Avaya Aura® Call Center Elite Multichannel Desktop User Guide

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Contents

Chapter 1: Introduction

Purpose

The purpose of this guide is to provide information about Avaya Aura® Call Center Elite Multichannel Desktop and also how to use the application to receive, view, and respond to voice and multimedia work items.

This guide is intended primarily for contact center agents who use Call Center Elite Multichannel Desktop to receive voice and multimedia work items.

Chapter 2: Overview

Call Center Elite Multichannel Desktop, a flagship desktop application of Avaya, is designed and developed for ease of operation in contact centers. The application presents voice and multimedia work items to an agent.

The architecture of Call Center Elite Multichannel Desktop is based on the integration and interaction of various plug-ins. This helps agents to perform all agent-specific operations on a single desktop screen.

As an agent, without leaving the screen, you can:

- Receive and reply to work items from customers who make contact using:
    - Telephone
    - Email
    - Web Chat
    - Google Hangouts
    - Simple Message Service (SMS)
- Record notes related to a work item or a call session.
- View the conversation history of a customer that you are handling.
- Search the directory for a phone number or an email address.
- View the real time statistical information about your work performance.
- Monitor the telephone activity of other agents in a contact center with whom you work closely.
- Handle work items efficiently by using the autotext, spell checker, and printing options in Call Center Elite Multichannel Desktop.

Additionally, you can access external applications, such as Microsoft Internet Explorer within the Desktop interface so that you do not have to minimize the Desktop application window. You can also configure the application to start external applications in a separate window.

In Call Center Elite Multichannel Desktop, you receive multimedia work items, such as email, SMS, and Chat messages blended with inbound telephone calls. All these work items are stored in different queues based on the type of work item and priority. From these queues, the work items are distributed to an agent with relevant skills and knowledge.

Call Center Elite Multichannel Desktop offers a complete range of telephony functions. Using these functions, you can:

- Make a call.

- Receive a call.
- End a call.
- Hold/Unhold a call.
- Divert a call.
- Send the Dual Tone Multi Frequency (DTMF) tones.
- Transfer a call.
- Conference a call.
- Drop contacts from a conference call.
- Forward all incoming calls to voice mail or another extension.

Call Center Elite Multichannel Desktop distributes internally held customer records to you and prompts you to initiate contact with customers by phone.

Plug-ins

Call Center Elite Multichannel Desktop is based on the integration of different plug-ins. Based on the settings made during the configuration, the plug-ins are loaded when the application starts. The plug-ins interact with each other to provide a wide range of voice and multimedia functionality to agents.

You can configure Call Center Elite Multichannel Desktop through a local `.ini` file or through a Configuration server. For more information, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Desktop Utility

The desktop plug-in is based on the configurations in the programs configured for the specific media store. The desktop plug-in acts on the phantom call action and the agent state after the interaction closes.

The desktop plug-in is specific to the multimedia contacts that are distributed through Avaya Communication Manager using phantom calls.

History

The history plug-in displays the history of agents and customers. The agent history includes information about:

- Old work items that you have handled.
- Work items that you are currently handling.
- Your conversations with a customer.

The customer history includes information about the conversation and interaction details of a customer with whom you are currently interacting.

You can view the history of a customer without an active work item by searching the customer in the Directory plug-in. If the customer is not present in the Directory plug-in, you can view the history by entering the email ID or exact phone number of the customer in the **Customer ID** field of Customer History search panel.

Spell Check

The Spell Check plug-in checks the spelling in a work item.

AutoText

This plug-in provides **AutoText** and **Work Codes** buttons on the toolbar. The AutoText plug-in:

- Inserts predefined text in your current work item to save your typing time.
- Assigns a work code to a work item.

Directory

The Directory plug-in displays the contact information stored in a contact database. You can search a database for a contact based on first name, last name, full name, or phone number.

If a contact is available, you can dial the searched contact or transfer an active call to the searched contact, or add the searched contact in an active conference.

You can view the history of a customer without an active work item by searching the customer in the Directory plug-in.

Printing

The Printing plug-in prints the information from a work item, session notes, and work item notes.

Print button is provided on the toolbar to use this plug-in.

> **Note:**
>
> In the Desktop interface with Ribbons, the Print option is only available in the **File** menu

IDS View Client

The IDS View Client plug-in helps to connect to the IDS server with or without Multicast IP. The connection to the IDS server is required for the Wallboard, Presence, Dashboard, and Real-time reporting.

Call Recording

The Call Recording plug-in records call with a customer and replays the recorded calls. In Call Center Elite Multichannel Desktop, the recording functionality is provided by integrating the Avaya Contact Recorder (ACR) application. For more information about ACR, see documentation on the Avaya Support website: http://support.avaya.com/.

You can use the recording buttons on the Voice toolbar to start and stop recording a call. For more information, see Voice toolbar on page 96.

Recorded calls are stored on the ACR server, based on the date, agent name, customer, record length, and Vector Directory Number (VDN). In Call Center Elite Multichannel Desktop, you can search the recorded calls based on the date, agent name, customer, and VDN.

You can also schedule a call recording, enter comments to a call recording, and give score to a call recording.

Supervisor can also record and replay the calls that agents in their group are handling.

Rules

Using the Rules plug-in, a user can create rules that automatically perform actions on the call events to meet certain criteria. For example, a user can create a rule to divert calls from a specific phone number to voice mail.

Work Item Creation

The Work-Item Creation plug-in helps the agents to create new outbound work items for Email and Preview Contact.

Work Item Notes

The Work Item Notes plug-in displays work item related notes that you create while interacting with a customer. The Work Item Notes window displays notes only for a work item that is currently open.

You can create more than one note for a single work item and categorize these notes in the Interaction, Conversation, and Parents groups.

Work Item Alert

The Work Item Alert plug-in alerts you when a new work item arrives. The system displays an alert window that contains the contact details.

Wallboard

The Wallboard plug-in displays real-time and statistical information of logged in agents, VDNs, queues, and skills.

Python Breakout

The Python Breakout plug-in helps in the development of applications in Call Center Elite Multichannel that can invoke IronPython scripts when a specific event occurred in the Desktop application.

Time in AUX

The Time in AUX plug-in adds a counter to the status bar of the Desktop application. The counter indicates how much time you spent on any of the following working modes:

- Auxiliary
- Available
- After Call Work

Microsoft Dynamics CRM

The Microsoft Dynamics CRM plug-in helps you to:

- View, edit, and use Microsoft Dynamics CRM in Call Center Elite Multichannel Desktop.
- Dial from any Microsoft Dynamics CRM Web page that displays one or more phone numbers.
- Receive Microsoft Dynamics CRM activities as part of your daily tasks.
- Search and dial any Microsoft Dynamics CRM account or contact from the Call Center Elite Multichannel directory.

An administrator creates rules that automatically perform actions on Microsoft Dynamics CRM call events.

Contact Management

The Contact Management plug-in displays and manages the contact information in the directory. You can add, change, and delete contact information in a directory.

An administrator can customize the field names used for displaying contact details.

External Application Container

The External Application Container plug-in opens an external application, such as Microsoft Internet Explorer (IE) in Call Center Elite Multichannel Desktop.

External Application Execute

The External Application Execute plug-in starts an external application, such as Notepad, in Call Center Elite Multichannel Desktop and transfer the information from the incoming work item to this external application. The information from a work item is stored in an XML file, which the external application uses to display the information.

The external application is opened independently of the Desktop application.

Save Close Document

The Save Close Document plug-in saves new and edited data to the ASContact database. The ASContact database acts as a contact directory in Call Center Elite Multichannel Desktop.

Custom Buttons

The Custom Buttons plug-in creates custom buttons that you can use to perform various call related actions.

This plug-in works in conjunction with the Rules Plug-in. In the Rules window, you can associate a rule to a custom button. When you click a custom button, the rule associated with that button is executed.

Quick Dial

The Quick Dial plug-in creates quick dial buttons that you can use to quickly dial the phone number of a customer. Quick dial buttons save your time to enter a phone number or search a contact in a directory.

The system displays quick dial buttons on the application toolbar at a specified location.

Enhanced Dial

The Enhanced Dial plug-in enhances the dialing for you by adding your information in the dial, in a customized format. The enhanced information is displayed in every new outbound call, transfer call, or a conference call that you make.

Customized Forms

The Customized Forms plug-in adds one or more work forms to multimedia work items. These forms appear on the additional tab next to a work item tab.

An administrator creates these forms in Call Center Elite Multichannel Control Panel.

Close Suspend Work Item

The Close Suspend Work Item plug-in suspends a work item so that the work item can be presented to another agent at a later date. While suspending the work item, you can specify the preferred agent to whom the work item must be presented. You can also close the work item and record its outcome.

Preview Contact

The Preview Contact plug-in contacts a customer using an outbound call, email, or Short Message Service (SMS) for a campaigning purpose.

The Preview Contact media store generates work items from a database. These work items are delivered to you to initiate an outbound contact.

Simple Messaging

The Simple Messaging plug-in receives simple messaging work items.

Chat Welcome Message

The Chat Welcome Message plug-in sets a chat welcome message. The system displays the chat welcome message to a customer when you accept the chat work item from the customer.

Email

The Email plug-in receives email work items.

Email Template

The Email Template plug-in creates an outbound email using the default email templates. The text and attachments in an email template are automatically added in an outbound email that you are replying or forwarding to a customer.

Telephony

The Telephony plug-in connects to Avaya Aura® Communication Manager.

Presence

The Presence plug-in monitors the telephone activity of other agents in a contact center.

Using the Presence plug-in, you can also view the work item history of any agent.

Session Notes

The Session Notes plug-in records notes for your day-to-day activities. These notes are not specifically related to a work-item.

Voice

The Voice plug-in helps you to make, answer, hold, unhold, transfer, conference, and end calls. You can also send the DTMF tones to a customer who is using Interactive Voice Response (IVR) system. For more information, see Sending DTMF tones on page 62.

The Voice toolbar is available on the Desktop interface to perform voice functions.

User

The User plug-in helps you to log in and log out of skills, use advance logging functionality, change work mode, select reason codes, access voice mail, and forward calls to another agent.

The User toolbar is available on the Desktop interface to perform user actions.

Supervisor

The Supervisor plug-in helps supervisors to monitor the call activity of an agent or group of agents. As a supervisor, you can:

- View or change the current state of an agent.
- Join a call as an observer in which you can hear the conversation without an agent and customer knowing that you have joined the call.
- Join a call as a coach in which you and an agent can communicate with each other without the customer knowing that the agent is interacting with you.
- Join a call as a participant in which an agent, a customer, and you can communicate with each other.
- Log out an agent.

Using the Supervisor plug-in, you can also view the work item history of any agent.

Media Client

With the Media Client plug-in, an agent can:

- Log on to a station using the **Station Login** button on the Call Center Elite Multichannel Desktop.
- Mute and unmute a voice call using the **Mute Audio** and **Unmute Audio** buttons on the Call Center Elite Multichannel Desktop.
- Select specific input and output devices.

In addition, the built-in Media Client feature provides the following functionalities:

- Works with a separate license.
- Provides a built-in soft phone in H.323 mode.

Note:

By default, this plug-in is disabled. For information about how to enable this plug-in, see *Administering Avaya Aura® Call Center Elite Multichannel*.

Multimedia suite

Call Center Elite Multichannel Desktop interacts with Media Director, Media Proxy, and the following media stores and media gateways for multimedia functionality:

- Email Media Store
- Preview Contact Media Store
- Simple Messaging Media Store
- Web Chat Gateway
- Short Message Service (SMS) Gateway
- Google Hangouts Gateway

For more information about how work items are generated and delivered to agents, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Call Center Elite Multichannel licensing

An administrator must buy licenses according to the requirements to set up the contact center using Call Center Elite Multichannel.

Avaya provides separate licenses for all the supported features. An administrator must buy a license key with a sufficient number of run-time licenses for each agent who will use the Desktop application.

The following table lists the Call Center Elite Multichannel features and the corresponding licenses:

Feature	License name
Voice	VALUE_CCEM_VOICE
Multimedia	VALUE_CCEM_MULTIMEDIA
Microsoft Dynamics CRM	VALUE_CCEM_MSCRM **Note:** This license key covers unlimited run-time licenses.
Media Client	VALUE_CCEM_MEDIACLIENT

Call Center Elite Multichannel license requirements

In Call Center Elite Multichannel, License Director is a central repository for all Call Center Elite Multichannel licenses. License Director polls the required licenses from the WebLM server that an administrator configures in Call Center Elite Multichannel Control Panel.

For more information about how to add a license key to License Director, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Error logging

Call Center Elite Multichannel Desktop logs error information relating to its operation in different log files on a local system or on the TTrace server. The application stores the log information using the Avaya Common Logging format.

On a local system, Call Center Elite Multichannel Desktop creates a new log file every day. The name of the error log file clearly identifies the application and the day of the week, for example, `MonASGUIHost.log`.

After the log file size reaches the limit specified in the configuration, the system archives the log file and creates a new log file.

Note:

The system stores only one log file in an archive. If a second error log file reaches the specified maximum size, the system overwrites the previously archived log file.

Error logging requirements

For logging on the TTrace server, you must provide TTrace parameters, such as TTrace server and TTrace server port in the Desktop configuration file and set the Error Log Mode parameter to 2. By default, the Error Log Mode parameter is set to 1, which instructs Call Center Elite Multichannel Desktop to create logs on a local system.

For more information about the TTrace logging, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Error logging levels

The types of errors that the system logs in a local error log file or on the TTrace server are determined by the logging level defined in the Desktop configuration file or in the Trace system.

The following table lists the error logging levels:

Error logging level	Description
0	No error logging takes place.
1	Logs fatal, major, minor, and trace information.
2	Logs fatal, major, and minor errors.
4	Logs fatal and major errors.
8	Logs only fatal errors.

Each file records the selected logging level as well as the date, time, location, and description of every error that occurs.

The system saves each error log file in the current working folder of Call Center Elite Multichannel Desktop, which is the same folder where the application executable is available.

Diagnostic testing error logging

You can use a custom log level to create log files that do not overwrite each other, every time the maximum file size limit is reached. To set the logging level, see Setting the diagnostic error logging level on page 20.

Caution:

To prevent creating multiple log files that consume your available disk space, you must use this error log level only when you perform diagnostic testing.

Setting the diagnostic error logging level

Procedure

Set the error logging level by adding *128* to one of the default logging levels.

For example, in the configuration file, if you specify `Error Log Level=129`, the new error log files are created that contains error information, related to fatal, major, minor, and trace errors.

Each new log file name is unique and is based on the date, year, month, and day format, with time in hours, minutes, and seconds format. For example, `YYYYMMDDHHMMSSASMediaDirector.log`, where,

YYYY = Year	MM = Month	DD = Day
HH = Hour	MM = Minute	SS = Second

For information on error logging levels, see Error logging levels on page 19.

Chapter 3: Desktop interface

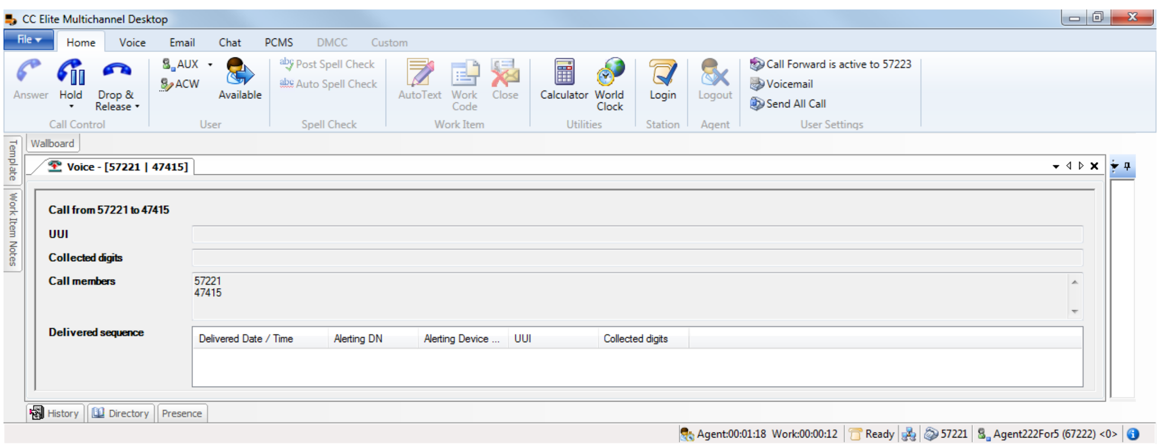
The following are the two options for viewing the Call Center Elite Multichannel Desktop interface:

- Desktop interface with Ribbons
- Desktop interface with Menus

Desktop interface with Ribbons

This interface contains UI controls, such as ribbon tabs, panels, and status bars. You can use the UI controls to manage various types of work items.

The following is the Call Center Elite Multichannel Desktop interface with Ribbons.



This interface consists of a **File** menu and the following Ribbon tabs:

- Home
- Voice
- Email
- Chat
- PCMS
- DMCC
- Custom

Button groups

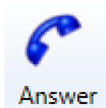
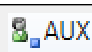
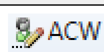
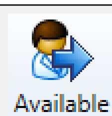
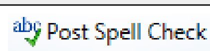
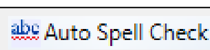
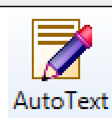
Button group	Button name	Icon	Description	Present in Ribbon tab
Call Control	**Answer**		Answers an active work item.	All
	Hold		Puts an active voice call on hold. You must use the Hold option when you want to transfer the call, conference the call, or discuss a customer query with your supervisor.	
	Drop & Release		Drops the current voice call.	
User	**AUX**		You can change your work mode to **Auxiliary** (AUX). The AUX mode indicates that you have taken a break, for example, lunch break.	All
	ACW		You can change your work mode to **After Call Work** (ACW). The ACW mode indicates that you are doing an after call work, such as updating notes or filling forms.	
	Available		You can change your work status to **Available** to receive work items.	
Spell Check	**Post Spell Check**		A single button to check the spelling in a work item, work item notes, and session notes. The Spell Check feature is powered by Keyoti RapidShell .Net Spell Checker, Keyoti Inc. For more information, go to http://www.keyoti.com.	All
	Auto Spell Check		A setting that forces Call Center Elite Multichannel Desktop to automatically check the spelling of words as you type the text inside the selected window.	
Work Item	**AutoText**		Displays the autotext entries that an administrator has configured in Control Panel.	All

Table continues…

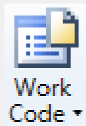
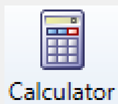
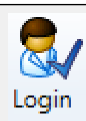
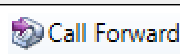
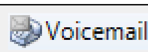
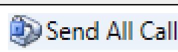
Button group	Button name	Icon	Description	Present in Ribbon tab
	Work Code		Displays the work codes that an administrator has configured in Control Panel.	
	Close		Closes the work item and records the outcome of the work item.	
Utilities	**Calculator**		Displays the inbuilt calculator for mathematical calculations.	Home
	World Clock		Displays two clocks where one clock shows the current time on the system of the agent and the other clock shows the time configured according to the requirement of the agent.	
Agent	**Login/ Logout**		Logs in or logs off the agent to the Desktop application.	Home
User Settings	**Call Forward is not active/ Call Forward to <number>**		Forwards an active voice work item to a number that you specify in the **Forward to** field.	Home
	Voicemail		Displays the voice mail messages that you received.	
	Send All Call		Forwards all voice work items to a predefined destination.	
Station	**Login/ Logout**		Registers or unregisters an Agent Station on Communication Manager. Call Center Elite Multichannel Desktop displays this button only when the Media Client plug-in is enabled.	Home
Audio	**Mute/ Unmute**		Mutes or unmutes a call.	Voice
Call Outbound	**Dial Field**		Displays the phone number of a contact. When you click the **Dial** pad, the system dials the phone number displayed in this field.	Voice

Table continues…

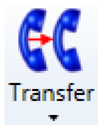
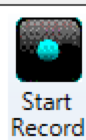
Button group	Button name	Icon	Description	Present in Ribbon tab
	Dial		When you click the **Dial** pad, the system dials the phone number displayed in the **Dial** field.	
	Send DTMF Tones		Sends Dual Tone Multi Frequency (DTMF) tones required for an Interactive Voice Response (IVR) system, such as telebanking and voice mail prompts.	
Transfer	**Transfer**		Transfers an active voice call to another number. For example, another agent or a supervisor. The following are the available options for transfer: • **Blind Transfer** • **Consult Transfer** • **Complete Transfer** • **Abort Transfer**	Voice
	Conference		Adds a contact to an active conference. The following are the available options for conference: • **Blind Conference** • **Consult Conference** • **Complete Conference** • **Abort conference**	
Call Recording	**Start Record**		Starts recording a voice call.	Voice
	Stop Record		Stops recording a voice call.	
	Replay Recordings		Opens the webpage of the Avaya Contact Recorder application. After logging in to the Avaya Contact Recorder application, you can search and replay the recorded calls.	
Quick Dial	**<A user-specified name>**		Quickly dials the phone number of the customer for which the quick dial button is configured.	Voice

Table continues…

Button group	Button name	Icon	Description	Present in Ribbon tab
New	**New Email**		Creates new outbound work items and child work items for Email.	Email
Suspend	**Suspend WorkItem**		Suspends a work item for Email to present it to another agent at a later date.	Email and PCMS
Reply and Forward	**Reply**		Opens a new tab for you to reply to an email that you receive from a customer. In the new email tab: • The **Subject** field displays the subject from an email that you received. • The **To** field displays the email address of a customer from whom you received the email. • The email body displays two sections, separated with a separator. You can drag this separator to resize the sections. The lower section displays the original email. You can enter your response to the customer query in the upper section. The arrow button (/) on the right side of the **From** field shows and hides a part of the information from the upper section. The purpose of hiding the information from the upper section is to provide larger area for the original email. **Note:** The button is enabled only when you have an active email work item.	Email
	Reply All		Opens a new tab for you to reply to the email that you receive from a customer. The email is sent to all the email addresses mentioned in the original email. The functionality of this option is same as the **Reply to Email** option. The **To**, **Cc**, and **Bcc** fields show the same email address from the original email.	

Table continues…

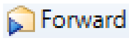
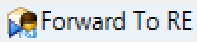
Button group	Button name	Icon	Description	Present in Ribbon tab
	Forward		Opens a new tab for you to forward this email to another person. For example, supervisor or another contact. You can enter the email addresses in the blank **To**, **Cc**, **Bcc** fields to forward this email.	
	Forward To RE		Opens a new tab for you to send an email to a Resident Expert. You must send an email to a Resident Expert when you are unable to understand a customer query or when advance skills are required to resolve a customer query. In the new email tab: • The **To** field changes to a drop-down list. You can select the email address of a Resident Expert from the drop-down list. • The **Cc**, **Bcc**, and **Subject** fields are disabled for editing. • You can select the **Reply directly to customer** check box, so that the Resident Expert can send the email to the customer.	
Actions	**Send As Default**		Sends a new active email or an active email that you are replying to or forwarding to a customer or a Resident Expert. After you send an email from the Desktop application, the tab of the original email work item becomes active. This button is enabled only when the tab of an email that you are sending, replying, or forwarding is active. When you click the upper part of this button, the system determines the outgoing email format based on the queue setting in EMS. When you click the arrow on the lower part of this button, you see the following options: • **Send as Plain Text** • **Send as HTML**	Email

Table continues…

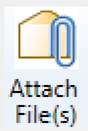
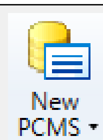
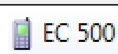
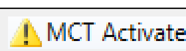
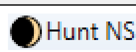
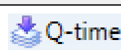
Button group	Button name	Icon	Description	Present in Ribbon tab
			When you perform one of the following steps, all outbound emails are sent in HTML format irrespective of the format of inbound emails: • In the `ASEmailMediaStore.ini` file, set the Send Email As HTML Format parameter to True. • In Call Center Elite Multichannel Control Panel, edit an EMS queue and select the **Send Email As HTML Format** check box. However, an outbound email is sent in Plain Text when you explicitly select the option to send the email in Plain Text.	
	Attach File(s)		Opens the file Open dialog box to select a file that you want to attach to an email. The **Attachment** field displays all the files that you have attached. To remove an attached file, you can select a file and press `Delete`. You can also right-click a file and select **Remove attachments**.	
	Save Email		Saves an email.	Email
New	**New PCMS**		Creates new outbound work items and child work items for Preview Contact.	PCMS
DMCC Buttons	**EC500**		Administers the Extension to Cellular button on a deskphone. When you enter a value, the system displays the **Timer** subfield where n is the default value. If you leave the default value unchanged, the system excludes the timer state. To include an Extension to Cellular timer state for the administered feature button, set the **Timer** subfield to `y`. After you include the timer state, the Extension to Cellular user can activate a one-hour timer to temporarily disable the feature.	DMCC
	MCT Activate		Sends a message to the Malicious Call Trace (MCT) control extensions so that the user can	

Table continues…

Button group	Button name	Icon	Description	Present in Ribbon tab
			trace a malicious call. MCT activation also starts recording the call if your system has an MCT voice recorder.	
	MCT Control	MCT Control	Provides control of a malicious call trace request. When the user presses the MCT Control button, the system displays the called party information. Pressing the button again displays the rest of the trace information. The MCT controller must dial the MCT Deactivate feature access code to release control. After the user becomes the MCT controller, the system stops notifying any other MCT Control extensions of the MCT request.	
	SAC	SAC	Temporarily directs all incoming calls to coverage, regardless of the assigned call-coverage redirection criteria.	
	Call FWD	Call FWD	Activates forwarding of multimedia calls as multimedia calls, not as voice calls.	
	Auto Dial		Sets the specified Dial Number as a favorite.	
	Stroke count	Stroke count 0	Sends a message to CMS to increment a stroke count number.	
	Work codes	Work codes		
	Account	Account	Opens a screen where the user can enter Call Detail Recording (CDR) account codes. With the CDR account codes, the system can associate and track calls according to a particular project or account number.	
	Vu-Stats		Opens a screen where the user can specify a display format for the statistics. If you assign a different VuStats display format to each button, the agent can use the buttons to access different statistics. You can assign this button only to telephones that have a display. You must specify the following: • Format: The number of the format that you want the button to display. • ID (optional): A split number, trunk group number, agent extension, or VDN extension.	

Table continues…

Button group	Button name	Icon	Description	Present in Ribbon tab
	Headset		Signals onhook or offhook state changes to Communication Manager. The green LED is on for offhook state and off (dark) for onhook state.	
	Supervisor Assist		Places a call to a split supervisor. This button is used by an ACD agent.	
	Busy indicator		Adds or removes the busy indicator.	
	uui-info		Opens a screen where the user can see up to 32 bytes of ASAI-related UUI-IE data.	
	VOA		Enables or disables VDN of Origin Announcement (VOA). VOA must be enabled.	
	Mute far-end		Puts a selected party on a conference call on mute. This button can be assigned to stations and attendant consoles.	
	Hunt NS		Places a Hunt Group into night service.	
	Q-Calls		Enables flashing of the associated status lamp after a call warning threshold is reached.	
	Q-time		Enables flashing of the associated status lamp after a time warning threshold is reached.	
	Bridged appearance		Provides an appearance of another user extension on this telephone. For example, an assistant might have a bridged appearance of the supervisor extension. The bridged appearance button functions exactly like the original call appearance, for instance, it indicates when the appearance is active or ringing. You can assign Bridged appearance buttons only to 2-lamp appearance buttons. You must indicate the extension and call appearance button that the user wants to monitor at this telephone.	
Custom Buttons	**<A user-specified name>**		Performs various call related actions. You can associate a rule to a custom button. When you click a custom button, the rule associated with that button is executed.	Custom

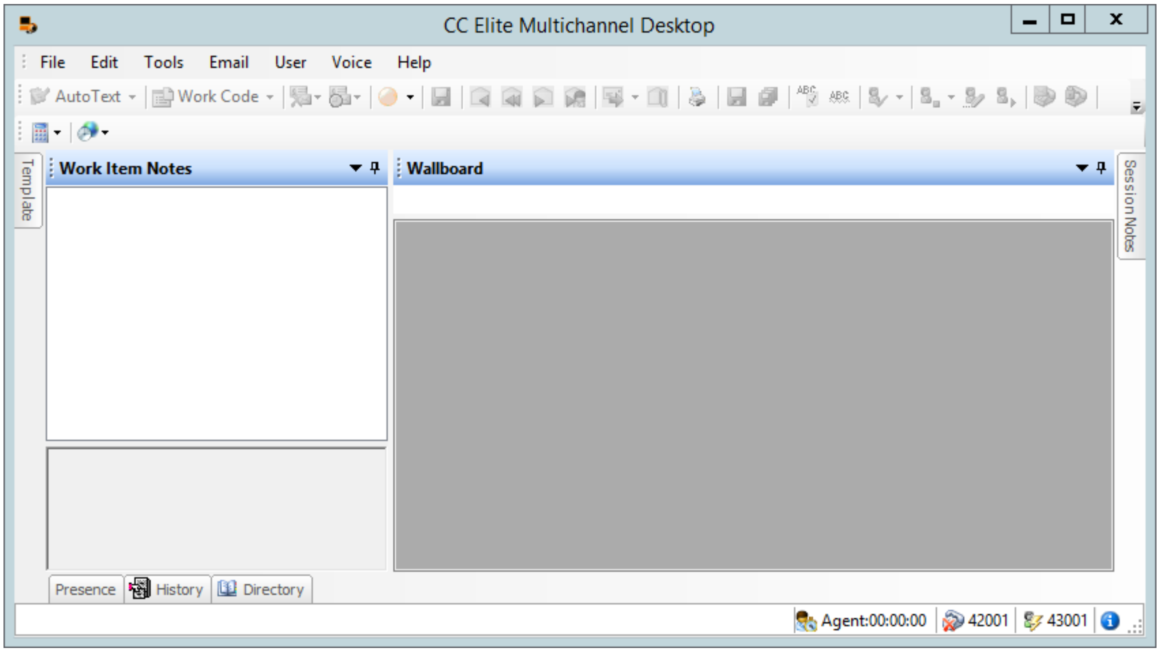
Note:

In this interface, tool tips for split buttons are displayed under the Ribbon toolbar.

Desktop interface with Menus

This interface contains UI controls, such as menus, toolbars, panels, and status bars. You can use the UI controls to manage various types of work items.

The following is the Call Center Elite Multichannel Desktop interface with Menus.



Toolbars

The Desktop interface contains the following toolbars:

AutoText

A single button to insert pre-defined text into a current work item, which saves your typing time. The text is categorized by topics and presented through a drop-down list. Email or chat program has an associated list of AutoText. Therefore, for every work item that you process, you can view the relevant AutoText options. For more information, see AutoText and Work Code toolbar on page 97.

Work Codes

A single button to assign a work code to a work item. The work codes are categorized by topics and presented through a drop-down list. Each Media Store queue has an associated list of work codes. Therefore, for every work item that you process, you get the relevant Work Code options. For more information, see AutoText and Work Code toolbar on page 97.

Spell Check

A single button to check the spelling in a work item, work item notes, and session notes.

The Spell Check feature is powered by Keyoti RapidShell .Net Spell Checker, Keyoti Inc. For more information, go to http://www.keyoti.com.

Spell Check As You Type

A setting that forces Call Center Elite Multichannel Desktop to automatically check the spelling of words as you type the text inside the selected window.

User

A set of buttons to log in and log out of skills, to change the work mode, to select the reason codes, to gain access to voice mail, and to forward calls to another agent. For more information, see User toolbar on page 93.

Voice

A set of buttons to answer, to transfer, to conference, and to end calls. For more information, see Voice toolbar on page 96.

Email

A set of buttons to perform all email functions. For more information, see Email toolbar on page 94.

Printing

A single button to print the information associated with a work item.

Media Client

Setup buttons to log in or log off the Agent Station on Communication Manager. For more information, see Media Client toolbar on page 97.

Windows

The Desktop interface contains the following windows:

Document

Windows to view and manage multimedia work items. The windows also display an external application, such as Microsoft Internet Explorer. The windows appear in the form of tabs.

You cannot drag a Document window to another location.

Tool

Windows that display information related to logged in agents, multimedia work items, notes, and templates. You can drag the windows, dock the windows in any position, or hide the windows. You can display the hidden window by holding a mouse pointer over the corresponding window tab.

The following tool windows are available in Call Center Elite Multichannel Desktop:

Work Item Notes:

A window in which you can view and record the notes related to the work items. You can record multiple notes for a single work item. The notes are arranged chronologically. You must click the note title to view the contacts.

Session Notes:

A window in which you can view and record notes that help you to perform your day-to-day activities. The notes do not specifically relate to a work-item.

The Session Notes window helps you to write notes directly in Call Center Elite Multichannel Desktop instead of opening an external application, such as Notepad. The system automatically stores the session notes in the Rich Text Format (RTF) format, as you type the text. The system loads the session notes every time you start the application.

Presence:

A window in which you can monitor the phone activity of other agents in a contact center with whom you regularly interact. At a glance, you can view if an agent is on a call, logged in to receive work items, or in the Auxiliary, Available or the After Call Work mode.

> **Note:**
>
> In the Presence window, when you select an agent and click **Show history**, the system populates the agent history in the History window.

History:

This window displays Customer History and Agents History tabs. On the Customer History tab, you can view a conversation and interaction history of customers. On the Agents History tab, you can view a list of work items that you or another agent, that you specify, has previously worked on. You can also search work items, based on the agentID, state, and the work item type, such as email, preview contact, or simple messaging.

Directory:

A window in which you can search a contact based on the first name, last name, full name, phone number, contact ID, or the Instant Message (IM) address.

After the Directory window displays the searched contact, you can initiate a call with the contact or send an email, SMS to the contact directly from the Directory window. You can also transfer an active call to the searched contact or add the searched contact in an active conference.

> **Note:**
>
> In the Directory window, when you select a customer and click **Show history**, the system populates the customer history in the History window. If the History and Directory windows are docked together, you must manually click the History tab to view the customer history.

Wallboard:

A window in which you can view real-time statistical information of agents. You can also view Vector Directory Numbers (VDNs), queues, splits/skills and alerts. If you resize the window, the system automatically resizes the text displayed in this window.

Resizing a window

Procedure

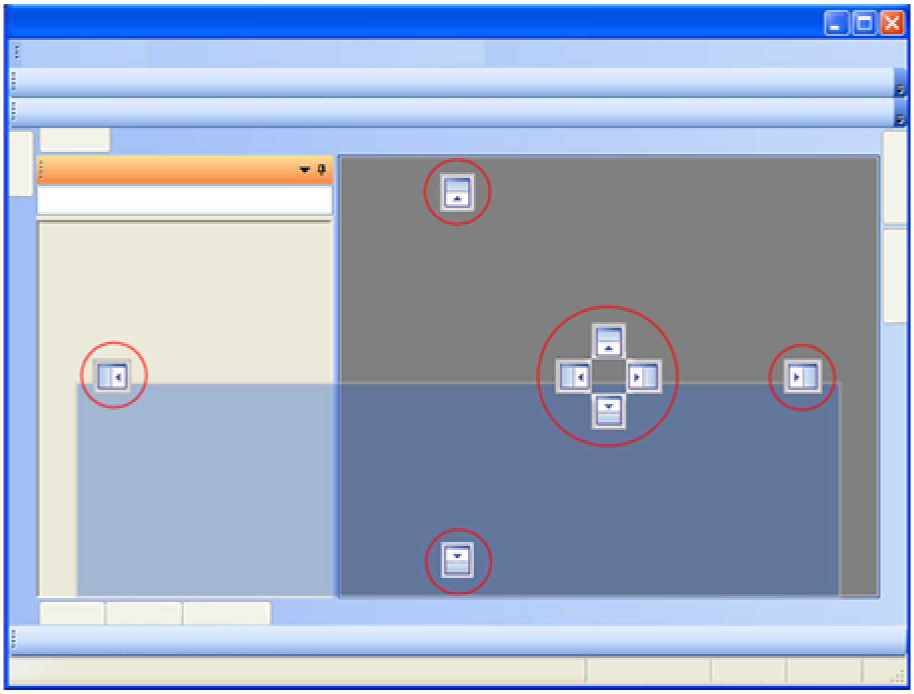
1. Move the mouse pointer over the edge of a window.
2. When the mouse pointer changes to a double-headed arrow, drag and drop the line to a new position.

   The system automatically updates the new position and size in the configuration of Call Center Elite Multichannel Desktop.

Docking a tool window

About this task

In the Desktop interface, you can move and dock a window based on your preference. When you drag a window, the application displays dock guides. These dock guides help you to decide a location to dock a window.



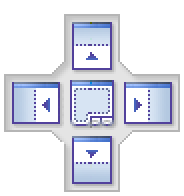
Procedure

Drag and drop the window to one of the dock guides.

> **Note:**
>
> If a window that you want to dock is not docking, you must right-click the title bar of the window and select **Dockable**.

The window is automatically docked to a position according to the dock guide you select.

Inner guides field descriptions



The following table describes the name and description of the inner guides.

Name	Description
Left Inner	Docks a window to the left of the document window, the working area of the Desktop window. The window height is restricted if there are adjacent windows.
Top Inner	Docks a window above the document window. The window width is restricted if there are adjacent windows.
Right Inner	Docks a window to the right of the document window. The window height is restricted if there are adjacent windows.
Bottom Inner	Docks a window below the document window. The window width is restricted if there are adjacent windows.

Outer guides field descriptions

The following table describes the name and description of the outer guides.

Name	Description
Left Outer	Docks a window that spreads across the left side of the screen.
Top Outer	Docks a window that spreads across the top side of the screen.
Right Outer	Docks a window that spreads across the right side of the screen.
Bottom Outer	Docks a window that spreads across the bottom of the screen.

Hiding a tool window

About this task

If your screen becomes cluttered with many open or docked windows, you can temporarily hide some of the Tool windows.

Procedure

1. Click the down arrow at the right side of the title bar of a window.
2. Select **Auto-Hide**.

   The window collapses from its docked state to an auto-hide tab, which appears at the edge screen.

   > **Note:**
   >
   > In the Desktop interface with Ribbons, when you auto-hide grouped Tool windows, some of the auto-hide tabs for the grouped Tool windows display as collapsed.

Viewing a hidden tool window

Procedure

Hold the mouse pointer over the auto-hide tab of a window or click the auto-hide tab of the required window.

The window opens with a size and location stored earlier.

Note:

By default, a hidden tool window is configured to be displayed on clicking the auto-hide tab. However, you can configure a hidden tool window to be displayed on holding the mouse pointer over the auto-hide tab.

Displaying a tool window as a tabbed document

Procedure

1. Click the down arrow at the right side of the title bar of a window.
2. Select **Tabbed Document**.

   The window collapses from the docked state to a tabbed state.

Navigating around the screen

Procedure

1. Perform one of the following actions:
   - Hold **Control** and keep pressing `Tab`.
   - Hold **Control** and the up and down arrow keys.

   The system displays a dialog box with the names of active windows.
2. On the dialog box, click the required window name and release **Control**.

   The selected window becomes active and appears with an orange color title bar. All the other inactive windows appear with the blue color title bar.

Logging in to skills

Procedure

1. Perform one of the following actions:
   - Click the **Agent Login** arrow on the toolbar.
   - Click **User** > **Agent Login** > **Agent Login** on the menu bar.

     Note:

     - If the advanced login feature is enabled in your configuration, click **Agent Login** to change the agent login details.
     - When you log in for the first time, Call Center Elite Multichannel Desktop places you in a mode specified during the configuration.

Important:

- If Agent authentication is enabled on the Call Center Elite Multichannel server and an agent attempts to log in to the Call Center Elite Multichannel Desktop using incorrect user ID or password, the system displays the following message:

  ```
  Authentication Failure.
  Please try again using correct Agent ID and Password.
  ```

  After the agent makes the permissible number of failed login attempts, the system locks the Agent ID and displays the following message:

  ```
  Agent ID xxxxx is locked because of multiple failed login
  attempts.
  Please contact the appropriate authority to unlock the Agent
  ID.
  ```

  You can configure the permissible number of failed login attempts and the time interval to unlock the agent in the Agent Authentication section of the `AXMLServer.ini` file. For more information, see *Administering Avaya Aura® Call Center Elite Multichannel*.

- If Concurrent Agent login is disabled on the Call Center Elite Multichannel server and a Desktop is monitoring a station, the system displays the following message when another Desktop attempts to monitor the same station:

  ```
  Station ID xxxxx is already in use by another Desktop.
  Please specify a different Station ID in the configuration.
  ```

  If an agent is logged in to a Desktop using an Agent ID and another agent attempts to log in using the same Agent ID, the system displays the following message:

  ```
  Agent ID xxxxx is already in use by another Desktop.
  Please specify a different Agent ID in the configuration.
  ```

2. Perform one of the following actions, if you are not in the **Available** mode:
   a. Click **Available** on the toolbar.
   b. Click **User** > **Available** on the menu bar.

      Note:

      When you end the call, you are placed either in the **Available** or the **After Call Work** mode, depending on the system configuration. Click **Available** to receive calls.
3. Perform one of the following actions, if you want to become unavailable to receive calls so that you can perform a call-related activity, such as filling a form:
   a. Click **After Call Work** on the toolbar.
   b. Click **User** > **After Call Work** on the menu bar.

   This places you in the **After Call Work** mode.

4. To perform an activity that is not related to the call, such as going to lunch, do one of the following actions:
   - Click **Auxiliary** on the toolbar.
   - Click **User** > **Auxiliary** > **Auxiliary** on the menu bar.

   This places you in the **Auxiliary** mode.

   If reason codes are enabled, select a reason for changing your work mode to **Auxiliary** by clicking the **Auxiliary** arrow on the toolbar.

Logging out of skills

Procedure

Perform one of the following actions:

- Click **Agent Logout** on the toolbar.
- Click **User** > **Agent Logout** > **Agent Logout** on the menu bar.

If reason codes are enabled, select a reason for logging out by clicking the **Agent Logout** arrow on the toolbar.

Handle multiple work items

Using the Multiple Call Handling feature, the staffed agents can take additional work items without closing their currently active work items. Call Center Elite Multichannel supports the following modes of Call Center Elite:

- Multiple Call Handling - On Request
- Multiple Call Handling - One Forced
- Multiple Call Handling - One Per Skill
- Multiple Call Handling - Many Forced

For information about these modes, see *Avaya Aura® Call Center Elite Feature Reference*.

Call Center Elite Multichannel supports the Multiple Call Handling - On Request mode only if you set the **On Request MCH Enabled** configuration parameter to True. For information about this parameter, see *Installing Call Center Elite Multichannel*.

If you enable the Multiple Call Handling - On Request mode, the **Available** button on the Call Center Elite Multichannel Desktop is enabled when the agent puts the current work item on hold.

Note:

- Avaya Communication Manager reserves one line appearance to transfer or forward calls. Therefore, Call Center Elite Multichannel Desktop or Call Center Elite Multichannel Reporting allows making the agent available until N-1 work items are established. In this case, N specifies the number of line appearances. After N-1 work items are established, the **Available** button remains enabled but does not allow the agent to be available for receiving any work item.

- Any mode of Multiple Call Handling (MCH) must be used only with Phantom call drop disabled.

Creating a vertical or horizontal group of work items

About this task

You can create groups of work item tabs and arrange the groups horizontally or vertically. You can also move a work item tab from one group to another.

Arranging work item tabs help you to simultaneously view information of all work items.

Procedure

Perform one of the following actions:

- Right-click the work item tab for which you want to create a new group and select **New Vertical Tab Group**.
- Right-click the work item tab for which you want to create a new group and select **New Horizontal Tab Group** to arrange that group horizontally.

  Important:

  The **New Vertical Tab Group** and **New Horizontal Tab Group** options are visible only when more than one work item tab is open.

The system creates a new vertical or horizontal group and displays the selected work item tab in the new group. The new group is arranged vertically or horizontally with other groups.

Note:

The system automatically adds the new incoming work item to a new group. You can repeat the steps to create new groups for new work items.

Moving a work item to another group

Procedure

1. Right-click the work-item tab and select **Move to Next Tab Group** or **Move to Previous Tab Group**.

   The system moves the selected work item to another group.

2. Repeat this step until the work item is moved to the required group.

Note:

Click the down arrow to display a list of the work items in a particular group.

Click the left or right arrow to move between several work items in a group.

Accepting a work item

Procedure

1. Start and log in to Call Center Elite Multichannel Desktop.
2. Change your work status to **Available** to receive work items.
3. When you receive a work item, click the text on the alert message that appears on your desktop.
    - If the customer contact in a work item matches with a record in the ASContact Database, the system displays a vertical contact tab as part of the work item. While handling this work item, you can click this contact tab and edit contact details of the customer. For more information, see Editing the contact details on page 50.
    - If the customer contact in a work item does not match with a record in the ASContact database, you can create a new customer contact record and associate it with this work item. For more information, see Adding a new contact to a directory on page 49. Next time, when the same customer contacts again, the system automatically displays contact records as part of the work item.
    - If the Microsoft Dynamics CRM Gui plug-in is enabled, Call Center Elite Multichannel Desktop tries to match the details of the incoming work item to one of the Microsoft Dynamics CRM account or contact records.

    If Call Center Elite Multichannel Desktop cannot find a match, the Microsoft Dynamics CRM Gui plug-in works based on its default configuration settings. In this case, the plug-in does nothing or opens a blank contact or account record as the vertical tab on the work item in which you can fill the details.

    If Call Center Elite Multichannel Desktop finds a match, you can view and edit the contact details.

Inserting an autotext entry

Procedure

1. Place the cursor where you want to insert an autotext entry.
2. Click the **AutoText** arrow on the toolbar and select an appropriate key.

Note:

If autotext previewing is enabled, hover your mouse over the key for few seconds to preview the value that will be inserted into your work item.

Checking the spelling of a word

About this task

When you type text in a work item, the words that are spelled out incorrectly or unavailable in the dictionary are marked with a red underline.

Procedure

1. Right-click the word with a red underline.

   The system displays a list of correct words that you can use.

   Note:

   Call Center Elite Multichannel Desktop automatically uses the dictionary specified for the **Dictionary File Name** parameter in the configuration.

2. Click the correct word.

Checking the spelling in a work item

Procedure

1. Perform one of the following actions:
   - Click **Spell check** on the toolbar.
   - From the **Edit** menu on the menu bar, select **Spell Check**.

   The system displays the Spelling dialog box. In the dialog box, you can view a list of suggested words.

2. Perform one of the following actions:
   - Select the most appropriate word from the suggested words, and click **Change** to change the word.
   - Click **Ignore** to ignore the suggested change and continue the spelling check.
   - Click **Add** to add the word that you are checking to the dictionary.

3. Click **OK** when you complete the spelling check.

Recording notes for a work item

Procedure

1. Open the Work Item Notes tool window.
2. In the upper section, right-click the appropriate category for recording notes and select **Add new notes**.

   The following categories are available:

   - Interaction
   - Conversation
   - Parents

   The system adds a note title containing agent ID, current date, and time to the selected category.
3. Select the note title and enter the work item related notes in the lower section.

   If your work item has a history of earlier notes, the system displays these notes when you select the work item.

   By default, notes are presented in chronological order, with the oldest note at the top and the newest at the bottom.

Editing an existing note

About this task

Note:

You can only edit notes that you have created.

Procedure

1. Open the Work Item Notes tool window.

   The system displays a list of notes that you have created.
2. In the upper section of the window, select a note title that you want to edit.
3. In the lower section of the window, edit the text.

   The system saves the edited text as you typed.

Suspending a work item

About this task

When you suspend a work item, the system sends the suspended work item to Media Director. Media Director then sends the work item to an appropriate agent at a later date and time.

Procedure

1. Click the **Suspend the work item** arrow on the toolbar and select the date and time till you want a work item to be suspended.
2. In the **Reason** field, enter the reason for suspending a work item.
3. In the **Preferred agent** field, enter the ID of a preferred agent who can handle the work item when the item is resumed.

   Note:

   The Preferred Agent functionality is a best effort routing and depends on the routing algorithm of Communication Manager.
4. Click **OK**.

   Once you process an email either by forwarding, replying, or suspending, your work mode changes to the **Available** or the **After Call Work** mode.

   If you have logged in as an **Auto-In** agent, Call Center Elite Multichannel Desktop automatically changes your work mode to **Available**.

   If you have logged in as a **Manual-In** agent, change your work mode to **After Call Work**.

   To change your work mode to **Available** to receive another call, click **Available** on the toolbar.

Assigning a work code to a work item

Procedure

1. Click the **Work Code** arrow on the toolbar and select the appropriate key from the available option.

   Note:

   If an administrator has enabled Work Code previewing, you can hover the mouse over the key for few seconds to preview the value that is assigned to your work item.
2. To add or update any additional information associated with this contact, do it in the Additional Information section of the work item.

Closing a work item

Procedure

Click the cross icon at the upper-right side of the Document window or right-click the document and click **Close**.

Printing information

Procedure

1. Perform one of the following actions:
   - Click **Print** on the toolbar.
   - From the **Edit** menu on the menu bar, click **Print**.

   The system displays the Print dialog box.
2. In the dialog box, select the required printing options and click **Print**.

   If more than one window is associated with an open work item, the system prints information from each window and separates it by a line.

Using History

About this task

The History window displays information about an agent and a customer.

Procedure

Click the Agent History tab to view the agent history and the Customer History tab to view the customer history.

On each tab, you can select various options to view the required information.

Opening a work item to perform an action

Procedure

Right-click a work item and select **Open Interaction**.

The system displays the work item as a new Document window tab. You can perform actions, such as replying to an email work item or calling a customer from a preview contact work item, based on the type of work item.

> **Note:**
>
> You cannot change the work item details.

Viewing the history of a work item

Procedure

Right-click a work item and select **Get Interaction History**.

The system displays the history of a work item in the Segment history for interaction window. The history contains the work item states. For example, created, queued, delivered, established, retrieved, closed, and suspended.

Searching the work history of an agent

About this task

The Agent History tab in the History window displays a list of work items that you, or another agent that you specify, handled previously.

On the Agent History tab, you can search for work items based on the agentID, state, and work item type, such as email, preview contact, or simple messaging.

Procedure

1. In the History window, click the Agent History tab.
2. In the **Agent ID** field, enter the agent ID of an agent whose work items you must view.

   Note:

   By default, the **Agent ID** field displays the ID of an agent who is currently logged in to Call Center Elite Multichannel Desktop. You can enter the agent ID only if the **Allow Search Other Agents** parameter is enabled in the configuration of Call Center Elite Multichannel Desktop.
3. From the **Type** drop-down list, select the type of work items you want view.

   The following types are available in the list:

   - Voice
   - Email
   - Preview Contact
   - Simple Messaging

   You can select All to select all types of work items.
4. In the **Days old** field, enter the number of days since when you want to view the work items.
5. **(Optional)** In the **Maximum returned** field, enter the number of work items that you want the search option to display.
6. In the **State** list, select one or more states of work items.

   The following states are available in the list:

   - Suspended
   - Closed
   - Created

- Processing
- Queued
- Delivered
- Established
- Pending close

You can click the **Select all** check box to select all states.

7. Click **Search**.

   The system displays work items, referred as interactions, in a group according to conversation. Each conversation has its own ID. For example, transferred Web Chat interactions are grouped together under a common conversation ID.

   Important:

   Ensure that the time on the following systems is synchronized:

   - Call Center Elite Multichannel Reporting or Call Center Elite Multichannel Desktop of all agents
   - Call Center Elite Multichannel core server
   - Call Center Elite Multichannel database server

   This synchronization is mandatory to get the correct results. To synchronize the time, you can use an NTP server or a domain server.

Viewing a customer conversation history

About this task

The Customer History tab in the History window displays the conversation and interaction history of a customer.

Procedure

1. In the History window, click the **Customer History** tab.
2. In the **Customer ID** field, enter one of the following inputs based on your requirement:
   - The exact phone number of the customer whose details are not available in ASContact Database.
   - The email ID of the customer whose details are not available in ASContact Database.
   - The GUID of the customer whose details are available in ASContact Database.
3. In the **Customer** field, verify the name of the customer.
4. Select the **Retrieve the conversation history when a new work item is delivered** check box to display the conversation history of a customer.

   The **Interaction list** panel displays the information about the current conversation and all the previous conversations associated with the contact. The information contains conversation details, such as type, state, agent ID, From Address, To Address, Subject, and Interaction ID.

Note:

If the system displays the customer ID for a conversation, the customer is matched with a contact record in ASContact Database.

By default, the conversations are sorted according to the interaction ID. You can sort the conversations by clicking the column heading of the respective column.

5. Select the **Retrieve the interaction history when a new work item is delivered** check box to display the interaction history of the conversation.

   The **Segment history for interaction** panel displays the information about your interaction with the customer. The information contains interaction details, such as state, time, Suspend To Time, Suspend Reason, and Preferred agent ID.

   By default, the interactions are sorted according to the time. You can sort the interactions by clicking the column heading of the respective column.

   Note:

   When you attempt to view a customer conversation history through the Show History option, the **Retrieve the conversation history when a new work item is delivered** and **Retrieve the interaction history when a new work item is delivered** fields are ignored from the filter.

6. In the **Days old** field, enter the number of days since when you want to view the work items.
7. **(Optional)** In the **Maximum returned** field, enter the number of work items that you want the search option to display.
8. From the **Type** drop-down list, select the type of work items you want view.

   The following types are available in the list:

   - Voice
   - Email
   - Preview Contact
   - Simple Messaging

   By default, the All option is selected.
9. In the **State** list, select the state of work items.

   The following states are available in the list:

   - Suspended
   - Closed
   - Created
   - Processing
   - Queued

- Delivered
- Established
- Pending close

By default, the **Select all** check box is selected.

Note:

For automatic history retrieval of work item, **Type** and **State** fields are ignored.

10. Click **Search**.

    The system displays work items, referred as interactions, in a group according to conversation. Each conversation has its own ID. For example, transferred Web Chat interactions are grouped together under a common conversation ID.

    Important:

    Ensure that the time on the following systems is synchronized:

    - Call Center Elite Multichannel Reporting Desktop or Call Center Elite Multichannel Desktop of all agents
    - Call Center Elite Multichannel core server
    - Call Center Elite Multichannel database server

    This synchronization is mandatory to get the correct results. To synchronize the time, you can use an NTP server or a domain server.

Using Presence

About this task

The Presence window displays the telephonic activities of other agents in a contact center. From this window, you can directly contact an agent, transfer a call to an agent, or add an agent to a conference. Using the Presence window, you can also transfer a Web Chat conversation to an agent.

The information contains details, such as agent name, agent ID, station ID, station state, and agent work mode.

Note:

By default, the agent name is displayed in the format <Firstname Lastname>.

To change the format of the displayed agent name, change the *Name Order* parameter value in the `[presence]` section of the `asguihost.ini` file or on the configuration server. The options available to change the format of the agent name are:

- *Normal* or *1*: This option displays the agent name in the <Firstname Lastname> format.
- *Reverse* or *2*: This option displays the agent name in the <Lastname Firstname> format.

Procedure

In the Presence window, right-click an agent record and click the appropriate option such as **Dial**, **Transfer**, or **Conference**.

Note:

In the Presence window, when you select an agent and click **Show history**, the system populates the agent history in the History window.

Directory search options

You can search the directory in the following ways:

Search	Description
Database Search	This is a comprehensive search that searches the entire directory based on the contact fields you select in the **Search Target Fields** drop-down list box, and specify the search criteria in the **Search Criteria** field. The system displays the searched contacts in the Phonebook table.
Smart Search	This search automatically highlights the best matched contact based on the characters you type within the results of the earlier Database search. You can use Smart Search to find contacts based on the first name or last name. You must select the **Smart Search** check box to use this search option.
Column Search	This is a quick search that dynamically searches the contacts by matching the characters you type with the contents in the **Business** field. The system highlights the first contact with a business phone matching the phone number you type. You can use Column Search to find contacts based on the business phone.

ASContact database

Call Center Elite Multichannel uses the ASContact database, an SQL-based database, for storing and maintaining contact details of agents, staff members in a contact center, and the customers of that contact center.

The ASContact database provides a wide range of fields to store detailed information. An administrator can select the required fields for a contact. The field structure of the ASContact database is based on the contact field structure of Microsoft Outlook.

Create a group of related contacts

In the ASContact database, administrator can create a group of related contacts that helps you to search a contact quickly. You must first add contacts to the ASContact database and then create a group of contacts. For information about adding a contact and creating a group of contacts, see *Administering Avaya Aura® Call Center Elite Multichannel*.

Based on the size and work load of a contact center, administrator can create groups based on the department, work area, manager, or administrator.

Administrator can also create groups within groups.

Note:

Even if an administrator adds a contact in a group, the contact remains as an individual record in a database and the system displays a group as separate record in a directory.

In the Directory window, the contact groups in the ASContact database are displayed in a blue color with an icon different from the icon of an individual contact. You can double-click a group to list the associated contacts or groups.

Groups with additional permissions are indicated in bold and in a blue color.

Displaying the entire directory

Procedure

1. In the Directory window, delete the text, if any, from the **Search Criteria** field.
2. Perform one of the following actions:
   - Click **Search**.
   - Press `Enter`.

Searching a contact in a directory

Procedure

1. From the **Search Target Fields** drop-down list, select a search target field.
2. In the **Search Criteria** field, enter the appropriate search criteria.
3. Click **Search**.

   If the search criteria matches with any contacts in the ASContact database, the system displays contact details of the matched contact in the Phonebook table.

   You can right-click the contact record and click an option to perform various actions.

   You can view the history of a customer without an active work item by searching the customer in the Directory plug-in.

Adding a new contact to a directory

Procedure

1. In the Directory window, right-click the Phonebook table and click **Add contact**.

   The system displays a new contact document window.
2. On the General tab, enter the information in the fields.

   On this tab, you can change a field name, such as **Business address** according to your requirements.

Note:

For a customer, you must add the full name, the email address, and the phone numbers, which includes mobile phone number of the contact. This helps you to identify the customer when you receive a work item from a customer.

3. On the Details tab, enter the information in the fields.
4. Perform one of the following actions:
   - Click **File** > **Save** to save the new contact.
   - Right-click the document and select **Save** to save the new contact.
   - Click **File** > **Save All** to save all contacts.

Associating a work item to a contact

About this task

If you receive a work item, the details of which do not match with any contacts in the database, you can associate the work item to a contact in the database.

Procedure

1. Search the directory for a contact.
2. In the Phonebook table, right-click the contact details and select **Associate with Work Item**.

   Next time, when the same customer contacts, the system displays the contact details on the work item alert.

Contact phone number formats

If the Smart Dial functionality is enabled, format the contact phone numbers as follows:

- Do not use the following in the phone number:
  - PSTN: The code required to dial an outside line.
  - STD: The code required to make a national call.
  - IDD: The code required to make an international call.
- Use a single space, hyphen, or parentheses to separate area codes from the local number. For example, 3-4770576, (3) 4770576, or (3)4770576.
- Prefix all country codes with +. For example: +64-3-4770576, +64 (3) 4770576 or +64(3)4770576.

If the Smart Dial functionality is disabled, you must include the PSTN, IDD, or STD access codes, the country codes, and the area codes to the phone number. For example: 14770576, 103 4770576 or 10064 3 4770576.

Editing the contact details

Procedure

1. In the Directory window, search a contact.

2. In the Phonebook table, right-click the contact details and click **Open**.

   The system displays the contact details in a new tab.

3. Edit the required details on the General, Details, and Associated Data tabs.
4. Click the Notes tab to add notes related to a contact.

   The Notes tab is a simple text editor, similar to Notepad. You can enter text or copy and paste text from another application.

   The system saves notes for an agent, logged in to the Desktop application. The note title contains the current date and time and the logged in agent ID.

5. Perform one of the following actions:
   - Click **File** > **Save** to save the changes for the contact.
   - Click **File** > **Save All** to save all contacts.

Deleting a contact

Procedure

1. In the Directory window, right-click a contact displayed in the Phonebook table and click **Delete Contact**.
2. Click **Yes** to confirm.

Navigating the directory using keyboard

About this task

In the Directory window, you can navigate the contacts in a directory using keyboard.

Procedure

1. Search the contacts.

   The system displays the matched contacts in the Phonebook table.

2. Hold the **Control** key and press Up or Down arrow.

   The system highlights selected contact record in gray color.

Inserting a phone number using keyboard

About this task

When you navigate the contacts list, you can use keyboard to directly insert the phone number of a contact in the **Dial** field on the toolbar.

Procedure

1. Select a contact whose phone number you want to insert.

   For more information, see Navigating the directory using keyboard on page 51.

2. Press `Insert`.

   The first phone number of the contact is inserted in the **Dial** field.

3. Keep pressing `Insert` to toggle between the other numbers of the contact.

Editing Microsoft Dynamics CRM accounts and contacts

Before you begin

By default, the Microsoft Dynamics CRM Gui plug-in is disabled by preceding it with a semicolon in the **Plug In Assembly List** section in the `ASGUIHost.ini` file. To enable this plug-in, you must remove the semicolon.

About this task

If an administrator has added Microsoft Dynamics CRM accounts and contacts in the directory, you can view the accounts and contacts in the Directory window. The Directory window displays the accounts and contacts as a single or a grouped record with the heading Microsoft Dynamics CRM Accounts and Microsoft Dynamics CRM Contacts.

To search a Microsoft Dynamics CRM contact or account, see Directory search options on page 48. For more information, see Displaying the entire directory on page 49 and Searching a contact in a directory on page 49.

Procedure

1. In the Directory window, right-click a Microsoft Dynamics CRM contact or account and click **Open MS CRM**.

   The system displays the details of the contact or account in the **Microsoft Dynamics CRM Connector** tab.
2. Edit the details and click **Save and Close**.
3. Click **Tools** > **Options**.
4. In the Options dialog box, click the **Microsoft Dynamics CRM Connector** tab.
5. Click the **Synchronization** tab.
6. Click **Synchronize now**.

   The system updates the contact details in the directory.
7. In the Directory window, click **Search** to refresh the contact details.

   When you update the contacts in Microsoft Dynamics CRM, the Microsoft Dynamics CRM Phonebook Synchronizer, which is present on the Microsoft Dynamics CRM server, automatically updates the ASContact database in real time.

Session notes

You can use the Session Notes window to record notes. You do not need to open an external application, such as Notepad to record notes.

The notes do not specifically relate to a work-item. The system automatically stores the session notes in the Rich Text Format (RTF) format. The system loads the session notes every time you restart the application.

Note:

You can configure the time interval to automatically save the session notes. Call Center Elite Multichannel Desktop saves the session notes after every time interval that you have specified.

The session notes are stored in the directory that you have specified in the Call Center Elite Multichannel Desktop configuration. In the specified directory, you can find the session notes files with a file name format as: `Sessionnotes<Agent ID>.rtf` or `Sessionnotes.rtf`.

If you:

- Logged in to Call Center Elite Multichannel Desktop to receive calls, the Session Notes window displays the contents of the `Sessionnotes<Agent ID>.rtf` file, which contains your own session notes.
- Not logged in to Call Center Elite Multichannel Desktop, the Session Notes window displays the contents of the `Sessionnotes.rtf` file. Any agent who can log in to the system can view the session notes from the `Sessionnotes.rtf` file.

If an administrator has specified the `My Documents` folder to store the session notes, and only you can log in to the system, the Session Notes window also displays notes from the `Sessionnotes<Agent ID>.rtf` file. If session notes are stored in a directory other than `My Documents`, all the users who can log in to the system can view the notes in the `Sessionnotes.rtf` file.

Creating a session note

About this task

Using this procedure, you can create a session note or add data to a session note.

Procedure

1. Open the Session Notes window.

   For more information, see Viewing a hidden tool window on page 34.

   The system displays the session notes that you have created and saved earlier.
2. In the Session Notes window, enter the session-related notes.
   - You can copy text from the notes and paste the text to another application.
   - You can paste the text, images into the session notes. Before pasting an image, you must open an image in an image editor, such as MS Paint, for editing.
   - You can separate the notes by putting a line after a note.
3. **(Optional)** Click the **AutoText** arrow on the toolbar to insert the autotext phrases.

   Note:

   The **AutoText** arrow is enabled only if a work item is open. Do not associate the session notes to the work item.

Dialing a phone number from a session note

Procedure

1. In a session note, select a phone number that you want to dial.
2. Right-click the selected number and click **Dial**.

   The system displays the number in the **Dial** field on the toolbar and makes an outgoing call to that number. After you receive the voice work item from the dialed number, you can perform all the telephony functions to that number.

Printing a session note

Procedure

To print a session note, see Printing information on page 43.

Checking the spelling in a session note

Procedure

To check the spelling in a session note, see Checking the spelling of a word on page 40 and Checking the spelling in a work item on page 40.

Wallboard

You can use the Wallboard window to view the predefined statistical data of selected agents.

By default, the Wallboard window is located at the top side of the Desktop window.

For information about configuring Wallboard, see *Installing Avaya Aura® Call Center Elite Multichannel*.

Viewing error logs

Procedure

1. Perform one of the following actions:
   - On the main menu, click **Tools** > **Error log**.
   - On the main menu, press `Control+G`.
2. In the Error Log dialog box, click the **Clear** button to delete the text from the error log.
3. Click **OK** to save the text and return to the Call Center Elite Multichannel Desktop interface.

Processing the Microsoft Dynamics CRM activities

Before you begin

Ensure that Microsoft Dynamics CRM Gui plug-in is enabled.

About this task

If the Microsoft Dynamics CRM Gui plug-in is enabled, you can receive Microsoft Dynamics CRM features, such as task, email, fax, letter, phone call, campaign response, campaign activity, case, appointment, or service in Call Center Elite Multichannel Desktop.

Procedure

On Call Center Elite Multichannel Desktop, click **Answer**.

Receiving a Microsoft Dynamics CRM activity is similar to receiving a Call Center Elite Multichannel work item. For more information, see Accepting a work item on page 39.

Note:

- You cannot answer a Microsoft Dynamics CRM work item by clicking the text on the alert message that appears at the lower-right side of Call Center Elite Multichannel Desktop.
- Microsoft Dynamics CRM consumes Desktop Memory if you use it with Microsoft Internet Explorer 8.0. Therefore, ensure that you upgrade to Microsoft Internet Explorer 9.0 or later if Microsoft Dynamics CRM Plug-in is configured.

Device Media Call Control (DMCC)

DMCC overview

Call Center Elite Multichannel Desktop connects to the Communication Manager deskphone so that the feature buttons of both products are synchronized. To connect to the Communication Manager deskphone, Call Center Elite Multichannel Desktop uses DMCC.

For example, EC500 pushed on Avaya H323 or the DCP deskphone configured on Communication Manager appears on Call Center Elite Multichannel Desktop.

You can put the DMCC buttons on the standard top or bottom toolbar or on the left or right toolbar. The DMCC plug-in can provide Vu-Stats and Queue information to the Wallboard plug-in. Using Communication Manager, you can configure the **Feature** button assignments for each station.

When you use DMCC, a media stream goes to multiple clients. DMCC registers a client application to control the deskphone and get the media at the same time without unregistering the physical phone.

DMCC modes

Main mode

The Main mode implies that the other endpoints can register with Communication Manager using the same extension. The Main endpoint is not dependent on the registration of any other IP endpoints using the same extension. After the endpoint joins the call, the endpoint can perform all related functions, such as Talk and Listen. You can associate only one Main registrant with an extension.

If the IP endpoint goes through a link bounce, Communication Manager can view the call-present flag only from the Main mode during registration. If you implement the **share-talk** button, the Main mode can block other registrants from taking over the talk-time slot. The Main registrant can also take over the talk-time slot from the endpoints registered in the DEPENDENT/INDEPENDENT dependency mode.

Independent mode

In the Independent mode, the endpoints can perform the following functions even when the Main IP endpoint is not registered:

- Receive call
- Make call
- Talk
- Listen

In the Independent mode, the endpoint has the capabilities of the Main registrant until the Main endpoint registers. When the Main mode registers or re-registers, the independent registrant is put in the Listen-only mode and the Main mode gets the talk privilege. The Main mode has precedence over the Independent mode. The Independent mode is enforced even if the user is in a call.

Note:

If you enable the **share-talk** button, the talk-time slot remains with the Independent registrar if the registrar activates the **share-talk** button. If the Main mode wants to take over the talk-time slot, then the Main mode must activate this button.

Using the Independent mode, the IP endpoints can specify when the endpoints want to make or receive calls even if the main endpoint is unavailable in the event of a network failure. The Independent mode is useful when a call recording application uses the service observing feature with two registrations for high availability. One registration registers in the Main mode, and the other registration registers in the Independent mode. In this example, the registrant uses Communication Manager to either answer calls or make calls after registering.

Dependent mode

In the Dependent mode, an IP endpoint can register only when another endpoint is registered to Communication Manager using the same extension in the Main mode. IP endpoints can register if the extension is with a DCP phone and the DCP phone is in service. During a call, the IP endpoint is always in the Listen-only mode.

DMCC features

Call Center Elite Multichannel supports the following DMCC features:

- EC500
- Malicious call trace activation
- Malicious call trace controller
- Send all calls
- Call forward
- Auto dial
- Stroke count
- Work codes
- Account
- Vu-Stats
- Headset
- Supervisor Assist
- Busy indicator
- User-to-user information
- VDN of origin repeat
- Mute far-end
- Hunt group night service
- Queued calls
- Oldest queued time
- Bridged appearance

Viewing the application help

Procedure

Perform one of the following actions:

- On the main menu, click **Help** > **Contents**.
- On the main menu, press `F1`.

Chapter 4: Manage Voice work items

In Call Center Elite Multichannel Desktop, you can:

- Make a call.
- Answer a call.
- End a call.
- Hold a call.
- Divert calls.
- Send Dual Tone Multi Frequency (DTMF) tones.
- Transfer a call.
- Conference a call.
- Drop contacts from a conference call.
- Forward all incoming calls to voice mail or another extension.
- Mute or unmute a call.
- Log in or log off an Agent Station on Communication Manager.

Making a call

About this task

You can call a customer contact that is available in the directory.

Procedure

1. Search contact details in a directory window.

   For more information, see Windows on page 31 and Searching a contact in a directory on page 49.

2. In the directory, right-click a contact record and select **Dial** > ***phone number***.

   Call Center Elite Multichannel Desktop makes an outgoing call to the number that you select.

   - If Smart Dial is enabled, Call Center Elite Multichannel Desktop automatically adds the required national, international access codes to the number. It also removes any unnecessary national and international access codes added in the number.

- Call Center Elite Multichannel Desktop ignores any spaces, non-alphanumeric characters, such as +,), (, /, $, or %, from the dial string.
- Call Center Elite Multichannel Desktop recognizes alphanumeric numbers. For example, if you select 1800Avaya, the application converts the number to its numeric equivalent 180028292.

When the call is answered, the state of the call changes to connected.

All the numbers that you dial, appears in the **Number to dial** field on the toolbar.

3. Dial the number from the **Number to dial** field:
   a. Right-click a contact record and select **Use phone number** > ***phone number***.

      Call Center Elite Multichannel Desktop inserts the selected phone number in the **Number to dial** field.

   b. Click **Dial** or press `Enter`.
4. Dial the number not listed in the directory:
   a. In the **Number to dial** field, enter the destination number.
   b. Click **Dial** or press `Enter`.
5. Dial the number using the **Quick Dial** button:

   For more information, see *Installing Avaya Aura® Call Center Elite Multichannel Guide*.

   a. If you have set the **Quick Dial** button for a contact, click the corresponding **Quick Dial** button.

      The phone number of the contact is inserted in the **Number to dial** field.

   b. Click **Dial** or press `Enter`.
6. On the toolbar, click the **Work Code** arrow and select an appropriate key from the list box to assign a work code to your work item.

   If previewing of work code is enabled, you can hover a mouse over the key for few seconds to view the value that is assigned to the work item.

Making a call while on another call

Procedure

1. On the **Voice** toolbar, click **Hold** if the **Dial** button is disabled.

   The system places your active call on hold.

   Note:

   Enable the **Automatically Hold Active Call On Dial** configuration parameter to enable the **Dial** button.

2. Perform one of the following actions:
   - In the **Number to dial** field, enter the destination number and click **Dial**.
   - Right-click a contact record and click **Dial** > ***phone number***.

   Call Center Elite Multichannel Desktop automatically places your active call on hold and makes an outgoing call. When your call is answered, the call state changes to connected.
3. When you finish your call, click **Drop and release**.
4. Click **Unhold** to make the original call active.

   If the **Make Call Active When Work Item Tab Clicked** configuration parameter is:
   - Enabled, you can toggle between the calls by clicking the work item tabs. Call Center Elite Multichannel Desktop makes the call you click as active and put the other call on hold.
   - Disabled, you can toggle between the calls by clicking the work item tab and clicking **Unhold** on the toolbar.

Making a call from Microsoft Dynamics CRM

Before you begin

Ensure that Microsoft Dynamics CRM Gui plug-in is enabled.

Procedure

Dial the contact number from a Microsoft Dynamics CRM Web page, such as account, contact, invoice, lead, campaign response, quote, sales order, system user, or phone call.

The Web pages display more than one phone number.

Call Center Elite Multichannel Desktop uses the built-in Smart Dial functionality to extract phone numbers that are saved inside these activities without any spaces or formatting, for example: -)(+.

Note:

- If you have synchronized your Microsoft Dynamics CRM database with the ASContact database, you can dial the contacts and accounts through the Call Center Elite Multichannel Desktop directory.
- Ensure that `WindowsMessageRelayer.exe` is properly deployed with the Microsoft Dynamics CRM plug-in to be able to make outbound calls.

Answering a call

About this task

When there is an incoming call, the system displays a voice work item to answer the call.

Procedure

1. Perform one of the following actions:
   - Click **Answer** from the toolbar.
   - Click the text on the voice alert from the lower-right side of your desktop.

     Note:

     This method of answering a call only works when you enable the **Make Call Active When Work Item Tab Clicked** configuration parameter.

   When the call connects, more buttons are enabled on the **Voice** toolbar.
2. On the toolbar, click the **Work Code** arrow and select an appropriate key from the list box to assign a work code to your work item.

   If previewing of work code is enabled, you can hover a mouse over the key for few seconds to view the value that is assigned to the work item.

Answering a call while on another call

About this task

If you receive a call when you are on an active call, the system displays an alert for a new voice work item.

Procedure

1. Perform one of the following actions:
   - Click the text on the voice alert from the lower-right side of your computer.
   - Click the work item tab.

   Call Center Elite Multichannel Desktop places the active call on hold and connects the new call.

   Note:

   This method of answering a call works only when you enable the **Make Call Active When Work Item Tab Clicked** configuration parameter.

   If the **Make Call Active When Work Item Tab Clicked** configuration parameter is:

   - Enabled, you can toggle between the calls by clicking the work item tabs. Call Center Elite Multichannel Desktop makes the call you click as active and put the other call on hold.
   - Disabled, you can toggle between the calls by clicking the work item tab and clicking **Unhold** on the toolbar.

After enabling this parameter, if the focus automatically shifts to the **Work Item** tab because of any other action such as the closure of an active window, then the call is answered and the work item is accepted.

2. When you finish your call, click **Drop and release**.
3. Click **Unhold** to make the original call active.

Placing a call on hold

Procedure

Click **Hold** on the toolbar.

Making a call active

Procedure

Click **UnHold** on the toolbar.

Sending DTMF tones

About this task

Sending DTMF tones is required for an Interactive Voice Response (IVR) system, such as telebanking and voice mail prompts.

When you select a digit in response to a prompt or instruction, the digit is converted into a tone and passed through the phone network. The prompt or instruction can be a pin number, an account number, or a selection for a customer choice.

Procedure

1. Make an outbound call to a company that uses an IVR system.
2. When the IVR system answers and prompts you to enter a digit, type appropriate digits in the **Dial** field.
3. Click **Dial**.
4. Repeat steps 2 and 3.
5. Follow all the IVR prompts to complete your outbound call.

Transfer a call

In Call Center Elite Multichannel Desktop, you can transfer a call using the following methods:

Blind transfer

A call is transferred immediately to the destination.

Consult transfer

A call is transferred after consulting with the destination.

Transferring a call to an available contact in the directory

Procedure

1. Search a contact in the directory.

   For more information, see Searching a contact in a directory on page 49.

2. Right-click the contact record and select **Transfer** > ***phone number***.

   Call Center Elite Multichannel Desktop immediately places the original call on hold and makes a consult transfer call to the number you have selected.

3. If the destination is valid, that is, if a person answers, click the **Transfer** arrow and select **Complete transfer**.

   Call Center Elite Multichannel Desktop transfers the active call.

4. If the destination is not valid, that is, if the phone line is busy, no answer from the contact, or the voice mail of the contact is active, click the **Transfer** arrow and select **Abort transfer**.

   Call Center Elite Multichannel Desktop ends the consult call.

Transferring a call to an unavailable contact in the directory

Procedure

1. In the **Dial** field on the voice toolbar, enter the phone number of the required contact.
2. Click the **Transfer** arrow and select **Blind Transfer** to immediately transfer the call.
3. To check if the destination is valid before transferring the call:

   a. On the toolbar, click the **Transfer** arrow and select **Consult transfer**.

      Call Center Elite Multichannel Desktop places the original call on hold and makes an outgoing call to the transfer destination.

   b. If the destination is valid, that is, if a person answers, click the **Transfer** arrow and select **Complete transfer**.

      Call Center Elite Multichannel Desktop transfers the active call.

4. If the destination is not valid, that is, if the phone line is busy, no answer from the contact, or the voice mail of the contact is active, click the **Transfer** arrow and select **Abort transfer**.

   Call Center Elite Multichannel Desktop ends the consult call.

Conference a call

In Call Center Elite Multichannel Desktop, you can conference a call using the following methods:

Blind conference

A conference destination is immediately joined to the active call.

Consult conference

A conference destination is joined to the active call only after consulting the contact on the destination.

> **Note:**
>
> In a conference, you can add a maximum of six contacts.

Adding a contact available in the directory

About this task

You can add a contact available in the directory to a conference call.

Procedure

1. Search a contact in the directory.

   For more information, see Searching a contact in a directory on page 49.

2. Right-click the contact record and select **Conference** > ***phone number***

   Call Center Elite Multichannel Desktop immediately places the original call on hold and makes a consult conference call to the selected number.

3. If the destination is valid, that is, if a person answers, click the **Conference** arrow and select **Complete conference**.

   The contact becomes active in the conference and the directory numbers of the contacts already in the conference are displayed to the new contact in the call members list.

4. If the destination is not valid, that is, if the phone line is busy, no answer from the contact, or the voice mail of the contact is active, click the **Conference** arrow and select **Abort conference**.

   Call Center Elite Multichannel Desktop ends the consult call. Click **Unhold** to resume the original call.

Use the above steps to add all required contacts to the conference call.

5. Click **Drop and release** to disconnect all contacts after you finished the call.

Adding a contact unavailable in the directory

About this task

You can add a contact not listed in the directory to a conference call.

Procedure

1. In the **Dial** field on the voice toolbar, enter the phone number of the required contact.
2. Click the **Conference** arrow and select **Blind conference** to immediately add the contact in the conference.
3. To check whether the destination is valid before adding the contact to the conference:
   a. On the toolbar, click the **Conference** arrow and select **Consult conference**.

      Call Center Elite Multichannel Desktop places the original call on hold and makes an outgoing call to the contact that you want to add in the conference.
   b. If the destination is valid, that is, if a person answers, click the **Conference** arrow and select **Complete conference**.

      The contact becomes active in the conference and the directory numbers of the contacts already in the conference are displayed to the new contact in the call members list.
4. If the destination is not valid, that is, if the phone line is busy, no answer from the contact, or the voice mail of the contact is active, click the **Conference** arrow and select **Abort conference**.

   Call Center Elite Multichannel Desktop ends the consult call. Click **Unhold** to resume the original call.

   Use the above steps to add all required contacts to the conference call.
5. Click **Drop and release** to disconnect all contacts after you finished the call.

Sending all calls to voice mail

About this task

You can automatically send all incoming calls to your voice mail.

Procedure

1. Click **Send All Calls** on the toolbar.
2. Click **Send All Calls** again to disable sending incoming calls to voice mail.

Forwarding all calls to another number

About this task

You can automatically forward all incoming calls to another number.

Procedure

1. Click **Call Forward** on the toolbar.
2. In the text box, select the phone number to which you need to forward the call.
3. Click **Forward**.
4. Click **Call Forward** again to disable call forwarding.

Recording a call using an agent

Procedure

1. Click **Answer** on the toolbar to receive the voice work item.

   The system enables the **Start Recording** and **Stop Recording** buttons.
2. Click **Start Recording**.

   The system starts recording your conversation with the customer.
3. Click **Stop Recording**.

   The system automatically stops recording when you complete a call or disconnect a call.

Recording a call using a supervisor

Procedure

1. On the Supervisor dashboard, right-click an agent ID under the **Current Work** node to record a call.

   For more information, see Adding a supervisor on page 82.
2. Click **Start Recording**.

   The system starts recording the call of the selected agent.
3. Click **Stop Recording**.

   The system stops recording the call of the selected agent.

Searching a recorded call

Procedure

1. From the **Tools** menu, select **Replay recording**.

   The system displays a new tab for the ACR server.
2. In the left pane, select the search parameters, such as date, agent name, customer, and VDN.
3. Click **Search**.

   The system displays a list of recordings that matches the search criteria.

Replaying a recorded call

Procedure

1. Search a recorded call.

   For more information, see Searching a recorded call on page 67.
2. From the list of searched recordings, select the recording that you want to replay.
3. Click the **Play** button to start replaying the recording.

Releasing a call

Procedure

On the **Voice** toolbar, click **Drop and release**.

Leaving a conference call

About this task

If you are in a conference call with multiple participants, and you want to leave the conference, perform the following action. The other contacts in the conference can continue the call.

Procedure

Click the **Drop and release** arrow on the toolbar and select **Drop me**.

Dropping another contact

About this task

If you are one of the participants in a conference call, you can perform the following action to disconnect another contact from the call even if you are not the initiator of the conference call.

Procedure

Click the **Drop and release** arrow and select **Drop call with:** ***phone number***.

Accessing voice mail

About this task

When you receive a new voice message, the envelope on the **Voice Message** button changes to yellow.

Procedure

Click **Voice Message** on the toolbar.

Call Center Elite Multichannel Desktop dials the voice mail destination number specified in its configuration.

Processing the Preview Contact work items

About this task

To effectively process the Preview Contact work items, Avaya recommends that you disable the **Bring Forward Work Item If Call Answered By Other Means** parameter during the configuration of Call Center Elite Multichannel Desktop.

Procedure

1. Start and log in to Call Center Elite Multichannel Desktop.
2. Change your work status to **Available** to receive work items.

Answering a Preview Contact call

Procedure

Perform one of the following actions:

- Click **Answer** on the toolbar.
- Click the text on the Preview Contact alert from the lower-right side of your desktop.

The system displays the Preview Contact window with work item details.

The first phone number listed in the contact details is automatically displayed in the **Dial** field on the toolbar.

If Smart Dial is enabled, Call Center Elite Multichannel Desktop automatically adds the required national, international access codes to the number. It also removes any unnecessary national and international access codes added in the number.

Calling a customer

Procedure

1. Click **Dial** on the toolbar.

   If you have any active call, Call Center Elite Multichannel Desktop places that call on hold and makes an outgoing call to the customer.

   The system displays the call in a new window.
2. If the customer answers, read the campaign prompt.

   If the destination is not valid, that is, if phone line is busy, or there is no answer from the contact, click the outgoing call tab to open the new window and click **Drop and release** on the toolbar.

   Warning:

   Do not click **Drop and release** when the Document window of your original call is active. This will close your work item.
3. After you end the call, click the outgoing call tab to open the new window and click **Drop and release**.

Assigning a work code to a work item

Procedure

1. Click the **Work Code** arrow on the toolbar and select the appropriate key from the available option.

   Note:

   If an administrator has enabled Work Code previewing, you can hover the mouse over the key for few seconds to preview the value that is assigned to your work item.
2. To add or update any additional information associated with this contact, do it in the Additional Information section of the work item.

Printing information related to a work item

About this task

You can print information related to a selected work item.

Procedure

1. Perform one of the following actions:
   - Click **Print the current work item** on the toolbar.
   - From the **Edit** menu on the menu bar, click **Print**.

   The system displays the Print dialog box.
2. In the dialog box, select the required printing options and click **Print**.

   If more than one window is associated with an open work item, the system prints information from each window and separates it by a line.

Updating the work status

About this task

You can update the status of interaction with a customer and close the work item.

Procedure

1. Click **Close the work item** arrow on the toolbar and select the appropriate work status.

   For information about the work status options, see Work status options on page 70.

   Alternatively, you can click the cross button on the work item to close it. In this case, the default option **1 Completed Success** is selected.

   Note:

   If you have logged in as an **Auto-In** agent, Call Center Elite Multichannel Desktop automatically changes your work mode to **Available** mode.

   If you have logged in as a **Manual-In** agent, change your work mode to **After Call Work**.
2. Click **Available** on the toolbar to receive another call.

   If at any time during an active call you click the tab for the outgoing call and then click back to the original work item, your outgoing call might be put on hold. To resume the call, you must click the outgoing call tab again.

Work status options

The following table describes the different work status options.

Option	Description
1 Completed Success	The customer was contacted and the work completed successfully.
2 Completed Failed	The attempt to reach the contact failed. This task is retried with future campaign schedules.
3 Completed No Retry	The customer was contacted and the work completed successfully. Further attempts to reach this contact should not be made because of the request from the customer.
4 Failed	The attempt to reach this contact failed. Further campaign schedules should not attempt to reach this contact because of an invalid phone number.

Chapter 5: Manage Email work items

Processing Email work items

Procedure

1. Start and log in to Desktop.
2. Change you work status to **Available** to receive work items.

Answering an email

Procedure

Perform one of the following actions:

- Click **Answer** from the toolbar.
- Click the text on the email alert from the lower-right side of your desktop.

The system displays work item details in a new document window.

Note:

Call Center Elite Multichannel Desktop supports the .zip, .tar, .pdf, .jpg, .tif, .txt, .doc, .xls, .htm, .vsd, .exe, .lvp, .wav, and .mp3 attachment types.

Replying to an email

Procedure

1. Perform one of the following actions:
   - Click **Reply to email** from the toolbar.
   - Click **Reply** from the **Email** menu on the menu bar.

   In the configuration of Email Media Store, if the **Include Original Email** parameter is enabled, Call Center Elite Multichannel Desktop automatically inserts the content of the original email into the reply. If the **Edit Original Email** parameter is enabled, the original email appears in the same editable window as the replied message.

   If both the parameters are disabled, the window is split with the original email in the lower, non-editable, pane and the replied message in the upper, editable, pane.

2. To insert the content of an email template, click where you want the text to appear, select the template from the Template window, which previews the template and click **Add Template**.
3. Enter the message in the message field.

Sending an email to another recipient

Procedure

1. Search a contact in the Directory tool window.

   For more information, see Searching a contact in a directory on page 49.
2. Depending on your requirement, perform the following actions:
   - Right-click the contact record and select **Send Email to** > ***email address***.
   - Right-click the contact record and select **Cc Email to** > ***email address***, if you want to send a copy of the message to another recipient with the name of that recipient visible to other recipients of the message.
   - Right-click the contact record and select **Bcc Email to** > ***email address***, if you want to send a copy of the message to another recipient with the name of that recipient invisible to other recipients of the message.

Attaching a file to an email

Procedure

1. Perform one of the following actions:
   - Click **Attach file** from the toolbar.
   - Select **Attach** from the **Email** menu on the menu bar.
2. Browse to the location and select a file.

   Note:

   Call Center Elite Multichannel Desktop supports the .zip, .tar, .pdf, .jpg, .tif, .txt, .doc, .xls, .htm, .vsd, .exe, .lvp, .wav, and .mp3 attachment types.
3. Click **Open**.

   Note:

   While attaching a file, ensure that the file is not open. Otherwise, the file might not get attached correctly.

Sending an email reply and returning to the original work item

Procedure

Perform one of the following actions:

- Click **Send email** form the toolbar.
- Select **Send** from the **Email** menu on the menu bar.

Forwarding an email to a resident expert

Procedure

1. Perform one of the following actions:
    - Click **Forward to resident expert** on the toolbar.
    - Select **Forward to resident expert** from the **Email** menu on the menu bar.
2. Click the **To** field to select a resident expert.
3. Select the **Reply Directly to Customer** check box to ensure that the system directly sends the reply from the selected resident expert to customer.

    Note:

    If you do not select the **Reply Directly to Customer** check box, the system sends the reply from the resident expert to the Media Director for redistribution to the next available agent.
4. Select an email template in the Template window if you want to insert the content of an email template, and click **Add Template**.
5. Type your message in the email body.
6. Click **Send Email** on the toolbar.

    Note:

    If, Advanced WorkCode is configured, then the agent must press the **Send** button again after entering the Advanced WorkCode.

Chapter 6: Manage Simple Messaging work items

Processing Simple Messaging work items

Procedure

1. Log in to Desktop.
2. Change your work status to **Available** to receive work items.

Releasing a call while working on a Web Chat conversation

Procedure

Click **Drop and release** from the toolbar to release a call and make your station Available.

If you have logged in as an **Auto-In** agent, Call Center Elite Multichannel Desktop automatically changes your work mode to **Available** mode.

If you have logged in as a **Manual-In** agent, change your work mode to **After Call Work**.

You can use this method of releasing each call to receive and work on several work items simultaneously.

Customer contact through Web Chat

When a customer initiates a Web Chat conversation, the customer is presented with the Web Chat interface of Call Center Elite Multichannel Desktop.

> **Note:**
>
> The Web-based chat application is provided in the Call Center Elite Multichannel installer. An administrator must install the application on the Web server.

To initiate a conversation, a customer must first type the customer name, optional department, and an initial question on the Web Chat interface, and then click **Launch Conversation**. The Web Chat gateway sends the request to Simple Messaging Media Store. After receiving the request, Simple Messaging Media Store creates a work item and passes the work item to Media Director. Media Director then distributes the work item to an appropriate agent.

Web Chat offers Date and Timestamp and Typing Notification features to customers and agents. In addition, Web Chat offers Chat Transfer feature to agents.

Note:

In a Web Chat conversation, if you type multiple spaces between two words, the system automatically replaces multiple spaces with a single space.

Date and Timestamp

During a conversation between a customer and an agent, the customer and the agent see a conversation timestamp according to their respective local time zones. However, the server stores the conversation timestamp according to the UTC time zone. If an agent attempts to view the conversation history from the server, the conversation timestamp is converted according to the local time zone of the agent.

During the conversation, if the date changes at the agent end but remains unchanged at the server end, the Web Chat work item window of the agent displays the new date while the server stores the conversation according to the current date on the server. The customer and the agent see the information related to day, month, and year in their local languages.

Note:

- The Date and Timestamp feature is applicable to all Simple Messaging Media Store gateways.
- The conversation history displays information about the date and time only after you upgrade to Call Center Elite Multichannel 6.4 or later version.

Important:

Ensure that the time on the following systems is synchronized:

- Call Center Elite Multichannel Reporting Desktop or Call Center Elite Multichannel Desktop of all agents
- Call Center Elite Multichannel core server
- Call Center Elite Multichannel database server

This synchronization is mandatory to get the correct results. To synchronize the time, you can use an NTP server or a domain server.

Typing Notification

During a Web Chat conversation between a customer and an agent, the customer and the agent receive the following notifications:

- When the customer types text, the agent receives a notification stating: `<Customer Name> is typing....`
- When the agent types text, the customer receives a notification stating: `Agent is typing....`

- When the customer stops typing for more than 5 seconds, the agent receives a notification stating: `<Customer Name> has entered text`.

Note:

The Typing Notification feature is applicable only to the Web Chat gateway.

Chat Transfer

During a Web Chat conversation between a customer and an agent, the agent can transfer the conversation to a queue or another agent. After the agent transfers the conversation, the current conversation between the agent and the customer ends.

When the agent transfers the conversation to a specified agent, the conversation goes to that agent only if the agent is available to receive the conversation. If the specified agent is unavailable for more than 4 minutes, the conversation gets re-queued and delivered to any available agent in the queue.

Note:

- The 4 minutes time is the default configuration value. You can edit the Maximum Time In Agent Queue Seconds parameter in the `ASMediaDirector.ini` file to specify the time for which the transferred conversation must wait for the availability of the agent. For more information about the `ASMediaDirector.ini` file, see *Administering Avaya Aura® Call Center Elite Multichannel*.
- An agent can transfer a conversation to another agent only if Direct Agent calling is configured in Communication Manager.

After an agent receives the transferred conversation, the Web Chat work item window of the agent displays a top pane and a bottom pane. The top pane displays the chat transcript history and the bottom pane displays the current conversation between the agent and the customer.

Important:

Ensure that the time on the following systems is synchronized:

- Call Center Elite Multichannel Reporting Desktop or Call Center Elite Multichannel Desktop of all agents
- Call Center Elite Multichannel core server
- Call Center Elite Multichannel database server

This synchronization is mandatory to get the correct results. To synchronize the time, you can use an NTP server or a domain server.

Transferring a conversation

About this task

Using this procedure, an agent can transfer a conversation to a queue or another agent.

Procedure

1. On the Web Chat work item window, click **Transfer**.

2. In the Select a Transfer Destination dialog box, perform one of the following steps to transfer the conversation to a queue:
   a. In the **Destination** field, click **Queue**.

      The system displays the list of queues.
   b. **(Optional)** Click **Refresh** to refresh the list of queues.
   c. Click a queue from the list.
   d. Click **OK**.
3. In the Select a Transfer Destination dialog box, perform one of the following steps to transfer the conversation to an agent:
   a. In the **Destination** field, click **Agent**.

      The system displays the list of agents. In the list of agents, the Agent Name field displays the name of the agent only if you configure the Presence plug-in and the agent details are available in the contact database. If you do not configure the Presence plug-in or the agent is not available in the contact database, the Agent Name field displays the name of the agent as SYSTEM.
   b. **(Optional)** Click **Refresh** to refresh the list of agents.

      The list contains all agents that are currently logged into Media Director.
   c. Click an agent from the list.
   d. **(Optional)** In the **Search** field, enter the text to search an agent in the list.

      When you enter the text, the first agent that matches the search criteria is selected automatically.
   e. Click **OK**.

   After a successful transfer, the Web Chat work item window of the agent displays:

   - A message confirming the transfer of conversation.
   - A message indicating the end of the conversation between the current agent and the customer.

   After a successful transfer, the Web Chat interface of the customer displays:

   - A message indicating that the system is transferring the conversation to another agent.

Customer contact through Google Hangouts

When a customer uses the Google Hangouts messenger to communicate with you, the customer must add one of the services of the contact center to the customer contact list. Instant Messenger automatically displays the Gmail address of the service in the gateway configuration of Google Hangouts messenger.

The customer initiates a conversation by double-clicking the service they want to contact. The system displays the Instant Message dialog box in which the customer enters a question and clicks **Send**.

The Google Hangouts messenger gateway sends the request to Simple Messaging Media Store, which creates a work item and passes the work item to Media Director. Media Director then distributes the work item to an appropriate agent.

Customer contact through SMS

Customers can communicate with you using a Short Message Service (SMS). To initiate a conversation, customer sends an SMS to a specific number in a contact center from their mobile phone.

The SMS gateway sends the request to Simple Messaging Media Store, which creates a work item and passes the work item to Media Director. Media Store distributes the work item to an appropriate agent.

Answering a chat call

Procedure

1. Perform one of the following actions:
    - Click **Available** from the toolbar.
    - Click the text on the chat alert from the lower-right side of your desktop.

    The system displays the work item details in a new document window.
2. In the **message** field, type your response.
3. **(Optional)** Insert a predefined phrase in the body of your work item.

    For more information, see Inserting an autotext entry on page 39.
4. Use the spell checker to check the spelling in your work item.

    For more information, see Checking the spelling of a word on page 40 and Checking the spelling in a work item on page 40.
5. Click **Send**.

    The customer can type a reply and click **Send**.

    > **Note:**
    >
    > Call Center Elite Multichannel Desktop displays the emoticons that a customer sends using an IM application. You can also send an emoticon to the customer by using a keyboard to type a key combination associated with an emoticon, for example, :).
6. Repeat the steps until you complete the conversation with the customer.

7. Close the work item.

   For more information, see Closing a work item on page 43.

Chapter 7: Supervisor plug-in

Supervisor is a plug-in with which you can monitor the call activity of an agent or a group of agents.

Using the plug-in, integrated with Call Center Elite Multichannel Desktop, you can:

- View or change the current state of an agent.
- Join a call as an observer in which you can hear the conversation without an agent and customer knowing that you have joined the call.
- Join a call as a coach in which you and an agent can communicate with each other without the customer knowing that the agent is interacting with you.
- Join a call as a participant in which an agent, a customer, and you can communicate with each other.
- Log out an agent.

Note:

In the Supervisor window, when you select an agent and click **Show history**, the system populates the agent history in the History window.

Additionally, if an administrator has configured the Interaction Data Server - View client for Desktop, you can:

- View statistics about the average length of time an agent spends in the **After Call Work** (ACW) and the **Available** modes.
- View statistics about the number of calls an agent received.

In Call Center Elite Multichannel Desktop, the plug-in displays data in a simple tree structure and uses colors to indicate information about agents and calls.

Note:

Realtime and Historical reports do not count a call or talk state when a Supervisor joins the call (all modes) through Supervisor Desktop.

Adding a supervisor requirements

Before you add a supervisor tab, ensure the following:

- A group of agents is created in the ASContact database using Call Center Elite Multichannel Control Panel. A supervisor can monitor the activities of the agents in the group.

Note:

You can monitor activities of an agent only when the corresponding agent ID is specified in the ASContact database.

- In the Options dialog box:
    - The Directory tab displays correct values for the ASContact database.
    - The IDS View Client tab displays the correct IDS View URL and IDS View Client is properly connected. With this, the supervisor can view the statistics of all agents.
    - The Telephony tab displays the correct XML server IP address and telephony link is successfully connected to the XML server. With this, the supervisor can monitor the stations and the agents.

Note:

In Call Center Elite Multichannel Desktop, the Dashboard plug-in is a very useful and powerful tool, where you can view agent details in an organized manner. You can simultaneously view the activities of four groups of agents.

Adding a supervisor

About this task

As a supervisor, you can add a supervisor tab on the dashboard to monitor the activities of an agent or a group of agents.

Procedure

1. In Desktop, click **Tools** > **Options**.
2. Click the Dashboard tab.
3. On the Dashboard tab, click **Add**.
4. Enter the values as described in Adding a supervisor field descriptions on page 82.
5. After you complete all settings, click **Apply** and then click **OK**.

   Supervisor tab displays single or multiple agent groups. For information about the nodes that are displayed for each agent, see Supervisor monitoring information on page 83.

   Note:

   By default, the agent name is displayed in the format <Firstname Lastname>. To change the format of the displayed agent name set the *Name Order* configuration value in the `User Control` section of the dashboard in `asguihost.ini` file to *Reverse* or *2*.

Adding a supervisor field descriptions

The following table describes the field descriptions of adding a supervisor.

Field	Description
Display name	The name that appears on the supervisor tab. For example, Supervisor.
Enable close button	A cross button that appears on the top-right corner of the supervisor tab. Clicking this button closes the supervisor tab.
Lock Layout	Locks the panel layout. If you select this option, you cannot resize the panels for agents groups that you monitor. If you do not select this option, you can resize the panels for agents groups. To resize the panels, you need to hold a mouse pointer between the two panels and when the mouse pointer changes to a double-headed arrow, drag it to the required side.
Panel Layout	In this area, you can select an option to arrange multiple dashboard content panels on the Supervisor tab. These dashboard content panels represent different groups of agents that you can monitor. Following are the options available: • **Single**: Displays only one panel. • **1 left 1 right**: Displays one panel at the left and one panel at the right. • **1 top 1 bottom**: Displays one panel at the top and one panel at the bottom. • **2 top 2 bottom**: Displays two panels at the top and two panels at the bottom. • **1 top 2 bottom**: Displays one panel at the top and two panels at the bottom. • **2 top 1 bottom**: Displays two panels at the top and one panel at the bottom.
Dashboard Content	Depending upon the options you select for **Panel Layout**, these drop-down list boxes are enabled. Select **Supervisor** from the drop-down list and click the corresponding button. For information about the options on the Supervisor dialog box, see Adding agent groups field descriptions on page 85. The supervisor tab displays the groups that you select on the Supervisor dialog box for each dashboard content.

Supervisor monitoring information

The following table describes the nodes that are available for a supervisor to monitor the information. These nodes contain sub-nodes for agent and phone. In these sub-nodes, a supervisor can view the respective information in real time.

Node	Description
Agent Group	This is the first level node, which represents the agent group name that you can monitor. In this node, supervisor can monitor call and agent related information in the **Phone** and **Agent** sub-nodes respectively.
Phone	This is the second level node. This node displays the call details of an agent group that you are monitoring. This node contains the following sub-nodes: • **Current Work**: Displays the number of voice calls an agent is currently handling from their phone. • **History**: Each Call Node has a single child node for each call currently at the agent device. The Active Call Node text indicates the call state, the direction of the call, and the phone number of the other call party.
Agent	This is the second level node. In this node, you can monitor the agent work mode and the statistical work details of an agent. When an agent logs in to the application, this node displays the agent name and the agent ID. This node contains the following sub-nodes: • **Agent work mode**: Displays the work modes, such as Logout, AUX, Available, or ACW, of an agent. • **Agent statistics**: Displays the statistical data about an agent. The data is retrieved from the Interaction Data Server - Voice and Presence. This node is not displayed, if the connection to the Interaction Data Server - Voice and Presence is not configured or not available. In agent statistics, you can monitor the following details: • **Agent ACW**: Displays the average length of time, in seconds, that an agent spends in the ACW mode. The time is calculated above the interval specified in the Interaction Data Server - Voice and Presence. • **Avg. Available**: Displays the time average length of time, in seconds, an agent is in the Available mode. The time is calculated above the interval specified in the Interaction Data Server - Voice and Presence. • **Calls received/interval**: Displays the total number of calls that an agent has received during the interval specified in the Interaction Data Server - Voice and Presence. **Note:** The statistic interval is the time in minutes between statistic calculations. The interval, which is set in the Interaction Data Server - Voice and Presence can be between 1 and 60 minutes. For more information about the interval, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Adding agent groups field descriptions

The following table describes the field descriptions of adding agent groups.

Name	Description
General Options	
Display title	The name of an agent group. For example, HR, Administration, or Finance. The system displays the title at the top-left side of the panel.
Supervisor group name	The name of an agent group from the ASContact database. You can monitor activities of agents only from these groups.
Maximum group members	The maximum number of agents that the system displays in a group. Default: 10.
Column Names In Database	
Station DN	The database column name from where Presence gets the station DN of each contact. The default is BusinessPhone.
Agent ID	The database column name from where Presence gets the agent ID of each contact. The default is OtherPhone.
Time Display Style	
Seconds only	Displays time in seconds.
Minutes and seconds	Displays time in minutes and seconds.
Call Functions	
Allow service observe	This option makes the **Allow Service Observe** menu item available to you when you right-click an active call. The default is True. For more information, see Joining a call as an observer on page 86.
Allow join call	This option makes the **Allow Join Call** menu item available to you when you right-click an active call. The default is True. For more information, see Joining call as a participant on page 87.
Allow join as coach	This option makes the **Allow Join As Coach** menu item available to you, when you right-click an active call. The default is True. For more information, see Joining a call as a coach on page 87.
Agent Functions	
Allow set agent state	This option makes the **Allow Set Agent State** menu item available to you, when you right-click the agent work mode. The default is True. For more information, see Setting an agent on page 87.

Table continues…

Name	Description
Allow log agent out	This option makes the **Allow Logout Agent** menu item available to you, when you right-click the agent work mode. The default is True. For more information, see Logging out an agent on page 87.
Call Node Color Scheme	
Service observe call node color	The color that is used to display a call node when you join call as an observer
Join call call node color	The color that is used to display a call node when you join a call as a participant.
Join as coach call node color	The color that is used to display a call node when you join a call as a coach.
Reason Codes	
Logout reason code	The reason code that is used when you attempt to log an agent out. The default is 9.
Auxiliary reason code	The reason code that is used when you attempt to put an agent in the AUX mode. The default is 8.
Error Log	
Enable error logging	This option enables the application to store the plug-in related error information to the error log files.
Show History	
Enable show history	If you select this check box, the system enables the Show History option in the Supervisor window.
Enable docking on show history	If you select this check box, the system enables docking of the History window on Call Center Elite Multichannel Desktop.

Supervisor functions

Supervisor can observe a conversation of an agent with a customer, help an agent resolve queries, or actively participate in a conversation that an agent has with a customer.

Joining a call as an observer

About this task

To monitor the conversation between an agent with the customer, supervisors can join a call as an observer. Supervisors can listen to the conversation between an agent and a customer without the agent and the customer being aware that the supervisor is on the call.

Procedure

Right-click an active call node and select **Service observe**.

Joining call as a participant

About this task

To participate in a call between an agent and a customer, supervisors can join the call as a participant. In this, the agent, the customer, and the supervisor can communicate with each other.

Procedure

Right-click the active call node and select **Join call as participant**.

Joining a call as a coach

About this task

To join a call to help an agent, supervisors can join a call as a coach. Supervisors can communicate with an agent without the customer being aware that the supervisor and the agent are interacting.

Procedure

Right-click the active call node and select **Join as coach**.

Dropping from a call

Procedure

Right-click the active call node and select **Drop me from call**.

Setting an agent

About this task

As a supervisor, you can set the working state for an agent. You can place an agent in the **AUX**, **ACW**, or **Available** mode.

Procedure

Right-click the Agent work mode node and select **Set agent state** > ***agent state***.

Logging out an agent

About this task

Being a supervisor, you can log an agent out.

Procedure

Right-click the **Agent work mode** node and select **Log agent out**.

Viewing the history of an agent

Procedure

In the Supervisor window, right-click the agent name and click **Show history**.

The system populates the agent history in the History window.

Chapter 8: Resources

Documentation

The following table lists the related documents for the Avaya Aura® Call Center Elite Multichannel product. You can download the documents from the Avaya Support website at http://support.avaya.com/.

Title	Description	Audience
Avaya Aura® Call Center Elite Multichannel Call Routing Server User Guide	Provides an overview of Call Routing Server that enables intelligent call routing for inbound calls in Call Center Elite Multichannel.	• Sales engineers • Solution architects • Implementation engineers • System administrators
Installing Avaya Aura® Call Center Elite Multichannel	Provides product overview, supported products, installation, configuration, and licensing requirements for Avaya Aura® Call Center Elite Multichannel.	• Implementation engineers
Avaya Aura® Call Center Elite Multichannel Configuration Client Developer Guide	Provides information about the Configuration Client Developer application, which is a control that facilitates an application to transparently access the configuration information from any location.	• Programmers
Administering Avaya Aura® Call Center Elite Multichannel	Provides information about how to manage databases, configure Call Center Elite Multichannel services, and administer Avaya Aura® Communication Manager.	• Sales engineers • Solution architects • Implementation engineers • System administrators
Avaya Aura® Call Center Elite Multichannel Overview and Specification	Provides an overview of the Call Center Elite Multichannel features.	• Sales engineers • Implementation engineers • System administrators

Table continues…

Title	Description	Audience
Avaya Aura® Call Center Elite Multichannel Application Management Service User Guide	Provides information about how to install and administer Application Management Service in Call Center Elite Multichannel.	• Sales engineers • Solution architects • Implementation engineers
Avaya Aura® Call Center Elite Multichannel Upgrade and Migration Guide	Provides information about how to upgrade or migrate Avaya Aura® Call Center Elite Multichannel from Release 6.2.x, 6.3.x, or 6.4.x to Release 6.5. The Upgrade Sequence section in the respective upgrading chapters provides a high-level overview of the process.	• Implementation engineers • Solution architects
Avaya Aura® Call Center Elite Multichannel Reporting User Guide	Provides information about the reports for Agents, Customers, Interaction, Program and Schedule, Skills, and VDNs. This guide also provides information about historical reports and real-time reports.	• Sales engineers • Solution architects • Implementation engineers
Avaya Aura® Call Center Elite Multichannel TTrace User Guide	Provides information about TTrace and its components, helps you to understand the TTraceConsole and TTraceConfig user interfaces, and explains the operations that you can perform using TTraceConsole and TTraceConfig.	• Sales engineers • Solution architects • Implementation engineers

Finding documents on the Avaya Support website

About this task

Use this procedure to find product documentation on the Avaya Support website.

Procedure

1. Use a browser to navigate to the Avaya Support website at http://support.avaya.com/.
2. At the top of the screen, enter your username and password and click **Login**.
3. Put your cursor over **Support by Product**.

4. Click **Documents**.
5. In the **Enter your Product Here** search box, type the product name and then select the product from the drop-down list.
6. If there is more than one release, select the appropriate release number from the **Choose Release** drop-down list.
7. Use the **Content Type** filter on the left to select the type of document you are looking for, or click **Select All** to see a list of all available documents.

   For example, if you are looking for user guides, select **User Guides** in the **Content Type** filter. Only documents in the selected category will appear in the list of documents.
8. Click **Enter**.

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** or click **>** to search for the course.

Course code	Course title
5C00092W	Avaya Aura® Call Center Elite Multichannel Overview
10C00010E	Knowledge Access: Avaya Aura® Call Center Elite Multichannel Implementation
10C00094V	Avaya Aura® Call Center Elite Multichannel Implementation and Maintenance
4302	Avaya Aura® Call Center Elite Multichannel Implementation Test
0C00060E	Knowledge Collection Access: Avaya Aura® Call Center Elite Portfolio
E: Self-paced in virtual campus W: Web (online) course V: Virtual	

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 http://support.avaya.com and perform one of the following actions:
  - In **Search**, type `Avaya Mentor Videos` to see a list of the available videos.
  - In **Search**, type the product name. On the Search Results page, select **Video** in the **Content Type** column on the left.
- To find the Avaya Mentor videos on YouTube, go to www.youtube.com/AvayaMentor and perform one of the following actions:
  - Enter a key word or key words in the **Search Channel** to search for a specific product or topic.
  - Scroll down Playlists, and click the name of a topic to see the available list of videos posted on the website.

    Note:

    Videos are not available for all products.

Support

Go to the Avaya Support website at http://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.

Appendix A: Toolbars and menus

The Call Center Elite Multichannel Desktop interface contains toolbars that you can use to manage multimedia work items.

You can use the toolbars to:

- View information related to a contact item and a work item.
- Complete tasks and update the work item status.

A toolbar consists of buttons and menus that you can use to set up your work environment, handle work items, and update the status of each work item.

About the toolbars

The following components have toolbars:

- Voice
- Email
- User
- AutoText
- Work Code

On each component toolbar, you can click buttons to perform an action or click menus to select an option before performing an action.

Toolbar buttons

You can configure the position of the toolbar on the Options dialog box from the **Tools** menu.

When you place the cursor over a button, the system displays a tooltip in a box near the button. This tooltip indicates the name of the button. To perform an action, click the corresponding button on the toolbar.

Toolbar menus

Toolbar menus are the buttons with a down arrow at the right side.

You can click the button to perform an action or the down arrow to view the menu options and submenus for the tasks that are associated with the button.

Context menus

Desktop displays a context menu when you right-click on a user interface control. The **Context** menu is a popup menu that displays options for the selected UI control.

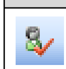
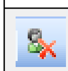
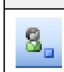
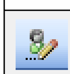
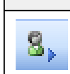
You can select a **Context** menu option instead of the corresponding function on the toolbar or menu bar.

User toolbar

The User toolbar consists of buttons and menus that you can use to perform the following tasks:

- Change your work status to **Available** to receive work items.
- Log in and log out of the application.
- Set your working preferences.
- Exit the application.

The following table describes the buttons that appear on the User toolbar.

Icon	Button	Description
	**Agent Login**	You can log in to the Desktop application.
	**Agent Logoff**	You can log out form the Desktop application.
	**Auxiliary**	You can change your work mode to **Auxiliary** (AUX). The AUX mode indicates that you have taken a break, for example, lunch break.
	**After Call Work**	You can change your work mode to **After Call Work** (ACW). The ACW mode indicates that you are doing an after call work, such as updating notes or filling forms.
	**Available**	You can change your work status to **Available** to receive work items.

Email toolbar

The Email toolbar consists of buttons and menus that you can use to perform actions related to the email work items.

The following table describes the buttons that appear on the Email toolbar.

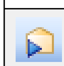
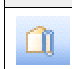
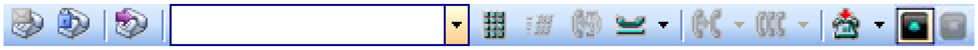
Icon	Button	Description
	**Save Email**	Saves an email.
	**Reply to Email**	Opens a new tab for you to reply to an email that you receive from a customer. In the new email tab: • The **Subject** field displays the subject from an email that you received. • The **To** field displays the email address of a customer from whom you received the email. • The email body displays two sections, separated with a separator. You can drag this separator to resize the sections. The lower section displays the original email. You can enter your response to the customer query in the upper section. The arrow button ( / ) on the right side of the **From** field shows and hides a part of the information from the upper section. The purpose of hiding the information from the upper section is to provide larger area for the original email. **Note:** The button is enabled only when you have an active email work item.
	**Reply to All Recipients**	Opens a new tab for you to reply to the email that you receive from a customer. The email is sent to all the email addresses mentioned in the original email. The functionality of this option is same as the **Reply to Email** option. The **To**, **Cc**, and **Bcc** fields show the same email address from the original email.
	**Forward Email**	Opens a new tab for you to forward this email to another person. For example, supervisor or another contact. You can enter the email addresses in the blank **To**, **Cc**, **Bcc** fields to forward this email.

Table continues…

Icon	Button	Description
	**Forward to Resident Expert**	Opens a new tab for you to send an email to a Resident Expert. You must send an email to a Resident Expert when you are unable to understand a customer query or when advance skills are required to resolve a customer query. In the new email tab: • The **To** field changes to a drop-down list. You can select the email address of a Resident Expert from the drop-down list. • The **Cc**, **Bcc**, and **Subject** fields are disabled for editing. • You can select the **Reply directly to customer** check box, so that the Resident Expert can send the email to the customer.
	**Send Email**	Sends a new active email or an active email that you are replying to or forwarding to a customer or a Resident Expert. After you send an email from the Desktop application, the tab of the original email work item becomes active. This button is enabled only when the tab of an email that you are sending, replying, or forwarding is active. When you perform one of the following steps, all outbound emails are sent in HTML format irrespective of the format of inbound emails: • In the `ASEmailMediaStore.ini` file, set the Send Email As HTML Format parameter to True. • In Call Center Elite Multichannel Control Panel, edit an EMS queue and select the **Send Email As HTML Format** check box. However, an outbound email is sent in Plain Text when you explicitly select the option to send the email in Plain Text.
	**Attach File**	Opens the file Open dialog box to select a file that you want to attach to an email. The **Attachment** field displays all the files that you have attached. To remove an attached file, you can select a file and press `Delete`. You can also right-click a file and select **Remove attachments**.
	**Spell Check**	Checks the spellings of the text entered in the email body.

Voice toolbar



The Voice toolbar consists of buttons and menus that you can use to perform actions related to the voice work items that you receive.

The following table identifies and describes the buttons that appear on the Voice toolbar:

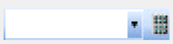
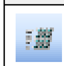
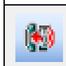
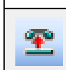
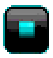
Icon	Button	Menu option	Description
	**Voicemail**		Displays the voice mail messages that you received.
	**Send All Calls**		Forwards all voice work items to a predefined destination.
	**Forward Call**		Forwards an active voice work item to a number that you specify in the **Forward to** field.
	**Dial field and Dial pad**		Displays the phone number of a contact. When you click the **Dial** pad, the system dials the phone number displayed in the **Dial** field.
	**Send DTMF tones**		Sends Dual Tone Multi Frequency (DTMF) tones required for an Interactive Voice Response (IVR) system, such as telebanking and voice mail prompts.
	**Answer**		Answers an active work item.
	**Hold**		Puts an active voice call on hold. You must use the Hold option when you want to transfer the call, conference the call, or discuss a customer query with your supervisor.
	**Unhold**		Resumes a voice call that is on hold. You can start communicating with the person on the call.
	**Transfer**	• **Blind Transfer** • **Consult Transfer** • **Complete Transfer** • **Abort Transfer**	Transfers an active voice call to another number. For example, another agent or a supervisor.
	**Conference**	• **Blind Conference** • **Consult Conference** • **Complete Conference**	Adds a contact to an active conference.

Table continues…

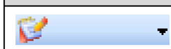
Icon	Button	Menu option	Description
		• **Abort conference**	
	**Drop and Release**		Drops the current voice call.
	**Start Recording**		Starts recording a voice call.
	**Stop Recording**		Stops recording a voice call.

AutoText and Work Code toolbar

AutoText and Work Code are single button toolbars with a down arrow on each button.

You can click **AutoText** to display the autotext entries that an administrator has configured in Control Panel. You can click an autotext entry to insert the entry in your work item, session notes, or work item notes.

You can click **Work Code** to view the work codes that an administrator has configured in Control Panel. You can click a work code to assign the work code to your work item.

Icon	Button	Description
	**AutoText**	Displays the autotext entries that an administrator has configured in Control Panel.
	**Work Code**	Displays the work codes that an administrator has configured in Control Panel.

Media Client toolbar

The following table lists and describes the buttons that appear on the Media Client toolbar.

Icon	Button	Description
	**Station Login/ Station Logout**	Registers or unregisters an Agent Station on Communication Manager. Call Center Elite Multichannel Desktop displays this button only when the Media Client plug-in is enabled.
	**Mute Audio/Unmute Audio**	Mutes or unmutes a call.

To use these buttons, you must configure the Media Client plug-in through **Tools** > **Options** dialog box. For information about how to configure the Media Client plug-in, see *Installing Avaya Aura® Call Center Elite Multichannel*.

Note:

- Media Client is not supported in Citrix and Virtualized environments.

- Media Client does not support SIP station.
- Do not log to the same station on the same Desktop simultaneously through Call Center Elite Multichannel Media Client and Avaya one-X® Agent/Avaya one-X® Communicator.
- When Call Center Elite Multichannel Media client is configured on Agent Desktop, agent cannot add collected digits while transfer or conference of calls.
- The DMCC plug-in functionality does not work with Media Client plug-in.

Shortcut keys

Call Center Elite Multichannel Desktop offers the following shortcut key combinations.

Shortcut	Action
`Control+P`	Print.
`Alt+S`	Send email.
`Alt+R`	Reply to email.
`Control+G`	View error logs.
`F1`	Display online help.
`F7`	Check spelling.
`Control+Home`	Dial a phone number.
`Control+Page Down`	Place a call on hold.
`Control+Page Up`	Resume a call that is on hold.
`Control+Delete`	Drop me from a call.
`Control+End`	Release a call.
`Control+Shift+Q`	Initiate a blind transfer.
`Control+Q`	Initiate a consult transfer.
`Alt+Q`	Complete a transfer.
`Alt+Shift+Q`	Abort a transfer.
`Control+Shift+A`	Initiate a blind conference.
`Control+A`	Initiate a consult conference.
`Alt+A`	Complete a conference.
`Alt+Shift+A`	Abort a conference.
`F8`	Log in to skills.
`F9`	Log out of skills.
`F10`	Change to the AUX mode.
`F11`	Change to the ACW mode.
`F12`	Change to the Available mode.

Appendix B: Plug-ins

Rules Plug-in

About Rules Plug-in

The Rules Plug-in is a plug-in component that allows you to create a simple set of rules that automatically perform actions on call events that meet certain criteria. This rule functionality is similar to the email rules capability in Microsoft Outlook. Without changing an application's code, you can use the Rules Plug-in to enhance desktop functionality. For example, you can configure rules to:

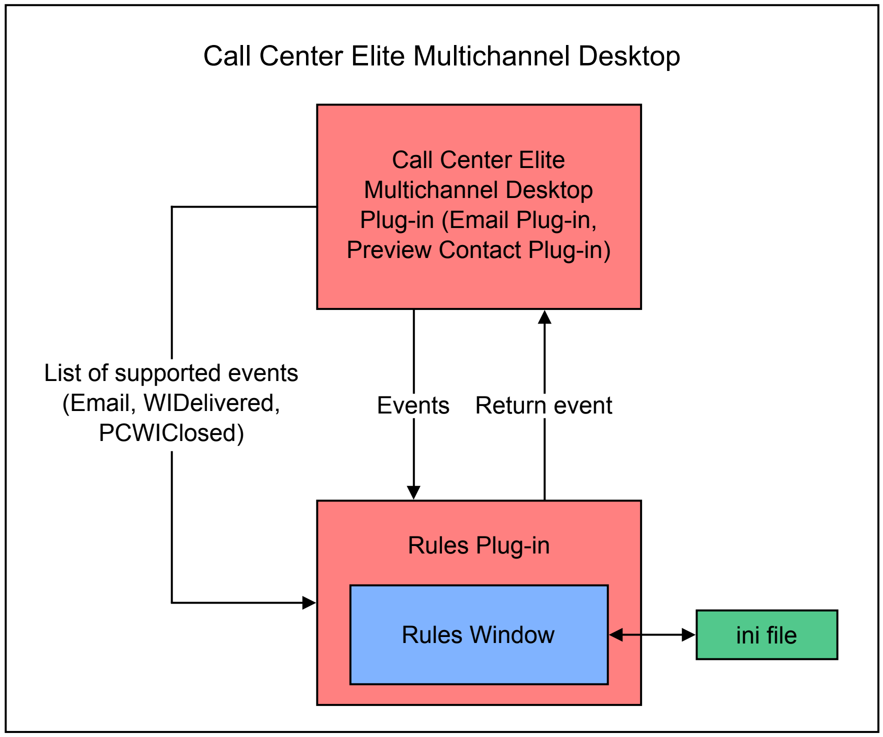
- Deflect calls from a specific CLI to voicemail
- Open another application or website
- Send data and key strokes to another customer-related application
- Bring another window to the front to help process a call
- Pass data to another application that supports DDE

Essentially, a rule fits into a simple statement; when a certain event occurs and a call property matches this value, do this action then either continue rules processing, jump to another rule or stop.

The Rules Plug-in is started by the controlling application. The configuration data passed to it consists of the mandatory generic plug-in configuration data and a list of rules to be processed.

The functionality to build valid rules that relate to a specific desktop product is managed by the individual controlling application. The application uses the Rules Plug-in to execute those rules.

Call Center Elite Multichannel Desktop uses the Desktop Rules Plug-in to convert events into events for the Rules Plug-in. Rules Plug-in also provides the Rules window that allows you to easily create, change, and remove rules. These rules are stored as simple text strings in the Call Center Elite Multichannel Desktop .ini file.



The Rules Plug-in and the Rules Wizard are installed as part of the Call Center Elite Multichannel Desktop installation.

Error logging

Call Center Elite Multichannel plug-ins log error information relating to their operation into the error log file of their controlling application.

For Call Routing Server log files, refer to the directory:`<CCEM_INSTALL_DIR>\Avaya Aura CC Elite Multichannel\Server\Call Routing Server\*ACRS.Log`

Installing Rules Plug-in

Call Center Elite Multichannel plug-ins are not installed as separate components, but as part of the installation for applications that support their integration. For more information on installing the supporting applications, see *Installing Avaya Aura® Call Center Elite Multichannel Guide*.

In addition to the standard installation steps, this appendix explains:

- how you can use command line parameters during installation to dictate where configuration information is retrieved.
- how you can change the configuration source from the local .ini file to the Configuration Server if an application has already been installed.

- how to automatically (silently) install an application following a set of pre-defined selection options.

Configuration of Rules Plugin

Configurable parameters

The following are the list of parameters that can be configured for the Rules plugin.

Enable Client A value that determines if the controlling application will enable this plug-in on startup. True=enabled, False=disabled.

Client Library Name The name of the generic plug-in: ASGRules.dll

Display Name The text that displays on the client's user interface.

Display Icon An icon that displays on the client's user interface to represent its running process.

Event Type Indicates to the server loading the plug-in if it wishes to do maintenance tasks or real work. Use Event Type=Native to tell the server that the plug-in wishes to interface for native server functionality.

[Sections] field descriptions

The following data must appear as one section but can be repeated to create more sections. A section will be used if the received event and filter values match the configured event and filter values.

Name	Description
Event Name	The name of the event sent by the controlling application that will invoke this configuration set. When combined with the **Event Filter Name** and **Event Filter Value** parameters, this represents a unique combination. If filtering is not used (by the **Event Filter Name** parameter being empty), the **Event Name** parameter is expected to be unique. If it is not, the first entry in the configuration sequence is used.
Event Filter Name	A name expected in the parameter list sent with the event from the controlling application. This filter allows multiple configuration sets to have the same **Event Name** but be identified by a received parameter value. If this parameter is empty, filtering will not be used.

Table continues…

Name	Description
Event Filter Value	The value the plug-in will try and match with the received event and event filter. If there is a match, this configuration set is deemed the correct sequence. Example: With a configuration set of **Event Filter Name**=*VDN* and **Event Filter Value**=*9830*, any event received with a matching Event Name must also contain, as part of the event's parameter sequence, a set VDN/9830.

For more information on how to construct a rule, see Rules language on page 102.

Rules language

The following keywords are used to create rules:

- When
- LinkedRule
- And
- Always
- Do
- Nothing
- Then
- Continue
- GotoRule
- Stop

When and LinkedRule

Triggers are matched against events as they are received from the controlling application. This is a simple string match on the event name received with the ASHandleServerEvent and the name that follows the When keyword in the received rule. The event name consists of all text from the end of the When keyword to the beginning of the And or Always keyword that follows.

This allows event names to consist of spaces and irregular characters.

The LinkedRule keyword is an exception to the event name matching. This keyword allows this rule to be executed only when called from another rule. This allows the simple chaining of common rules from different trigger sources.

Example

The following is an example for configuring rules:

Rule 1 = When ApplicationOpened Always Do Open Calc.exe

Rule 2 = When CallAlerting And CallerDN = 1234 Do BringToFront Calculator Then GotoRule 4

Rule 3 = When CallAnswered And CallerDN = 1234 Do SendKeys Calculator, %CallerDN% {ENTER} Then GotoRule 4

Rule 4 = When LinkedRule And CallerDN = 1234 Do DDEPoke MyService, MyTopic, MyItem, %CallerDN%

Always, And, and Nothing clause

The And clause allows a piece of event data to be verified to help filter this rule from others. It supports checking of any key/value received with the event parameters.

Assessment of the value of an event value is done using the keyword operators <,> and =. The event key/values are compared to either a literal string value or the keyword Nothing. If a value that is required to be matched by the rule does not exist in the received key/value set, this rule fails and further rules are checked.

Value	Description
CallerDN = 1234	Matches the key/value item CallerDN on a literal value 1234.
CallerDigits > Nothing	Checks that the key/value item contains some data, that is, the key/value item is not an empty string.
CallerDigits = Nothing	Checks that the key/value item is empty. Note: The key/value must still be present in the received event key/value list.

The Always keyword removes any filtering for this trigger. And is mutually exclusive with Always.

Examples:

Rule 1 = When ApplicationOpened Always Do Open Calc.exe

Rule 2 = When CallAlerting And CallerDN = 1234 Do BringToFront Calculator Then GotoRule 4

Note:

A rule supports multiple And clauses that can be chained to allow checking of a number of event properties. For the rule to be selected, all And clauses must be successfully matched.

Do clause

The Do clause specifies the action (or actions) to be taken when the trigger and filter conditions are satisfied.

Some of these actions require further values to satisfy the action requirements. These are termed action values. As a standard, action values are a comma-separated list of string literals used to perform the action. All action values are parsed to allow data from the call object to be inserted into the action value.

Available actions are:

- Open
- SendKeys
- BringToFront

- Clipboard
- WriteFile
- DDEPoke
- DDEExecute
- DDEServer
- ReturnEvent
- SocketClient
- SocketServer
- ASGExtension
- Nothing
- SQL
- Alert

Open clause

The **Open** action launches the specified program based on the current shell settings. The rule does not wait for the program to exit. This action expects action values that contain the full path to the executable and any command line parameters. Action values are passed to replace any dynamic command line data with values from the current call object.

If the target is an executable file, then command line parameters must appear as a second comma-separated action value.

Examples:

Open MissedCallLog.exe, %CallerDN% %CalledDN% %UUI%

Open http://SomeServer/ MissedCallLog&%CallerDN%+%CalledDN%+%UUI%

> **Note:**
>
> If you are using the action as a Windows Run command, the comma between the command and parameters should not be entered. For example: **`MissedCallLog.exe %CallerDN% %CalledDN% %UUI%`**

SendKeys

The SendKeys action sends keystrokes (CTI information) to applications that have no automation interface. This action expects two action values to be configured with it.

The first is the name of the window to be activated. This action value supports a wildcard character "*" , which allows applications that dynamically adjust the window title based on specific data (for example, Agent) to be located and shown:

Value	Description
* at the end	Matches any window with a title starting with the specified text. For example: Active* will find the first window starting with Active.
* at the begin	Matches any window with a title ending with the specified text. For example: *Notepad will find the first window with a title ending in Notepad, for example, Untitled - Notepad.
* at beginning and end	Matches any window with a title containing the specified text. For example: *Note* will find the first window with a title containing Note, for example, Untitled - Notepad.

The second action value is the sequence of key strokes to be sent once the window has been located. This action value is passed to replace any dynamic command line data with values from the current call object.

Example:

SendKeys *Notepad, %CallerDigits%

Most keyboard characters are represented by a single keystroke. To send a single keyboard character, send the character itself as the string argument. For example, to send the letter x, send the string argument “x”. To send a space, send the string “ ".

To send more than one keyboard character at a time, send a sequence of characters as a compound string argument. For example, to send letters a, b, and c, send the string argument “abc”.

The SendKeys action uses the following characters as character modifiers (instead of using their face-values):

Special character	Argument
{ }	Braces
( )	Parenthesis
[ ]	Square brackets

Special character	Argument	Key
+	Plus sign	SHIFT
^	Caret	CTRL
%	Percentage	ALT
~	Tilde	ENTER

Braces “{ }” are used to send non-character keystrokes and keystrokes that represent actions:

Key	Argument
{ }	Braces
( )	Parenthesis
[ ]	Square brackets

Key	Argument
BACKSPACE	{BACKSPACE}, {BS}, or {BKSP}
BREAK	{BREAK}
CAPS LOCK	{CAPSLOCK}
DEL or DELETE	{DELETE} or {DEL}
DOWN ARROW	{DOWN}
END	{END}
ENTER	{ENTER}
ESC	{ESC}
HELP	{HELP}
HOME	{HOME}
INS or INSERT	{INSERT} or {INS}
LEFT ARROW	{LEFT}
NUM LOCK	{NUMLOCK}
PAGE DOWN	{PGDN}
PAGE UP	{PGUP}
PRINT SCREEN	{PRTSC}
RIGHT ARROW	{RIGHT}
SCROLL LOCK	{SCROLLLOCK}
TAB	{TAB}
UP ARROW	{UP}
FI	{F1}
F2	{F2}
F3	{F3}
F4	{F4}
F5	{F5}
F6	{F6}
F7	{F7}
F8	{F8}
F9	{F9}
F10	{F10}
F11	{F11}
F12	{F12}
F13	{F13}
F14	{F14}
F15	{F15}

Table continues…

Key	Argument
F16	{F16}
F17	{F17}
F18	{F18}
F19	{F19}
F20	{F20}
F21	{F21}
F22	{F22}
F23	{F23}
F24	{F24}
NUMPAD0	{NUMPAD0}
NUMPAD1	{NUMPAD1}
NUMPAD2	{NUMPAD2}
NUMPAD3	{NUMPAD3}
NUMPAD4	{NUMPAD4}
NUMPAD5	{NUMPAD5}
NUMPAD6	{NUMPAD6}
NUMPAD7	{NUMPAD7}
NUMPAD8	{NUMPAD8}
NUMPAD9	{NUMPAD9}
NUMPADMULTIPLY	{NUMPADMULTIPLY}
NUMPAD*	{NUMPAD*}
NUMPADADD	{NUMPADADD}
NUMPAD+	{NUMPAD+}
NUMPADSUBTRACT	{NUMPADSUBTRACT}
NUMPAD-	{NUMPAD-}
NUMPADDECIMAL	{NUMPADDECIMAL}
NUMPAD/	{NUMPAD/}
LEFTBRACE	{LEFTBRACE}
RIGHTBRACE	{RIGHTBRACE}

Square brackets “[ ]” have no special meaning when used with SendKeys, but you must enclose them within braces to accommodate applications that do give them a special meaning (dynamic data exchange (DDE) for example).

The plus sign “+” , precedes a character to specify the SHIFT key is held down while the character is pressed. For example, to specify the SHIFT key is held down while e is pressed, send the string argument “+e”.

Note:

When used this way, these special characters are not enclosed in braces.

The caret “^” precedes a character to specify the CTRL key is held down while the character is pressed.

The percentage symbol “%” precedes a character to specify the ALT key is held down while the character is pressed.

A combination of SHIFT, CTRL and ALT can be used at once. For example, to specify the SHIFT and CTRL keys are held down while e is pressed, send the string argument “+^e”.

Parentheses “( )” are used when you want SHIFT, CTRL or ALT held down while several keys are pressed. For example, to specify the SHIFT key is held down while e and c are pressed, send the string argument “+(ec)”.

Note:

If you leave out the parentheses “+ec”, you are specifying the SHIFT key is held down while e is pressed but not when c is pressed.

The tilde character “~” can be used as an alternative to the argument {ENTER} to press the ENTER key.

To send +, ^, & or ~, enclose the special character in braces “{ }”. For example, to send the plus sign, send the string argument “{+}”.

To send brace characters, send the string argument “{LEFTBRACE}” for the left brace and “{RIGHTBRACE}” for the right one.

BringToFront

The **BringToFront** action attempts to find the named window and bring it to the front. If the window cannot be found, this action fails immediately. This action expects two action values to be configured with it.

Syntax

BringToFront Window Name, Show Style

Window Name	The name of the window to be activated. This action value supports a wildcard character “*”, which allows applications that dynamically adjust the window title based on specific data (for example, Agent) to be located and shown in the following table:

Value	Description
* at the end	Matches any window with a title starting with the specified text. For example: Active* will find the first window starting with Active.
* at the begin	Matches any window with a title ending with the specified text.

Table continues…

Value	Description
	For example: *Notepad will find the first window with a title ending in Notepad, for example, Untitled - Notepad.
* at beginning and end	Matches any window with a title containing the specified text. For example: *Note* will find the first window with a title containing Note, for example, Untitled - Notepad.

Show Style The size of the window when it is brought to the front. Options are:

- NORMAL. The window displays at its default (partial screen) size.
- MAXIMIZED. The window is maximized so it covers the full screen.
- RESTORE. The window is restored to its previous size (the size it was before it was last minimized or maximized).

Note:

NORMAL, MAXIMIZED and RESTORE must appear in capitals to work.

Example:

BringToFront Calculator, NORMAL

Clipboard

The `Clipboard` action places data into the clipboard in the specified format. This data can then be used by other applications that support clipboard access.

Syntax

```
Clipboard Data
```

Data The format of the data that will be inserted into the clipboard when the event occurs. This parameter can be modified by event properties.

Example

Rule1 = **When** CallAlerting **Always Do Clipboard** %CallerDN% **Then** Stop

In this example, when a CallAlerting event is received by the Rules Plug-in, the CallerDN event property is placed in the system clipboard. The user will then be able to use the paste function to insert the data to another application.

This function will replace the current contents of the clipboard.

WriteFile

The `WriteFile` action opens the specified file and writes data into it in the specified format.

Syntax

```
WriteFile File Name, OpenType, Data
```

OpenType Determines how the file will be opened. Valid types are APPEND (data will be added to the end of the existing file or a new file will be created), and CREATE (a new empty file will be created and the formatted data will be written to it).

File Name The name of the file to be opened.

Data The format of the data that will be inserted into the file when the event occurs. This parameter can be modified by event properties.

Example

Rule1 = **When** CallAlerting **Always Do WriteFile** c:\temp\out.txt, APPEND, %CallerDN% Then Stop

In this example, the CallAlerting event causes the Rules Plug-in to open the file `c:\temp\out.txt` and appends the contents of the CallerDN event property to it. If the file is not found, the Rules Plug-in attempts to create it.

DDEPoke

The `DDEPoke` action opens a Dynamic Data Exchange (DDE) connection to another application using a service name, topic and item as action values. Data in the format specified in the final action value will be "poked" into the application and the connection will be closed. This parameter will be modified using data received with the trigger event. These values can be a mixture of literals, that is Destination = 8888 or values taken from the received event. Values to be copied from the received event are enclosed in the % character.

A service name is an application that can participate in a DDE conversation. Usually, the application is the name of an .exe file (without the .exe extension) for a Microsoft Windows-based application, such as Microsoft Excel.

A topic is the name of a topic recognized by the application. The topic is often a document or data file.

An item is the name of a data item recognized by the application.

Example

The following example puts the calling party number into the first cell of Sheet1 in an Excel spreadsheet:

```
DDEPoke Excel,Sheet1,R1C1,%CallerDN%
```

The following is a complete rule from an ActiveAgent.ini file:

```
Rule1=When CallAlerting Always Do DDEPoke Excel,Sheet1,R1C1,%CallerDN% Then Continue
```

DDEExecute

The `DDEEXECUTE` action opens a Dynamic Data Exchange (DDE) connection to another application using a service name, topic and item as action values. Data in the third action value parameter indicates the command to be executed. This parameter will be modified using data received with the trigger event. These values can be a mixture of literals, that is Destination = 8888 or values taken from the received event. Values to be copied from the received event are enclosed in the % character.

A service name is an application that can participate in a DDE conversation. Usually, the application is the name of an .exe file (without the .exe extension) for a Microsoft Windows-based application, such as Microsoft Excel.

A topic is the name of a topic recognized by the application. The topic is often a document or data file.

An item is the name of a data item recognized by the application.

Example

This example opens the form called form1 in an Microsoft Access database called DB1.

```
DDEExecute MSAccess,DB1,,[OpenForm form1]
```

DDEServer

The `DDEServer` action instructs the Rules Plug-in to setup as a DDE server and accept incoming connections from other applications that support DDE.

Registration of the DDE Service, Topic and Item is done by the Rules Plug-in at startup. Connections are then accepted at any time.

Client applications that connect to the Rules Plug-in using this mechanism can also send data that can be used to interact with the Rules Plug-in or the controlling application. For more information, see Returned Data from Client.

Syntax

```
DDEServer Service, Topic, Item, Data
```

Service	The name of the DDE service that the Rules Plug-in will register with the Windows system.
Topic	The name of the DDE topic that the Rules Plug-in will register with the Windows system.
Item	The name of the DDE item that the Rules Plug-in will register with the Windows system.
Data	The format of the data that will be passed to all connected clients when the event occurs. This parameter can be modified by event properties.

Example

In this example, when the CallAlerting event is received, any connections that are currently active with the specified Service, Topic and Item will receive data that is comprised of the CallerDN property.

```
Rule1 = When CallAlerting Always DO DDEServer CCEMService, CCEMTopic, CCEMItem, %CallerDN
% Then Stop
```

ReturnEvent

The `ReturnEvent` action returns an event to the controlling application. The action requires at least one action value which represents the name of the event to be called. The action can also take a list of comma-separated values after the event name that will represent the values to be returned with the event. These values can be a mixture of literals, that is Destination = 8888 or values taken from the received event. Values to be copied from the received event are enclosed in the % character.

Example

```
ReturnEvent Deflect, %CallAppearance%,Destination = 8888
iTable.Commit
```

SocketClient

The `SocketClient` action causes the Rules Plug-in to open a socket-based connection to the specified IP address on a specified port and send some dynamic data. The socket connection closes once the data is transferred.

Example

```
SocketClient 192.168.0.10, 80, %CallerDigits%\n
```

SocketServer

The `SocketServer` action instructs the Rules Plug-in to listen on a specific IP port and accept incoming connections from other applications.

The setup to accept incoming connections from other applications is performed when the Rules Plug-in starts. New connections are accepted at any time. When the triggering event occurs, any connections that are currently available will receive the specified data.

Client applications that connect to the Rules Plug-in using this mechanism can also send data that can be used to interact with the Rules Plug-in or the controlling application. For more information, see Returned Data from Client.

Syntax

```
SocketServer IP Address, IP Port, Data
```

IP Address	The IP address that will be used to accept incoming connections on. If this parameter is 0, the Rules Plug-in will listen on all available IP addresses in the machine.
IP Port	The IP port that will be used to accept incoming connections.
Data	The format of the data that will be passed to all connected clients when the event occurs. This parameter can be modified by event properties.

Example

In this example, incoming connections are accepted on the IP address 192.168.10.101 at port 29090. When a CallAlerting event is received by the Rules Plug-in, the CallerDN event property will be sent to every client that has connected.

```
Rule1 = When CallAlerting Always Do SocketServer 192.168.10.101, 29090, %CallerDN% Then
Stop
```

ASGExtension

The `ASGExtension` action causes the Rules Plug-in to load another generic plug-in and make it available for sending events. This action expects a minimum of two action values. The first action value specifies the name of the plug-in to be loaded. This name should be a full path, if required. The second action value is the name of the event to be called when this action is to be executed. Following the two required action values is a list of key value pairs that are sent to the loaded generic plug-in either at load time, when the event is called or both.

Syntax

```
Start:Client Enabled = True
```

Start Key value pairs to be sent when the generic plug-in is loaded will have the key value prefixed with the word Start:. The Start: delimiter is removed from the key name before being sent with startup data.

```
Event:CallerDN = %CallerDN%
```

Event Key value pairs that are to be sent to the generic plug-in with the associated event will be prefixed with the word Event: The Event: delimiter will be removed from the key name before being sent with the event.

Example 1

In this example, the key Client Enabled would be sent with startup data. It would have a value of true.

```
Start:Client Enabled = True
```

Example 2

In this example, the key CallerDN would be sent with the event to the loaded generic plug-in. It would have a value taken from the key value CallerDN received with the incoming event to the ASG Rules engine.

```
Event:CallerDN = %CallerDN%
```

Example 3

In this example the Rules Plug-in loads the additional plug-in ASGSendMail. When this plug-in is loaded, Rules Plug-in sends a single key value of Client Enabled with a value of True. When the action is run, the Rules Plug-in sends an event of ASSendMail to the loaded plug-in with the key values prefixed with the word Event.

```
ASGExtension ASGSendMail.dll, ASSendMail, Start:ClientEnabled = True,
Event:ASMailServer = agile01, Event:ASMailSenderAddress = matthew.bagley@abc.com,
Event:ASMailRecipientAddress = matthew.bagley@abc.com, Event:ASMailSubject = Call
from %CallerDN% diverted
```

Nothing

The `Nothing` action allows you to channel multiple rules into a single rule. It can also be used to introduce a time delay before the next rule is executed. The time delay parameter is expressed in milliseconds.

Example

The following example shows two rules (1 and 2) that are triggered by different event names, funneling into a single rule, rule 3, which holds TCP/IP socket connections from other applications. When rule 3 is activated, it sends data in the format specified.

```
Rule1 = When CallAlerting Always Do Nothing 1000 Then GotoRule 3
Rule2 = When CallCleared Always Do Nothing Then GotoRule 3
Rule3 = When LinkedRule Always Do SocketServer 192.168.10.6, 12345, %EVENTNAME% has fired
```

SQL

The `SQL` action allows a simple SQL statement to be executed. The Rules Plug-in requires Microsoft ADO to be installed and uses this technology to open the database and executes the SQL statement.

Syntax

```
SQL Connection String, SQL Statement
```

Connection String	The string used by ADO to connect to, and open, the database.
SQL Statement	The SQL statement to be executed against the specified database. This parameter can be modified by event properties.

Example

This example opens a Microsoft Access database called ASGRulesTest.mdb using the specified connection string and inserts details about the call into a table labeled tblCallEvents.

```
Rule1 = When CallAlerting Always Do SQL DRIVER=={Microsoft Access Driver(*.mdb)};DBQ=C:
\ASGRules\SampleApplications\Database\ASGRulesTest.mdb;Uid=Admin;Pwd=; , Insert Into
tblCallEvents (Event, UCID, CallerDN, CalledDN) Values('%EVENTNAME%', '%UCID%', '%CallerDN
%', '%CalledDN%')
```

Notify

The `Notify` action notifies the user with text in a taskbar window that auto hides. The Notify popup should follow the location of the taskbar (top, left, right and bottom).

Note:

To display the non-English text in the Notify window, you must correctly set the collation in the SQL database for the language in which you have installed Call Center Elite Multichannel.

Syntax

```
Notify Notify Text, Show Speed, Keep Alive Time
```

Notify Text	The text you want to display to the user. If the Show Speed and Keep Alive Time parameters are missing (that is Notify Notify Text), the default behavior is for the text to take 3 seconds to appear (fade in), sit static on the screen for 3 seconds, and then take 3 seconds to disappear (fade out).

Note:

You can insert a line break in the Notify Text by typing '0x0A'. You can also display call-related information in your Notify Text by specifying event properties (%property%).

To add other ASCII characters such as comma, space, and tab, you must insert the corresponding Hex code mentioned in the standard ASCII chart.

Show Speed The number of seconds it takes for the text to appear. Also the number of seconds it takes for the text to disappear. For example, if you specified 5, it would take 5 seconds for the text to appear and another 5 seconds for the text to disappear. The value must be between 0 and 10. This parameter is optional. If missing (that is Notify Notify Text, Keep Alive Time), the text will appear and disappear straight away with no fading in/ fading out time.

Keep Alive Time The number of seconds the text is static on the screen before it begins to disappear. The value must be between 1 and 100. This parameter is optional. If missing (that is Notify Notify Text, Show Speed), the default behavior will be used (that is the text will remain static on the screen for 3 seconds.) If you type an extra comma to indicate where the value would be (that is Notify Text, Show Speed, ,) the value is assumed to be 0 and the text will start to disappear as soon as it has appeared.

Example

The following example statically displays the text 'Incoming Call' for 10 seconds. It takes the text 2 seconds to fade in and 2 seconds to fade out.

```
When CallAlerting Do Notify Incoming Call, 2, 10
```

The following example statically displays the caller's station DN for 10 seconds. The text spends no time fading in and out.

```
When CallAlerting Do Notify %CallerDN%, ,10
```

The following example statically displays the caller's station DN for 3 seconds. It takes the text 2 seconds to fade in and 2 seconds to fade out.

```
When CallAlerting Do Notify The caller is %CallerDN% 0x0A %CallerDigits%, 2
```

Alert

The `Alert` action brings a message box dialog to the front of the user application which alerts the user to a piece of information. This dialog has an OK button which the user is required to click before processing can continue.

Syntax

```
Alert Caption, Message
```

Caption The caption of the alerting message box

Message The message that will be displayed to the user when the event occurs.

Example

In this example, the Rules Plug-in displays a message box to the user with a caption of 'Alert From Rules Engine' and a message body that contains the CallerDN event property.

```
Rule1 = When CallAlerting Always Do Alert "Alert From Rules Engine", %CallerDN% Then Stop
```

Default Event Parameters

All events come to the Rules Plug-in with event properties governed by the calling application. However, the Rules Plug-in will automatically make available to the rule certain system parameters that will aid in rule development. These system parameters will be referenced by a keyword which must be enclosed in % marks like other event properties (for example, %HOSTNAME%)

Syntax

LOGGEDINUSERNAME	This property inserts the name of the user currently logged into the computer running the host application.
HOSTNAME	This property inserts the name of the machine the Rules Plug-in is currently running on.
IPADDRESS	This property inserts the IP address of the machine the Rules Plug-in is currently running on.
EVENTNAME	This property inserts the name of the event that triggered the Rules Plug-in to run. This event name will be as received from the host application and will not be modified if rules are linked together.
ENVIRONMENT	This property allows the Rules Plug-in to pick up a variable from the current system environment and place it into the formatted data string. The name of the environment variable will be separated from the keyword by a colon.

Example

This example will retrieve the environment variable PATH and present this to the user in a simple message box.

```
Rule1 = When CallAlerting Always Do Alert Path, %ENVIRONMENT:PATH%
```

Returned Data from Client

The SocketClient, SocketServer and DDEServer types of connectivity allow client applications to pass information to the Rules Plug-in that will be passed to the controlling application via the ASG interface. This return data must be text, it must be terminated with a single carriage return character and must contain key/value pairs in the format key=value. Multiple key/value pairs must be separated by a single comma. The data received must contain at least one key/value pair that indicates the name of the event to fire via the ASG interface. This must have a key name of 'Event'.

Example

If a connected client sent a piece of formatted text 'Event=CallDial,Number=8888' to the Rules Plug-in, the Rules Plug-in would send an event to the controlling application with the event name being CallDial and a single event parameter with a key of Number and a value of 8888. If the receiving application happened to be Agent from Avaya Aura® Call Center Elite Multichannel, this would cause Agent to go off-hook and dial the number 8888.

Then, Continue, GotoRule, and Stop

The `Then` clause is optional at the end of the rule and allows the rule designer to specify what happens after this rule has been selected and executed. If the Then clause is not specified, rules processing terminates.

One of three keywords will follow the Then clause keyword, specifying the post rules action to take:

- The `Continue` clause indicates that further rules processing should occur. Rules that appear after this rule will be assessed to determine whether they match the When/And criteria. If they do they will be executed.
- The `GoToRule` clause allows this rule to jump to another rule. The rule specified is executed provided it matches the `When/And` criteria. The `GotoRule` keyword expects the rule number to be provided as an additional parameter.
- The `Stop` clause stops rules processing.

Example

```
Rule 2 = When CallAlerting And CallerDN = 1234 Do BringToFront Calculator Then GotoRule 4
```

Sample Configuration for Call Routing Server

This sample demonstrates how you can use Call Routing Server with the Rules Plug-in to route incoming calls to the particular agent based on caller-entered digits.

Upon receiving an event from the Telephony Server, the Call Routing Server searches each section of its configuration, attempting to match the received information with the **Event Name**, **Filter Name** and **Filter Value** values. If the server does not make a match with one section, it moves to the next.

The Call Routing Server would stop at the following section if it receives a RouteRequest event from VDN 9885*.

Once the match is made, the server passes the event to the Rules Plug-in, which executes the configured rule(s).

In this case, the first rule will run if the received event is RouteRequest and it carries digits collected with the call (user-entered code). If these rule requirements are met, the plug-in will return a RouteSelect event to the Call Routing Server, instructing it to route the call to the extension entered by the user and to display that extension number to the agent as user-to-user information (UUI). It will also return the received RouteRegisterReqID and RoutingCrossRefID parameters to identify the route request.

If the requirements of the first rule aren't met (in this case there are no collected digits with the call), the second rule will be used and the RouteSelect event will request the call be routed to extension 8888.

On receiving the RouteSelect event, the Call Routing Server will pass it to the Avaya Telephony Server, which will in turn, pass it to the Avaya Communication Manager for routing to the agent.

* VDN 9885 must be registered as a routing VDN before Call Routing Server can receive RouteRequest events from it (see the Call Routing Server parameter **Routing VDN List**).

Note:

It is essential that event parameters are typed accurately, with uppercase letters in the right place and without spaces between words.

- **Enable Client**=True
- **Client Library Name**=ASGRules.dll
- **Display Name**=Rules Engine
- **Display Icon**=someicon.ico
- **Event Type**=Native

First Section:

- **Event Name**=RouteRequest
- **Event Filter Name**=VDN
- **Event Filter Value**=9885

Example

```
Rule1=When RouteRequest And UserEnteredCode>Nothing Do ReturnEvent RouteSelect ,
%RouteRegisterReqID%, %RoutingCrossRefID%, RouteSelected=%UserEnteredCode%, UUI=
%UserEnteredCode% Then Stop
```

```
Rule2=When RouteRequest Always Do ReturnEvent RouteSelect , %RouteRegisterReqID%,
%RoutingCrossRefID%, RouteSelected=8888
```

External browser application

To open URLs in full screen mode, Call Center Elite Multichannel Desktop provides an external browser application named IEBrowserWindow.exe. This application opens URLs using Microsoft Internet Explorer Browser Control to support the kiosk mode functionality of Internet Explorer. Call Center Elite Multichannel Desktop can use this application only when you create rules through Rules Plug-in.

Example

- ```
  Rule1 = When Voice.WIDelivered Always Do ReturnEvent
  Container.LaunchNewExternalApplicationWindow,externalAppConfigSectionName=External
  Application 2,externalAppCommandLine=-URL="http://<URL
  name>",callIDToCloseWindowWhenCallDropped=%CallID% Then Continue Else Stop
  ```

  Use this rule to open the URL when a voice work item is delivered with menu bar, toolbar, and status bar enabled and URL opened in full screen mode.

- ```
  Rule1 = When Voice.WIDelivered Always Do ReturnEvent
  Container.LaunchNewExternalApplicationWindow,externalAppConfigSectionName=External
  Application 2,externalAppCommandLine=-URL="http://<URL name>"  -toolbar=1 -
  statusbar=0 -menubar=0,callIDToCloseWindowWhenCallDropped=%CallID% Then Continue
  Else Stop
  ```

  Use this rule to open the URL when a voice work item is delivered with toolbar enabled and status bar and menu bar disabled.

- ```
  Rule1 = When Voice.WIDelivered Always Do ReturnEvent
  Container.LaunchNewExternalApplicationWindow,externalAppConfigSectionName=External
  Application 2,externalAppCommandLine=-URL="http://<URL name>"  -toolbar=0 -
  ```
  ```

```
statusbar=1 -menubar=0,callIDToCloseWindowWhenCallDropped=%CallID% Then Continue
Else Stop
```

Use this rule to open the URL when a voice work item is delivered with status bar enabled and toolbar and menu bar disabled.

- ```
  Rule1 = When Voice.WIDelivered Always Do ReturnEvent
  Container.LaunchNewExternalApplicationWindow,externalAppConfigSectionName=External
  Application 2,externalAppCommandLine=-URL="http://<URL name>"  -toolbar=1 -
  statusbar=0 -menubar=1,callIDToCloseWindowWhenCallDropped=%CallID% Then Continue
  Else Stop
  ```

  Use this rule to open the URL when a voice work item is delivered with status bar disabled and toolbar and menu bar enabled.

  Note:

  To enable the menu bar, toolbar must be enabled.

Rules Engine

Supported Events

Rules.Started

This event is triggered by the Rules Engine to indicate that Rules functionality has been initialized and other events may be received. This event is guaranteed to be the first event sent to the Rules Engine.

Supported parameters:

None.

Rules.Stopped

This event is fired to indicate that Rules functionality has stopped and no further events will be received. This indicates (primarily) that the host application is being closed. This event is guaranteed to be the last event sent to the Rules Engine.

Note:

It is assumed that this event is sent as a result of the Rules Plug-in being stopped. Since the Rules Engine (ASG Rules) processes events on a different thread to the containing plug-in, a finite period of time (5 seconds) must be given for this rule to execute before the plug-in honors the request to shut down.

Supported parameters:

None.

Supported Return Events

Rules.ActiveWindow

The event activates the named window within Call Center Elite Multichannel Desktop.

Supported parameters:
  ```

WindowTitle	The name of the window that is activated. This supports the following matching capabilities: • Starts with (for example, Def*) • Ends with (for example, *ity) • Contains (for example, *ef*), and • Exact (for example, Definity)

Example:

This example activates the window whose title starts with 'Definity' when a voice delivered event occurs.

```
When Voice.WIDelivered Always Do ReturnEvent Rules.ActivateWindow, WindowTitle =Definity*
```

Telephony Plug-in

Supported Events

Voice.WIDelivered

Telephony Plug-in fires this event when a new voice work item is received at the desktop.

Supported parameters:

- CallerDN
- CalledDN
- UUI
- UserEnteredCode
- InteractionID
- ConversationID
- CustomerID
- UCID
- CallID
- VDN
- SplitSkill
- AgentID
- StationDN

Voice.WIEstablished

Telephony Plug-in fires this event when a voice work item has been established at the desktop.

Supported parameters:

- CallerDN
- CalledDN
- CallID
- UCID
- UUI
- UserEnteredCode
- AgentID
- StationDN

Voice.WICleared

Telephony Plug-in fires this event when a voice work item has been cleared from the desktop.

Supported parameters:

- CallerDN
- CalledDN
- UUI
- CallID
- UCID

Supported Return Events

Voice.SendDTMF

This return event instructs Voice Plug-in to send DTMF tones on the specified call. If the call does not exist, the mandatory parameters are not received, or the call is not in the correct state, then this request is ignored.

Supported parameters:

- CallID (mandatory)
- DTMFTones (mandatory)

Voice.Dial

This return event is received instructs Voice Plug-in to create a new call attempt with the parameters provided. If the mandatory parameters are not received, this request is ignored.

Supported parameters:

- Number (mandatory)

- UUI (optional)

User Plug-in

Supported Events

User.AgentLogin

User Plug-in triggers this event when an agent successfully logs into the Avaya Communication Manager.

Supported parameters:

- AgentID
- StationDN
- WorkMode

User.AgentLogout

User Plug-in triggers this event when an agent successfully logs out from the Avaya Communication Manager.

Supported parameters:

- AgentID
- StationDN
- ReasonCode

User.AgentStateChange

User Plug-in fires this event when an agent successfully changes their agent state in the Communication Manager.

Supported parameters:

- AgentID
- StationDN
- AgentState
- ReasonCode
- WorkMode

Email Plug-in

Supported Events

Email.WIDelivered

Description

Email Plug-in fires this event when a new email work item is received at the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- MSQueueID
- From
- To
- Subject
- AgentID
- StationDN

Email.WIClosed

Description

Email Plug-in fires this event when an email work item is removed from the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- CompletionCode

Supported Return Events

None at this time.

Wallboard Plug-in

Supported Events

Wallboard.FlashDisplayMessageAdded

Description

This event will be fired into rules as a result of another plug-in calling the AddFlashDisplayMessage method.

This event will not fire when rules adds a message to the Wallboard.

Supported parameters

- Message
- DisplayTime
- MessagePriority
- MessageKey

Wallboard.StandardDisplayMessageAdded

Description

This event will be triggered into rules as a result of another plug-in calling the AddStandardDisplayMessage method.

This event will not trigger when rules add a message to the Wallboard.

Supported parameters

- Message
- DisplayTime
- MessageKey

Wallboard.AlertTriggered

Description

This event will be fired into rules when an alert (threshold), that has been setup in the UI, is triggered.

supported parameters

- AlertName – this is the name setup in the UI that identifies the triggering alert.
- AlertingDevice – the device identifier that has caused this alert to be triggered.
- AlertingDeviceName – the name associated with the device currently alerting.
- AlertingDeviceType – this is a string enumeration that can only contain the currently administrable types. This must be one of "agent", "vdn" or "queue".
- ThresholdObject – the name of the parameter in that has currently exceeded its threshold.

- CurrentValue – the value that this object currently has.

Wallboard.AlertReset

Description

This event is fired when an alert (threshold) that has previously been triggered has been reset.

Supported parameters

- AlertName – this is the name setup in the UI that identifies the triggering alert.
- AlertingDevice – the device identifier that has caused this alert to be triggered.
- AlertingDeviceName – the name associated with the device currently alerting.
- AlertingDeviceType – this is a string enumeration that can only contain the currently administrable types. This must be one of "agent", "vdn" or "queue".
- ThresholdObject – the name of the parameter in that has currently exceeded its threshold.
- CurrentValue – the value that this object currently has.

Supported Return Events

Wallboard.AddFlashDisplayMessage

Description

This Rules return event will allow the Rules engine to add a flash display message to the Wallboard. When this return event is caught by the Wallboard Plug-in, its behavior will be identical to a plug-in calling the AddFlashDisplayMessage on the IWallBoard interface. The Wallboard Plug-in will need to add in the optional parameters if they are not present.

Supported parameters

- Message – Required.
- DisplayTime – Required
- MessagePriority – Required
- MarqueeStyle – optional. Defaults to the general UI settings.
- Forecolour – optional. Defaults to the general UI settings.
- Backcolour – optional. Defaults to the general UI settings.
- PreferredMessageKey – optional. Allows the rules to specify the key for later message removal. If missing, the Wallboard will assign its own unique key that will not be known to rules.

Wallboard.AddStandardDisplayMessage

Description

This Rules return event will allow the Rules engine to add a standard display message to the Wallboard. When this return event is caught by the Wallboard plug-in, its behavior will be identical to a plug-in calling the AddDisplayMessage on the IWallBoard interface.

Supported parameters

- Message – Required.
- DisplayTime – Required
- PreferredMessageKey – optional. Allows the rules to specify the key for later message removal. If missing, the Wallboard will assign its own unique key that will not be known to rules.

Wallboard.RemoveDisplayMessage

Description

This Rules return event will allow the Rules engine to remove a displayed message.

Supported parameters

- MessageKey – required. Identifies the message to be removed.

Preview Contact Plug-in

Supported Events

PC.WIDelivered

Description

Preview Contact Plug-in fires this event when a new preview contact work item is received to the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- MSQueueID
- ProgramID
- AgentID
- StattionDN
- WorkItem Type

PC.WIClosed

Description

Preview Contact Plug-in fires this event when the preview contact work item is removed from the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- CompletionCode

Supported Return Events

None at this time.

Simple Messaging Plug-in

Supported Events

SMMS.WIDelivered

Description

Simple Messaging Plug-in fires this event when a new simple messaging work item is received at the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- MSQueueID
- AgentID
- StationDN

SMMS.WIMessageReceived

Description

Simple Messaging Plug-in fires this event when a new simple message is received that is part of an established interaction.

Supported parameters

- InteractionID
- ConversationID
- CustomerID

- Message

SMMS.WIMessageSent

Description

Simple Messaging Plug-in fires this event when a new simple message is sent to the customer from an established interaction.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- Message

SMMS.WIClosed

Description

Simple Messaging Plug-in fires this event when the simple messaging work item is removed from the desktop.

Supported parameters

- InteractionID
- ConversationID
- CustomerID
- CompletionCode

Supported Return Events

None at this time.

External Application Container Plug-in

Supported Events

Container.SetExternalApplicationWindowActive

Description

This return event activates an existing window.

Supported parameters

- externalAppConfigSectionName. The configuration section name of the external application that will be started or activated within the Call Center Elite Multichannel Desktop interface.

Container.LaunchNewExternalApplicationWindow

Description

This return event starts a new window dynamically.

Supported parameters

- externalAppConfigSectionName. The configuration section name of the external application that will be started or activated within the Call Center Elite Multichannel Desktop interface.
- externalAppCommandLine. The command line Call Center Elite Multichannel Desktop will use to start the external application. It will override the default setting in the configuration file. If this value is left blank, the original External Application Command Line configuration setting will be used to start the application.
- callIDToCloseWindowWhenCallDropped. The CallID which will be used to close the window that contains the external application when the specified call is dropped. If this value is blank, the new window will not close when the call is dropped.

Example

```
Rule1 = When Voice.WIDelivered Always Do ReturnEvent
Container.LaunchNewExternalApplicationWindow,externalAppConfigSectionName=External
Application 2, externalAppCommandLine=support.avaya.com,
callIDToCloseWindowWhenCallDropped=%CallID% Then Continue
```

Microsoft Dynamics CRM Plug-in

Supported Events

MSCRM.CreateCompleted

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when MSCRM.Create is completed.

Syntax

```
When MSCRM.CreateCompleted And invokeId=Rule1 Do ReturnEvent MSCRM.Screenpop, entity=
%entity%, id=%id%,bringToFront=true Then Continue
```

Supported parameters

entity	Microsoft Dynamics CRM entity that has been created.
ID	The id of the entity instance which has been created.
invokeID	This invoke id is provided for additional filtering if required, incase rules start to get complicated and overlap each other. MSCRM Rules Return Event MSCRM.Create includes this parameter.

MSCRM.LookupCompleted

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when MSCRM.Lookup is completed.

Syntax

```
When MSCRM.LookupCompleted And invokeId=Rule1 Do ReturnEvent MSCRM.Screenpop, entity=
%entity%, id=%id%,bringToFront=true Then Continue
```

Supported parameters

entity Lookup has been completed on this MSCRM entity.

ID Unique identifier (GUID) of the resulting entity.

When no match is found, blank is returned. When multiple matches are found, a pipe delimited list is returned.

1F8B6FC0-426A-4122-BAC2-A05B6071FC57|
DFE86B44-26E2-4c4e-90C5-63DEC7603927

> **Note:**
>
> If returnMultiples of return event MSCRM.Lookup was set to false (disabled), only one id will be returned even if multiple matches were found. This is to cater for external applications which cannot understand pipe delimited string of ids.

invokeID This invoke id is provided for additional filtering if required, incase rules start to get complicated and overlap each other. MSCRM Rules Return Event MSCRM.Lookup includes this parameter. Initially this parameter is limited to use in a static manner. Dynamically incrementing and associating the InvokeID may be desirable in future releases if required.

matchCount Count of the number of matches. e.g. 0 or 1 or 2 etc.

MSCRM.RetrieveCompleted

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when MSCRM.Retrieve is completed.

All attributes (including custom attributes) of the retrieved Microsoft Dynamics CRM entity instance are returned and made available.

Syntax

```
When MSCRM.RetrieveCompleted And invokeId=Rule1
```

Supported parameters

entity Retrieve has been completed on this Microsoft Dynamics CRM entity.

invokeID	This invoke id is provided for additional filtering if required, incase rules start to get complicated and overlap each other. Microsoft Dynamics CRM Rules Return Event MSCRM.Retrieve includes this parameter. Initially this parameter is limited to use in a static manner. Dynamically incrementing and associating the InvokeId may be desirable in future releases if required.
All attributes of the retrieved entity	The number of attributes will be different for each Microsoft Dynamics CRM entity. MSCRM.RetrieveCompleted Return Event will return all attributes including custom attributes of the retrieved entity instance.

MSCRM.Appointment.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM appointment activity is delivered to Call Center Elite Multichannel Desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM appointment activity are returned and made available.

Syntax

```
When MSCRM.Appointment.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM appointment activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, see the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.CampaignActivity.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM campaign activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM campaign activity are returned and made available.

Syntax

```
When MSCRM.CampaignActivity.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM campaign activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.CampaignResponse.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in triggers this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM campaign response activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM campaign response activity are returned and made available.

Syntax

```
When MSCRM.CampaignResponse.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM campaign response activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.Case.IncidentDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM case incident is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM case incident are returned and made available.

Syntax

```
When MSCRM.Case.IncidentDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM case incident (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.Email.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM email activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM email activity are returned and made available.

Syntax

```
When MSCRM.Email.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM email activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.Fax.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM fax activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM fax activity are returned and made available.

Syntax

```
When MSCRM.Fax.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM fax activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.Letter.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM letter activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM letter activity are returned and made available.

Syntax

```
When MSCRM.Letter.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM letter activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.PhoneCall.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM phone call activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM phone call activity are returned and made available.

Syntax

```
When MSCRM.PhoneCall.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM phone call activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.ServiceActivity.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM service activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM service activity are returned and made available.

Syntax

```
When MSCRM.ServiceActivity.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM service activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

MSCRM.Task.ActivityDelivered

Description

Microsoft Dynamics CRM Plug-in fires this event to the Call Center Elite Multichannel Desktop Rules Plug-in when a Microsoft Dynamics CRM task activity is delivered to the desktop.

All attributes (including custom attributes) of the Microsoft Dynamics CRM task activity are returned and made available.

Syntax

```
When MSCRM.Task.ActivityDelivered
```

Supported parameters

All attributes of the Microsoft Dynamics CRM task activity (including custom attributes).	The number of attributes can be different based on the customization of your Microsoft Dynamics CRM implementation.

Note:

For a full list of attributes for each entity, refer to the Microsoft Dynamics CRM Entity reference available at http://YourMSCRMServer/sdk/list.aspx.

Supported Return Events

MSCRM.Create

Description

This event is sent from the Call Center Elite Multichannel Desktop Rules Plug-in and received by Microsoft Dynamics CRM Plug-in. It instructs Microsoft Dynamics CRM Plug-in to create a new instance of a Microsoft Dynamics CRM entity.

The result can be accessed when Microsoft Dynamics CRM Plug-in finishes creating the entity and triggers the MSCRM.CreateCompleted event.

Syntax

```
Do ReturnEvent MSCRM.Create, entity=account, attributes=telephone1|name, values=%CallerDN
%|NewAccount, invokeId=Rule1 Then Continue
```

Supported parameters

entity Microsoft Dynamics CRM entity instance to create.

attributes A pipe delimited string of attributes to be set for this entity instance.

For a complete list of attributes for each Microsoft Dynamics CRM entity, refer to the MSCRM SDK or navigate to http://<yourservername>/sdk/list.aspx.

The following example adds three attributes: telephone1, telephone2 and telephone3 which are valid attributes for the contact entity.

For example, telephone1|telephone2|telephone3

values A pipe delimited string of attribute values to be set for this entity instance.

Must match the number of attributes specified in "Create Attributes" parameter.

The following example sets values for the three attributes telephone1, telephone2 and telephone3

For example, +64(9)4770641|+64(21)409965|+64(272)066082

invokeID This invoke id is provided for additional filtering if required, in case rules start to get complicated and overlap each other. Microsoft Dynamics CRM Rules Event MSCRM.CreateCompleted includes this parameter.

MSCRM.Lookup

Description

This event is sent from the Call Center Elite Multichannel Desktop Rules Plug-in and received by Microsoft Dynamics CRM Plug-in. It instructs Microsoft Dynamics CRM Plug-in to query the Microsoft Dynamics CRM's database adhering to the MSCRM SDK API.

The result of this lookup can be accessed when Microsoft Dynamics CRM Plug-in completes its look up and triggers the MSCRM.LookupCompleted event.

Syntax

```
Do ReturnEvent MSCRM.Lookup, entity=contact, attributes=telephone1|telephone2|
mobilephone, value=%CallerDN%,condition=1, returnMultiples=true, InvokeId=Rule1 Then
Continue
```

Supported parameters

entity Microsoft Dynamics CRM entity to look up.

attributes A pipe delimited string of attributes to lookup.

For a complete list of attributes for each Microsoft Dynamics CRM entity, refer to the MSCRM SDK or navigate to http://<yourservername>/sdk/list.aspx.

The following example looks up three attributes telephone1, telephone2 and telephone3 which are valid attributes for the contact entity.

For example, telephone1|telephone2|telephone3

values The value to lookup. Can be fixed, will typically be one of parameters received from Microsoft Dynamics CRM trigger events.

condition Specifies the search condition, available options are: 0=Exact, 1=LIKE

returnMultiples Specifies whether MSCRM.LookupCompleted returns pipe delimited string of matches when multiple matches are found. If disabled only the first match will be returned.

This is to cater for external applications who cannot understand pipe delimited string of ids when external applications are triggered on MSCRM.LookupCompleted.

false=Disabled, true=Enabled

invokeID This invoke id is provided for additional filtering if required, in case rules start to get complicated and overlap each other. Microsoft Dynamics CRM Rules Event MSCRM.CreateCompleted includes this parameter.

MSCRM.Retrieve

Description

This event is sent from the Call Center Elite Multichannel Desktop Rules Plug-in and received by Microsoft Dynamics CRM Plug-in. It instructs Microsoft Dynamics CRM Plug-in to retrieve a Microsoft Dynamics CRM entity instance.

The result of this retrieve can be accessed when Microsoft Dynamics CRM Plug-in completes its retrieve and triggers the MSCRM.RetrieveCompleted event.

Syntax

```
Do ReturnEvent MSCRM.Retrieve, entity=contact, id=9A24C8F0-A258-DB11-BD2E-000C2928CAD3,
InvokeId=Rule1 Then Continue
```

Supported parameters

entity Microsoft Dynamics CRM entity to retrieve.

ID The id of the entity instance to retrieve.

invokeID This invoke id is provided for additional filtering if required, incase rules start to get complicated and overlap each other. Microsoft Dynamics CRM Rules Event MSCRM.RetrieveCompleted includes this parameter.

MSCRM.Screenpop

Description

This event is sent from the Call Center Elite Multichannel Desktop Rules Plug-in and received by Microsoft Dynamics CRM Plug-in. It instructs Microsoft Dynamics CRM Plug-in to screen pop a Microsoft CRM entity instance.

Syntax

```
Do ReturnEvent MSCRM.Screenpop, entity=contact, id=9A24C8F0-A258-DB11-BD2E-000C2928CAD3,
bringToFront=true Then Continue
```

Supported parameters

entity	Microsoft CRM entity to screen pop.
ID	The id of the entity instance to screen pop.
bringToFront	True or False. Whether to bring the screen popped document window to the front or not.

Call Routing Server to Plug-in

The following events will be sent from the Call Routing Server to the plug-in.

For parameter descriptions, see the *Avaya Application Enablement Services TSAPI for Avaya Communication Manager Programmer's Reference Guide*.

Related links

CallDelivered on page 138
CallEstablished on page 140
ConnectionCleared on page 141
CallCleared on page 141
RouteRequest on page 142
RouteEnd on page 142
RouteUsed on page 143
TServerLinkStatus on page 143

CallDelivered

This event is fired when the call is delivered to a monitored VDN. This event will fire whenever the Call Routing Server receives the cstaCallDelivered event from the Telephony Server.

The following parameters will be passed with the CallDelivered event.

- VDN

- CallID
- CallingDevice
- CalledDevice
- AlertingDevice
- LastRedirectionDevice
- Cause
- DeliveredType
- Split
- UserEnteredCode
- UUI
- TrunkGroup
- TrunkGroupMember
- UCID
- LAIType
- LAIPriority
- LAIHours
- LAIMinutes
- LAISeconds
- LAISourceVDN
- OCICallingDevice
- OCICalledDevice
- OCITrunkMember
- OCITrunkGroup
- OCIUserEnteredCode
- OCIUUI
- OCIUCID
- OCILAIType
- OCILAIPriority
- OCILAIHours
- OCILAIMinutes
- OCILAISeconds
- OCILAISourceVDN

Related links

Call Routing Server to Plug-in on page 138

CallEstablished

This event is fired when the call is answered. This will be triggered by receiving the cstaEstablished event from the Telephony Server.

The following parameters will be passed with the CallEstabished event.

- VDN
- CallID
- AnsweringDevice
- CallingDevice
- CalledDevice
- Cause
- LastRedirectionDevice
- Split
- UserEnteredCode
- UUI
- TrunkGroup
- TrunkGroupMember
- UCID
- LAIType
- LAIPriority
- LAIHours
- LAIMinutes
- LAISeconds
- LAISourceVDN
- OCICallingDevice
- OCICalledDevice
- OCITrunkMember
- OCITrunkGroup
- OCIUserEnteredCode
- OCIUUI
- OCIUCID

- OCILAIType
- OCILAIPriority
- OCILAIHours
- OCILAIMinutes
- OCILAISeconds
- OCILAISourceVDN

Related links

Call Routing Server to Plug-in on page 138

ConnectionCleared

This event is mapped directly from the cstaConnectionCleared event received from the Telephony Server.

The following parameters will be passed with the ConnectionCleared event.

- VDN
- CallID
- ReleasingDevice
- Cause

Related links

Call Routing Server to Plug-in on page 138

CallCleared

This event is mapped directly from the cstaCallCleared event received from the Telephony Server.

The following parameters will be passed with the CallCleared event.

- VDN
- CallID
- Cause
- Reason

Related links

Call Routing Server to Plug-in on page 138

RouteRequest

This event is mapped directly from the cstaRouteRequest event received from the Telephony Server.

The following parameters will be passed with the RouteRequest event.

- RouteRegisterReqID
- RouteCrossRefID
- CurrentRoute
- CallID
- CallingDevice
- TrunkGroup
- TrunkGroupMember
- UserEnteredCode
- LAIType
- LAIPriority
- LAIHours
- LAIMinutes
- LAISeconds
- LAISourceVDN
- UUI
- UCID
- VDN

Related links

Call Routing Server to Plug-in on page 138

RouteEnd

This event is mapped directly from the cstaRouteEnded event received from the Telephony Server.

The following parameters will be passed with the RouteEnd event.

- RouteRegisterReqID
- RoutingCrossRefID
- ErrorValue
- VDN

Related links

Call Routing Server to Plug-in on page 138

RouteUsed

This event is mapped directly from the cstaRouteUsed event received from the Telephony Server.

The following parameters will be passed with the RouteUsedEvent:

- EventName
- Comma-Separated Event Arguments

Related links

Call Routing Server to Plug-in on page 138

TServerLinkStatus

This event is broadcasted to all extensions when the Telephony Server link status is changed.

The following parameters will be passed with the TServerLinkStatus event.

- LinkStatus: Two values are Up and Down.
- IsPrimaryLink: The values are True and False. This parameter indicates whether this link is the primary link or the secondary link.

Related links

Call Routing Server to Plug-in on page 138

Plug-in to Call Routing Server

The plug-in instructs Call Routing Server to perform tasks by use of a fixed command set.

In the following commands there is a mixture of command parameters that are mandatory (M) and those that are optional (O). If a mandatory parameter is missing, the command request will be ignored.

For parameter descriptions, refer to the *Avaya Application Enablement Services TSAPI for Avaya Communication Manager Programmer's Reference*.

Related links

RouteSelect on page 144
RouteEnd on page 144
ClearCall on page 144
ClearConnection on page 145

RouteSelect

Received from the Call Center Elite Multichannel plug-in, this event instructs the Call Routing Server to direct a call to the specified destination. This event will expect the following parameters:

- RouteRegisterReqID (M)
- RoutingCrossRefID (M)
- RouteSelected (M)
- RouteUsedReq (O)
- CallingDevice (O)
- DirectAgentCallSplit (O)
- UserProvidedCode (O)
- UUI (O)

Related links

Plug-in to Call Routing Server on page 143

RouteEnd

Received from the Call Center Elite Multichannel plug-in, this event instructs the Call Routing Server to end routing association on a specific call. This event will expect the following parameters:

- RouteRegisterReqID (M)
- RoutingCrossRefID (M)
- ErrorValue (M)

Related links

Plug-in to Call Routing Server on page 143

ClearCall

Received from the Call Center Elite Multichannel plug-in, this instructs the Call Routing Server to clear the call. The following parameters will be received with the request:

- CallID (M): The Avaya Aura® Communication Manager that represents the call to be cleared.

Related links

Plug-in to Call Routing Server on page 143

ClearConnection

Received from the Call Center Elite Multichannel plug-in, this instructs the Call Routing Server to clear a party from the call. The following parameters will be received with the request:

- CallID (M): The Avaya Aura® Communication Manager that represents the call.
- Device (M): The device to be dropped from the call.
- UUI (O): Any user-to-user information that should be inserted with the clear connection request when it is sent to the Avaya Telephony Server.

Related links

Plug-in to Call Routing Server on page 143

Appendix C: Media Proxy

Media Proxy is a bridge component that manages the connections between Media Director and any number of client applications running on the same computer.

Running as a Windows service in the background, Media Proxy:

- Reduces network traffic when multiple client applications on one machine need to connect to the Media Director.
- Automatically connects to the Media Director when it restarts (client applications do not need to re-connect to the Media Director when it restarts).
- Allows users to use Call Center Elite Multichannel Desktop when building client applications.

Note:

The performance of Call Center Elite Multichannel reduces when you run Media Proxy on the Server end with multiple Desktops connected to it.

Related links

Client Applications on page 146
.Net Remoting Connection on page 147
Starting Call Center Elite Multichannel service on page 147

Client Applications

Media Proxy allows multiple client applications to connect to more than one Media Director. To achieve this, client applications need to provide:

- The Media Director's IP address and port number.
- The agent's voice station DN.
- The type of work item the client application needs to receive.

Related links

Media Proxy on page 146

.Net Remoting Connection

All Call Center Elite Multichannel Desktop applications and services that use .Net remoting, automatically use a configuration file, in this case `ASMediaProxyService.exe.config`, to control their remoting connection. The file, which should not be changed, specifies the gtcp channel and default port number.

`ASMediaProxyService.exe.config` also specifies and controls the level of error logging.

> **Note:**
>
> Desktops can also connect to Servers using a secure connection over .Net Remoting. For information about secure connection, see *Administering Avaya Aura® Call Center Elite Multichannel*.

Related links

Media Proxy on page 146
Error logging on page 18

Starting Call Center Elite Multichannel service

About this task

Use this procedure to start Call Center Elite Multichannel service.

Procedure

1. Click the **Start** button on the Windows Taskbar and select **Control Panel** from the pop-up menu.
2. Click **Administrative Tools**.
3. Click **Services**.
4. Right-click a Call Center Elite Multichannel service and select **Start** from the pop-up menu.
   - AS Application Management Director
   - AS Call Routing Server
   - AS Email Media Store
   - AS IDS MultiMedia
   - AS IDS View
   - AS IDS Voice
   - AS IVR Server
   - AS Media Proxy Service
   - AS Preview Contact Media Store
   - AS Short Message Service Gateway

- AS Simple Messaging Media Store
- AS Web Chat Gateway
- AS XML Server

Related links

Media Proxy on page 146

Appendix D: Troubleshooting

The troubleshooting section provides tips, Frequently Asked Questions (FAQs), and answers for some problems that you might face when using Call Center Elite Multichannel Desktop.

Note:

For error and warning messages, the system displays the troubleshooting information in the Status Bar Details window.

In the Status Bar Details window, the information is added in a chronological order. You can select a message to read the details and troubleshooting information.

Station monitoring fails

Desktop fails to monitor a station. The system displays a red cross mark on the Station DN icon in the status bar of Desktop.

This problem occurs because Desktop is unable to connect to the XML server to make a successful station monitoring request.

Solution

Procedure

1. Run the `XMLServerTest.exe` file from the default directory: <CCEM_INSTALL_DIR>\Avaya Aura CC Elite Multichannel\Desktop\CC Elite Multichannel Desktop\XML Server Test.
2. Run the `TSTEST32.exe` file from the default directory: <CCEM_INSTALL_DIR>\AE Services\TSAPI Client\Program.
   - If the TSAPI test fails, check Application Enablement Services or Communication Manager for a problem.
   - If the TSAPI test passes, but the XML server test fails, check the following logs of Call Center Elite Multichannel for a problem:
     - Desktop logs: Enable Telephony section trace and error logging.

- XML server logs: Set the log level to 1.
- TSSPY trace logs.

3. Check if you are using a valid station and you are logged in to the soft phone or a hard phone using that station.

Agent is unable to log in to Desktop

After starting Desktop, an agent is unable to log in to Desktop.

This problem occurs because an agent specifies invalid login credentials or tries to log in to a station that the system does not monitor.

Solution

Procedure

1. Check and ensure the following:
   - The system monitors the station.
   - The agent has entered valid login credentials.
   - The agent is not already logged in to another station.
2. Check the following logs:
   - Desktop logs: Enable Telephony section trace and error logging.
   - XML server logs: Set the log level to 1.
   - TSSPY trace logs.

Agent does not receive the associated multimedia work item

Agent does not receive the associated multimedia work item - Problem 1

Agent receives a phantom call but does not receive the associated multimedia work item such as Email, Chat, SMS, or Preview Contact.

This problem occurs because Desktop is unable to connect to media stores, such as Email, Simple Messaging, or Preview Contact, through Media Director.

Solution

Procedure

1. Check and ensure the following:
    - Desktop successfully connects to Media Proxy.
    - Media Director has information about all configured media stores.
    - The logged in agent is successfully registered with Media Director. Check the agent details in the **Media Client** node of Media Director.
    - FQDN, which Desktop uses to connect to media stores, resolves the correct IP address of the media store server.
2. Check the following logs along with the configuration file:
    - Desktop logs.
    - Media Director logs.
    - Logs files of the media store that has a problem.

Agent does not receive the associated multimedia work item - Problem 2

Agent receives a phantom call but does not receive the associated multimedia work item such as Email, Chat, SMS, or Preview Contact.

Solution

Procedure

1. Ensure that you do not monitor voice VDNs in multimedia queues.
2. Ensure that you do not use call diversion techniques for multimedia VDNs. An example of call diversion techniques is Automatic Call Forward.

Agent receives a phantom call but does not receive the associated CRM work item

Condition

Agent receives a phantom call but does not receive the work item associated with the phantom call when CRM is configured.

Cause

This problem occurs when the time on the Call Center Elite Multichannel Desktop, Call Center Elite Multichannel server, and CRM server are not synchronized.

Solution

1. Synchronize the time on the Call Center Elite Multichannel Desktop, Call Center Elite Multichannel server, and CRM server.
2. Restart the PCMS service.

Presence and Wallboard do not display statistics

In Desktop, Presence and Wallboard do not display the statistics and telephonic activities of agents.

This problem occurs because the IDS client is unable to connect to the IDS View server.

Solution

Procedure

1. Check and ensure the following:
   - You have specified the correct IDS View server configuration details in Desktop. You can find the details on the IDS View Client tab.
   - You have deselected the **Receive by multicast** option in Desktop if multicast is disabled in the network. You can find this option on the IDS View Client tab.
   - The IDS View and IDS Voice and Presence services are successfully running.
2. Check the following logs:
   - IDS View Client trace log from Desktop.
   - IDS View server log.
   - IDS Voice and Presence log.

Licensing error messages

When you start Desktop, the system displays an error messages related to licensing.

Solution

Procedure

Check and ensure that the following events have not occurred:

- The license is not set up using Application Management Service.
- The license is a trial-only license and has expired.

- The number of run-time licenses requested exceeds the total number of licenses purchased.
- The server running License Director or License Director itself is unavailable.

For more information about how Desktop interacts with License Director, see *Administering Avaya Aura® Call Center Elite Multichannel Guide*.

Cut, Copy, and Paste options do not work in HTML editor

In HTML editor, the Cut, Copy, and Paste options do not work when you right-click context menus.

Solution

Disable the Enhanced Security option for Microsoft Internet Explorer.

For information about disabling the Enhanced Security option and its implications, see Microsoft documentation on Microsoft website.

Index

H

I

J

K

L

M

N

O

P

Q

R

S