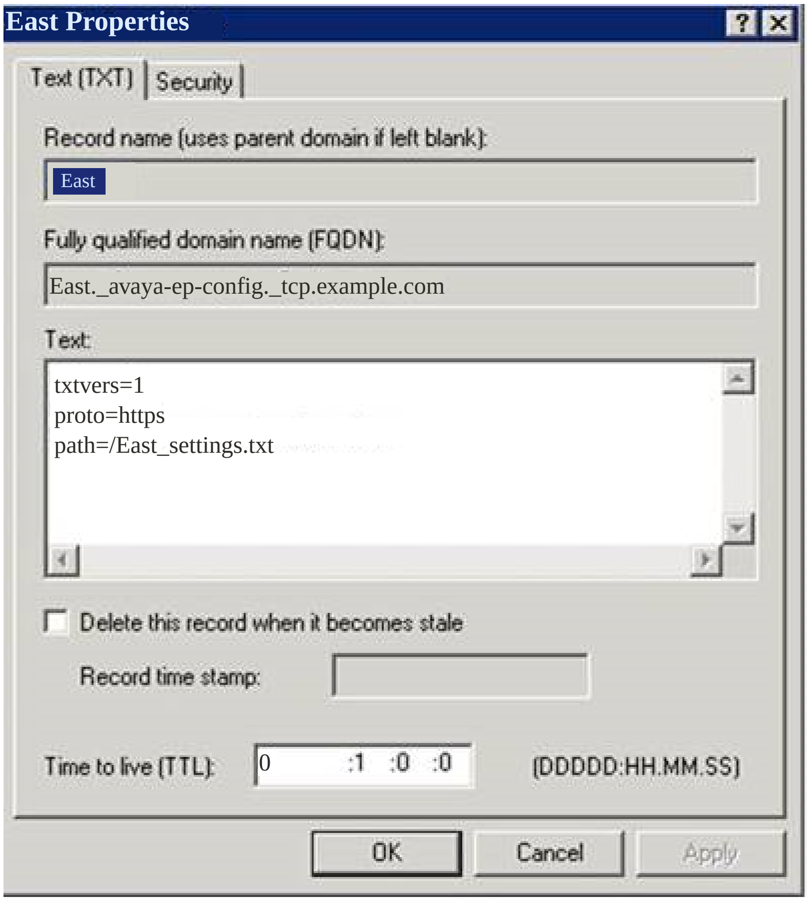
   TXT records are provisioned differently depending on the DNS server. However, all TXT records must have the following parameters:

   - txtvers: The text version of the TXT record. This value indicates the structure version of the record. You must always set the value to `1`.
   - path: The path to the settings file. An example value is `path=/East_settings.txt`.
   - proto: The web server access scheme. This value is usually `http` or `https`.

The following is an example of a TXT record: `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/East_settings.txt"`

In this example, 300 is the time-to-live period.

In case of Microsoft DNS Manager, the following is an example of a TXT record:



Record name (uses parent domain if left blank): East

Fully qualified domain name (FQDN): East._avaya-ep-config._tcp.example.com

Text:
txtvers=1
proto=https
path=/East_settings.txt

□ Delete this record when it becomes stale

Record time stamp:

Time to live (TTL): 0 :1 :0 :0 (DDDDD:HH.MM.SS)

Sample DNS SRV records configuration

You might need to discuss with your DNS provider if your level of service is sufficient to provide support for DNS Service Discovery (DNS-SD). For more information, see DNS-Based Service Discovery. Avaya Workplace Client uses DNS PTR records consistent with the DNS-SD RFC, which in some cases might require an additional level of service from your DNS provider.

To support automatic configuration, you must configure the PTR, SRV, and TXT records in your DNS server configuration. For more information, see the documentation of your DNS server.

PTR records

PTR records provide a list of configurations with multiple PTR records. Avaya Workplace Client supports multiple PTR records. Avaya Workplace Client displays each one of the PTR records in a drop-down list that allows the user to choose from different environments.

Format: `_avaya-ep-config._tcp.<domain>. IN PTR <Descriptive name>._avaya-ep-config._tcp.<domain>`

The following are examples:

- `_avaya-ep-config._tcp.example.com. IN PTR East._avaya-ep-config._tcp.example.com`
- `_avaya-ep-config._tcp.example.com. IN PTR West._avaya-ep-config._tcp.example.com`

SRV records

SRV records provide a link from the descriptive name to the web server where you stored the file. If you have multiple SRV records for the same PTR record, then the priority of the SRV records must be different.

Format: `<Descriptive name>._avaya-ep-config._tcp.<domain>. <TTL> IN SRV <priority> <weight> <port number> <web server FQDN>`

The following are examples:

- `East._avaya-ep-config._tcp.example.com. 300 IN SRV 0 0 443 server.example.com`
- `West._avaya-ep-config._tcp.example.com. 300 IN SRV 0 0 443 server.example.com`

TXT records

TXT records provide a link from the descriptive name to the URL information, protocol, and path.

Format: `<Descriptive name>._avaya-ep-config._tcp.<domain>. <TTL> IN TXT "txtvers=1" "proto=<http or https>" "path=<file path>"`

The following are examples with Avaya Aura® Device Services:

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/acs/resources/configurations"`
- `West._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/acs/resources/configurations"`

The following are examples without Avaya Aura® Device Services:

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/East_settings.txt"`
- `West._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/West_settings.txt"`

The following are examples with Avaya Aura® Device Services and OAuth2:

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/acs/resources/configurations?preferredAuth=bearer"`
- `West._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/acs/resources/configurations?preferredAuth=bearer"`

DNS-based automatic configuration for DNS servers not compliant with RFC 6763

The sample DNS SRV records configuration in the earlier section is based on RFC 6763 and is the preferred method for deploying Avaya Workplace Client. However, some third-party DNS services, such as GoDaddy and Verisign, do not fully support RFC 6763. Deployments that rely on these third-party DNS services do not offer the ability to provision multiple parameters in the TXT record response. This prevents those deployments from using DNS-based automatic configuration.

To work around the limitations of third-party DNS services, you can use a TXT record format that condenses the parameters into a single parameter from a DNS configuration perspective.

Note:

Define the TXT record in the DNS file in one line. The parameters must be delimited by a comma.

TXT records

The TXT record provides a link from the descriptive name to the URL information, protocol, and path.

Format: `<Descriptive name>._avaya-ep-config._tcp.<domain>. <TTL> IN TXT "txtvers=1" "proto=<http or https>" "path=<file path>"`

The following are examples:

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "parmset=txtvers=1,proto=https,path=/East_settings.txt"`
- `West._avaya-ep-config._tcp.example.com. 300 IN TXT "parmset=txtvers=1,proto=https,path=/West_settings.txt"`

You can either use the original solution parameter set or the new condensed parameter set. Do not combine both sets of parameters. The following combinations are invalid:

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "parmset=proto=https,path=/East_settings.txt"`

- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "proto=https" "parmset=txtvers=1,path=/East_settings.txt"`
- `East._avaya-ep-config._tcp.example.com. 300 IN TXT "txtvers=1" "proto=https" "path=/East_settings.txt" parmset="txtvers=1,proto=https,path=/West_settings.txt"`

Avaya Cloud account method for configuring URL discovery

The recommended way to allow users to configure Avaya Workplace Client is by entering an email address. If you are unable to configure the required PTR records in DNS, use Avaya Cloud accounts to create a mapping for your company domain to one or more settings files.

- Create an Avaya Spaces account.
- Set up a company domain on https://accounts.avayacloud.com/.
- Map your domain to the settings file URL.

Registering an account

About this task

Use this procedure to register an account using your email address.

Procedure

1. In your web browser, enter https://accounts.avayacloud.com/.
2. In the Email or Phone field, type your email address.
3. Click Yes, sign me up!.

   sends a confirmation email to the email address you specified.

4. In your mailbox, open the confirmation email and then click the Confirm button.

   You are redirected to the My Account page.

5. Provide your first name, last name, password, and, optionally, a photo.

6. Click Create an account.

Setting up a company domain in Avaya Spaces

About this task

The key part of the Avaya Spaces integration is to associate the customer's domain address with their Avaya Spaces account.

Before you begin

- Ensure that your customer domain matches the email address domain for logging in to Avaya Workplace Client.
- Ensure that you have access to the DNS server settings for the domain.

Procedure

1. Log in to Avaya Spaces at https://accounts.avayacloud.com/.
2. **Optional:** If you have not set up your company or want to configure a new company, do the following:
    1. Click on your user name in the top-right of the screen, and click Add Company.
    2. Type a name and description for your company.
    3. Click Save.
3. Click Manage Companies, and click the existing company name.
4. Click Domains.
5. Click Add Domain.
6. Type the domain address, and click OK.
7. To verify ownership of the domain, next to the domain name, click Verify.

    Avaya Spaces displays a verification code.
8. Copy the verification code and add it as a text record to the DNS entries on the domain's DNS server.
9. Click Verify.

Mapping your domain to the settings file URL

About this task

Add the Equinox Cloud Client application to the company domain on https://accounts.avayacloud.com/ and put the settings file URL in the public settings in the correct JSON format.

You can specify multiple systems in the network by adding multiple Profile_Name sections, one for each system that can be used for Avaya Workplace Client registration. You can use this procedure while waiting for the company domain to be verified.

Procedure

1. Log in to your Avaya Spaces account and click Manage Companies.
2. Click the company name.
3. Click Apps.
4. Click Configure New App.
5. In the Product field, select Equinox Cloud Client.
6. In the Public Settings field, enter the following settings, which are altered to match the URL of the customer's system:

- Single login system

```
{
   "Client_Settings_File_Address": [
      {
      "Profile_Name": "Production",
      "Client_Settings_File_Url": "https://productionserver.example.com/4
6xxsettings.txt"
      }
   ]
}
```

- Multiple login systems: If there are multiple servers, the user receives a prompt from a drop-down list of profile names when they login.

```
{
   "Client_Settings_File_Address": [
      {
       "Profile_Name": "East",
       "Client_Settings_File_Url": "https://servereast.example.com/46xxse
ttings.txt"
      },
   "Client_Settings_File_Address": [
       {
        "Profile_Name": "West",
        "Client_Settings_File_Url": "https://serverwest.example.com/46xxse
ttings.txt"
       }
   ]
}
```

7. Click Save.

Moving the settings file

About this task

Use this procedure if you need to move the settings file to a different server location. This procedure works for both new and existing users.

Before you begin

Configure endpoints to automatically check for updates by setting the SETTINGS_CHECK_INTERVAL parameter in the settings file.

Procedure

1. Configure the web server hosting the settings file to redirect incoming client HTTP requests from the old URL to the new URL.
2. **Optional:** For new users, if step 1 does not work, do the following:
    1. Inform users about the new URL required for automatic configuration.
    2. Update DNS entries to point to the new file.
    3. Update your Windows registry entries with the new URL.
3. **Optional:** For existing users, if step 1 does not work, add the SETTINGS_FILE_URL parameter to the existing settings file.

    This step ensures that as the existing clients pick up the settings file, the clients are migrated to the new server location.

Avaya Workplace Client on Avaya Vantage

The Avaya Workplace Client APK is bundled in the Avaya Vantage™ firmware zip file and is then pushed automatically to the Avaya Vantage™ device. If a new version of Avaya Workplace Client is available in Google Play, the Avaya Vantage™ device displays an upgrade notification.

For Avaya Workplace Client to work as a phone application on the Avaya Vantage™ device, the ACTIVE_CSDK_BASED_PHONE_APP parameter in the configuration file includes the package name. For example, `SET ACTIVE_CSDK_BASED_PHONE_APP com.avaya.android.flare`.

For Avaya Workplace Client to display the tutorial screen, you must add the com.google.android.webview package name to the white list of allowed applications on Avaya Vantage™.

Avaya Vantage parameters

The following Avaya Workplace Client parameters are supported on Avaya Vantage™.

Parameter name	**Supported on Avaya Vantage™**
SIPUSERNAME	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
SIPPASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
UNIFIED_PORTAL_USERNAME	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
UNIFIED_PORTAL_PASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
EWSUSERNAME	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.

Parameter name	Supported on Avaya Vantage™
EWSPASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
ESMUSERNAME	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
ESMPASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
ACSUSERNAME	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
ACSPASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
SUPPORTEMAIL	Yes
LOG_VERBOSITY	Yes
UNIFIED_PORTAL_SSO	Hard-coded to "1".
ESMSSO	Hard-coded to "1".
EWSSSO	Hard-coded to "1".
SSOUSERID	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.
SSOPASSWORD	Internal parameter. Avaya Vantage™ shares configuration with Avaya Workplace Client.

Parameter name	Supported on Avaya Vantage™
LOCKED_PREFERENCES	Yes
OBSCURE_PREFERENCES	Yes
TRUSTCERTS	Yes
TLSSRVRID	Yes
PKCS12URL	Yes
PKCS12PASSWORD	Yes
MYCERTURL	Yes
MYCERTCN	Yes
SCEPPASSWORD	Yes
MYCERTDN	Yes
MYCERTCAID	Yes
MYCERTKEYLEN	Yes
MYCERTRENEW	Yes
AUTO_AWAY_TIME	Yes

Parameter name	Supported on Avaya Vantage™
ADDRESS_VALIDATION	Yes
PHONE_NUMBER_PRIORITY	Yes
NAME_SORT_ORDER	Yes
NAME_DISPLAY_ORDER	Yes
HOMESCREENLAYOUT	Yes
DIALPLANLOCALCALLPREFIX	Yes
PHNLDLENGTH	Yes
ENHDIALSTAT	Yes
PHNOL	Yes
PHNCC	Yes
DIALPLANAREACODE	Yes
PHNPBXMAINPREFIX	Yes
PHNLD	Yes
PHNIC	Yes

Parameter name	Supported on Avaya Vantage™
PHNDPLENGTH	Yes
DIALPLANEXTENSIONLENGTHLIST	Yes
DIALPLANNATIONALPHONENUMLENGTHLIST	Yes
AUTOAPPLY_ARS_TO_SHORTNUMBERS	Yes
APPLY_DIALINGRULES_TO_PLUS_NUMBERS	Yes
DND_SAC_LINK	Yes
ANALYTICSENABLED	Yes
DTMF_PAYLOAD_TYPE	Yes
RTP_PORT_LOW	Yes
RTP_PORT_RANGE	Yes
ENABLE_OPUS	Yes
OPUS_PAYLOAD_TYPE	Yes
DSCPAUD	Yes
DSCPSIG	Yes

Parameter name	**Supported on Avaya Vantage™**
DSCPVID	Yes
MEDIAENCRYPTION	Yes
ENCRYPT_SRTCP	Yes
ENABLE_MEDIA_HTTP_TUNNEL	Yes
MEDIA_ADDR_MODE	Yes
ENABLE_VIDEO	Yes
VIDEO_MAX_BANDWIDTH_ANY_NETWORK	Yes
FORWARD_ERROR_CORRECTION	Yes
ENABLE_AVAYA_CLOUD_ACCOUNTS	Yes
ENABLE_EQUINOX_MEETING_ACCOUNT_DISCOVERY	Yes
SIP_CONTROLLER_LIST	Yes
SIPDOMAIN	Yes
SIMULTANEOUS_REGISTRATIONS	Yes
SIPSSO	Hard-coded to "0".

Parameter name	**Supported on Avaya Vantage™**
ENFORCE_SIPS_URI	Yes
ENABLE_PPM	Yes
ENABLE_PPM_CALL_JOURNALING	Yes
SHOW_TEAM_BUTTON_VISUAL_ALERT	Yes
SHOW_TEAM_BUTTON_CALLER_ID	Yes
SIGNALING_ADDR_MODE	Yes
EWSENABLED	Yes
EWSSERVERADDRESS	Yes
EWSDOMAIN	Yes
ESMENABLED	Yes
ESMSRVR	Yes
ESMPORT	Yes
ESMSECURE	Yes
ESMREFRESH	Yes

Parameter name	Supported on Avaya Vantage™
ESMHIDEONDISCONNECT	Yes
ACSENABLED "1"	Yes
ACSSRVR "10.133.67.10"	Yes
ACSPORT "443"	Yes
ACSSECURE "1"	Yes
ACSSSO "1"	Hard-coded to "1".
CONTACT_MATCHING_SEARCH_LOCATION "1"	Yes
CONFERENCE_FACTORY_URI "66078889@slav.com"	Yes
CONFERENCE_ACCESS_NUMBER	Yes
UNIFIEDPORTALENABLED	Yes
CONFERENCE_PORTAL_URI	Yes
CONFERENCE_MODERATOR_CODE	Yes
CONFERENCE_PARTICIPANT_CODE	Yes
CONFERENCE_VIRTUAL_ROOM	Yes

Parameter name	Supported on Avaya Vantage™
CONFERENCE_FQDN_SIP_DIAL_LIST	Yes
UCCPENABLED	Yes
SHOW_EQUINOX_MEETING_PANEL_IN_TOM	Yes
AUDIO_DEVICE_CALL_CONTROL_ENABLED	Yes

Emergency calls

Users can use Avaya Workplace Client on Avaya Vantage™ to make calls to a preconfigured emergency services number. You must configure the emergency services numbers.

In the Avaya Aura® environment, users can make an emergency call even when they are logged out of Avaya Vantage™ or when Avaya Vantage™ is in the locked state.

Deployment considerations while upgrading to Avaya Workplace Client

Wireless data limitations

Avaya recommends that customers thoroughly test Avaya Workplace Client in their environment prior to operational deployment. This is to determine if the functionality and performance meet the customer's specific requirements. Due to the variability of Wi-Fi and Cellular 3G or 4G data connections, the application's VoIP stability and voice quality can vary widely.

Avaya Workplace Client is designed to support the VoIP requirements of mobile business professionals, not for deployment of mission critical workflows.

Analytics

By default, as described in the end-user license agreement, Avaya Workplace Client sends anonymous information about the application events to a third-party analytics service. This is to assist in analysis of the application feature usage and support quality improvements.

You can opt-out of the analytics feature for all users by configuring the ANALYTICSENABLED parameter in the automatic configuration file. In addition, end-users can opt-out by disabling the Quality Improvement setting in the Support tab of the Avaya Workplace Client settings.

Note:

If you are using a proxy that requires authentication, then Google Analytics does not work for Avaya Workplace Client.

Instant messaging

You can use the following for instant messaging:

- Avaya Multimedia Messaging service on Avaya Aura® Presence Services
- Avaya Multimedia Messaging
- Spaces Direct Messaging

  You can exchange instant messages with other users using both Avaya Multimedia Messaging and Spaces Direct Messaging. Avaya Multimedia Messaging is used as the default over Spaces Direct Messaging.

Upgrade from Avaya one-X Communicator for Windows to Avaya Workplace Client for Windows

Avaya Workplace Client for Windows is recommended for all new Avaya Aura® deployments as the Windows-based soft client of choice. In addition, most users of Avaya one-X® Communicator for Windows can benefit from the new features and capabilities in Avaya Workplace Client. However, not all Avaya one-X® Communicator for Windows features are provided in Avaya Workplace Client.

Note:

If you have installed and configured Avaya one-X® Communicator and Avaya Collaboration Services and if you install Avaya Workplace Client for Windows, you can view the prompt to close Google Chrome and Microsoft Excel and then try the installation of Avaya Workplace Client for Windows. To avoid viewing this prompt, uninstall Avaya one-X® Communicator and Avaya Collaboration Services before you install Avaya Workplace Client for Windows.

Before deploying Avaya Workplace Client, ensure that all critical features that you require are available. The following features are unavailable in Avaya Workplace Client:

- H.323 support
- Client Enablement Services integration for Visual Voice Mail and other features
- Lotus Notes support for local contacts
- Limiting of concurrent calls
- Click to Fax or SMS
- Administrator feature labelling
- Personal or private Call
- Personalized and differentiated ring tones per call type
- Other telephony features not listed in this document including but not limited to:
  - Calling Party Block

- Whisper Page

Desk Phone mode limitations

Using Avaya Workplace Client in the Desk Phone mode has the following limitations:

- Video calling is disabled.
- Multi-party call cannot be initiated using the New conversation area.
- Adhoc conferences use the Communication Manager conference feature, not rich conferencing.
- Screen sharing cannot be initiated from a point-to-point call.

Additional setup options for Avaya Workplace Client for Windows and Mac platforms

End users can install Avaya Workplace Client on mobile and desktop platforms. You can install Avaya Workplace Client on desktop platforms using a command line option.

You can also deploy Avaya Workplace Client for Windows to work in a Citrix, XenApp, or VMWare environment.

Command line and silent installation options

Avaya Workplace Client for Mac command line and silent installation options

The following table lists silent installation commands and other command line options available with Avaya Workplace Client for Mac. End users do not need to install and uninstall their client manually if you use the silent options. Silent install only works with administrator privileges.

Tip:

To mount the Avaya Workplace Client for Mac dmg file automatically, double-click the file.

Action	Command
Perform a silent installation.	`/Volumes/Avaya\ Workplace/Install.app/Contents/MacOS/install -silent`

Action	Command
Perform a silent installation with automatic configuration enabled.	`/Volumes/Avaya\ Workplace/Install.app/Contents/MacOS/install -silent -autoconfigURL <URL>` Replace `<URL>` with the appropriate automatic configuration URL.
Perform a silent uninstallation.	`sudo /Volumes/Avaya\ Workplace/Uninstall.app/Contents/MacOS/uninstall -silent`

Print help information about installation and uninstallation command usage.	For help with installing, use the following command:
	`/Volumes/Avaya\ Workplace/Install.app/Contents/MacOS/install -help`
	For help with uninstalling, use the following command:
	`/Volumes/Avaya\ Workplace/Uninstall.app/Contents/MacOS/uninstall -help`

Avaya Workplace Client for Windows command line and silent installation options

The following table lists silent installation commands and other command line options available with Avaya Workplace Client for Windows. Silent install only works with administrator privileges. With the silent option, end users do not need to install and uninstall their client manually.

Action	**Option**
Perform a silent installation.	`"Avaya Workplace Setup.msi" /qn`
Perform an installation with automatic configuration enabled.	`"Avaya Workplace Setup.msi" AUTOCONFIG="<URL/path to auto-config-file>"` Replace `URL` with the appropriate automatic configuration URL.
Perform a silent uninstallation.	`msiexec /qn /x "Avaya Workplace Setup.msi"`
Print help information for Windows installer command line.	`msiexec /?`
Create install log.	`msiexec /i <path_to_ACW_installer /L*v <path_for_logs>`
Create unistall log.	`msiexec /x <path_to_ACW_installer> /L*v <path_for_logs>`
Enable ImProvider.	`"Avaya Workplace Setup.msi" IMPROVIDER=1`

Action	Option
Enable the DSCP driver installation, which is disabled by default.	`"Avaya Workplace Setup.msi" NOQOS=0`
Disable the outlook plug-in installation.	`"Avaya Workplace Setup.msi" OP=0`
Disable the browser plug-in installation.	`"Avaya Workplace Setup.msi" BP=0`

By default, the Avaya QoS service, that is, DSCP driver, is not installed. If you do not install the Avaya QoS service while installing the client, then Avaya Workplace Client for Windows uses the Microsoft QWAVE API. To set the DSCP value, follow the instructions on MS QoS policy.

If the customer wants to set audio and video separately, then you must install the Avaya DSCP driver by using the silent install parameter. This method takes precedence over the Microsoft APIs, which have the limitation that they can only set audio and video with the same value.

Supported languages for silent installation

Use the following command to perform a silent installation of Avaya Workplace Client for Windows for the supported languages: `msiexec /i "Avaya Workplace Setup.msi" Language=xxxx ProductLanguage=xxxx /L*v install_log.txt /qn`, where Language is the Avaya Workplace Client language and ProductLanguage is the OS language.

Note:

The Language value in the command is applied only in case the local language is not stored in the following registry path: HKLU\Avaya\Avaya IX Workplace\Language. If you configure the local-user entries in the registry before a new Avaya Workplace Client installation or before the user changes the language from the User Preferences setting, then the Language value is not applied.

Replace *xxxx* in the command with the Language Code Identifier (LCID) values from the following table:

Language	Culture code	LCID
Arabic	ar-SA	1025
Malay	ms-MY	1086
Czech	cs-CZ	1029

Language	**Culture code**	**LCID**
Danish	da-DK	1030
English (U.K.)	en-GB	2057
English (U.S.)	en-US	1033
German	de-DE	1031
Spanish	es-ES	1034
French	fr-FR	1036
Indonesian	id-ID	1057
Italian	it-IT	1040
Hungarian	hu-HU	1038
Dutch	nl-NL	1043
Norwegian	nb-NO	1044
Polish	pl-PL	1045
Brazilian Portuguese	pt-BR	1046
Swedish	sv-SE	1053
Turkish	tr-TR	1055
Russian	ru-RU	1049
Hebrew	he-IL	1037
Thai	th-TH	1054
Korean	ko-KR	1042
Japanese	ja-JP	1041
Simplified Chinese	zh-CN	2052

Language	Culture code	LCID
Traditional Chinese	zh-TW	1028

Deploying Avaya Workplace Client on a Windows server by using Group Policy

About this task

Use this procedure to deploy Avaya Workplace Client on a Windows server by using Group Policy. For information about using Group Policy to remotely install any software on a Windows server, see Microsoft Support site.

Before you begin

Ensure that the Windows server is part of a corporate network.

Procedure

1. To open Group Policy Management, click Start > run > GPMC.MSC.
2. Navigate to Default Domain Policy.
3. Right-click Default Domain Policy and click Edit.
4. Navigate to Computer Configuration > Policies > Windows Settings > Scripts.
5. In the Scripts/Startup folder, place the Avaya Workplace Client for Windows MSI installer.

   You can open the location by clicking Show Files.

6. To add a new script, click Add.

   1. Browse to go to the Avaya Workplace Client for Windows MSI installer.
   2. In the Script Parameters field, add the `/qn` parameter and click Ok.

If a user who is already a part of the corporate domain logs in to a Windows system, the system automatically installs the Avaya Workplace Client application.

Installing Avaya Workplace Client for Windows to work in a Citrix, XenApp, or VMWare environment

About this task

Use this procedure when users need to log in to and use Avaya Workplace Client for Windows in a Citrix, XenApp, or VMWare environment.

Note:

- In a virtual environment, non-supported features such as video and computer-based audio are disabled. Also, the DSCP driver is not installed.
- Do not use Avaya Aura® Device Services to auto-update the client.

Before you begin

- Install Quality Windows Audio Video Experience (QWAVE) on the Citrix server. For example, for Windows 2012, see https://docs.microsoft.com/en-us/windows-server/administration/server-manager/install-or-uninstall-roles-role-services-or-features.

  Note:

  Copy and paste the URL in your supported browser if the hyperlink does not work.
- Obtain a supported deskphone as the Desk Phone mode is used in the virtual environment.

Procedure

1. Open Command Prompt.
2. Go to the location of the .msi file for Avaya Workplace Client for Windows.
3. Use the -VDIENV command to perform the installation.

   For example,

   ```
   "Avaya Workplace Setup.msi" VDIENV=1
   ```

.

Citrix and VMWare environment specifications

Avaya Workplace Client for Windows supports the following specifications in a Citrix or VMWare environment:

Supported environments

- Citrix XenApp 6.5
- Citrix XenApp and XenDesktop 7.8
- Citrix XenApp and XenDesktop 7.9
- Citrix XenApp and XenDesktop 7.11
- VMware Horizon View 7.0 and later versions
- VMware Horizon Client 4.1 and later versions

Server capacity

Can scale up to 60 users on a single server with 80 GB of RAM and Intel Xeon Processor E5-2640 at 2.5 GHz.

Avaya Workplace Client add-in for Microsoft Outlook

Avaya Workplace Client provides a new and improved Outlook add-in for desktop platforms that includes the following features:

- Add meeting details to an appointment.
- Start and join conferences from your calendar.
- Start a call from within Outlook to a contact using Avaya Workplace Client for Windows.

Additionally:

- You can add meeting invites on behalf of someone who has given you delegate access to their Exchange Calendar.
- You can automatically configure the meeting information for Avaya Workplace Client.
- The conferencing system provides the meeting invite templates for Avaya Equinox® Conferencing.
- Microsoft Windows IM Provider integration, which is optional, activates click-to-IM and presence in Outlook for Avaya Workplace Client contacts.

Note:

Microsoft Outlook add-in for web mail does not support calendar delegation and IM provider.

The Outlook add-in includes support for Avaya Spaces. Besides the existing capabilities, the Outlook add-in integrates the workflow from the existing Avaya Spaces Outlook add-in. You need to sign in to Avaya Spaces on Avaya Workplace Client to enable Avaya Spaces in the Outlook add-in.

By integrating with Avaya Spaces, you can use the Search feature to search for a meeting if multiple meetings are configured.

Microsoft Outlook requirements

- Microsoft Outlook add-in for Windows is supported on Exchange Server 2010 SP1 and later versions, including Office 365.
- Microsoft Outlook add-in for Mac and web mail is supported on Exchange Server 2013 and later versions, including Office 365.
- You must enable the Exchange Calendar service in Avaya Workplace Client for the Microsoft Outlook add-in to work.

- Internet access must be available because portions of the add-in are hosted on the Internet as a part of the new Avaya Workplace Client add-in for Microsoft Outlook architecture.If the add-in is hosted internally on the private network with the OUTLOOK_ADDON_HOST_URI configuration parameter, then Internet access is not required.
- To use the Delegate feature, you must be provided with delegate access to the calendars that you wish to access. Contact your IT department for assistance.

Avaya Workplace Client add-in for Microsoft Outlook installation

The Avaya Workplace Client add-in for Microsoft Outlook is installed by default.

To prevent the default installation on Avaya Workplace Client for Windows, select the Custom setup type in the interactive installer or use the silent install parameter described earlier. The add-in is also enabled by default for non-guest users.

You can disable the Outlook add-in on Avaya Workplace Client for Mac by setting the ENABLE_OUTLOOK_ADDON parameter to `0`. Alternatively, if you do not specify ENABLE_OUTLOOK_ADDON in LOCKED_PREFERENCES or OBSCURE_PREFERENCES, the user can manually disable the Outlook add-in from Avaya Workplace Client.

Disabling the Avaya Workplace Client add-in for Microsoft Outlook by using the registry

Procedure

1. Open the Registry Editor window.
2. Go to Computer > HKEY_CURRENT_USER > SOFTWARE > Microsoft > Office > Outlook > Addins > Avaya.Outlook.Addin.

3. Set the value of LoadBehavior to `0`.

Avaya Workplace Client add-in for Microsoft Outlook hosted on customer web server

Supported clients

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing

  For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Automatic configuration settings

- SET ENABLE_OUTLOOK_ADDON 1ENABLE_OUTLOOK_ADDON must be set to 1 to enable the Avaya Workplace Client add-in for Microsoft Outlook.
- SET OUTLOOK_CALL_CONTACT 1OUTLOOK_CALL_CONTACT must be set to 1 to enable click to call from the Avaya Workplace Client add-in for Microsoft Outlook. This parameter is only applicable for UC deployments. Disable this parameter for OTT deployments.
- SET OUTLOOK_ADDON_HOST_URI HTTPS://enterprise-FQDN/path/to/Addon OUTLOOK_ADDON_HOST_URI can be defined for enterprises that host the Avaya Workplace Client add-in for Microsoft Outlook files locally.

Hosting the Avaya Workplace Client add-in for Microsoft Outlook

About this task

By default, the Avaya Workplace Client add-in for Microsoft Outlook is an Avaya cloud-hosted Microsoft Outlook add-in. The Microsoft Outlook client downloads the add-in from the Internet at startup. Enterprises might choose to host the Avaya Workplace Client add-in for Microsoft Outlook in the enterprise environment by using the following procedure.

Procedure

1. Download the latest package.

   For example, for release 3.12, from https://manage1.esna.com/workplace.mso/3.12.0/current.zip.

2. Unzip the package content on a web server that hosts the Avaya Workplace Client add-in for Microsoft Outlook files.

   Web server does not have any special requirements. Only static files hosting and https is preferred.

   The unzipped package includes a folder with the package version. For example, 3.12.0.2.

3. Create a virtual directory that points to the location of the unzipped package.

   For example, https://somesite.intranet.dev/workplace.mso –> /data/workplace.mso/, which is the folder where the package was unzipped.

4. Validate that you can load the manifest.xml file.

   For example, for release 3.12, open `https://somesite.intranet.dev/workplace.mso/3.12.0.2/manifest.xml`.

5. In the location where you downloaded and unzipped the package, edit the content of the manifest.xml file to replace https://manage1.esna.com/workplace.mso/ with the new location of the Avaya Workplace Client add-in for Microsoft Outlook.

   For example, `https://somesite.intranet.dev/workplace.mso`.

6. Update the Avaya Workplace Client configuration property OUTLOOK_ADDON_HOST_URI with the location of the Avaya Workplace Client add-in for Microsoft Outlook.

   For example, `https://somesite.intranet.dev/workplace.mso`.

The default Avaya Equinox® Management server template includes two external references to images that are rendered in the meeting invitation. To resolve issues that cause placeholders being inserted instead of the actual images, perform the following steps. If the customer does not use these images in the meeting invitation, you do not need to perform the following steps:

1. Download the following images:

   - branding.png: From https://manage1.esna.com/workplace.mso/img/branding.png.
   - meeting.png: From https://manage1.esna.com/workplace.mso/img/meeting.png.

2. Host these images within the customer network. For example:

   - `https://somehost.customer.com/workplace/img/branding.png`
   - `https://somehost.customer.com/workplace/img/meeting.png`

You can host these images on the server used to host the Outlook extension files.

3. Replace the default branding and meeting pictures on the Avaya Equinox® Management server by going to Settings > Invitations with the images hosted in Step 8.

Avaya Workplace Client add-in for Microsoft Outlook enhanced template

Avaya Equinox® Conferencing supports separate HTML and TEXT invitation templates. The HTML template is used by the Outlook plug-in and meeting scheduling to send email invitations. The TEXT template is used by Avaya Workplace Client to display the dialing information during a meeting.

Supported clients

- Avaya Workplace Client on desktop platforms

Supported servers

- Avaya Equinox® Conferencing
- Unified Portal
- Avaya Aura® Web Gateway

For information about the minimum supported versions, use the Compatibility Matrix tool on the Avaya Support website at https://support.avaya.com/CompatibilityMatrix/Index.aspx.

Avaya Equinox® Management server configuration

Avaya Equinox® Management 9.1 CD6 supports the following new variables:

- [VIRTUAL_ROOM_NAME]
- [DESKTOP_MOBILE_ACCESS_LINK]

Existing variables supported on Avaya Equinox® Management 9.0.2 or before 9.1 CD6 include:

- [MEETING_ID]
- [PIN]

- [E164]

Customizing the email template

About this task

Use this procedure to customize the email template provided by the Avaya Workplace Client add-in for Microsoft Outlook.

Procedure

1. Replace the example bridge numbers and location labels with the appropriate information.

If the simple custom logo is configured, you can replace the default logo location in the HTML template with the custom logo stored on the User Portal.

1. **Optional:** Discover the custom logo URL by browsing to one of the following links and the customLogo field:
   - https://alphaconfportal.avaya.com:8443/ups/resources/tenants/default/
   - https://alphaconfportal.avaya.com:8443/ups/resources/tenants/{tenantAlias}/
2. **Optional:** For a single tenant deployment, the URL can be one of the following:
   - https://alphaconfportal.avaya.com:8443/portal/custom-styles/999/customLogo.svg
   - https://alphaconfportal.avaya.com:8443/portal/custom-styles/999/customLogo.png
3. **Optional:** For a multi-tenant deployment, the URL can be one of the following:
   - https://alphaconfportal.avaya.com:8443/portal/custom-styles/{tenantID}/customLogo.svg
   - https://alphaconfportal.avaya.com:8443/portal/custom-styles/{tenantID)/customLogo.png
4. **Optional:** To use an invitation template other than the default English language, you can download the localized invitation template files.

Configuration for Avaya Equinox Conferencing

You must configure the following parameters for Avaya Equinox® Conferencing :

- CONFERENCE_ACCESS_NUMBER
- CONFERENCE_PORTAL_URI

Avaya recommends the use of Avaya Aura® Device Services to provide per-user configuration parameters. Else, end users need to manually update the Avaya Workplace Client settings in Services > Meetings.

External dependencies

The Avaya Workplace Client add-in for Microsoft Outlook runs in a sandbox, that is, no access to the file system. The add-in template is hosted centrally in the cloud as a hosted service. As such, the Avaya Workplace Client add-in for Microsoft Outlook requires access to the domain manage1.esna.com using the HTTPS protocol.

Set up appropriate firewall rules in the enterprise to allow access to this domain. You can confirm whether the domain is accessible by using a web browser and the following URL: `https://manage1.esna.com/workplace/manifest.xml`. If the XML file loads into the browser, then there is connectivity to the external domain.

Avaya URI

Avaya provides a number of URI formats that third-party applications can use. Avaya supports the following verbs as part of the URI:

- Audio calls
- Video calls
- Instant messaging
- Configuration

By using Avaya URIs, third-party applications can direct Avaya Workplace Client to:

- Create an audio call.
- Create a video call.
- Create a conference call.
- Create a new conversation or open an existing conversation.
- Update the automatic configuration URL.

Avaya URIs have the avaya://verb?address&parm1=value1&parm2 format with parameters being optional.

Verb	Android - Mobile	Android - Vantage	iOS	Mac	Windows
Call	Yes	Yes	Yes	Yes	Yes
Video	Yes	Yes	Yes	Yes	Yes
Message	No	No	No	Yes	Yes
Config	Yes	No	Yes	Yes	Yes

All platforms do not support all Avaya URI parameters. If you provide an unsupported parameter within the Avaya URI, Avaya Workplace Client ignores the unsupported parameter, but continues to invoke the verb. The verb invocation is only one-way because Avaya Workplace Client does not provide status updates back to the third-party application.

Note:

Android does not detect any custom URIs, such as non-global URIs in emails and text messages. On Android, you must create custom URIs as HTML or web pages so that the URIs are clickable, and Avaya Workplace Client for Android initiates the desired action.

Application integration

Avaya Workplace Client uses Avaya URIs for many of its own solution components. This ensures that Avaya URIs utilization is a stable construct for you to build your own integration into Avaya Workplace Client.

Avaya URI purpose

URIs are a universally understood construct for developers and can be implemented consistently across many operating systems. URIs are simple, open, and interoperable. You can easily append data and parameters to Avaya URIs to provide additional context from the calling application to Avaya Workplace Client. URIs can be read by humans, which makes adoption simple and debugging straightforward.

A key aspect of Avaya URIs is that the verb passed to Avaya Workplace Client renders in the Avaya Workplace Client application. This makes the integration simple without the need to review log files for detailed integration.

URI encoding

In some cases, parameter values might require a special encoding, often referred to as Percent-Encoding. Percent-Encoding might not be necessary for most Avaya URI invocations. The following table contains a list of some of the reserved characters that must be percent-encoded:

Character	Escape code
Space	%20

Character	Escape code
<	%3C
>	%3E
?	%3F
@	%40
=	%3D
$	%24

URI for audio and video calls

In the Avaya URI for audio or video calls, the primary parameter is the phone number that you want to dial. The phone number is subjected to the Avaya Workplace Client dialing rules configuration, if enabled.

As phone numbers vary across sites and regions, local numbers might not work for all Avaya Workplace Client platforms. Use international format numbers. Do not use phone number formatting characters such as hyphens, dashes, and brackets.

While many web browsers automatically detect phone numbers and convert the numbers to links, it is safer if you do the conversion directly in the code. By linking each phone number, you can ensure that phone numbers are always enabled for click-to-call and the Avaya URI style matches your site.

The generalized Avaya URI format for calls is avaya://[video|call]?<phonenumber>.

Avaya URI embedded in a web page for calls

```
Telephone Service
```

<a href="avaya://call?+123456789123451">+1 (234) 567-8912</a>

<a href="avaya://video?+123456789123451">+1 (234) 567-8912</a>

Your browser displays the following links:

avaya://call?+123456789123451

avaya://video?+123456789123451

Invoking an Avaya URI for calls

Procedure

- To test your URI on a Microsoft Windows workstation, invoke the following commands in a command window or from the start menu:
  - `start avaya://call?+12345678912`
  - `start avaya://video?+12345678912`
- To test your URI on an Apple Macintosh workstation, invoke the following command in a command shell:
  - `open avaya://call?+12345678912`
  - `open avaya://video?+12345678912`

Optional parameters for audio and video

Parameter	Value	Description
Subject	UTF-8 string	The calling application can specify the subject of a call. For example, Lunch. This parameter is not supported on all platforms.

Parameter	Value	Description
CallbackURL	UTF-8 string	Avaya Workplace Client can invoke a callback when the call is dialed. Callback is invoked if the call succeeds or fails. The callback handler must be registered on the operating system. The Callback URL might be a standard URL, such as http, https, mailto, or an application custom URL. The Callback URL allows flow control to be passed back to the invoking application. This parameter is not supported on all platforms.

Avaya URI for audio calls and conference

Third-party applications can use the following Avaya URI formats to direct Avaya Workplace Client to create an audio call and conference:

Note:

If you want to make an audio conference call by using the custom URI and Avaya Equinox® Conferencing, you must include the meeting ID in the URI.

Scenario	Example and result
Avaya URI with valid number	avaya://call?+912012345678 Avaya Workplace Client dials the call by applying the existing dialing rules.
Avaya URI with valid number appended with subject	avaya://call?+912012345678&subject=Test%20%Subject Avaya Workplace Client dials the call by applying the existing dialing rules.
Avaya URI with valid number appended with CallBack URL	avaya://call?+912012345678&callbackURL=http://www.google.com Avaya Workplace Client dials the call by applying the existing dialing rules, and the callback URL opens in the default browser.

Scenario	Example and result
Avaya URI with valid number appended with subject and CallBack URL	avaya://call?+912012345678&subject=Test%20%Subject&callbackURL=http://www.google.com Avaya Workplace Client dials the call by applying the existing dialing rules, and the callback URL opens in the default browser.
Avaya URI with valid conference access number appended with meeting ID	avaya://call?+98765432198&MeetingId=123451234512345 Avaya Workplace Client dials the call to the conference with the meeting ID.
Avaya URI with valid conference access number appended with meeting passcode	avaya://call?+7654321&MeetingPasscode=7651234 Avaya Workplace Client dials the call to the conference with the meeting passcode.
Avaya URI with valid conference access number appended with meeting ID and meeting passcode	avaya://call?+98765432198&MeetingId=123451234512345&MeetingPasscode=1234 Avaya Workplace Client dials the call to the conference with the meeting ID and passcode.
Avaya Workplace Client is not running Avaya URI with valid conference access number appended with meeting ID and meeting passcode	avaya://call?+98765432198&MeetingId=123451234512345&MeetingPasscode=1234 Avaya Workplace Client starts, and the configured user is logged in automatically. Avaya Workplace Client dials the call to the conference with the meeting ID and passcode.

Avaya URI for video calls and conference

Third-party applications can use the following Avaya URI formats to direct Avaya Workplace Client to create a video call and conference:

Note:

If you want to make a video conference call by using the custom URI and Avaya Equinox® Conferencing, you must include the meeting ID in the URI.

Scenario	Example and result
Avaya URI with video to a valid number	avaya://video?+912012345678 Avaya Workplace Client dials the video call by applying the existing dialing rules.
Avaya URI with video to a valid number appended with subject	avaya://video?+912012345678&subject=Test%20%Subject Avaya Workplace Client dials the video call by applying the existing dialing rules.
Avaya URI with video to a valid number appended with CallBack URL	avaya://video?+912012345678&callbackURL=http://www.google.com Avaya Workplace Client dials the video call by applying the existing dialing rules, and the callback URL opens in the default browser.
Avaya URI with video to a valid number appended with subject and CallBack URL	avaya://video?+912012345678&subject=Test%20%Subject&callbackURL=http://www.google.com Avaya Workplace Client dials the video call by applying the existing dialing rules, and the callback URL opens in the default browser.
Avaya URI with video to a valid conference access number appended with meeting ID	avaya://video?+98765432198&MeetingId=123451234512345 Avaya Workplace Client dials the video call to the conference with the meeting ID.
Avaya URI with video to a valid conference access number appended with meeting passcode	avaya://video?+7654321&MeetingPasscode=7651234 Avaya Workplace Client dials the video call to the conference with the meeting passcode.
Avaya URI with video to a valid conference access number appended with meeting ID and meeting passcode	avaya://video?+98765432198&MeetingId=123451234512345&MeetingPasscode=1234 Avaya Workplace Client dials the video call to the conference with the meeting ID and passcode.

Scenario	Example and result
Avaya Workplace Client is not running Avaya URI with video to a valid conference access number appended with meeting ID and meeting passcode	avaya://video?+98765432198&MeetingId=123451234512345&MeetingPasscode=1234 Avaya Workplace Client starts, and the configured user is logged in automatically. Avaya Workplace Client dials the video call to the conference with the meeting ID and passcode.

URI for instant messaging

In the Avaya URI format for messaging, the primary parameter is the comma-delimited list of participant addresses to a message. If a participant address is not reachable by Avaya Workplace Client, the address is not added to the conversation. If the Avaya Workplace Client messaging provider does not support multi-party instant messaging, only the address of the first participant is added to the conversation.

The generalized Avaya URI format for messaging is avaya://message?participantAddress1,participantAddress2,...&subject=Sample%20%Subject.

Avaya URI embedded in a web page for messaging

```
Support Service
Telephone Service
```

<a href="avaya://message?support@example.com">support@avaya.com</a>

Invoking an Avaya URI for messaging

Procedure

- To test your URI on a Microsoft Windows workstation, invoke the following command in a command window or from the start menu: `start avaya://message?support@avaya.com`.
- To test your URI on a Apple Macintosh workstation, invoke the following command in a command shell: `open avaya://message?support@avaya.com`.

Optional parameters for messaging

Parameter	Value	Description
Subject	UTF-8 string, with html escapes.	The conversation subject is created or opened if the subject conversation with matching participants is found.
MessageBody	UTF-8 string, with html escapes.	The message body is inserted into the message dialog window. The actual message is not sent until the Avaya Workplace Client user invokes send. This parameter is not supported on all platforms.

Avaya URI for messaging

Third-party applications can use the following Avaya URI formats to direct Avaya Workplace Client on desktop platforms to create a new conversation or open an existing conversation:

Scenario	Example and result
Avaya URI with a single valid messaging address	avaya://message?abc@avaya.com Avaya Workplace Client checks whether there is an existing conversation with the contact. • If an existing conversation is available, Avaya Workplace Client opens the existing conversation with the specified contact. • If an existing conversation is unavailable, Avaya Workplace Client creates a new conversation with the specified contact.
Avaya URI with two or more valid messaging addresses	avaya://message?abc@avaya.com,xyz@avaya.com Avaya Workplace Client checks whether there is an existing conversation with the two contacts. • If an existing conversation is available, Avaya Workplace Client opens the existing conversation with the two specified contacts. • If an existing conversation is unavailable, Avaya Workplace Client creates a new multiparty conversation with the two specified contacts.
Avaya URI with two or more valid messaging addresses appended with subject	avaya://message?abc@avaya.com,xyz@avaya.com&subject=Test%20%Subject Avaya Workplace Client checks whether there is an existing conversation with the two contacts for the specified subject. • If an existing conversation is available, Avaya Workplace Client opens the existing conversation with the two specified contacts with the matching subject. • If an existing conversation is unavailable, Avaya Workplace Client creates a new multiparty conversation with the two specified contacts for the specified subject.

Scenario	Example and result
Avaya URI with two or more valid messaging addresses appended with subject and message body	avaya://message?abc@avaya.com,xyz@avaya.com&subject=Test %20%Subject&MessageBody="Message Body Sample" Avaya Workplace Client checks whether there is an existing conversation with the two contacts for the specified subject. • If an existing conversation is available, Avaya Workplace Client opens the existing conversation with the two specified contacts with the matching subject. The opened conversation must have the provided message body text. • If an existing conversation is unavailable, Avaya Workplace Client creates a new multiparty conversation with the two specified contacts for the specified subject and message body text.
Avaya URI with two or more valid messaging addresses appended with subject and message body and CallBack URL	avaya://message?abc@avaya.com,xyz@avaya.com&subject=Test %20%Subject&MessageBody="Message Body Sample"&callbackURL=http://www.google.com Avaya Workplace Client checks whether there is an existing conversation with the two contacts for the specified subject. • If an existing conversation is available, Avaya Workplace Client opens the existing conversation with the two specified contacts with the matching subject. The opened conversation must have the provided message body text. The callback URL opens in the default browser after the message is sent. • If an existing conversation is unavailable, Avaya Workplace Client creates a new multiparty conversation with the two specified contacts for the specified subject and message body text. The callback URL opens in the default browser after the message is sent.

URI for configuration

You can use the Avaya URI to provide a configuration URI to the Avaya Workplace Client user, which the user can use to update the Avaya Workplace Client configuration. Optionally, the Avaya Workplace Client application might be reset. During the application reset, the existing configuration is cleared and the configuration is updated. This is useful for administrative and support personnel to assist their customers with initial configuration or correcting existing configurations. The Avaya Workplace Client user must always confirm the configuration activity.

The generalized Avaya URI format for configuration is avaya://config?ConfigURL.

Avaya URI for automatic configuration

Third-party applications can use the following Avaya URI formats to direct Avaya Workplace Client to update the automatic configuration URL:

Scenario	Example and result
Avaya URI with configuration URL	`avaya://config?https://alphablue-aadscluster.avaya.com:8443/acs/resources/configurations` Avaya Workplace Client displays a dialog to the user indicating that a configuration update is available. The user can choose to configure the application or cancel the configuration update.
Avaya URI with configuration URL for OAuth2 clients	`avaya://config?https://alphablue-aadscluster.avaya.com:8443/acs/resources/configurations&PreferredAuth=bearer` Avaya Workplace Client displays a dialog to the user indicating that a configuration update is available. The user can choose to configure the application or cancel the configuration update.
Avaya URI with configuration URL appended with the reset parameter	`avaya://config?https://alphablue-aadscluster.avaya.com:8443/acs/resources/configurations&reset` Avaya Workplace Client displays a dialog to the user indicating that a configuration update is available. The user can choose to reset the application to a new install state and then configure the application, or cancel the configuration update.
Avaya URI with configuration URL for OAuth2 clients appended with the reset parameter	`avaya://config?https://alphablue-aadscluster.avaya.com:8443/acs/resources/configurations%26PreferredAuth%3DBearer&reset` Avaya Workplace Client displays a dialog to the user indicating that a configuration update is available. The user can choose to reset the application to a new install state and then configure the application, or cancel the configuration update.

Troubleshooting, interoperability limitations, system artifacts, and call statistics

Troubleshooting

Avaya Workplace Client does not register to Session Manager

Cause

If the following conditions exist, Avaya Workplace Client will not get PPM data as the user does not exist on Session Manager 1:

- On System Manager, user profile has single Session Manager 2 entry.
- On Avaya Workplace Client, in the Phone Service area, Session Manager 1 IP address or FQDN is mentioned manually or using the automatic configuration file.

Solution

Procedure

Do one of the following:

- Add the correct Session Manager details in the settings file for automatic configuration.
- Ask the user to type the correct IP address or FQDN in the Phone Service area of Avaya Workplace Client.

Avaya Workplace Client on mobile platforms cannot register to server components

Cause

Avaya Workplace Client on mobile platforms cannot register to server components if the clients use Microsoft's Network Device Enrollment Service for the SCEP client identity certificate enrollment.

Solution

Procedure

Choose the Key Usage extension as Digital signature.

Users cannot log in to Avaya Workplace Client

Condition

In an Avaya Workplace Client deployment that includes Session Border Controller, the user might see the following error message while trying to log in: `Invalid extension and password`.

Solution

Procedure

Set up the user-agent string correctly in Session Border Controller.

For more information, see *Administering Avaya Session Border Controller for Enterprise*.

Users cannot log in to the Desk Phone mode

User Alert

Avaya Workplace Client users cannot log in to the Desk Phone mode.

Logs/Alarms

The system displays the following error: `403 Endpoint Routing Forbidden.`

Recovery Action

Procedure

1. Log in to Avaya Aura® Session Manager.
2. In the Session Manager Administration tab, enable Direct Routing to Endpoints.
3. In the Max. Simultaneous Devices field of the Session Manager communication profile section of the User Profile page, set the value to 2 or higher.
4. To complete user configuration, check the following:

    1. Avaya Aura® Session Manager profile and endpoint profile on Avaya Aura® System Manager.
    2. *Station profile*, *aar analysis*, *trunk group*, *signaling group*, and *numbering plan* on Avaya Aura® Communication Manager.

    The extension range for the numbering plan must follow the same numbering format that is configured for the trunk group. For more information about user configuration, see *Administering Avaya Aura® Session Manager* and *Administering Avaya Aura® Communication Manager.*

Remote users can view the VoIP Services Limited error

Condition

In an Avaya Workplace Client deployment that includes Session Border Controller, remote users might receive the following error message: `VoIP Services Limited`.

Solution

Procedure

- On Session Border Controller, do the following:

    1. Configure the PPM mapping profile and Presence server address correctly for the SIP telephony features, presence, and PPM contacts to work.
    2. Ensure that the SIP, port number 5061, and PPM, port number 443, interfaces are configured to use the same certificate.

        In many cases, the SIP interface is configured to use a third-party certificate, but the PPM interface uses the demo certificate.

- On Communication Manager, in the Private-Numbering table, ensure that the SIP extension range is mapped to the SIP trunk of Session Manager. If it is not mapped, Avaya Workplace Client is unable to subscribe to the full telephony services.

Users cannot use Avaya Workplace Client for Android to log in to Client Enablement Services when using Avaya SBCE

Cause

Avaya SBCE uses a strong cipher suite. Except for Client Enablement Services, users can log in to all services when using Avaya SBCE.

Solution

Procedure

As Client Enablement Services does not support strong cipher suites, you must align the cipher suite configuration across all elements of the solution.

Audio is lost for a few seconds during a call

Cause

Opening and closing other applications on your device during a call results in audio loss for a few seconds.

Solution

Procedure

Workaround is unavailable.

Video functionality is inconsistent across mobile clients

Condition

During a video call on mobile platforms, when you put Avaya Workplace Client in the background:

- Video freezes on the far-end iOS device.
- Video works fine on the far-end Android device.

Cause

When Avaya Workplace Client is in the background, due to platform limitations with iOS, Avaya Workplace Client does not have access to the camera.

Solution

Procedure

Workaround is unavailable.

Users receive two notifications for group and team button calls

Cause

If users use Avaya Workplace Client on a device with iOS 13 or an earlier version, for group and team button calls, the device displays extra notifications.

Solution

Procedure

To avoid viewing these extra notifications, users must use iOS 13.2 or a later version.

Avaya Workplace Client uses the notifications filtering entitlement that Apple provides with iOS 13.2 and later versions to fix the issue of the extra notifications.

Avaya Workplace Client does not display photos for some Microsoft Outlook local contacts

Cause

This is a known Outlook issue. This issue occurs due to a problem with the Outlook connection protocol.

Solution

Procedure

Workaround is unavailable.

Avaya Workplace Client for iOS displays local contact details for an incoming call instead of aggregate contact details

Condition

If iOS CallKit is enabled, Avaya Workplace Client for iOS displays local contact details for an incoming call instead of aggregate contact details.

Cause

Apple confirms that this functionality is as intended. Apple intentionally prioritizes by showing a user local contact card information for a caller over the caller information given by CallKit if there is a contact card.

Solution

Procedure

Workaround is unavailable.

User can view incorrect call name in native call history

Condition

There are two users, A and B. B has A as a local contact on the iOS device.

1. A makes a call to B. On the iOS device of B, the call history displays a different name than the contact name which is provided by Avaya Workplace Client for iOS.

Cause

The native CallKit prefers a local contact name instead of the contact name which is provided by the application. Hence, if the user has local contacts on the iOS device, the local contact names are used for incoming calls and native call history entries.

Solution

Procedure

1. B must remove A from local contacts.
2. B must add A as a Workplace contact in Avaya Workplace Client for iOS.

Avaya Workplace Client for iOS displays the contact name as nickname on the New Contact screen

Condition

If you create a new Avaya Workplace Client contact from your call history, the Nickname field on the New Contact screen is automatically populated with the contact name.

Cause

The call history details include the display name and phone number. In iOS, the display name and nickname are considered the same. Hence, the nickname is automatically populated with the display name.

Solution

Procedure

Workaround is unavailable.

Android device setting changes automatically from the silent and vibrate mode to the general mode

Condition

On some Android devices, for incoming and outgoing VoIP calls, the device setting changes automatically from the silent and vibrate mode to the general mode.

Solution

Procedure

Workaround is unavailable.

Unable to dial Avaya Aura Messaging extension to read messages in a dual stack IPv6 network

Condition

Avaya Workplace Client is configured as a dual stack network. The Avaya Aura® Messaging extension supports IPv6.

Cause

Avaya Aura® Messaging does not support ANAT. Hence, Communication Manager drops the call.

Solution

Procedure

Workaround is unavailable.

Avaya Workplace Client call stops responding when you uninstall QoS from network settings

Condition

1. In Network Connections, go to the properties of your network connection.
2. In the Networking tab, select QoS Packet Scheduler.
3. Click Uninstall.
4. Make a call using Avaya Workplace Client for Windows.When the call is answered at the other end, the call stops responding.

Cause

The QoS Packet Scheduler is required for Avaya Workplace Client for Windows to function properly.

Solution

Do not uninstall any run-time dependencies such as QoS Packet Scheduler while using Avaya Workplace Client for Windows.

Media preserved call is not dropped when you answer a cellular call

Condition

When you are on a VoIP call and Session Manager becomes unreachable, the VoIP call becomes unreachable. At the same time, you receive an incoming cellular call.

When you end the cellular call, the media preserved call is still active and not dropped. The media preserved call should have ended.

Solution

Procedure

Workaround is unavailable.

The Web Collaboration window displays a shared document on another conference

Condition

This condition might occur in the following situations:

- You are the moderator on a MeetMe conference and you start web collaboration.
- While the MeetMe conference and web collaboration are active, you start an Adhoc conference and then start a second web collaboration session for the same call.

Solution

Procedure

Workaround is unavailable.

Interoperability limitations

Known interoperability limitations

Interoperability limitations exist between Avaya Workplace Client and other products.

The following are examples of limitations that occur when you use Avaya one-X® Mobile and Avaya Workplace Client:

- Call logs are inconsistent between Avaya one-X® Mobile and Avaya Workplace Client.
- When you add contacts in Avaya one-X® Mobile, the contacts do not appear in Avaya Workplace Client.

Similar limitations might also exist between Avaya Workplace Client and other products.

Interoperability and limitations with voice mail privacy enforcement

The Client Enablement Services server and Avaya Workplace Client have a limitation with respect to private voice mail. If you configure the Messaging service for voice mail-style privacy, voice mail messages do not contain the voice mail attachment. Hence, the user cannot play the audio for the voice mail message using Avaya Workplace Client.

The Client Enablement Services server and Avaya Workplace Client do not support email-style privacy. Hence, if the audio attachment for a message is marked as private, the user can continue to download and play the audio attachment using Avaya Workplace Client.

Avaya Workplace Client for Windows file system artifacts

Avaya Workplace Client for Windows uses the following directories to save application data:

- %APPDATA%/Avaya/Avaya IX Workplace/configdata.xml: Removing configuration data causes Avaya Workplace Client to reacquire configuration the next time you start the application. Configuration data files are managed by the Avaya Workplace Client application and do not require additional administration.
- %APPDATA%/Avaya/Avaya IX Workplace/CallLogs: Removing call logs removes call history from the Avaya Workplace Client application. Call log data is not restored the next time you start the application.
- %LOCALAPPDATA%/Avaya/Avaya IX Workplace/logs: Removing runtime logs affects supportability of Avaya Workplace Client. Runtime logs are managed by the Avaya Workplace Client application and do not require additional administration.
- %LOCALAPPDATA%/Avaya/Avaya IX Workplace/Dumps: Crash dump files are not managed by the Avaya Workplace Client application and must be managed by you. For support, you might need to send these files to Avaya.

- %LOCALAPPDATA%/Avaya/Avaya IX Workplace/preferences_local.xml: Local preferences include devices and their gains, last window position, a call mode, and default URI handler.

  ⚠ **CAUTION:**

  Many Citrix deployments use administrative policies that clear the local AppData folder periodically. In such cases, all local preferences are restored to their default values.
- %APPDATA%/Avaya/Avaya IX Workplace/preferences_roaming.xml: Roaming preferences include the user preferences not included in local preferences.

When you uninstall Avaya Workplace Client for Windows, the uninstallation process removes the application data from the associated directories.

Avaya Workplace Client for Mac file system artifacts

Avaya Workplace Client for Mac uses the following directories to save application data:

- ~/Library/Application Support/com.avaya.Avaya-IX-Workplace/configdata.xml: Removing configuration data causes Avaya Workplace Client to reacquire configuration the next time you start the application. Configuration data files are managed by the Avaya Workplace Client application and do not require additional administration.
- ~/Library/Application Support/com.avaya.Avaya-IX-Workplace/callLogs: Removing call logs removes call history from the Avaya Workplace Client application. Call log data is not restored the next time you start the application.
- ~/Library/Logs/com.avaya.Avaya-IX-Workplace/logs: Removing runtime logs affects supportability of Avaya Workplace Client. Runtime logs are managed by the Avaya Workplace Client application and do not require additional administration.
- ~/Library/Logs/com.avaya.Avaya-IX-Workplace/logs/crashes: Crash dump files are not managed by the Avaya Workplace Client application and must be managed by you. For support, you might need to send these files to Avaya.
- ~/Library/Preferences/com.avaya.Avaya-Equinox.plist: Preferences include devices and their gains, last window position, a call mode, and default URI handler.

When you uninstall Avaya Workplace Client for Mac, the uninstallation process removes the application data from the associated directories.

Credential information

Windows system saves your login credentials for Avaya Workplace Client for Windows in Credential Manager. You can access Credential Manager from Control Panel > User Accounts. When you uninstall Avaya Workplace Client for Windows, the uninstallation process removes your credential information.

Mac system saves your login credentials for Avaya Workplace Client for Mac in Keychain Access > Keychains > login. You can access Keychain Access from Applications > Utilities. When you uninstall Avaya Workplace Client for Mac, the uninstallation process removes your credential information.

Connecting to a protocol sniffer

About this task

You cannot run a protocol sniffing tool such as Wireshark directly on mobile devices. Use this procedure so that Avaya Workplace Client for Android and iOS can connect to and support Wireshark. Use such tools to capture network traces associated with the VoIP service.

For more information about protocol sniffers, see the developer tools guide for your device operating system.

Procedure

1. Set up your personal computer as an access point.
2. Install a protocol sniffing tool such as Wireshark on your computer.
3. Connect your device to the access point on your computer.
4. Capture the trace on the bridged adapter.

Call statistics

While on an active call, you can view the call statistics on Avaya Workplace Client. Use the call statistics to analyze and troubleshoot network issues that might affect the call.

The following sections include call statistics information on audio, video, and collaboration depending on the call type.

Call statistics — Audio details

Represents details of transmitted and received audio stream properties.

Attribute name	Description
Codec	The name of the codec that is being used for the audio session.
Packetization Millis	The packetization interval in milliseconds. This represents the duration of the audio data contained in each packet. It is retrieved from the ptime attribute from the SDP audio codec config.
RFC2833 Payload Type	The payload type negotiated for telephony events (DTMF tones).
Local IP Address	The local IP address used to receive audio packets from the far-end.
Remote IP Address	The remote IP address used to send audio packets to the far-end.
Local Port	The local RTP receive port for the audio session according to SDP offer and answer exchange.
Remote Port	The remote RTP receive port for the audio session according to SDP offer and answer exchange.
Encryption Type	The encryption type used for the audio session.
Media Tunneled	The status indication for whether there is audio tunneling.
RTCP Encrypted	The RTCP encryption status of the audio session. The value is true if feedback RTCP packets are encrypted. Else the value is false. If it is true, RTCP packets must be decrypted before reading audio stream details.
Round Trip Time Millis	The round-trip audio delay in milliseconds calculated according to RFC 3550. This is the time required for an RTP packet to go from sender to receiver and back.

Attribute name	Description
Packets Transmitted	The total number of RTP packets transmitted.
Packets Received	The total number of RTP packets received.
Bytes Transmitted	The total number of RTP payload bytes transmitted.
Bytes Received	The total number of RTP payload bytes received.
Fraction Lost Local	The fractional loss seen locally. This is an 8-bits size value. This is the fraction of RTP data packets from source that got lost since the previous SR or RR packet was sent. The loss is expressed as a fixed point number with the binary point at the left edge of the field. This is equivalent to taking the integer part after multiplying the loss fraction by 256. This fraction is defined as the number of packets lost divided by the number of packets expected. If the loss is negative due to duplicates, the fraction lost is set to zero.
Fraction Lost Remote	The fractional loss seen remotely, which the far end sends to the local end through RTCP. This is an 8-bits size value. This is the fraction of RTP data packets from source that got lost since the previous SR or RR packet was sent. The loss is expressed as a fixed point number with the binary point at the left edge of the field. This is equivalent to taking the integer part after multiplying the loss fraction by 256. This fraction is defined as the number of packets lost divided by the number of packets expected. If the loss is negative due to duplicates, the fraction lost is set to zero.
Average Jitter Local Millis	The average jitter buffer size in milliseconds that the local end is experiencing on a received RTP stream. In VoIP, a jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in evenly spaced intervals. Variations in packet arrival time, called jitter, can occur because of network congestion, timing drift, or route changes. The jitter buffer, which is located at the receiving end of the voice connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very little sound distortion.

Attribute name	Description
Average Jitter Remote Millis	The average jitter buffer size in milliseconds that the far-end is experiencing. In VoIP, a jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in evenly spaced intervals. Variations in packet arrival time, called jitter, can occur because of network congestion, timing drift, or route changes. The jitter buffer, which is located at the receiving end of the voice connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very little sound distortion.
Current Buffer Size	The current jitter buffer size in milliseconds. In VoIP, a jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in evenly spaced intervals. Variations in packet arrival time, called jitter, can occur because of network congestion, timing drift, or route changes. The jitter buffer, which is located at the receiving end of the voice connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very little sound distortion.
Preferred Buffer Size	The preferred or optimal jitter buffer size in milliseconds. In VoIP, a jitter buffer is a shared data area where voice packets can be collected, stored, and sent to the voice processor in evenly spaced intervals. Variations in packet arrival time, called jitter, can occur because of network congestion, timing drift, or route changes. The jitter buffer, which is located at the receiving end of the voice connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very little sound distortion.
Current Packet Loss Rate	The rate of percentage packet loss because of network and late packets.
Current Discard Rate	The rate of percentage packet loss because of late packets.
Current Expand Rate	The fraction of synthesized speech frames inserted through expansion in the total frame count in buffer. In case of a starved jitter buffer, synthesized speech frames are added. This process is called expand.
Current Preemptive Rate	The fraction of synthesized speech frames inserted through pre-emptive expansion in the total frame count in buffer. In case of a shallow jitter buffer, synthesized speech frames are added. This process is called pre-emptive expand and is based on previous frames.

Attribute name	Description
Current Accelerate Rate	The fraction of data removed through acceleration. In case of a full jitter buffer speech, frames are deleted. This process is called acceleration.

Call statistics — Video statistics

Represents detailed statistics of a video call.

Attribute Name	Description
Target Frame Rate	The target sent and received frame rate in frames per second.
Actual Frame Rate	The actual sent and received frame rate in frames per second.
Resolution Width	The width of the sent and received video stream.
Resolution Height	The height of the sent and received video stream.
Jitter Buffer Size Millis	The actual sent and received side jitter buffer size in milliseconds. In VoIP, a jitter buffer is a shared data area where video packets can be collected, stored, and sent to the video processor in evenly spaced intervals. Variations in packet arrival time, called jitter, can occur because of network congestion, timing drift, or route changes. The jitter buffer, which is located at the receiving end of the video connection, intentionally delays the arriving packets so that the end user experiences a clear connection with very few video delays.
Target Bit Rate	The target sent and received bit rate per second.
Actual Bit Rate	The actual sent and received bit rate per second.

Attribute Name	Description
Packet Count	The total number of packets sent and received.
Byte Count	The total number of bytes sent and received.
Key Frame Count	The number of key frames locally requested (receive direction) or remotely requested (send direction).
Packet Loss Total	The total number of packets lost in transmit and receive direction.
Packet Loss Fraction	The fraction of packets lost in transmit and receive direction.

Call statistics — Video transmission statistics

Represents detailed transmission statistics of a video call.

Attribute name	Description
802.1p Tag	The 802.1p Layer 2 priority tag if set
DSCP Tag	The DSCP tag if set

Call statistics — Collaboration statistics

Transmission statistics.

Attribute name	Description
Resolution Width	The frame resolution width. If the value is undefined, -1 is returned.
Resolution Height	The frame resolution height. If the value is undefined, -1 is returned.
Actual Frame Rate	The actual frame rate. If the value is undefined, -1 is returned.
Codec	The codec type used in collaboration data sharing. If the value is undefined, -1 is returned.
Round Trip Time Milliseconds	The packets round trip time in milliseconds. If the value is undefined, -1 is returned.
Actual Bit Rate	The actual bit rate used during data sharing. If the value is undefined, -1 is returned.
Target Bit Rate	The target bit rate setting. If the value is undefined, -1 is returned.
Jitter Milliseconds	The average jitter in milliseconds. If the value is undefined, -1 is returned.

Attribute name	Description
Packet Loss Count	The lost packets count. If the value is undefined, -1 is returned.
Packet Loss Percentage	The percentage of lost packets. If the value is undefined, -1 is returned.

Call statistics — Collaboration receive statistics

Received statistics with additional three values received from Web Collaboration Server.

Attribute name	Description
Frame Count	The received frame count. If the value is undefined, -1 is returned.
Frame Loss Percentage	The frame loss percentage. If the value is undefined, -1 is returned.
Queue Size	The receiving frame queue size. If the value is undefined, -1 is returned.

Resources

Documentation

See the following documents at http://support.avaya.com.

Table 1. Avaya Workplace Client, Avaya Multimedia Messaging, Avaya Aura® Device Services, and Avaya Workplace VDI documentation

Title	Use this document to	Audience
Overview		
Avaya Workplace Client Overview and Specification for Android, iOS, Mac, and Windows	Understand high-level product functionality, performance specifications, security, and licensing.	Customers and sales, services, and support personnel
Avaya Workplace VDI Overview and Planning	Understand high-level product functionality, security, and licensing. Also, perform deployment planning.	• System administrators • Customers and sales, services, and support personnel
Planning		
Planning for and Administering Avaya Workplace Client for Android, iOS, Mac, and Windows	Perform system planning and configuration for: • Avaya Workplace Client for Android • Avaya Workplace Client for iOS • Avaya Workplace Client for Mac • Avaya Workplace Client for Windows	• System administrators • Customers and sales, services, and support personnel

Title	Use this document to	Audience
Avaya Multimedia Messaging Reference Configuration	Understand technical overview information, system architecture, functional limitations, and capacity and scalability for Avaya Multimedia Messaging.	Customers and sales, services, and support personnel
Implementing		
Deploying Avaya Multimedia Messaging	Install, configure, and administer Avaya Multimedia Messaging.	Implementation personnel
Deploying Avaya Aura® Device Services	Install, configure, and administer Avaya Aura® Device Services.	Implementation personnel
Deploying the Avaya Aura® Web Gateway	Install, configure, and administer the Avaya Aura® Web Gateway.	Implementation personnel
Implementing, administering, and troubleshooting Avaya Workplace VDI	Install, configure, administer, and troubleshoot Avaya Workplace VDI.	Implementation personnel
Administering		
Administering Avaya Multimedia Messaging	Administer and manage Avaya Multimedia Messaging.	Implementation personnel
Administering Avaya Aura® Device Services	Administer and manage Avaya Aura® Device Services.	Implementation personnel
Administering the Avaya Aura® Web Gateway	Administer, manage, and troubleshoot the Avaya Aura® Web Gateway.	Implementation personnel
Maintaining		

Title	**Use this document to**	**Audience**
Updating server certificates to improve end-user security and client user experience	Understand and administer certificates on Avaya Workplace Client.	• System administrators • Customers and sales, services, and support personnel
Using		
Using Avaya Workplace Client for Android, iOS, Mac, and Windows	Install and use Avaya Workplace Client.	Enterprise users
Avaya Workplace Client Quick Reference Guide	View the functionality in Avaya Workplace Client.	Enterprise users
Using Avaya Workplace Client on Avaya Vantage™	Set up and use Avaya Workplace Client on Avaya Vantage™.	Enterprise users
Using Unified Portal	Set up and use Avaya Workplace Client Unified Portal.	Enterprise users
Using Avaya Workplace VDI	Set up and use Avaya Workplace VDI.	Enterprise users

Table 2. Back-end server documentation for Avaya Workplace Client planning

Title	**Use this document to**	**Audience**
Overview		

Title	Use this document to	Audience
Avaya Aura® Communication Manager Overview and Specification	Understand high-level product functionality, performance specifications, security, and licensing.	Customers and sales, services, and support personnel
Avaya Aura® System Manager Overview and Specification		
Avaya Aura® Session Manager Overview and Specification		
Avaya one-X® Client Enablement Services Overview and Specification		
Planning		
Avaya IP Voice Quality Network Requirements	Understand quality of service requirements and codec selection.	• System administrators • Customers and sales, services, and support personnel
Implementing		

Title	Use this document to	Audience
Avaya Aura® Communication Manager Special Application Features	Perform installation, configuration, and initial administration tasks.	Implementation personnel
Deploying Avaya Aura® Communication Manager		
Deploying Avaya Aura® System Manager on System Platform		
Deploying Avaya Aura® System Manager		
Deploying Avaya Aura® applications from System Manager		
Deploying Avaya Aura® Session Manager		
Deploying Avaya Aura® Presence Services		
Avaya Aura® Presence Services Overview and Specification		
Implementing Avaya one-X® Client Enablement Services		
Administering		

Title	Use this document to	Audience
Administering Avaya Aura® Communication Manager	Perform ongoing administration tasks, including maintenance and upgrades.	• System administrators • Architects • Implementation personnel
Administering Avaya Aura® System Manager		
Upgrading and Migrating Avaya Aura® applications from System Manager		
Administering Avaya Aura® Session Manager		
Administering Avaya Aura® Presence Services		
Administering Avaya one-X® Client Enablement Services		

Finding documents on the Avaya Support website

Procedure

1. Go to https://support.avaya.com.
2. At the top of the screen, type your username and password and click Login.
3. Click Support by Product > Documents.
4. In Enter your Product Here, type the product name and then select the product from the list.
5. In Choose Release, select the appropriate release number.

   The Choose Release field is not available if there is only one release for the product.

6. In the Content Type filter, click a document type, or click Select All to see a list of all available documents.

For example, for user guides, click User Guides in the Content Type filter. The list only displays the documents for the selected category.

7. Click Enter.

Avaya Documentation Center navigation

The latest customer documentation for some programs is now available on the Avaya Documentation Center website at https://documentation.avaya.com.

Important:

For documents that are not available on Avaya Documentation Center, click More Sites > Support on the top menu to open https://support.avaya.com.

Using the Avaya Documentation Center, you can:

- Search for content by doing one of the following:
  - Click Filters to select a product and then type key words in Search.
  - From Products & Solutions, select a solution category and product, and then select the appropriate document from the list.
- Sort documents on the search results page.
- Click Languages (🌐) to change the display language and view localized documents.
- Publish a PDF of the current section in a document, the section and its subsections, or the entire document.
- Add content to your collection by using My Docs (☆).Navigate to the Manage Content > My Docs menu, and do any of the following:
  - Create, rename, and delete a collection.
  - Add topics from various documents to a collection.
  - Save a PDF of selected content in a collection and download it to your computer.
  - Share content in a collection with others through email.
  - Receive collection that others have shared with you.
- Add yourself as a watcher using the Watch icon (👁). Navigate to the Manage Content > Watchlist menu, and do the following:
  - Enable Include in email notification to receive email alerts.

  - Unwatch selected content, all content in a document, or all content on the Watch list page.

  As a watcher, you are notified when content is updated or deleted from a document, or the document is removed from the website.

- Share a section on social media platforms, such as Facebook, LinkedIn, and Twitter.
- Send feedback on a section and rate the content.

Note:

Some functionality is only available when you log on to the website. The available functionality depends on the role with which you are logged in.

Training

The following courses are available on the Avaya Learning website at http://www.avaya-learning.com. After logging in to the website, enter the course code or the course title in the Search field and press `Enter` to search for the course.

Course code	Course title
20390W	Using the Avaya Workplace Client
22160W	Avaya Workplace Client Fundamentals

Viewing Avaya Mentor videos

Avaya Mentor videos provide technical content on how to install, configure, and troubleshoot Avaya products.

About this task

Videos are available on the Avaya Support website, listed under the video document type, and on the Avaya-run channel on YouTube.

Procedure

- To find videos on the Avaya Support website, go to https://support.avaya.com/ and do one of the following:
  - In Search, type `Avaya Mentor Videos`, click Clear All and select Video in the Content Type.
  - In Search, type the product name. On the Search Results page, click Clear All and select Video in the Content Type.The Video content type is displayed only when videos are available for that product.

    In the right pane, the page displays a list of available videos.
- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and do one of the following:
  - Enter a key word or key words in the Search Channel to search for a specific product or topic.
  - Scroll down Playlists, and click a topic name to see the list of videos available for the topic. For example, Contact Centers.

    Note:

    Videos are not available for all products.

Support

Go to the Avaya Support website at https://support.avaya.com for the most up-to-date documentation, product notices, and knowledge articles. You can also search for release notes, downloads, and resolutions to issues. Use the online service request system to create a service request. Chat with live agents to get answers to questions, or request an agent to connect you to a support team if an issue requires additional expertise.

Using the Avaya InSite Knowledge Base

Using the Avaya InSite Knowledge Base

The Avaya InSite Knowledge Base is a web-based search engine that provides:

- Up-to-date troubleshooting procedures and technical tips
- Information about service packs

- Access to customer and technical documentation
- Information about training and certification programs
- Links to other pertinent information

If you are an authorized Avaya Partner or a current Avaya customer with a support contract, you can access the Knowledge Base without extra cost. You must have a login account and a valid Sold-To number.

Use the Avaya InSite Knowledge Base for any potential solutions to problems.

1. Go to http://www.avaya.com/support.
2. Log on to the Avaya website with a valid Avaya user ID and password.The system displays the Avaya Support page.
3. Click Support by Product > Product-specific Support.
4. In Enter Product Name, enter the product, and press `Enter`.
5. Select the product from the list, and select a release.
6. Click the Technical Solutions tab to see articles.
7. Select relevant articles.

Data privacy controls

Personal data is stored on the file system that is accessible by the current user or a privileged user. The file system content is not encrypted, but might be encrypted using platform technologies. When personal data is transmitted over a network, the data is encrypted with the most latest protocols.

Data categories containing personal data

User data in memory

- Remote-party phone number from calls
- Participant display name, roster list, and active talker from conference calls
- Participants on conversations and messages from Avaya Multimedia Messaging messages
- End user preferences information
- Configuration information
- Contacts retrieved from the network
- Contacts retrieved from the local contacts application on mobile platforms
- Calendar event information

User data on disk

The following information is saved on the disk:

- Local call logs
- Configuration information
- End-user preferences information

On Windows, user’s credentials are saved in the Windows Credential Manager, in an area that is encrypted such that only the Windows user can decrypt not even the administrator. Users can access this area through Windows APIs. On Mac and iOS, the system saves the credentials to keychain. On Android, the system saves the credentials in user preferences.

User data logs

The following information is saved:

- User handle or email
- SIP user name

- Display name information from SIP messages
- Virtual room information

The following information is not saved:

- Active talker changes
- Avaya Multimedia Messaging message content
- Passwords

Personal data human access controls

User data in memory

None

User data on disk

Users can access the data on:

- Desktops: By browsing through the file system
- Mobiles: Through debug port or iTunes

User data logs

Users can access the data logs:

- Through file system
- By using the Report a problem option in Avaya Workplace Client

Personal data programmatic or API access controls

User data in memory

Users can access the data in memory through internal programmatic access. External application API for desktops can be turned off. For example, for headset integration, named pipe or JSON.

Series of Avaya URIs are configured on the system such that when clicked from a browser or Outlook plug-in, the link opens in Avaya Workplace Client.

User data on disk

Users can access the file system through the OS file system APIs.

User data logs

None

Personal data “at rest” encryption controls

User data in memory

Avaya Workplace Client does not encrypt the user data in memory.

User data on disk

The host platform configuration might encrypt the file system content.

User data logs

The host platform configuration might encrypt the file system content.

Personal data “in transit” encryption controls

User data in memory

HTTPs or TLS 1.2 sends or receives data with servers. External application interface done through named pipe uses local OS facilities and is not encrypted. This is implemented on Windows and Mac OSX.

User data on disk

TLS 1.2

User data logs

Email sent as a result of Report a problem is sent using standard email protocols. Log files sent in email as attachment are compressed into a single file and the compressed file might be encrypted by the user.

Personal data retention period controls

User data in memory

The data saved in the memory is removed based on use cases. For example, during a call, a call object remains in memory. When the call ends, the object is removed from the memory, but a new CallLog object is created.

User data on disk

The user data on disk is permanent until rolled over, application reset or uninstalled, or until the user deletes the data from the file system.

User data logs

The user data logs are not configurable but can be manually deleted.

Personal data export controls and procedures

User data in memory

Not applicable

User data on disk

User or administrators can access the user data on disk.

- Desktops: Local configuration, call log, and log files can be copied to an external system.
- Mobile platforms: Local files are accessible through the Android debug port or iTunes and can be copied from the mobile endpoint to a desktop.

Report a problem serviceability option can be selected to compress and email all local files including configuration and call log files.

User data logs

- Desktops: Local configuration, call log, and log files can be copied to an external system.
- Mobile platforms: Local files are accessible through the Android debug port or iTunes and can be copied from the mobile endpoint to a desktop.

Personal data view, modify, delete controls and procedures

User data in memory

Not applicable

User data on disk

The user or administrator has access to the file system on desktops, or through Android Debug Bridge (adb) on Android, or iTunes on iOS. On desktop systems, the user or administrator can edit the files.

User data logs

- Desktops: The administrator has full read or write access to the file system.
- Mobile platforms: The user or administrator can access the logs through the adb port on Android or iTunes on iOS.

Personal data pseudonymization operations statement

User data in memory

None

User data on disk

None

User data logs

Not applicable

Glossary

Communication Manager

Communication Manager

A key component of Avaya Aura®. It delivers rich voice and video capabilities and provides a resilient, distributed network for media gateways and analog, digital, and IP-based communication devices. It includes advanced mobility features, built-in conference calling, contact center applications and E911 capabilities.

EC500

A feature that bridges calls received by the Avaya Aura® Communication Manager server to any mobile phone, regardless of location or wireless service provider.

Extension to Cellular access number

The phone number dialed to connect to the Avaya server that is running Communication Manager. The Extension to Cellular access number initiates the process of enabling or disabling Extension to Cellular or changing the station security code.

FNE

FNE

An extension assigned to a feature within Communication Manager. The system administrator configures a Feature Name Extension (FNE) to correspond to a FAC that activates the feature.

FECC

Far End Camera Control (FECC) is a feature of endpoint cameras, where an endpoint in the call can remotely control the camera of another endpoint in the call.

Off-PBX telephone

A method used to extend Communication Manager extensions and features outside of Communication Manager.

OTT

Over the Top (OTT) deployment means that you can use Avaya Workplace Client in a non-Avaya Aura® environment as a conferencing client for users that have a virtual room assigned to them.

Product Licensing and Delivery System (PLDS)

The Avaya licensing and download website and management system. Avaya Business Partners and customers use this site to obtain ISO image files and other software downloads.

Real-time Transport Protocol

A network protocol that delivers audio and video over IP networks.

RFC 2833

A standards-based mechanism used to send DTMF digits inband with Real time Transport Protocol (RTP).

Secure Real-Time Transport Protocol

An extension to Real-Time Transport Protocol (RTP) that incorporates enhanced security features. Like RTP, Secure RTP or SRTP is intended mostly for VoIP communications.

Session Border Controller

A component that delivers security to a SIP-based Unified Communications network.

Session Manager

Session Manager

An enterprise SIP proxy registrar and router that is the core component within the Avaya Aura® solution.

System Manager

System Manager

A common management framework for Avaya Aura® that provides centralized management functions for provisioning and administration to reduce management complexity. System Manager can also function as a self-signed Root Certificate Authority (CA) or as an intermediate CA. System Manager enables the Simple Certificate Enrollment Protocol (SCEP) application to sign certificates for Avaya deskphones.

UCCP

Unified Conference Control Protocol (UCCP) is a web-based protocol. It is used by Conferencing clients to have conference control including roster, moderator commands, and user commands.