



# **Avaya one-X<sup>®</sup> Agent Overview and Specification**

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## Contents

<b>Chapter 1: Introduction.....</b>	<b>7</b>
Purpose.....	7
Intended audience.....	7
Related resources.....	7
Documentation.....	7
Training.....	10
Support.....	10
Warranty.....	11
<b>Chapter 2: Avaya one-X Agent overview.....</b>	<b>13</b>
Avaya one-X Agent overview.....	13
Avaya one-X Agent features.....	13
Use modes.....	13
Call and Contact Center features.....	14
Contact Management features.....	17
Other features.....	18
Configuration features.....	21
Avaya one-X Agent configurations and corresponding features.....	22
New in this release.....	23
Feature comparison between Avaya one-X Agent and Avaya IP Agent.....	24
Product compatibility.....	27
Supported languages for Avaya one-X Agent.....	28
<b>Chapter 3: Security.....</b>	<b>29</b>
Additional security information.....	30
Port utilization.....	30
<b>Chapter 4: Licensing requirements.....</b>	<b>31</b>
<b>Index.....</b>	<b>33</b>



# Chapter 1: Introduction

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## Purpose

This document describes tested product characteristics and capabilities, including product overview and feature descriptions, interoperability, performance specifications, security, and licensing requirements.

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## Intended audience

This document is intended for people who want to gain a high-level understanding of the product features, functions, capacities, and limitations.

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## Related resources

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## Documentation

The following table lists the documents for Avaya one-X Agent and other related documents. Download the documents from the Avaya Support website at [www.avaya.com/support](http://www.avaya.com/support).

Document number	Title	This document describes:	Audience
Overview			
	<i>Avaya one-X Agent Overview and Specification</i>	The product characteristics and capabilities including product overview and feature descriptions, interoperability, performance specifications, security, and licensing requirements.	Sales Engineers, Solution Architects, Implementation Engineers,

Document number	Title	This document describes:	Audience
			and Support personnel
Implementing			
	<i>Installing Avaya one-X Agent</i>	The implementation of Avaya one-X Agent in a customer environment. This guide provides details on system requirements, deployment options, implementation, customization through user scenario, and standard installation procedures.	Implementation Engineers and Support personnel
	<i>Installing server applications for Avaya one-X Agent</i>	<p>The installation for the three server applications with Avaya one-X Agent:</p> <ul style="list-style-type: none"> <li>• Presence Services</li> <li>• Avaya Aura® Session Manager</li> <li>• Central Management for Avaya one-X Agent</li> </ul> <p>Describes the installation procedures for each applications in separate chapters because the server applications are optional for Avaya one-X Agent 2.5 and later.</p>	Implementation Engineers and Support personnel
	<i>Migrating server applications from Avaya one-X Agent 2.0 to 2.5</i>	The migration procedure for server applications from Avaya one-X Agent 2.0 to 2.5. This document also has procedures to keep the user and configuration data of all server applications. In addition, the document has procedures for servers to migrate, remove, and reinstall in a sequence. The document also has procedures on the data restoration.	Implementation Engineers and Support personnel
	<i>Implementing Avaya Aura® Presence Services</i>	The procedures to install and configure Avaya Aura® Presence Services.	Implementation Engineers and Support personnel



Document number	Title	This document describes:	Audience
	<i>Implementing Avaya Aura® Session Manager</i>	The procedures to install and configure Avaya Aura® Session Manager.	Implementation Engineers and Support personnel
	<i>Installing and upgrading Avaya Aura® System Manager</i>	The procedures to install and upgrade Avaya Aura® System Manager.	Implementation Engineers and Support personnel
Supporting			
	<i>Avaya one-X Agent Port Settings</i>	The steps to change the ports for firewall traversal rules.	Implementation Engineers and Support personnel
	<i>Troubleshooting Avaya one-X Agent</i>	The procedures to troubleshoot the problems during the installation and administration of Avaya one-X Agent and Central Management that Avaya one-X Agent supports.	Implementation Engineers and Support personnel
Using			
	<i>Using Avaya one-X Agent</i>	All tasks available to users of Avaya one-X Agent.	Sales Engineers, Solution Architects, Implementation Engineers, and Support personnel
	<i>Administering Avaya one-X Agent</i>	The Avaya Aura® Communication Manager administration for the Avaya one-X Agent configurations during the initial system setup and to change the configuration.	Implementation Engineers and Support personnel
	<i>Using Avaya one-X Agent Central Management</i>	The agent features, and administration of Central Management features. This guides also describes how to use Central Management.	Implementation Engineers and Support personnel
	<i>Administering Avaya Aura® Communication Manager</i>	The procedures to configure Avaya Aura® Communication Manager.	Implementation Engineers

Document number	Title	This document describes:	Audience
			and Support personnel
	<i>Avaya one-X Agent quick reference guide</i>	The procedure to install the Interactive Installation procedure that agents use to install Avaya one-X Agent software and procedures.	Sales Engineers, Solution, Architects, Implementation Engineers, and Support personnel
	<i>Administering ACCCM for Avaya one-X Agent Central Management</i>	The agent and supervisory features that administrators use to control Avaya one-X Agent Central Management.	Implementation Engineers and Support personnel
Customizing			
	<i>Avaya one-X Agent API document</i>	The API for customers to customize screen pop.	External customers

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## Training

The following courses are available on the Avaya Learning website at [www.avaya-learning.com](http://www.avaya-learning.com). After you log into the website, enter the course code or the course title in the **Search** field and click **Go** to search for the course.

Course code	Course title
2C00015O	Avaya one-X Agent 2.5
ATA01690VEN	Avaya one-X Agent Implementation and Maintenance

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## Warranty

To understand the terms of the limited warranty, see the sales agreement or other applicable documentation.

For information about the standard Avaya warranty and support for Avaya one-X Agent during the warranty period, see the Avaya Support website at [www.support.avaya.com](http://www.support.avaya.com) in **HELP & POLICIES > Policies & Legal > Maintenance and Warranty Information**.

See also **HELP & POLICIES > Policies & Legal > License Terms**.



# Chapter 2: Avaya one-X Agent overview

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## Avaya one-X Agent overview

Avaya one-X Agent is a desktop software for agents in a contact center. This desktop software enhances agent productivity regardless of agents working from the head office or the branch office. Avaya one-X Agent synchronizes with the deskphone to share the control of telephony and agent features. Agents can use the user interface to gain access to common agent features, including contact center capabilities, namely integrated video and instant messaging.

Avaya one-X Agent supports the agents to deliver superior customer contact features. Agents can:

- Use advanced contact handling features to serve the customer.
- Gain access to customer-specific information through Screen Pop.
- Contact experts throughout the enterprise by using the Supervisor Assist feature.

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## Avaya one-X Agent features

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### Use modes

Agents can choose one of the following use modes depending on the location, deskphone set, and network:

**My Computer:** With the My Computer mode, agents can use a computer to transfer voice through a headset without another telephony device.

**Desk Phone:** With the Desk Phone mode, agents can use an Avaya deskphone with Avaya one-X Agent. The system transfers voice to an Avaya deskphone and shares controls, namely, Answer Call, End Call, Call Hold, between Avaya one-X Agent and Avaya deskphone.

**Note:**

Agents must perform all Automatic Call Distribution (ACD) operations from the Avaya one-X Agent program and not from the deskphone.

**Other Phone:** With the Other Phone mode, agents can use a Public Switched Telephone Network (PSTN) or Global System for Mobiles Communications (GSM) phone to make or receive calls when the agents telecommute. Agents use the Other Phone mode to access audio components from a home telephone, an office deskphone, or a mobile phone. Agents can configure the Other Phone mode for toll-quality audio and optimize audio through another phone.

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## Call and Contact Center features

Avaya one-X Agent provides features for easier call handling and optimizing contact center operations.

### VuStats

Agents can view the contact center information from Communication Manager using the VuStats Monitor. Supervisors and agents use the VuStats feature to monitor the critical contact center activity and statistics. Agents can configure the refresh intervals for contents of a particular button and for the entire VuStats monitor cycle.

### Agent Greetings

Agents in a contact center have Agent Greeting support on Avaya one-X Agent. Agents can record and configure multiple agent greetings to play, based on the incoming call parameters, namely, Prompted Digits, Calling Number (ANI), or Dialed Number (DNIS or Vector Directory Number).

### Work Item

Work Item is a container that the user groups interact according to the function with respect to the main incoming ACD call. Agents can also form Work Items for independent outbound calls. The organizational grouping of work items assist agents in understanding the media, namely, calls, IMs, that relate to each other. Organizational groupings are independent if multiple media are active simultaneously.

### Screen Pops

Agents can display Web pages, open programs, or retrieve and display caller information from a database. Agents can create Screen Pops using the **Screen Pops** menu on the System Settings window. Screen Pop can consist of any process or program that an agent starts through one of the commands in the Windows executable or through a registered file type activation.

### Launch Application

With the Launch Application menu, agents can centralize, organize, and launch the program from the Avaya one-X Agent primary window. The **Launch Application** menu lists the labels under **Launch Applications** on the System Settings window.

### Follow Up Work

Agents can follow up a work for the Work Item after an ACD call is complete. In the Follow-Up mode, the system starts the countdown timer when an agent begins to complete the task for the Work Item. When the wrap-up time reaches the threshold limit, the system closes the Work Item and changes the agent status accordingly.

## Caller information

Agents can display the following caller data using the caller information feature:

- Caller ID
- Automatic Number Identification (ANI)
- Dialed Number Identification Service (DNIS)
- User to User information (UUI)
- Prompted Digits

When an agent clicks the deskphone display, the program displays the information, if available, for the corresponding call. The external Computer Telephone Integration (CTI) programs and Interactive Voice Response (IVR) systems place UUI and Prompted digits, in particular to a call record.

## Time-To-Service support

Avaya one-X Agent, with Communication Manager 4.x or later, provides the Time-To-Service (TTS) support. The TTS feature improves the time for IP endpoints to restore services when many endpoints try to register within a short period. This instance occurs during the agent shift changes for Avaya one-X Agent users. You also use the TTS feature for recovering call signaling when the Duplicated Processor Ethernet (DPE) systems undergo a processor switch, or when an active server fails and standby server takes over the control. The TTS feature for extension registration is controlled and administered in the network region to which the extension belongs.

### Note:

If Communication Manager is out of service, Enterprise Survivable Server (ESS) attempts to take control of the port network of the agent deskphone.

Avaya one-X Agent always registers as a non-TTS endpoint in the Desk Phone mode for Communication Manager 5.2 or earlier.

## Alternate Server List

Alternate Server List (ASL) contains the list of gatekeepers and the Communication Manager data. Avaya one-X Agent uses the ASL data if the primary server is unavailable. ASL can also have additional gatekeepers and Communication Manager IP addresses (Alternate Gatekeeper List), which the Avaya one-X Agent client application receives from the server during registration. The system also uses the ASL list when the current server breaks down or if there is a network outage.

## Duplicated Processor Ethernet support

With Duplicated Processor Ethernet (DPE) support, the IP deskphones, supporting TTS, accepts the incoming connection requests from a server on the gatekeeper list. The IP deskphones use this new connection to replace an connection and continue the operation without registering again. With mechanism, Communication Manager can begin a new connection to each deskphones during a server interchange. Therefore, the Communication

Manager allows the deskphones to change to the server changing from the standby to the active state. However, DPE has the following limitations:

- DPE supports for Processor Ethernet (PE) on duplicated servers only for duplicated main servers and ESS servers.
- DPE has new enhancement for TTS IP deskphones only. These deskphones require a new firmware release.

**Note:**

During a video call and sharing of a video file, if a DPE interchange occurs, then the audio in the video file disappears.

## **TTY call handling**

Callers with hearing or speech impairments use special text devices to begin a call into a contact center. These devices are called Teletype (TTY) for the hearing impairment. TTY is also called Telephone Device for the Deaf (TDD). Traditionally, a special type of machine was needed at the receiving end to interpret this text and responses. Avaya one-X Agent, with the Communication Manager PSTN Gateways, provides an integrated TTY conversation support for an agent. TTY interactions displays as normal in the My Computer deskphone calls to the agent, except that Avaya one-X Agent detects the text tones and displays the text tones for agents. Similarly, an agent can type characters and these tones are converted back to descriptor tone packets for Communication Manager gateway to convert to the PSTN tones required.

The TTY interaction appears in a window similar to the IM window. Agents interact with TTY callers with a normal roman alphabet character text and a set of standardized abbreviations available on the TTY interaction window. The agent's messages appear as normal characters during a TTY session. The TTY protocols rely on a significant number of abbreviations. For example, Go Ahead (GA) is the signal that an agent types and waits for a response from a TTY user. We need such human protocols because TTY works on half-duplex, where either parties can send one character at a time transmission.

## **Instant Messaging and presence**

Avaya one-X Agent supports the IM and presence features if your organization has deployed IM and Presence Services within your network. If an agent or an administrator configures the IM setting, the agent can add an IM contact to the list, view agent's presence status, and start IM messages with the contact list. Agents cannot add an IM contact at the desktop, if the administrator prohibits the agent from initiating an IM session with contact that are not defined in Central Management.

With IM, you can communicate with agents in real-time using the Avaya one-X Agent client. The presence feature displays the agent's presence status. Agents can view the agent status, voice channel state, and IM state.

Avaya one-X Agent is interoperable with the IM tools, namely, Avaya one-X Communicator and Microsoft Office Communicator.

## **Video calling and video file sharing**

Agents can start a video call with customers. Avaya one-X Agent supports video communication between Communication Manager endpoints. Agents can also play a video file containing either a demo, tutorial, or a product promotion for the other party.



## Media files sharing

Agents can share media files, namely, video, audio, and image files, with a remote caller's desktop screen. For example, agents can share a video demonstration of a product, or play a video tutorial on how to use a specific product.

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## Contact Management features

This section describes the Avaya one-X Agent features that agents can use for managing contact details.

### Contact List

The Contact List window provides a view of defined contacts and address book, that the agents can add or edit. Each contact record contains a work deskphone number, home telephone number, cellphone number, and postal address. Agents can also import Contact List from Avaya IP Agent and Avaya IP Softphone clients, when agents start the Avaya one- X Agent client application on the desktops for the first time.

If contact center has deployed Central Management, administrators can create and manage these contacts on Central Management and push the contact to the Avaya one-X Agent client. Agents cannot change or add the contact details from the desktop. If administrators provide necessary permission, agents can create any number of contact records, or import a contact from Outlook Contact or from the corporate directory. Agents can also manage these contacts within Avaya one-X Agent, or integrate Avaya one-X Agent with Outlook Contacts or a Lightweight Directory Access Protocol (LDAP) directory. In the Central Management, the Contact List contains records of customers, prospects, vendors, partners, experts. The contacts are grouped for easy access.

### Outlook Contacts

The Outlook Contacts feature supports configuring Microsoft Outlook to include Outlook Contacts in the Avaya one-X Agent contact list. Agents can configure the Exchange Sever address with Avaya one-X Agent and import contacts from Outlook Contacts. With Outlook integration, agents can click a number on Outlook Contacts to dial a call in the Avaya one-X Agent Contact List. Agents can also search any contact in the configured Outlook directory through the Avaya one-X Agent advanced search feature.

### Directory Services

With Directory feature, agents can define and configure a public directory within the Avaya one-X Agent. Public Directory provides access to corporate or public directory services. Agents can also search public or company information using the Avaya one-X Agent advanced search feature.

### Work Log

The Work Log maintains a record of all agents' tasks, one record for each piece of work. The system groups multiple interactions within one piece of work in the same Work Log record. The Work Log record includes incoming and outgoing call, IM interaction records, TTY interaction, and media sharing. The Work Log records for IM and TTY interactions also include transcripts. A single work log contains contact name, deskphone number if a telephonic

interaction, date/time, and interaction duration. Further, each work record contains a dialed Dual Tone Multiple Frequency (DTMF) number, screen pop name, and work code details.

Agents can search or sort Work Log records from the Avaya one-X Agent Work Log window. In addition, agents can add the search import Work Log records from the Avaya IP Agent and Avaya IP softphone clients when an agent starts the Avaya one-X Agent client on the desktop for the first time.

### **Supervisor desktop**

Supervisors use number of different tools to conduct regular service observing and grant access to agents. Avaya one-X Agent provides new features for supervisors to perform these functions through the same Avaya one-X Agent user interface. The new features integrate telephony, presence, instant messaging, media file sharing, agent monitoring, reporting, and Communication Manager supervisor features and provide the features on the Avaya one-X Agent user interface.

#### **Important:**

Ensure that supervisors do not log in to ACD and observe other agents simultaneously. This issue can raise a potential conflict from calls originating from two different sources. Communication Manager does not support certain functions, such as, switching to Auxiliary state when observing an agent.

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## **Other features**

### **Voice Mail**

Avaya one-X Agent provides Voice Mail support for registered extensions to access numbers, mailboxes, or Voice Mail programs. Agents can see a message waiting indication in the Avaya one-X Agent client for the registered extension. With Voice Mail, agents can call a number or execute a program. Agents or system administrators can integrate the Voice Mail system with a telephone system, third-party Voice Mail program, or web-based Voice Mail server.

### **Speed Dial**

With the Speed Dial feature, agents can dial the frequently-dialed numbers. Agents can save the contact numbers of expert agents as shortcuts in the Speed Dial list.

### **Favorites**

With the Favorites feature, agents can save contacts. Further, agents can use the Favorites list to gain quick access, especially when there is a large list of contacts in Contact List.

### **Dialpad**

With the numeric dialpad, agents can send Dual Tone Multi Frequency (DTMF) signals during an active call. Agents can also define a telephone number and use it as a shortcut to make calls through the Dialpad window.

### **Button bar**

With the button bar feature, agents can choose their favorite dialpad and embed favorite dialpad in the Avaya one-X Agent main user Interface.

## Conference call

With the conference call feature, agents can add participants to existing calls. Avaya one-X Agent supports two types of conference calls:

- **Direct Conference:** Agents use direct conference to add a participant to the conference call before speaking to the contact.
- **Consultative Conference:** Agents use consultative conference to conference a call after announcing the conference call.

An agent can add a maximum of five participants to a conference call. Agents can also drag an active call and drop the call into another active call to initiate a conference.

## Call transfer

With the call transfer feature, agents can transfer an active call to other endpoints. An agent can transfer a call using the transfer button and dialing the required extension. Avaya one-X Agent offers two types of call transfer:

- **Direct Transfer:** Agent uses direct transfer to forward an active call to another agent or supervisor without informing about the transfer.
- **Consultative Transfer:** Agent uses consultative transfer to forward an active call to another agent or supervisor after informing about the call.

## Call hold

With the Call Hold feature, agents can put an active call on hold. An agent can answer other calls while the call is on hold. Depending on the system settings, an agent can either put an active call on manual hold or on auto hold. By default, Avaya one-X Agent puts an active call on hold when an agent initiates a new call or reactivates a call on hold.

## Click-to-Dial

With the Click-to-Dial feature, agents can use mouse to dial a formatted telephone number that appear on Web pages. The Click-to-Dial feature operates on Web pages that appear in Microsoft Internet Explorer and Mozilla Firefox.

## Agent status

Agents can set the status to Ready or Auxiliary modes. The Ready state indicates that an agent is available for ACD calls and the Auxiliary state indicates that an agent is not ready for ACD calls.

Agents can control the status and the availability for accepting ACD calls. For example, if an agent wants to leave the station for lunch or need additional time for the last concluded call, then an agent can change the status to unavailable for ACD calls.

### Important:

If Communication Manager is out of service and the agent is in the Pending Auxiliary state, then after ending the call, Avaya one-X Agent reconnects to the ESS network. The agent logs in to ACD with agent status as defined in the System Settings panel.

## Video

Avaya one-X Agent supports video with H.323 telephony protocol in the My Computer and Desk Phone modes. Using video, agents can conduct a face-to-face video communication with

a customer or an agent. An agent can also share media files. The video feature provides the following controls:

- Desktop video controls: start, stop, mute or unmute, display properties and options, and relinquish camera control
- Point-to-point video control
- Bandwidth management and class of service control

### **Citrix Presentation Server**

Citrix Presentation Server allows agents to connect to Avaya one-X Agent located on central servers. An agent can connect to Avaya one-X Agent remotely, from home, airport Internet kiosks, softphones, and other devices outside the corporate network. However, it is actually running on a Citrix Presentation Server hosted in the corporate environment. Citrix Presentation Server supports H.323 softphones for Avaya one-X Agent in the following environments:

- Microsoft Windows Server 2003
- Microsoft Windows Server 2008

#### **Note:**

Avaya one-X Agent does not support the My Computer mode or video when in a Citrix environment.

Classic Citrix Presentation Server services are now packaged into Citrix XenAp.

### **Favorites toolbar**

With favorites toolbar, agents can set the toolbar buttons on the Avaya one-X Agent main window. The favorite buttons provide quick access to options including release a call, changing the answer settings to manual or auto, changing the agent status to ready or auxiliary, making a call to the supervisor directly, assigning a work code to the work item, and dialing a last called number. Agents can define the favorites buttons through the Dialpad window.

### **Phone display**

Avaya one-X Agent, agents can view a 40-character display at the bottom of the Work List window from Communication Manager. Agents can view both call-related and non call-related information including call-prompting digits, VuStats data, and the local date and time display from ACD.

### **Dynamic Hot-desking**

Dynamic Hot-desking is a Central Management enabled feature. Agents can use any seat at any desk and make or receive calls. The system downloads the user settings at the agent's system and authenticates the agent's login credentials against Central Management. The agent need not know the specific extension or password required for this desk. Therefore, for agents to hot-desk, an administrator must configure the agents settings on Central Management.

### **Contact Supervisor**

Agents can contact supervisors directly, if an administrator has configured the agent with Central Management and supervisors are added to the My Supervisors group. The agent can also contact the supervisor on the corresponding skill directly from the contact list, if an agent

has the Supervisor Assist feature and the supervisor skill set is configured on Communication Manager.

---

## Configuration features

### Central Management

- Provides secure and role-based access.
- Provides centralized control of endpoints.
- Allows creating global settings for all users.
- Allows creating parent and child templates. Administrators can assign these templates to agent groups based on user roles and business area.
- Provides integrated options to control agent from accessing various critical client settings.
- Imports multiple agent profiles, with their customized settings from a setup.
- Supports Active Directory authentication.
- Provides options to store agent-created settings and applies the settings in the subsequent agent login.
- Provides options to store and manage predefined location data, and links the desktop client to Communication Manager. Administrators can hot-desk the agents.
- Provides options for administrators to select preferred profile for agents.

### Profiles

Profile is a collection of preconfigured settings and preferences. Agents can select profiles to assign the preconfigured settings to handle calls. Administrators can design profiles for agent groups and deploy the profiles with the installation.

### Importing settings

If Avaya IP Agent or Avaya IP Softphone clients exists on agents' computers, the agents can import the following settings:

- Login credentials
- Contacts
- Work log

### Importing contacts and groups

If a user has contacts or groups saved as a Comma Separated Value (CSV) file in the system, administrator can import the contact or groups to Central Management. The administrator uses the user roles and templates to specify in the CSV file, in addition to any roles and templates contacts or the group members.

### Control on agent permissions

Administrators can set attributes to control agent permissions. Most user interface settings have a ReadOnly attribute. If ReadOnly is set to true, agents cannot change the settings for the corresponding field on the Avaya one-X Agent interface. The ReadOnly attribute works

hierarchically, which means the attribute value set for a parent applies to all child elements. This feature provides granularity to control agent permissions.

### **Alternate Server Address definition**

This feature provides an option to define other server addresses as registration alternatives if registration with the primary server fails.

### **Authorization and carrier code**

This feature supports authorization and carrier code, which is mandatory in some countries. You require authorization and carrier code for making external calls from the Avaya one-X Agent program. A user or an administrator can assign the authorization and carrier code to the Avaya one-X Agent program and define the call types that the program must attach to make external calls.

### **Multiple local area code**

This feature provides the option to specify more than one local area code for a local calling area in the Dialing Rules field of the Avaya one-X Agent program.

### **Interoperable with IM and presence**

This feature supports integration with Avaya one-X Communicator

---

## **Avaya one-X Agent configurations and corresponding features**

Avaya one-X Agent is available with the following configurations:

<b>Config. Type</b>	<b>Configuration options</b>
1.	Telephony only (without Central Management or IM and Presence)
2.	Telephony with Central Management (without IM and Presence)
3.	Telephony with IM/Presence (without Central Management)
4.	Telephony with Central Management and IM and Presence

### **Corresponding features**

The following table displays all features available for the combinations:

<b>Features</b>	<b>Configuration type 1</b>	<b>Configuration type 2</b>	<b>Configuration type 3</b>	<b>Configuration type 4</b>
Administrators can configure agent profiles from a central location.	No	Yes	No	Yes
Agents can use Instant Messaging to communicate with other agents.	No	No	Yes	Yes

Features	Configura tion type 1	Configur ation type 2	Configurat ion type 3	Configur ation type 4
Agents can use Instant Messaging to communicate with outside clients.	No	No	Yes	Yes
Users can publish the presence status and subscribe to presence status of other users in the network.	No	No	Yes	Yes
Supervisors can monitor agents in the group and can control the agents privileges.	No	Yes	No	Yes
Agents can use soft TTY to interact with clients having vocal and hearing impairments.	Yes	Yes	Yes	Yes
Agents can play a video file over established video call.	Yes	Yes	Yes	Yes
Agents can share media files.	Yes	Yes	Yes	Yes
Administrators can use an external API to make and control calls.	Yes	Yes	Yes	Yes
Agents can use an external API to receive notifications from Avaya one-X Agent.	Yes	Yes	Yes	Yes
Agents can log on from any desk (hot-desking).	No	Yes	No	Yes
Agents can use Single Sign-on (SSO) and get authentication for all available features.  <b>Note:</b> SSO works only with Central Management.	No	Yes	No	Yes

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## New in this release

### Support for State Timer

Avaya one-X Agent supports the agent state timer for Ready, After Call Work, and Auxiliary states. State Timer is a visual representation of the time an agent spends in a particular state. State Timer displays the start time and the mode name in the Work Log panel.

### Support for new agent state

Avaya one-X Agent supports the After Call Work (ACW) as an agent state. Agents use the ACW state to indicate that agent is working on task related to previous call.

### Capture work log of agent states

Avaya one-X Agent supports the work log of agent state changes, such as, Auxiliary, ACW, Ready, Agent Login, and Agent Logout.

### Support for skipping the Welcome screen

Avaya one-X Agent provides an option to skip the Welcome screen and proceed to the Station Login if the agent saved the station credentials on the earlier log in.

### Option to cancel the log in button during Agent Login

Avaya one-X Agent supports canceling the log in session if agent enters an incorrect agent ID or password. Agent can click the **Cancel** button to end the session.

### Support for Windows 8 32-bit and 64-bit

Avaya one-X Agent supports Windows 8 32-bit and 64-bit operating systems.

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## Feature comparison between Avaya one-X Agent and Avaya IP Agent

The following table summarizes the operational and functional changes in Avaya IP Agent and Avaya one-X Agent. The intent of this table is to identify changes the way an agent starts an functionality or changes to functional behavior.

A “Y” indicates that the corresponding item is available in the specific release.

Functionality	Avaya one-X Agent	Avaya IP Agent	Notes
New Avaya Work Item normalizing user interface paradigm	Y		Users need not have detailed knowledge of Communication Manager specific ACD and deskphone button operation, especially to Agent States. The system uses the user interface paradigm across the contact center line of routing servers, such as, Communication Manager, Communication Manager, Interaction Center, and Proactive Contact.
Only context appropriate actions are available	Y		Addresses actions appropriate for the program.



Functionality	Avaya one-X Agent	Avaya IP Agent	Notes
Eliminates the legacy Windows Registry as the source of configuration parameters	Y		The system uses the Windows registry to store the configuration in the XML files in the user's Application Data folder.
Co-resides with other Avaya Soft Phones	Y		Agents can install Avaya IP Agent or IP Softphone and Avaya one-X Agent on the same computer. Agents can also install the Avaya one-X Agent and Avaya one-X Communicator programs without video on the same computer, but cannot use both the programs simultaneously.
MSI Installation		Y	Avaya IP Agent includes the MSI compliant Silent Install and support for command line parameterization and execution.
Configuration Utility	Y	Y	Because the system stores the configuration as XML, agents need not have the export tool.
Launch Tool Bar	Y	Y, maximum of 20 on Fixed Windows Toolbar	Avaya one-X Agent has a single click drop-down menu selection for an unlimited number of external program accesses.
Secure Desktop	Y	Y	
Infrastructure support for Location Data	Y		
Encrypted Signaling Link	Y	Y	Communication Manager Release 2.x and later.
Encrypted Voice in My Computer	Y		Communication Manager 3.x and later.
Communication Manager Enhanced Dial Plan	Y	Y	
Crash Dump Tool		Y	

Functionality	Avaya one-X Agent	Avaya IP Agent	Notes
60 Agent Greetings for each Agent	Y	Y	No limit set for Agent Greetings in Avaya one-X Agent.
High Definition Audio	Y	Y	
Bluetooth Headsets	Y	Y	This feature is available only for media. The feature does not support Blue Button control.
Web Dialer Enhancements	Y	Y	This feature supports configurable strings to highlight Web dialer.
Compatibility with Communication Manager No-Hold conference and transfer	Y	Y	User of Avaya one-X Agent do not require knowledge of Communication Manager button sequences.
Instant Messaging	Y	Y	Avaya IP Agent only integrates with Avaya SIP Enablement Services IM, without agent controls.
Screen Pops	Y	Y	Avaya one-X Agent does not support Dynamic Data Exchange (DDE) screen pops.
Advanced Segmentation Client	Y	Y	With the Advanced Segmentation feature, you can use up to 32 characters of user-to-user (UUI) information as a parameter to open an universal resource locator (URL) Screen Pop.
Shared Control with CallMaster IV and V		Y	
Automatic RTP Codec Negotiation	Y		
Configurable Event and Error Logging	Y		Avaya one-X Agent has four levels of logging. Avaya IP Agent is All-Off or All-on.
Improved LDAP protocol support for Public Directory Searches	Y		Avaya IP Agent supports Dial Plan. However, Avaya one-X Agent has more dial plans than Avaya IP Agent .

Functionality	Avaya one-X Agent	Avaya IP Agent	Notes
Connectivity	My Computer, Desk Phone, Other Phone	Road Warrior, Shared Control of Avaya Telephone through the Server, Telecommuter	Agents can add any number of tele-commute numbers.  <b>Note:</b> The connection modes are same with different names.
Callmaster VI Endpoint		Y	
Shared Control through Avaya Proprietary Telephone		Y	The shared control function works only with older versions of the Avaya IP Deskphones.
Virtualization Support	Y		The Avaya one-X Agent program supports any host Operating System, whether the host is virtual or physical. The program supports the Desk Phone mode and Other Phone mode by default. But, in the My Computer mode, the program supports only when the endpoint sound system or device is local to program execution hardware.
Avaya Video Telephony Services-H.323	Y		Communication Manager requires Communication Manager 4.x or later with separate video licenses and Web camera.
Alternate/Mini User Interface		Y	
Phone Directory	Y	Y	The phone directory includes dialing from a directory.
Bridge Appearances support		Y	

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## Product compatibility

For the latest and most accurate compatibility information, go to [www.support.avaya.com/CompatibilityMatrix/Index.aspx](http://www.support.avaya.com/CompatibilityMatrix/Index.aspx).

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## Supported languages for Avaya one-X Agent

Avaya one-X Agent supports the following languages on the client application user interface.

- Simplified Chinese
- Traditional Chinese
- Dutch
- French
- German
- Italian
- Japanese
- Korean
- Brazilian Portuguese
- Russian
- Spanish (Latin)

# Chapter 3: Security

Avaya one-X Agent provides agents with secure implementation. The system stores passwords in an encrypted format.

## **Silent installation**

With the silent installation mode, users can use the standard install package through command line interface (CLI) without the need of a graphical user interface. The system controls the installation options through parameters on a command line.

## **Secure connections through firewall**

Avaya one-X Agent supports connections through a third-party, external, and VOIP-aware firewall.

## **User authentication through the enterprise directory**

Avaya one-X Agent integrates with the existing enterprise directory. The Avaya one-X Agent program uses the Active Directory or LDAP user records for authentication and authorization.

## **Denial of Service protection**

Avaya one-X Agent supports protection against Denial of Service attacks.

## **Support for server load balancing across gatekeepers**

Administrators can distribute the registration and usage of Communication Manager across multiple C-LAN circuit packs within a network region, therefore increasing the performance and reliability for all IP endpoints.

## **Secure operation**

Use the Microsoft Windows Desktop applications with the most restrictive user privileges. In particular, the Avaya one-X Agent program with unrestricted administrator privileges. Ensure that Avaya one-X Agent has write access to the current user documents folder in a day-to-day operation. The user documents folder is `\Documents and Settings\<user>\Application Data\Avaya\Avaya one-X Agent\`. The user can change the Current User registry hive.

### **Note:**

Agents or other persons using extensions in remote locations must not use the Avaya one-X Agent feature for emergencies because IP endpoints do not dial or connect with local emergency services when dialing from remote locations.

### **Caution:**

Avaya is not responsible or liable for any damages resulting from misplaced emergency calls made from an Avaya endpoint. By using this product, you have read this advisory and agree to use an alternative telephone to dial all emergency calls from remote locations.

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## Additional security information

For information on additional security for all Avaya products, including Avaya one-X Agent and the Avaya components, see the Application Notes or Technical Notes on the Avaya Support website at [www.support.avaya.com](http://www.support.avaya.com).

You can find information about the following:

- Avaya Product Security Vulnerability Response Policy
- Avaya Security Vulnerability Classification
- Security advisories for Avaya products
- Software patches for security issues
- Reporting a security vulnerability
- Automatic email notifications of security advisories

For additional information about security practices, see [http://www.nsa.gov/ia/guidance/security\\_configuration\\_guides/index.shtml](http://www.nsa.gov/ia/guidance/security_configuration_guides/index.shtml).

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## Port utilization

For information about port matrix, see the Avaya one-X Agent port settings on the Avaya Support website at [www.support.avaya.com](http://www.support.avaya.com).

# Chapter 4: Licensing requirements

Avaya controls Avaya one-X Agent and the optional Avaya Video Telephony Solution (AVTS) through licenses. Avaya one-X Agent is available with license types to match the customer contact interaction management requirements.

With the Agent license type, agents can use all capabilities, including video and other connection modes. The connection modes are My Computer and Other Phone with other deployment options and program virtualization. With the Supervisor license type, supervisors can monitor quality and perform contact center management. If a user does not intend to sign in to the ACD as an agent, but wants to use the features of Avaya one-X Agent, the user can use a Non-Agent license type.

## Avaya one-X Agent features by license type

Feature	Agent	Supervisor	Non-Agent
Desk Phone	✓	✓	✓
My Computer	✓	✓	✓
Other Phone	✓	✓	✓
Screen Pop	✓	✓	✓
Agent Greetings	✓	✓	
Click-to-dial	✓	✓	✓
Outlook Integration	✓	✓	✓
Internet Explorer and Mozilla Firefox Integration	✓	✓	✓
Virtualization	✓	✓	✓
Avaya Video Telephony Solution Integration (Requires a video license)	✓	✓	✓

## Licensing requirements

Follow-up Work	✓	✓	
Caller Data	✓	✓	✓
VuStats	✓	✓	
Hot Desking	✓	✓	✓
LDAP Integration	✓	✓	✓
Drag-and-Drop Transfer	✓	✓	✓
Drag-and-Drop Conferencing	✓	✓	✓
Work Log	✓	✓	✓
Contact List	✓	✓	✓
Launch Application	✓	✓	✓
Observe agent		✓	
Quick Alert		✓	
Coach		✓	
Barge In or Listen In		✓	
Service Observe		✓	



## Index

---

### A

additional information .....	<a href="#">30</a>
agent greetings .....	<a href="#">14</a>

---

### C

call and contact features .....	<a href="#">14</a>
caller information .....	<a href="#">14</a>
configuration .....	<a href="#">13</a>
configuration features .....	<a href="#">21</a>
contact center .....	<a href="#">14</a>
contact management .....	<a href="#">17</a>

---

### D

directory .....	<a href="#">17</a>
DPE support .....	<a href="#">14</a>

---

### F

feature comparison .....	<a href="#">24</a>
feature table .....	<a href="#">22</a>
features .....	<a href="#">18</a>
call hold .....	<a href="#">18</a>
conference call .....	<a href="#">18</a>
contact list .....	<a href="#">18</a>
dialpad .....	<a href="#">18</a>
speed dial .....	<a href="#">18</a>
video .....	<a href="#">18</a>
voice mail .....	<a href="#">18</a>
call transfer .....	<a href="#">18</a>
features for various configurations .....	<a href="#">22</a>
follow-up work .....	<a href="#">14</a>

---

### I

introduction .....	<a href="#">13</a>
--------------------	--------------------

---

### L

languages supported .....	<a href="#">28</a>
launch application .....	<a href="#">14</a>
legal notices .....	<a href="#">2</a>
licensing .....	<a href="#">31</a>

call hold .....	<a href="#">31</a>
call transfer .....	<a href="#">31</a>
conference call .....	<a href="#">31</a>
contact list .....	<a href="#">31</a>
dialpad .....	<a href="#">31</a>
speed dial .....	<a href="#">31</a>
video .....	<a href="#">31</a>
voice mail .....	<a href="#">31</a>

---

### M

management .....	<a href="#">29</a>
------------------	--------------------

---

### N

new features .....	<a href="#">23</a>
notices, legal .....	<a href="#">2</a>

---

### O

outlook contacts .....	<a href="#">17</a>
overview .....	<a href="#">13</a>

---

### P

port utilization .....	<a href="#">30</a>
product compatibility .....	<a href="#">27</a>

---

### R

related documentation .....	<a href="#">7</a>
-----------------------------	-------------------

---

### S

screen pops .....	<a href="#">14</a>
security .....	<a href="#">29</a> , <a href="#">30</a>
support .....	<a href="#">10</a>
contact .....	<a href="#">10</a>

---

### T

training .....	<a href="#">10</a>
translated languages .....	<a href="#">28</a>
TTS support .....	<a href="#">14</a>
TTY support .....	<a href="#">14</a>

---

<b>U</b>	
user types .....	<a href="#">13</a>

---

<b>V</b>	
vustats .....	<a href="#">14</a>

---

<b>W</b>	
warranty .....	<a href="#">11</a>
work item .....	<a href="#">14</a>
work log .....	<a href="#">17</a>